For a safer and healthier workplace environment.

Irish Film & Television Health & Safety Guide

Fís Éireann
Screen Ireland

Contents

Disclaimer

The material in this guide is intended to provide assistance and guidance to productions in supplying workplace protection for employees and to reduce losses resulting from accidents and injuries. It is not intended as legal advice or to replace site specific health and safety advice and assessment which will still be required for each individual project.

This document is intended as a specimen and does not replace the need for each production company to have company specific policies, a written safety statement, safe systems of work, risk assessments or other as required under legislation.

Whilst all reasonable care has been taken to ensure that the information contained in this guide is accurate, no responsibility can be accepted Fís Éireann/Screen Ireland the authors or publishers for any omissions or inaccuracies appearing or for any consequences arising directly or indirectly therefrom. Readers should refer to the Health and Safety Authority Website for current legislation and guidelines.

Everyone in this industry has legal and moral responsibilities for safety. These guidelines are intended to assist people involved in the industry and not replace the laws that are in place. To determine their legal workplace duties and rights, employers/producers, supervisors and working professionals must refer to the actual legislation as this document is not a legal interpretation of the legislation.

Foreword

As the national agency for the Irish film, television drama, animation and documentary industry, Fís Éireann/Screen Ireland is the creative partner to the sector, investing in talent, creativity and enterprise. We are inspired by original storytelling that will emotionally move audiences at home and abroad. Through a wide range of practical funding supports across development, production, distribution, promotion and skills development, Screen Ireland supports the sector at every stage. We support filmmakers in their creative pursuit to share valuable artistic, cultural and commercial stories on screen.

The Health and Safety of employers and workers in the sector is crucial and plays a pivotal part in supporting the sector. (Note - For the purposes of these Guidelines cast and crew whether employed or self-employed will be referred to as employees or workers. Where 'worker' is mentioned the reader can interpret this to mean employee).

The Screen Sector in Ireland is committed to improving the Health and Safety standards for those working in the sector.

In early 2019 Screen Ireland commissioned a team of Health and Safety Consultants to develop a Health and Safety guidance document. The Health and Safety guidance document was developed in accordance with best practise approach for people that work in Film and Television production. The guidance document was developed in close consultation with industry stakeholders. Periodic reviews of the guide will be undertaken to keep information up to date and to consider any legislative changes. Should any sections require amendment, this will be undertaken through a formal industry stakeholder consultation process.

The core aim of the guidance document is:

- to promote a safer and healthier workplace environment for those working in the sector,
- to improve the health and safety standard across the Screen Sector in Ireland,
- to improve the health and safety culture for those working in the sector and those that are new to the sector,
- to strive for a safer and healthier workplace to support each other and the Screen Sector, and
- to provide practical guidance to employers and workers in the Screen Sector that have a duty of care under the health and safety legislation.

The guidance document was developed in close consultation with industry stakeholders through a series of structured focus groups, round table interviews with individual departments within Film and TV Production, continuous engagement with Screen Guilds, SIPTU and Screen Producers Ireland.

It is not intended as legal advice or to replace specific health and safety advice and assessment which will still be required for each individual project.

Acknowledgments

Fís Éireann/Screen Ireland would like to acknowledge the dedication and support the Film and TV industry in Ireland have given to develop this health and safety guide.

The sector has played a crucial part throughout the development process in particular, the many heads of department, Guild representatives, SIPTU, Screen Producers Ireland and other crew for their continued support and participation.

Screen Ireland would especially like to thank the Health and Safety consultants Chris Mee Group and in particular Karen Cummins.

Screen Ireland would also like to extend its thanks to external bodies which include the Health and Safety Authority (HSA), Clerkin Elevation, Commission for Regulation of Utilities (CRU), Safe Electric, International Powered Access Federation (IPAF), Road Safety Authority (RSA), Irish Aviation Authority (IAA), Larry Henry SOS Training Ltd, and CORU (Ireland's multi-profession health regulator).

History

In 2001, 'The Irish Film and Television Guidelines for Health and Safety Practice' for the Irish Motion Picture Industry was agreed on a voluntary basis between Irish Actors Equity, SIPTU, Film Makers Ireland, Screen Training Ireland and representatives of the insurance industry.

It was also agreed to establish a permanent committee to deal with health and safety matters. This committee was called 'The Irish Film and TV Health and Safety Committee'.

Health and Safety Guidance Document 2002

The 2002 safety guidance notes set out safe working practices that were developed with industry stakeholders. The safety guidance document of 2002 was regarded as an accurate reflection of generally accepted industry practice and provided reference materials for industry usage.

These guidelines were recommendations reflecting current recognised safe practices and did not have the status of enacted laws or regulations but, where they referred to laws and regulations, those laws and regulations were to be observed without exception.

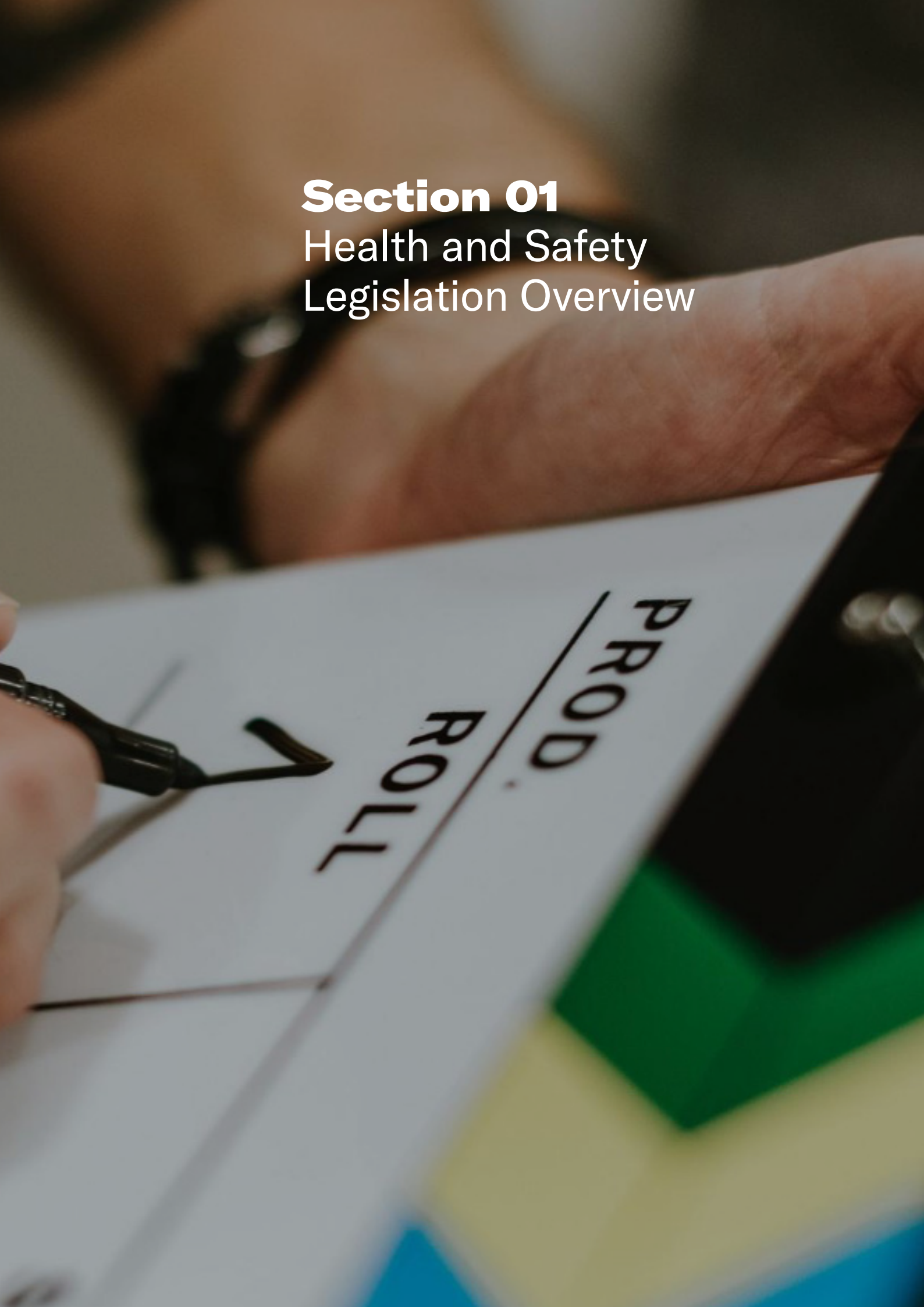
Health and Safety Guidance Document 2019 / 2021

In 2019 Fís Éireann/Screen Ireland commissioned the development of this guide and a health and safety awareness training programme for the film and TV industry.

Everyone working in the industry has a legal and moral responsibility for safety. This guide is intended to assist all persons working in the industry to understand their legal responsibilities.

For all persons: employers, producers, production managers, Head of Departments, and employees to understand their full legal duties and responsibilities, clarification is to be sought from all applicable legislation.

This is not a legal document; it does not represent legal advice; it is merely guidance.



Section 01
Health and Safety Legislation Overview

01 Legislation Overview

The following chapter outlines some of the primary and secondary legislation for health and safety in Ireland. It is non-exhaustive. Expert advice should always be taken as required to fully understand the requirements of these and other acts and regulations. Persons using this document should be aware that in addition to legislation referenced in this document there is other legislation, Codes of Practice (COPs), EU Directives, Statutory Instruments that may affect different departments for example, electrical, construction, chemical and biological legislation etc.

It is beyond the scope of this guide to give detailed information on all legislation, CoPs and other guidance that may need to be complied with and or taken into consideration during a production. It is your responsibility to familiarise yourself with what is applicable and comply with the same.

This guide is not intended as legal advice or to replace specific health and safety advice and assessment which will still be required for each individual project.

This is not a legal document; it does not represent legal advice; it is merely guidance.

1.1 — Introduction to Health and Safety Law

Following is an overview of key legislation, codes of practice and guidance and has been provided for ease of reference. It is the responsibility of each individual and company to familiarise themselves with the legislation referenced and all subsequent legislation including amendments that is applicable to them and their company, production and activities required.

It should be noted that when contractors or self-employed persons are engaged, they are required to adhere to the health and safety legislation as it applies to an employer. Contractors and employers will be required to exchange relevant documentation (Safety Statements, Risk Assessments etc.).

Contractors with employees are responsible for ensuring that their employees have relevant training, understanding all emergency procedures i.e. fire procedures and for ensuring that all 'employees' of the contractor are also familiar with the 'employing' companies' procedures and vice versa. Some of the responsibilities that are legally assigned to the employer are:

- to prepare or cause to be prepared a written safety statement
- identify the hazards in the place of work under his or her control
- assess the risks presented by those hazards and be in possession of written assessments known as risk assessments
- ensuring that measures take account of changing circumstances and the general principles of prevention.

These should be prepared by competent persons.

As many production companies in Ireland are subsidiaries of larger companies, the exec producers, producers, unit production manager (UPM) production manager (PM) line producer (LP) should confirm for each production company created in Ireland (typically Designated Activity Company - DAC) what policies are in place for the parent company (if any), and how the subsidiary company can comply with the parent company's policy, or will they need to develop their own policies. Policies can include environmental policy, child protection policy, equality policy, prevention of bullying and harassment policy and other as appropriate.

02 Health & Safety Terminology and Information

2.1 — Employer, Worker/Employee & Place of Work

Employer

Article 5 of the EU Directive (89/391/EEC) defines employer as: 'any natural or legal person who has an employment relationship with the worker and has responsibility for the undertaking and / or establishment'.

The definition of employer is outlined in Section 2(1) of the Safety, Health and Welfare at Work Act 2005 as follows: "employer", in relation to an employee—

A. means the person with whom the employee has entered into or for whom the employee works under (or, where the employment has ceased, entered into or worked under) a contract of employment,
B. includes a person (other than an employee of that person) under whose control and direction an employee works, and
C. includes where appropriate, the successor of the employer or an associated employer of the employer.

Worker / Employee

Article 5 of the EU Directive (89/391/EEC) defines worker as: 'any person employed by an employer, including trainees and apprentices but excluding domestic servants'.

The definition of employee is outlined in Section 2(1) of the Safety Health and Welfare at Work Act 2005 as follows: 'employee' 'means a person who has entered into or works under (or, where the employment has ceased, entered into or worked under) a contract of employment and includes a fixed-term employee and a temporary employee and references, in relation to an employer, to an employee shall be construed as references to an employee employed by that employer'.

For the purposes of these Guidelines cast and crew whether employed or self-employed will be referred to as employees or workers. Where 'worker' is mentioned the reader can interpret this to mean 'employee' and vice versa.

Place of Work

The definition of place of work is outlined in Section 2(1) of the Safety Health and Welfare at Work Act 2005 as follows: "place of work" includes any, or any part of any, place (whether or not within or forming part of a building or structure), land or other location at, in, upon or near which, work is carried on whether

occasionally or otherwise and in particular includes—

A. in relation to an extractive industry including exploration activity, the whole area intended to house workstations to which employees have access for the purpose of their work relating to the immediate and ancillary activities and installations of, as appropriate—
   i. the surface or, as the case may be, underground extractive industry, including overburden dumps and other tips and any accommodation that is provided and, in the case of the underground extractive industry, any working area,
   ii. the extractive industry through drilling onshore including any accommodation that is provided, and
   iii. the extractive industry through drilling offshore, including any accommodation that is provided,
B. a tent, trailer, temporary structure or movable structure, and
C. a vehicle, vessel or aircraft.

The information below is a summary of the concepts of some Health and Safety terminology.

2.2 — What Is Meant by 'Reasonably Practicable'

'Reasonably practicable' means that an employer has exercised all due care by putting in place the necessary protective and preventive measures, and where the putting in place of any further measures is grossly disproportionate.

2.3 — What Is Accountability & Responsibility

An employer, a Producer, Director, Production Manager, Manager can assign responsibility, but cannot give away accountability.

Employers have greater responsibilities under section 80 of the 2005 Act on 'Liability of Directors and officers of undertakings' which requires them to be in a position to prove they have proactively managed the safety and health of their workers. Any person being a director, manager or other similar officer of the undertaking, or a person who purports to act in any such capacity, to be aware of Section 80 and Section 81 of the SHWW Act 2005, reference section 3.4 Liability of Directors and Managers below.

2.4 — What Happens If I Ignore the Law

Ignorance of the law is no excuse. This principle means that when an individual violates the law, it doesn't matter whether or not the individual knew what the law said.

2.5 — What Is the Onus of Proof

It shall be for the accused to prove (as the case may be) that it was not practicable or not reasonably practicable to do more than was in fact done to satisfy the duty or requirement, or that there was no better practicable means than was in fact used to satisfy the duty or requirement.

Note: a company director, manager or other similar officer of a company, or a person who purports to act in any such capacity, that person as well as the company shall be guilty of an offence and shall be liable to be proceeded against.

On indictment in the Circuit Court the maximum penalty is €3,000,000 and/or imprisonment for a term not exceeding two years. You cannot insure against this.

2.6 Definition of 'Competent'

A person is deemed to be a competent person where, having regard to the task he or she is required to perform and taking account of the size or hazards (or both) of the undertaking or establishment in which he or she undertakes work, the person possesses sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken.

03
Safety, Health and Welfare at Work Act, 2005

3.1 — Safety, Health and Welfare at Work Act, 2005

The Safety, Health and Welfare at Work Act 2005 (2005 Act) applies to employers, employees in all employments and to the self-employed. One of the main objectives of the 2005 Act is to prevent accident and ill health in the place of work. Link: http://www.irishstatutebook.ie/eli/2005/act/10/enacted/en/pdf

The 2005 Act outlines the duties and responsibilities of employers, employees and the self-employed.

3.2 — Summary of Employer's Duties under the 2005 Act

Employers are primarily responsible for ensuring the safety, health and welfare of employees and persons other than their employees at the place of work.

Duties include but are not limited to:

- Preparing or having prepared a written safety statement (under section 20) and they must be specific to the place of work.
- The safety statement (including the risk assessments) should be brought to the attention of all employees and others at the workplace that may be exposed to any risks. This should be done at least once a year, and whenever it is changed or updated. The statement must be in a form and language that is likely to be understood.
- Determining and implementing the safety, health and welfare measures necessary for the protection of the safety, health and welfare of his or her employees and ensuring that the measures take account of changing circumstances and the general principles of prevention as specified in Schedule 3;
- Consult and liaise with employees on matters relating to safety, health, and welfare at work.
- Ensure the design, provision and maintenance of plant and machinery are safe and without risk to health.
- Providing systems of work that are planned, organised, performed, maintained, and revised as appropriate to be safe and without risk to health.
- Ensure that the use, handling, storage and transport of articles, substances or physical agents are not a risk to the health of employees.
- With regards to the place of work, maintain safe access to and egress from it.
- Providing a safe working environment.
- Providing and maintaining adequate welfare facilities.
- Providing the necessary information, instruction, training, and supervision to employees.

- Prepare adequate plans and procedures to be followed and measures to be taken in the case of an emergency or serious and imminent danger.
- To appoint one or more 'competent persons', to perform functions as are specified by the employer, relating to the protection from and the prevention of risks to safety, health and welfare at work.
- To co-operate and co-ordinate health and safety arrangements in a shared workplace.
- To provide health surveillance where appropriate.
- Reporting of prescribed accidents and dangerous occurrences to the Authority.
- An employer shall ensure that only employees who have received appropriate instructions have access to the area of the place of work where a serious, specific danger exists.
- Every employer shall manage and conduct his or her undertaking in such a way as to ensure, so far as is reasonably practicable, that in the course of the work being carried on, individuals at the place of work (not being his or her employees) are not exposed to risks to their safety, health or welfare.

3.3 — General Principles of Prevention – Schedule 3

1. The avoidance of risks.
2. The evaluation of unavoidable risks.
3. The combating of risks at source.
4. The adaptation of work to the individual, especially as regards the design of places of work, the choice of work equipment and the choice of systems of work, with a view, in particular, to alleviating monotonous work and work at a predetermined work rate and to reducing the effect of this work on health.
5. The adaptation of the place of work to technical progress.
6. The replacement of dangerous articles, substances, or systems of work by safe or less dangerous articles, substances, or systems of work.
7. The giving of priority to collective protective measures over individual protective measures.
8. The development of an adequate prevention policy in relation to safety, health, and welfare at work, which takes account of technology, organisation of work, working conditions, social factors and the influence of factors related to the working environment.
9. The giving of appropriate training and instructions to employees.

3.4 — Liability of Directors and Managers

All persons who are Directors, managers, or other similar role to be aware of Section 80 and Section 81 of the SHWW Act 2005. Liability of directors, managers and other persons who purport to act in such capacity.

The above two sections state that where an offence, a breach or non-compliance with the legislation has been committed by a company and the doing of the acts that constituted the offence has been authorised, or consented to by, or is attributable to connivance or neglect on the part of, a person, being a director, manager or other similar officer of the undertaking, or a person who purports to act in any such capacity, that person as well as the undertaking shall be guilty of an offence and shall be liable to be proceeded against and punished.

Where a person is proceeded against for such an offence and it is proved that, at the material time, that that person was a director of the undertaking concerned or a person employed by it whose duties included making decisions that, to a significant extent, could have affected the management of the company, it shall be presumed, until the contrary is proved, that the doing of the acts were authorised, consented to or attributable to connivance or neglect on the part of that person.

3.4.1 — Penalties and Offences

Penalties and offences, Part 7 of the SHWW Act 2005, most offences, including any breaches of Regulations under the 2005 Act may be tried either in summary proceedings in the District Court or on indictment in the Circuit Court where the maximum penalty is €3,000,000 and/or imprisonment for a term not exceeding two years or both.

A Health and Safety Authority inspector can also issue on "the spot fines" where he or she has reasonable grounds for believing that a person is committing or has committed certain prescribed offences under occupational safety and health legislation.

On the spot fines can apply to employers, employees, persons in control of workplaces, importers and suppliers etc - all duty holders under the Act.

Reference health and Safety Authority link: https://www.hsa.ie/eng/Topics/Managing_Health_and_Safety/Safety,_Health_and_Welfare_at_Work_Act_2005/#penalties

3.5 — Summary of Employee's Duties under 2005 Act

- To take reasonable care of themselves and those that may be affected by their acts or omissions.
- To co-operate with their employer in relation to health and safety.
- To use all equipment, tools etc., safely and to report any defects or potential hazards.
- To use any personal protective equipment provided.
- To ensure that they are not under the influence of an intoxicant that could endanger their own safety, health, or welfare at work or that of any other person.
- Not to engage in improper conduct or other behaviour that is likely to endanger their own safety, health, and welfare or that of any other person.
- To report any activity which may endanger employees or other persons.

3.6 — Information, Instruction, Training and Consultation

3.6.1 — Information

As per section 9 of the 2005 Act employers are required to provide information to employees on matters relating to their safety, health, and welfare at work.

The information to include information on the hazards to safety, health, and welfare at the place of work and the risks identified by the risk assessment outlining the protective and preventive measures to be taken.

3.6.2 — Instruction and Training

As per section 10 of the 2005 Act employers are required to provide instruction, training, and supervision to employees on matters relating to their safety, health, and welfare at work. Employers are required to ensure employees receive adequate safety, health and welfare training, including, in particular, information and instructions relating to the specific task to be performed by the employee and the measures to be taken in an emergency.

Training under this section shall be provided to employees-

A. on recruitment,
B. in the event of the transfer of an employee or change of task assigned to an employee,
C. on the introduction of new work equipment, systems of work or changes in existing work equipment or systems of work, and
D. on the introduction of new technology

Regarding training requirements for employees, previous training may be taken into account by the employer where appropriate. Contractors are responsible for keeping their necessary skills and training up to date to ensure they can perform their role in a competent manner.

3.6.3 — Consultation

As per section 26 of the 2005 Act every employer shall, for the purpose of promoting and developing measures to ensure the safety, health and welfare at work of his or her employees and ascertaining the effectiveness of those measures consult with employees.

For full details on employers' requirements regarding information, instruction, training and supervision of employees and requirements for consultation and participation of employees, please see the 2005 Act and in particular relevant sections referenced above. Link: https://www.hsa.ie/eng/Legislation/Acts/Safety_Health_and_Welfare_at_Work/SI_No_10_of_2005.pdf

Below are some measures (non-exhaustive) production companies could take to encourage a safety culture, promote safety, and improve health and safety awareness of all persons working on a production.

3.6.4 — Induction

Introduce an induction programme for all new recruits including trainees, for cast, background artists and persons who may not be engaged on the production as a full-time member of crew. Induction provides information to employees on the company's expectations of employees, provides information on the company's culture, rules, and policies and if working in a studio environment could include rules and policies of the studio. A Head of Department (HOD) may be tasked by the production company to develop and provide inductions for their specific departments and crew.

3.6.5 — Toolbox Talks

Encourage the implementation of toolbox talks within different departments, for example each HOD could generate toolbox talks appropriate to their crews' activities. Toolbox talks are short safety briefings / discussions which can be given daily, weekly, or monthly depending on activities, use of equipment, use of chemicals, crew numbers, recent incidents or other. Toolbox talks identify immediate hazards at the place of work. Toolbox talks can improve communications, safety awareness and remind crew of their duties and responsibilities. Topics for toolbox talks can include but not limited to: Personal Protective Equipment, Respiratory Protective Equipment, Slip, Trip and Falls, Electrical Safety, Manual Handling, Fire Safety Awareness, Working at Height, Ergonomics, Safe Use of Plant and Machinery.

3.6.6 — Safety Briefing prior to commencement of the shooting day

At the beginning of each shooting day, the 1st AD or other appointed persons (for example: crew member from department with specific hazardous activities i.e. stunts, special effects (SFX), water, motion platform, action vehicles) to brief all crew, cast and background actors on protective and preventatives measures for the set areas, and the location, and measures to be taken in event of an emergency. It is considered best practice to video record this briefing as a record of information communicated. To assist the 1st AD and to ensure that all hazards and hazardous activities at a location have been identified and to ensure control measures will be communicated to all persons, the assigned safety officer or safety advisor could be requested to carry out a final review of the location, set areas, activities to take place, equipment to be used and brief the 1st AD on items that should be communicated to all other persons.

3.6.7 — Health and Safety Authority (HSA) Online Training

In addition to training provided to crew, cast and background artists by the production company and or individual Heads of Department (HOD) the HSA E-Learning platform can be used by a production company.

The E-Learning courses can be utilised to assist in improving health and safety awareness and health and safety culture. There are no charges for the HSA E-Learning courses. On successful completion of an E-Learning course, participants can download a certificate of completion.

UPM/LP/PM or HODs can register a group to take courses through the 'HSA Group Manager' facility on the HSA E-Learning website. Link to HSA E-Learning for further information: https://hsalearning.ie/

3.6.8 Work Related Stress and Healthcare

Stress is not a disease or injury but it can lead to mental and physical ill health.

The causes of work-related stress can be many and varied , but can be broadly classified into 3 groups.

1. Stress from doing the job - caused for example by monotonous work, too much work or insufficient time.
2. Stress from work relationships - due for example to poor teamwork, complex hierarchies of authority, working in isolation or bullying and harassment.
3. Stress from working conditions - due for example to shift work, dealing with life - threatening injuries, illnesses and patient deaths or the threat of violence and aggression.

The Safety, Health and Welfare at Work Act 2005, requires employers to put in place systems of work which protect employees from hazards which could lead to mental or physical ill-health. There is an obligation on employers to risk assess all known hazards including psychosocial hazards, which might lead to stress.

Risk assessment for stress involves the same basic principles and processes as for other workplace hazards. The hazard must be identified, the risk assessed, and control measures identified, implemented and evaluated.

See the HSA's Work Positive Tool for help in identifying stressors in your workplace.

3.6.9 Dignity in the Workplace and Grievance Procedure Policy.

Within the Film and TV sector, each Production Company should hold a comprehensive Dignity in the Workplace and Grievance Procedure policy that covers employees in compliance with legislation, and these should be made available to employees on the production.

Further information

- Work Related Stress, European Agency for Safety and Health at Work.
- Mental Health Promotion in the Healthcare Sector, European Agency for Safety and Health at Work.
- Practical Advice for Workers on Tackling Work-Related Stress and its Causes, European Agency for Safety and Health at Work.
- Critical Incident Stress Management Network Ireland.

Minding Creative Minds offer a free 24/7 wellbeing & support programme for the Irish Creative Sector that now includes Film (actors, writers, designers & film crew). See more here: http://mindingcreativeminds.ie/

Speak Up & Call It Out: Review - Events - Irish Theatre Institute https://www.hsa.ie/eng/Your_Industry/Healthcare_Sector/Work_Related_Stress/

https://www.screenproducersireland.com/resources

04
Safety, Health and Welfare at Work (General Application) Regulations, 2007 – SHWW (GA) Regs 2007

Further information

The Health and Safety Authority have provided a guidance document setting out the general principles that should/ could be used by employers and managers to ensure their safety and health management systems comply with the best practices. HSA Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Best_Practices_in_Safety_Guide.pdf

The purpose of the Safety, Health and Welfare at Work (General Application) Regulations 2007 (GA Regs) is to set out the requirements for the following areas of work:

- Workplace
- Use of Work Equipment
- Personal Protective Equipment
- Manual Handling of Loads
- Display Screen Equipment
- Electricity
- Work at Height
- Control of Noise at Work
- Control of Vibration at Work
- Protection of Children and Young Persons
- Protection of Pregnant
- Post Natal and Breastfeeding Employees
- Night Work and Shift Work
- Safety Signs at Places of Work
- First-Aid
- Explosive Atmospheres at Places of Work

The requirements for the majority of the above chapters of the Regulations as applicable will be covered in subsequent sections of this guide as appropriate. Below are some of the requirements of some sections of the GA Regs. The HSA have published a total pack of guidance for all parts and chapters of the Safety, Health and Welfare at Work, (General Application) Regulations 2007. The guidance documents are not intended as a legal interpretation of the legislation.

The guidance documents can be found through the following link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/General_Application_Regulations/Guide_to_the_Safety,_Health_and_Welfare_at_Work_General_Application_Regulations_2007.html

4.1 —Personal Protective Equipment

The Safety, Health and Welfare at Work, (General Applications) Regulations 2007, Chapter 3 of Part 2, provides information in relation to Personal Protective Equipment (PPE).

Section 8 (2)(i) of the SHWW Act 2005 places a duty on employers to supply PPE where risks cannot be eliminated or adequately controlled. Section 13 (1)(g) of the 2005 Act places a duty on employees, having regard to their training and instructions, to make correct use of PPE.

Chapter 3 of Part 2 of the SHWW (GA) Regulations 2007 applies further duties on the employer in respect of selection, assessment, conditions of use and compatibility, periodical review, maintenance and replacement of PPE, as well as the provision of information and training regarding PPE provided for employees.

Regulations 62 – 67 (Chapter 3 of Part 2) of the SHWW (GA) Regs 2007 outline the duties of employers.

A summary of these duties is as follows:

Regulation 62: Provision of Personal Protective Equipment

An employer shall ensure that, personal protective equipment is provided for use by the employer's employees where risks at a place of work to the safety or health of employees cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organisation.

PPE should only be provided where the risks cannot be avoided or limited by other means.

An employer when providing personal protective equipment shall take into account the appropriate matters specified in Schedule 2.

Regulation 63: Assessment of Personal Protective Equipment

Before choosing any personal protective equipment, an employer shall make an assessment to determine whether such equipment satisfies the requirements of this Regulation and Regulations 62 and 64.

The PPE selected should be capable of achieving the level of protection required.

The assessment of the PPE selected must be periodically reviewed, particularly if there is reason to suspect that any element of the assessment is no longer valid or there has been a significant change in the matters to which it relates.

The level of risk must be assessed so that the performance required of the PPE can be determined. When assessing suitability of PPE, the following to be considered:

- Is it appropriate for the risks involved and the working conditions?
- Does it prevent or adequately control the risks involved?
- Can it be adjusted to fit the wearer correctly?
- Does the PPE cause discomfort, also if more than one item of PPE is being worn, are they compatible?
- Have any relevant medical conditions of the wearer of the PPE been taken into account?
- What are the needs of the job and the demands it places on the wearer?

Regulation 64: Conditions of Use and Compatibility

Where it is necessary for an employee to use personal protective equipment, the employer shall determine the conditions of use of such equipment, in particular the period for which it is worn.

Where PPE must be used, the employer is obliged to examine the seriousness and frequency of the risks present in the workplace and to reduce, as far as possible, the times necessary for the employee to wear PPE without risk to his or her safety and health. The PPE selected must have the characteristics to remain effective for the periods of exposure of the employee to risk.

When selecting PPE there are certain ergonomic, physical and health factors which need to be taken into account, these factors include:

- movement (e.g., does PPE restrict movement),
- visibility (e.g., does use of PPE restrict area of view),
- breathing (e.g., is breathing ability restricted)
- irritation (e.g., does PPE cause skin irritation) and
- health (e.g., does the wearer have a medical conditions).

Regulation 65: Personal Use

Regulation 65 requires that PPE should normally be provided for personal use only. On occasions it may be necessary for PPE, particularly for more complex and expensive PPE such as respirators or diving equipment, to be used by more than one person. In those circumstances' arrangements should be made by the employer to have the PPE cleaned and disinfected before use by another individual.

Regulation 66: Maintenance and Replacement

An employer shall ensure that any personal protective equipment provided by the employer is always maintained in good working order and in a satisfactory hygienic condition by means of any necessary storage, maintenance, repair or replacement. PPE must be thoroughly examined regularly, by properly instructed staff, in accordance with the supplier's and manufacturer's instructions, to ensure that it is in good working order before being issued for use to the wearer. The wearer should check the PPE and should not use it if found to be defective in any way.

Regulation 67: Information, Training and Instruction

The employer has a general duty under the 2005 Act to inform, instruct and train employees regarding the risks to safety, health and welfare at the place of work and the protective and preventive measures to be taken under the relevant statutory provisions.

Regulation 67 requires that where PPE is provided employees must be informed of the risks against which they are being protected by the PPE. Employees must also be provided with suitable information, instruction and training (including training in the use, care or maintenance of PPE) to enable them to make proper and effective use of any PPE provided for their protection.

The level of training provided will vary with the level of risk involved and the complexity and performance of the equipment.

The Role of Employees

Employees should:

- Use PPE properly whenever it is required to be used,
- Report any defects in or damage to the PPE immediately,
- Participate in any training or instruction provided on PPE,
- Inform their employer of any medical conditions they have that might be affected by the use of the PPE provided to them.

Schedule 2 to the General Application Regulations 2007, Personal Protective Equipment

Part A is a non-exhaustive list of work activities and sectors that may require the provision of PPE. Schedule 2, Part B is a non-exhaustive list of parts of the body which may be subject to risk and the types of PPE which may be appropriate to use to protect the employee.

Below is a summary (non-exhaustive) of Part A, a guide list of work activities and sectors that may require the provision of PPE, and examples of these when working on a production.

Head Protection (Skull Protection)

Protection helmets - During set build or on set, working on, underneath or in the vicinity of scaffolding and elevated places of work including cranes, manitous and genie booms.

1. Foot Protection
   Safety shoes with puncture-proof soles during set build including scaffolding work. Any work, including working in stages, workshops and on set where there is a risk of impact on or crushing of the foot caused by falling or projecting objects or collision of the foot with an obstacle.
2. Eye or Face Protection
   Protection goggles, face shields or screens. During any welding, grinding or chiselling work, or with bolt-driving tools, example during set build/ fabrication or during a process used by modelmakers. VFX crew working with lasers. Construction, Art, Costume, or other departments work with liquid sprays, acids, caustic solutions, disinfectants, or corrosive products.
3. Respiratory Protection
   Respirators/breathing apparatus: Work using any process where harmful dust or fumes are likely to be present, for example during multiple elements of construction work, costume department crew working in breakdown room, art department, prosthetics and model makers using materials and substances where there will be harmful dusts and or fumes.
4. Hearing Protection
   Ear protection - Working with pneumatic drills, example used by construction crew for set build, or by model makers.
5. Body, Arm and Hand Protection
   Can include protective clothing or fire-resistant protective clothing for crew working with acids, caustic solutions, disinfectants, and corrosive cleaning substances, during welding and for cast and crew during SFX sequences with Fire.

   Pierce-proof aprons, leather aprons, gloves including metal mesh gloves for crew working with knives, involving drawing knife towards the body, welding, and handling of sharp-edged objects. Crew handling items that have been on the ground, example cabling for lamps or other.
6. Weatherproof or waterproof clothing.
   All crew working outdoors during preparations and for striking of sets and for all persons working externally on shooting days where there is a requirement to work in the open air, in rain and cold weather.
7. Reflective Clothing Work, where the employees must be clearly visible, for example all persons working on a set build and for crew working on a public road and on an external location at night.
8. Safety Harness
   For crew working at a height, working on scaffolding and or in Mobile Elevated Working Platforms, for example construction, electrical crew

during construction stage, during shooting and for strike. For stunt performers while rehearsing and shooting of stunts.

9. Safety Ropes
   Work in high crane cabs including tasks as above or working in shafts.
10. Skin ProtectionCrew working with coating materials. Costume department crew in breakdown room, hair and make-up department crew using dyes and applying tan to cast, background artists.

For further information please see HSA website. FAQ's Links https://www.hsa.ie/eng/Topics/Personal_Protective_Equipment_-_PPE/PPE_-FAQs/Personal_Protective_Equipment_FAQ_Responses.html

Guidance to SHWW (GA) Regs 2007 Chapter 3 of Part 2. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_PPE.pdf

4.2 Manual Handling (MH)

The Safety, Health and Welfare at Work, (General Applications) Regulations 2007, Chapter 4 of Part 2, outline the requirements that must be adhered to in relation to manual handling. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Manual_Handling.pdf

Manual handling of loads, as per Chapter 4 of Part 2 means "any transporting or supporting of any load by one or more employees, and includes lifting, putting down, pushing, pulling, carrying or moving a load, **which by reason of its characteristics or unfavourable ergonomic conditions, involve**s risk, particularly of back injury, to employees."

Manual handling is any activity where a person is required to exert force to lift, lower, pull, push, carry or otherwise move, hold, or restrain any animate or inanimate object. Employers must ensure the risks associated with systems of work involving MH are either eliminated or reduced.

Training is required to be delivered by QQI Level 6 Manual Handling/People Handling Instructor.

Refresher training will be at intervals not more than every three years and when there is any major change in the work involved or equipment used or when an employee is transferred to another activity requiring different loads to be handled.

As per SHWW (GA) Regs Chapter 4 of Part 2: "The provision of manual handling training on its own will not reduce injury rates. Manual handling training needs to be specific to the tasks involved. On employees returning to work after receiving training follow up workplace supervision should be in place to ensure that the lessons learned are put into effect. On returning to work after training employees have a responsibility to put into practice the techniques and principles of lifting that were taught.

An aim of training is to ensure that employees understand the reasons for doing the job with least risk, and that they can recognise the risks and decide the best way to go about it and can perform the task in that way. Training is not a substitute for the reduction or avoidance of manual handling activities which involve risk. Manual handling training is only one part of an intervention approach which is primarily focused on the implementation of ergonomic control measures to avoid or reduce risk of musculoskeletal injury".

Regulations 69 (a) "requires the employer to organise the work to allow the use of mechanical or other means to avoid the need for the manual handling of loads by employees in the workplace".

Regulations 69 (b) provides that when the manual handling of loads is unavoidable, steps must be taken, either by organisational or other means, to reduce the risk involved, having regard to the risk factors in Schedule 3 to the Regulations".

The risk factors in Schedule 3 that must be considered include:

1. the characteristics of the load,
2. the physical effort required,
3. the characteristics of the working environment,
4. the requirements of the activity, and
5. the individual risk factors of the relevant employee.

Regulation 69(c) "requires that a risk assessment be carried out on all work tasks which involve manual handling activity".

A summary of the risk assessment process that should be conducted is as follows:

Step 1 Identify the manual handling tasks that need to be assessed.
Step 2 Develop a risk assessment schedule.
Step 3 Carry out the risk assessment process:
- 3a – Task observation and description,
- 3b – Collect task data,
- 3c – Identification of risk factors, and
- 3d – Solution development and action plan.

Step 4 Review the effectiveness of the control measures or solution.

Regulation 69(c): wherever the need for manual handling of loads by the employer's employees cannot be avoided, organise workstations in such a way as to make such handling as safe and healthy as possible, and

- taking account of the risk factors for the manual handling of loads specified in Schedule 3, assess the health and safety conditions of the type of work involved and take appropriate measures to avoid or reduce the risk, particularly of back injury, to the employer's employees,
- ensure that particularly sensitive risk groups of employees are protected against any dangers which specifically affect them in relation to the manual handling of loads and the individual risk factors, having regard to the risk factors set out in Schedule 3,
- ensure that where tasks are entrusted to an employee, his or her capabilities in relation to safety and health are taken into account, including, in relation to the manual handling of loads by employees, the individual risk factors set out in Schedule 3,
- when carrying out health surveillance in relation to the manual handling of loads by employees, take account of the appropriate risk factors set out in Schedule 3.

Regulation 69(d) obliges an employer to provide employees with precise information (or general indications, at least) on the weight of each load and the centre of gravity of the heaviest side where a package is eccentrically loaded.

For further information on Manual Handling please see links below: HSA - The Guidance on the Management of Manual Handling in the Workplace: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Guidance_Manual_Handling.pdf

HSA - Manual Handling and Musculoskeletal Disorders. Link: https://www.hsa.ie/eng/Workplace_Health/Manual_Handling_Display_Screen_Equipment/Guidance_Documents/Manual_Handling/

HSA Link to multiple resources for MH, including a range of guidance documents, sample Risk Assessment templates and Safe System of Work Plans: https://www.hsa.ie/eng/Workplace_Health/Manual_Handling_Display_Screen_Equipment/Guidance_Documents/

HSA Managing Ergonomic Risk in the Workplace to Improve Musculoskeletal Health. Link: https://www.hsa.ie/eng/

publications_and_forms/publications/manual_handling_and_musculoskeletal_disorders/managing_ergonomic_risk_in_the_workplace_to_improve_musculoskeletal_health.pdf

HSA Ergonomics Good Practice.
Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Manual_Handling_and_Musculoskeletal_Disorders/Ergonomics_Good_Practice.pdf

4.3 Display Screen Equipment

The Safety, Health and Welfare at Work, (General Application) Regulations 2007, Chapter 5 of Part 2 outline the requirements that must be adhered to in relation to Display Screen Equipment.

Multiple departments within a production use display screen equipment (DSE) (can also be referred to as visual display unit or VDU) during their working day.

A person is deemed to be a DSE user where they use such equipment for continuous periods of more than one hour, or if the VDU is generally used by the employee on a daily basis.

Regulation 72 (Chapter 5 of Part 2) outlines the duties of an Employer.

Employers are required to evaluate health and safety at workstations with particular reference to eyesight, physical difficulties and mental stress. A person with the necessary skills, training and experience must complete an analysis of individual workstations on behalf of the employer.

It is not sufficient to allow employees to use a software package to assess their own workstations. The analysis should take into account the minimum requirements for display screen equipment detailed in Schedule 4 to the Regulations under the categories of:

1. The equipment,
2. The environment and,
3. The employee/computer interface.

Work Related Upper Limb Disorders

Regulation 72(1)(b) provides that the employer must ensure that the use of such equipment is not a source of risk for the employee. Complaints that may arise from working with VDUs, which should be taken into account include work-related upper limb disorders (WRULDs). Effects from WRULD range from temporary fatigue or soreness in the limbs, to cramp, to ongoing pain in the muscles or nerves effecting the arm, hand, and shoulder areas.

Holding a part of the body rigid for a long time such as the back, neck and head may cause discomfort in the muscles, bones, and tendons. Awkward positioning of the hands and wrist relative to the work being carried out is another likely factor.

These effects can be avoided by using proper equipment and suitable furniture, and through training and changing the way in which the work is carried out. Problems can be avoided by good workplace design so that one can work comfortably and by good working practices. Prevention is easiest if action is taken early through effective analysis of a workstation.

Standing Workstation and Drafting Table

A standing desk and or specialised adjustable drafting table may be best suited to certain crew members, for example draughtspersons, who may carry out detailed work while standing.

Prolonged standing can put strain on the circulatory system and on the legs and feet. This increases the risks of varicose veins. Stand on an adequate surface to maintain good blood flow. Use an anti-fatigue mat or a footrest for lifting one foot at the time.

Breaks

Regulation 72(1)(c) provides that the employer must plan the activities of employees in such a way that daily work on display screens is periodically interrupted by breaks or changes of activity. The flow of work to a DSE user should be designed to allow natural breaks to occur. Ideally, the length of the rest should reflect the intensity of the individual job. Although the Regulations set no frequency for breaks, no single continuous period of work at a screen should, in general, exceed one hour.

However, there are four important points:

- Rest breaks or changes in the pattern of work, where they are necessary, should be taken before fatigue sets in.
- Some employees suffer symptoms from the effort used to keep up performance while fatigued.
- The employee should not sit in the same position for long periods and should make sure to change posture as often as practicable.
- Short, frequent rest breaks are more satisfactory than longer breaks taken occasionally.
- Rest breaks should be taken away from the VDU.

The production company – UPM/PM/LP should be aware:

- Laptops are not covered by these regulations because the keyboard shall be tiltable and separate from the screen to allow the user to find a comfortable working position which avoids fatigue in the arms or hands.
- A laptop does not have a separate keyboard and should not be used for long periods of time and a risk assessment must be carried out to assess the usage of the laptop and the setup of the temporary laptop workstation.
- The employer needs to carry out an analysis of individual workstations and a competent person must complete this analysis.
- It is not sufficient to allow employees to use a software package to assess their own workstations.
- The analysis of a workstation must take account of the minimum requirements in Schedule 4 of the General Application Regulations.

All persons that use DSE/VDU should be aware that they will need to adapt their behaviour towards the organisation of their daily work to be more active. Movement is important to get blood circulation through the muscles. Remember the body is made to move. A static posture sitting or standing is not advised to be kept for a prolonged period of time. Every 30 – 40 minutes, release the pressure put on the static part of your body by moving/stretching gently for few seconds and repositioning yourself in the recommended posture. For example, if you were typing on the keyboard for the past 30 - 40 minutes, roll gently and slowly back the shoulders, move your fingers, and drop your arm along your body for a few seconds. Then start typing again. If you are standing up all day, consider having some sitting time (morning break, lunchtime) for a few minutes every hour.

No single continuous period of work at a screen should, in general, exceed one hour. Crew should be encouraged to stand up from their workstation frequently throughout the working day (every 30 – 40mins), and ensure they look away from the screen at least every 20 mins (and allow their eyes to refocus on other objects for approximately 20 seconds).

Additionally, under Regulation 73, an Employer must inform employees of any entitlement they may have eye or eyesight test provided by the State. If the results of that test reveal that particular lenses are required for VDU work, the costs of minimum requirement frames and lenses must be borne by the Employer.

Guide to Safety, Health and Welfare at Work, (General Application) Regulations 2007, Chapter 5 of Part 2. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/General_Application_Regulations/Display_Screen.pdf

HSA FAQ's for Display Screen Equipment. Link: https://www.hsa.ie/eng/Workplace_Health/Manual_Handling_Display_Screen_Equipment/FAQs/Display_Screen_Equipment_FAQs/Display_Screen_Equipment1.html

4.4 Safety Signage

Safety Signage as per Chapter 1 of Part 7 and Schedule 9 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 set out requirements for safety signs and signals which must be used at all workplaces when hazards cannot be avoided or adequately reduced and provides guidance to safety and health practitioners, employers, managers, employees on safety signs at places of work.

Signage used is required to be a specific colour and shape. Overview of requirements:

- Signboards use a combination of shape, colour and a symbol or pictogram.
- Signboards should not contain text as the symbols or pictograms should be understood independently of the literacy or language ability.
- Only information authorised in Regulations may be displayed on safety signs at workplaces.
- Employees must be provided with information and instruction. Where there is a risk because of traffic, signs should be put in place.
- Where hazards cannot be avoided or reduced, employers must put in place appropriate signs.
- The number and position of signs will depend on the extent of the danger or on the zone to be covered.
- Safety signs must never be a substitute for necessary protective measures.
- The risk assessment and safety statement should identify necessary signage required in the place of work.
- The objective of the system of safety signs is to draw attention rapidly and unambiguously to specific hazards.
- The effectiveness of safety signage is dependent on provision of full information.

Note: Text may be included on a supplementary signboard provided that it does not adversely affect the effectiveness of the safety signboard.

Part A of Schedule 9 to the Regulations set out General Requirements on the types of signs, the combination of signage, the colours to be used, effectiveness of signs, maintenance, positioning, and the illumination of signs. Part A of Schedule 9 also requires where persons are present whose sight or hearing is impaired (including by the use of personal protective equipment) then other measures must be taken to ensure the effectiveness of the signs.

Part B of Schedule 9 provides detail on required intrinsic detail of Signboards, the conditions of use and provides examples of signs that are required to be used in various circumstances.
Schedule 9 also provides specific instruction for:

- Signs on containers and pipes (Part C),
- Signs for identifying and locating fire-fighting equipment (Part D),
  - This Part applies to the use of a specific colour (red) for the identification of fire-fighting equipment, and location of fire-fighting equipment. (The red area must be sufficiently large to allow the equipment to be identified easily).
- Signs for obstacles, dangerous locations and marking traffic routes (Part E),
- Illuminated signs (Part F),
- Acoustic signs (Part G),
- Verbal communication (Part H) and
- Hand signals (Part I).

Colours: The system for signs and signboards is based on the familiar "traffic light" colours, with the additional colour of blue.

- Red for prohibition - prohibiting behaviour likely to incur or cause danger.
- Yellow for caution - sign giving warning of a hazard or risk, take precaution.
- Green for positive action – sign giving information, example emergency escape, first aid.
- Blue for mandatory – requiring specific behaviour, wear PPE.

4.5 Pregnancy at Work

Production companies to ensure that the workplace does not pose a risk to persons who are pregnant, post-natal and breastfeeding, and that the workplace does not pose a risk to the unborn child.

Some of the relevant legislation is as follows: Safety, Health & Welfare at Work (General Application) Regulations 2007 (Chapter 2 of Part 6): Protection of Pregnant, Post Natal and Breastfeeding Employees and the related Schedule 8 and The Maternity Protection Act 1994 and 2004. Please see Link: Guide to the Safety, Health & Welfare at Work (General Application) 2007. Chapter 2 of Part 6, HSA Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Pregnant_Post_Natal.pdf

Employees (crew, cast and background artists) are required to notify their employer of their condition as soon as is practicable. Employees to provide their employer with a medical or other appropriate certificate confirming her condition. Crew, cast, and background artists working on a production to inform the UPM/LP/PM of their condition. Pregnancy at Work Frequently Asked Questions available on the HSA website. Link: https://www.hsa.ie/eng/Workplace_Health/Sensitive_Risk_Groups/Pregnant_at_Work_Frequently_Asked_Questions/

Regulations 147 – 152 (Chapter 2 of Part 6) of the SHWW (GA) Regs 2007 provide (Regulation 147) interpretation for Chapter 2, (Regulation 148) application of Chapter 2 and outline the duties of employers. A summary of these duties is as follows:

Regulation 149 - Risk Assessment

On receipt of formal notification of pregnancy, recent birth or breastfeeding an employer shall carry out a risk assessment. An employer must assess any risks in the workplace and assess specific risks to that employee which may affect a pregnant woman or her unborn baby.

Regulation 150: Protective or preventive measures

Employers must take the preventive and protective measures necessary to ensure the safety and health of such employees and avoid any possible effect on such pregnancy or breastfeeding. On completion of the risk assessment, certain tasks, duties, or work locations may need to be reconsidered or allocated to other crew members to facilitate compliance with the findings of the risk assessment.

Where the risk assessment identifies a risk to the safety or health of the pregnant employee, the pregnancy or the breastfeeding employee, the employer must assess if there are any practical ways the risk can be avoided by following the three steps set out below.

Step 1: Adjust the working conditions and/or hours of work If this does not remove the risk
Step 2: Provide suitable alternative work If that is not possible

Aspects of pregnancy	Factors in work
Morning sickness	Early shift work Exposure to nauseating smells
Backache	Standing/manual handling/posture
Varicose veins	Standing/sitting
Frequent visits to the toilet	Difficulty in leaving job/site of work
Increasing size	Use of protective clothing Work in confined areas Manual handling
Tiredness	Overtime Evening and night work, shift work
Balance	Problems of working on slippery, wet surfaces
Comfort	Problems of working in tightly fitting workspaces
Dexterity, agility, co-ordination, speed of movement and reach may be impaired because of increasing size	Problems of working in tightly fitting workspaces

Figure 1: Aspects of Pregnancy Related to Factors in Work
Source: Guide to the SHWW (GA) 2007. Chapter 2 of Part 6

Step 3: The employer should assist the employee in receiving health and safety leave under Section 18 of the Maternity Protection Act 1994. It should be noted that this step applies where the employer, having undertaken the risk assessment, identifies occupational risks which arise for normal pregnancies and which he or she cannot reasonably control using steps 1 or 2.

Regulation 151: Night work

Under regulation 151, night work means working between 11.00 p.m. and 6.00 a.m. the next day, where an employee works at least three hours (not necessarily consecutive) in that period, or, where a minimum of 25 per cent of the employee's working hours in a month are worked between those times. If an employee has a medical certificate stating that for health and safety reasons she is not required to perform night work during the pregnancy or for fourteen weeks afterwards, the employer must remove her from night work by either transferring her to daytime duties, or, if this is not feasible, granting the employee leave. The employee concerned may have an entitlement to health and safety leave under the maternity protection legislation in these circumstances. For further information on Night work, please reference Chapter 56: Night Work / Night Shoots, within this guide.

Regulation 152: Information

Employer shall take appropriate steps to ensure that employees and/or their representative are provided with the results of the risk assessment (referred to in Regulation 149) and measures taken.

Schedule 8 to the SHWW (GA) Regulations 2007 lists physical agents, biological agents, chemical agents, processes and working conditions that could endanger the health of the pregnant employee and the unborn child. These include but are not limited to, shocks, vibration or movement, handling of loads, noise, radiation, extremes of cold or heat, work in hyperbaric atmosphere, certain industrial processes and Toxoplasma and Rubella virus. For further details see Schedule 8 to the General Application Regulations 2007 - Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Pregnant_Post_Natal.pdf

he UPM/LP/PM should be aware of Schedule 8 of the above regulations and review the risk assessments relevant to that person's work. The HSA have a template on their website for pregnancy risk assessment, this has been included in this section of the guide and could be used by production companies. It is available at the end of this section.

The risk assessment to take account risk for all phases and activities of the production.

If the risk assessment identifies a risk to the employee, the employer must take steps to protect the employee. The guidance document on Chapter 2 of Part 6 outlines steps that can be taken by the employer to avoid the risks.

The UPM/LP/PM (employer) should take account of any certified medical advice provided to the employer by the employee.

Section 8 of the guidance document on Chapter 2 of Part 6 provides lists of agents, processes and working conditions relating to pregnant, post-natal and breastfeeding employees. Agents can be Physical, Biological and Chemical. Appendix 3 of the guidance document on Chapter 2 of Part 6 provides detail of Aspects of Pregnancy that May Affect Work. Below is an excerpt from the Guide to SHWW (GA) Regs 2007 Chapter 2 of Part 6 for ease of reference. Source: Guide to the SHWW (GA) 2007. Chapter 2 of Part 6

Appendix 4 of the Guide to SHWW (GA) Regs 2007 Chapter 2 of Part 6 provides reference to Reference to other relevant legislation, the Maternity Protection Act 1994 and the Maternity Protection (Amendment) Act 2004 and associated Regulations which set out provisions relating to:

- Entitlements to maternity leave
- Entitlements to clinic visits
- Maintenance of job security
- Entitlements to health and safety leave
- Health and safety benefits

In addition to Chapter 2 of Part 6 (Protection of Pregnant, Post Natal and Breastfeeding Employees), Regulation 24, Chapter 1 of Part 2 relating to the workplace of the Regulations requires an employer to ensure that pregnant, post-natal and breastfeeding employees are able to lie down to rest in appropriate conditions.

Animals

When a script requires the use of animals the UPM/LP/PM and employer to be aware that there may be a risk to the pregnant employee. Examples can include working with cats, or an environment where there may be cat excrement. Toxoplasmosis is an infection caused by a parasite. There may also be a risk if a pregnant employee is expected to work in an environment where sheep and other farmed animals are giving birth or have recently given birth, i.e. from infections that such animals can carry. A pregnant person should not help deliver calves, kids or lambs and should avoid contact with new-born lambs, birthing by-products and contaminated bedding etc. Avoid handling and washing other people's clothing worn during lambing. Ensure such clothing is washed separately from other washing.

The employee should seek advice from her doctor and the employer should review the employees' risk assessment if the employee is expected to work in such an environment. If it is not possible for the employee to work in such an environment alternative staffing or work arrangements will need to be considered.

For further information on Toxoplasmosis please see Health Service Executive website. Link: https://www.hse.ie/eng/services/list/5/publichealth/publichealthdepts/pub/toxo-leaflet.pdf

For further information on infection risk please see Health & Safety Executive UK guidance document: Infection risks to new and expectant mothers in the workplace 'A guide for employers.Link: http://www.hse.gov.uk/pubns/priced/infection-mothers.pdf

Pregnancy Health and Wellbeing

For further information on pregnancy and health, see Health Service Executive website. Link: https://www2.hse.ie/pregnancy/

For information on foods to avoid, and eating well during pregnancy, see HSE website. Links: https://www2.hse.ie/wellbeing/child-health/lifestyle-changes-and-things-to-avoid-during-pregnancy/food-and-drinks-to-avoid-in-pregnancy.html

https://www.hse.ie/eng/services/list/3/acutehospitals/hospitals/cavanmonaghan/eating-well-in-pregnancy.pdf

Pregnant Employee Risk Assessment Template

See Appendix 1

4.6 — Electricity

Employers should be aware of the requirements of Part 3 of the Safety, Health and Welfare at Work (General Application) Regulations 2007. Guidance document on SHWW(GA) Regs 2007 Part 3. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Electricity.pdf

Electrical equipment to be fit for purpose. When choosing electrical equipment considerations are given to likelihood of damage and or danger from wear and tear due to the environment and conditions to which it will be exposed throughout the production. If equipment shall be used externally what affects the weather, including wind, temperature, humidity, ice, water, and lightning may have on the equipment. When used in workshops, stages and or on set the effects of dust, dirt, water, explosive substances or other may have on the equipment.

Regulation 74 (of SHWW(GA) Regs 2007 Part 3): Interpretation for Part 3

Portable equipment means equipment, including hand-held portable equipment, which—

A. because of the manner in which it is to be used, requires to be moved while it is working,
B. is designed so that it can be moved while it is working, or
C. is moved from time to time between the periods during which it is working;

Portable equipment includes not only electrical tools, such as electric drills and grinders, which can be carried, but also transportable electrical equipment which is moved about on wheels or a trolley, such as electric arc welders, floor-cleaning equipment and steam/water pressure cleaners.

Residual current device means an electro mechanical switching device intended to disconnect a circuit when the residual current attains a stated value under specific conditions.

4.6.1 PAT Testing (Portable Appliance Testing)

PAT Testing is covered under SHWW(GA) Regs 2007 Part 3, Regulation 81.

Regulation 81 states the following:

1. 81
   A. An employer shall ensure that a circuit supplying portable equipment or a socket outlet intended to supply portable equipment, including any circuit supplied by an electrical generator, and in which is used alternating current at a voltage—
      i. exceeding 125 volts, and
      ii. not exceeding 1,000 volts,
      is protected by one or more residual current devices having a tripping current not exceeding 30 milliamperes operating within such period of time so as to provide the necessary protection to prevent danger to any person coming into direct or indirect contact with any live part of the circuit,
   B. portable equipment is maintained in a manner fit for safe use and portable equipment which is –
      i. exposed to conditions causing deterioration liable to result in danger,
      ii. supplied at a voltage exceeding 125 volts alternating current (AC), Is –
         i. visually checked by the user before use, and
         ii. periodically inspected by a competent person, appropriate to the nature, location and use of the equipment.
2. An employer shall ensure, where appropriate, that a competent person – (a) tests any portable equipment described in paragraph (1)(c)(i) and(ii) and (b) certifies whether or not the portable equipment (including any cables and plugs) was, on the day of test, as far as could reasonably be ascertained, safe and without risk to persons coming into direct or indirect contact with any live part of the equipment.

   Portable equipment, by its nature, is more susceptible to damage than fixed electrical equipment. It is also more likely to be used in different environments and is often directly in contact with the user.

   All portable equipment must be maintained in a manner fit for safe use and should be subject to an appropriate inspection regime by employers to ensure that this is the case.

   The nature and frequency of maintenance should be adequate to prevent danger. The nature and frequency of inspections will vary dependent on the equipment, its use and location of the equipment.

   The results of PAT inspections and tests should be recorded and kept available for 5 years from the date of inspection.

   Equipment that is hardwearing and/or used in an environment that is likely to increase deterioration may require more frequent testing. Example: equipment used in workshops or on sets may require PAT testing (in

addition to visual inspection) 2 to 4 times per annum, whereas computers, laptop chargers or microwaves may require less frequent testing. Contractors supplying their own equipment are responsible for ensuring PAT testing is carried out as above.

4.7 Working at Heights

In relation to a definition of work at height the Regulations do not specify a minimum height. As per the Health and Safety Authority 'work at height is work in any place, including a place at, above or below ground level, where a person could be injured if they fell from that place. Access and egress to a place of work can also be work at height'. Work at height activities could be using a kick stool, using a ladder, working on the back of a lorry, rigging lighting, erecting, or working on a scaffold or other mobile platforms.

When there is a requirement for employees to work at height, the regulations state that the employer must carry out a risk assessment for work conducted at height. For all duties of the employer, what employees need to know about working at height and key requirements for working at height please see section Working with Ladders and Part 4 of the Safety, Health and Welfare at Work (General Application) Regulations 2007, Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Work_at_Height.pdf

Please see work at height flow chart of the above document Part 4 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 for an overview of steps to take in assessing risks, and steps to take to enable work to be carried out safely.

Please see the following sections for further information on working at heights: Construction and Working at Heights for further information including Work at Height Rescue, Working with Ladders, Mobile Elevated Working Platforms (MEWP'S), and Working on Roofs.

4.8 Noise

Regulations for Noise in the workplace: Safety, Health and Welfare at Work (General Application) Regulations 2007 Chapter 1 of Part 5: Control of Noise at Work.

Unit for noise - noise of sound measurement is called decibels (dB). Ratio of the sound pressure to reference pressure to something.

As a rough guide, if it is difficult to hear a normal conversation at a distance of two metres from the person speaking, it is likely that the noise level in the area is above 80 dB(A)

The level of noise must be kept to the lowest practicable; by for instance quieting the source of noise of reducing the amount of time people spend in a noisy area.

Exposure action values:
Lower exposure action values - 80 dB (A)
Upper exposure action values - 85 dB (A)
Exposure limit values - 87 dB (A)

Actions required by the employer at different levels.

- Above action value of 80 dB(A)- You must reduce noise exposure and make an audiometric screening test available to employees.
- Above action value of 85 dB(A) - You must design and implement a programme to reduce noise exposure. Mandatory warning signs must be displayed, and hearing protectors must be available and must be worn, and ensure that workstations are protected from unauthorised access by barriers or other suitable means. A hearing check, including audiometric screening test, must be made available to employees whose exposure exceeds the lower exposure action level.

A comprehensive approach comprising risk identification, equipment and job redesign, training and education should be adopted to manage the risk of noise induced hearing loss (NIHL) and any other noise related health effects, e.g. stress and tension.

Employers should consider the choice of appropriate work equipment, the design and layout of places of work and workstations, providing adequate information and training to use work equipment correctly and safely in order to reduce their exposure to noise. Employers should ensure that the risk arising from exposure of the employer's employees is either eliminated and or reduced to a minimum by technical means and organisation of work. If rest facilities are provided, employees shall ensure that noise in those facilities is reduced to a level compatible with the purpose and conditions of use.

Measurement of noise must be repeated at appropriate intervals especially if there is any significant change in work patterns or equipment.

Employees are entitled to know results of the risk assessment, and measures taken to reduce exposure and how to use hearing protectors correctly, as well as why and how to report and detect signs of hearing damage.

Potential High Noise Work in Film and Television Production can include:

- Set constructions and props manufacture especially work involving the use of power tools.
- Special effects that involve the use of pyrotechnics.
- Work that may be undertaken on a 'noisy' set e.g. factory floor.
- Work that involves live bands which use high-powered amplifiers particularly concerts that are being recorded in studio.
- Use of firearms.

HODs are responsible for ensuring that their crew are aware of the noise levels in the place of work and measures taken to reduce noise and protect employees.

Where noise is as a result of activities on set for example use of firearms overseen by armourer, explosions overseen by SFX coordinator the armourer or SFX coordinator or other as applicable will be required to advise and also document by means of risk assessment the potential dB(A) and what measures will be required to protect cast, crew and equipment (See Chapter 1 of Part 5 of the Safety, Health and Welfare at Work (General Application) Regulations 2007). The risk assessment should include what level of hearing protection will be required and who is responsible for supply and distribution of same.

The UPM/PM/LP should ensure that relevant persons have been informed of the risks and appropriate control measures will be in place. The 1st AD to ensure the measures specified are implemented when on set.

Noise and use of animals including horses on set.

Where animals including horses will be on set where there are expected high levels of noise including short sharp burst of noise, the animal/horse handler should ensure that animals being used will not be ill affected by the noise and their behaviour subsequent to any noise will not compromise the safety of cast, crew, or any other persons or property/equipment.

Safety Health & Welfare at Work 2007, Chapter 1 of Part 5: Control of Noise at Work guidance document. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Control_of_Noise.pdf

05
Safety, Health and Welfare at Work (Construction) Regulations 2013

For further information for employees and employers on Noise the HSA have a Workplace Health Toolkit, Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Section%205%20Noise%20at%20Work.pdf

HSE Guidance on Control of noise at work in music and entertainment. Link: http://www.hse.gov.uk/pubns/priced/hsg260.pdf

There are a lot of everyday activities that come under the definition of construction work.

The definition is very broad, many work activities or tasks on a building or structure are construction. Construction work includes but is not limited to: Construction, alterations, converting, fitting-out, renovating, repairing, upkeep, decorating, redecorating, maintaining, commissioning and de-commissioning, demolishing, assembling, and dismantling of structures.

Many Film & TV productions are highly impacted by construction e.g. set design, temporary construction, fit outs etc.

5.1 — SOLAS Safe Pass

The Safety Health and Welfare at Work (Construction) Regulations 2013 requires that persons at work on a construction site to whom Regulation 4(2) applies be in possession of a valid safety awareness registration card referred to in Schedule 4. The Safe Pass course is a 1-day course. The SOLAS Safe Pass card lasts four years from the date of training.

Under the Safety Health and Welfare at Work (Construction) Regulations 2013, Safe Pass / Safety Awareness Programmes only applies to -

A. Craft and general construction workers,
B. Persons undertaking on-site security work, and
C. Persons or classes of persons as may be prescribed by the Minister.

The Health and Safety Authority in conjunction with the Construction Advisory Committee have produced a summary guide of the categories of persons to whom Safe Pass does and does not apply.

Further information on the requirements for SOLAS Safe Pass can be found on HSA website: https://www.hsa.ie/eng/Your_Industry/Construction/Construction_FAQ's/Safe_Pass/#wi

SOLAS Safe Pass – Amendment to Construction Regulations: https://dbei.gov.ie/en/Legislation/Legislation-Files/SI-No-129-of-2019.pdf

UPM/PM/LP's should request key crew members to present their SOLAS Safe Pass (if required for the production / studio/ set build areas and or locations) as proof of having completed the course. The Project Supervisor Construction Stage (PSCS) should ensure only authorized persons are on the construction site/ areas where construction works are being carried out, and monitor this.

SOLAS Construction Skills Certificates Scheme (CSCS) Cards or Equivalent.

Construction Managers are required to ensure that crew directly under their control (including external contractors) hold valid construction skills registration cards if the worker engages in any of the tasks specified in Schedule 5 of the Construction Regulations 2013.

5.2 — Duty Holders under Construction Regs 2013

The following are the key duty holders for construction under the Construction Regs 2013.

- Client (The Client is defined as: a person or company for whom a project involving construction work is undertaken. The client usually has effective control over key aspects of the project).
- Designer
- Project Supervisor Design Process (PSDP)
- Project Supervisor Construction Stage (PSCS)
- Contractors

5.3 — Overview of Duties of Duty Holders under Construction Regs 2013 (not a legal interpretation of the Regulations)

5.3.1 — The Client

Where a project has construction work as defined under these regulations, the client will have specific duties, depending on the number of contractors that may be engaged, if there is a particular risk as per Schedule 1 of these regulations, and on the timeframe of the project.

Overview of Client Duties:

- Select and appoint competent designers and contractors with adequate resources to carry out the work.
- Co-operate with the Project Supervisors:
- give them any information they have in relation to the state or condition of a structure or of the site,
- if there is a Safety File give it to the PSDP,
- set a realistic time frame for completion of the project,
- The Client shall also provide, or arrange to have provided, a copy of the Preliminary Safety and Health Plan to all those being considered for or tendering for the role of Project Supervisor for the Construction Stage.

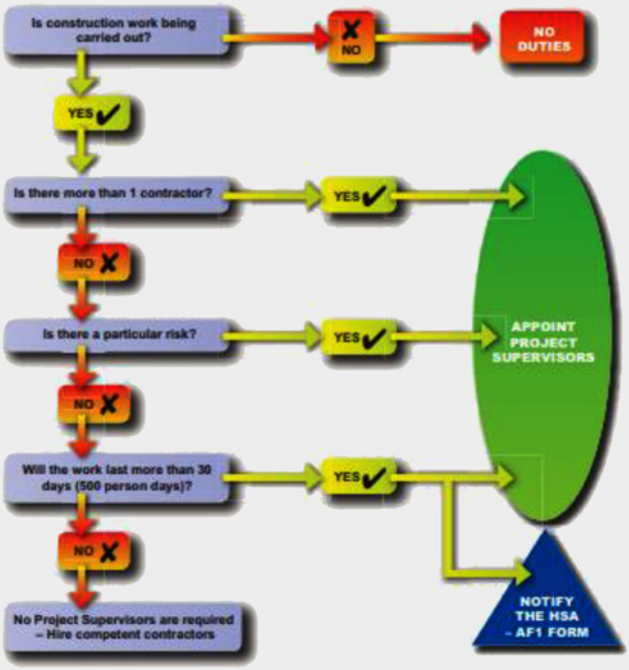


Figure 2: Flowchart for the Appointment of Project Supervisors
Source: HSA Guide for Contractors and Project Supervisors

- If the project is going to take longer than 30 days or 500 person days, then the Client must notify the Health and Safety Authority (AF1 Form). This can be done by registered post or by email to wcu@hsa.ie
- The Client also has a duty to co-operate with project supervisors.
- Keep the Safety File that the PSDP has provided when the project is completed.

If there is a particular risk as per Schedule 1 or more than one contractor, the client must:

- Appoint a competent PSDP in writing.
- Appoint competent PSCS in writing.
- Terminate/Change the appointments of roles within the project if it is necessary to do so.

Where a client (UPM/P/LP) appoints project supervisors, designers, or contractors in relation to construction, they must demonstrate to the client that they are competent and have allocated or will allocate adequate resources to enable them to perform their duties imposed under these Regulations or under other relevant statutory provisions prior to any works commencing.

For further information on 'who' is the Client and duties of the Client, see link to HSA website: https://www.hsa.ie/eng/Your_Industry/Construction/Construction_Duty_Holders/Client/

The Health & Safety Authority (Ireland) does not have specific detailed information for the Film & TV Industry. Below is a link to the Health & Safety Executive (UK) The Construction Design and Management Regulations (CDM) roles and duties in the TV/film and broadcasting sector, which may be of assistance to give guidance to persons in Ireland working in the industry (note legislation in Ireland differs to UK legislation). Link: https://hse.gov.uk/entertainment/cdm-2015/cdm-role-allocation/tv-film-broadcasting.htm

5.3.1.1 — Notification to HSA of Construction Work - AF1 – Duty of Client

If construction work is planned to last longer than 30 working days or the volume of work is scheduled to exceed 500 person days, a client shall promptly give notice in writing to the Authority in an approved AF1 Form at the design stage of the project.

The flowchart below outlines duties of client for appointment of project supervisors and notification to HSA:

5.3.2 — Designer

Overview of Designer Duties

Designers have a duty to ensure designs can be constructed safely and do not pose a risk to the end user.

A Designer shall-

- Take account of the general principles of prevention, the relevant safety and health plan, and any safety file.
- Provide in writing to the project supervisor all relevant information necessary for the project supervisor to carry out their duties and all information about the project known to the designer regarding particular risks to the safety, health and welfare of persons at work, including but not limited to the risks referred to in Schedule 1;
- Where designers can not eliminate the risk through design then the designer is required to conduct a design risk assessment.
- Cooperate with the PSDP, PSCS and other designers to ensure they comply with these Regulations.

For further information on 'who' is the Designer and duties of the Designer, see link to HSA website: https://www.hsa.ie/eng/Your_Industry/Construction/Construction_Duty_Holders/Designers/

5.3.3 — Project Supervisor Design Process

Overview of Duties of PSDP

- Consider the general principles of prevention when setting out the schedule of the project and ensuring that adequate time is allocated for the project.
- Reference any existing information that may be available for the structure(s).
- Prepare a preliminary safety and health plan – The main purpose of initiating the Safety and Health Plan at the design process is to provide the following information for the project supervisor for the construction stage:
  - A general description of the project;
  - Any other work activities taking place on site;
  - Work involving particular risks referred to in Schedule 1 to the Regulations but not limited to this list;
  - The timescale for the project (and the basis on which the time frame was established);
  - Conclusions drawn by designers and the PSDP as regards the general

principles of prevention
  - Any relevant Safety and Health Plan or Safety File
  - The location of electricity, water and sewage connections as appropriate.
- The PSDP should arrange meetings or discussions between the different designers, contractors, or other relevant person so as to aid the co-ordination of the design process.
- In order for the PSDP to comply with the duties it may be necessary for the PSDP to issue directions to other duty-holders, for example if the provision of information relating to the conclusions drawn by a designer when applying the General Principles of Prevention and design risk assessments is not forthcoming. The PSDP shall confirm the directions in writing.
- If, in the opinion of the PSDP, a designer, contractor or other relevant person has not carried out directions confirmed in writing, notify in writing the Authority, the client and the person to whom the direction was given.
- The PSDP to retain a copy of each associated notification to the Authority with the safety and health plan.
- repare a safety file appropriate to the characteristics of the project,
- Promptly deliver the safety file to the client on completion of the project.

For further information on the role of the PSDP, see link to HSA website: https://www.hsa.ie/eng/Your_Industry/Construction/Construction_Duty_Holders/Project_Supervisor_Design_Process/

5.3.4 — Project Supervisor Construction Stage

Overview of Duties of PSCS

- Where a project is notifiable to the HSA submit notification on AF2 form prior to commencement of construction.
- The PSCS must develop the preliminary plan and develop a suitable Construction Safety and Health Plan for the project before commencement of construction work.
- Where required, follow the provisions of the safety and health plan.
- The PSCS must make adjustments to the plan to take account of progress and changes which occur, and include specific measures concerning work which involves a particular risk including but not limited to any risk referred to in Schedule 1,
- include in the plan, rules for the execution of the construction work which rules are required for the purposes of the safety, health and welfare of persons at work,
- ensure that the plan and any rules contained in it are in writing and that they are brought to the attention of all contractors and other relevant persons who may be affected by them.
- The Project Supervisor Construction Stage is responsible for managing and co-ordinating the construction phase safety and health issues on site.
- Facilitate coordination and cooperation, organise and monitor cooperation between contractors.
- Coordinate the implementation during construction of the general principles of prevention.
- Decide technical or organisational aspects and estimate the time required for completing the work or work stages.
- Where required, facilitate the appointment of a site safety representatives from the employees of the contractor or contractors undertaking.
- Provide access to appropriate information regarding safety, health and welfare and co-ordinate safety awareness and skills certification on site.
- Supply information to the PSDP for the Safety File.

For further information on the role of the PSCS, see link to HSA website: https://www.hsa.ie/eng/Your_Industry/Construction/Construction_Duty_Holders/Project_Supervisor_Construction_Stage/

5.3.4.1 — Notification to HSA for Construction Work AF2 - Duty of PSCS

If work on a construction site is expected to last longer than 30 working days or the volume of work is scheduled to exceed 500 person days, the PSCS shall, before the work begins, give written notice promptly to the Authority on the AF2 form. HSA publications and forms – Link: https://www.hsa.ie/eng/Publications_and_Forms/Forms/

5.3.5 — Contractors

A Contractor means any employer whose employees carry out and or manage construction work. A contractor may also include a self-employed person or a sole trader.

Overview of Duties of Contractor

- To apply where appropriate the general principles of prevention in a consistent manner.
- To provide any necessary site-specific information relating to the safety of the site, or relevant extract of their safety statement to the PSCS.
- Identify hazards, eliminate the hazards, or reduce risks during construction work.
- Provide workers with site specific induction.
- Comply with site rules and the safety and health plan, and ensure their employees comply.
- Ensure workers have a safety awareness card and a CSCS.
- Co-operate with the PSCS.
- Comply with directions of the project supervisors.
- Monitor compliance and take corrective action where required.
- Report accidents to the Authority and to the PSCS where an employee cannot perform their normal work for more than three consecutive days, excluding the day of the accident.
- Facilitate where required the site safety representative.
- Appoint safety officers where there are more than 20 on site or 30 employed.

For further information on the duties of contractors see link to HSA website: https://www.hsa.ie/eng/Your_Industry/Construction/Construction_Duty_Holders/Contractors/Contractors.html

Link to HSA Construction Regulations 2013: https://www.hsa.ie/eng/Legislation/New_Legislation/SI_291_2013.pdf

Links to the HSA website for AF1 & AF 2 Forms: https://www.hsa.ie/eng/Publications_and_Forms/Forms/

For further information re construction and design, please see: Guidelines on the Procurement, Design and Management Requirements of the Safety health and Welfare at Work (Construction) Regulations 2013.HSA Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Guidelines_on_Procurement_Const_regs_2013.pdf

Sample Construction Stage Health & Safety Plan. HSA Link: https://www.hsa.ie/eng/Your_Industry/Construction/BeSMART_ie_for_Construction/risk-assessment-128661-1531403001.pdf

An organizational flow chart developed by the Health & Safety Executive (UK) for TV & Broadcasting that outlines role allocation for the design and construction phase of a production. Link: https://hse.gov.uk/entertainment/cdm-2015/assets/docs/television-broadcasting-part5.pdf

Note that in Ireland at time of creating this section of the guide (Sept 2019) the Construction Regulations were: Safety, Health & Welfare at Work (Construction) Regulations 2013 and in UK: The Construction (Design and Management) Regulations 2015.

06
The Health and Safety Authority

The Health and Safety Authority (HSA) (UK equivalent - Health and Safety Executive)

The HSA has overall responsibility for the administration and enforcement of health and safety at work in Ireland. The HSA monitors compliance with legislation at the workplace and can take enforcement action.

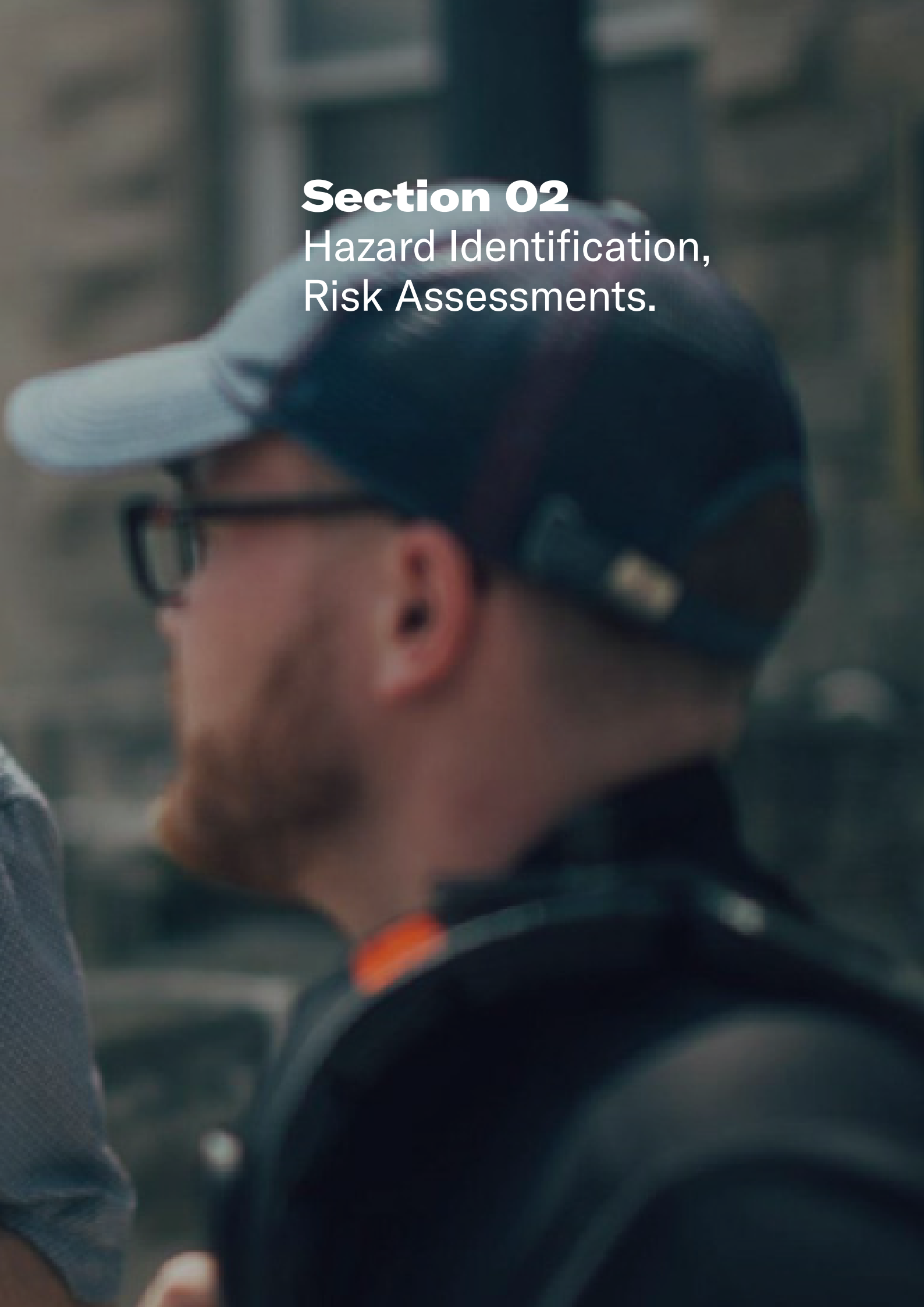
The powers of the HSA include:

- They can enter any place of work.
- They may search and examine any place of work.
- They can require persons at that place of work to produce any records.
- They can issue direction including:
  - Direction for an improvement plan, where they have identified an activity that is or is likely to be a risk.
  - The inspector may serve a written notice (an improvement notice) where the inspector is of the opinion that a person has breached or is not in compliance with the law.
  - The inspector may serve a written notice (a prohibition notice) where they are of the opinion that an activity (including any article or substance or otherwise) which involves or is likely to involve a risk of serious personal injury to any person, prohibiting that activity from being carried out.

A person guilty of an offence is liable:

- On summary conviction to a fine not exceeding €3,000 or imprisonment for a term not exceeding 6 months or both,
- or on conviction on indictment to a fine not exceeding €3,000,000 or imprisonment for a term not exceeding 2 years or both.

Link to the HSA website: https://www.hsa.ie/eng/



Section 02
Hazard Identification, Risk Assessments.

07
Hazard Identification & Risk Assessments

7.1 — What is a Hazard

A hazard refers to anything with the potential to cause harm, injury or ill-health, damage to property, and damage to the environment.

7.2 — What is a Risk

Risk means the likelihood that an undesired or hazardous event will occur, together with the severity of the harm suffered, consequences, and how many people could be affected.

7.3 — What is a Risk Assessment

Risk Assessment is a careful examination of what in your place of work or about your work activities could cause harm to your employees and visitors to your workplace and determining the control measures you can implement to minimise the risk.

The overall purpose of the risk assessment process is to evaluate the hazards that arise or may arise in the course of the work activities, and to ensure that the risks to people arising from these hazards are assessed and controlled to either eliminate the hazards or reduce the risks to an acceptable level.

The results of risk assessments to be documented, and the control measures put in place communicated with employees / all persons who will be affected by the hazard at the place of work.

The findings of the risk assessment to be recorded in the Safety Statement – see chapter 3.2.

The safety statement can also refer to specific procedures contained in other documents or databases (regarding the preparation and communication of risk assessments for specific departments) which are known to the workers and are easily accessible.

Review the hazard identification and risk assessment process on an ongoing basis. There is no single methodology for hazard identification and risk assessment.

Below are steps that can be followed for either a three-step risk assessment or for a five-step risk assessment.

Three-step process

1. Identifying the hazards in the workplace(s) under your control.
2. Assessing the risks presented by these hazards.
3. Putting control measures in place to reduce the risk of these hazards causing harm.

The five steps to risk assessment

1. Identify the hazards.
2. Decide who might be harmed and how.
3. Evaluate the risk and decide on precautions
4. Review your significant findings
5. Review your risk assessment and update if necessary

7.4 — Who carries out Risk Assessments

A 'competent' person (ref definition Chapter 2). If the production company does have an appointed competent safety officer, this person can complete the risk assessments for production.

Where in-house expertise is not available, production companies may need to employ the services of an external competent safety and health adviser. They need to be familiar with your work activities, have worked in this sector before and have the ability to assess specific work activities. A competent safety and health adviser should be used. They must be familiar with the hazards which are relevant to the workplace under review.

The risk assessment should involve consultation with, and participation by, workers and take into account legal and other requirements.

pecific risk assessments in respect of specific categories such as night-time or shift workers, persons working at height, children, and pregnant or post-natal employees must be prepared.

Risk assessments for each location should be provided to and circulated to all crew/ background artists or others affected by production company operations, including 2nd Unit personnel. The UPM/ LP/PM should arrange for location risk assessments to be generated as required.

Specific risk assessments and method statements from other departments should be in place prior to works being carried out or filming at any location.

7.5 — Legal requirements for Risk Assessments

Section 19 of the Safety, Health and Welfare at Work Act 2005 requires that employers and those who control workplaces to any extent must identify the hazards in the workplaces under their control and assess the risks to safety and health at work presented by these hazards.

7.6 — Legal requirements Contractors/ Self Employed Persons and Risk Assessments

All contractors are required to provide the production with an adequate, written risk assessment for their activities. All contractors and self-employed persons are required to put in place all reasonably practicable measures to ensure they and others affected by their actions are not put at risk.

If the production company will not be producing risk assessments for each department, HoDs should be made aware of this on appointment and informed of the requirement for them to assess hazards and ensure risks are adequately controlled before work commences.

7.7 — Dynamic Risk Assessments

Dynamic risk assessment is a continuous process of identifying hazards, assessing risk, and taking action to eliminate or reduce risk in changing circumstances.

These changes must be communicated to all crew, cast and background artists (any person who may be affected). Records of dynamic risk assessments should be maintained.

An example of where a dynamic risk assessment may be required is where there is an existing risk assessment in place for a hazardous activity (stunt/SFX or use of action vehicle) and on the shooting day, there is a requirement or request by the director for a significant change in the activity.

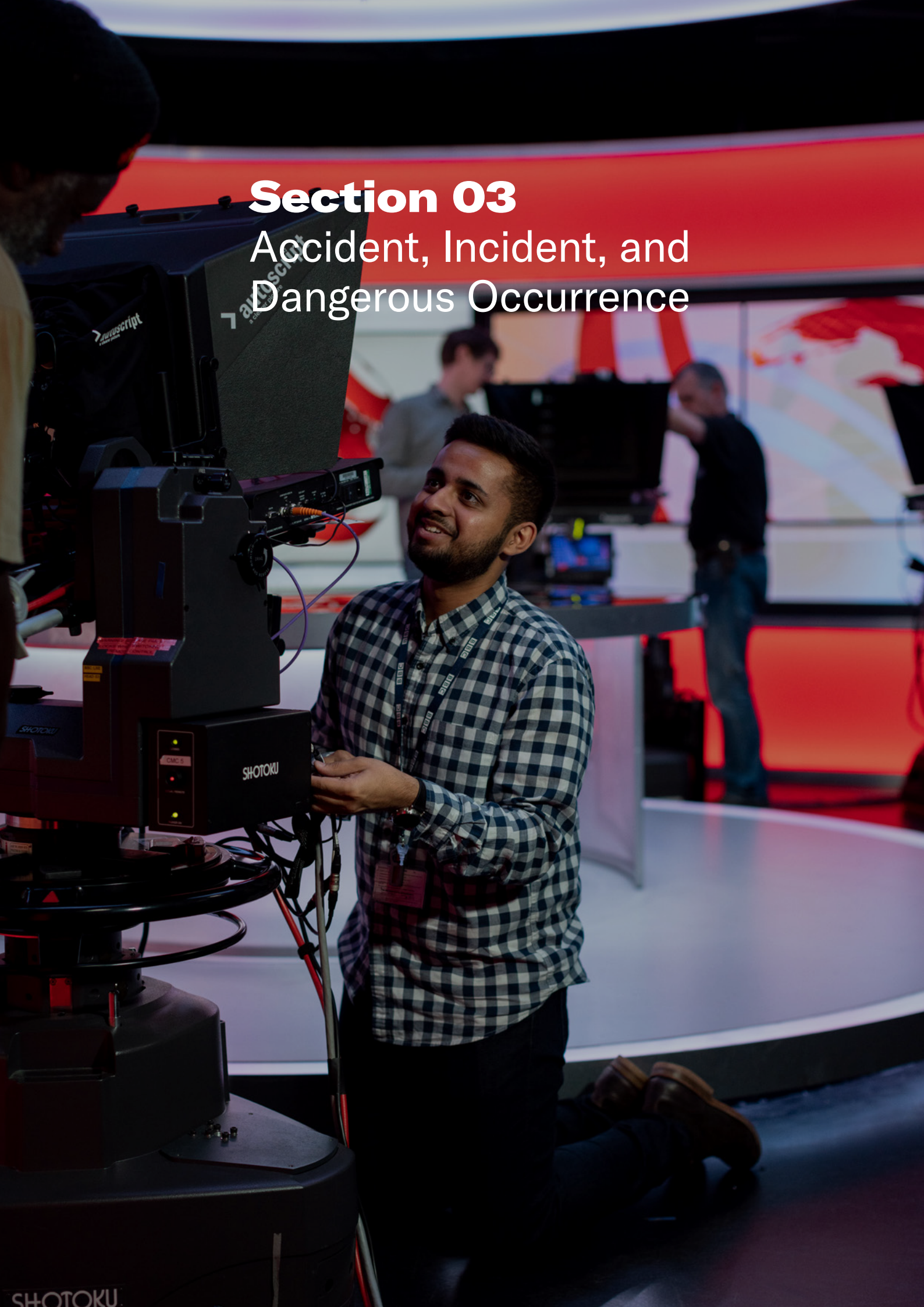
The UPM/PM/LP and Safety Officer/ Advisor must be informed prior to changes taking place.

The requested changes must be discussed with the competent/responsible persons(s) (stunt, SFX, or action vehicle coordinators for example) to determine if the revised activity can proceed in a safe manner. Those persons should then determine what control measures are required by evaluating the risk.

The changes and agreed control measures must be documented and clearly communicated to all relevant persons that may be affected by any changes (crew, cast, background artists/special extras or others). The new revised control measures must be implemented.

Prior to continuing rehearsals or shooting, the 1st AD should ensure all parties understand the implications of any changes made.

For further information on Risk Assessments, please see HSA Guidance document. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Guide_to_Risk_Assessments_and_Safety_Statements.pdf



Section 03
Accident, Incident, and Dangerous Occurrence

08
Definitions

8.1 — Near Miss

A 'near miss' is defined as an unplanned event that does not result in personal injury or property damage, but where the potential for damage/injury is high.

8.2 — Incident

An 'incident' is defined as an unplanned event that results in property damage but does not result in personal injury.

8.3 — Accident

An 'accident' means an accident arising out of or in the course of employment which, in the case of a person carrying out work, results in personal injury.

Personal injury includes "any injury, disease, disability, occupational illness or any impairment of physical or mental condition, and death, that is attributable to work."

For the purposes of the Safety, Health and Welfare At Work (General Application) (Amendment) (No. 3) Regulations 2016 only fatal and non-fatal injuries are reportable. Diseases, occupational illnesses, or any impairments of mental condition are not reportable. Note that directly caused mental injuries such as shock or fright as the result of an assault, continue to be reportable.

(For occupational exposure to SARS-COV-2 reference the Safety, Health and Welfare at Work (Biological Agents) Regulations 2013 and 2020, and the 2020 Biological Agents Code of Practice).

8.4 — Dangerous Occurrence

A dangerous occurrence includes, but is not limited to, an unintentional explosion, the collapse, overturning or failure of any load-bearing part of any lifting equipment, other than an accessory for lifting. It also includes structural collapse associated with construction or maintenance work.

For a list of dangerous occurrences see Appendix 1 of link below: HSA Guidance on the Safety, Health and Welfare at Work (Reporting of Accidents and Dangerous Occurrences) Regulations 2016. https://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Accident_and_Dangerous_Occurrences_Reporting.pdf

8.5 — Ill Health

A condition of inferior health in which some disease or impairment of function is present, includes poor physical or mental condition.

8.6 — First Aid

First Aid is the emergency care or treatment given to an ill or injured person before medical aid can be obtained. The aims of first aid are to preserve life, prevent worsening of condition and promote recovery.

Under Regulation 163 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 an occupational first aider means a person trained and qualified in occupational first aid.

Since the 1st of June 2018, the HSA only recognises the Pre-Hospital Emergency Care Council (PHECC) First Aid Response (FAR) training standard as meeting the needs of occupational first aid in workplaces.

8.7 — Medical Aid

Medical Aid is professional treatment for illness or injury.

09
Reporting of Accident, Incident, Near Miss and Dangerous Occurrence

9.1 – Internal Reporting

All injuries, near misses and dangerous occurrences should be reported and recorded.

Production companies must have in place accident report forms and procedures that give clear guidance for all crew on the steps to be taken in the event of a near miss, accident, or dangerous occurrence.

Crew should report any such occurrence to their manager/HoD. All accident and dangerous occurrences should be reported to the crews' HoD and the UPM/LP/PM. On shooting days any accident or dangerous occurrence on set and or at a location should be reported to the 1st AD and the UPM/LP/PM.

9.2 – Reporting of Accidents and Dangerous Occurrences to the HSA

The Safety, Health and Welfare at Work (Reporting of Accidents and Dangerous Occurrences) Regulations 2016 (S.I. No. 370 of 2016). The "2016 Regulations" brings the reporting of accidents and dangerous occurrences in line with the provisions of the Safety, Health and Welfare at Work Act 2005.

Further information Links: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Accident_and_Dangerous_Occurrences_Reporting.pdf

http://www.irishstatutebook.ie/eli/2016/si/370/made/en/pdf

http://www.irishstatutebook.ie/eli/2005/act/10/enacted/en/print#sec2

Where an accident or dangerous occurrence is reportable to the Authority, the employer has a duty to report these to the Authority (HSA).

Under Regulation 225 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 (the "2007 Regulations") an employer must report an accident or dangerous occurrence where:

A. an employee dies as a result of an accident at their place of work or in the course of carrying out their work in a location other than their normal place of work,
B. an employee, as a result of an accident at their place of work or in the course of carrying out their work in a location other than their normal place of work, is prevented from performing their normal work for more than 3 consecutive days, excluding the day of the accident but including any days which would not have been working days,
C. an employee dies within one year as

a result of an accident at their place of work or in the course of carrying out their work in a location other than their normal place of work, even if the accident had already been reported.

D. any person who is not your employee or who is not at work but who as a result of an accident related to a place of work or a work activity suffers any injury or condition which, due to the nature or severity of the injury or condition, results in the person being taken from the location of the accident to receive treatment in respect of that injury in a hospital or medical facility at a work site that is staffed by a registered medical practitioner,

E. any person who is not your employee or who is not at work but who as a result of an accident related to a place of work or a work activity dies from an accident caused by a work activity at the place of work, or

F. prescribed dangerous occurrence.

Diseases, occupational illnesses, or any impairments of mental condition are not reportable as they are not classified as personal injuries under the 2016 Regulations. Note that directly caused mental injuries such as shock or fright as the result of an assault are reportable.

9.2.1 — Timeframes for reporting to HSA

Under the 2016 Regulations, fatal accidents must be reported immediately to the Authority and the Gardaí so the necessary action and any investigation can take place. **The Authority must be supplied by** the quickest practicable means with the name of the deceased, brief particulars, and the location of the accident and, within 5 working days of the death, submit the formal report to the Authority in the approved form.

Non-fatal accidents or dangerous occurrences should be reported to the Authority as soon as reasonably practicable and not later than 10 working days after the event, send a written report to the Authority in the approved form.

9.2.2 — Keeping of Records

The employer must keep a record of any accident or dangerous occurrence which is required to be reported for a period of 10 years from the date of the accident or dangerous occurrence (Regulation 226 of the 2007 Regulations).

9.2.3 — Defence in Proceedings

It will be a defence in any proceedings against an employer for such person to prove that he or she was not aware of the accident or dangerous occurrence in relation to which he or she was required by Regulation 225 to send a written report to the Authority and that he or she had taken all reasonable steps to have such accident or dangerous occurrence brought to his or her notice.

9.2.4 — IR1 and IR3 forms

Reporting to the HSA can be done online using the IR1 and IR3 forms.

IR1 for accidents and IR3 for dangerous occurrences. Link: https://webapps.hsa.ie/Account/Login?ReturnUrl=%2f

9.2.5 — Health & Safety Authority Contact Details

Address: Metropolitan Building, James Joyce Street, Mountjoy, Dublin 1
Phone: (01) 614 7000
Emails: wcu@hsa.ie

For further information on reporting requirements to HSA – Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Accident_and_Dangerous_Occurrences_Reporting.pdf

9.3 — Accident Investigations

Production companies must have in place near miss/accident investigation procedures.

The urgency and level of an investigation will depend on the magnitude and immediacy of the risk involved.

All fatal accidents reported to the Health and Safety Authority and An Garda Síochána are investigated by HSA inspectors. The HSA inspector or An Garda Síochána will advise of how the scene is to be preserved/maintained. Where an employer has control of the scene, the scene should be preserved until the arrival of An Garda Síochána/HAS, or before the expiration of 3 clear days after reporting a fatal accident.

The employer is responsible for coordinating the internal investigation of accidents and dangerous occurrences. Producers, UPM, LP or PM should coordinate the accident on behalf of the employer. For an investigation to be worthwhile, it is essential that management and the workforce are involved. The investigation team must include people who have the necessary investigative skills, based on the nature of the accident.

Persons involved in the investigation could include HoD specialized contractors, external safety advisors, internal safety officer, producers, and the UPM, LP and PM. An effective investigation requires a methodical, structured approach to information gathering, collation and analysis.

The findings of the investigation will form the basis of an action plan and identify control measures which address the immediate, underlying and root causes to prevent the accident or incident from reoccurring and for improving overall management of risk.

10
Medic/First Aid Cover Considerations for a Production

The UPM/PM/LP/Producer should determine the requirements for their production, assess what level of cover is required for each phase and also on specific days during each phase. This will be based on a risk assessment.

Example of considerations to determine cover required:

- During the phase of setting up offices when there are only office-based crew, it may be considered sufficient to have Pre-Hospital Emergency Care Council (PHECC) First Aid Responder(s). This will be based on a risk assessment.
- As the production develops and the number of crew and departments and activities increase (construction crew including carpenters and scaffolders/riggers, stunts/SFX or costume/make-up/hair/prosthetic/props departments using chemicals and engaging in activities that could be considered hazardous to health) there may be the need for additional First Aid Responder's (FAR) and medic cover, based on the risk assessment.
- During the shooting phase there may be a need for more than one medic, for different levels of medic cover, a transport ambulance on standby depending on the number of crew, cast and background artists, the activities taking place on set including stunts/stunt rehearsals/SFX and for preparations/strike of set areas, taking into account the proximity of the nearest hospital, based on the risk assessment.

10.1 — First Aiders

Persons who have received training and are qualified to act as a First Aider in the workplace.

The recognized standard for occupational first aid in workplaces in Ireland is PHECC FAR (Pre-Hospital Emergency Care Council – First Aid Responder). Training for this standard is a three-day course, with a refresher course required every two years. FAR should be in possession of a PHECC FAR Certificate.

10.2 — PHECC

PHECC – 'The Pre-Hospital Emergency Care Council is an independent statutory body. PHECC set the standards for education and training for pre-hospital emergency care in Ireland'. Pre-hospital emergency care is care given to an ill / injured person in a pre-hospital environment. The pre-hospital care can be from a trained responder or a registered practitioner. Ref Link: https://www.phecit.ie/PHECC/What_we_do/PHECC/What_we_do/What_we_do.aspx?hkey=ad21b38b-ae2b-4bf4-85da-9e0abecde29f

10.3 — PHECC Licenced Provider Categories

There are 'Four Categories of pre-hospital emergency care Clinical Practice Guidelines (CPG's) licensed providers' and they are as follows:

- Statutory Service Providers
- Voluntary Service Providers,
- Private Service Providers
- Auxiliary Service Providers.

10.4 — PHECC Licensed Service Providers

Production companies engaging a service provider for pre-hospital emergency care must ensure that they are a Licensed CPGs Provider with PHECC. Production companies can check if a service provider is licensed on the PHECC website.

Link to PHECC website – service providers: https://www.phecit.ie/PHECC/Clinical_resources/CPG_approved_service_providers/PHECC/Clinical_Resources/Approved_Service_Providers__CPGs_/Approved_service_providers_-_CPGs.aspx?Hkey=840156ff-7fea-4415-b2f5-dd9a78d9ac1a

10.5 — PHECC Registered Practitioners License/PIN ID card

Emergency medical technicians, paramedics and advanced paramedics engaged to provide medical cover on a production must be on the PHECC register to legally practice in Ireland. https://www.phecit.ie/PHECC/The_register/PHECC/The_Register/Register.aspx

Each PHECC-registered practitioner is issued with a unique Personal Identification Number (PIN) on an ID card. The registration status of an individual may be checked using this PIN.

Link to PHECC Register: https://www.phecit.ie/PHECC/The_Register/Check_the_Register/PHECC/The_Register/Check_the_Register/Check_The_Register.aspx

10.6 — Insurance for Medics

Nurses employed in the public health service or in certain voluntary organisations are protected by the Clinical Indemnity Scheme (CIS). Those working in the private sector may be covered by their employers' insurance. In the interest of patient safety and protecting the public, nurses must ensure that they have professional indemnity insurance.

EMTs, Paramedics and Advanced Paramedics providing Medic Cover are required to have the appropriate insurance cover.

The UPM/PM/LP must check the PHECC Register to ensure all EMTs, Paramedics/Ad Paramedics are on the PHECC register, the service provider is a PHECC licensed provider, and the licensed provider has appropriate insurance cover.

10.7 — Nurses

All nurses who practise in Ireland must be registered with the Nursing and Midwifery Board of Ireland (NMBI). Nurses (and midwives) cannot legally practise in Ireland unless they are registered with NMBI.

As an employer, it is vital that you only employ nurses and midwives who are registered with the Nursing and Midwifery Board of Ireland. Each NMBI-registered nurse is issued with a unique Personal Identification Number (PIN). The registration status of an individual may be checked using this PIN.

Check the Register: https://www.nmbi.ie/Check-the-Register

10.8 — Emergency Medical Technician (EMT)

EMT is a registered practitioner who has completed PHECC's Standard of Education & Training to EMT level. This is the minimum clinical level that is recommended to provide care and transport of an ill or injured patient. The EMT can provide basic life support including the use of automated external defibrillators, basic and advanced airway management, use of bag-valve-mask, ECG and SpO2 monitoring, glucometry, basic trauma care which includes splinting and spinal immobilisation. The EMT may administer medications including Aspirin, Entonox, EpiPen, Glucagon, Glucose gel, GTN, Naloxone, Oxygen, Paracetamol, Ibuprofen and Salbutamol.

10.9 — Paramedic

The paramedic can provide intermediate life support. This includes the skills listed for the EMT and the insertion of nasopharyngeal airway, 12 - lead ECG, peak flow meter, cessation of resuscitation, tourniquet application, manual defibrillation, and spinal injury decision. The paramedic may administer the medications permitted for an EMT as

well as Epinephrine (1:1000), Midazolam, Clopidogrel, Hydrocortisone, Ipratropium Bromide and Ticagrelor. The paramedic may maintain intravenous infusions once commenced.

10.10 — Advanced Paramedic (AP)

The AP level is above the EMT and Paramedic, they are expert practitioners in the field of pre-hospital emergency care. The Advanced Paramedic can provide advanced life support. This includes the skills listed for a paramedic and endotracheal intubation, intravenous cannulation, intraosseous cannulation, needle thoracocentesis, and needle cricothyrotomy. The advanced paramedic may administer the medications permitted for a paramedic and 23 additional medications for acute emergency medical and traumatic conditions, from cardiac arrest to hypovolaemia.

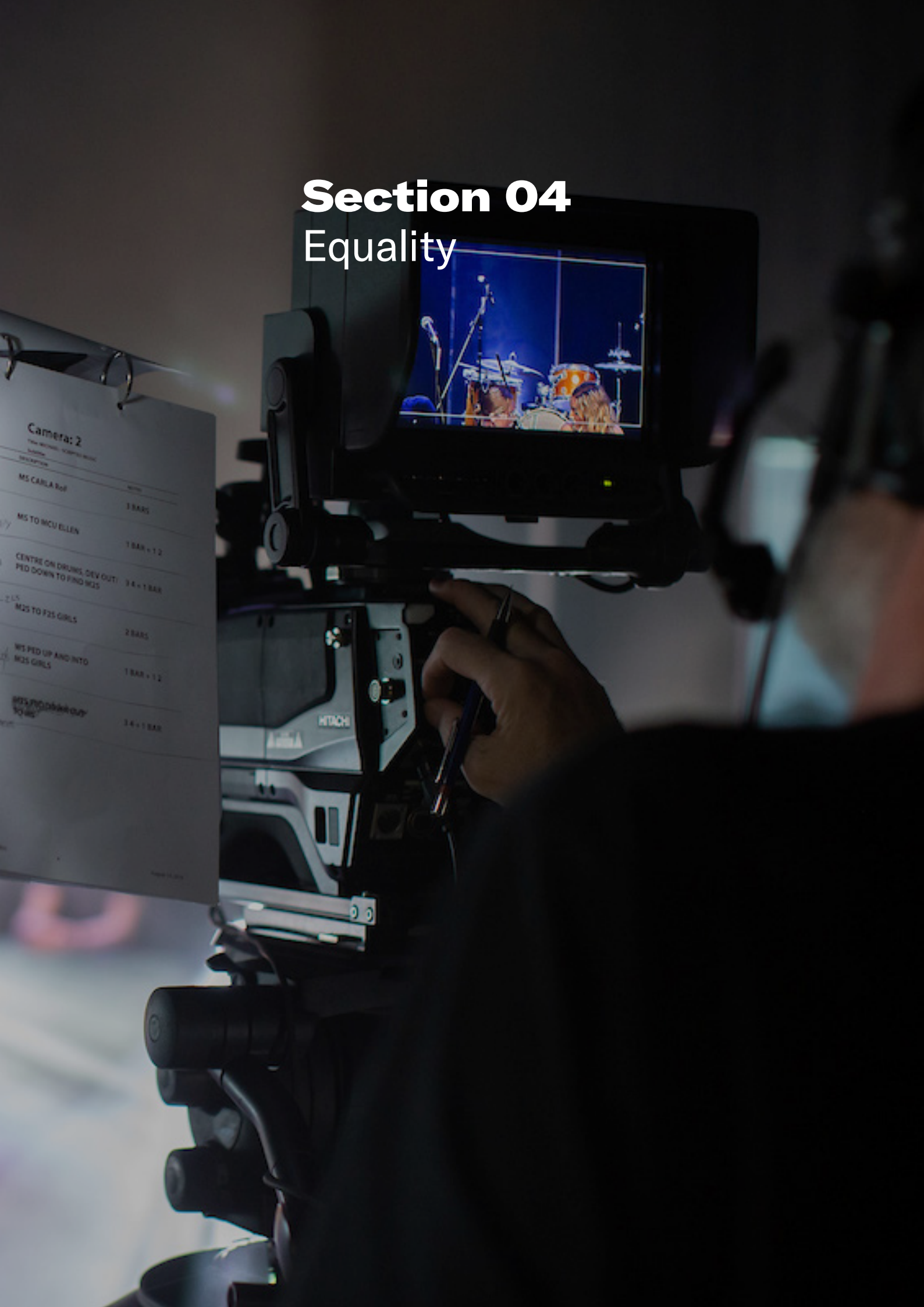
EMT, Paramedic & Ad Paramedic Ref PHECC Scope of Practice: https://www.phecit.ie/Images/PHECC/Public%20and%20Patients/PUB041%20-%20Pre-Hospital%20Emergency%20Care%20and%20Scope%20of%20Practice.pdf

10.11 — Maintaining Records

The production company should maintain records for the following:

- **Responders:** Copy of certificates for any PHECC responder on a production.
- **Licensed providers**: Copy of the PHECC licensed service provider's license.
- **Licensed registered practitioners**: Copy of PHECC ID card with PIN number for all practitioners engaged in capacity of a practitioner on the production.
- **Insurance:** Copies of all insurances for the PHECC license provider and or personal /collective protection with regard to professional liability for practitioners.
- **Garda Vetting responders**: Where responders are working on a production each responder should have Garda Vetting.
- **Garda Vetting Practitioners**: The PHECC-licensed provider should provide proof of Garda clearance for any practitioner working on a production with children.
- **Other:** The production company may seek evidence of incorporation of the PHECC license's provider's company.

Section 04
Equality



11
Equality, Diversity, and Inclusion

Legislation

The Employment Equality Acts 1998–2015 outlaw discrimination in a wide range of employment and employment-related areas.

Employees with disability have the same employment rights as other employees. Employers should note that discrimination may be direct or indirect.

Every employer has a legal responsibility to ensure that all employees/workers, whether full time or freelance, are treated with respect and dignity in all situations associated with their employment.

All employees/workers, trainees, interns, students, board members, volunteers and individuals providing services to the employer are protected by this Code of Behaviour. They are also required to comply with it. Senior staff must take responsibility for the power they have and be aware of the potential impact their behaviour has on others. The employer encourages all employees/workers to call out inappropriate behaviour as soon as it arises.

Direct discrimination is where a person is treated in a less favourable way than another person is, has been or would be treated in a comparable situation on any of the following nine grounds:

There are **9 grounds for discrimination**, including:

- **Gender**: this means man, woman, or transgender
- **Civil status**: includes single, married, separated, divorced, widowed people, civil partners and former civil partners
- **Family status**: this refers to the parent of a person under 18 years or the resident primary carer or parent of a person with a disability.
- **Sexual orientation**: includes gay, lesbian, bisexual, and heterosexual.
- **Religion**: means religious belief, background, outlook, or none
- **Age**: this does not apply to a person aged under 16
- **Disability**: includes people with physical, intellectual, learning, cognitive or emotional disabilities and a range of medical conditions
- **Race**: includes race, skin colour, nationality, or ethnic origin
- Membership of the **Traveller community**.

These include recruitment and promotion; equal pay; working conditions; training or experience; dismissal and harassment including sexual harassment. https://www.citizensinformation.ie/en/employment/equality_in_work/equality_in_the_workplace

The legislation defines discrimination as treating one person in a less favourable way than another person.

What counts as discrimination in the workplace?

Discrimination is defined as less favourable treatment. An employee is said to be discriminated against if they are treated less favourably than another employee is treated, has been treated or would be treated, in a comparable situation on any of the above 9 grounds.

- Discrimination can be *direct* or *indirect*.
- To establish **direct discrimination**, a direct comparison must be made. For example, in the case of disability discrimination the comparison must be between a person who has a disability and another person who has not. Or, between two people with different disabilities.

Indirect discrimination is when practices or policies do not appear to discriminate against one group more than another but have a discriminatory impact. Indirect discrimination can also happen where a requirement that may appear non-discriminatory adversely affects a particular group or class of people.

Specific situations covered by employment equality legislation.

- **Disability**: Employers are obliged to make reasonable accommodations for staff with disabilities. This includes providing access to employment, enabling people with disabilities to participate in employment including promotion, and training.
- **Pregnancy**: Pregnancy-related discrimination is discrimination on the ground of gender and includes recruitment, promotion, and general conditions of employment. Women who are pregnant or have recently given birth are also protected under maternity protection and unfair dismissals legislation.
- **Equal pay**: Employment equality legislation provides for equal pay for like work. *Like work* is defined as work that is the same, similar, or work of equal value. It is one of the terms that must be part of the contract of employment as a result of laws passed by the Dáil. A claim for equal pay can be made on any of the nine grounds listed above.
- **Harassment** is defined as any unwanted conduct which has the purpose or effect of violating a person's dignity and creating an intimidating, hostile, degrading, humiliating or offensive environment for the person on grounds of gender, marital status, family status, race, age, religion, sexual orientation, disability, or membership of the Travelling Community. Examples of harassment might include: Verbal harassment - jokes, comments, ridicule or songs; Written harassment - messages, texts, emails, letters and notices; Physical harassment - jostling, shoving, pinching, unnecessary touching or any form of assault; Non-verbal harassment or intimidation - gestures, posturing or threatening poses; Visual displays - cartoons, posters, emblems, badges; Isolation or exclusion from work-related social activities; Pressure to behave in a manner that the employee/worker thinks is inappropriate.
- **Bullying** which is linked to one of the 9 discriminatory grounds above comes under employment equality legislation. Bullying is conduct which occurs on more than one occasion (direct or indirect) and which is offensive to a reasonable person. A pattern of any of the following (non-exhaustive) types of conduct amount to bullying: Personal insults and name calling; Persistent unjustified criticism and/or sarcasm; Public or private humiliation; Shouting at employees/workers in public and/or private; Sneering; Instantaneous rage, often over trivial issues; Unfair delegation of duties and responsibilities; Unnecessary work interference; Making it difficult for workers to have access to necessary information; Aggression; Making offensive comments about physical appearance; Physical abuse; Being treated less fairly than colleagues; Intrusion - pestering, spying or stalking; Menacing behaviour.
- **Victimisation**: Under employment equality legislation you are protected against victimisation if you bring a claim or are involved in a complaint of unlawful discrimination against your employer. This means that your employer may not penalise you by dismissal, unfair treatment, or an unfavourable change in your conditions of employment.
- **Sexual Harassment** is any form of unwanted verbal, non-verbal or physical conduct of a sexual nature which has the purpose or effect of violating a person's dignity and creating an intimidating, hostile, degrading, humiliating or offensive environment for the person. Examples of sexual harassment include: Sexual gestures; Displaying sexually suggestive objects including images, text messages or emails; Unwelcome sexual comments and jokes; Unwelcome physical contact

such as pinching, groping, unnecessary touching; Physical force, or threat of force, for sexual objective; Threat of disadvantage for rejection of advances; Promise of advantage for sexual concessions.

Under the Safety Health and Welfare at Work Act 2005, employers must ensure the safety, health, and welfare of all employees in the workplace. Special mention is made of employees with disabilities and employers are directed to take their needs into account, particularly about doors, passageways, staircases, showers, washbasins, lavatories, and workstations.

The recent publication of the Speak Up report by the Irish Theatre Institute shows that more work needs to be done across the broad arts and culture sector, including the screen sector, to provide safer working conditions for arts and arts workers and the government has indicated that new measures and funding will be put in place to address this going forward. The Speak Up: A Call For Change report is available here: https://www.irishtheatreinstitute.ie/wp-content/uploads/2021/10/ITI-Speak-Up-A-Call-for-Change-Report-Oct2021_Final_WEB.pdf

Resources

The *National Disability Authority* (NDA) is an independent statutory agency established by the National Disability Authority Act 1999, which provides advice on disability policy and practice to government and the public sector and promotes Universal Design in Ireland.

In 2015 the *Employer Disability Information Service* was also established. The service is managed by a consortium of employer organisations: Chambers Ireland, IBEC and ISME, and is funded through the NDA. Its purpose is to provide employers with an expert peer source of advice and information on employing staff with disabilities, with a view to enhancing the confidence and competence of employers to employ, manage and retain staff with disabilities.

The Department of Employment Affairs and Social Protection provides a range of supports for employers to:

- provide disability training and awareness,
- develop and implement inclusive recruitment policies and procedures,
- accommodate new employees with disability.
- assist with retaining employees who have acquired an injury.

Information on available workplace schemes for people with disabilities and their employers or prospective employers is available at: http://www.welfare.ie/en/Pages/Workplace-Supports_holder.aspx

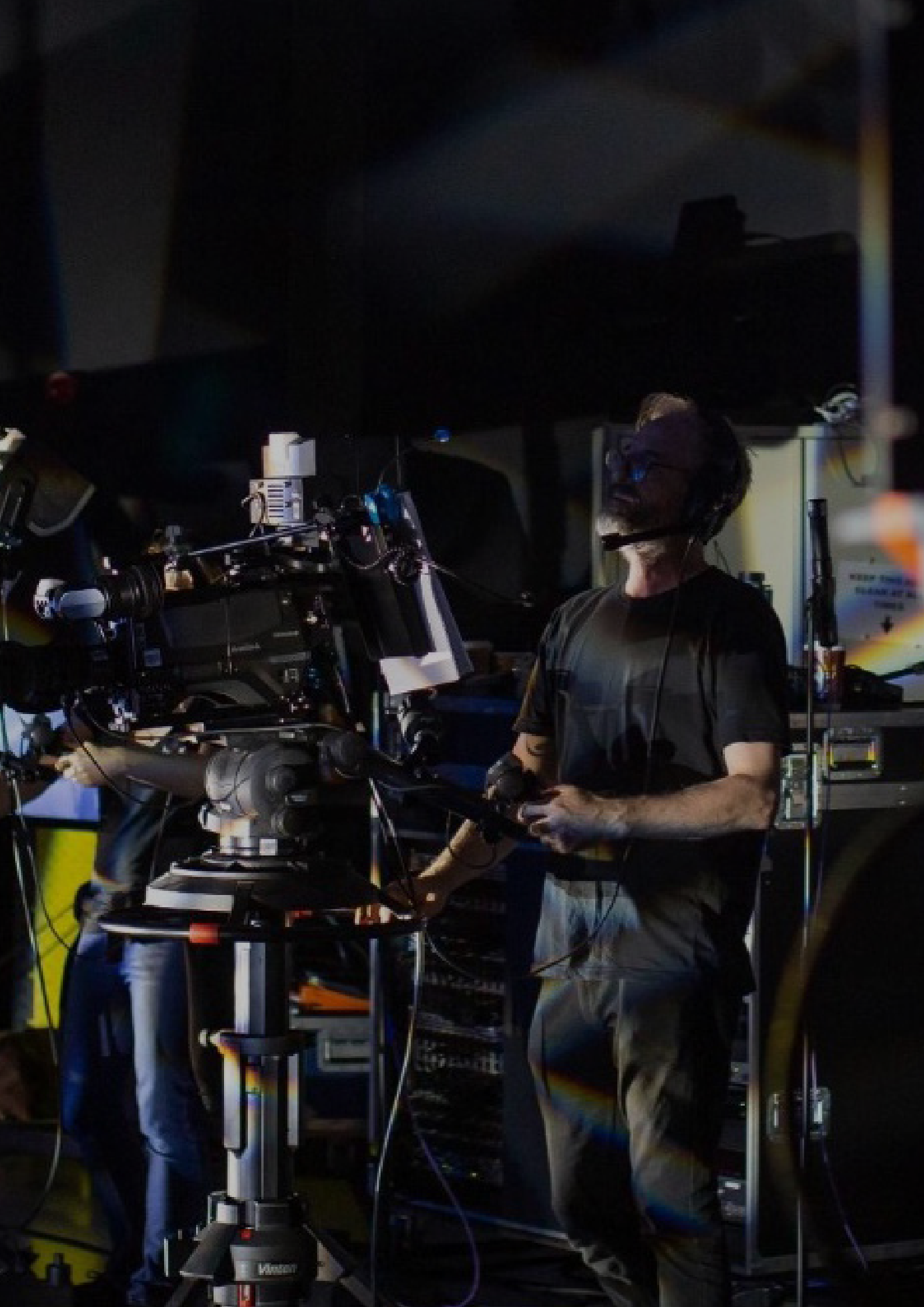
For further information on equality and discrimination in the workplace see link - Citizens Information: https://www.citizensinformation.ie/en/employment/equality_in_work/equality_in_the_workplace.html

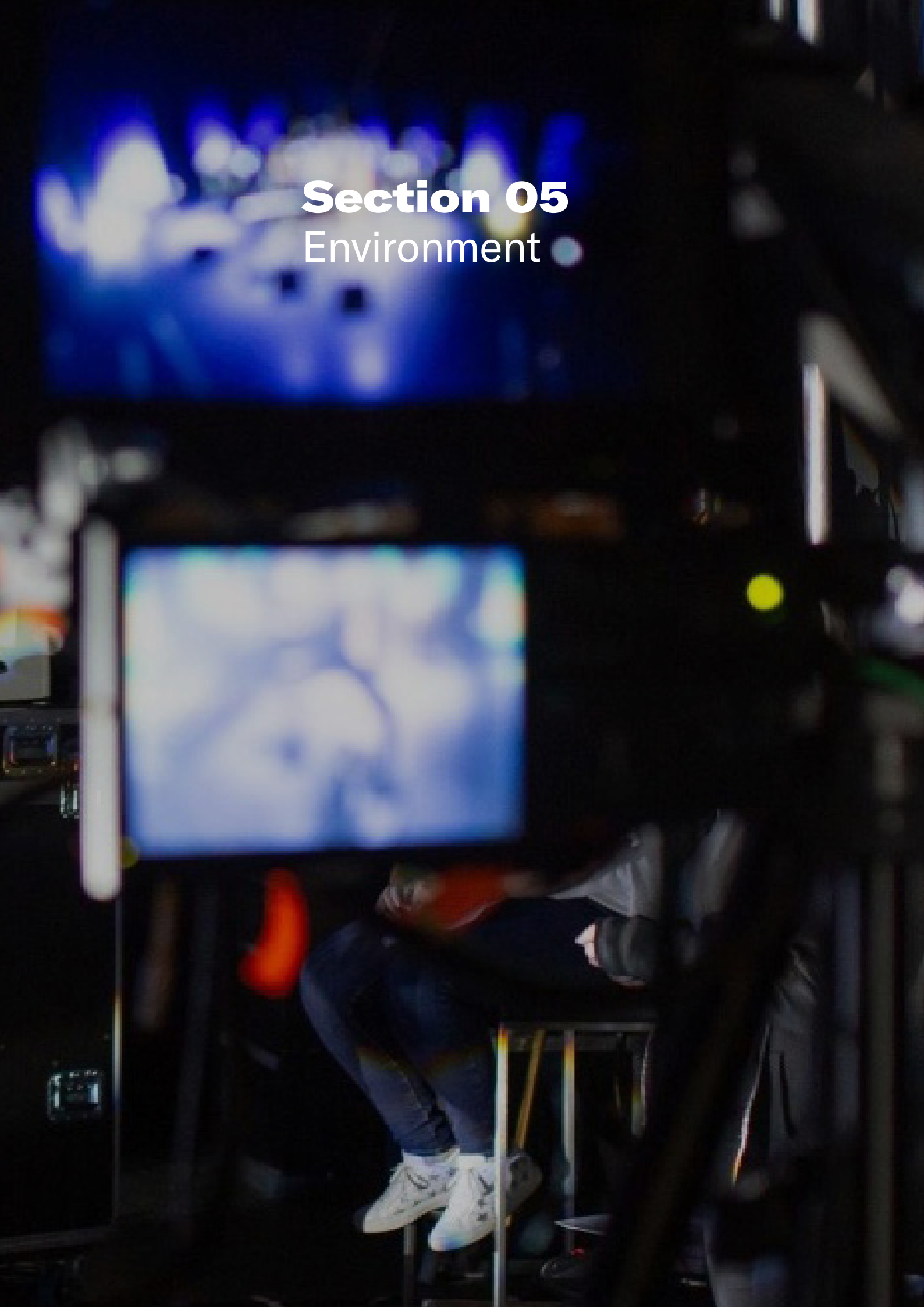
https://www.citizensinformation.ie/en/employment/equality_in_work/bullying_in_the_workplace.html#)

For full details on the guidelines for the informal and formal complaints procedure please read Full Dignity in the Workplace document and to access further Information, Support Organisations, Legislative and Regulatory Framework, Reference and Source Materials please see Irish Theatre Institute's website: http://www.irishtheatreinstitute.ie/publications.aspx

For further information please see information on Speak Up & Call It Out: Review - Events - Irish Theatre Institutehttps:

https://www.irishtheatreinstitute.ie/wp-content/uploads/2021/10/ITI-Speak-Up-A-Call-for-Change-Report-Oct2021_Final_WEB.pdf





Section 05
Environment

12 The Environment

There is a growing need to reduce the impact of the film/TV industry in Ireland on the environment. Exec Producers, Producers, UPM/PM/LP should confirm for each production company or DAC what environmental policies are in place or, if required, develop appropriate environmental/sustainability policies and plans. Producers/UPM/LP/PM should determine measures that can be put in place to ensure the production is a sustainable one, reducing the threat to the environment and to human health. Companies should continuously be working towards a 'leave no trace' policy regarding all waste from a production.

12. — Carbon Calculator for Film & TV Industry Ireland

From Oct 2019, Albert UK, along with Screen Greening, has a carbon calculator available to Irish producers. This web-based system allows a production company to determine the precise carbon footprint of their production. Screen Greening is an umbrella organisation, representing the Broadcasting Authority Ireland, RTÉ, Screen Ireland, Screen Producers Ireland, TG4 and Virgin Media Ireland, who have invested in bringing The Carbon Calculator to the Irish production/screen sector. The Carbon Calculator is available to Irish Producers via Broadcasting Authority Ireland, RTÉ, Screen Greening, Screen Ireland, Screen Producers Ireland, TG4 and Virgin Media Ireland Websites.

For further information please visit https://www.screenireland.ie/filming/sustainable-filmmaking/carbon-calculator/

12.2 — Industry Guides for Sustainability - Ireland

Below are different guides, support systems and case studies that can assist all production companies in being more sustainable.

Production companies can become more eco-friendly and reduce their carbon footprint by adapting some of the measures identified within the guide below. Information on case studies within Ireland and guides used in other jurisdictions can be found at the end of this section.

Ireland: Screen Ireland's 'Green Filming' website includes useful information that can be adopted by production companies and the departments within a production company.

Green Filmmaking: https://www.screenireland.ie/filming#facilities

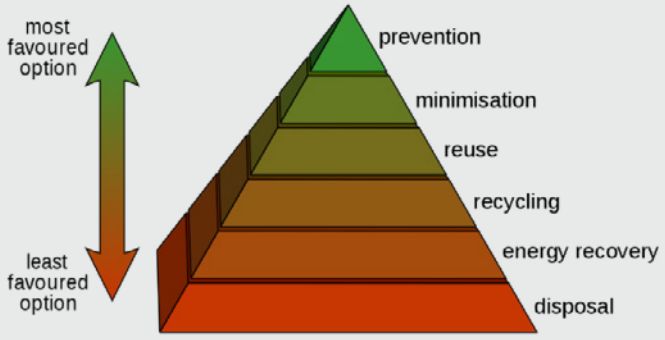


Figure 3: Waste Hierarchy Model
Source: Wikipedia: https://en.wikipedia.org/wiki/Waste_hierarchy

A 'Green Production Toolkit' was developed to assist production companies improve environmental awareness and reduce our carbon footprint. Green production Toolkit: https://www.screenireland.ie/images/uploads/general/Green_Production_Toolkit..pdf

12.3 — Film Relief - Section 481 investment in film

Application Under Section 481:

For all projects, production companies as a part of the application process the Production Company must submit the following:

1. Skills Development Plan
2. Gender Equality Initiatives
3. Diversity and Inclusion Initiatives
4. Sustainability Plan

12.4 — Sustainability Plan

Production companies should outline what measures they will take to reduce their carbon footprint for the duration of the production. How they will manage waste and inform all crew on measures to be implemented by each department to ensure the production is a sustainable production. A sustainability directory is available through the Screen Greening website. https://www.screenireland.ie/images/uploads/locations/Sustainability_Department_Directory.pdf

12.5 — Waste Hierarchy Model

See figure 3

12.6 – Waste management / Waste disposal Guidelines:

Waste management is one of the many challenges facing Film & TV production companies, particularly when filming in remote, un-serviced locations.

There is an enthusiasm within the industry to improve and make a permanent shift towards a greener model of waste management.

UPM/LP/PMs should only contract fully licensed and insured National Waste Collection Permit Office (NWCPO) permit holders, to manage, remove and transport all waste. The permit must cover all types of waste being produced and cover the appropriate NWCPO waste management region.

All HoDs should ensure that the production's waste management system is known and understood by their crew. HoD's will be required to promote the production company's waste management system.

12.7 — Green Runner

The Green Runner (GR) is a new industry entry-level position that was introduced in 2009 onto Universal Pictures and Warner Bros productions.

Figure 4 Example of three-way management system at a filming location
Source: Glon Waste Management

When environmental impact reduction systems are introduced, e.g., waste management, wastewater management, best results will be achieved when a GR is on set at all times.

The appointed GR has to be trained to work across the production, enabling a sustainability management system to work effectively, and be allowed the required time to fulfil the role.

Duties include daily systems set-up, supervision, and maintenance of the hardware of each system, e.g. three stream waste stations, wastewater filter and collect machines. Importantly, the GR is a supportive, encouraging presence, a focal point, liaising across all departments, advising, and reminding everyone on set how the systems work. Research shows new environmentally friendly systems will not be optimally effective without a nominated, trained GR on set at all times. The GR role is constantly evolving into new areas such as green energy, green suppliers, green production office practices. The GR can be a member of the locations team or can be contracted in as part of a green service.

12.8 — Water pollution

Water pollution can be caused if wastewater from different departments is discharged straight to surface water drains, rivers, streams, or directly onto the ground. Wastewater can be generated from any trade or industry, including catering, facilities, costume, honey wagons (including sewage). All wastewater must be disposed of through a licenced provider. Receipts for wastewater collected should be maintained by the production company, and/or HoD of a department and/or contractor.

12.9 — Waste Management consideration for a Production - Studios and on Location

Three Stream waste management system

It is a huge challenge in a hectic work environment to introduce and implement a three-stream waste management system. Such a system helps production companies to minimise general waste and maximise recyclable and compostable waste.

For a three-stream waste management system to be successful there needs to be:

- Full support and buy in from producers and HODs,
- An acceptance of the real cost of waste management,
- A fully licensed and insured waste management contractor,
- A user-friendly system,
- On-site management and supervision of the system,
- Cooperation from all departments.

See figure 4. The UPM/LP/PM should ensure that the waste contractor is licenced. Examples of how a waste management contractor could assist a more sustainable production include:

- Consulting with location manager and/or production to establish production size, numbers of people, catering compostable management, moves/locations
- Design and price a three-stream waste management system to suit, including Green Runner (GR) who manages waste segregation throughout the working day
- Recommend a wastewater management system specific to the needs of a production
- On shooting days set up the three-stream waste stations at unit base and set
- The GR manages, supervises, and maintains the system to ensure optimal functionality
- End of day clear-up and wrap out at end of each shooting day
- All the waste is collected, transported, and disposed of under NWCPO license
- A full waste type percentage breakdown report generated at the end of production

12.10 — Comparing traditional waste disposal versus a managed three-stream method

Using the traditional waste system 100% of the waste disposed of is general waste.

Using a waste management system as above the percentages of different waste categories can vary. Below is an example (source: Glon Waste Management System – GWMS) of an overview of waste disposal using a three-stream waste management approach, with a green runner can be as follows:

- non compostable catering cutlery, plates etc
  - recycling 34%
  - compostable 15%
  - general 51%
- compostable catering cutlery, plates etc
  - recycling 30%
  - compostable 46%
  - general 24%

12.11 — Considerations for reducing carbon footprint on a production in the office and studio environment:

- Use LED lighting where possible
- Switch off applicable (that can be switched off) at end of day instead of leaving on standby
- Use ‘power save mode’ on appliances where possible
- Unplug phone chargers when phones are charged

- Try to communicate electronically rather than using hardcopy
- When necessary to print, print using double sided setting and 'Echo' setting
- Purchase and use recycled goods where possible
- Use rechargeable batteries
- Ensure heating is efficient, identify means of reducing heating consumption
- Segregate waste and recycle waste
- Use bulk container for drinking water rather than individual small plastic bottles of water and use compostable water cups.

Art and Construction Department

- Set dressing (greens) to be recycled, not left at location, or disposed of in general waste.
- The production designer and the construction manager should consider the life cycle of materials to be used for building/creation of sets (cradle to grave!)
- Can materials to be used be easily recycled and or reused for future set builds?
- Can recycled materials be used to construct sets?
- Only print what has to be printed
- Minimize use of colour when printing
- Use water-based paints for sets
- Share drawings electronically where possible
- After striking sets use a contractor that will recycle all timber waste materials, and others
- Safety Data Sheets/Material Data Sheets to be available for all chemical / hazardous products used, these products to be stored, handled, and used by competent persons only and segregated and disposed of as hazardous waste as appropriate.

Catering - sustainable measures can include:

- Use delph and cutlery that can be washed and reused for each meal
- Can the contract caterer source local produce?
- Is there a catering contractor in your local area that fulfils all catering requirements including insurances, HACCP etc?
- Use bulk container for drinking water rather than individual small plastic bottles of water
- Encourage crew, cast, background artists and extras to use their own water cups/bottles
- Introduce more vegetarian dishes for each meal. Reduce meat consumption

Where real delph and cutlery cannot be used throughout a production, consider compostable catering consumables. Compostable versus non-compostable notes:

Catering Consumables: Usage of all consumables for a production could be:

- Per person:
  - 3 to 4 cups and lids per day
  - 2 x Pack of knife, fork, spoon, and serviette (breakfast and lunch)
  - 1 x fork and serviette for late break
- The costs for compostable and non-compostable will vary depending on volumes used
- The more volume used the lower the cost to purchaser will be
- For cups with lids, the highest proportion of the cost is for the compostable lid
- As the demand for non-compostable goods increases, this will help in driving down the costs as the supplier will be purchasing greater volumes
- Typically, there could be a 20% increase in costs (cost comparison April 2019) for using all compostable consumables.

Transport

- Can production offices be within a short travel distance for all key crew?
- Are locations within a short travel distance for all key shooting crew, and cast?
- Can suitable cast be sourced locally or within the country?
- Can suitable local background artists and extras be sourced?
- Can cast, crew background artists/ extras avail of public transport to get to and from production offices and locations?
- Reduce use of vehicles, pick up and collect crew, cast and extras collectively where practical
- Can journeys be reduced by selection of vehicles used?
- Transport captain should choose vehicles that are well maintained and where possible have low emissions
- Drivers should turn off engines when not required

12.12 — Industry Guides for sustainability – jurisdictions other than Ireland
America:

'Green Production Guide' is a guide that was developed by the Producers Guild of America.

The Green Production Guide has primary support from Disney, Amblin Partners, 20th Century Fox, NBCUniversal, Paramount Pictures, Sony Pictures Entertainment, Warner Bros, Amazon Studios and HBO.

"The basic principles behind "greening" a production include conserving fuel and energy, avoiding toxins and pollution, saving water and preventing landfill waste". The aim of the GPG is to reduce carbon emissions within the industry. For further information on the Green Production Guide please follow link below: http://www.greenproductionguide.com/about/

UK: 'albert' - albert exists to support the UK production and broadcast industry's transition to environmental sustainability, working in collaboration to accelerate the adoption of best practice.

Link to albert: http://wearealbert.org/about/what-is-albert

The website has useful information for production companies and departments within them on how they can be more sustainable.

The website has a number of different case studies which can give good inspiration to productions on how they too can be more sustainable.

Link case studies: http://wearealbert.org/inspiration/case-studies

12.13 — Sustainable Production case studies Ireland

1. A short film, funded under Screen Ireland/FIS Eireann The Irish Film Board/Bord Scannán na hÉireann 2016/2017, assigned a graduate of the Filmbase Master's programme to a role called "Sustainability Manager". A case study in sustainable production practices can be found here: https://www.screenireland.ie/images/uploads/general/CATCALLS_Green_Filmmaking_Case_Study_2018.pdf
2. During 2017 a case study was carried out on the production Vikings Season 5 using a three-way waste system and signage. Link to the case study: https://www.screenireland.ie/images/uploads/general/Vikings_Green_Production_Case_Study.pdf

12.14 — Green shoot UK & British Film Institute Sustainability Report 2015

This report addresses the requirements of the British Standard on Sustainable film, Sustainability Management Systems and Production case studies. Link: http://www.greenshoot.com/storage/cmsuploads/23-samplereportdownload-BFI-2015-Sustainability-Report.pdf

Further reading - Standards for environmental management

ISO 1400

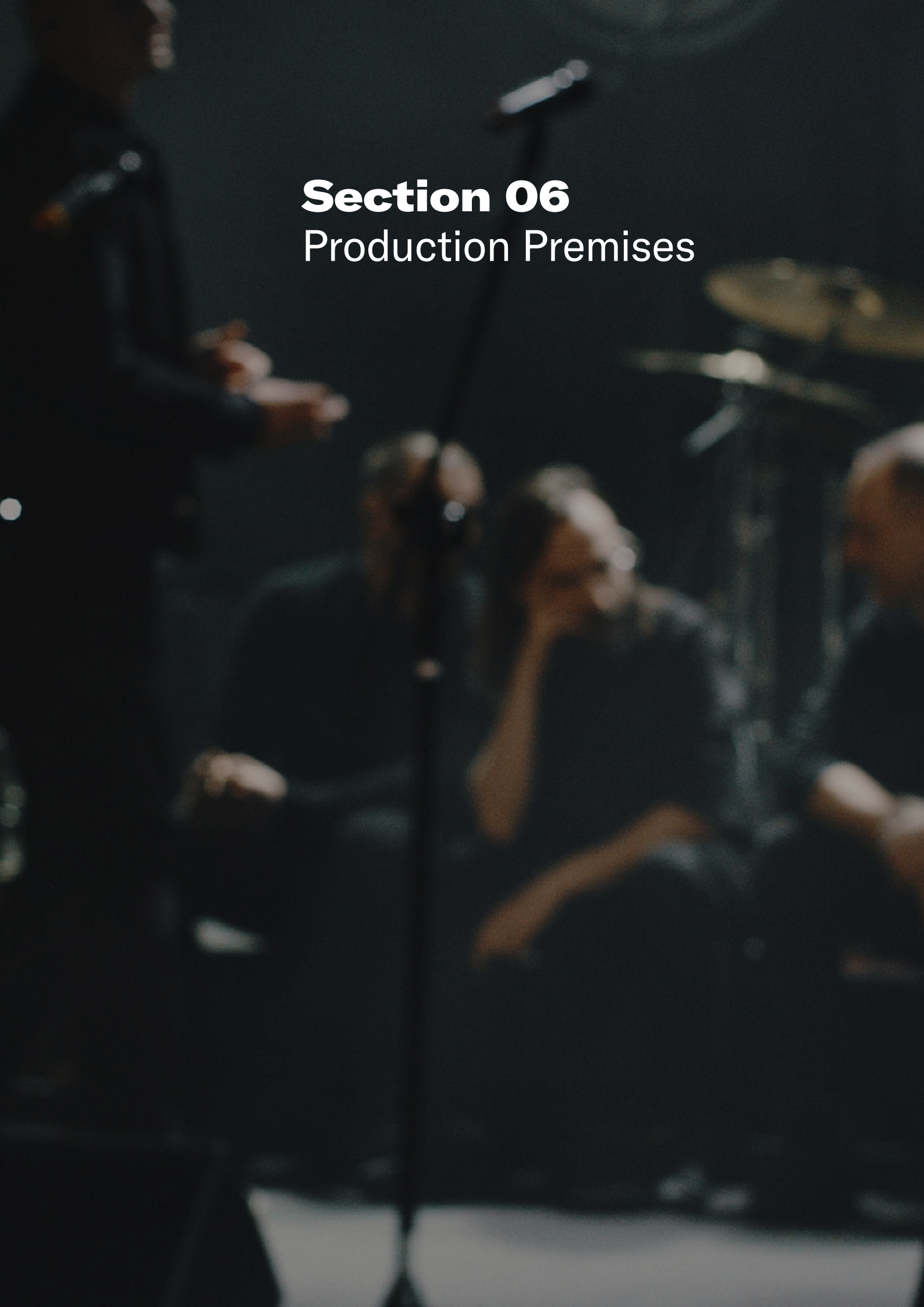
https://www.nsai.ie/certification/management-systems/iso-14001-environmental-management

Introduction to ISO 45001

https://www.iso.org/files/live/sites/isoorg/files/archive/pdf/en/introduction_to_iso_14001.pdf

BS 8909 British Standard on Sustainable film

BS 8909: The standard works by asking organizations to state what they want to achieve within their organization in terms of sustainability and to describe what they will do to achieve their aims. Ref Link: https://shop.bsigroup.com/Browse-By-Subject/Environmental-Management-and-Sustainability/Sustainability/Sustainable-film-with-BS-8909/



Section 06
Production Premises

13
Production Premises

Below is an overview of some considerations required by the Production Company for Production Premises including offices.

13.1 — Setting Up Working Areas for Production Departments

This note is intended to cover all occasions where various departments such as art properties, make-up/ prosthetics, construction, prop, and costume are set up on a one-off basis for a particular production. There are two points to be considered.

- Legislation specifies the requirements for safe working conditions. A production company assumes those responsibilities whenever it sets up production departments in a building or series of buildings, including temporary ones.
- Although the results are often unique rather than mass produced (props, sets, costume etc) the need to establish some common safe work conditions remains the same. This is especially true for crew who maintain a continuous work rate from production to production.

13.2 — The Building(s) and Working Areas

The Safety Health and Welfare at Work (General Application) Regulations 2007 sets out the requirements of the employer to ensure that the physical environment of the place of work is adequate and to take precautions against the risk of personal injury and to prevent danger.

Part 2, Chapter 1 (Workplace) of the SHWW (GA) Regulations 2007 sets out the requirements and duties of an employer with regard to the place of work.

Work areas should be large enough to be safe and healthy and be adequate with regard to stability, ventilation, fresh air, temperature and lighting. Employers shall ensure that workrooms have sufficient surface area, height and air space to allow employees to perform their work without risk to their safety, health or welfare. Employer shall ensure routes to emergency exits and the exits themselves are kept clear at all times and lead as directly as possible to the open air or to a safe area and in the event of danger, it is possible for employees to evacuate all workstations quickly and as safely as possible.

Under Part 2 of these Regulations, which is applicable to fixed workplace premises, employers are required to ensure that pedestrians and vehicles can move in a safe manner and that traffic routes are clearly identified and appropriately dimensioned. Traffic rules for mobile work equipment are also required.

Link to guidance document for SHWW (GA) Regs 2007: https://www.hsa.ie/eng/Publications_and_Forms/Publications/General_Application_Regulations/Guide_to_the_Safety,_Health_and_Welfare_at_Work_General_Application_Regulations_2007.html

Reference the SHWW Act 2005 for further information on the main provisions for securing and improving the safety, health, and welfare of people at work. Link: http://www.irishstatutebook.ie/eli/2005/act/10/enacted/en/pdf

In many cases, production departments are set up in rented premises which may have been recently used for other purposes or not at all. Persons involved in the selection of premises should be familiar with legislative requirements for the workplace.

The legislative requirements referred to above should be taken into account for all phases of the production.

The following points should be considered:

- Place of work - ensure that buildings which house places of work have a structure and solidity appropriate to the nature of their use.
- Electrical installations
  - Ensure installations are inspected and tested.
  - Wiring – is there any exposed wiring? Is the wiring insulated and secured? Does any wiring run across aisles and walkways? Wiring should be protected from damage and from becoming a tripping hazard.
  - Electricity switchboard: has the switchboard been recently inspected? Will it take the total electrical load imposed by various departments?
    Residual current devices (RCDs): the legislative requirements about RCDs should be known and applied without exception where required.

    See Guidance Note on Periodic Inspection and Testing of Electrical Installations required by the 2007 Safety Health and Welfare at Work (General Application) Regulations, link: https://safeelectric.ie/wp-content/uploads/2017/06/Guidance-Note_on_Periodic_Inspection_and_Testing_.pdf
- Ventilation: the ventilation requirements will vary from department to department. What is adequate in one may be insufficient in another. In most cases the natural ventilation provided through windows and doors will be adequate. In cases where, for instance, there are high dust levels or high temperatures or where the workplace is isolated from the outside air, mechanical or forced ventilation may be necessary and should be installed. Where it already exists, it should be checked for correct positioning and recent maintenance. In cases where there are high dust levels, high temperatures or where spray painting or test involving smoke are carried out, or where the workplace is isolated from the outside air, mechanical or forced ventilation may be necessary.
- Temperature: During working hours, the temperature in rooms containing workstations must be appropriate for human beings, having regard to the working methods being used and the physical demands placed on the employees.
- Lighting: While the provision of natural lighting takes precedence over artificial lighting, in practice both will be required. Requirements may vary from department to department. The lighting available for each area should be assessed for its suitability and supplemented where necessary. Lighting arrangements should be made so that brightness, unsuitable shading or poorly placed light sources or workstations cannot cause discomfort or injury from glare or from reflection of light into the eyes of the employees. Defective lights should be replaced and shades for lights provided where strain will otherwise result.
- Floors must be free of dangerous bumps, holes, or slopes and fixed, stable and, as far as is reasonably practicable, not slippery.
- Doors installed in places of work should be suitable for the number of persons employed and the nature of the work carried on.
- Emergency exits and escape routes: people often fail to appreciate how quickly a fire can spread. It is vital that fire exits are not blocked or obstructed and that any such obstructions are removed without delay. Floor markings and signs should indicate the areas to be kept clear.
- Fire detection and firefighting: a place of work must be equipped with appropriate fire-fighting equipment, fire detectors and an alarm system.
- Movement of pedestrians and vehicles: outdoor and indoor places of work should be organised in such a way that pedestrians and vehicles can circulate

in a safe manner.
- General welfare: ensure that any place of work is maintained in a clean and hygienic condition and that any rubbish, dirt, and waste is not allowed to accumulate but is removed on a regular basis. Employers must also ensure that the floor of any workroom is kept clean and that a suitable cleaning regime is in place to ensure hygiene standards are maintained.
- Sanitation: there should be enough washing facilities and toilets, taking into account the needs of various departments. Changing rooms to be provided where appropriate.
- General welfare: there should always be access to plenty of drinking water.
- General welfare: provide suitable and adequate facilities to allow employees to eat and drink or have arrangements in place to allow employees access to other suitable and adequate facilities.
- Provision should be made for first aid/medical aid - Emergencies and serious and imminent dangers. Section 11 of the Safety, Health and Welfare at Work Act 2005 states that every employer must, in preparing and revising as necessary adequate plans and procedures to be followed and measures to be taken in the case of an emergency or serious and imminent danger provide the necessary measures to be taken appropriate to the place of work for first aid, fire-fighting and the evacuation of employees and any other individual present in the place of work, taking account of the nature of the work being carried on and the size of the place of work.
- Rest rooms: where appropriate, rest rooms or rest areas should be provided, in particular, such facility must be provided to pregnant, post-natal or breastfeeding employees.

13.3 — Fire and Fire Escapes

- The fire alarm system should be tested to ensure it is working correctly.
- If there is no fire alarm or smoke detector system then consideration should be given to suitability of taking up the lease, requesting the landlord ensures the property complies with legislation, and which expenses are borne by the landlord in order to comply with these regulations.
- A fire evacuation plan should be made and practised regularly so everyone knows their escape routes and any responsibilities they may have. The Employer shall arrange any necessary contacts with the appropriate emergency services with regard to first aid, emergency medical care, rescue work and firefighting.
- The Employer shall designate employees to implement the plans and procedures and ensure that they receive adequate training and equipment, taking into account either or both the size of and specific hazards relating to the place of work.
- There should be sufficient fire-fighting equipment of the correct type and a basic understanding (through training) amongst the nominated crew of how it should be used. This equipment must be inspected, maintained, and serviced at appropriate intervals. The equipment should be identified using the specific colour 'red' for the equipment and placing a location signboard, or by using the colour red to denote where the equipment is kept.
- All fire exits should be kept free of obstructions and clearly marked. Is there a hydrant within close vicinity in the event of fire?

When working within a studio, the check sheet within section 'Studios' (i.e. Chapter 55) can be used to assist a production company in determining and confirming some of the requirements above.

Fire safety must be considered as a core component of any risk assessment, and in the preparation of the relevant safety statement. Fire safety risk assessments should include fire prevention, fire detection and warning, and emergency escape and firefighting.

Helpful guidance is provided by the Health and Safety Authority relating to each of these items at https://www.hsa.ie/eng/Topics/Fire/

Appropriate signage must be put in place to mark the location and identification of emergency escape routes, first aid facilities and the location and identification of fire-fighting equipment. These signboards must be permanent in nature. These signboards must be made of shock and weather resistant material and installed at a suitable height and position. Specific signboards to be used, including in respect of items such as flammable materials and emergency escape routes, are set out in Schedule 9 to the SHWW (GA) Regulations 2007.

Further information: Health and Safety Executive (UK) have published a guidance document 'Fire safety in construction', this guidance document provides useful information on carrying out fire risk assessments and fire precautions. (note: UK legislation and standards are referenced in this guidance document not Irish legislation and standards). Link: https://www.hse.gov.uk/pubns/priced/hsg168.pdf

Section 07
Production Departments

14 Department Titles

The following information outlines key personnel within each department as would be seen on a Unit List. The number will be dependent on the budget level, not every role will be on every production.

Executive Producer/Producer/Co Producer

Director

Production
Unit Production Manager/Production Manager/Line Producer
Production Coordinator
Production Assistant/Secretary

Accounts
Financial Controller
Production Accountant
Assistant Accountant
Accounts Assistant

Art Dept
Production Designer
Supervising Art Director
Art Director
Standby Art Director
Graphics
Draughtsperson
Art Dept Coordinator
Art Dept Assistant

Set Decoration
Set Decorator
Production Buyer
Assistant Set Decorator
Assistant Buyer
Petty Cash Buyer

Assistant Directors
1st Assistant Director
2nd Assistant Director
Background artists Coordinator
3rd Assistant Director

Camera
Director of Photography
Camera Operator
Focus Puller
Clapper Loader
DIT
Data Manager
Video Assist

Grip
Key Grip
Grip

Casting
Casting Director
Casting Associate

Catering
Catering Supervisor

Construction
Construction Manager
HoD Trades
Carpenter
Rigger
Supervising Rigger
Painter
Plasterer
Stagehand

Continuity
Script Supervisor

Costume
Costume Designer
Costume Supervisor
Costume Assistant

Electrical
Gaffer
Best Boy
Electrician
Genny Operator
Practical Electrician

Facilities
Facilities Manager
Facilities Driver

Health & Safety Advisor/Officer
Health & Safety Officer

Locations
Location Manager
Assistant Location Manager
Locations Assistant

Hair
HoD Hair Stylist
Crowd Room Supervisor
Key Hair Stylist
Hair Stylist

Make-up
HoD Make-up
Key Make-up Artist
Crowd Room Supervisor
Make-up Artist

Medical
Emergency Medical Technician
Paramedic
Advanced Paramedic

Postproduction/Edit
Editor
Assistant Editor
Postproduction Supervisor

Props
Prop Master
Charge Hand Dressing
Dressing Prop
Standby Prop
Store Person
Run-around Driver

Sound
Sound Recordist/Mixer
Boom Operator

Special Effects
Special Effects Supervisor
Special Effects Technician

Stunts
Stunts Coordinator

Transport
Transport Captain
Unit Driver
Standby Driver

Visual Effects
Visual Effects Supervisor

Other Departments could include:
Action Vehicles, Armourer, Prosthetics, Animals including Horses and Carriages and Ridden Horses, Aircraft **and** Drones, Marine Coordinator and others. Within each department it would be typical to have trainees and new entrants.

15
Roles and Responsibilities per Department (HODs)

Overview of roles and responsibilities detailed below are in order of a basic unit list on certain productions. The unit list is in alphabetical order. For each department, the roles, and responsibilities of HoDs only are addressed, in addition to departments that could typically be included on a Unit List.

Further information on examples of the roles and responsibilities of other persons in each department can be found on Screen Ireland's website. Note: The introductions to the majority of the departments within this guide, as per Careers in Screen website: Link: https://www.careersinscreen.ie/live-action-tv-drama/

Other specialists may be required for a production, see Part 8 'Specialised Departments' for an overview of the roles and responsibilities of these specialists.

16
Executive Producer

The executive producer is responsible for managing personnel and the resources required for a production. They monitor and control activities from development to sales and distribution.

The executive producer must demonstrate commitment to health and safety from the onset.

17
Producer

The producer is responsible for overseeing all elements of a production from conception of an idea/finding a script/book etc. to completion of the film/TV Series. They raise the development financing and production finance and oversee all aspects of the development process and production process to completion and distribution. Producers secure the rights, choose the screenwriter and story editing team. The producer ensures everything runs smoothly on the production and between departments providing a creative environment for the cast and crew to work in. In pre-production, producers (with the director) bring together the key members of the creative team. This includes the director, cinematographer and production designer and key cast members. Link: https://www.careersinscreen.ie/role/producer-3/

During postproduction they link with the director and the postproduction team until full completion and delivery of the project. Producers are always in close communication with the director and other key creatives on set. Producers approve all changes to the script and shooting schedules, cost reports and budgets. They are the main point of contact for all co-production partners, investors, and distributors.

The Producer is responsible for the overall control of a production and is responsible for all aspects of health and safety and supporting the unit production manager and line producer in the implementation of health and safety.

The producer is responsible for ensuring that competent crew, including safety officer/safety advisor are engaged if required.

18
Unit Production Manager/ Production Manager/Line Producer

The line producer/production manager is the chief executive officer (CEO) during production. The line producer is often among the first people to be hired on a project.

They must liaise with other senior department heads including the producer, director and production designer and prepare detailed production schedules and budgets before shooting.

They must possess excellent leadership and management skills.

They are responsible for all of the financial and business aspects of the production in close collaboration with the production manager. They are responsible for creating, implementing, and overseeing the production budget and schedule in advance of filming. They must manage the budget to project completion. They must hire production staff, equipment, suppliers, and contributors across various departments. They must manage finances in both 'above-the-line' creatives' costs (i.e. directors, producers and cast costs) as well as 'below-the-line' areas (production, location and all other costs. Link: https://www.careersinscreen.ie/role/line-producer-production-manager/

Unit production manager (UPM)/ production manager (PM)/line producer (LP) are responsible for:

- Overseeing and fulfilling the duties of the Employer on behalf of the production company as required under the legislation including (but not limited to) the 2005 Act (e.g. to manage and conduct work activities in such a way as to ensure the safety, health and welfare at work of all employees), and the duties of the client under the SHWW (Construction) Regulations 2013 (e.g. to employ competent designers, and contractors to carry out the work).
- Creating, implementing, and overseeing the production budget and schedule in advance of filming.
- Engaging competent HoDs and crew numbers.
- Setting up working areas for production departments.
- Ensuring good communications between all departments and safety and risk management of the production.
- Ensuring that the requirements of all applicable legislation are complied with including having in place a production specific safety statement.
- Ensuring all relevant persons receive health and safety information and risk assessments as necessary including risk assessments for locations and specific risk assessments from HoD's and specialist crew/persons as appropriate.
- Ensuring there are appropriate fire safety provisions for offices, studios, and locations.
- Appointing competent safety officer/ advisor, as necessary.
- Enforcing health and safety standards.
- Determining the need for first aid for each phase of the production.
- Designate at each place of work under the employer's control the number of occupational first aiders (PHECC First Aid Responders) as is necessary (and or PHECC registered medical practitioners) to give first aid (and or medical aid) at the place of work concerned.
- Ensuring there is appropriate medical and or first aid provisions (See Regulation 165 of the Safety, Health and Welfare at Work (General Application) Regulations 2007. These Regulations set out the provisions for first aid at the workplace. This Regulation includes providing and maintaining suitably marked and easily accessible first-aid equipment, as is adequate and appropriate in the circumstances for enabling first-aid to be given to persons at every place where working conditions require it).
- Providing one or, as appropriate, more first-aid rooms at every place of work where the size of the undertaking, the type and scale of activity being carried out and the frequency of accidents so require. These rooms must be fitted with essential first-aid equipment and facilities and is easily accessible for stretchers (Regulation 166 of the Safety, Health and Welfare at Work (General Application) Regulations 2007.
- Ensuring systems are in place for internal reporting of all accidents, emergencies and dangerous occurrences and the management of investigating same.
- Reporting of (reportable) accidents and dangerous occurrences to the HSA.
- Cooperation with enforcing authorities.

19
Director

The director (not company director) is a person who directs the making of the production.

"The director's job is to turn the script into a finished film by bringing together all the other creative departments to realise their vision of how the story should be told visually. They are in charge of all creative and dramatic decisions from selecting the actors and the crew to the locations and style of the film. They decide what to film, how to film it and how it should look and sound." Link: https://www.careersinscreen.ie/role/director-2/

The director has a key role in creative aspects of the production but needs to remain aware of the health and safety implications of any decisions and take advice from the UPM/PM/LP, 1st AD and or safety officer/ advisor or others.

20
AD Dept - 1st Assistant Director

The assistant director's (AD) department is the department responsible for supporting the director and crew throughout the shoot. The department, under the director, consists of first AD, second AD, third AD and trainee ADs.

The first assistant director (1st AD) is responsible for ensuring that the day's filming work is completed, directs the background with their team, oversees crowd control and maintains clear communication between director and crew. Link: https://www.careersinscreen.ie/live-action-tv-drama/#sec24

They assist the production manager and director. The primary aim of any 1st AD is to ensure the film comes in on schedule while maintaining a safe working environment for all cast, crew, and background artists on set.

The 1st AD is responsible for:

- The planning and efficient execution of the shooting schedule.
- Keeping the production on schedule throughout the day.
- Determining and discussing potential health and safety concerns with UPM/ PM/LP/director/ safety advisor and others prior to filming days and be satisfied that risks have been adequately controlled.
- Call meetings as required to discuss health and safety issues at required intervals.
- Ensuring good communication with all shooting crew, conveying health and safety requirements, and maintaining a safe working environment.
- Ensure briefing is given if required to all crew, cast and background artists for any new set or location, if there are specific activities or safety issues at a location.
- Ensure safety precautions are followed for particular hazards identified and or for specialized equipment including use of PPE.
- Coordinating health and safety on set during the filming phase.
- Taking appropriate measures in the event of an accident, summoning medic, or emergency services, assisting with clearing area after accident to protect all other persons.
- When injured persons have been assisted, notify production and safety officer/advisor without undue delay after an accident.
- Consider requirements for protective gear such as goggles, safety shoes and masks etc, have these been provided depending on the needs of different departments, cast and background artists?

21
Art Department

The art department, under the direction of the art director, works to deliver the vision of the production designer. The department is responsible for all aspects of the design of the production, including set design, set dressing, props, graphic design and model making. Link: https://www.careersinscreen.ie/live-action-tv-drama/#sec18

The production designer is engaged at the commencement of a project, pre-production and works closely with the director and the director of photography to achieve the look of the film. The production designer is the head of the film's art department.

As the head of the art department, they are in charge of making sure each shooting location and set area is prepared and reflects the vision of the director.

The production designer, as the HoD for the department, is responsible for agreeing the required crewing levels with the LP/PM/UPM and management of crew, ensuring time allocated allows for crew to carry out tasks in a safe manner.

This can include assisting with determining crewing levels for other departments. The production designer must be aware of and work within the budget of the production and to tight deadlines.

The production designer and art director ensure that all equipment used by the art department crew are safe and without risk to health, in good condition and are fit for purpose (as per section 8 of the Safety, Health and Welfare at Work Act 2005) and art department crew are competent for tasks to be carried out.

Specific training requirements could include: Safe Pass, Screen Pass, Chemical Awareness, Abrasive Wheel, safe use of Power Tools and Manual Handling. Certificates of training may be requested, and crew should provide proof of training where requested.

The production designer and art director ensure that all art department crew are provided with and use required personal protective equipment.

The production designer works closely with other set designers, graphic artists, costume supervisors, set decorators, prop masters, makeup artists, special effects supervisors and model makers to achieve the desired vision for the production.

Art Director

The art director reports to the production designer. They will be required to work closely with the construction manager and overseeing other crew within the art department (for example assistant art directors, draughtsman). They oversee the schedule of the art department and monitor the budget.

During pre-production, they are also responsible for specifying requirements for SFX, action vehicles, animals, horse-drawn carriages, and others that will be seen on camera.

They liaise closely with the location manager to determine when locations can be prepared and dressed. During the filming phase, they continue to oversee the construction, dressing and striking of sets ensuring that all sets are struck, and locations cleared.

Other Crew within the Art Department include:
Assistant art director
Standby art director
Set designer
Graphic artist
Draughtsperson
Set decorator (for further information on set decorators and the set dec department, please see Chapter 22 on 'Set Decoration' within this guide).

General Considerations for Art Department Office

- Windows should be 'openable' to allow for good ventilation and air exchange.
- Electrical source and installations to have residual current devices and be inspected as per legislative requirements (guidance advises at a minimum every 3 months).
- Sockets must not be overloaded.
- If necessary, local lighting will be provided. Light fittings should not create any hazard.
- Appropriate means to be provided for bringing props to and from set areas.
- Persons working at a computer workstation every day, and generally use display screen equipment for more than one continuous hour a day are considered DSE users. DSE users have an increased risk of upper limb disorders and repetitive strain injury. The risk may be compounded by poor sitting posture, aggravated by poor layout of workstations.
- DSE users to have DSE assessments carried out as per SHWW(GA) Regulations 2007 Chapter 5 of Part 2. The analysis of the employee's individual workstation must take account of the minimum requirements in Schedule 4 to the General Application Regulations.
- Crew are to be aware that laptops are not covered by the above regulations

due to the fact that the keyboard should be tiltable and separate from the screen. This allows the user to find a comfortable working position avoiding fatigue in the arms or hands.
- A standing desk and or specialised adjustable drafting table may be best suited to certain crew members within the art dept, for example draughtspersons, who may carry out detailed work while standing.
- Prolonged standing can also put strain on the circulatory system and on the legs and feet. This increases the risks of varicose veins. Stand on an adequate surface to maintain good blood flow. Use an anti-fatigue mat or a footrest for lifting one foot at the time. Take frequent micro breaks every 30 –40mins to change posture/increase circulation.

For further information on DSE please see Chapter 4, section 4.3: Display Screen Equipment in this document.

Working with Chemicals

In line with the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 and 2015, it shall be the duty of every employer to ensure that the risk to the safety and health of employees from hazardous chemical agents is eliminated so far as is reasonably practicable or reduced to a minimum by application of the hierarchy of controls.

Safety Data Sheets (SDS) must be available for all chemical agents/ hazardous products used. Chemical agents/hazardous products should be handled by competent persons only.

Persons using chemicals must have received training for safe use of chemicals and be provided with the appropriate Respiratory Protective Equipment (RPE)/ Personal Protective Equipment (PPE).

- Aerosols should not be used in small unventilated areas - aerosols should not be used in the art department offices. Workshop areas, stages, or other well-ventilated areas to be used if no Local Exhaust Ventilation (LEV) is provided/ deemed not necessary based on risk assessment.
- Where the SDS states extraction such as LEV to be provided, this is to be provided by the production company.
- The type of LEV, hood or enclosure is influenced by the work being done. Where a hood or enclosure is required, they should not obstruct or cause ergonomic difficulties (e.g. manual-handling limitations or over-reaching). The hood/enclosure may need to be designed to capture/contain dust, fumes, mist, fibres, vapour, or gas aerosols.
- Where spray booths are used in the Republic of Ireland and across the European Union, they must meet legislative requirements and relevant EU standards and users must use approved respirators and equipment. Risk assessments must be carried out for safe use of spray booth. The HSA BeSmart tool may be beneficial to HoD'S that use spray booths Ref: https://www.besmart.ie/risk-assessment/complete/browse-hazards/view/307/

Ref: Spray booths, see for example the EU standard EN 16985:2018 'Spray booths for organic coating material - Safety requirements which deals with all significant hazards relevant to spray booths for the application of organic liquid and powder coating materials. More specifically, the standard refines and clarifies the safety concepts for protection against hazardous substances used in the paint application process. The text covers safety measures against hazardous substances which are dangerous to health or may cause fire and explosion).

Safety data sheets and material data sheets must be available for all chemical and hazardous products used. These products are to be handled and used by competent and qualified persons only. In line with the Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 - 2015, persons using chemicals must have received training for their safe use and be provided with the appropriate RPE/PPE. The Safety, Health and Welfare at Work (Construction) Regulations 2013 stipulate that other preventative measures may also be taken such as the replacement of a hazardous substance by a harmless or less hazardous substance. In addition, an adequate number of appropriate fire-fighting devices and where required, fire detectors and alarm systems, should be available

Good design and being fit for purpose are the crucial initial considerations to ensure the effectiveness of a system, reference HSA guidance on LEV: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Local_Exhaust_Ventilation_LEV_Guidance.pdf

Risk assessments should be in place for use of chemicals. The HSA's document 'Your Steps to Chemical Safety - A Guide for Small Business' shows you how to carry out a chemical risk assessment, which is required by law: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/Your_Steps_to_Chemical_Safety.pdf

Chemical Agent Code of Practice 2020: https://www.hsa.ie/eng/publications_and_forms/publications/codes_of_practice/chemical_agents_cop_2020.pdf

For further information on working with chemicals please see Chapter 65 within this guide: Working with Chemicals

Using Scalpels

A risk assessment and safe system of work should be in place for persons using scalpels. This could entail practical demonstrations on the safe use of scalpels to any new or inexperienced user, followed by supervised use of scalpels. Users should be assessed to determine when it is safe for a new user to use a scalpel unsupervised.

To further reduce risk of injury, the following measures (non-exhaustive) could be considered:

- The positioning of the workstation where scalpel is used.
- Times when scalpel is or isn't to be used (office environment congested/noisy that could cause distraction in safe use of scalpel).
- Choice of rules: For example, a metal triangle scale ruler could be used as a substitute to a flat metal ruler.
- The user could use a cut resistant glove on the hand that holds the ruler.

Personal Protective Equipment (PPE)

Section 8 of the 2005 Act places a duty on employers to supply PPE where risks cannot be eliminated or adequately controlled. Section 13 of the 2005 Act places a duty on employees, having regard to their training and instructions, to make correct use of PPE.

Chapter 3 of Part 2 of the SHWW (GA) Regulations 2007 applies other duties on the employer in respect of selection, assessment, conditions of use and compatibility, maintenance and replacement, information and training regarding PPE provided for employees where risks to safety and health cannot be avoided or sufficiently limited by technical means or collective protection or by measures, methods and procedures of work organisation.

Ref: Guidance document to the SHWW(GA) Regs 2007 Chapter 3 of Part 2. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_PPE.pdf

See also section 4.1 regarding PPE.

Lone Worker Situation

Please note: As with other parts of this guidance document individual employers are expected to carry out further research as necessary and in the case of lone workers to note that there are additional rules/regulations beyond Chapter 59 (Working Time – Adults) for example.

There are occasions where art dept crew could be required to work under lone worker conditions.

Lone working is defined by the Health and Safety Authority as anyone who works alone, those who work by themselves without close or direct supervision.

Legislation does not prohibit a person from working alone, however Section 19 of the Safety, Health and Welfare at Work Act 2005 requires the employer to undertake a risk assessment. An employer shall, in identifying hazards and assessing risks under that section, take account of particular risks if any, affecting employees working alone at the place of work or working in isolation at remote locations (Regulation 2 (3) of the Safety, Health & Welfare at Work (General Application) Regulations, 2007).

The risk assessment determines whether or not an employee may work alone or if the employee is at significantly higher risk when working alone?

Note: Employers must be aware of any specific legislation on lone working, which may be applicable to their specific industry, e.g. supervision in diving operations, vehicles carrying explosives. Lone workers include:

- Where only one person in a fixed establishment is working on the premises, including outside of normal hours.
- People work separately from others
- People who work outside normal hours
- People working away from their fixed base e.g. on construction, plant installation, maintenance and cleaning work, electrical repairs, painting and decorating etc
- A risk assessment may conclude that it is not possible for the work to be carried out by a lone worker.

Lone workers include:

- Where only one person in a fixed establishment is working on the premises, including outside of normal hours.
- People work separately from others
- People who work outside normal hours
- People working away from their fixed base e.g. on construction, plant installation, maintenance and cleaning work, electrical repairs, painting and decorating etc

A risk assessment may conclude that it is not possible for the work to be carried out by a lone worker.

Where there is a lone worker, it should identify precautions that must be taken by employers, taking account of normal work and foreseeable emergencies. Employees must also take reasonable care to look after their own safety and health.

Hazards that lone workers may encounter include:

- accidents or emergencies arising out of the work, including inadequate provision of first aid
- sudden illnesses
- inadequate provision of rest, hygiene and welfare facilities
- physical violence from members of the public and/or intruders

Control measures could include (but not limited to):

- Ensuring communication is maintained, by mobile phone, telephone or other.
- Having a controlled periodic check system in place with colleagues.
- Automatic warning devices, e.g. panic alarms, no movement alarms, automatic distress message systems, i.e. pre-recorded message sent if not actively cancelled by operative, etc.
- Instruction and training in proper procedures, e.g. code words for potentially violent situations when combined with mobile phone communication.
- Use of Personal Protective Equipment (PPE).
- First-aid kits and training.
- Developing and implement a standard operating procedures (SOPs) for each production.
- Locking and securing place of work.
- Implementing correct incident reporting procedures.

For a lone worker at a remote location, the following factors must be considered:

- How long should the work take and how frequently should the worker report in,
- Has the worker a safe means of travel to and from the location, especially out of normal hours,
- Is there access to adequate rest, hygiene, refreshment, welfare and first aid facilities,
- Can emergency services approach the location without hindrance? Procedures for responding to 'worst-case scenario'.

The Employer holds the main responsibility for protecting the safety and health of lone workers. Nonetheless, lone workers themselves have a responsibility to help their employer fulfil this duty, and so they must:

- Take reasonable care to look after their own safety and health
- Safeguard the safety and health of other people affected by their work
- Co-operate with their employer's safety and health procedures
- Use tools and other equipment properly, in accordance with any relevant safety instructions and training they have been given
- Not misuse equipment provided for their safety and health
- Report all accidents, injuries, near-misses and other dangerous occurrences

For further information on Lone Working, please see HSA website Links: https://www.hsa.ie/eng/Topics/Hazards/Lone_Workers/#who

https://www.hsa.ie/ eng/Topics/Hazards/Lone_Workers/#legallyworkalone

Safe Pass

Members of the art department may be required to hold a Safe Pass card. Safe Pass may be required by a landlord to access a location or by a construction manager/PSCS to access set build areas.

For further information on Safe Pass please see the section within this guide - Safety, Health and Welfare at Work (Construction) Regulations 2013 / SOLAS Safe Pass and also HSA website. Link: https://www.hsa.ie/eng/Your_Industry/Construction/Construction_FAQ's/Safe_Pass/

See also Chapter 28 which addressed Construction in detail.

Scaffolding and Rigging on a Production

Any person constructing a scaffold or carrying out rigging must be competent and qualified. Scaffolders and riggers are responsible for erecting and dismantling a range of structures for a production including access and support structures. They are responsible for establishing and maintaining a safe working environment for themselves, their crew and other persons in the work area that may be affected by their operations. The advanced scaffolder/rigger is responsible for inspecting and maintaining the integrity of the scaffold until handover (if services of rigger are not being maintained, as production would then

have full responsibility for inspection and maintenance of the scaffold).

Studio Grid Area/Gantry

When working within a studio environment where the use of a gantry is needed, the production designer and art director liaise with the construction manager and rigging HoD.

Studio grid areas should be available and designed to ensure fit for purpose.

Studio grid areas should have in-built full gantry walkway and means of safe access to the gantry including for bringing equipment to the gantry area.

Arrangements for emergencies and rescue from height need to be considered as part of the planning and risk assessment for work at height activities. See Chapter 4, Section 4.7 Work at Height as well as Chapters 28 Construction regarding Work at Height and Work at Height Rescue.

Bespoke Scaffold

For scaffolds and set builds that exceed certain criteria and fall outside the scope of standard designs, a bespoke design will be required. In this instance, a competent scaffold designer must be engaged, and a temporary works scaffold design produced. The design should be communicated to the PSDP in advance or erecting the scaffold.

For further information on construction elements required for a production, please see the Construction, Working at Height, Scaffolding and Rigging section of the guide.

Use of Mobile Elevated Working Platforms (MEWP'S)

What is a MEWP – As per HSA guidance document on MEWPS a MEWP is a mobile machine. It is used to move persons to working positions where they are carrying out work from the work platform, with the intention that they are getting on and off the work platform only at access positions at ground level or on the chassis. It consists at a minimum of a work platform with controls, an extending structure, and a chassis.

Those working with MEWP's must be familiar with the HSA Guidance document on safe operation procedures for MEWP's. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/HSA_MEWPs_Guidance.pdf

See Chapter 4 - Section 4.7 Work at Height as well as Chapters 28 Construction regarding Work at Height and Work at Height Rescue.

Scheduling of Crew

Scheduling of art dept crew should ensure they do not work excessively long hours. This includes the time required for early calls and to remain at set after wrap, as necessary.

The production designer/Art director will ensure there are sufficient crew available to cover the entire working day, that crew are not in a lone worker situation, and that crew do not work an excessively long working day, which can lead to fatigue or stress. Scheduling requirements should be highlighted to the production office as early as possible if it is determined by the HoD there is difficulty in covering all working hours.

Surveying

In addition to lone working when surveying a location as a potential set, the art department crew may be required to make safety observations and alert other crew from the art department that may visit the location subsequently.

The appointed health and safety advisor or officer may be required to attend initial survey(s) requested by UPM/LP/PM of a proposed location to determine if the location is suitable and to assist with providing recommendations to production to determine suitability and measures to enable the location to be used if appropriate to do so.

A safety observation sheet - Art Department Safety Observations (ARTSO) has been used by art department personnel on productions prior to the production of this guide and a sample of the template can be found in Appendix 2.

The ARTSO could be completed by the art director or other competent person and the completed ARTSO circulated by production to other departments. These will also need to visit the location to survey/recce the set area for preparations of the set and for crew engaged in activities when filming at the location.

The ARTSO does not replace the need for department specific and production location specific risk assessments.

Areas of consideration when surveying a location, structure or stage as a potential set area can include:

- Structural: Will it be necessary to have the property or structure or part of same assessed by a structural engineer, and obtain an engineer's report?
- Asbestos: Is it likely that there may be asbestos within the structure that could be disturbed during any phase of the production?
- Set Build: Will there be a requirement for a 'set build' or modification of a structure?
- Access: Are access/egress routes suitable, and how will they be maintained safely for all phases of the production including in the event of an emergency?
- Electricity: Are there electrical hazards at the location such as overhead/underground services or electrical installations that require statutory inspections?
- Fire: Due to the nature of the environment and proposed activities of the production for any phase of the production is there an increased risk of fire? When set area is being constructed provision is required for maintaining adequate fire lanes. See also Chapter13, section 13.3 Fire and Fire Escapes
- Vehicles, plant, and equipment: Is the location suitable for plant and equipment required for each phase of the production and for action vehicles required?
- Animals: Is the location suitable for animals including horses and carriages if within script?
- Vermin and other biological hazards: does the location pose specific risk of contamination from vermin and or other biological hazards?
- Water: Is there a requirement for persons to work either on or within close proximity of water?

Sample Blank ARTSO

Sample ARTSO can be printed as required. See Appendix 2

Further reading

For further information re construction and design, please see document: Guidelines on the Procurement, Design and Management Requirements of the Safety health and Welfare at Work (Construction) Regulations 2013. HSA Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Guidelines_on_Procurement_Const_regs_2013.pdf

HSE (UK) Guidance Document for Buildings used for locations or temporary studios in film and television. Link: http://www.hse.gov.uk/pubns/etis18.pdf

22
Set Decoration

The set director works with the production designer and director to realise their vision for the look and visual style of a film or TV show, by sourcing suitable props and set dressings for the look of the film. They must break down the script for set dressing and props requirements and undertake-research on locations, period, and characters in advance of filming. They must decide on the style of props such as furniture, fabrics, wallpaper, and communicate this with the buyer and props department. They are responsible for creating a research base for all members of the department to use, listing, and noting all props and dressing elements. They manage and oversee the set decorating department, ensuring they remain within tight schedules and budgets. They must liaise with the props department during production. Link: https://www.careersinscreen.ie/role/set-decorator/

The set decorating department is usually made up of the following team members:

- set decorator,
- production buyer,
- assistant set decorator,
- assistant buyer,
- set decorating coordinator,
- petty cash buyer,
- trainee buyer,
- set decorator's assistant.

Depending on the size of the overall budget of a production, the set dec department may consist of a smaller team.

Set Decorator

Roles and responsibilities of the set decorator as follows:

The set decorator is the head of the department and is responsible for each décor element inside the sets, from practical lighting, technology, art, furniture, drapery, floor coverings, books, collectables, to exterior furnishings.

Working with concepts from the production designer, approved by the director/producer and studio, along with drawings and illustrations from the art department, the set decorator budget, designs, develops floor plans, sources, builds, schedules and eventually supervises the installation of the set dressing in each set. These include industrial equipment, lighting fixtures, graphics, furniture, artwork, drapery, decorative accents, florals, floor coverings, and exterior décor to support the story.

General Considerations for Set Decoration Department

Set decorating and production buying is a process like few others as many parameters are script-based and can vary dramatically from one job to the next. The crew can be called upon to carry out their duty in a variety of work environments and can be asked to supply a remarkably broad range of props. Below are guidelines to help the department identify the most common health and safety issues encountered in their daily work, however a degree of care and caution should be exercised at all times while in the workplace.

Office Requirements

The set decorator is responsible for advising UPM/PM/LP of the requirements for the office, ensuring that it has adequate and appropriate shelving and storage spaces and that the office environment is kept tidy and files maintained securely.

There needs to be adequate provision for electrical installations to cater for the equipment required. Electrical wiring from machines and equipment should be maintained in a manner that does not lead to trip hazards.

Set decoration department crew are not primarily based in an office environment but should be aware that long uninterrupted periods of static posture may cause back problems. Those who generally use display screen equipment for more than one continuous hour a day are considered DSE users and have an increased risk of upper limb disorders, and/or repetitive strain injury. The risk may be compounded by poor sitting posture, aggravated by poor layout of workstations.

The crew should be aware that a laptop is not covered by the above regulations because the keyboard should be tiltable and separate from the screen. This allows the user to find a comfortable working position which avoids fatigue in the arms or hands.

No single continuous period of work at a screen should, in general, exceed one hour. Crew should be encouraged to stand up from their workstation frequently throughout the working day (every 30 –40mins), and ensure they look away from the screen at least every 20 mins (and allow their eyes to refocus on other objects for approximately 20 seconds).

For further information on DSE please see section Display Screen Equipment in this document.See also section 13.2: The Building(s) and Working Areas, Section 4.6 Electricity and Chapter 31: Electrical.

Lone Worker Situation

Please note: As with other parts of this guidance document individual Employers are expected to carry out **further** research as necessary and in the case of lone workers to note that there are additional rules/regulations beyond Chapter 59 (Working Time – Adults) for example.

There are occasions where Set Decoration crew could be required to work under the Lone worker situations. Lone working is defined by the Health and Safety Authority as anyone who works alone, those who work by themselves without close or direct supervision.

Legislation does not prohibit a person from working alone, however Section 19 of the Safety, Health and Welfare at Work Act 2005 requires the employer to undertake a risk assessment. An employer shall, in identifying hazards and assessing risks under that section, take account of particular risks if any, affecting employees working alone at the place of work or working in isolation at remote locations (Regulation 2 (3) of the Safety, Health & Welfare at Work (General Application) Regulations, 2007).

The risk assessment determines whether or not an employee may work alone or if the employee is at significantly higher risk when working alone?

Note: Employers must be aware of any specific legislation on lone working, which may be applicable to their specific industry, e.g. supervision in diving operations, vehicles carrying explosives.

Lone workers include:

- Where only one person in a fixed establishment is working on the premises, including outside of normal hours.
- People work separately from others
- People who work outside normal hours
- People working away from their fixed base e.g. on construction, plant installation, maintenance and cleaning work, electrical repairs, painting and decorating etc

A risk assessment may conclude that it is not possible for the work to be carried out by a lone worker.

Where there is a lone worker, it should identify precautions that must be taken by employers, taking account of normal work and foreseeable emergencies. Employees must also take reasonable care to look after their own safety and health.

Hazards that lone workers may encounter include:

- accidents or emergencies arising out of the work, including inadequate provision of first aid
- sudden illnesses
- inadequate provision of rest, hygiene and welfare facilities
- physical violence from members of the public and/or intruders

Control measures could include (but not limited to):

- Ensuring communication is maintained, by mobile phone, telephone or other.
- Having a controlled periodic check system in place with colleagues.
- Automatic warning devices, e.g. panic alarms, no movement alarms, automatic distress message systems, i.e. pre-recorded message sent if not actively cancelled by operative, etc.
- Instruction and training in proper procedures, e.g. code words for potentially violent situations when combined with mobile phone communication.
- Use of Personal Protective Equipment (PPE).
- First-aid kits and training.
- Developing and implement a standard operating procedure (SOPs) for each production.
- Locking and securing place of work.
- Implementing correct incident reporting procedures.

For a lone worker at a remote location, the following factors must be considered:

- How long should the work take and how frequently should the worker report in,
- Has the worker a safe means of travel to and from the location, especially out of normal hours,
- Is there access to adequate rest, hygiene, refreshment, welfare and first aid facilities,
- Can emergency services approach the location without hindrance? Procedures for responding to 'worst-case scenario'.

The Employer holds the main responsibility for protecting the safety and health of lone workers. Nonetheless, lone workers themselves have a responsibility to help their employer fulfil this duty, and so they must:

- Take reasonable care to look after their own safety and health.
- Safeguard the safety and health of other people affected by their work.
- Co-operate with their employer's safety and health procedures.
- Use tools and other equipment properly, in accordance with any relevant safety instructions and training they have been given.
- Not misuse equipment provided for their safety and health.
- Report all accidents, injuries, near-misses and other dangerous occurrences.

For further information on Lone Working, please see HSA website Link: https://www.hsa.ie/eng/Topics/Hazards/Lone_Workers/#who

Air Quality On-Set

Sometimes smoke, dust, and other airborne particles such as from fires, candles or ground coverings are required for visually creative reasons. Crew can be subjected to this atmosphere for many continuous hours during the working day.

Small unventilated sets with large numbers of extras and combined with open flame could lead to air quality being compromised.

For further information on air quality please refer to the section in this guide on 'Air Quality on Set'.

Prop Food

Stand by prop should advise prop master if any cast or background artists have any known food allergies in advance of filming day. Link for further information on allergens: https://www.fsai.ie/legislation/food_legislation/food_information_fic/allergens.html#14_allergens

For further information on food safety see sections Prop Department and Catering in this guide.

Electrical Set Pieces

Portable equipment, by its nature, is more susceptible to damage than fixed electrical equipment. It is also more likely to be used in different environments and is often directly in contact with the user.

All portable equipment must be maintained in a manner fit for safe use and should be subject to an appropriate inspection regime by employers to ensure that this is the case.

The nature and frequency of should be adequate to prevent danger. The nature and frequency of inspections will vary dependent on the equipment, its use and location of the equipment.

The results of PAT inspections and tests should be recorded and kept available for 5 years from the date of inspection.

Equipment that is hardwearing and/or used in an environment that is likely to increase deterioration may require more frequent testing. Example: equipment used in workshops or on sets may require PAT testing (in addition to visual inspection) 2 to 4 times per annum, whereas computers, laptop chargers or microwaves may require less frequent testing. Contractors supplying their own equipment are responsible for ensuring PAT testing is carried out as above.

Please reference sections 4.6 Electricity and section 4.6.1 Portable Appliance Testing for further information.

Drapes

Drapes Workshop and Drapes on Set

- The workshop should be of adequate size to allow people to work safely, allowing ample room around work equipment / machinery (some of which can be industrial equipment).
- The workshop should use adequate lighting for cutting and sewing.
- Work areas and areas around work benches to be kept clear at all times. Routes to emergency exits to be kept clear at all times.
- Drapes crew working the specialised equipment and machinery must be competent and have received training in safe use of the machines as per section 10 of the Safety, Health and Welfare at Work Act 2005). Certificates of training may be requested, and crew should provide proof of training where requested.
- Where trainees are employed (still having the above training) they will be supervised as required by the head drapes person.
- Adequate provision for electrical installations to cater for the equipment required. Electrical wiring from machines should be maintained in a manner that does not lead to trip hazards.
- Specialised cutting tables (min size guidance of 8" by 4") height needs to suit the drapes person.
- Respiratory protective equipment required for chemicals and dyes being used as per safety data sheet.
- The dryer and washing machines are only to be operated when drapes persons are present.
- Flame proofing of materials: Drapes must be fire retardant, the set decorating department must always be notified by the producer where the use of practical flame, flash effects or the possibility of fire exists (See section Fire – General Guidelines in Chapter 41 - SFX).
- The set decorating department must be allowed time to work closely

with the Special Effects coordinator, Stunts coordinator and production designer/Art Department, to ensure that potential risks are minimised or eliminated, and fire/flame retardant of costumes to be carried out where needed.
- Good manual handling practices must be used when hanging drapes.

If ladders or other platforms are required for the hanging of drapes, risk assessments should be in place for the use of ladders and persons to be trained in safe use of ladders. For further information on use of ladders/working at height, please see sections Working with Ladders, Working at Heights and Construction, Working at Heights' within this guide.

Hazardous Materials

If the prop buyer is requested to purchase any hazardous chemicals or materials, or specialised equipment for example for the stunts department they should be provided with specific information from the HoD. Where chemicals, substances or materials are being purchased for which safety data sheets, material data/technical sheets and manufacturer's instructions are available, these should be made available to the relevant HoD to assist with generating risk assessments. For further information on working with chemicals please see Chapter 65 within this guide, 'Working with Chemicals'.

Manual Handling

The nature of the set decoration department means that all team members are usually required to lift, put down, carry, push, pull, move objects and loads and are sometimes required to work in areas with space limitations.

Both the employer (production company) and the employee (all department team members) have a responsibility to ensure best practice is followed in relation to any manual handling.

The Safety, Health and Welfare at Work, (General Applications) Regulations 2007, Chapter 4 of Part 2, outline the requirements that must be adhered to in relation to manual handling: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Manual_Handling.pdf

23 Accounts

The accounts department manages all financial issues in relation to the production and ensures that invoices are paid, purchasing processes are followed, accounting information is monitored and recorded, and expenditure is managed in line with the production budget. The department is also responsible for cash flow management, cost reporting to financiers, and payroll. The department consists of a production accountant, assistant production accountant, and a trainee.

Production accountants usually work on a freelance basis. The experience and qualification required will depend on the size and scale of the film or TV production. Film or TV production accountants usually have a recognised qualification in accounting, as well as having a good working knowledge of filmmaking processes.

Production accountants are responsible for managing finances and maintaining financial records during film or TV production, working closely with the producer and the production office.

They will be required to supervise assistant accountants and accounts trainees.

They must ensure that all legal requirements re company accounts are met.

Working Time

In order to be compliant with the Working Time Act 1997 (and the European Court of Justice ruling (May 2019) companies in the EU must set up an objective, reliable and accessible system to record the hours of work of their employees.

For working hours and breaks for children, see section Working with Children in Film & TV Industry.

Weekly time sheets:

All crew are required to provide the accounts department with weekly time sheets in order to comply with the Working Time Act 1997. For further information about working hours, and breaks: http://www.irishstatutebook.ie/eli/1997/act/20/enacted/en/pdf

Note regarding working hours: The Working Time Act 1997, states that the maximum average working week for many employees cannot exceed 48 hours. The average may be calculated over one of the following periods:

- 4 months for most employees
- 6 months for employees working in the security industry, hospitals, prisons, gas/electricity, airport/docks, agriculture or in businesses which have peak periods at certain times of the year (such as tourism)
- 12 months where this has been agreed between the employer and the employees (and this must be approved by the Labour Court)

Working Time General Exemptions

S.I No. 21/1998 - Organization of Working Time (General Exemptions) Regulations, 1998.

3. (1) Without prejudice to Regulations 4 and 5 of the Organization of Working Time Act 1997, activities specified in the Schedule to these Regulations are exempted from the application of sections 11, 12, 13 of the 1997 Act.

Activities specified in the schedule include persons working in production in the press, radio, television, cinematographic, postal or telecommunications industries.

Persons working in the production to be aware of the above General Exemption Regulations. Link: http://www.irishstatutebook.ie/eli/1998/si/21/made/en/print

Collective Agreements SPI & SIPTU

There is a Collective Agreement on Working Time between Film Makers Ireland (Screen Producers Ireland) and Services Industrial Professional & Technical Union (SIPTU). The Labour Court approved the agreement concerning Working Time and Rest Arrangements under the exemptions Provision of the Working Time Act 1997. The production company should make details of this agreement available to crew through the accounts department. At the time of publication of this guide, a new agreement was in negotiations and had not been signed.

Office Requirements

(Please see section 13.2 for further information on requirements for The Building(s) and Working Areas).

The production accountant will be responsible for advising UPM/PM/LP of the requirements for the accounts office and ensuring that it has adequate and appropriate shelving and storage space to ensure the office environment is kept tidy and files can be maintained securely.

There needs to be adequate provision

for electrical installations to cater for the equipment required. Electrical wiring from machines and equipment should be maintained in a manner that does not lead to trip hazards.

Temperature and lighting for accounts offices (for DSE users) to be as per SHWW(GA) Regs 2007, Chapter 1 of Part 2 and Chapter 5 of Part 2. Accounting department crew will be based in an office environment, all accounting department crew should be aware that long uninterrupted periods of static posture may cause back problems. Persons working at a computer workstation every day, and generally use display screen equipment for more than one continuous hour a day are considered DSE users and have an increased risk of upper limb disorders and repetitive strain injury. The risk may be compounded by poor sitting posture, aggravated by poor layout of workstations.

Under the Safety, Health and Welfare at Work (General Applications) Regulations 2007, Part 2, Chapter 5, DSE assessments / risk assessment should be carried out for all for DSE users, by a competent DSE assessor. Reference section within this guide on Display Screen Equipment and HSA SHWW(GA) Regs DSE Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Display_Screen_Equipment.pdf

HSA SHWW(GA) Regs DSE FAQ's Link: https://www.hsa.ie/eng/Workplace_Health/Manual_Handling_Display_Screen_Equipment/FAQs/Display_Screen_Equipment_FAQs/Display_Screen_Equipment1.html#chapter

The UPM/PM/LP and production accountant should be aware that a laptop is not covered by the above regulations because the keyboard should be tiltable and separate from the screen to allow the user to find a comfortable working position which avoids fatigue in the arms or hands.

A laptop does not have a separate keyboard and a user should not work on a laptop for long periods of time. A laptop should be connected to a separate monitor and keyboard, the workstation can then be assessed to record whether the workstation meets the requirements detailed in the Display Screen Equipment Regulation including Schedule 4.

Other temporary laptop workstations should be assessed to determine the usage of the laptop and to identify potential risks.

No single continuous period of work at a screen should, in general, exceed one hour. Crew should be encouraged to stand up from their workstation frequently throughout the working day (every 30 – 40mins), and ensure they look away from the screen at least every 20 mins (and allow their eyes to refocus on other objects for approximately 20 seconds).

24 Camera, DIT & Video Assist

The camera and lighting department is broadly responsible for the capturing of the final shoot, in collaboration with the director. The work in this department includes roles that are creative, technical, and physical. From setting up the shot creatively and technically, operating and maintaining cameras, rigs, and equipment, and backing up digital footage and preparing dailies, the work is hugely diverse.

The director of photography (DOP, or cinematographer) is the head of department and is supported by a camera operator, 1st assistant camera operator (also known as a focus puller), 2nd assistant camera operator (also known as a clapper loader), and trainee. The camera department also includes a digital imaging technician, who makes sure digital image files are managed, filed and packaged correctly for post-production. Link: https://www.careersinscreen.ie/live-action-tv-drama/#sec17

General Considerations

Depending on the production, shooting can present a variety of work environments.

Below are guidelines to help identify potential issues that may be encountered, but the best tool is a logical approach to the circumstances on any given day. Being alert and aware of what's going on around you can contribute greatly to a safe workplace while filming.

Risk Assessments

The DoP and other HoDs working closely with or under the DoP are required to generate location specific risk assessments and method statements as applicable.

Equipment Preparation and Handling Considerations

The value of preparation time cannot be understated, and this is a crucial time for organising the smooth running of the camera department for the shooting phase. Prep time presents the ideal opportunity to ensure equipment functions properly, is fit for purpose and safe to use.

- Weight and size should be considered for all cases being used. Note equipment may need to be carried by crew over long distances and rough terrain.
- Cases including locks and catches can be closed and locked when unattended and should be in good repair. Cases should have appropriate handles to enable safe carrying. Larger cases

should have multiple lifting points to allow a team lift. Secure additional adhesive grip or handles should be added where required and where possible.
- Carts, trolleys, and wheel sizes should be appropriate to shooting conditions.
- Good Manual Handling practices to be used and need for heavy lifting kept to a minimum. Note: Many camera rental companies supply cases designed for overseas shipping and not for daily use. Where possible use smaller cases made of lighter material.
- Use suitable interlocking devices to secure accessories to cameras when available.

Electrical and Electronic Equipment Preparation and usage

Camera department crew should liaise with electrical department and camera rental company to ensure electrical and electronic items are safe and reliable for use. The following will be required:

- All mains powered electrical equipment to be PAT tested, including hired equipment.
- All equipment including connectors and cabling to be in good condition.
- Equipment should be examined for water, environmental or any other damage
- Ensure stability can be maintained for stands and mountings for electronics equipment. Special consideration may be required for heavier items such as large monitors.
- Lithium batteries should be in good condition, fit for purpose, transported (i.e. yellow pelicases or similar approved cases), stored and used appropriately. They should be free from any signs of damage and perform as expected
- Battery chargers should be appropriate for the batteries they are to charge, and crew should be aware of proper charging procedures. Trainee camera crew or less experienced crew must not be permitted to engage in these activities until they have received appropriate instruction on the procedures and safety precautions required.
- Camera dept crew should communicate with the electrical dept regarding power requirements prior to shooting, including for camera truck to ensure sockets and systems are not overloaded. See Chapter 31 regarding Electricity.

Camera Truck and/or Camera Room

The camera truck can be subjected to constant movement over different terrain while transporting equipment between locations and this can give rise to potential safety issues. Careful planning will ensure that the safety of the truck and its contents are not compromised.

- Camera truck must be fit for purpose, be fitted with shelving, tail lift and steps.
- Access steps and tailgate should be kept clean and safe at all times. Steps must have a secure fixing.
- Shelves and work benches should be suitable for the weight and size of the equipment to be stored and transported. Shelving should be properly constructed and secured to the body of the truck.
- All shelves should have proper restraints to ensure items cannot fall from them. Heavy items should not be stored on upper shelves.
- Ensure carts and other wheeled items can be safely restrained, so they cannot move during transportation.
- Electrical power supplies to the camera truck should be appropriate for the load required. Power supply to be approved by the electrical dept. Sockets must never be overloaded.
- Electrical supply connections should be done only by a qualified electrician.
- Tailgate operator should make visual checks and verbal announcements before and during operation.
- Truck should be parked on level and appropriate ground with sufficient working space for loading and unloading.
- Compressed gas containers and solvent sprays should be properly marked and stored so they cannot fall.
- Only suitable radiant heaters should be used on the camera truck. No fan heaters.
- The truck workspace to be properly maintained, free of slip and trip hazards.
- Persons are not permitted to travel inside the truck when moving.
- As crew members may need to work for prolonged periods on the truck, proper ventilation, and good air quality as well as moisture and damp issues should be considered. The truck and tailgate area are strictly 'No Smoking' zones.
- Camera trucks should be equipped with appropriate lighting and have sufficient backup lighting should the power supply be disconnected. Tailgate area should also have good lighting.
- Electrical appliances including heaters, kettles and coffee machines should be unplugged when not in use.
- Appropriate and serviced fire extinguishers should be available on camera trucks.
- Traffic routes for vehicular traffic or pedestrians (or both) should be clearly marked where possible. In some locations the provision of footpaths is appropriate.
- An employer must also ensure that the transport of employees on mechanically driven mobile work equipment is only permitted where safe facilities are provided to this effect and if work is carried out during the journey, speeds are adjusted as necessary (Regulation 41 of the Safety, Health and Welfare at Work (General Application) Regulations 2007).

Protective Clothing

Protective clothing falls into two categories. Firstly, that which belongs to the individual and carried by all crew. Secondly, specialist safety requirements should meet specific shooting situations. Expert guidance is usually given in these circumstances.

- Camera crew should dress appropriately for weather and terrain, back up weather protection may be required on days where there is inclement weather. Appropriate footwear to be worn (no open toed shoes).
- The production or specialised HoD may be required to supply additional protective equipment for non-standard shooting circumstances, for example life jackets for on water work, fire protection suits, waders for water, dust masks, safety goggles, hearing protection or other to ensure camera crew are protected from specific hazards.
- Camera crew should wear and use PPE when requested for their own safety.
- Crew should be aware of good hand hygiene, hands should be washed regularly, hand sanitizers should be available, and gloves should be worn when handling cables and other items that have been on the ground.
- Crew members sensitive to insect bites should keep a supply of insect repellent available. When filming in long grass or other areas where ticks may be present, appropriate clothing (long socks, trousers) should be worn to protect against Lyme Disease. Any insect bites must be reported to the medic or production as soon as possible.
- Crew to ensure they have adequate protection from the sun when filming outdoors (sunscreen, appropriate hat/ clothing).

Transportation and Moving Around Set

It has become common practice for a separate department and qualified persons to handle the on-set transportation of equipment, especially

for difficult terrain. Advance consultation between location dept and camera dept can make this a safe and efficient process. If transportation is not supplied crew levels should be sufficient to ensure safe handling. Crew members should not be left alone to move trollies or large pieces of equipment over dangerous terrain.

Use of All-terrain Vehicles (ATV)s and Trailers:

- At times all-terrain vehicles (ATV)s and trailers may be needed to move equipment between the camera truck and set, these should only be operated by qualified personnel and not by camera crew.
- Trailers should be of an appropriate standard and come supplied with the necessary straps to secure carts and other wheeled items.
- Trailers should not be overloaded or have too high a centre of gravity.
- Crew must follow the advice of the vehicle operator if traveling with such equipment and always make personal safety a priority.
- All equipment on carts should be secured for transportation prior to loading on trailers.
- Where possible, locations should consult with the camera crew in advance regarding difficult terrain for moving equipment.

As regards work equipment, an employer must ensure that work equipment with ride-on employees is fitted out in such a way as to reduce the risks for employees during the journey, including risk of contact with or trapping by wheels or tracks. It is also necessary to ensure that the risks from wheels and tracks when the equipment is travelling are controlled by the design of the machine. [Note that the above requirements are set out in Regulation 35 (Chapter 2 of Part 2) of the Safety, Health and Welfare at Work (General Application) Regulations 2007].

Shooting and On-Set Safety

It is the responsibility of everyone on set to be aware and vigilant regarding dangers in an ever- changing environment.

- Camera equipment should be positioned on a level, safe area, and equipment secured to prevent inadvertent movement, allowing safe access, and minimizing the risk of trip hazards from equipment and cables.
- Where possible cameras should be secured on a snap plate or placed in a stable position on a level surface when not in use. If an unsecured camera must be left unattended on set, it should be kept low to ground level.
- Weather and wind conditions should be monitored to ensure security of equipment and safety of persons on set. Examples are Easy-Up tents and wind barriers which should be secured with straps or ground pegs and C-stands to be weighted with a sandbag if there are any expected winds and or wind gusts.
- Use of electrical power on set must always be with the approval of the electrical dept.
- Electrical equipment in use by camera must be protected from wet at all times.
- Emergency exits and routes to them should be kept clear of equipment.
- Where darkness is an issue, provision of work lights should be arranged with locations and electrical departments in advance, and crew should carry personal torches/head lamps when working in low-light areas. Care should be taken not to blind others with these devices.
- Mobile phones should be used only when necessary.
- If there is any danger of cameras being struck by an object (including but not limited to vehicles or projectiles) during a shot, consideration should be given to a “lock off” or use of a remote head so that no camera crew need be adjacent to the camera at the time of shooting. Where a camera must be manned and there is a possibility of it being impacted by an object, appropriate barriers and protection must be provided by the relevant qualified person.
- Where a camera will be placed in an elevated position (e.g. on a crane), camera crew should ensure all camera accessories (matte box, filter trays, rods, articulating arms, etc) are tightened securely. Crew are to liaise with and follow instructions from the grip department regarding securing the camera itself. Cameras must always have a safety tie.
- The movement of camera equipment (including camera trolleys) to and around the set should only be undertaken by members of the camera dept, though members of the grip dept. may assist if requested and supervised.
- When moving cameras, standby bags, lens cases and other heavy items around set, crew members should at all times be aware of cast, crew and extras working/moving on set, and mindful of any obstacles or trip hazards which may be present.
- Camera crew should not overload themselves with gear, good manual handling practices to be followed. When carrying equipment over dangerous terrain (sand dunes, rocky, inclined, or slippery surfaces) it is advisable to seek assistance as necessary and keep one hand free.

Handheld Operating and Fight/Battle Sequences

Camera operators can be required to shoot handheld, supporting the weight of the camera during a take. It is not uncommon for this to be the shooting method for an entire day. This may include typical handheld (the camera resting on the operator’s shoulder or gripped by handles) or with the use of a Steadicam, EZ-rig, gimbal, or similar device. Maintaining an awkward position or supporting a weighted load for extended lengths of time can lead to various ailments ranging from discomfort to muscle fatigue. Resulting safety concerns, such as dropping equipment, trips and falls may also occur, potentially causing injury to the individual and to others. Consideration should be given to when and where equipment and/or personnel can be utilised to provide relief during shooting.

- When operating handheld, or with a Steadicam or similar stabilizing rig, operators should be supported by a member of the grip dept. If necessary protective equipment should be made available to operators and other camera crew when working in the vicinity of cast or extras during fight and battle scenes. In such circumstances stunt coordinators, performers and ADs should instruct extras to ensure they are aware of the presence and position of camera crew during takes, especially when weapons (swords etc) are being used.
- Special consideration should be given when shooting handheld in fight or battle sequences. Safety of the operator should be high priority. The stunt coordinator’s advice must be adhered to.
- There should be adequate crew to support the camera operator and camera (both camera and grip crew). Crew should ensure cables attached to handheld cameras can be wrangled during takes.
- Extra consideration must be given to handheld filming in vehicles. Securely mounting the camera on or within the vehicle should always be considered first. Any impact or rapid acceleration or deceleration could result in the operator or other personnel in the vehicle being struck by an unsecured camera. Airbags can present particular hazards as the effects of their release on operators holding cameras can cause injuries. This also comes under

non-standard shooting situations and requires supervision and advice from the vehicle operator.

Non-Standard Shooting Situations

This relates to situations where a greater safety awareness is required. Examples are use of devices such as drones, helicopters, cranes and insert cars. It includes locations such as cliff edges or roof tops of high buildings, shooting at sea or underwater. At these times heightened levels of concentration and awareness will be required. The camera department should take instruction from any expert advisers engaged by the company and be familiar with relevant risk assessments for these situations.

- Unusual shooting equipment (drones, remote heads etc.) must be operated by competent trained technicians. Camera crew working with these specialised pieces of equipment should follow the specific instructions provided by specialists relating to how cameras and other equipment are configured. Cameras to be prepared to the specification of the technician in charge of the device. Cameras should not be rigged, de-rigged or adjusted without first seeking approval from the appropriate expert.
- When the shoot requires the camera crew to ride on any moving vehicle (cars, boats, etc.) crew should at all times comply with the instructions and control measures given in the relevant risk assessment provided by the HoD for the department responsible.
- When working at height (cherry pickers, cliffs, and roof tops) is required, Safe System of Work and Risk Assessments should be provided by a competent, qualified person. All work at height and lifting equipment to be inspected as per legislative requirements. See Part 4 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 which provides an overview of the steps to take in assessing risks, and steps to take to enable work at height to be carried out safely. See also Chapter 2 of Part 2 of the 2007 Regulations for lifting equipment regulations. Withing this guide see Chapter 4, Section 4.7 Working at Height as well as Chapters 28 Construction and Chapters 40 – 42, regarding work at height for further information.
- Life jackets are legally required on water and must always be worn. These to be supplied by the marine department, the marine coordinator should ensure they are fit for purpose and in good condition.
- When shooting from insert cars, minimum crew should be on board and be safely secured and harnessed to the vehicle.

Chemicals and Solvents

Chemicals and solvents used by the camera dept are mainly cleaning and lubrication products of the type available to consumers. The chemicals and solvent can give off fumes or be corrosive and do require care in use. The other main item is compressed gas products used to remove dust, mainly a product called Kenair which when inverted can act like a freezing agent and can be mis-used.

- Safety data sheets should be available for all chemicals and solvent used. Only competent persons should use these. Risk assessments should be in place for use of hazardous substances which is in addition to detailing storage, handling, transport measures required and use of PPE/RPE, ventilation required and disposal measures. It will advise on safe use of substances, example: Kenair compressed gas canisters should never be inverted when spraying, and potential dangers relating to the use of flammable sprays.
- Wear personal protective clothing, gloves and eye protection, and respiratory protective equipment as per safety data sheet and risk assessment. Ensure other persons cannot be inadvertently affected by hazardous substances used.

For further information on working with chemicals please see 'Working with Chemicals' Chapter 65 within this guide

Emergency Electronic Maintenance

Ideally, any electronic maintenance should be carried out by the camera supply company or a qualified technician. However, there are times when in order to continue shooting, emergency repairs are required. These should not be carried out by anyone without the required knowledge and expertise to carry out the task(s) safely.

- Electrical items and equipment showing any signs of damage to be taken out of use and inspected by a member of the electrical department, or returned to the rental house.
- Any lithium battery displaying signs of damage should be taken out of use and inspected by a qualified person or returned to the rental house.
- If it is necessary to use soldering irons, they should be used only by those with the necessary experience and must not be left unattended when not in use.

Scheduling

Attention must be given to the scheduling requirements for camera department crew including the number of cameras to be serviced, terrain and location difficulties to ensure crew do not have to work excessive hours which can lead to fatigue and or stress.

Camera equipment is heavy and moving it can be physically exerting. Enough crew should be engaged to safely meet requirements and to ensure there is sufficient crew available to cover the entire working day. Any concerns regarding crewing should be brought to the attention of a superior (HoD) and highlighted to the production office as early as possible.

Water and Underwater filming

All persons involved in underwater filming should be aware of and comply with legislative requirements and codes of practice specific to this area. Some of these requirements are listed in the diving section below such as the Safety, Health and Welfare at Work (Diving) Regulations 2018. These Regulations, for instance, set out measures which ensure that a standby diver will always be on hand in the case of an emergency.

Specific Diving Legislation:

The Safety, Health and Welfare at Work (Diving) Regulations 2018 and 2019 (S.I. No. 254 of 2018 as amended by S.I. No. 180 of 2019) came into force on 1st May 2019. These regulations are made under and enforced under the Safety, Health and Welfare at Work Act 2005 (the 2005 Act).

They apply to any diving project in which a person who dives is at work. They apply to all places of work and work activities where diving projects are carried out and to which the 2005 Act applies.

Their purpose is to protect the safety, health and welfare of all personnel involved in diving at work. They set out a framework for the safe management of diving projects. They outline specific responsibilities and duties for persons engaged in diving projects, for example, clients, diving supervisors, diving contractors, divers and other people who may affect the safety of the diving project.

Diving Codes of Practice

There are two CoPs for diving: The Code of Practice for Inland Diving and Inshore Diving and the Code of Practice for Offshore Diving. The majority of

diving at work in Ireland tends to fall under the Code of Practice for Inland Diving and Inshore Diving.

Code of Practice for Inland Diving and Inshore Diving Link: https://www.hsa.ie/eng/publications_and_forms/publications/codes_of_practice/code_of_practice_for_inland_diving_and_inshore_diving.html

Code of Practice for Offshore Diving Link: https://www.hsa.ie/eng/publications_and_forms/publications/docks_and_ports/code_of_practice_for_offshore_diving.pdf

Underwater camera operators (i.e. divers according to the 2018 Regulations) must hold a recognised, valid commercial diving certificate, and be competent and fit to do so (as per the above regulations and CoP). Their training must be suitable for the depth to which the diving operations are being conducted.

Example of commercial diving certificate: Quality & Qualifications Ireland (QQI) Level 6 Certificate in Commercial SCUBA Diving Operations. Commercial divers must have a certificate of medical fitness to dive (current 12-month period) and may be required to have their own insurances.

Note: Professional Association of Diving Instructors (PADI) is a'recreational' diving membership and diver training organisation.

The diving supervisor (camera operator, marine coordinator or other) will be responsible for carrying out risk assessments for all activities, including determining medical and emergency cover and arranging for the sufficient number of competent and fit persons to be available (example supervisor, diver and standby person). A diving supervisor must not permit any diver to take part in a diving operation if, in the opinion of the diving supervisor, that diver is not fit and competent to dive. They carry out, safely and without risk to the health or welfare of such persons on the diving project, equipment requirements, divers required for either surface rescue or underwater rescue and other. For further information on water activities and tank work please see Chapter 51 on Marine Coordinator.

Note: At the time of generating this guidance document not all current practicing underwater DoP and camera operators hold commercial licenses but would have many years diving drama filming experience. Typically, underwater DoPs and camera operators would have held a minimum of PADI Dry suit Diver or higher qualification and a valid HSA Diving Medical Cert. As outlined above all persons diving at work must hold a valid Commercial Diving Certificate.

25 Grips

"The grip department works with the camera department to ensure that camera shots are achievable by building, maintaining, and ensuring the safety of all equipment that enables the camera to capture the shot (e.g. dollies, cranes, tripods, etc.) The grip crew consists of the key grip, best boy (grip), dolly grip, grip and trainee".

Grips are responsible for all camera movement on set: camera dollies, tracks, camera cranes, wire rigs, camera towers and car rigs are just some of the apparatuses that grips use daily for this purpose. The key grip must have a comprehensive understanding of the modern equipment available, and be up to date with technological changes, including digital technology.

When dollies, tracks, camera cranes, towers and car rigs are being used on set, grips are responsible for all health and safety aspects of camera use. They are responsible for overseeing and ensuring the safety of their crew, the safe use of all equipment used by their department and the wellbeing of anyone near the camera equipment.

The role of a key grip is to collaborate with the director, the director of photography (DoP) and the camera operator(s) of a project to determine the requirements of the production, to understand the vision for the end product and to be familiar with the script requirements. They may be required to work closely with HoD's from other departments. They ensure that the crew assigned for the project have the required competencies. They will be required to manage, communicate, and delegate within their department. The key grip is to be aware of the budget allowed for the production, advise production on costs of equipment and crew for required works, and work within the allocation.

Grips, Rigging Grip and Crane Technicians

Grips are responsible for erecting, operating and supervising specialist equipment to achieve camera movements in film and TV production. Crane technicians operate camera cranes, under the supervision of a competent grip.

Qualifications for Grips and Crane Technicians UK

(There is no recognised Irish qualification):

- NVQ - National Vocational Qualification
- Grip Level 2: NVQ 2 – qualifies a grip to work under the supervision of a first grip or key grip.
- Crane Technicians Level 2 NVQ – qualifies a crane technician to operate camera cranes under the supervision of a key grip
- Grip Advanced: NVQ 3 – qualifies a grip as key grip and also to supervise other grips on a production.

Qualification requirements for grips and vehicles working on public roads

In the UK, the Metropolitan Police Film Unit requires any camera rigging, in, on or around vehicles and tracking vehicles to be carried out or supervised by National Vocational Qualification Level (NVQ) III certified grips. The NVQ qualification is a UK qualification, and is a recognized international standard. At time of creating this section of the guide (July 2019), in Ireland, there is no training provider of further education training on the National Framework of Qualifications for grips, however a training structure has been developed and will be implemented in the near future. Until a recognized standard becomes available in Ireland it could be considered best practice for key grips working in Ireland to be NVQ 111 certified.

Levels of Qualifications UK (There is no recognised Irish qualification):

Grip Advanced: NVQ 3 – qualifies a grip as key grip and also to supervise other grips on a production.

Note: At time of generating this guidance document not all current practicing Key Grips hold NVQ 3.

The NVQ Training (UK) for the Level 2 and Level 3 is provided through Buckinghamshire College Group. Link: http://www.gripsbranch.org.uk/qualification.php

Note: BECTU, the UK's media and entertainment union maintain a listing of qualified grips and crane technicians for the UK. Grips working in Ireland that also work and attained qualifications in UK in would be listed on the BECTU website.

Recce, Tech Recce and Production Meetings

The key grip and other crew working within the grip department may be required to attend reconnaissance trips (known as 'recces') to locations/studios that will be used during the shooting phase to determine what support equipment will be required to achieve the desired shots, and what grip department crew will be required per location. They also attend the production meeting to discuss any health and safety issues or concerns.

Risk Assessments & Method Statement

The key grip provides site-specific method statements and risk assessments (RAMS) as required for each location or studio set up. If there are any variations that could affect the safe use of equipment and or safety of persons on set, a dynamic risk assessment is carried out.

See Chapter 7 regarding Hazard Identification and Risk Assessments.

Vehicle – Modifying or Converting

Certain modifications are illegal e.g. excessively tinted windows or loud exhausts. However, in general, provided the modification is carried out to an appropriate safety standard, does not negatively affect the roadworthiness of a vehicle and does not present a danger to any road user, there is no law against it.

It is important to remember that under Irish road traffic regulations, it is the responsibility of the owner and/or driver to ensure that their vehicle is maintained in a roadworthy condition at all times when used in a public place. Therefore, any modification which negatively affects that roadworthiness can result in prosecution.

These regulations include:

- S.I. No. 190 of 1963 Road Traffic (Construction, Equipment & Use of Vehicles) Regulations, 1963
- S.I. No. 5 of 2003 Road Traffic (Construction and Use of Vehicles) Regulations, 2003
- S.I. No. 23 of 2018 Road Traffic (Construction and Use of Vehicles) (Amendment) Regulations 2018
- S.I. No. 189 of 1963 Road Traffic (Lighting of Vehicles) Regulations, 1963

Where a vehicle (e.g. a tracking vehicle) is modified or adapted (including bolting) to be used for purposes other than intended by the manufacturer, it may be necessary to find out if there are any safety implications with the proposed modifications.

Any modifications carried out that may affect the safety and structural integrity of a vehicle must be declared at the vehicle's next roadworthiness test and a modifications report, certified by a suitably qualified individual (SQI), presented in order to pass.

You may wish to contact Engineers Ireland or the Institute of Automobile Engineer Assessors (IAEA) to seek SQIs with appropriate accreditation in your area. Ref: http://www.rsa.ie/Documents/VS_Information_Notes/Vehicle_Modifications/FAQs%20on%20Modifying%20or%20Converting%20a%20Vehicle.pdf

Please remember it is up to the applicant to ensure that the vehicle and trailer is compliant with all Irish and EU regulations prior to submitting a proposed driving scene in the city of Dublin. Proof of the vehicle's roadworthy certificates will be requested.

Modifications can affect your insurance policy so please contact your insurance provider for further details.

Where loads overhang to the front, rear and/or side of a vehicle there are Irish and UK requirements and guidelines. Ref:http://www.irishstatutebook.ie/eli/1963/si/190/made/en/print

https://www.gov.uk/government/publications/overhanging-loads-on-vehicles/overhanging-loads

Filming on Roads

- All vehicles being used must be fit for purpose and in good mechanical working order.
- Vehicles used on roads must be roadworthy, have appropriate NCT/DOE and insurance.
- An open communication system must be in place between the 1st AD, lock off crew and drivers before any action or rehearsal.
- Grips, drivers of all vehicles and production must be familiar with, and comply with, the *Road Traffic Act* legislation, the guidance in the *Metropolitan Police Guidance to Filming on the Move* 2020 Revision (or if more recent version available), and *Health and Safety Executive Safe Filming and Recording in, from and around Vehicles*.
- Note where reference is made to the Metropolitan Police Service (MPS), in Ireland An Garda Síochána is the MPS equivalent.
- Please see links below: https://www.met.police.uk/SysSiteAssets/media/downloads/central/advice/filming/guidelines-filming-move-london.pdf http://www.hse.gov.uk/pubns/etis22.pdf
- Where there is a requirement for a temporary road closure, an application is to be made by production through the relevant Local government department. A traffic management plan is required when filming on public roads.

Reference section on Filming on Public Roads for further information.

Shooting Day

During the shooting day, the key grip works with the director of photography and camera operators, determining requirements and positioning of equipment.

The chain of command on set is that the key grip & 1st AD has final say and that any changes, including repositioning of equipment, must be agreed, and approved by the key grip.

An open communication system must be in place.

Weather

Prior to the day of the shoot, the key grip checks anticipated weather conditions. On the day of shoot, they monitor weather conditions. If they are deemed to be unsafe, the key grip shall immediately advise the 1st AD, and operations shall not recommence unless all are satisfied that it is safe to continue.

Reference section within this guide on Camera, DIT & Video Assist for further information applicable to grips and crane technicians.

26
Casting

The casting department is responsible for casting all the acting roles on a project. This is done by means of a process which can have two stages.

Stage one is development casting, during which time the casting director will attach high profile actors to a project in order to assist with the financing of that project. Stage one is done by making direct offers.

Stage two is active casting when the project is greenlit and shoot dates are set; the rest of the cast is identified by means of an audition process. When actors have been chosen the casting director will negotiate, on behalf of the producer, all aspects of the actors' terms of engagement with their agents. In order to fulfil this specific brief on individual projects, casting professionals need to constantly update their in-depth knowledge of their acting constituency and be aware of current industry trends.

Considerations for working area requirements by casting crew include:

- Safe means of access/egress.
- Clean, tidy, and fit for purpose.
- Adequate in size to allow people to work safely, allowing for privacy if required.
- Adequate lighting and heating and electrical supply including sockets for casting crew.
- Sufficient welfare facilities such as toilets, taking into account the number of people using the area. Under Regulation 20 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 an employer must provide and maintain and keep in a clean state an adequate number of lavatories and washbasins, with hot and cold running water in the vicinity of workstations, rest rooms, changing rooms and rooms housing showers.
- Adequate availability of drinking water.

Please reference section 13.2 for further information on requirements for The Building(s) and Working Areas used by a production.

27
Catering

The catering supervisor is responsible for the management of all food related services and management of all staff within the catering department. The catering company providing meals during filming phase (and prep and strike phases) is responsible for ensuring that all foods are stored, prepared and cooked to high hygienic standards and in compliance with hazard analysis critical control point (HACCP) and that staff working for the company have received food safety training. The UPM/LP/PM is responsible for ensuring the catering company(s) is HACCP compliant and has proof of public liability insurance.

Facilities

Under the Safety, Health and Welfare at Work Act 2005 an employer must provide and maintain facilities and arrangements for the welfare of his or her employees at work. Thus, the catering company must have the facilities required to prevent the contamination of food and for the following to be in place:

- suitable, sufficient, and easily cleanable:
  - surfaces for the preparation of food
  - cooking equipment
  - utensil wash-up facilities
- staff hand wash facilities which are separate to food preparation
- hot (> 63 C) and cold (< 5 C) holding facilities
- temperature checks and monitoring
- storage for dry goods
- removal of refuse
- supply of potable water and power supply
- separate sanitary facilities for catering staff to include:
  - wash hand basin with hot and cold water
  - antibacterial liquid soap
  - paper towels for hand drying
  - separate designated sanitary accommodation to be provided for food workers.

As regards work equipment, an employer must ensure that work equipment with ride-on employees is fitted out in such a way as to reduce the risks for employees during the journey, including risk of contact with or trapping by wheels or tracks. It is also necessary to ensure that the risks from wheels and tracks when the equipment is travelling are controlled by the design of the machine.

[Note that the above requirements are set out in Regulation 35 (Chapter 2 of Part 2) of the Safety, Health and Welfare at Work (General Application) Regulations 2007].

Risk associated with temporary catering facilities can include:

- Food poisoning caused by eating food containing harmful bacteria or which contains harmful substances.
- Allergic reaction from consumption of food or working with foods such as nuts, dairy products, or wheat.
- Contamination of foods by insects, rats, and mice.
- Prosecution for failing to meet food safety standards.
- Temporary catering is of special concern as it is more difficult to manage food hygiene in a temporary location.
- Kitchens present hazards such as electricity, natural gas, hot water, hot surfaces and knives and the risks from these can be greater in a temporary or mobile kitchen.
- Water pollution can be caused if wastewater from catering operations (contaminated with detergents, oils, and food matter) is discharged straight to surface water drains, rivers, streams, or directly onto the ground.
- Fire from poorly maintained electrical equipment
- Slips, trips from food/liquid spillages

Food poisoning - bacteria include:

Campylobacter species

The most commonly reported foodborne bacteria in Ireland, symptoms usually appear within 2 to 5 days of consumption but can be from 1 to 11 days. Symptoms can include fever, headache, and feeling of being unwell, followed by severe stomach pain and diarrhoea. Source: raw poultry meat, contaminated drinking water and unpasteurised milk.

Salmonella species

Can cause severe illness in elderly people, infants and those with impaired immune systems, symptoms usually appear within 12 to 36 hours but can be 6 to 72 hours.

Symptoms can include diarrhoea, fever, and stomach cramps.

Source: raw meat and poultry, raw eggs, and egg products.

E. coli

Can cause fever, vomiting, stomach pain and diarrhoea, and can cause kidney failure. Death has occurred in some cases. Symptoms usually appear within 1 to 14 days. Source: raw beef (particularly minced beef, e.g. burgers) and meat products, contaminated drinking water, unpasteurised milk.

Staphylococcus aureus

Can cause vomiting, diarrhoea, nausea, and stomach pain. Symptoms usually appear within 1 to 7 hours. Source: Food handlers are the main source as staphylococcus is carried on the skin and in the nose of humans.

Prerequisite and HACCP

Prerequisites

Before implementing HACCP (Hazard Analysis & Critical Control Point), food businesses must be operating to standards of good hygiene practice by having in place appropriate prerequisites. For instance, Plant and Equipment e.g. refrigeration services/systems; equipment fit for purpose, operated in accordance with its instructions and accessible for cleaning. All food business must have in place prerequisite programmes (PRPs).

Food Safety Authority of Ireland – HACCP - Prerequisite Programmes, link: https://www.fsai.ie/food_businesses/haccp/prerequisite_hygiene_requirements.html#prp_examples

HACCP can then be used to control steps in the business which are critical in ensuring the preparation of safe food. The National Standards Authority of Ireland (NSAI) has produced sector specific Irish standards (I.S.) to good hygiene practice. All food businesses must use the appropriate standard for their sector (e.g. catering, retail, processing).

Prerequisites include, where appropriate:

1. Cleaning and Sanitation
2. Maintenance
3. Personnel Hygiene and Training
4. Pest Control
5. Plant and Equipment
6. Premises and Structure
7. Services (compressed air, ice, steam, ventilation, water etc.)
8. Storage, Distribution and Transport
9. Waste Management
10. Zoning (physical separation of activities to prevent potential food contamination).

The FSAI has developed a Safe Catering Pack, it is a tool to help caterers develop a system to manage food safety and comply with food hygiene regulations. Regulation 852/2004/EC sets out rules and general requirements on food hygiene including premises layout and temperature control. The Safe Catering Pack presents options for how businesses choose to do this. The pack was designed for catering businesses, but it may also be used by retailers who have a catering function. It is ideal for businesses that have not yet developed their own food safety management system but may also be used to improve existing systems. FSAI Safe Catering Pack, link: https://www.fsai.ie/safecatering/

HACCP

There are seven principles of HACCP. A food safety management system based on these seven principles will enable hazards to be identified and controlled before they threaten the safety of your food and the health of your customers:

1. Identify the hazards - Look at each step (e.g. purchasing, delivery, storage, preparation, cooking, chilling etc.) in your operation and identify what can go wrong.
2. Determine the critical control points (CCPs). This is a step-in food processing where a control procedure must be applied to prevent a food safety hazard occurring or reduce it to a safe level.
3. Establish critical limits - Set limits to enable you to identify when a CCP is out of control e.g. the temperature at the centre of a beef burger following cooking must reach a minimum 70°C for 2 minutes, or equivalent (i.e. 75°C instantaneously).
4. Establish a system to monitor control of the CCP - When CCPs and critical limits have been identified it is important to monitor and record what is happening at each CCP. This will depend on the size and nature of your business. Monitoring should in all cases be simple, clear, and easy to use e.g. recording the final cooking temperature and time for a cooked beef burger.
5. Establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control. When monitoring indicates that a CCP is not under control, corrective action must be taken (e.g. the temperature of cooked meat in a refrigerator rises to >10°C for over 24 hours due to a technical fault in the refrigerator. The cooked meat is destroyed, and the refrigerator is repaired by the manufacturer to maintain new cooked meat supplies at the correct temperature of ≤5°C).
6. Establish procedures for verification to confirm the HACCP system is working effectively. Review and correct the system periodically and whenever you make changes to your operation e.g. microbiological analysis of a chicken product to verify that it is free of salmonella after cooking.
7. Establish documentation for all procedures and records for these principles and their application. For the successful implementation of HACCP, these must be kept and be readily available. e.g. cooking temperatures, delivery, or cleaning records. It is unrealistic to operate HACCP or to demonstrate compliance with the current legislation without providing evidence.

Cleaning

- The appropriate contact type chemical to be used.
- Products used need to be suitable for use around food. The contact time to be adhered to.
- Staff to be trained in awareness and use of different chemicals, for example: when and how to use degreaser and antibacterial.
- Colour coding for mops to be used.
- Dishwasher to reach required temperature to ensure items are cleaned effectively.
- There needs to be separate food and hand sink.
- Staff need to have access to hygienic welfare facilities. For instance, an employer must provide appropriate changing rooms for persons at work if they have to wear special work clothes and if, for reasons of health or propriety, they cannot be expected to change in another area.

Also if the circumstances so require where work clothes are likely to be contaminated by dangerous substances, atmospheric conditions or the conditions of the place of work, the employer to provide facilities in changing rooms to enable working clothes to be kept in a place separate from personal clothing and effects (Regulation 21 of the Safety, Health and Welfare at Work (General Application) Regulations 2007). If changing rooms are not required under circumstances referred to above, the employer shall ensure that every person at work is provided with a place to store his or her own clothes and personal effects.

Facilities for eating Meals

Modified 'dining buses' are typically used for persons to eat on during the filming phase (pre and strike). The dining bus and table for serving of food must be maintained hygienically. Tables to be well maintained and hygienic. Litterbins and refuse collection points must be available in the vicinity of the catering outlet. An employer must ensure that the temperature in the canteens or eating areas is appropriate to the particular

purpose of such areas. An employer must ensure that suitable and adequate facilities for boiling water and taking meals are provided and maintained for the use of employees, or that employees have reasonable access to other suitable and adequate facilities for the taking of meals (Regulations 7 and 18 of the 2007 Regulations).

Environment

To reduce the impact on the environment:

- Source foods locally and buy Irish produce where possible.
- Plates, cups, cutlery can be compostable instead of non-compostable.
- A Food Waste Management Plan to be in place by provider as per Waste Management (Food Waste) regulations, 2009. Food waste arrangements to be clarified prior to production.
- The catering company to provide a wastewater bowser to collect and remove wastewater for offsite disposal, or adequate provision to be available on site for wastewater disposal.
- All trade effluent to be disposed of by a contractor which holds a waste collection permit. Under section 3 of the Local Government (Water Pollution) Act, 1977 (as amended), a person shall not cause or permit any polluting matter to enter waters and under section 16 an individual or business may not discharge a trade effluent to the sewer except in accordance with a licence issued under these regulations.

The UPM/PM/LP should discuss the above with the catering companies and use a company that can provide excellent food, comply with HACCP, and can assist with reducing the environmental footprint of a production.

Transporting Food

- Companies providing catering must ensure care is taken to prevent food being contaminated during distribution and delivery to set and location.
- Ready-to-eat food supplied from a catering business is at risk from contamination with food poisoning bacteria from raw food if both are transported together.
- It is essential that both raw and ready-to-eat foods are fully wrapped and kept separate during transportation.
- Separate, clean, food-grade containers should be used for food in transit.
- The transport vehicle or containers must be capable of maintaining the foodstuffs at the appropriate temperatures and allow the temperatures to be monitored.
- It is important that the temperature of the food is measured using designated calibrated thermometers.

Temperature Control

- In order to prevent the growth of harmful bacteria cold food should be transported and distributed at a temperature of 5°C or below.https://www.fsai.ie/uploadedFiles/Food_Business/Transport%20and%20Delivery.pdf
- Heat ready-to-eat food at a temperature of 63°C or hotter and frozen food at a temperature of less than or equal to -18°C.
- Food should be disposed of if there is any doubt about its safety.
- Fridge/freezer temperatures to be checked at least once per day.
- Records of food temperatures need to be documented. An example of food temperatures as below:
  - Cooking: Core temperature 75°C or above.
  - Keep hot food, temperature to be above 63°C.
  - Cooling: Cool food to below 5°C as quickly as possible and place in refrigerated storage within 2 hours.

Cross Contamination Control

Correct segregation of cooked and uncooked foods should be maintained. Boards for prepping food should be colour coded. Staff must have received training in cross-contamination control and hygiene.

Personal Hygiene

Outer protective clothing worn during cooking and prepping of food is not to be worn outside of designated food areas and must not be worn when disposing of rubbish. Wedding bands are the only jewellery that should be worn.

Ensure those preparing food follow and maintain good personal hygiene such as tying long hair back, covering all cuts and grazes with blue plasters (so it can be seen if it drops into food).

Training

All food handlers should have training in food safety. Overview of levels of training:

- Level 1 provides information on basic food safety skills that staff should be able to demonstrate within the first month of employment.
- Level 2 provides information on the additional food safety skills that staff should be able to demonstrate within 3-12 months of commencing employment in a food business.
- Level 3 provides information on the food safety skills that should be demonstrated by managers and supervisors in food operations.

Licence and Registration

Trading licence to be readily available if on public property.

The company needs to be registered as per Regulation (EC) No 852/2004 on the hygiene of foodstuffs.

Allergens and Information

Food information regulations require that information on the 14 allergens has to be disclosed and visible for persons consuming food. Cook and prepare separately any food known to cause allergies. Wash down surfaces and utensils that have been used prior to making other dishes.

FSAI Link to further information on Allergens: https://www.fsai.ie/legislation/food_legislation/food_information/14_allergens.html

Testing of Water

An adequate supply of potable water must be available. The water distribution system should be maintained so that the potable water does not become contaminated. Ensure water is sampled and tested as appropriate, for both microbiological and physicochemical parameters.

Traceability

All food businesses must have an effective traceability system in place. They must be able to trace food one step back to their suppliers and if they are supplying food to other businesses, one step forward to their customers.

Records

Records to be maintained for the following areas would include:

- Training
- Cleaning
- Traceability – suppliers list
- Temperatures
- Calibration
- Pest control
- Sickness records
- Dockets to be maintained for any waste oil and wastewater.

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Construction

See also Chapter 5 which relates to the Safety, Health and Welfare at Work (Construction) Regulations and is therefore intrinsically linked.

The construction department interprets, plans, manages and builds all sets and constructed elements of a film. Working closely with the art department, construction departments include trades such as painters, carpenters, riggers, plasterers, as well as specialist film construction roles such as stagehands. This department includes highly skilled master craftsperson roles such as scenic painter.

Persons carrying out works to be competent and be aware of any legislation, regulations, directives, and codes of practice (CoPs).

The construction manager manages the project's time, cost, and quality of work for building of sets.

The management is required to have project skills and techniques to oversee the planning, design, and construction of a project from start to finish. A construction manager should be skilled/have competencies in the following areas: time management, cost management, quality management, decision making, mathematics and working drawings.

The construction manager is responsible for ensuring site specific risk assessments and method statements (RAMS) are in place for works to be carried out and there are safe systems of work in place for workshop and set / location construction activities. They must ensure crew have required training and are provided with required PPE/RPE. The construction manager should agree with production what level of first aid and medical aid will be required throughout each phase of the production depending on activities.

The construction manager may or may not be required to fulfil the role of the PSCS (Project Supervisor Construction Stage).

See section on Safety, Health and Welfare at Work (Construction) Regulations 2013 within this guide for overview of key duty holders for construction, including:

- Client – Production Company
- Designer
- Project Supervisor Design Process (PSDP)
- Project Supervisor Construction Stage (PSCS)
- Contractors

Further information re construction and the construction regulations can be found through HSA Links below: https://www.hsa.ie/eng/Legislation/New_Legislation/SI_291_2013.pdf

https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Guidelines_on_Procurement_Const_regs_2013.pdf

See also Chapter 5 within this guide which relates to the Safety, Health and Welfare at Work (Construction) Regulations.

General Considerations for Construction Facilities – Workshop Including workshops at a location for a set build

The construction manager may have their own workshop that is not provided by production and is under the complete control of the construction manager at an alternative location. In the event that this is the case, the construction manager must have their own safety statement and insurances for these premises.

Where a production company provides the construction manager with facilities such as a carpentry workshop or others or the construction manager provides their own workshop the following applies:

- The facilities should be clean, well lit, have access to clean water and be properly equipped for all required activities including administration needs of HoD.
- The construction department must have adequate facilities for any specialised or hazardous activities including working with hazardous tools, machinery, products, and chemicals. For instance, in managing chemicals safely there must be a sufficient personal hygiene facility in place.
- Floors areas should be non-slip and level.
- Adequate ventilation taking into account chemical and product usage.
- Local exhaust ventilation (LEV) system may be required, taking into account products/chemicals being used - they must be well designed and fit for purpose to ensure the effectiveness of a system. Employers or the construction manager works with designers, suppliers, installers, and employees to effectively control exposure to airborne contaminants. Suppliers must provide LEV that is fit for purpose, is shown to work and continues to work. The employer (the LEV owner) must ensure controls are adequate. Everyone, including suppliers and users of the LEV, must be competent in the use of the LEV system. HSA guidance on LEV: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Local_Exhaust_Ventilation_LEV_Guidance.pdf
- Safe system of work to be in place for all works involving the use of hazardous equipment, machinery, and substances.
- PPE/RPE to be provided and to be worn as required.
- Workshops should be of adequate size to allow people to work safely, allowing ample room to work safely with and around equipment and machinery. Exclusion zones should be placed around hazardous equipment and machinery. Under the Safety, Health and Welfare at Work (General Application) Regulations 2007 "work equipment" means any machinery, appliance, apparatus, tool or installation for use at work.
- Work areas, areas around work benches and routes to emergency exits should be kept clear at all times. Routes to emergency exits to be kept clear at all times.
- All crew working with specialised equipment and machinery must be competent and have received training in safe use of the equipment and machinery being used (as per section 10 of the Safety, Health and Welfare at Work Act 2005). Certificates of training may be requested, and crew should provide proof of training where requested.
- There should be electrical installations to cater for all equipment required. Electrical wiring from machines to be maintained in a manner that does not lead to trip hazards.
- The principles of lifting should be followed for all manual handling tasks. Mechanical aids for the department as necessary should be used by crew as appropriate.
- Carbon monoxide detectors to be provided where gas is used.
- Extension leads should not be used in the breakdown room, in particular in the vicinity of water.
- Respiratory protective equipment should be as required for chemicals/dyes used as per safety data sheet.
- Safety signage should be in place advising of requirements for PPE, location of extinguishers, safety guidance for machinery or others. An Employer must provide safety or health signs, or both, at the place of work where hazards cannot be avoided or adequately reduced by techniques for collective protection or measures methods or procedures used in the organisation of work (See Chapter 1 of Part 7 of the Safety, Health and Welfare at Work (General Application) Regulations 2007).
- Welfare facilities to be provided

in compliance with Safety, Health and Welfare at Work (Construction) Regulations 2013 Part 14 Construction Site Welfare Facilities. Link to guidance for requirements for Construction Welfare Facilities: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/welfare_facilities_csp1.pdf

Waste Management

Waste management should be agreed with production and those responsible for construction materials for the system to be agreed with production, as per the company's environmental policy.

Working with Chemicals in Construction Department

Construction department workers can work with a wide range of chemicals.

These can include solvents, thinners, acetone, paints, plaster.

The type of LEV, hood or enclosure is influenced by the work being done. Where a hood or enclosure is required, they should not obstruct or cause ergonomic difficulties (e.g. manual-handling limitations or over-reaching). They may need to be designed to capture/contain dust particles, fumes, mists, vapours or other.

Where spray booths are used in the Republic of Ireland and across the European Union, they must meet legislative requirements and relevant EU standards and users must use approved respirators and equipment.

Risk assessments must be carried out for safe use of spray booth. The HSA BeSmart tool may be beneficial to HoD'S that use spray booths Ref: https://www.besmart.ie/risk-assessment/complete/browse-hazards/view/307/

Ref: Spray booths, see for example the EU standard 'EN 16985:2018 'Spray booths for organic coating material - Safety requirements' which deals with all significant hazards relevant to spray booths for the application of organic liquid and powder coating materials. More specifically, the standard refines and clarifies the safety concepts for protection against hazardous substances used in the paint application process. The text covers safety measures against hazardous substances which are dangerous to health or may cause fire and explosion).

Safety data sheets and material data sheets must be available for all chemical and hazardous products used. These products are to be handled and used by competent and qualified persons only. In line with the Safety, Health and Welfare At Work (Chemical Agents) Regulations, 2001 - 2015, persons using chemicals must have received training for their safe use and be provided with the appropriate RPE/PPE. The Safety, Health and Welfare at Work (Construction) Regulations 2013 stipulate that other preventative measures may also be taken such as the replacement of a hazardous substance by a harmless or less hazardous substance. In addition, an adequate number of appropriate fire-fighting devices and where required, fire detectors and alarm systems, should be available.

Chemicals must be appropriately stored, for example flammables stored in fireproof cabinets, cylinders secured and stored as per data sheet. SDS should be supplied in accordance with

REACH regulation 2006 and all hazardous chemicals being stored should carry correct labelling to indicate hazards, according to CLP Regulations (i.e. Classification, Labelling and Packaging of Substances and Mixtures (CLP) Regulation No. 1272/2008). The Chemicals Act 2008 (No 13 of 2008) which was amended by the Chemicals (Amendment) Act 2010 (No 32 of 2010), came into operation on the 10 December 2010 and the main purpose of the 2008 and 2010 Acts is to facilitate the enforcement of such EU Regulations concerning chemicals.

For further information on working with chemicals please see Chapter 65 within this guide: Working with Chemicals.

For further information please see HSA document Use Chemicals Safely on a Construction Site. Link: https://www.hsa.ie/eng/publications_and_forms/publications/construction/construction_chemicals_safety_dl.pdf

Fireproof Materials used to construct sets or used on sets

Materials should be fire retardant or flameproofed as required, to ensure they are fit for purpose and reduce risk of fire on sets. The construction manager should maintain material data sheets for products that are fire retardant and retain certificates of products used for any materials that have been treated. The construction manager liaises with the electrical department, SFX coordinator and others to determine what set materials must be fire retardant and what specification is required.

Carpentry/Woodworking

General Precautions for Operators:

- Inspect all equipment before using, ensure equipment is in good condition and remove from circulation any equipment that is not.
- Ensure safety shields/devices are used.
- Wear and use approved protective equipment at all times.
- Remove rings, watches and loose clothing. Suitably confine long hair.
- Ensure work areas are in a clean and safe condition.
- Follow all lockout/tag-out procedures as required.

Hand Tools

- Keep all hand tools clean, sharp and in good repair.
- Use all hand tools for the purpose for which they were intended.
- Do not carry sharp/pointed objects in pockets.

Power Tools

- Make all adjustments and tighten all locking devices before attaching the tool to the power supply.
- Make sure the tool is switched off before connecting to the power supply.
- Use a grounded outlet, grounded extension cords, and/or a ground fault circuit interrupter.
- Operate all tools with all safety guards in place.
- Use fence/guide, push-stick appropriately.
- Maintain appropriate safety margin between cutting edge and hands.
- Keep blades/bits, etc. sharp.
- Keep the tool and surrounding work area in a clean and safe condition.
- Follow manufacturer's maintenance instructions.
- Handle all air-actuated devices with extreme caution.
- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect it from the receptacle.
- Keep cords and hoses away from heat, oil, and sharp edges.
- Disconnect tools when not using them, before servicing and cleaning them, and when changing accessories such as blades, bits, and cutters.
- Secure work with clamps or a vice, freeing both hands to operate the tool.
- Avoid accidental starting. Do not hold fingers on the switch button while carrying a plugged-in tool.
- Be sure to keep good footing and maintain good balance when operating power tools.
- Machines should be securely fixed to benches or floors as required.
- Machines should have emergency stop mechanisms where required as per manufacturer's guidelines.

- PAT (portable appliance testing) to be carried out for all handheld power tools.
- Battery operated tools and machinery can reduce risk of working with electricity and reduce risk of trips and falls particularly when used in areas other than the workshop.

Explosive-Actuated Fastening Tools

- Only trained and competent operators shall use explosive-actuated tools (See Reg 173 of the Safety, Health and Welfare at Work (General Application) Regulations 2007).
- All operators shall wear appropriate personal protection equipment (PPE) (i.e. eye and ear protection and/or face shields).
- Do not use a tool in an explosive or flammable atmosphere.
- Inspect the tool before using it to determine that it is clean, that all moving parts operate freely, and that the barrel is free from obstructions and has the proper shield, guard, and attachments recommended by the manufacturer.
- Do not load the tool unless it is to be used immediately.
- Do not leave a loaded tool unattended, especially where it would be available to unauthorized persons.
- Keep hands clear of the barrel end.
- Never point the tool at anyone.

Working with Industrial Plant and Equipment

Industrial plant and equipment includes:

- Cranes and hoists
- Camera cranes, jibs, dollies, booms etc
- Cherry pickers
- Vehicle loading cranes
- Scaffolding
- Mobile elevating work platforms
- Forklift
- Gas equipment
- Compressors, air receivers, boilers, and pressure vessels
- Equipment such as bench saws, drills, nail guns, guillotines, lathes, angle grinders etc
- Explosive power tools
- Spray painting equipment
- Certain equipment that must be used in stunt/special effects/hazardous filming sequences.

All plant and equipment must be operated, maintained, and stored in accordance with the manufacturer's specifications. Where examinations and inspections (example GA1 & GA2) are required the construction manager should ensure they are carried out and records maintained.

Safe use of Machinery

Section 8 of the 2005 Safety, Health and Welfare at Work Act requires employers to ensure that machinery is designed, provided, and maintained so as to be safe and without risk to health. The use of any machinery should be covered by a risk assessment in accordance with section 19 of this Act.

More specific technical requirements are contained in Chapter 2 of the 2007 Safety, Health and Welfare at Work (General Application) Regulations [S.I.No.299/2007 and S.I.No.732/ 2007] which deal with the use of work equipment.

These regulations set down the minimum requirements for machinery in use including the requirement that it complies with the provisions of any relevant enactment implementing any relevant directive of the European Communities. An employer must ensure that work equipment is maintained in such a way as to reduce the risks to users of the work equipment and to other persons at work (Regulation 31 of S.I.No.299/2007).

Other parts of the General Application Regulations are also relevant to machinery safety such as those parts dealing with electricity (see Chapter 31 on Electricity), noise and vibration (See Chapter 4, section 4.8 on Noise and Chapter 39 on Sound).

The use of machinery is also addressed in legislation specific to certain industries such as offshore, construction, mines, and quarries (e.g. Safety Health and Welfare at Work (Construction) Regulations 2013).

Working with Dangerous Machinery

- Any form of domestic and/or industrial machinery that has moving parts should be regarded as potentially dangerous.
- Any devices that have impellers, jaws, nip points, cogs, blades rotating worms, in running rollers and/or other moving parts should be regarded as potentially high risk.
- Dangerous machinery includes any engine, motor machine, shaft, belt, gearing, pulley, flywheel, contrivance, or appliance operated by any source of motive power.

The installation, operation, guarding, maintenance, and disposal of dangerous machinery is covered by relevant legislation, regulations, HSA Standards, codes of practice and manufacturer's operating manual. For instance, an employer must ensure that work equipment presenting risk due to falling objects or projections is fitted with appropriate safety devices corresponding to the risk (Regulation 33 of S.I.No.299/2007) and lifting dangerous equipment is operated by a competent person or by a person who is under the direct supervision of a competent person for the purpose of training (Regulation 51 of S.I.No.299/2007).

Guarding Against Dangerous Machinery

All dangerous machinery must be adequately guarded in accordance with manufacturer's recommendations and statutory requirements. Except for maintenance purposes, machined guards must not be removed.

Employers must ensure that all machine guards are effective and appropriate for the particular type of machine. All machine guarding should comply with HSA guidance and manufacturer's standards.

Guards must be maintained in a serviceable condition. If and when guards are removed, precautions must be taken to ensure the machine is not operated. Employees must be trained in how to operate dangerous machinery and provided with necessary PPE, e.g., glasses, dust masks, etc. All PPE must comply with the relevant EC Standards (Regulation (EU) 2016/425 covers the design, manufacture and marketing of personal protective equipment).

Machine parts which require guarding include non-operational parts which transmit power and motion such as:

- Belts and pulleys
- Gear wheels
- Shafts and spindles
- Flywheels
- Chain and sprocket gears

and operational parts such as:

1. The tools and dies of power presses
2. The blades of guillotines
3. Milling cutters
4. Drop saws
5. Circular saws
6. Drills and chucks

Typical Hazards to look for when Identifying Dangerous Machine Parts

The following machine parts represent the most significant hazards and are usually synonymous with the use of machinery:

- "Drawing in" of a body part, e.g., fingers, hands, or hair or of clothing, e.g., sleeves
- Shear Points

- Impact and crushing
- Cutting
- Entanglement
- Stabbing
- Abrasion
- Flying particles or projectiles

Types of Machine Guarding

There are four main types of machine guarding:

- Fixed guards i.e. permanent non-moving guards that cannot be removed without the assistance of tools
- Interlocked guards i.e. guards that are linked to the machine so that the machine will not operate unless the guard is fully in place. This type of guard can be electrical, mechanical, pneumatic, or hydraulic.
- Photoelectric guards i.e. guards that use beams of light, which if broken or interrupted will cause the machine to stop or not start.
- Combination guarding i.e. combining a number of different types of guards to provide the best possible protection.

Working at Heights

Definition of Working at Height: As per Health and Safety Authority: 'Work at height is work in any place, including a place at, above or below ground level, where a person could be injured if they fell from that place. Access and egress to a place of work can also be work at height'.

Crew from many different departments within a production may be required to carry out work at height and/or access, egress a place of work which can be work at height.

Work at height activities should be avoided where possible. Employers have a responsibility to ensure that work at height is planned and there are risk assessments in place for all such activities. The risk assessment should be carried out by a competent person. It should clearly outline measures that will be in place to mitigate risks.

Reference section Working at Heights within this document.

The Safety, Health & Welfare at Work (General Application) Regulations, Part 4, provides further information on working at height. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Work_at_Height.pdf

General Guidelines for all Work Involving Heights

Careful risk management strategies must be made for circumstances involving working at heights and for those working underneath operations undertaken at heights:

- Where measures cannot be taken to eliminate the risk of a fall occurring, the employer shall provide sufficient work equipment (in accordance with Regulation 100) to minimise the distance of a potential fall and risk of injury, and provide such additional training and instruction as required.
- Specifically, you must wear a fall arrest system and device where specified. It is important to note in particular that a personal fall protection system must be suitable and of sufficient strength for the purposes for which it is being used, having regard to the work being carried out and any foreseeable loading and a personal fall protection system must fit the employee and be adjustable to minimise injury and used to prevent unplanned or uncontrolled movement of the user. Where designed for use with an anchor, an employer shall ensure that the system is securely attached to at least one anchor of sufficient strength and stability, and suitable steps are taken to prevent any employee falling or slipping from a personal fall protection system.
- All harnesses, lanyards, fall arrest and fall restraint devices must be manufactured and maintained to the relevant standards
- All scaffolding contractors must ensure adequate arrangements are made for the storage and inspection of all fall protection equipment, so that it is maintained fit for use. NASC (SG4-15 Sec 6.15) recommends three levels of inspection by competent persons for all personal fall protection equipment:
  - Pre-use checks: This level of inspection should be carried out by the user for both harnesses and lanyards at the beginning of each shift.
  - Detailed inspections - For frequently used equipment, particularly those used in arduous conditions such as scaffolding, the NASC recommends that a formally recorded detailed inspection is undertaken at least every three months; (NOTE DIFFERENT TYPEFACE)
  - Interim inspections: These are also in-depth inspections and may be carried out when necessary between detailed inspections. The need for interim inspections and their frequency should be identified through risk assessment.
- Scaffold Ties: As per CoP for accessing and working scaffold:
  - "Each type of system scaffold has a characteristic tying pattern recommended by the manufacturer. These patterns should be followed unless structural design calculations show any proposed variations to be safe. The system scaffolding manufacturer's recommended tying arrangements should be available to the scaffolders. The recommended tying arrangements should also be provided to the people responsible for inspecting the system scaffold during use".
  - "Tube and Fitting Scaffold Ties, the number of ties must be determined by the designer, in accordance with the requirements of I.S. EN 12811 Part 1, 2004".
  - The anchorage capacity of ties to be established. Anchorage to be tested as per CoP for Accessing and Working Scaffold, section 3 of the CoP.
- Do not use inertia reel (fall arrest) devices, in such a way that a fall will create a pendulum effect injury. An employer shall ensure that a fall arrest system incorporates means of absorbing energy and limiting the force applied to the user's body. The system should not be used in a manner that involves the risk of a line being cut or does not afford a safe zone (where required) or otherwise inhibits its performance or renders its use unsafe.
- No person shall be allowed to undertake work requiring the use of fall restraint or fall arrest devices without having undertaken appropriate training in the use and maintenance of such devices. If a scaffolder is required to carry out work where a harness has to be hooked on, they must not be a lone worker. This establishes a safe working arrangement.
- Safe access/egress must be provided for all work platforms. An employer must ensure that the place of work is stable and of sufficient strength and dimensions to permit safe passage of employees, as well as sufficient edge protection and a surface with no gap through which an employee or object could fall.
- Signs must be clear, unobstructed and in conspicuous places.
- When working at heights only essential tools and equipment will be taken aloft.
- Prior to ascending, all tools and equipment are to be secured with lanyards to prevent them falling on those below and pockets must be empty of any unsecured items.
- Where there is a potential for props and/or sets or furniture to create a risk by falling, appropriate control measures

must be implemented.
- Vision must not be obstructed when working or performing at heights.
- Never position ladders or similar items on structures for additional reach.
- Entry to scaffolding must not occur until appropriately qualified persons have completed scaffolding erection. Ladders should extend at least one meter (1m) beyond the work area or step off point and must be secured.
- At a height that guard rails are not present, then an approved safety harness connected to a secure anchor point must be used, Ref SG4: 15. Advanced guardrail recommended where possible.
- All mobile access equipment must have their wheels locked prior to use.
- Communication systems must be established between those at height and those on the ground.
- Do not work to the sides of ladders or guard railings at height.
- Appropriate footwear must be worn to minimise the risk of slipping.
- Appropriate clothing must be worn to minimise the risk of snagging.
- Hair must be tied back at all times.
- Where possible, use mobile platforms as opposed to ladders.
- Height rescue procedures shall be developed for each workplace where working at heights is undertaken.
- Cameras and equipment that could fall from heights must be secured.
- Safety, Health and Welfare at Work (General Application) Regulations, 2007 - Part 4 - Regulation 119, sets down the requirements for the inspection of equipment used for work at height, to which Regulations 101 to 114 apply.

Falling Objects

A falling object can be any object or material that may fall from a height but also includes those that can be propelled sideways or upwards which can strike and be capable of causing injury to the person who is struck. A risk assessment must be undertaken to identify falling-object hazards and to identify appropriate management strategies.

Factors which can cause objects to fall include:

- Unsecured tools when working on a grid or other elevated platform.
- Storage of equipment, materials and tools near unprotected edges and openings.
- Placing materials and equipment near unprotected edges and openings.
- Unsecured props or sets, especially during set-up and strike situations.
- Defective or damaged ropes and slings.
- Inadequate mechanism for securing chains on chain motors.
- Inadequate braking or failure of flying systems.
- Failure to warn people prior to moving “flown scenery”.
- Failure to adequately secure luminaries with safety chain and inadequate maintenance of safety chains.
- Slips and falls of performers carrying props.
- Inappropriate choreography for performances creating the potential for the falling object to be a person who lands on another person.

Risk control measures could include:

- Securing all tools and equipment when working at heights and when climbing ladders.
- Toe boards or kick boards installed on walkways and elevated platforms.
- Cables taped down and appropriately covered and highlighted in areas where people are walking.
- Materials, equipment, and tools not stored on walkways or platforms.
- Housekeeping of a high standard to ensure that loose objects do not create a trip hazard or are propelled over edges.
- Adequate maintenance carried out on all flying systems, grids, ropes, slings, barrels, safety chains and other similar equipment.
- All set pieces to be adequately secured to prevent collapse, overturning or unintended movement.
- Attention should be given to securing large pieces of scenery during set-up and strike situations.
- Any equipment used for suspending objects is to be inspected by an appropriately qualified person prior to use.
- When working at heights hard hats should be worn. Exclusion zone should be maintained under scaffold while physical work is being carried out.

Rigging, Work Platforms and Working at Height General Considerations

All work at height will be the subject of a detailed risk assessment undertaken in accordance with the relevant legislation, regulations, and CoP. Work at height may include work undertaken on:

- Scaffolding, roofs, hoists, buckets, cherry pickers and other working platforms.
- Roofs.
- Masts, towers, studio grid areas.

Consideration must be given to:

- Edge protection, i.e., guard and/or railing.
- Scaffolding erected by appropriately qualified persons.
- Mobile elevated work platforms operated by appropriately qualified persons.
- Rescue procedures.
- Industrial fall arrest systems(s) device(s) and anchorage(s).

Appropriate risk reduction strategies will be determined in consultation with employees undertaking the tasks and having regard to prevailing weather conditions.

Studio Grid Area/Gantry

Studio grid areas should be available and designed to ensure they are fit for purpose within studios. They should have in-built full gantry walkway and means of safe access to the gantry including safe access for bringing equipment to the gantry area. The specification of the grid and gantry should be checked to ensure that it can take the load of any auxiliary equipment including lighting, camera or other. Personal protection suitable for each gantry area and a rescue plan should be in place including any equipment required in the event of an emergency. Persons carrying out any work must be competent including training in implementation, if required, of the rescue plan.

General considerations:

- Because of the danger from falling objects, nothing may be stored on grids.
- Unauthorised personnel are forbidden from entering grid areas.
- Grids and gantries must have adequate guard rails.
- Where practical, waterfalls should be provided for lighting at the time of build if not designed into studio.
- Scaffolders (CSCS) should be competent and qualified to carry out works, taking into account the build requirements.
- Further to attaining qualification in advanced scaffolding, persons should have further training and experience in rigging.
- Only qualified scaffolders to erect and or modify any scaffold, having sufficient training, experience, and knowledge appropriate to the nature of the work to be undertaken.
- Temporary scaffolds, grids and gantries should be erected in accordance with applicable regulations and CoP.
- Scaffolding materials must be in good condition and not warped or bent.

– All components to be inspected as per legislative requirements, including chains used in studios for gantry's or other.

Fire Precautions

Rigging, work platforms and associated equipment must not be rigged or set in such a way as to obstruct or otherwise compromise the effectiveness of fire emergency exits and/or firefighting equipment. In the event of fire, appropriate means of escape must be available for persons working at height. See Chapter 13, section 13.3 Fire and Fire Escapes

Working with Ladders

The General Application 2007 work at height regulations do not ban ladders but require consideration to be given to their use. Ladders should only be considered where the use of other more suitable work equipment such as towers, mobile platforms, scaffolds or other is not appropriate.

General guidelines:

– Only use a ladder for short duration work (30 mins or under).
– Only use a ladder for low-risk tasks – light work.
– Safety should not be compromised by haste to complete the job.
– Choose the appropriate ladder for the job, e.g. electrical work should not be carried out using a metal ladder.
– Inspect ladder for serviceability.
– Do not overload ladders.
– Do not modify or in any way tamper with a ladder.
– Always face the ladder when ascending or descending.
– Person accessing ladder must maintain three points of contact on the ladder at all times, e.g. one foot and two hands at the working position.
– Do not stand on the top step and/or cross bracing.
– Use ropes to raise or lower tools and/or equipment in an appropriate tool pouch.
– Always keep your centre of gravity between side rails, i.e. do not overreach sideways.
– Do not move, extend, or retract a ladder while someone is standing on it.
– Purchase/use only those ladders which are standards approved.
– Carry ladders parallel to the ground.
– Ensure ladder is regularly inspected and maintained.
– Ladders to be so positioned as to ensure stability, any surface upon which the ladder rests is to be stable, firm, of sufficient strength and of suitable composition to support the ladder.

There are many types and sizes of ladders including portable, suspended, step, interlocking, extension, mobile and fixed ladders. They all, regardless of their use, need to meet the requirements of the work at height Regulations - Regulation 114 of the SHWW (GA) Regs 2007

For further information on safe use of Ladders, see HSA Information sheet on ladders. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Ladder_information_sheet.pdf

Working with Ropes

General guidelines:

– All ropes (and fittings) must be constructed of sound material with adequate strength for their particular application and use
– All ropes must be inspected prior to use
– Ropes that are worn or adversely affected by weather must be removed from service
– No rope must be used to lift a load greater than its safe working load
– Ropes which have been repaired and/or altered must be subjected to a load equal to their safe working load before being re-used
– Ropes must be kept clear of acids and other chemicals
– Ropes must be kept clean and stored in a clean dry place when not in use
– Suitable packing must be provided to ensure ropes do not come into contact with edges and/or surfaces which could damage the rope

Scaffolders & Riggers

Levels for scaffolders in Ireland:

– Trainee Scaffolder (no CSCS card)
– Basic Scaffolders
– Advanced Scaffolders

It is believed that the above terminology may be phased out over the next number of years. Persons wishing to become qualified scaffolders and production companies engaging scaffolders are advised to check with the Health & Safety Authority and or SOLAS for any changes.

Code of Practice for Access and Working Scaffolds

In the Republic of Ireland, the Code of Practice for Access, and Working Scaffolds (CoP) provides practical guidance on the requirements and prohibitions set out in the relevant statutory provisions for scaffold erectors, contractors, and users of scaffolding. Ref: https://www.hsa.ie/eng/publications_and_forms/publications/construction/cop_for_access_and_working_scaffolds1.pdf

Qualifications for Scaffolders: Amendments to the scaffolding training programme have been finalised (Jan 2017) and were in effect from Jan 2019. Information re the programme see CIF website: https://cif.ie/2016/12/15/cscs-scaffolding-programmes/

Note re Trainee Scaffolders

As per CoP: 'The trainee scaffolder is permitted to participate in general scaffolding operations, provided that the trainee scaffolder is at all times under appropriate supervision of a competent person such as a person competent at the level of scaffolding for which the trainee is under training for. Under no circumstances should a trainee scaffolder be performing duties without supervision'.

Rigging Crew on a Production

The hierarchy and chain of command within the department is as follows:

– Rigging HoD
– Rigging Supervisor
– Rigging Chargehand
– Rigger

All the above crew must be competent and qualified advanced scaffolders.

Scaffolding and Rigging on a Production

Any person constructing a scaffold or carrying out rigging must be competent and qualified. Scaffolders and riggers work closely with HoDs as required including the construction manager, gaffer and DoP department. They are responsible for erecting and dismantling a range of structures for a production including access and support structures. They are responsible for establishing and maintaining a safe working environment for themselves, their crew and others in the work area who may be affected by their operations. The advanced scaffolder/rigger is responsible for inspecting and maintaining the integrity of scaffold until handover (if services of the rigger are not being maintained, as production would then have full responsibility for inspection and maintenance of the scaffold, to be carried out by a competent person). The construction manager needs to determine who shall inspect and maintain the scaffold/rig after handover. This must be done by a qualified and competent person.

Riggers

Riggers on a production must be qualified advanced scaffolders (CSCS card holders) and have proven experience in the film and TV industry before they become responsible for engaging in and overseeing rigging work for a set build for a production.

Riggers are responsible for inspecting and maintaining the security and integrity of scaffolding and rigging. They are responsible for overseeing the safety of activities including lifting operations, use of winches, pulley blocks and tackle, chains, slings, and ropes. Riggers must ensure that all crew working on their team are competent.

Note re Level 1, Level 2 & Level 3

Level I, Level 2 and Level 3 are not terms used for qualified certified scaffolders in Ireland. The CSCS card (Ireland) must specify basic or advanced scaffolder.

Note re levels in UK

In the UK persons who have attended Level 1 & Level 2 training will only be certified following final assessment. On completion of final assessment after Level 1 & Level 2 a person in the UK would be a basic scaffolder and be provided with a Construction Industry Scaffolds Records Scheme (CISCR), National Vocational Qualification (NVQ or SVQ for Scotland) card Level 2.

After completing training and assessment for Level 3, a person would be an advanced scaffolder and be provided with a CISCR S/NVQ Level 3 card.

CSCS cards Training from Other Jurisdictions

SOLAS have a system in place for the recognition of qualifications of citizens of EU Member States wishing to operate in the construction sector in the Republic of Ireland.

As per Code of Practice for Access and Working Scaffolds anybody with qualifications and training from another EU Member State can apply to SOLAS for recognition of their training and qualification under the European Union (Recognition of Professional Qualifications) Regulations 2017 (S.I. 8 of 2017). IF deemed equivalent and meets the required criteria they will be issued with a SOLAS CSCS card of the appropriate level (temporary services card or experienced operator's card). Application for recognition of qualifications can be made through SOLAS, link for details as follows: http://www.solas.ie/Pages/CSCS.aspx

Certification & Registration

As per CoP, SOLAS, through the Construction Skills Certification Scheme, assesses scaffolders, applies for certificates, issues cards and keeps a register of certified scaffolders. On successful completion of the initial training and CSCS assessment, scaffolders should keep a record of their subsequent work experience.

Scaffolding, additional requirements

Reference Regulation 107 of the SHWW (GA) Regs 2007: Scaffolding, additional requirements for further information regarding the design, erecting and dismantling of scaffolding. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Work_at_Height.pdf

Bespoke Scaffold

For scaffolds and set builds that exceed certain criteria and fall outside the scope of standard design, a bespoke design will be required. In this case a competent scaffold designer must be engaged, and a temporary works scaffold design produced. The design should be communicated to the PSDP in advance of erecting the scaffold.

Note re the Code of Practice for Access and Working Scaffold

As per the CoP 'The code is not a technical guidance document and does not give detailed recommendations or guidance on special scaffolds such as cantilever, truss-out or slung scaffolds. Information in this code needs to be read in conjunction with the manufacturer's manual and instructions and any scaffold design provided'.

In the UK riggers may be graded in any of the following job titles under the Joint Industry Grading Scheme:

- Trainee, Basic or Advanced Riggers
- Standby Riggers
- Electrical Riggers
- Special Effect Riggers
- Flying Riggers

JIGS Link: https://www.jigs.org.uk/

Inspection of Scaffold

As per Code of Practice for Access and Working Scaffolds 'The designated person inspecting a scaffold must be competent. A competent person is a person who is fully trained, has acquired the necessary knowledge and practical experience and has received the necessary instructions for the inspection of the type of scaffold. A trained scaffolder can inspect a scaffold for which he/she is trained to erect'.

A flow chart for Handover Procedure for Scaffolders can be found on page 61 of the Code of Practice for Access and Working Scaffolds. Link: https://www.hsa.ie/eng/publications_and_forms/publications/construction/cop_for_access_and_working_scaffolds1.pdf

Inspections of Scaffold and Certificate of Handover

1. Inspection of scaffolding materials before use
2. Inspection of scaffolding in use
3. A certificate of handover of scaffolding to user
4. Scaffolding to be inspected at least every 7 days
5. All scaffolding, regardless of height, must be inspected after any modifications/alterations, if it has been subjected to adverse weather conditions, and where there has been any impact or damage
6. Scaffold should be inspected before use where it has not been inspected within the previous 7 days.

Mobile Tower Scaffold

Persons erecting mobile tower scaffolds must hold QQI Certification and CSCS card, if the structure is not being erected by a person holding CSCS card for basic or advanced scaffold.

Please see sections Working at Heights and Work at Height Rescue for further information.

Work at Height Rescue

Safety Health and Welfare at Work (General Application) Regulations 2007 Part 4 – Work at Height, Regulation 95 requires employers to plan their work properly; to ensure it is appropriately supervised and that it is carried out in a safe manner. Planning includes the selection of work equipment and preparing for emergencies.

A rescue plan must be in place before work commences and reviewed as work progresses, or through different phases of work (example for prep/shooting/striking of sets).

Arrangements for emergencies and rescue from height need to be considered as part of the planning and risk assessment for work at height activities. When working at height a rescue plan outlining measures to facilitate a timely evacuation and rescue in an emergency should be generated.

A rescue kit and rescue measures put in place need to be suitable for the scaffold structure and environment being worked in (including possible limitations and restrictions within the set area).

The National Access and Scaffolding Confederation (NASC London) have developed guidance documentation that can assist employers in formulating a rescue plan. NASC SG19:17 A Guide to Formulating a Rescue Plan. The guide can be downloaded through the NASC website. Link: https://www.nasc.org.uk/shop/health-and-safety-guidance/sg19-a-guide-to-formulating-a-rescue-plan/

Lifting Equipment Considerations

All lifting equipment should be used as per manufacturer's instructions and manufacturer's best practice guidelines for the equipment being used.

Cherry pickers, Genie booms, Manitous and MEWPS demand special consideration.

- Cherry pickers and Genie booms: Considerations re rigging or affixing any item outside the basket in Ireland/ Europe. Any modification or addition to the equipment could invalidate its certificate of conformity and affect its safe operation. Consultation should take place with the manufacturer and production's/contractors' insurers regarding any proposed additions and modifications as modifications could affect your insurance.
- Manitous are specifically designed for lifting loads and give more stability. Genie booms are designed for access and are not a material hoist. The gaffer should be aware of the suitability and limitations of the equipment used and ensure equipment chosen is fit for purpose.
- The weather must be appropriate and wind rates monitored while equipment is in use. Wind speeds as per manufacturer's guidelines should be considered, as should load in the basket of the machine, and if load diminishes flow of air/wind through the basket.
- The operator must be satisfied with the safety of the working situation before the arm is raised.
- All electrical equipment on board must be tethered with a safety strap.
- Generally, for boom type MEWPs, where appropriate a full body harness with a short restraint type lanyard will be required. The lanyard must be anchored on a designated anchor point within the machine.
- The persons on board cherry pickers/ Genie booms must be supplied with an appropriate harness and competent in the safe use of harness and inspection of the harness.
- Proof of thorough and other inspections should be provided for all lifting equipment used (Example GA1 & GA2 for all lifting equipment and GA3 for Work at Height). Samples of these forms can be found on the HSA website. Link below.
- Working on or near water with a cherry picker, the risk assessment should take into account the risk of falling from a height and risk of drowning in event of overturning of equipment.

GA1, GA2 & GA3 Forms HSA website.

Link: https://www.hsa.ie/eng/Publications_and_Forms/Forms/

Mobile Elevating Work Platforms (MEWPs)

MEWPs must only be operated by a person who holds an appropriate certificate of competency which has been issued by a recognised issuing authority. An MEWP is a mobile machine that is used to move persons to working positions where they are carrying out work from the work platform.

General Guidelines

- Choose the appropriate MEWP for the job
- Ensure the MEWP is set up on stable ground
- Do not overload an MEWP
- Ensure the MEWP and any object or person on the platform remains well clear of power lines when fully extended
- Wear required PPE including but not limited to suitable safety footwear and safety harness with short lanyard at all times while working from an MEWP
- A safe system of work to be in place, including a rescue plan. The SSoW and rescue plan should be clearly communicated to all workers involved and within the vicinity of the works.
- A site-specific risk assessment should be in place prior to any works being carried out. It should be clearly communicated to all workers involved.
- When working near water or over water or when working near live roads a detailed risk assessment needs to be carried out.

MEWPs including Mobile Verticals / Scissor Lifts & Use of Harness

- It is recommended that harnesses are worn in MEWPs. Confirmation from the manufacturer should be sought and based on the operator's risk assessment.
- Persons working with MEWP's must be familiar with the HSA Guidance document on safe operation procedures for MEWPs. Link: Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/HSA_MEWPs_Guidance.pdf

Working on Roofs

Roof work for the purpose of this section refers to the need for work to be undertaken on a roof, rather than roof work which involves the removal or replacement of a roof or roofing material.

Where possible, working from roofs should be avoided, particularly roofs that are known to be very old and do not have a record of regular inspection and maintenance.

Prior to undertaking work on roofs other more reliable options such as elevating work platforms, scaffolding workboxes etc. should be investigated.

Assume that the roof is fragile, unless confirmed otherwise by a competent and appropriately qualified person.

No roof work shall be undertaken without carrying out a detailed risk assessment if work is to be done on or adjacent to fragile roofs. The appropriate control measures must be recorded and implemented.

Depending on the circumstances, such control mechanisms may involve railing off the fragile area, the use of adequately supported crawling boards, ladders and duckboards or doing the required work from a mobile elevating work platform or other secure platform.

Consideration must be given to the prevailing weather conditions.

Further information on safety in roof work can be found within HSA's CoP – Link: https://www.hsa.ie/eng/Legislation/Codes_of_Practice/Code_of_Practice_for_Safety_in_Roofwork/

Susceptible Roofing Materials

The following roofing materials pose particular risks:

- Rusted corrugated metal
- Translucent plastic
- Wired glass panels
- Corrugated cement sheeting (super six sheeting)

Falls through these types of materials can be avoided by introducing effective hazard management systems in conjunction with roof work.

See section on Asbestos within this document if applicable.

Derelict Structures

If filming activities are proposed in derelict structures, a risk assessment should be undertaken prior to the structure being loaned, hired, leased, or rented. The risk assessment shall have regard to the architectural and engineering plans for the structure and assess the impact of the deteriorated state of the premises. Assessment shall be sought from suitable qualified architects and structural engineers and other relevant experts. The presence or otherwise of asbestos shall be established. The risk assessment shall address:

- Necessary remedial construction work to render the site safe for filming activities having regard to issues such as roof collapse, wall collapse, etc
- Removal/containment of asbestos
- Safe access and egress

The employer must negotiate the lease/location agreement/contract in such a way as to enable remedial work, temporary repairs and/or installation of structural supports to ensure that the risk of collapse is eliminated or reduced – either at the cost of the owner or the employer.

See section on Asbestos within this document if applicable.

Work at Height & Scaffold Regulations/ Guidance documents, Codes of Practice and Toolkits

All persons engaged in organising or carrying out work at height should be familiar with the following as applicable:

1. Safety, Health and Welfare at Work (General Application) Regulations 2007 Part 4 - HSA Link: https://www.hsa.ie/eng/publications_and_forms/publications/retail/gen_apps_work_at_height.pdf
2. Safety, Health and Welfare at Work (General Application) Regulations Work at Height Toolkit - HSA Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Toolkit_Work_At_Height.pdf
3. Code of practice for Access and Working Scaffold – HSA Link: https://www.hsa.ie/eng/publications_and_forms/publications/construction/cop_for_access_and_working_scaffolds1.pdf
4. Work at Height Falling Objects – HSA Link: https://www.hsa.ie/eng/Vehicles_at_Work/Workplace_Transport_Safety/Managing_Workplace_Priority_Risks/Work_at_height.pdf
5. National Access and Scaffolding Confederation (NASC) London (& Health and Safety Executive) – A Guide to formulating a Rescue Plan – Link: https://www.nasc.org.uk/shop/health-and-safety-guidance/sg19-a-guide-to-formulating-a-rescue-plan/
6. National Access and Scaffolding Confederation (NASC) London (& Health and Safety Executive) – A Guide to Preventing Falls in Scaffold Operations – Link: https://www.nasc.org.uk/shop/health-and-safety-guidance/sg415-preventing-falls-in-scaffolding/
7. National Access and Scaffolding Confederation (NASC) London (& Health and Safety Executive) Use, Inspection & Maintenance of Lifting Equipment and Accessories for Lifting in Scaffolding – Link: https://www.nasc.org.uk/shop/health-and-safety-guidance/sg915-use-inspection-and-maintenance-of-lifting-equipment-and-accessories-for-lifting-in-scaffolding-full/
8. Construction Welfare Facilities: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/welfare_facilities_csp1.pdf
9. Chemicals Safely on a Construction Site. Link: https://www.hsa.ie/eng/publications_and_forms/publications/construction/construction_chemicals_safety_dl.pdf
10. Safe use of Ladders / Ladder information. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Ladder_information_sheet.pdf

See also Chapter 4 - Section 4.7: Working at Heights.

29 Continuity and Script Supervision

Continuity, or script supervision, involves closely monitoring what is being filmed each day to ensure that the finished product ends up making continuous verbal and visual sense. Falling under the directing department, the script supervisor works closely with the director and all other departments in monitoring and recording action, props, and camera details.

During pre-production, the continuity/ script supervisor will review the script to determine if there are any inconsistencies.

The continuity and script supervisor are responsible for their own health and safety awareness and best practice on a film set and should abide by all risk assessments issued by production.

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Costume

The costume department is responsible for the design, fitting, hire, purchase, manufacture, continuity and care of all costume items on film/TV. The department collaborates closely with a wide range of other departments for which costume may have an impact, including camera and sound". (NOTE: some passages for each department role description are in quotes and some are not. Is this deliberate or an error?)

They will also work closely with heads of hair/make up departments to create the overall image of the characters for the production. They must work within the budget allocations for the productions and will be required to work to tight deadlines.

The costume designer is responsible for all the clothing and costumes worn by all cast and background artists/extras that appear on screen. They are responsible for designing, planning, and the creation of the garments to be worn, including purchasing fabrics and sourcing suppliers for all garments.

The costume supervisor is responsible for the setup of the department They employ and manage the crew for the duration of the production. The designer and the supervisor are jointly responsible for ensuring there is adequate provision for health and safety and that there are the required risk assessments, safe systems of work, crew have required training and are provided with required PPE/RPE.

General Considerations for Costume Facilities

- The costume department facilities should be clean, well lit, have access to clean water and be properly equipped for all required activities including the administration needs of HoD, and a private area for fittings by cast, background artists and extras.
- The costume department must have adequate facilities for any specialised or hazardous activities that could include working with chemicals, dyes and ageing down. It should be ventilated taking into account chemical/product usage and may require a local exhaust ventilation (LEV) system - good design and being fit for purpose are the crucial initial considerations to ensure the effectiveness of a system.
- Consideration should be given to the location (access/egress) of the costume department and specific requirements for the production, for example, what equipment, machinery, and materials will need to be brought to the costume department? What access is available for delivery or other trucks? Is the costume department on the ground floor or other? How will equipment, machinery, materials be safely brought to and from the costume department?
- Washing machines and dryers are only to be operated during hours when the costume department is on the premises. The lint filter in dryers to be cleared after each use.

Workroom

- Workroom, where making and repairs is carried out, needs adequate lighting for cutting and sewing.
- Workshops to be of adequate size to allow people to work safely, allowing ample room around equipment and machinery (some of which can be industrial equipment).
- Work areas and areas around work benches should always be kept clear. Routes to emergency exits to be kept clear at all times.
- Cutters/makers working the specialised equipment and machinery must be competent and have received training in safe use of the machines. Certificates of training may be requested, and crew should provide proof of training where requested.
- Where trainees are employed (still having the above training) they will be supervised as required by senior cutters/makers.
- There needs to be adequate provision for electrical installations to cater for the equipment required. Electrical wiring from machines to be maintained in a manner that does not lead to trip hazards.
- Specialised cutting tables (min size of 8" by 4") are required and the height needs to suit each individual cutter.
- The principles of lifting should be followed for all manual handling tasks. Mechanical aids should be provided for the department as necessary and to be used by crew as appropriate.

Breakdown room

- Breakdown room needs to have adequate lighting and be of adequate size to allow people to work safely.
- Exclusion zones should be created around hot and boiling pots (capacity can range from 75 – 150 litres, could have at least 3 pots operational at any one time) used for dying fabrics.
- Safe system of work should be in place for all dying works, including taking fabrics from boiling water into baths/ baskets, use of tongs. PPE to be worn, maintaining a dry floor area/non slip flooring/anti-slip mats (that do not become a trip hazard), filling & heating of pots, safe use of gas, drainage for run-off water and emptying of pots.
- Local exhaust ventilation system to be provided for the breakdown room.
- Carbon monoxide detectors to be provided where gas is used.
- Adequate electrical supply should be provided for requirements. Maintain good wire management. Waterproof sockets to be provided if required, if sockets are not a height and, in a position, to prevent splashing.
- Extension leads should not be used in the breakdown room, in the vicinity of water.
- Respiratory protective equipment as required for chemicals/dyes being used as per safety data sheet.
- Wastewater from dye should be collected and stored in appropriate vats and collected by a licenced provider. Receipts for collection to be maintained by the department HoD.
- The principles of lifting should be followed for all manual handling tasks. Mechanical aids to be provided for the department as necessary and used by crew as appropriate.

General Considerations for cast and background artists costume changing / fitting rooms

- There needs to be adequate lighting.
- Rooms are of adequate size to allow people to work safely and have sufficient rails and space between railings for persons to move without the risk of trips and falls. Floor covering to be fit for purpose, for example may require non- slip flooring/anti-slip mats (that do not become a trip hazard).
- Adequate electrical supply to be provided for requirements, and safely maintained.
- Costume changing rooms allow for privacy of persons changing.
- The principles of lifting should be followed for all manual handling tasks. Mechanical aids provided for the department as necessary and used by crew as appropriate.
- All crew working in this section using breaking down materials must follow guidance as per breakdown section.
- If showers are used, they must be flushed in advance of use and during production as per HSE guidelines handover to reduce risk of legionnaires disease (flushing must be documented).

General Considerations for Costume Facilities during Filming Phase and on location including costume trucks.

If facilities are in the form of a trailer,

truck or similar area, consideration should be given to the following:

- The trailer or truck is in good repair.
- A quiet power supply will be required.
- The trailer or truck must be levelled and parked safely.
- Safe entry and exit, safe secure ramp and/or steps with handrails, as necessary. Preferably no steps within the costume truck, and where this is not possible, steps are adequately highlighted.
- The flooring within the unit is fit for purpose, risk assessment to identify suitable floor covering, example: non-slip flooring and anti-slip mats (that do not become a trip hazard) where the floor may become wet due to weather or other.
- A risk assessment should be carried out for the facility being provided to determine (non-exhaustive) the number of exits, the location of exits, costumes and other equipment that can safely be contained within the unit. It should determine the number of persons that can safely access the facility at one time, to ensure that the unit is not overcrowded and can be safely evacuated in event of an emergency. Emergency evacuation procedures to be in place.
- Truck to have appropriate number and type of fire extinguishers, secured and appropriately positioned as per risk assessment, with smoke detection system and carbon monoxide detector if necessary.
- There must be adequate space to enable crew to work and move safely, with adequate headroom and rail and bench space.
- Appropriate storage facilities provided to keep costumes and costume equipment in good condition.
- Bottles and containers must be clearly labelled, and hazardous/flammable products stored in their original container with the appropriate labels.
- Storage and use of any hazardous products must be as per safety data sheet.
- Aerosols should not be used in small unventilated dressing rooms,
- Appropriate extraction should be provided.
- All crew working on set using breaking down materials must follow guidance as per breakdown section.
- Windows should be openable for good ventilation and air exchange.
- Electrical source and installations to have residual current devices and be inspected as per legislative requirements (minimum every 3 months).
- Sockets must not be overloaded.
- Irons and shoe dryers must be unplugged when not in direct use.
- Hairdryer, kettles, microwaves etc should be unplugged after use.
- If necessary, local lighting should be provided at individual workstations and places of particular risk. Light fittings should not create any hazard.
- Appropriate means should be provided for bringing costumes to and from set areas, clothing can be heavy especially if wet after rain or SFX rain.
- Costume department crew should be provided with necessary facilities (should include appropriate power source, adequate lighting and heating) on set to enable them to work out of the elements as necessary, and for cast and background artists to change in privacy;
- If showers are to be used, they must be flushed in advance of use and during production as per HSE guidelines handover to reduce risk of legionnaires disease (flushing must be documented).
- The lint filter in dryers to be cleared after each use.
- The dryer and washing machines are only to be operated during hours when costume department is present.
- Wastewater from costume truck can contain dyes and other chemicals, wastewater to be stored in holding tanks and disposed of appropriately by licenced (permit) waste contractor.

Please reference section 13.2 for further information on requirements for The Building(s) and Working Areas used by a production.

Working with Chemicals in Costume Department

Costume department workers can work with a wide range of chemicals.

These can include dyes, polysynthetic dyes including pigment dyes, organic solvents, varnishes, adhesives and latex glues, PDA glue, other glues, bleach, acetic acid, methylated, white spirits, acetone, spray paints, household paint, fabric paint and acrylic paints, hair spray, bitumen spray, dirty down/breakdown sprays, powders and pigments – talcum powder, fullers earth, leather dyes, leather polishes, breakdown oils, polishes and gels.

The type of LEV, hood or enclosure is influenced by the work being done. Where a hood or enclosure is required it should not obstruct or cause ergonomic difficulties (e.g. manual-handling limitations or over-reaching). The hood/enclosure may need to be designed to capture/contain dust, fumes, mist, fibres, vapour, or gas aerosols.

Where spray booths are used in the Republic of Ireland and across the European Union, they must meet legislative requirements and relevant EU standards and users must use approved respirators and equipment. Risk assessments must be carried out for safe use of spray booth. The HSA BeSmart tool may be beneficial to HoD'S that use spray booths Ref: https://www.besmart.ie/risk-assessment/complete/browse-hazards/view/307/

Ref: Spray booths, see for example the EU standard 'EN 16985:2018 'Spray booths for organic coating material - Safety requirements' which deals with all significant hazards relevant to spray booths for the application of organic liquid and powder coating materials. More specifically, the standard refines and clarifies the safety concepts for protection against hazardous substances used in the paint application process. The text covers safety measures against hazardous substances which are dangerous to health or may cause fire and explosion).

Safety data sheets and material data sheets must be available for all chemical and hazardous products used. These products are to be handled and used by competent and qualified persons only. In line with the Safety, Health and Welfare At Work (Chemical Agents) Regulations, 2001 - 2015, persons using chemicals must have received training for their safe use and be provided with the appropriate RPE/PPE. The Safety, Health and Welfare at Work (Construction) Regulations 2013 stipulate that other preventative measures may also be taken such as the replacement of a hazardous substance by a harmless or less hazardous substance. In addition, an adequate number of appropriate fire-fighting devices and where required, fire detectors and alarm systems, should be available

For further information on working with chemicals please see Chapter 65 within this guide: Working with Chemicals.

Dyes

- There are numerous dyes available and it is often extremely difficult to find out what is in them. Some of them can be toxic, corrosive, allergenic or carcinogenic. The cancer-causing potential of most of the dyes used in crafts is largely unstudied and unknown. For this reason, precautions should always be taken when dyeing.
- Use of the internationally recognised Colour Index (CI) would help identify

dyes. In the CI, names and numbers are assigned to all commercial dyes by the British Society of Dyers and Colourers together with the American Association of Textile Chemists and Colourists. Suppliers and manufacturers should be asked to provide this CI identification for their dye products and if none is available, another product should be used.
- Dyes are also classified into classes which relate to their chemical structure such as fibre-reactive dyes, acid dyes and so on. This information, often withheld, should also be requested.
- Aniline dyes are synthetic dyes and are rarely used in their true form.
- Manufacturers data sheets, which often give information about possible hazards and preventative measures, should be acquired, and studied.
- Every care should be taken to avoid inhaling or ingesting dyes or making skin contact with them. Protective gloves, goggles and clothing may be necessary.
- Wherever possible, it is preferable to use liquid dyes rather than powders to minimise the chances of inhalation.
- Fibre-reactive dyes and acid dyes can be obtained pre-dissolved in water.
- Water-based solutions are safer than solvent-based solutions which use, for example, methyl alcohol.
- Exhaust ventilators and/or cartridge respirators should be used when dyes or other chemicals are being used.
- Discharge dyeing, using sodium hypo chlorate-based bleach to remove colour from fabrics, can be irritating to the skin and inhalation and ingestion should be avoided.
- Special care is required to avoid skin contact in the tie-dying process, where concentrated dye solutions are poured over tied fabric.
- In batik processes, the wax may be removed either by ironing fabric between sheets of newspaper of by the application of solvents such as a white spirit. Pine resin may be added to the wax to allow for better flow and penetration of the way. Hot wax fumes can be irritating to the respiratory tract but are thought to be not otherwise hazardous.
- Melting wax can present a fire hazard and wax decomposition products from heating or ironing are highly irritating.
- The use of carbon tetrachloride to remove residual wax is highly dangerous to the liver and should never be used.

Properties and Qualities of Fabrics

Every fabric has particular properties and qualities making them more suitable for a particular task than another. However, when choosing fabrics, consideration must always be given to prevailing climatic conditions and the need to allow the skin to breathe, or to ensure heat retention. Of particular importance is the flammability potential of the fabric in any scenes involving flames, excessive heat etc.

Actors should be asked about possible allergic reactions to particular fabrics or any existing skin conditions such as eczema, which may be exacerbated by such use. In these cases, alternative fabrics or the use of undergarments is recommended.

Reverse Season Filming

The problems of reverse season filming such as hypothermia and dehydration can be reduced by the careful choice of fabrics in the making of costume. Flesh-coloured wetsuits, warm towels, clothes, showers, drinks, and a heated caravan, together with doubles of costumes are ways of minimising exposure to cold and cold water.

Protective Clothing

- The modification of costume to protect actors, including stunt actors and doubles, by the use of padding or stronger materials is necessary for stunt and special effects sequences or where risks may occur.
- The flammability potential of fabrics must always be borne in mind for sequences involving flame, sparks, and special pyrotechnical effects. See section 'Fire' – General Guidance within Chapter 41 - SFX.
- Time should be allowed for the design of costume to take account of comfortable fit as well as safety of body harnesses and padding.

Flame Proofing of Materials

- Costumes when required should be flameproofed, the costume designer must always be notified by the producer where the use of practical flame, flash effects or the possibility of fire exists.
- The costume designer must be allowed time to work closely with the special effects coordinator, stunt coordinator and production designer, to ensure that potential risks are minimised or eliminated, and flameproofing of costumes is carried out where needed.
- It should be noted that some flame retardant can be applied to costumes but can also cause problems if they come into contact with skin. If such retardant is used, actors and other personnel involved should be advised. See Chapter 13, section 13.3 Fire and Fire Escapes

Design Hazards

Careful attention must be given to costumes that may incorporate such design features as long scarves, and trains and corsets which, under some circumstances, could risk strangulation, tripping and or breathing restriction. Other design hazards include undue restriction of movement.

- Costumes to be used in potentially hazardous sequences must be designed, treated, and manufactured in such a way as to reduce the risk of injury.
- Actors should provide information regarding potential allergic reactions to particular fabrics, washing powders, and any other chemical substances and any skin conditions which may be exacerbated by materials or substances. If necessary, alternative fabrics/costumes/undergarments shall be used.
- Sensitivity testing for jewellery (silver gold or other), must be undertaken if an actor is uncertain and in accordance with manufacturer's recommendations.
- The design of all costumes must provide for avoiding heat exhaustion and in a manner that accommodates the performer's natural bodily functions and requirements including eating, drinking, and going to the toilet at adequate intervals. See Chapter 7 regarding Hazard Identification and Risk Assessments.

Lighting

- The fine work involved in costume making needs good, preferably natural light. Artificial daylight can be used if natural light is inadequate and artificial lighting that provides correct colour spectrum and light intensity should be installed.
- Fluorescent triphosphoric lighting or metal halide lights providing a lux value of around 2000 would be adequate for exceptionally fine work.

Crew Footwear and Clothing

All crew should wear appropriate clothing for work they carry out and the environment they work in, including warm waterproof clothing in wet or cold weather and suitable footwear for ground conditions at each location. Costume department crew should never wear

open-toed footwear due to risk of injury from chemicals, hot liquids and other.

Overuse Injuries

The repetitive, fine movements involved in making costumes may lead to overuse injuries, repetitive strain injuries and manual handling injuries.

Overuse injuries can be prevented by:

1. Good posture, correct height of chair and workbench, machines, etc.
2. Taking frequent rest breaks.
3. Varying tasks frequently.
4. Providing rubber mats or wooden platforms to cover concrete floors to ease the problems of standing for long periods of time.

Resting Facilities

Facilities should be provided to ensure the comfort of actors required to stay for long periods of time in awkward or heavy costumes, or costumes which make sitting difficult. Under Regulation 18 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 an employer must ensure that where any employees have in the course of their employment reasonable opportunities for sitting without detriment to their work or, where a substantial proportion of any work done by employees can properly be done sitting,

i. suitable facilities for sitting are provided and maintained for their use, or
ii. if this is not practical, they are otherwise ergonomically supported.

Hygiene

Actors should not be required to wear costumes worn by others that have not been laundered. Costumes must be regularly laundered (using hypo allergenic powders and conditioners) and maintained in a clean and safe condition.

Footwear

Footwear for cast and background artists must fit properly, not be dangerous to wear and should be appropriate for the action and location.

Scheduling

Adequate attention must be given to the scheduling of costume calls, to ensure cast and costume department crew staff do not have to work excessively long hours.

This requires allowing for the time needed to assist cast and others into and out of costumes and to re-dress in own clothing, and to take care of costumes as necessary at the end of the day.

These scheduling requirements should be highlighted to the production office as early as possible.

The HoD should ensure there is sufficient crew available to cover the entire working day, that crew is not in a lone worker situation, and that crew is scheduled so that each crew member does not work an excessively long working day, which can lead to fatigue and stress.

31 Electrical

The lighting crew is involved in the design, set-up and control of the lighting plan in collaboration with the cinematographer. The electrical department works closely with the lighting crew in the setup and operation of lighting and electrical equipment and supports the camera department on all elements of electrical distribution. The department consists of a gaffer (or chief lighting technician), best boy, lighting technician, generator operator, electrician, practical electrician and dimmer operator.

The production must ensure that the gaffer and his crew have the necessary qualifications to perform the role of electricians on a production and are competent for the role. The gaffer is the senior electrician on a production, all other crew in this department report directly to the gaffer. They are responsible for planning and overseeing all of the electrical and lighting requirements on a production for sets within a studio and on location, including rigging and construction requirements for lighting, based on the production design drawings.

They will work closely with the DOP and others within the camera department, the production designer and others within the art department, and the construction department.

They are responsible for overseeing all other crew within the electrical department, for overseeing the installation of temporary electrical supplies and determining rigging requirements to support these.

The gaffer ensures that only qualified and competent electricians who are members of the department should connect to or authorise connection to the power supply for sets.

They should ensure that all equipment, machinery, tools or other used by crew are in good condition and fit for purpose (as per section 8 of the Safety, Health and Welfare at Work Act 2005) crew are qualified, competent and licenced as required and receive the necessary training to carry out their job safely and in compliance with legislation.

See 'Safe Use of Machinery' within Chapter 28 – Construction.

The gaffer will be required to break down the script to determine the lighting requirements for sets to assist the DOP in realizing the desired lighting effect. The gaffer and crew should ensure that the electrical supply is appropriate and sufficient for the lighting requirements and requirements of other departments.

Electricity

Employers have a legal duty to ensure the safe interaction of employees with all items associated with electricity. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Electricity.pdf

The use of electricity at work is regulated by several pieces of legislation, the specific piece of legislation where electricity is addressed most directly is in Part 3 (Regulation 74 to 93) of the Safety Health & Welfare at Work (General Application) Regulations 2007. Comprehensive guidelines on these Regulations are available here: Guidelines to Part 3 of the 2007 General Applications Regulations.

SHWW (GA) Regs 2007, Regulations 76 – 93 of Part 3 - Electricity, outline the duties of employers.

A summary of these duties is as follows:

An employer shall ensure that all electrical equipment and electrical installations are designed, constructed, installed, maintained, protected and used so as to prevent danger and that electrical equipment which may foreseeably be exposed to adverse or hazardous environments, is suitable for the environment and conditions to which it will be exposed.

The regulations also require employers to ensure all electrical equipment and electrical installations, including distribution boards, sockets, transformers and connections, are suitably protected from ingress of moisture or particles, and foreseeable impacts, as appropriate to the location.

All connections in circuit and protective conductors, including connections to terminals, plugs and sockets and any other means of joining or connecting conductors, must be adequate for the purposes for which they are used. This applies equally to temporary and permanent connections. The insulation and conductance of the connections must be suitable, having regard to the conditions of use, including likely fault conditions.

An employer shall ensure that effective means suitably located are provided to protect all electrical equipment and electrical installations from overcurrent so as to prevent danger.

Generators and/or battery standby supplies are used in a broad range of workplaces to ensure continuation of supply in the event of loss of supply from the utility provider. Auxiliary battery supply is also used to ensure integrity of supply to critical equipment such as information technology equipment, fire safety critical systems etc. The design, installation, maintenance, transportation and storage of such systems have safety implications and must be carried out so as to prevent danger. The design and installation of changeover mechanisms from the normal to the auxiliary supplies must be carried out in a way that prevents danger.

Suitable means must be provided by which the electricity supply to any piece of equipment can be switched off – isolated.

Sufficient working space, suitable access and egress and adequate illumination must be provided while persons are working on, at or near electrical equipment in order that they may work safely.

Employers must also protect against electric shock in both normal and fault conditions.

Regulation 81 of Part 3, specific requirements that apply in respect of portable equipment (addressed in Chapter 4, section 4.6. 'Electricity' of this guide.

Regulation 89 of Part 3, SHWW (GA) Regulations 2007, sets out the requirement for inspection, testing and certification of new and existing electrical installations. Regulation 89(b) requires that all existing electrical installations in workplaces must be tested periodically by a competent person and that this competent person must certify that the installation is in compliance with this part of the regulations. The period between inspection and tests must be decided upon by an employer based on a process of risk assessment taking account of the nature of the installation, its uses and the environment.

The HSA have produced a useful diagram which gives visual guidance on working with electrical installations: https://www.hsa.ie/eng/Topics/Electricity/Information_Guidance_Legislation/

Competency - Working with Electricity

Qualifications for electricians

All electricians must hold a National Craft Certificate or another suitable award, equivalent to Level 6 or higher on the National Framework of Qualifications (NFQ).

All cast, crew must be aware that they must not carry out electrical work unless a qualified electrician, sufficient practical experience in the work and are deemed competent for works to be carried out, so as to prevent danger. As per Reg 88 of the SHWW General Application Regulations: 'An employer shall ensure that no person is engaged in any work activity to which this part relates where technical knowledge and experience is necessary to prevent danger unless that person is competent or is under such degree of supervision as is appropriate, having regard to the nature of the work'.

Employers to ensure employees are supervised and trained to use electrical equipment in a safe way.

The gaffer shall maintain all relevant certificates of training/copies of trade cards for their crew.

Completion Certificates

Where any electrical works have been carried out, for example any power change to an existing electrical installation, connections to a Fixed Hard Wired Distribution Box (domestic or Industrial), it is mandatory for a registered electrical contractor (REC) to issue a completion certificate for all electrical works (excluding minor works). Only a qualified certifier (QC) can certify electrical works. QC certs to be maintained by the electrical department. All works have to comply with the current National Rules for Electrical Installations ET101 2008 4th Edition (incorporating subsequent amendments example: A1:2011 & A2:2016) (4th Edition at time of generating this section of the guide - Aug 2019 - Note ET:101 National Rules for Electrical Installations (4th edition) will be revised and released as an Irish Standard IS:10101 - implementation date is planned for around July 2020).

Qualified Certifiers must have a QC number. Ref Safe Electric. Link: https://safeelectric.ie/contractors/certificates/certificates/

Electrical Verification & Certification

The qualification is from City & Guilds, which is recognised worldwide, and lasts five years. Only qualified electricians can certify any electrical works and produce QC Certs. Further information: Ref Safe Electric. Link: https://safeelectric.ie/contractors/certificates/certificates/

What are Minor Electrical Works?

Minor electrical works include the replacement of an electrical accessory such as a light switch, the replacement or relocation of light fitting where the

existing circuit is retained, the provision of an additional socket to an existing radial circuit'. Ref CER/13/147

The work must be in compliance with the National Wiring Rules.

Ref: Safe Electric. Links: https://safeelectric.ie/contractors/about-us/faqs/ https://safeelectric.ie/contractors/wp-content/uploads/sites/2/2017/07/restrictedWorks.pdf

Notes: Safe Electric & CRU. Safe Electric - previously RECI. Commission for Energy Regulations CER - now known as the Commission for Regulation of Utilities Water and Energy 'CRU'. Link: https://www.cru.ie/

RCD

Powered equipment to have RCD (residual current device) and or MCB (mechanical circuit breaker) protection as suitable and required by recognised standards. All electrical equipment to be PAT tagged.

Correctly functioning RCDs are key to minimising risk and preventing shock or electrocution. An RCD must be tested by regular operation of the test trip button, as stipulated by the device manufacturer.

While the push-to-test routine should ensure that the RCD will operate when required, it should also be functionally tested by a competent person periodically to ensure that it operates for the rated leakage current (e.g. at 30 mA) and within the time permitted (e.g. < 0.3 seconds).

Portable Appliance Testing (PAT)

Any electrical equipment that has been hired to the production should be accompanied by proof of PAT testing. Every piece of equipment should have a visual PAT test sticker attached. These should correspond to a PAT testing record which should be made available if required. Any practical electrical work or wiring to props should also be PAT tested.

Employers are responsible for ensuring PAT testing is carried out as required by SHWW(GA) Regs 2007 Part 3, Regulation 81.

Portable equipment, by its nature, is more susceptible to damage than fixed electrical equipment. It is also more likely to be used in different environments and is often directly in contact with the user.

All portable equipment must be maintained in a manner fit for safe use and should be subject to an appropriate inspection regime by employers to ensure that this is the case.

The nature and frequency of maintenance should be adequate to prevent danger. The nature and frequency of inspections will vary dependent on the equipment, its use and location of the equipment.

The results of PAT inspections and tests should be recorded and kept available for 5 years from the date of inspection.

Equipment that is hardwearing and/or used in an environment that is likely to increase deterioration may require more frequent testing. Example: equipment used in workshops or on sets may require PAT testing (in addition to visual inspection) 2 to 4 times per annum, whereas computers, laptop chargers or microwaves may require less frequent testing. Contractors supplying their own equipment are responsible for ensuring PAT testing is carried out as above.

For further information on Regulation 81, see section 4.6.1 'PAT Testing' within this guide and the Guidelines to Part 3 of the 2007 General Applications Regulations.

Personal Protective Equipment

Section 8 of the 2005 Act places a duty on employers to supply PPE where risks cannot be eliminated or adequately controlled. Section 13 of the 2005 Act places a duty on employees, having regard to their training and instructions, to make correct use of PPE.

Chapter 3 of Part 2 of the SHWW (GA) Regulations 2007 applies other duties on the employer in respect of selection, assessment, conditions of use and compatibility, maintenance, and replacement. Information and training regarding PPE provided for employees where risks to safety and health cannot be avoided or sufficiently limited by technical means or collective protection or by measures, methods, and procedures of work organisation. Ref: Guidance document to the SHWW(GA) Regs 2007 Chapter 3 of Part 2. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_PPE.pdf

See Chapter 4, section 4.1 regarding PPE.

Using Practical Lights and electrical equipment at a Location

The gaffer should be satisfied that if using practical lights in the location, that they have passed a recent electrical safety test. They should consult with the locations department HoD re use of practical lights at a location.

The set area should be taken into consideration when determining equipment to be used. For external filming equipment could be exposed to wet and or windy conditions, or where there is a requirement for SFX effects that could compromise electrical equipment safety.

All on set power requirements should be supervised and installed only by the electrical department.

General

- The nature of work performed by electricians on set often requires working before or after the rest of the crew has arrived on set. During these times special vigilance should allow for a safe working environment to include ample working lights and safe access.
- The locations department, electrical departments and production will agree which department is responsible for work lights outside of the shooting day.
- Crew should not sit on or place their drinks (or any liquid) on any electrical equipment, including junction boxes.
- Entrances and exits to and from set should be kept clear of all equipment, including electrical equipment, grips, and camera gear.
- All crew to respect 'locked off' areas.

Electrical Installations in a Studio

The gaffer should seek records of inspection and testing for electrical installations within the studio that the electrical department uses directly or for power being supplied for other departments. The studio representative advises the gaffer of protocol if power fails when working in the studio.

Electrical and Electronic Equipment Preparation usage and special consideration

The gaffer must ensure electrical items used by their crew are safe and reliable for use. The following will be required:

- All mains powered electrical equipment to be PAT tested, including hired equipment.
- All equipment including connectors and cabling to be in good condition.
- Equipment should be examined for water, environmental or any other damage
- Ensure stability can be maintained for stands and mountings for electronics equipment.
- Special consideration may be required for heavier items such as large monitors.
- When working near or over water, risk assessment should take account

of (non-exhaustive) suitability of all electrical department equipment used for working under or adjacent to water (water from the sea/swimming pool/ other). Ensure equipment has the required ingress protection (IP) rating, accounting for distance of equipment from and or above water, means of anchoring and securing of equipment, possible corrosion and additional measures required when working in vicinity of sea water.

Electrical Dept Crew Working at Height/ Lifting Equipment

For work at height and scaffolding/rigging and work at height rescue, MEWPS and Ladders, reference working at heights and construction sections of this guide. Section Chapter 4, Section 4.7: Working at Heights, and Chapter 28: Construction.

- Work at height structure to be signed off by a competent person as per section scaffolding/rigging and work at height.
- When working at height in a studio environment the gantry walkways should be safe and secure with appropriate railings.
- Where required as per risk assessment persons in these gantry walkways to be harnessed to safe anchor points. Persons using harnesses must be competent in their safe use. The use of a 'ripple' or 'descending tether' should be considered for these situations.
- Work safely by tethering tools. This prevents the risks of falling objects striking and injuring a person below or damaging machinery and equipment.
- At all times that electrical components are being used at height, there must be appropriate safe access/egress to the height.
- While electrical rigging is occurring, the area should be excluded as required, restricting access of other crew/ departments.
- Crew should not position themselves under electricians at work (in studio or on location under cranes, towers, or cherry pickers). A cordon should be in place.

Lifting Equipment Considerations

All lifting equipment should be used as per manufacturer's instructions and best practice guidelines for the equipment being used. Lifting equipment to be operated by competent and certified persons only.

Cherry pickers, Genie booms, Manitous and MEWPS demand special consideration.

- Cherry pickers/Genie booms: Considerations re rigging or affixing any item outside the basket in Ireland/ Europe. Any modification or addition to the equipment could invalidate its certificate of conformity and affect its safe operation. Consultation should take place with the manufacturer and productions' and contractors' insurers regarding any proposed additions and modifications as these could affect your insurance.
- Manitous are specifically designed for lifting loads and give more stability. Genie booms are designed for access and are not a material hoist. The gaffer should be aware of the suitability and limitations of the equipment used and ensure it is fit for purpose.
- The weather must be appropriate for the use of equipment and wind rates monitored while equipment is in use. Wind speeds as per manufacturer's guidelines should be taken into account, as should load in the basket of the machine, and if load diminishes flow of air/wind through the basket.
- When poor weather conditions are forecast the gaffer and the operator(s) should assess the risk, by means of dynamic risk assessment, and determine when the equipment is no longer to be used. In the event of electrical thunderstorms and lightning, lifting activities and work at height activities should stop. The lifting and other equipment to be lowered and made safe. Ensure the equipment is earthed and persons are cleared from the area. When the thunderstorm has passed the gaffer and the operator(s) (or others as applicable) assess the risk and determine when or if it is safe to re-use the equipment and to thoroughly inspect the equipment prior to using it.
- The operator must be satisfied with the safety of the working situation before the arm is raised.
- All electrical equipment on board must be tethered with a safety strap.
- Generally, for boom type MEWPs, where appropriate a full body harness with a short restraint type lanyard will be required. The lanyard must be anchored on a designated anchor point within the machine.
- The persons on board Cherry pickers/ Genie booms must be supplied with an appropriate harness and competent in safe use of and inspection of the harness.
- Proof of thorough and other inspection to be provided for all lifting equipment used (Example GA1 & GA2 for all lifting equipment and GA3 for Work at Height) samples of these forms can be found on the HSA website, link: https://www.hsa.ie/eng/Publications_and_Forms/Forms/
- Working on or near water with a cherry picker, the risk assessment must take into account the risk of falling from a height and risk of drowning in event of overturning of equipment.

MEWPS including Mobile Verticals/ Scissor Lifts & Use of Harness

- It is recommended that harnesses are worn in MEWPs, confirmation from manufacturer should be sought and based on operator's risk assessment.
- Persons working with MEWPs must be familiar with the HSA Guidance document on safe operation procedures for MEWPs. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/HSA_MEWPs_Guidance.pdf

For work at height and scaffolding/rigging and work at height rescue, MEWPS and Ladders, reference working at heights and construction sections of this guide. Chapter 4 - Section 4.7: Working at Heights, and Chapter 28: Construction.

Overhead Electricity

Crew may be required to use equipment, lifting equipment and/or work at height equipment near overhead electrical power lines. Where there is a risk from overhead electricity lines, persons must be aware of and take account of the Code of Practice for Avoiding Danger from Overhead Electricity Lines. Link: https://www.hsa.ie/eng/publications_and_forms/publications/codes_of_practice/avoiding_danger_from_overhead_electricity_lines.pdf

Electric Shock

Electric shock can result in consequences ranging from tingles, to jolts, pain, and can cause death. Electric shock can interfere with and damage the nervous system. The victim can lose voluntary control of their muscles including the victim's heart muscle causing the heart to enter a state of fibrillation, leading to cardiac arrest.

Moving of Loads

- Where manual handling does involve a risk of injury due to its characteristics, (examples: large, heavy, awkward, hot loads) or due to unfavourable ergonomic conditions (examples: dark set areas/undulated ground/working at a height/accessing stairwells) the employer or HoD must carry out risk assessments for manual handling activities, reduce the need for manual

handling tasks, ensure a safe system of work for tasks to be carried out and ensure persons have had manual handling training that is specific and relevant to the tasks involved.
- The principles of lifting should be followed for all manual handling tasks. Mechanical aids such as sack trolley/truck, skates, 4×4 vehicles or others should be provided and used to carry electrical equipment to set and adjoining areas.

Generators

Where generators are required, these should be driven by persons with a suitable driving licence for the vehicle being driven and operated by qualified competent electricians. The gaffer should ensure that the generator(s) are suitable for the load required to enable sufficient power for all equipment on days and nights of filming. Mobile generators to have adequate RCD/Minatare Circuit Breakers (MCBs). All cabling connected to the generator to be PAT tested and certified. Only authorized electrical connections to be connected to the generator.

Reference SHWW (GA) Regs 2007, Regulations 76 – 93 of Part 3 - Electricity, duties of employers for further details.

In studios additional fuel for tanks should be transported and stored in a safe manner. Refuel with caution to avoid damage to any part of the location. Provide spill kit for all generators. Generators to be transported and stored in a safe manner.

The gaffer or generator operator must ensure that the generator is suitably earthed before use.

Exhaust from the generator should be positioned so as not to allow build-up of fumes in areas where persons congregate. If generators are used in enclosed areas, air quality may need to be monitored to ensure air quality is not compromised.

It is recommended that all connections to/from generators and RCD mobile power distribution boxes are carried out by a registered electrical contractor (REC). If a REC carries out controlled electrical works, they must certify those works. Although it is not a legal requirement that these be completed by an (REC), it is important that the works are in compliance with the National Wiring Rules. From a safety perspective, it is important that these works only be completed by competent individuals.

Persons to be competent to prevent danger

As per Regulation 88 (SHWW GA Reg 2007) 'An employer shall ensure that no person is engaged in any work activity to which this Part relates where technical knowledge and experience is necessary to prevent danger unless that person is competent or is under such degree of supervision as is appropriate, having regard to the nature of the work. Persons should not be placed at risk due to a lack of skills on their part or the part of others in working with electrical equipment'. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Electricity.pdf

Driving Vehicles / Operating machinery

If a forklift is required, it must be in good repair, be inspected as per legislative requirements and be operated by competent persons only. An employer must ensure that a fork-lift truck carrying one or more employees is equipped or adapted to limit the risk of it overturning (Regulation 39 of the Safety, Health and Welfare at Work (General Application) Regulations 2007). An employer must also ensure that all lifting operations are properly planned, appropriately supervised and carried out to protect the safety of employees (Regulation 42 of the 2007 Regulations).

See links for further information: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Information_Sheets/forklift-safety-tips.pdf
https://www.hsa.ie/eng/Publications_and_Forms/Publications/Machinery_and_Work_Equipment/CoP.pdf
https://www.hsa.ie/eng/Publications_and_Forms/Publications/General_Application_Regulations/Gen_Apps_Work_Equipment.pdf

Persons operating machinery such as Genie booms or Manitous must be qualified and certified for equipment being operated (Regulation 51 of the Safety, Health and Welfare at Work (General Application) Regulations 2007).

Proof of thorough and other inspection to be provided for all lifting equipment used. (Regulation 52 - 54 of the Safety, Health and Welfare at Work (General Application) Regulations 2007). (Example GA1 & GA2 samples of these forms can be found on the HSA website), link: https://www.hsa.ie/eng/Publications_and_Forms/Forms/

See also Regulation 43 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 which looks at the inspection requirements for cranes.

As regards work equipment, an employer must ensure that work equipment with ride-on employees is fitted out in such a way as to reduce the risks for employees during the journey, including risk of contact with or trapping by wheels or tracks. It is also necessary to ensure that the risks from wheels and tracks when the equipment is travelling are controlled by the design of the machine.

[Note that the above requirements are set out in Regulation 35 (Chapter 2 of Part 2) of the Safety, Health and Welfare at Work (General Application) Regulations 2007].

Driving a vehicle: vans, trucks, or buses

Drivers driving a generator or other vehicle must have a current valid driving licence for the category of vehicle they drive. Please see section Driving for Work for further details including Certificate of Professional Competency (CPC) Qualification Card and Tachograph.

Effects of lights when working on roads and or at night

Be aware that lights on and or around sets can cause glare and impair the vision of pedestrians and drivers.

Working on Roads

If required to work on public roads see section Filming on Public Roads, Action Vehicles and Low Loaders.

Risk Assessments and Method Statement

The gaffer should provide site-specific method statements and risk assessments (RAMS) for each location and studio set up for work carried out by the electrical department crew. If there are any variations that could affect the safe use of equipment or safety of persons on set, in a studio or at a location, a dynamic risk assessment is to be carried out. The gaffer ensures all his crew are aware of these risk assessments and that there are safety systems for work activities.

The main hazards with electricity on set, in a studio or on location can include:

- Poorly maintained electrical equipment and wiring.
- Contact with live parts causing shock and burns.
- Faults which could cause fires.
- Weather.

All risk assessments and method statements to be documented. Remember if something is not documented it is hearsay.

32 Facilities and Transport

Further information

The Health & Safety Executive UK have generated a document for Electrical Safety for entertainers, this is a useful resource. Link: http://www.hse.gov.uk/pubns/indg247.pdf

The production company/UPM/LP/PM are responsible for the appointment of a competent and adequately resourced transport captain. The transport captain manages and oversees all transportation requirements for the production.

On small/low budget productions there may be no need for a transport captain. In these cases, the PM will liaise with them in pre-production and decide who will put in place the transport requirements of the production, appointing one of the unit drivers as transport coordinator. They liaise with the 2nd AD to organise all unit transport requirements throughout the shoot. The facilities requirements of the production will continue to be administered by the facilities company hired to do so.

It is the responsibility of each driver to have the appropriate licence and insurance for the vehicle they will be required to drive.

The transport captain (will also include the transport coordinator where there is no transport captain on a production) is responsible for appointing a competent person to manage the use and requirements for all support vehicles, including trucks used to transport equipment to and from location. They hire all necessary drivers. They will work closely with the UPM/LP/PM, production coordinator and location manager.

The appointed person will be responsible for overseeing all the transport arrangements of cast, crew, and background artists to and from unit base and locations.

The transport department can vary in size, depending on the scale of the shoot, the number of locations, the requirement for support vehicles required, the travel arrangements of cast and crew. The transport captain is responsible for ensuring that people are picked up at the right place, and delivered to the set on time, by private cars, mini-buses, or coaches.

Members of the transport department must be aware of, and abide by, legal requirements for vehicles and use of vehicles, and ensure that they are safe and roadworthy.

As regards work equipment, an employer must ensure that work equipment with ride-on employees is fitted out in such a way as to reduce the risks for employees during the journey, including risk of contact with or trapping by wheels or tracks. It is also necessary to ensure that the risks from wheels and tracks when the equipment is travelling are controlled by the design of the machine. [Note that the above requirements are set out in Regulation 35 (Chapter 2 of Part 2) of the Safety, Health and Welfare at Work (General Application) Regulations 2007].

The transport captain is responsible for obtaining and managing vehicles associated with a production, including engaging a competent and adequately resourced facilities manager who will be responsible for provision and overseeing all facilities vehicles.

Driving for Work– Drivers from all departments and production companies

The RSA, HSA and An Garda Síochána have developed a number of resources to help drivers and employers develop and implement safe driving practices. The resource includes information on creating a Driving for Work Policy, Driver Health Guidelines, and many more. Link: http://drivingforwork.ie/

A driver must ensure that sufficient safety clearance is provided for pedestrians if means of transport are used on traffic routes. An employer is also required to ensure pedestrian routes and traffic routes are clearly identified for the protection of employees. [Note that these requirements are set out in Regulation 14 of the Safety, Health and Welfare at Work (General Application) Regulations 2007)].

Driving Licences

For all drivers, all departments: drivers driving a car, van, generator, LGV, bus or other vehicle must have a current valid driving licence for the category of vehicle they drive.

Vehicle Safety, Roadworthiness, Insurance, Tax CVRT/CRW

All vehicles to be roadworthy. While it may be the responsibility of the transport coordinator or facilities manager to take action when an issue is reported to them, it is the responsibility of each driver to ensure vehicles being used by the transport department crew are roadworthy, have CRW/NCT and are taxed.

The facilities manager is responsible for all facilities vehicles, including trucks for costume, makeup, hair, dining bus, dressing room trailers, temporary production offices at unit base, and honey wagons.

The transport coordinator may be responsible for obtaining standby trucks for lighting, grips, camera, props and other departments, honey wagons, and

others, and all rental cars for cast and crew.

Note: CVRT previously known as DOE (Department of Environment).

Insurance: All vehicles to have proof of insurance, including for drivers of specific vehicles.

Commercial Vehicle Roadworthiness Testing and TAX

All Commercial Vehicles to have a Certificate of Roadworthiness (CRW) to obtain motor tax. Vehicles must have a Certificate of Roadworthiness to obtain Motor Tax.

Reference link below for RSA website for applicable Legislation for General Roadworthiness. Link:https://www.rsa.ie/en/RSA/Your-Vehicle/Commercial-Vehicle-Testing-/

Maintenance

The standby truck drivers are responsible for the day-to-day upkeep of the vehicles as per RSA requirement. The standby truck drivers are also responsible for the internal housekeeping of the trucks.

All drivers to be aware of 'Driver and Operator Maintenance' requirements as per RSA. Link: https://www.cvrt.ie/en/Operator-Driver-Obligations/Pages/default.aspx

National Car Test – NCT

The NCT is a test for cars only. For information on NCT and applicable legislation please see details on the Road Safety Authority website: Link: https://www.rsa.ie/en/RSA/Your-Vehicle/Your-Vehicle-/What-is-the-NCT-/

Certificate of Professional Competency (CPC) Qualification Card

In order to drive a truck (or bus) you must be the holder of a current valid Driver's CPC card for the category of vehicle you are driving professionally.

The legal basis for the Driver CPC Programme is the EU Directive 2003 / 59/ EC which was transposed into Irish law in 2008 under the European Communities (Vehicle Drivers Certificate of Professional Competence) (No. 2) Regulations 2008 and amended in 2020 under European Union (Vehicle Drivers Certificate Of Professional Competence) (Amendment) Regulations 2020 to implement Directive (EU) 2018/645.

Ref Links for further information:
https://www.rsa.ie/Documents/Road%20Safety/CPC/SI%20359%20of%202008%20CPC.pdf
https://www.rsa.ie/Documents/Road%20Safety/CPC/DIRECTIVE%202003-59-EC.pdf
https://www.rsa.ie/Documents/Professional%20Drivers/SI%20No%20178%20of%202020.pdf
https://www.rsa.ie/en/RSA/Professional-Drivers/Driver-Hours/Regulations/

You must have the full Driver CPC if you drive a truck or bus as the main part of your job. You must carry your Driver CPC card while driving a truck or bus professionally. If you are stopped by an RSA Transport Officer or An Garda Síochána and you do not have Driver CPC penalties will apply (e.g. Failure to produce Driver CPC – fine of up to €2,000).

Exemptions

As per RSA you don't need the full Driver CPC if you drive:

- for non-commercial purposes, such as driving as an unpaid volunteer.
- for emergency or rescue services such as Gardai, Defence Forces, Ambulance, and Irish Prison Service.
- as a registered RSA approved driving instructor giving driving instruction
- during your work, if driving the vehicle is not part of your principal occupation. For example, tradesman using a light truck to transport their materials or a farmer transporting their own animals.
- with a maximum speed not exceeding 45 km/h.

For further information re CPC please see link: https://www.rsa.ie/RSA/Professional-Drivers/Driver-Hours/Getting-your-CPC/

Tachograph

Digital tachographs are mandatory in the EU since 2006. They record the amount of time drivers spend driving and resting and data about the vehicle.

Exemptions

As per RSA - Digital Tachograph Exemptions
The main exempted cases are:

- A **passenger** vehicle constructed and equipped to carry not more than nine people, including the driver
- A vehicle whose **gross vehicle weight is not more than 3.5 tonnes**
- A vehicle with between 10 and 17 seats (including driver's seat) **used exclusively for the non-commercial carriage of passengers**
- A vehicle with a **maximum authorised speed not exceeding 40kph**

For further information re tachograph and exemptions please see link: https://www.cvrt.ie/en/Operator-Driver-Obligations/Pages/About-Tachographs-and-Exemptions.aspx

Safety Considerations and Responsibilities of the Transportation Captain/Coordinator

The transportation captain/coordinator is responsible for conveying current safety requirements to all transportation crew members. They ensure all drivers and all transport dept crew have read and understood all relevant parts of the production company safety statement, and other applicable policies (including child protection policy, environmental policy, accident reporting procedures or other). They ensure site and location specific risk assessments have been circulated to transport depart crew.

Safety Considerations and Responsibilities of the Facilities Manager

The facilities manager is responsible for conveying current safety requirements to all facilities and department crew members. They ensure all drivers and all transport dept crew have read and understood all relevant parts of the facilities company and production company safety statement, and other applicable policies including the examples listed in the previous paragraph. They ensure location and site-specific risk assessments have been circulated to facilities department crew.

Transport and Facilities Dept Risk Assessments, Safety Briefings and Bulletins

The transport captain and the facilities manager should conduct safety meetings on the first day of work for their crew.

Risk assessments: The transport captain and facilities manager and/or production must ensure that the risks associated with driving for work and other work activities as necessary are considered and documented. All professional drivers engaged by a production or facility company will be aware of their responsibilities as drivers under Irish law.

The transport captain and facilities manager should discuss the safety aspects of the week's/day's activities and the particular hazards of a location. They distribute safety bulletins as required relating to specific hazards as they occur (e.g. road conditions, extreme weather, etc.) to all drivers, and update drivers and other risk assessments, as necessary.

Please see link to HSA document 'Work Related vehicles/ Transport Risk Assessment': https://www.hsa.ie/eng/Publications_and_Forms/Publications/Work_Related_Vehicles/Transport_Risk_Assessment.pdf

Considerations and requirements for Standby and Facilities Vehicles at Unit Base - Non-exhaustive:

3 Way/2 Way Trucks to be fit for purpose, and to be clean and hygienic.

The transport coordinator should inspect vehicles periodically and liaise with the facilities manager, as necessary. The facilities manager should inspect vehicles daily and take appropriate action where necessary.

There should be provision for heating in 2 way and 3 way, depending on the time of year there may be a requirement for additional heating. If so, gas must not be used. Additional heaters should be approved by the transport coordinator. Gas must not be used in any trailer.

Operational smoke detectors to be fitted in all trailers. Suitable services and maintained fire extinguishers to be in all trailers.

There must not be any cooking facilities in any trailer. There may be provision of a microwave and kettle. Where there is a microwave provided, a fire blanket must be provided, and microwave included in the trailer risk assessment.

Steps for all trailers should be suitable, fit for purpose and secure. Secure rails should be provided on costume and makeup trailers. Two-way trailers have a handle at entrance and secure rails for honey wagons. Honey wagons should be cleaned and inspected daily by nominated operatives, nominated by the facilities manager. The transport coordinator/ captain should inspect honey wagons at agreed intervals.

All standby trucks and trailers should have adequate lighting within the units and adequate secure shelving or other to ensure fit for purpose. Adequate lighting at unit bases must be provided on all walkways during all hours of operation in darkness including set-up, shooting and wrap-up. The lights must remain on until the last person is leaving unit base. For night work the transport coordinator/ facilities manager should liaise with location manager re requirement for tower lights at unit base and standby area(s).

Fire Safety

At the time of generating this document not all truck facilities have more than one access/egress route. Until there are alternative access routes within these facilities, avoid hazardous activity that would increase the risk to crew and or cast within the units. A risk assessment should be carried out for the facility being provided, to determine (non-exhaustive) the number and type of extinguishers, the number of exits, the location of exits, costumes and other equipment that can safely be contained within the unit, and to determine the number of persons that can safely access the facility at any one time, to ensure that the unit is not overcrowded and it can be safely evacuated in event of an emergency. Emergency evacuation procedures to be in place.

Footwear/Clothing – PPE

Drivers of vehicles should be appropriately attired. Drivers driving vehicles other than cars should wear safety footwear, hi-visibility jacket/top and have suitable work gloves. All drivers should be deterred from wearing shorts. They should have appropriate clothing for weather conditions, for example wet weather, cold conditions, etc.

Any persons handling any chemical substance are to be provided with the required PPE/RPE (personal protective equipment/respiratory protective equipment) as per safety data sheet.

Section 8 of the 2005 Act places a duty on employers to supply PPE where risks cannot be eliminated or adequately controlled. Section 13 of the 2005 Act places a duty on employees, having regard to their training and instructions, to make correct use of PPE.

See Chapter 4, section 4.1 regarding PPE.

Emergency Action Plan

Each transport captain and facilities manager should develop a production specific emergency action plan (EAP), which may need to be modified for different locations. Discuss elements of the emergency action plan, such as the location of emergency equipment and emergency procedures, including in case of fire, road traffic accident. The HSA have a driver handbook available through their website, this is a useful resource for the transport captain and facilities manager and also crew working under their direction.

See handbook link under the section immediately below.

Emergency Procedures

The production company may have specific procedures for the production.

The appendices of the HSA Safe Driving for Drivers Handbook contain a sample Emergency

Procedure in the Event of a Collision and a Sample Incident Recording Form which can be amended and used as required by the Transport Captain. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Work_Related_Vehicles/Safe_Driving_for_Work_Handbook_.pdf

Emergency packs in Vehicles. RSA:

As part of the Road Safety Strategy 2013-2020, it proposed to make it compulsory for a breakdown emergency pack including a first aid kit, a high visibility vest, a breakdown triangle and a torch to be carried in all vehicles (Action 105).

The first aid supplies were determined on the basis of the maximum seating capacity of the vehicle. https://www.rsa.ie/Documents/Road%20Safety/Consultations/RSA_Emergency-Packs-public-consultation-background.pdf

The Government Road Safety Strategy (2021-2030) brings together the actions which are required across multiple stakeholders to achieve the RSA's mission of saving lives and preventing injuries by reducing the number and severity of collisions on Irish roads. The final government Road Safety Strategy 2021-2030 will be submitted to the Minister for Transport by end of Q1 2021.

https://www.rsa.ie/en/Utility/News/2020/Public-urged-to-have-their-say-on-road-safety/#:~:text=The%20Government%20Road%20Safety%20Strategy,of%20collisions%20on%20Irish%20roads.

Collision Recording - Notification to HSA

The RSA have a form for recording collisions which can be used to notify the HSA.

The employer (either the production company, the transport captain or the unit health and safety officer) to notify the HSA if an employee has an accident involving:

- driving or riding a vehicle for their work
- exposure to a dangerous substance or injury from an article being carried by a vehicle for work
- road repair or road construction activities, including road work done by others

You should use the Collision Recording Form to report the accident to the RSA.

Link:https://www.rsa.ie/Documents/Driving%20for%20work/Collision_Recording_Form.pdf

In the event of a reportable accident including a fatality the HSA to be notified using the online platform - Report an Accident (IR1), link: https://www.hsa.ie/eng/Publications_and_Forms/Forms/

For further information see: Reporting an accident and accident Investigation as per Chapter 9 within the guide.

Drivers – 'Fit to Drive'

All drivers have a responsibility to report for work and be fit to drive. Fitness to drive can be negatively affected by (non-exhaustive list) stress, fatigue, drugs, alcohol, temporary illness, or a medical condition.

Alcohol and Drugs - Driving

The legal drink drive limit is 50mg of alcohol per 100ml of blood. For specified drivers there is a lower limit of 20mg per 100 ml of blood. Specified drivers include learner or novice drivers, commercial and professional drivers. Since October 2011 all convictions in the District Court for drink driving offences carry a mandatory disqualification for a minimum of 6 months.

Distracted Driving

All drivers should switch off mobile phones while driving. Phones can be checked for missed calls and messages when vehicles are parked. Drivers can be prosecuted if found using hands free equipment, reference Road Traffic Act 2006 (Restriction on Use of Mobile Phones) Regulations 2014.

The use of personal earphones for listening to music and or radio should be avoided.

Setting GPS systems should not occur while driving, any GPS settings to be set prior to driving and while parked. Drivers should refrain from eating or drinking while driving.

First Aiders/Medical Aid

A production company may have a number of first aiders as part of their crew and have engaged the services of medics for the production. It is important to note that an employer must designate at each place of work under the employer's control the number of occupational first aiders as is necessary to give first aid at the place of work concerned. Furthermore, an employer such as a production company must ensure that the number of occupational first aiders, their training and the equipment available to them is adequate, taking account of the size or hazards, or both, of each such place of work (Regulation 165 of the Safety, Health and Welfare at Work (General Application) Regulations 2007).

The recognized standard for occupational first aid in workplaces in Ireland is PHECC FAR (Pre-Hospital Emergency Care Council – First Aid Responder). Training for this standard is a three-day course, with a refresher course required every two years. FAR should be in possession of a PHECC FAR Certificate.

The production company may provide first aid training to drivers, example PHECC First Aid Responder training, so drivers can provide immediate care for persons that may become unwell while travelling or injured in the vicinity of any drop off or collection point while awaiting the arrival of emergency medical services.

Crew should report any near misses, accidents, collisions or dangerous occurrences to their manager or HoD, to the medic on duty and to the UPM/LP/PM as per production company's reporting procedures and as per section Accident, Incident, Near Miss and Dangerous Occurrence of this guide.

Locations – Access / Egress and Parking

The transport captain may be required to attend a recce to a location and liaise with the location manager to advise on and determine access and egress, parking of required vehicles or, turnaround areas.

The transport captain where possible should attend recce and liaise with the location manager to ensure access and egress routes to and from locations and set areas, that drop off and turnaround areas are suitable for vehicles being driven, ground conditions are suitable where persons will be required to embark and disembark and there is provision for adequate lighting for same.

The means for lighting of areas and stewarding of areas to be documented in the transport department risk assessments.

Drivers Hours and Rest Times

Professional drivers must comply with the current RSA rules and Road Transport Working Time Directive for drivers. The Directive applies to all bus and truck drivers and other mobile workers who use tachographs for recording driving times, breaks and rest periods.

All drivers and driver managers are to be aware of the required rest time that a driver must take each week. All drivers must have a means of proving their hours of rest.

For further information see links below:
https://www.rsa.ie/RSA/Professional-Drivers/Driving-Safely/Driver-Hours/
https://www.rsa.ie/Documents/Tachograph_Enf/Drivers_Hours.pdf
https://www.rsa.ie/Documents/Tachograph_Enf/Tacho%20Cards/Tacho%20Guides/1952%20RSA%20working%20time%20booklet.pdf

Scheduling and Drivers Rosters

Transport Department Drivers, Facilities Drivers and Standby Trucks: The transport captain and facilities manager should take account of the schedule requirements for cast and background artists when scheduling drivers' hours to enable compliance with current

RSA and EU regulations.

In particular, Regulation (EC) No 561/2006 provides a common set of EU rules for maximum daily and fortnightly Driving times, as well as daily and weekly minimum rest periods for all drivers of road haulage and passenger transport vehicles, subject to specified exceptions and national derogations.

For further information see links below:
https://ec.europa.eu/transport/modes/road/social_provisions/driving_time_en
https://www.rsa.ie/RSA/Professional-Drivers/Driving-Safely/Drivers-hours-and-tachograph-legislation/

It is the ultimate responsibility of the individual driver to ensure they do not breach driver regulations and to advise their supervisor in the case of any oversight. Cast and background artists may require early transport to and from unit base, for example to attend hair, makeup, or costume prior to the shooting day and on wrap. Facilities vehicles may need to be delivered to the unit base ahead of the shooting day. Facilities personnel may need to be at unit base for an early call to ensure trailers are secure, open, havevbeen checked, are heated if necessary and are adequately lit. If any driver has concerns about their driving hours or schedules, they should discuss this with their transport captain/facilities manager or UPM/LP/PM.

Location Moves

Location moves and moving of trucks is the responsibility of the facilities provider

and stand by truck provider. The facilities manager and transport coordinator should take into account drivers' working hours on days when there is a location move, as the move will typically take place outside of the shooting day. Drivers advise their manager where their hours may be in breach of legislation.

Weather considerations

The weather can give rise to additional driving hazards, including reduced visibility and slippery road surfaces. It is the responsibility of each driver to check their vehicle and ensure it is serviced and maintained including tyres and windscreen wipers being in good condition. The weather for each shooting day is typically highlighted on the call sheet, however drivers should also listen to weather and travel bulletins throughout their shift. Drivers should never drive in severe weather conditions unless an absolute necessity. Please see the Chapter 57 'Weather' within this document.

Action Vehicles, Low Loaders, Filming in the Public Domain

Reference Chapter 54 'Filming on Public Roads' within this guide for further information as required.

Seatbelts

S.I No. 24 /2006 European Communities (Compulsory Use of Safety Belts and Child Restraint Systems in Motor Vehicles) Regulations 2006, state where a seatbelt is fitted, it must be worn.

Further information through links below: https://www.rsa.ie/Documents/VS_Information_Notes/Seatbelts_Safety_Restraints/FAQs%20on%20Seatbelts%20in%20Cars%20LCVs%20HCVs.pdf

Are there exemptions (exceptions) from having to wear a seatbelt e.g. for medical conditions?

Yes. But only if the person holds a certificate from a registered medical practitioner excusing them from having to wear a seatbelt or if they are wearing a disabled person's belt (e.g. if in a wheelchair).

Other exemptions include driving instructors and driving testers during a lesson or a driving test, and members of An Garda Síochána or members of the Defence Forces in the course of their duties.

Children and Restraints

Drivers have a legal responsibility to ensure that all passengers under 17 are appropriately restrained in the vehicle as per RSA 'A guide to driving safely with children on board'.

Link:http://www.rsa.ie/Documents/Road%20Safety/Leaflets/Leaf_booklets/Child%20safety%20in%20cars.pdf

Buses

Passengers in buses fitted with seat belts must be informed of the requirement to wear them.

Use of seat belts and child restraints - The law in Ireland requires the following vehicles to have seat belts:

- Passenger vehicles that accommodate fewer than 8 people (excluding the driver)
- Passenger vehicles that accommodate more than 8 passengers and have a gross vehicle weight of less than 3,500 kg
- All buses transporting children must be fitted with the appropriate seat belts or restraint systems for the number of children being transported.

Taxis and Seatbelts

Since July 2004, drivers of small public service vehicles (such as taxis) are not exempt and must wear seat belts when driving these vehicles.

The vehicle should only carry as many people as there are seat belts, and every person travelling in a motor vehicle should wear their seatbelt.

Checklists - Vehicles

Drivers have responsibilities to ensure that the vehicles they are driving are roadworthy and not likely to cause danger to anyone.

Driving for work checklist forms could be used by transport managers at the start of each production and by each driver for the vehicles they drive daily.

The Health & Safety Authority and the Road Safety Authority have generated checklists that can be used for checking vehicles.

Walkaround books provided by the transport coordinator or facilities manager to be used for the daily checks. Walkaround books should be checked periodically by the transport coordinator.

Checklists and sheets are to be maintained and retained for inspection by appointed inspectors of the RSA where deemed necessary, as required under Irish law.

An example of checks for vehicles as per RSA forms vehicle safety checklists as per links below: https://www.rsa.ie/en/RSA/Professional-Drivers/Owners-and-managers/Vehicle-Maintenance-Checks1/Walkaround-checks/

https://www.rsa.ie/Documents/Tachograph_Enf/Driving%20for%20Work%20CD%20Rom/Driving%20for%20Work%20Checklist.pdf

Use of Chemicals/Hazardous Materials

Facilities personnel may require the use of chemicals for Honey wagons. The facilities manager should provide SDS for any chemicals used and ensure persons handling or using the chemicals have received training on safe use of chemicals and there are risk assessments and a safe system of work in place.

All wastewater must be disposed of through a licenced provider. Receipts for wastewater collected should be gathered by the facilities manager for the duration of the production. Waste and wastewater management for Honey wagons to be outlined and agreed with the production company.

For further information on working with chemicals please see Chapter 65 within this guide: Working with Chemicals

Electricity

Employers have a legal duty to ensure the safe interaction of employees with all items associated with electricity. The Legislation where electricity is addressed most directly is Safety Health & Welfare at Work (General Application) 2007 Part 3 (Regulation 74 to 93) of the 2007. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Electricity.pdf

See sections – Electrical Department and SHWW (General application) Regulations 2007 –within this guide for further information.

RCD

Powered equipment to have RCD (residual current device) and or MCB (mechanical circuit breaker) protection as suitable and required by recognised standards. All electrical equipment to be PAT tagged.

Correctly functioning RCDs are key to minimising risk and preventing shock or electrocution. An RCD must be tested by

regular operation of the test trip button, as stipulated by the device manufacturer.

While the push-to-test routine should ensure that the RCD will operate when required, it should also be functionally tested by a competent person periodically to ensure that it operates for the rated leakage current (e.g. at 30 mA) and within the time permitted (e.g. < 0.3 seconds).

Portable Appliance Testing (PAT)

Any electrical equipment that has been hired to the production should be accompanied by proof of PAT testing. Every piece of hired equipment should have a visual PAT test sticker attached. These stickers correspond to a PAT testing record which should be made available if required. Any practical electrical work or wiring to props should also be PAT tested.

Employers are responsible for ensuring PAT testing is carried out as required by SHWW(GA) Regs 2007 Part 3, Regulation 81.

Portable equipment, by its nature, is more susceptible to damage than fixed electrical equipment. It is also more likely to be used in different environments and is often directly in contact with the user.

All portable equipment must be maintained in a manner fit for safe use and should be subject to an appropriate inspection regime by employers to ensure that this is the case.

The nature and frequency of maintenance should be adequate to prevent danger. The nature and frequency of inspections will vary dependent on the equipment, its use and location of the equipment.

The results of PAT inspections and tests should be recorded and kept available for 5 years from the date of inspection.

Equipment that is hardwearing and/or used in an environment that is likely to increase deterioration may require more frequent testing. Example: equipment used in workshops or on sets may require PAT testing (in addition to visual inspection) 2 to 4 times per annum, whereas computers, laptop chargers or microwaves may require less frequent testing. Contractors supplying their own equipment are responsible for ensuring PAT testing is carried out as above.

For further information on Regulation 81, see section 4.6.1 'PAT Testing' within this guide and the Guidelines to Part 3 of the 2007 General Applications Regulations.

Ingress Protection Rating – Electronic equipment

Electrical equipment used is to have the required ingress protection (IP) rating as well as the required levels of sealing effectiveness of electrical enclosures against intrusion particles and moisture.

Generators

Where generators are required, these are provided by the facility company or a contracted generator company organised by the transport captain or facilities manager. There should be two separate generators, one for shooting requirements and the second to facilitate the standby trucks and downloading (rushes and footage).

Generators are to be driven by and operated by qualified, competent electricians with driving licence as per class of vehicle being driven.

The competent generator operator should ensure that the generator is suitably earthed before use. Only authorized electrical connections are to be connected to the generator.

The HoD responsible for provision of generators is to ensure that the generator(s) are suitable for the load required to enable sufficient power for all equipment on days and nights of filming.

Mobile generators are to have adequate RCD and MCD. All cabling connected to the generator to be PAT tested and certified. Only authorized electrical connections can be connected to the generator.

The production company is to ensure the safe use of generators that they hire and that they are operated by competent persons only.

Generators for catering may or may not be under the remit of the transport captain/facilities manager, (their competent electrician) and this is to be confirmed by production at the time of appointment. Waste management and wastewater management for catering to be outlined and agreed by and with the production company on engagement.

It is recommended that all connections to/from generators and residual current device (RCD) mobile power distribution boxes are carried out by a registered electrical contractor (REC). If an REC carries out controlled electrical works, they must certify those works. Although it is not a legal requirement that these controlled works be completed by an REC (rec), it is important that they are in compliance with the national wiring rules and from a safety perspective, it is important that these works only be completed by competent individuals.

If refuelling is required it's carried out by a fuel supplier at agreed times, the supplier is to have a risk assessment and safe system of work in place for refuelling of generators on location and unit base.

Exhaust from a generator should be positioned so as not to allow build-up of fumes in areas where persons congregate. If generators are used in enclosed areas, air quality may need to be monitored to ensure it is not compromised.

For further information please see the section Electrical department within this guide.

Using Practical Lights and electrical equipment at a Location

The transport captain/facilities manager is to liaise with the locations department HoD re requirements of practical lights at a location.

The environment of the set area should be taken into consideration when determining what equipment is to be used. For external filming where equipment could be exposed to wet and windy conditions, or where there is a requirement for SFX effects that could compromise electrical equipment safety.

Maintaining Training Records/ Certification

The transport captain/facilities manager should maintain all relevant certificates of training and copies of Trade Cards for their crew.

Legislative requirement

As with other parts of this guidance document, individual Employers, the transport captain/facilities manager are expected to carry out further research as necessary specific to their project to ensure they are compliant with legislative requirements.

33
Hair

The two departments of make-up and hair are responsible for the design and application of hair and make-up, including cutting and styling and corrective make-up, as well as specialist techniques such as wig application, facial hair application, prosthetics application, body paint, and ageing effects. The departments collaborate closely with each other, as well as with other departments such as SFX, camera and ads.

The hair designer is the department head. They hair designer work closely with the director and production designer, makeup, and costume department. They carry out research to create hairstyles required to suit each production.

The hair designer is responsible for setting up the department, for breaking down the script, employing and managing the crew within this department for the duration of the production and monitoring the continuity of hair including wigs and/or hairpiece fittings for cast and background artists throughout each production. They must work within the budget allocations for the productions and will be required to work to tight deadlines.

They are responsible for ensuring there is adequate provision for health and safety and that there are required risk assessments, safe systems of work, crew have required training and are provided with required PPE/RPE. Risk assessments to be carried out for all activities.

The European Agency has a tool that can assist in the risk assessment process, the risk assessments required for a production may need to include areas not covered within this document. Link: https://osha.europa.eu/en/tools-and-publications/publications/e-facts/efact34

General Rules

- There should be adequate numbers of clean capes and headbands for cast and background artists on call for attention by the hair department.
- The hair department area should be kept clean and tidy and the hair department crew should maintain a high standard of personal hygiene and appearance, with the minimum use of hand/wrist jewellery.
- Combs, brushes, razors, scissors, and spatulas must be cleaned and disinfected regularly and must be disinfected before and after each use.
- Antiseptic liquid should be used with disposable cotton buds for razor cuts.
- Hands should be washed and sanitised before and after work commences with each individual artist.
- Only ingredient products from established and reputable manufacturers should be used.
- The hair designer is to ensure that crew are provided with all appropriate personal protective equipment (PPE) and respiratory protective equipment (RPE), for work they carry out and products they work with, and that the appropriate PPE/RPE is selected, provided and used for all crew working under their care;
- Only competent persons should handle hazardous equipment, tools, and machinery.
- Medical advice should be sought for any skin problem, for crew and cast, even of a minor nature, and reported to the production office.
- Actors should provide any information regarding potential allergic reactions to any chemical substances or products (for example: dyes and latex) or any skin conditions which may be exacerbated by any materials and/or substances.
- Cast, background artists are to be made aware of any possible complications associated with procedures, for example: hair extension, colouring. Records of procedures that have the potential to cause damage are to be recorded in advance.
- In event a cast member or background artist has any complaint or concerns re any procedure carried out, this should be recorded. Records are maintained by the hair designer and reported to production where appropriate.
- When working with stunt performers who will be in close proximity to fire and using a wig, the hairstylist shall make sure that the wig is attached in a way that the performer can remove quickly. Also, a fire-retardant gel should be used on the wig or on the performer's own hair.
- When exposure to children is possible, when working with children, a specific risk assessment to be in place outlining measures taken to reduce risk of exposure to chemicals and other (See Chapter 53 and in particular the section on 'Sensitive Risk Group – Children/ Young Persons').
- Hairdressing areas must have adequate space, benches, and height-adjustable styling chairs.
- There needs to be adequate provision for electrical installations to cater for the equipment required. Electrical wiring from machines to be maintained in a manner that does not lead to trip hazards.
- Hairdryer, hair straighteners etc should be unplugged after use.

Overuse Injuries

The repetitive, fine movements involved in working in the hair department may lead to overuse injuries, and repetitive strain injuries.

Overuse injuries can be prevented by:

1. Good posture, correct height of chair and workbench, machines, etc.
2. Taking frequent rest breaks.
3. Varying tasks frequently.
4. Providing rubber mats or wooden platforms to cover concrete floors to ease the problems of standing for long periods of time.

Occupational Health and Safety - Hairdressing

In 2016 the Social Partners, Coiffure EU and UNI Europa Hair and Beauty, in the hairdressing sector signed the European framework agreement on the protection of occupational health and safety. See European framework agreement on the protection of occupational health and safety in the hairdressing sector at link: https://www.uni-europa.org/wp-content/uploads/2016/06/EFA_OHS_HairdressingSector_signed_20160623.pdf

Protecting the health and safety of hairdressers is crucial. Not only are their working conditions strenuous, but they are also 10 times more likely to develop skin conditions and 5 times more likely to develop musculoskeletal diseases such as arthritis and tendinitis than the average worker. 20% of hairdressers develop work-related asthma and they are regularly exposed to chemicals that research suggests potentially causes cancer.

See American Cancer Society link below for such research: https://www.cancer.org/cancer/cancer-causes/hair-dyes.html

The European framework agreement on the protection of occupational health and safety in the hairdressing sector aims to promote a high level of protection of the health and safety for all workers active in the hairdressing sector, by establishing provisions in order to prevent, eliminate or reduce work-related health risks in the hairdressing sector.

Use of Chemicals – Occupational Health

It is estimated that up to 70% of hairdressers suffer from work-related skin damage at some point in their career. Many hairdressers, particularly trainees, spend a lot of time with their hands in water and in contact with shampoo, hair dyes and cleaning products. The use of shampoo, hair dyes and cleaning products can lead to skin damage. The

skin may become dry, red, sore, and even bleed. The skin can also become more sensitive to damage from other chemicals. Most of this damage is preventable. As a professional, they will use these products more often than a person at home, so it is important that workplace exposure is assessed.

For further information on working with chemicals please see Chapter 65 within this guide: Working with Chemicals

Possible health effects from use of hairdressing products

The most frequent occupational illnesses related to chemical exposure for hairdressers are allergy related, namely dermatitis which affects the skin and asthma which affects the lungs. Once an allergic reaction develops to a particular chemical you will become allergic to it for life, both in and outside the workplace. An example would be an allergic reaction to paraphenylenediamine (PPD) which is found in many permanent and some semi-permanent hair dyes.

Persulfates (such as ammonium persulfate, potassium persulfate and sodium persulfate) used in hair bleaches and hair lighteners can cause allergic reactions including skin or eye, respiratory irritation and scalp irritation for person having work carried out. Burns, permanent hair loss, scarring and disfigurement can be caused by the incorrect use of chemicals.

Tips for chemical safety including use of dyes

- Make a list (inventory) of all hairdressing products and other products such as sterilising fluid and cleaning products.
- Consult your supplier or the manufacturer for further information, including obtaining relevant safety data sheets (SDS).
- In line with the Safety, Health and Welfare At Work (Chemical Agents) Regulations, 2001 and 2015, persons using chemicals should have received training for safe use of chemicals and provided with the appropriate RPE/PPE. All chemical and hazardous products used are to be handled and used by competent persons only.
- Observe any warning labels and instructions for safe use on the product container, packaging, or leaflet.
- Consider the use of safer products, such as fewer toxic products or those in a less hazardous form for the workers. An example would be using a non-dusty form of persulfates to prevent workers breathing it in.
- Know the safe way to handle the products and what precautions to take before using any products. Always follow the manufacturers' instructions for use. Make sure everyone in the workplace gets this information.
- Always wear the PPE/RPE advised by the manufacturer - this may include gloves and eye protection.
- Remember some products are flammable - avoid tea lights and candles.
- Clean up spills straight away in a safe manner.
- Always put the cap back on containers straight away after use.
- Store products in a dry, cool, dark place in as small a quantity as possible. Do not decant products into containers that do not have the correct label.
- Keep all products off your hands. Wear gloves routinely for washing hair, colouring, bleaching and all cleaning tasks. The ideal gloves should be powder-free, non-latex, 300mm in length and be provided in different sizes to ensure they fit individual workers.
- Keep food and drink away from chemicals and don't eat or drink in the vicinity of chemicals.
- Ensure that there is as much natural ventilation as possible - make sure windows and doors are opened. When ventilation is not sufficient, the airborne chemicals and dusts can accumulate in the air and can be inhaled in significant quantities.
- Ensure that the product mixing area is well ventilated.
- Be careful where you buy hair dyes from, especially if sourcing from outside Europe, as the products may not meet the safety standards for hair dyes allowed to be sold in the European Union. Check the website www.hpra.ie which advises on the legal obligations for sale and distribution of cosmetic products in Ireland.

Hand Care

- Keep all products off your hands. Wear gloves routinely for washing hair, colouring, bleaching and all cleaning tasks. The ideal gloves should be powder-free, non-latex, 300mm in length and be provided in different sizes to ensure they fit individual workers.
- Dry hands thoroughly with a disposable towel.
- Moisturise hands with a perfume-free product as often as possible.
- Distribute the wet work evenly among employees to reduce the individual's exposure to wet work.
- Do not wear jewellery on hands or arms.
- Know the signs of dermatitis and check your hands regularly for signs. Get medical advice if you show signs of dermatitis. See https://www.hse.ie/eng/health/az/c/contact-dermatitis/
- Use disposable gloves and throw them away after each use. Avoid latex gloves if possible due to the risk of an allergic reaction. If you must use them, use a low protein, and powder free version of the gloves.

Scheduling

Adequate attention must be given to the scheduling of hair requirement calls, to ensure hair department staff do not have to work excessively long hours. Account for the time needed to create specific style, fit wigs etc and time requirements at the end of the day. These scheduling requirements should be highlighted to the production office as early as possible.

The HoD will be required to ensure there are sufficient crew available to cover the entire working day, crew are not in a lone worker situation, and they schedule crew so as each crew member does not work an excessively long working day, which can lead to fatigue and stress.

Facilities

- The hairdressing facilities should be clean, well lit, adequately ventilated and properly equipped, with access to clean water.
- Smoking, eating, and drinking should not be permitted in the hairdressing room.
- Aerosols should not be used in small unventilated rooms.
- Where the facilities are in the form of a caravan, truck or similar area, consideration should be given to the following needs:
  - A quiet power supply
  - The caravan or truck is level and parked safely.
  - Safe entry and exit and safe steps, where steps are necessary.
  - Adequate headroom.
  - Optimum storage facilities so that hair products do not deteriorate or become unstable. Storage facilities should be of adequate size. Storage of any hazardous product should be in accordance with any applicable regulations.
  - Bottles and containers should have their contents clearly labelled and any hazardous or flammable products should carry appropriate labels.
  - Residual current devices are required in line for all electrical installations and equipment.

See Chapter 13, section 13.2 regarding The Building(s) and Working Areas.

General Considerations for Hair Facilities During Filming Phase and on Location Including Hair trucks.

If facilities are in the form of a trailer, truck or similar area, consideration should be given to the following:

- A quiet power supply will be required.
- The trailer or truck should be level and parked safely.
- Safe entry and exit and safe secure steps and handrails, where steps are necessary.
- Trucks should have appropriate fire extinguishers, secured, and appropriately positioned as per risk assessment and smoke detection system and carbon monoxide detector if necessary.
- Must have adequate space to enable crew to work and move safely, have adequate space for stylists' chairs.
- Adequate and appropriate storage facilities are to be provided to keep products and equipment in good condition.
- Bottles and containers should be clearly labelled, and hazardous and flammable products stored in original containers with the appropriate labels. Aerosols should not be used in small unventilated dressing rooms,
- Appropriate extraction should be provided.
- Windows should be openable for good ventilation and air exchange.
- Electrical source and installations to have residual current devices and inspected as per legislative requirements (minimum every 3 months).
- Sockets must not be overloaded.
- Hairdryers and straighteners, kettles, microwaves must be unplugged when not in direct use.
- If necessary, local lighting should be provided at individual workstations and places of particular risk. Light fittings should not create any hazard.
- Appropriate means are to be provided for bringing hair products including wigs to and from set areas.
- Hair department crew should have the necessary facilities on set to work in the elements as necessary and for cast and background artists to have hair adjustments carried out in an appropriate environment in the elements.
- Wastewater from hair trucks can contain dyes and other chemicals so store wastewater in holding tanks and dispose of appropriately using a licenced waste contractor.
- Safety data sheets/material data sheets to be available for all chemical and hazardous products used, these should be stored, handled, and used by competent persons only and segregated and disposed of as hazardous waste.

Crew Footwear and Clothing

All crew must wear appropriate clothing for work they carry out and for the environment that they work in, including warm waterproof clothing in wet and cold weather as well as appropriate footwear for ground conditions. Hair department crew should never wear open-toed footwear due to risk of injury from scissors, chemicals, and other.

Links for further information

HSA - Link: https://www.hsa.ie/eng/publications_and_forms/publications/information_sheets/hairdressing_info_sheet.pdf

European association of national employers' organisations in hairdressing Link: https://www.coiffure.eu/social-dialogue/official-documents/signed-agreement-health-and-safety

The European Agency Risk Assessment Tool - Link: https://osha.europa.eu/en/tools-and-publications/publications/e-facts/efact34

34 Health and Safety Advisor/Officer

The producers/UPM/LP/PM must determine the level of assistance required for overseeing health and safety for each production. Employers are obliged under law, to obtain, where necessary, the services of a competent person (whether under a contract of employment or otherwise) for the purpose of ensuring, so far as is reasonably practicable, the safety, health and welfare at work of his or her employees - Reference SHWW Act 2005, section 8 – (2) (l).

Also reference DIRECTIVE 89/391/EEC: Without prejudice to the obligations referred to in Articles 5 and 6 of the Directive, the employer shall designate one or more workers to carry out activities related to the protection and prevention of occupational risks for the undertaking and/or establishment. If such protective and preventive measures cannot be organized for lack of competent personnel in the undertaking and/or establishment, the employer shall enlist competent external services or persons. Where an employer enlists competent external services or persons, this shall not discharge him from his responsibilities in this area.

The Health and Safety Advisor/Officer, assess each production taking into account (non-exhaustive):

- The number and profile of crew, cast and background artists,
- The number and nature of locations,
- The hazardous nature of activities for building of sets (work at height, use of design scaffold, numerous carpentry workshops, use of chemicals etc),
- The nature of activities based on script requirements.

A safety advisor (SA) is an external safety professional contracted by the production to assist with advising and addressing health and safety for the production.

The person appointed by a production to assist and oversee health and safety for a production may or may not be a full-time member of crew.

A safety officer (SO) is appointed by a production to oversee health and safety on a full-time basis. The appointed SA/SO must be competent (have appropriate training, knowledge and experience for the nature and size of the hazards of the production and work to be undertaken). They shall report directly to the UPM/LP/PM. In the absence of appointment of a full-time SO for a production the UPM, LP or PM will fulfil this role.

Safety is the responsibility of every individual on a production. Everyone has a responsibility to work safely and in

compliance with the applicable health and safety legislation.

Responsibilities of the SA/SO can include (non - exhaustive):

- Advise the production on legislative requirements for compliance.
- Assist with completing and submitting HSA documentation and reports.
- Attend safety meetings, including pre-production meetings.
- Attend tech recces and generate location risk assessments if required.
- Report and advise on safety concerns and assist with identifying measures to mitigate risk.
- Assist HoDs in identifying safety concerns and assist with identifying measures to mitigate risk.
- Carry out workplace, location and studio inspections and report findings to UPM/LP/PM.
- Stop any unsafe activities.
- Assist with or carry out accident and near miss investigations.

The SA may or may not also fulfil the role of project supervisor design process (PSDP) for the production. See Chapter 5 regarding specific Duties of Duty Holders in construction projects.

Separately, employees are permitted to select and appoint from amongst their number, a safety representative, to represent them at the place of work in consultation with their employer on matters related to safety, health and welfare at the place of work. Further details are set out in section 25 of the Safety, Health and Welfare at Work Act 2005.

Reference HSA Safety Representatives and Safety Consultation Guidelines. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Safety_Representatives_and_Safety_Consultation_Guidelines.pdf

Locations – a place of work. "Place of work" includes any, or any part of any, place (whether or not within or forming part of a building or structure), land or other location at, in, upon or near which, work is carried on whether occasionally or otherwise. [Please note that this 'place of work' definition is set out under the Safety, Health and Welfare at Work Act 2005].

The locations department is responsible for sourcing and securing all non-studio locations for a film/TV production, a process that begins at early pre-production stage. Location managers collaborate closely with the director and production designer. The department consists of a location manager, assistant location manager and trainee. The Location manager identifies and photographs location options; negotiates and is responsible for issues such as permitting, insurance and certain copyright issues; and manages all logistical issues in relation to the shooting location. This includes ensuring that the location is safe, accessible, and suitable for shooting requirements, including considerations such as noise and light.

The role of the location manager involves liaising and reporting to the UPM/PM/LP, the director and 1st AD, the production designer, the safety officer/safety advisor, and location owner. The location manager oversees the locations department and its staff.

The location manager will often assist production and finance departments in maintaining budget management regarding actual location/permit fees as well as labour costs to production for the locations department.

Locations should be viewed from a safety perspective. Where the location manager has any concerns following the initial or subsequent scout of a location the PM/UPM /LP should be consulted about the suitability of locations prior to offering to the director.

The location manager is required to take into account health and safety issues that present for a location and advise the safety advisor/safety officer and PM/UPM/LP so they can determine what measures are required in so far as is reasonably practicable, to ensure safety of crew and background actors. The safety advisor/safety officer and location manager (or deputy) should attend the production meeting to discuss any health and safety issues, concerns and measures to put in place.

The location manager determines the logistics required of all crew/contractors involved in prep, shooting and strike of a location.

Filming Permissions

Appropriate permissions must be received from any involved owners, or representative of the owner or authorities, including police and councils.

The location manager is usually responsible for ensuring insurance documents are shared with location owners. The location manager is responsible for final clearance and permission to use a location for filming and agreeing contract terms with owners or point of contact. They must ensure contracts are signed prior to any works taking place.

Location Recce, Tech Recce and Location Risk Assessments

Once it has been generally established how sequences are to be filmed and before filming, all locations should, wherever possible, be visited by the producer, directors, heads of departments and the safety officer/safety advisor tasked with generating the location-specific risk assessments.

General Public

Liability for the safety of the general public is the responsibility of the production company. This aspect, therefore, must always be a factor in the choice of a location, and steps taken to minimise danger. Safe crowd control measures are essential and local authorities should be informed of the shoot and its location when necessary.

Safety Checklists – Non-Exhaustive

Interiors Checklist - where a safety advisor or officer has been engaged many of the points below should be highlighted and discussed with this person and UPM/PM/LP to determine required actions to be taken as appropriate.

- Entry and exit – all points of entry and exit should be made safe, open freely from inside, and have security, as necessary. Both day and night, access/egress points should be well lit.
- Fire escapes should be adequate, unobstructed, open freely from inside, clearly marked and noted on call **sheets and** risk assessments, together with evacuation plans and procedures. See Chapter 13, section 13.3 Fire and Fire Escapes**.**
- Fire detection – the position and operational status of any sprinkler or

smoke detection systems should be established and the necessary steps taken to avoid the systems being activated by filming lights or smoke effects. Where a system is disarmed, this can only be done with the owner's approval, by a qualified person as agreed with the owner, and with clear systems of work and assignment of responsibility. The location manager should be advised of who will carry this out. Clear means of communication is to be established with all cast, crew and background artists, and to be in place if a system is temporarily disarmed, all persons should be made aware the system is disarmed and means of advising of the need for an evacuation. The landlord or assigned qualified persons/point of contact MUST confirm the system is operational at the end of each shooting day or period as agreed. These measures are to be documented on the risk assessment.

- Fire extinguishers: those already on the location should be checked for appropriate type and date of service/ maintenance. Depending on filming activities, additional or different types of extinguishers may be needed, these are provided by the production company or individual HoD. The location manager should confirm that the required location fire extinguishers are in place at the beginning of each shooting day.
- Traffic areas: the general traffic areas of building areas such as passageways, stairwells and exits should be well lit, enhanced where necessary and kept clear of crew equipment.
- Building structure: the basic structure should be established as safe, including the flooring and roofing. Where a location manager has any concerns re the structure of a location this should be highlighted to the safety advisor/ safety officer and PM/UPM/LP to determine if the structure needs to be assessed by a structural engineer prior to confirming the location as a possibility to the director.
- Older buildings in addition to ensuring structural integrity should be checked for hazardous storage items, chemicals, dust residues etc and made clean. Lifts should be certified and serviced, if records of service are not available the lift should not be used.
- Hazardous substances should be removed or safely disposed of it not in use. Information about the use, handling, storage, and transport of hazardous material should be made accessible along with suitable PPE required. Ensure persons handling and removing hazardous substances are competent and have the appropriate training.
- Plant and equipment should be securely guarded, in safe working order and appropriately cordoned off.
- An employer shall ensure that where the safety of work equipment depends on the installation conditions an inspection is carried out after assembly at any new site or in any new location, and that the work equipment is installed correctly and is operating properly as set out in Regulation 30 of the SHWW (GA)Regs 2007.
- There are many circumstances in which it is not possible to eliminate entirely at source the hazards arising from the use of work equipment, for instance in the case of moving machinery, high-speed cutting equipment or vibrating machinery. In order to minimise the risks, it is necessary to consider guarding of dangerous parts, detection of dangerous situations, design of controls, provision of safe systems of work, use of protective equipment and any other necessary measures. These requirements are set out in Regulation 28 of the SHWW (GA)Regs 2007.
- As regards portable equipment, it is to be periodically inspected by a competent person, appropriate to the nature location and use of the equipment. [These requirements are set out in Regulation 81 of the SHWW (GA) Regs 2007.
- Construction sites: on construction and building sites, hazards such as incomplete floors, unsound support members, stacked materials, uneven footing, chemicals and power tools in use should be appropriately cordoned off to ensure there can be no unauthorised access.
- Access roads to set areas should be well signposted, safe, and wide enough for unit vehicles. Parking should also be adequate and safe, and where required track matting or similar used to ensure vehicles have good traction and crew can unload and load safely.

Exteriors Checklist - where a Safety Advisor/Safety Officer has been engaged many of the points below should be highlighted and discussed with this person and UPM/PM/LP to determine required actions to be taken.

Depending on the type of filming and the location concerned, the following points should be considered:

- The sorts of temperature range expected.
- The types of land terrain to be encountered.
- The prevailing water conditions including tidal extremes, current direction, strength, and temperature.
- The draining capacity of the location should be checked if filming involves water effects of any sort.
- The prevailing wind directions, their strength at times and the possible effect on temporary structures, sand, or soil etc.
- The nature and possible hazards posed by the animal life both on land and water, especially rats, mosquitoes, wasps, sea lice, stingers, midges, badgers etc.
- The nature and possible hazards posed by the plant life both on land and in water, especially palms with sharp fronds, stinging nettles, poison ivy etc.
- The current bush-fire status of the area and any existing rules. Escape routes should be marked clearly on maps.
- The potential for flash flooding even after relatively light falls.
- The level of the use of chemicals for pest control and whether aerial or ground spraying of insecticides is due to occur or has recently occurred.
- The quality of the roads in and out of locations, considering the variety of unit vehicles using them, including emergency use. Allowances may need to be made for maintenance of roads and access routes. In this case, appropriate signs should be put in place.
- Where there is a risk at a workplace because of traffic movements or traffic and pedestrian interaction, appropriate signs regulating traffic and pedestrian movements should be put in place in accordance with any other legislation specifically regulating transport by road.
- The location of local emergency medical facilities which should be established and noted on the call sheet including rapid transportation plans and evacuation plans to the nearest major hospital. This information should be given to local police.
- Adequate lighting at unit base and all walkways during all hours of operation in darkness including set-up, shooting and wrap-up of the unit base. The lights must remain on until the last person is leaving.

General Checklist: where a Safety Advisor/Safety Officer has been engaged many of the points below should be highlighted and discussed with this person & UPM/PM/LP to determine required actions to be taken. The following points apply in most situations:

- Risk assessments for each location are to be provided and circulated to all

crew, background actors and others that may be affected by production company operations. The UPM/LP/PM should arrange for location risk assessments to be generated as required.
- Specific risk assessments and method statements from other departments to be in place prior to works being carried out at any location.
- Clean, operational toilets must be available in reasonable proximity to the shooting areas. They should be serviced, as necessary.
- Hygiene facilities: in all cases, simple handwashing facilities must be available prior to meal breaks. In some circumstances, more elaborate measures may be required to maintain hygiene to a suitable standard. Hand sanitisers should be available at external locations.
- Water supply: an adequate supply of clean drinking (potable) water must always be available, regardless of the location.
- A waste management system must be in place that is fully licenced by the NWPCO and fully insured.
- Road access: safe and all-weather paths must be provided for those walking to and from the shooting area.
- Scrambling lines may be required in some cases.
- Additional labour may be required and/or equipment, to transport filming gear and equipment into remote sites.
- Emergency care: access to first aid, emergency medical aid and care on remote locations needs to be considered in pre-production. These include plans for immediate first aid, medical aid, and transport to emergency care. Establish the hours of operation of local hospitals and medical facilities, in particular where specialised care or treatment could be required, as set out in section 11 of the Safety, Health and Welfare at Work Act 2005.
- Other emergency services: access to emergency services on remote locations, such as fire brigades, needs to be considered in pre-production, including range and standards of services available.
- Radio and telephone communication: in extremely remote locations, radio and telephone communication to emergency services may be compromised. Measures must be in place in the event of an emergency and how communication will be achieved with undue delay.
- Accommodation: in remote locations where, temporary accommodation is provided by the production company, basic standards of fire safety, access safety and welfare facilities must be included in all plans.
- Back-up power: in extremely remote locations, back-up, emergency power should be maintained.

Dressing Rooms/Holding Areas

Where a safety advisor or safety officer has been engaged many of the points below should be highlighted and discussed with this person and UPM/PM/LP to determine required actions to be taken as appropriate.

- Multiple dressing room units (3 way + 4 way etc.). The driver/operator/facilities provider should ensure that a high standard of safety is maintained for bringing facilities to and from locations, while on location and while these units are in use.
- Cast green rooms and background artists holding areas should be suitable for the number of persons at location and be well ventilated, heated and insulated.
- Generator exhausts shall be elevated a minimum of three feet above the floor level and vented to the outside at all times. Exhaust fumes should not be directed in the direction of enclosed areas or in medical or welfare facilities.
- All portable electric heaters shall be equipped with safety tip over switches. Such heaters may be installed only on a temporary basis when extreme cold weather prevails or when there is no permanent adequate heater installed.
- Temporary gas heating systems should not be used.
- A single handrail or grab bar shall be required where the floor is over three feet high.
- All steps shall be stable and constructed securely. Fruit crates shall not be used as steps.

Scheduling

Adequate attention must be given to the scheduling of locations department crew to ensure they do not work excessively long hours. Allow for the time required for early calls and requirement to remain at set after wrap.

The HoD should ensure there are sufficient crew available to cover the entire working day, crew members are not in a lone worker situation, and they schedule crew so that each crew member does not work an excessively long working day, which can lead to fatigue and stress. Scheduling requirements should be highlighted to the production office as early as possible if it is determined by the HoD there is difficulty in covering all working hours.

Work Equipment with ride-on-employees

As regards work equipment, an employer must ensure that work equipment with ride-on employees is fitted out in such a way as to reduce the risks for employees during the journey, including risk of contact with or trapping by wheels or tracks. It is also necessary to ensure that the risks from wheels and tracks when the equipment is travelling are controlled by the design of the machine. [Note that the above requirements are set out in Regulation 35 (Chapter 2 of Part 2) of the Safety, Health and Welfare at Work (General Application) Regulations 2007].

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Medic

The medic may be required to be on standby for medical needs at the different phases of a production for example for construction crew during set build and strike and on set to oversee and attend to the medical needs of cast, crew and background artists.

Note re Occupational Health Provider and medical fitness to work: In addition to the above, on occasion, it is also possible that a production company would engage the services of an Occupation Health provider to carry out pre-employment assessments or other medically related assessments for cast and or crew.

The Occupational Health Provider or appointed Medic (registered medical practitioner) may also be required to carry out an assessment of an employee/s to assess his or her fitness to perform certain work activities. Where, following an assessment, a registered medical practitioner is of the opinion that an employee is unfit to perform work activities, he or she shall notify the employer, by the quickest practicable means, of that opinion and the likelihood of early resumption of work for rehabilitative purposes and shall inform the employee accordingly, giving the reasons for that opinion. Furthermore, if an employee becomes aware that he or she is suffering from any disease or physical or mental impairment which, should he or she perform a work activity, would be likely to cause him or her to expose himself or herself or another person to danger or risk of danger, he or she shall immediately notify the employer concerned or the registered medical practitioner nominated by that employer who shall in turn notify the employer. Medical fitness to work is set out in section 23 of the Safety, Health and Welfare at Work Act 2005.

The appointed medic or medic coordinator liaises with different departments and personnel on a production including UPM/PM/LP/ safety officer or the 1st AD, stunt coordinator, SFX coordinator to assist with determining the level of cover required for the different phases of the production.

The appointed medic provider or coordinator is responsible for the coordination of all other medics required during the production and ensures that appropriate cover as agreed with UPM/PM/LP is provided. The appointed person will ensure that all other medics are familiar with working on a set environment. They work with practitioners that are new to the industry until they are familiar with working on set.

Immediate response: In the event of an emergency the medic will be responsible for providing medical assistance to the ill/injured person(s), ensuring the emergency medical services (EMS) have been contacted ensuring other persons are protected, the scene is not disturbed, notify the UPM/PM/LP or Safety Officer/ Advisor of the event without undue delay, record treatment given and actions taken.

Post event: They provide the UPM/PM/LP with an accident report and follow-up reports, as necessary. They are required to take into account GDPR and their legal requirements respecting the confidentiality of the person who received the injury or became unwell.

Reference: Reporting of Accident, Incident, Near Miss and Dangerous Occurrence, Reporting of Accidents and Dangerous Occurrences to the HSA, Accident Investigations for further information as required.

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Makeup and SFX Makeup including Prosthetics

The two departments of makeup and hair are responsible for the design and application of hair and makeup, including hair cutting and styling and corrective makeup, as well as specialist techniques such as wig application, facial hair application, prosthetics application, body paint, and ageing effects. The departments collaborate closely with each other, as well as with other departments such as SFX, Camera and ADs.

The key makeup artist is the department head and works under the close direction of the director and producers. They are responsible for planning makeup designs for all leading and supporting cast. If special effects makeup is required, they will consult, supervise, and work with a special effects team to create all prosthetics and SFX makeup for a production.

Prosthetics and Special Effects Makeup

Prosthetics and special effects makeup are used to create or enhance special features on cast members including ageing, or create effects like injuries, scars, and wounds. A special effects makeup artist may work with live models or structures for creation of and the application of makeup effects or prosthetics. They also create life-like limbs or corpses.

The special effects makeup team may work directly with the director and producers or report to the key makeup artist

General Considerations for Makeup Facilities

- The makeup and special effects makeup department, including prosthetics and speciality prosthetics facilities should be clean, well lit, have access to clean water and be properly equipped for all required activities including the administration needs of the HoD, and for model to remain in workshop for plaster mould or other, where cast may have no choice but to eat in the workshop.
- The department facilities must have adequate ventilation taking into account chemical and product usage and may require local exhaust ventilation (LEV) system. Good design and being fit for purpose are crucial to ensure the effectiveness of a system.
- Workshops should be of adequate size to allow persons to work safely, including ample room to work safely with and around equipment and machinery.
- Crew to be provided with all

appropriate personal protective equipment (PPE) and respiratory protective equipment (RPE), for work they carry out and products they work with. The HoD should ensure the appropriate PPE/RPE is selected, provided, and used for all crew working under their care.
- Only competent persons should handle hazardous equipment, tools, and machinery.
- Appropriate signage to be in place in workshop areas as required.
- Access to workshops should be controlled so people who do not work in this department do not inadvertently put themselves at risk by accessing an area where there is risk of fumes, vapours, dusts etc and for privacy of cast having makeup and prosthetic works carried out.
- Eating, drinking, and smoking should not be permitted in any make-up area, unless a specific area has been provided that is separate to where makeup is applied and can be kept appropriately sanitised
- Safety data sheets and material data sheets should be available for all chemical and hazardous products used, these products to be handled and used by competent persons only

For further information on working with chemicals please see Chapter 65 within this guide: Working with Chemicals.

Facilities during filming phase

If facilities are in the form of a trailer, truck or similar area, consideration should be given to the following:

- A quiet power supply will be required.
- The trailer or truck should be levelled and parked safely.
- Safe entry and exit and safe steps, where steps are necessary.
- There must be adequate space to enable crew to work and move safely, adequate headroom and sufficient benches and chairs for the number of cast and background artists requiring makeup.
- Adequate and appropriate storage facilities are to be provided to keep makeup in good condition.
- Bottles and containers must be clearly labelled, with hazardous or flammable products stored in their original containers with the appropriate labels.
- Storage and use of any hazardous makeup or effects products must be as per safety data sheet.
- Aerosols should not be used in small unventilated makeup rooms or dressing rooms, appropriate extraction should be provided.
- Electrical source and installations to have residual current devices and inspected as per legislative requirements (minimum every 3 months).
- If necessary, local lighting should be provided at individual workstations and at places of particular risk. Light fittings should not create any hazard.
- Appropriate control measures are to be taken when crew are carrying alcohol and acetone to and from and when on set, taking account of conditions on set.
- Appropriate means to be provided for bringing makeup to and from set areas and makeup crew should be provided with necessary facilities on set to enable them to work out of the elements, as necessary.
- The makeup area should be kept clean and tidy.

See also Chapter 13, section 13.2: The Building(s) and Working Areas.

Cross infection

Contagious viruses and bacteria can be spread by makeup. High standards of hygiene can reduce the likelihood of cross infection. Some of the virus and bacteria that could be spread through makeup can include:

- **Staphylococcus epidermidis** is a form of staph bacteria that has been found on lipsticks, eyeshadows, and eyeliners.
- **Pseudomonas aeruginosa** is a common bacterium and has been associated with inflammation and rash on the skin. Pseudomonas aeruginosa live on a mascara wand that can nick the eye or penetrate into the soft tissues or membranes of the eye.
- **Methicillin-Resistant Staphylococcus Aureus** (MRSA), can lurk on old makeup and cause an infection. When applying makeup, MRSA present can enter a pimple, open cut or the mucous membranes of the eye and nose.
- **Conjunctivitis is an** infection of the membrane that lines the eyelid and a portion of the eyeball. To reduce the risk of developing conjunctivitis, avoid cross contamination of cosmetics.
- **Herpes Simplex** cold sores are small blister-like lesions which usually appear around the mouth. Caused by the herpes simplex viruses, cold sores are highly contagious, and infection can be easily passed from person to person by close direct contact.
- **Stye**: Usually, styes form as the result of trapped oil, but infection can also cause a stye. The glands can trap bacteria from cosmetic products, leading to inflammation and tenderness.
- **Blepharitis**: Blepharitis/eyelid inflammation/infection of the eyelid can occur as the result of a bacterial infection. It's usually associated with an overgrowth of bacteria that live along the margins of the eyelids and at the base of the eyelashes.
- **Keratitis**: Microbial keratitis/corneal infection occurs when bacteria come in contact with the cornea. This can occur if bacteria contaminate contact lenses. If contact lenses are put into the eye after using makeup, the bacteria in the makeup may contaminate one or both lenses. Non-infectious keratitis can be caused by wearing contact lenses too long or by a foreign body in the eye.

Hygiene Considerations

Good work practices can prevent cross-infection.

- Workshops and all work areas should be kept clean, sanitised, and tidy, all crew will be required to 'clean as you go'.
- Hands should be washed and sanitised properly prior to applying Makeup, before work commences on another actor and again after you finish. Drying your hands is equally as important – damp hands spread germs.
- The cast and background artists should confirm they are not allergic to latex, steel, copper, or any other substance.
- The cast and background artists should have disclosed to production any known medical condition that the make-up artist should be aware of, this could include skin infections, parasitic infection, eczema, watery eye/dry eye syndrome, eye infections, hypersensitive skin, claustrophobia, respiratory condition or other.
- Additional vigilance will be required when a client has a skin, eye, or mouth infection. Only use disposable (single use) makeup applicators that are immediately disposed of after use and don't double dip. The make-up artist must wash their hands and use hand sanitiser after completing the make-up before moving on to another client or touching their own face/skin/hair/mouth and or nose.
- The makeup artist must maintain a high standard of personal hygiene and appearance, with the minimum use of hand/wrist jewellery.
- There should be adequate numbers of clean capes and headbands for all cast and background artists.
- Avoid sharing makeup. Individual sponges, applicators and makeup must be provided for each actor and

transported in zip-lock bags or cast bags.
- Do not share towels. Use clean/freshly washed individual towels or disposable towels
- There must be sufficient new, clean sponges for each actor. Disposable sponges can offer advantages as sponges are difficult to disinfect properly.
- Use disposable sponges and clean/disposable powder puffs for each client. For crowd work, inexpensive larger sponges can be torn into small pieces for each background artist.
- Combs and brushes must be cleaned and disinfected regularly.
- Medical advice should be sought for any skin problem or eye injury, even of a minor nature, and reported to the production office.
- Do not blow on brushes or makeup
- Don't double dip utensils (going from a product to a face/skin, then back in the product).
- Sharpen pencils after use. Once you've used liner, sharpen the pencil before putting the lid back on. This keeps the lid cleaner and also preps the pencil ready for use, so you don't have to fiddle with sharpeners in the middle of a makeup.
- Brushes and pencils should only be moistened with clean tap water, mineral water or transported boiled water.
- Makeup should always be kept clean to prevent cross-contamination and packaging must be kept intact. Sterilise all brushes, containers, and utensils before and after each use.
- If something hasn't been used for a while, it is prudent to give it a quick disinfect and wipe before using.
- Use makeup disinfectant sprays. There are several spray products available that are designed to kill most of the bacteria that may be on makeup. They can be used on all makeup, including creams, powders, pencils, and tools.
- Don't keep makeup beyond its shelf life, pay attention to makeup sell by and use by dates.
- Clean and sterilise anything dropped on the floor.
- Hairpieces such as beards and moustaches may be used by one person only.
- Only ingredients labelled cosmetics from established and reputable manufacturers are to be used.
- The appropriate remover should always be used, in the correct quantity. Cleansing materials to be hygienically disposed of.
- Makeup artists should be the only people responsible for the application and removal of makeup. Actors requesting to remove their own makeup, for whatever reason, should be notified to the production office.
- Cleaning and removal of waste should be carried out as necessary by an effective method. Waste should be stored in suitable receptacles and removed at the end of each working day or more frequently if required.

Scheduling

Adequate attention must be given to the scheduling of makeup calls, especially for special effects, to ensure staff do not have to work excessively long hours.

Consider the time needed to remove makeup, special effects etc, at the end of the day. These scheduling requirements should be highlighted to the production office as early as possible. The HoD will be required to ensure there are sufficient crew available to cover the entire working day, crew are not in a lone worker situation, and scheduled so that each crew member does not work an excessively long working day, which can lead to fatigue and stress.

Working in the Sun

Skin protection agents are essential for cast and background artists required to work in direct sunlight, especially if the role calls for minimal wardrobe or even no hat. The problems of baldness should be considered. Sunscreens with broad spectrum protection (against both UVA and UVB rays) and with sun protection factor (SPF) values of 30 or higher (50) are recommended. No sunscreen, regardless of strength, should be expected to stay effective for a shooting day without regular reapplication. Considerations for reapplication could include time of day, working in or out of direct sunlight, SPF used, skin type/colour, humidity, wind, sweating and contact with water. A risk assessment will assist with determining the SPF to be used, its reapplication and other measures required to protect cast and background artists.

Comfort of Cast in Special Effects Makeup

Special attention should be given to the needs of cast who are required to keep prosthetic or special effects makeup on during tea breaks, meal breaks and for long periods of shooting. Cool rest areas, straws, appropriate diet, and other assistance should be offered.

Use of Contact Lenses and Special Effects Contact Lenses

Under Health and Social Care Professional Act 2005 and subsequent amendments and Optical Registration Board (Regulation and Control of Prescribing and Dispensing of Prescriptions and Sale of Spectacles) Byelaw 2015 only competent persons to fit contact lenses including any device, designed to be worn in contact with the ocular surface.

CORU was set under the Health and Social Care Professionals Act 2005 (as amended) and is the regulating body, their role is to protect the public by promoting high standards of professional conduct, education, training and competence through statutory registration of health and social care professionals.

Competent person: An optometrist or dispensing optician qualified in fitting of contact lenses and registered with the Irish Optician's Board to fit and remove any contact lenses, **where it is not practical for a person to fit themselves.** A dispensing optician not on the contact lenses division of the register shall not conduct the sale of contact lenses or engage in the fitting of contact lenses.

There is significant risk associated with the use, insertion and removal of contact lenses including corneal abrasions resulting from a disruption or loss of cells in the top layer of the cornea.

A clean environment must be provided where the person inserting the lenses can wash his or her hands and maintain good hygiene standards. The eye professional should have been fully consulted in advance, so they can ensure the comfort and safety of persons wearing the contact lenses.

Some links which may be of interest: http://www.irishstatutebook.ie/eli/2005/act/27/enacted/en/pdf
http://www.irishstatutebook.ie/eli/2017/act/32/enacted/en/html
http://www.irishstatutebook.ie/eli/2015/si/455/made/en/pdf
https://coru.ie/files-recognition/standards-of-proficiency-for-dispensing-opticians-contact-lenses-division-.pdf

Manufacture and application of theatrical dental veneers (i.e. fangs etc)

A dentist/dentist technician can prescribe for prosthetic devices and take impressions for the same. This can also be carried out digitally by a competent person.

A clinical technician or an approved dental laboratory can manufacture dental prosthetic devices.

The above competent persons can identify any underlying health issues where the use of prosthetic devices may cause damage. They will ensure that dental instruments are sterilised, will disinfect equipment and carry out other infection prevention and control procedures following national and international standards and best practice.

The scope of practice (in line with the Dentist Act 1985) outlines the following:

1. Dental Technicians
   Dental technicians are dental healthcare professionals who make devices including dentures, crowns, and bridges to the prescription of a dentist or clinical dental technician. Clinical dental technicians may carry out the following duties: 1. fabricate, fit, insert or fix removable denture prostheses and the clinical and laboratory work preparatory work thereto, including the establishment and maintenance of all relevant records.
2. Dentists can prescribe and provide fixed and removable prostheses.
   Dental Council of Ireland scope of practice – Link: http://www.dentalcouncil.ie/files/Scope%20of%20Practice%20-%20Guidance%20(approved)%20-%2020141203.pdf

38 Props – Prop Department

The term 'props' refers to any moveable item that is meant to be visible on film. This huge range of objects include hand props and dressing props (objects central to the action in a scene), stunt props (replica items made of soft materials), and mechanical props. Props also include some weapons and foliage.

The property department works within the art department and is responsible for the manufacture, maintenance, transportation, and storage of props, as well as prepping props for each day's shoot and dressing props into sets. They work with the art department and the construction department to build props, and also work with actors and extras in relation to how they interact with and use props.

The property master, known as the props master, is responsible for all props acquired for and used on a production and the safe return of props to their lawful owner on completion of use. They are also responsible for all connected paperwork connected. Props could be any item, for example a needle or an anchor.

The department is structured with the props master as head of department and the following crew are employed according to the needs of the production:

- dressing prop.
- standby prop.
- stores person.
- trainee prop.
- Run around van prop person.

The prop master determines crewing levels (either on a full-time contract basis or daily basis) with the production designer and UPM/LP/PM, and reviews, as necessary. They are responsible for scheduling and assigning work tasks for their crew, and ensuring time allocated allows them carry out tasks in a safe manner. They agree with production what level of first aid and medical aid will be required throughout each phase of the production.

The props master will be required to liaise with the production designer, the art director, and other members of the art department to achieve the required 'look' of the project. They may have to liaise with the construction department, SFX and stunts coordinator, action vehicle coordinator, animal wrangler and crew from other departments depending on the requirements of the production. The props master will be responsible for the drawing up of dressing and striking plans in conjunction with the above departments.

As head of department (HoD) the props master is responsible for the safety and welfare of their crew. They ensure that all crew have read and understand the production's safety statement. They are responsible for ensuring risk assessments (and method statements if appropriate) are in place for each work area, for example prop room, workshop, 'set' in studio environment, and 'set' at a location, which could be internal or external. They are required to ensure their crew have read and understand all relevant risk assessments and have been instructed on the safe working practices to be followed at each work area.

The prop master must ensure that all machinery, equipment used by their crew is in good condition and fit for purpose, that crew are qualified, competent and licenced and they have received the necessary training to carry out their job safely and in compliance with legislation. The prop master is to maintain certificates of training for their crew.

Recces and tech recces

The prop master to attend recces and tech recces as is necessary and attend the production meeting to discuss any health and safety issues, and measures that will be put in place to mitigate risks on locations and set.

Prop Room

Requirements for the prop room:

- The prop room needs to be of adequate size and have adequate lighting to allow persons to work safely.
- Sufficient stable shelving to facilitate orderly and safe storage of props.
- As the prop room can be similar to a warehouse, there may be need for provision for heating, depending on the time of year.
- Hot and cold running water should be available in the prop room.
- Handwashing/drying facilities to be provided.
- Adequate facilities for the washing of props, dishwasher may be required (for glassware, crockery, cutlery, depending on volumes).
- Safety data sheets to be available for all chemicals used, chemicals to be used by competent persons only.
- Local exhaust ventilation system and spray booth to be provided for prop room if determined necessary by prop master. Storage and use of any hazardous products must be as per safety data sheet.
- Carbon monoxide detectors to be provided where gas is used.

- First Aid kits to be available.
- The principles of lifting to be followed for all manual handling tasks. Mechanical aids, such as sack trolley/ truck, skates and other to be provided for moving heavy large or heavy props.
- Adequate electrical supply including sockets to be provided for requirements, and safely maintained.
- Workshop to have required fire extinguishers for activities of crew within the workshop.
- Tools and machinery to be in good working order and fit for purpose.
- PAT testing to be carried out as per legislative requirements.
- Storage systems used (example racking) to be fit for purpose, secure and in good repair. Racking should be inspected annually from an outside expert and regular inspections from technically competent persons carried out.
- If required, provide an area for storing of valuable items securely.
- If a forklift is required, it must be in good repair, be inspected as per legislative requirements and be operated by competent persons only.

See links for further information: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Information_Sheets/forklift-safety-tips.pdf
https://www.hsa.ie/eng/Publications_and_Forms/Publications/Machinery_and_Work_Equipment/CoP.pdf

Dressing prop

The dressing prop should be competent and familiar with working environments of sets. They will be responsible for ensuring all dressing props on set are stored safely and that a safe working environment is maintained. The dressing prop ensures safe working practices are implemented for use of all hand tools and power tools. They must be qualified and competent in the safe use of machinery (see section 'Safe Use of Machinery' within Chapter 28 – Construction), equipment, tools, and chemicals they use, and be provided with the necessary personal protective equipment/respiratory protective equipment.

General Considerations for Prop Facilities during Filming Phase and on location including Prop trucks:

If facilities are in the form of a truck or similar area, consideration should be given to the following:

- The trailer or truck is levelled and parked safely.
- Safe means of access/egress, with secure steps and handrails if necessary.
- As per risk assessment, appropriate fire extinguishers, (secured in position) smoke detection system and carbon monoxide detection.
- Adequate space to enable crew to work and move safely, have adequate headroom, rail, and bench space
- Adequate and appropriate storage facilities to keep props secure during transit.
- Bottles and containers to be clearly labelled and hazardous or flammable products stored in their original container with original labels. Storage and use of any hazardous products must be as per safety data sheet.
- Aerosols should not be used in small unventilated areas.
- Extraction to be provided if required.
- Windows should be openable to allow for good ventilation and air exchange.
- Electrical source and installations to have residual current devices and be inspected as per legislative requirements (minimum every 3 months).
- Sockets must not be overloaded.
- If necessary, local lighting should be provided. Light fittings should not create any hazard.
- Appropriate means for bringing props to and from set areas.

See also Chapter 13, section 13.2: The Building(s) and Working Areas.

Stand by prop

- The standby prop must be competent and familiar with the hand props required for each character.
- The standby prop must adhere to best practice when dealing with actors in relation to food and drink allergies. Production should advise prop master if any cast or background artists have any known food allergies in advance of the filming day. Link for further information on allergens: https://www.fsai.ie/legislation/food_legislation/food_information_fic/allergens.html#14_allergens
- Cooked food items used to dress sets that are to be eaten should be prepared and handled by a food stylist and must be disposed of (and not consumed by any person) at the end of the shooting sequence. Persons providing food consumed on 'set by cast and background artist as required by script should have a pre-requisite programme and be in compliance with HACCP. Please see section on Catering for further information.
- All food that is to be eaten by cast and background artists must be prepared and treated in a hygienic manner by the food stylist. Good hygiene practices must be followed by any person handling food, for example dressing prop and cast. Risk assessment should be in place for when food items are consumed on set.

The Run Around Van

- The run around van should be road worthy, fit for purpose and in good condition.
- It should be fitted with a serviced tail lift, tie off points, straps, blankets, and sack truck/trolley. Items stored within the van are to be stored securely, safely, and tidily by the driver.
- The van must be insured, taxed, and have a current certificate of road worthiness cert (CRW), proving the vehicle has passed the commercial vehicle roadworthiness testing (CVRT).
- Persons assigned to drive the van should have the required licence category.
- If a person has obtained any penalty points or has ever been disqualified from driving, this should be made known to the prop master and production.

Working with Chemicals

Where chemicals i.e. paint, solvents, adhesives, glues are being used, the props master must ensure the relevant safety data sheets/material data sheets are available for all chemical and hazardous products.

Hazardous substances chemicals must be handled and used by competent persons only. In line with the Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 and 2015, they must have received appropriate training for safe use of chemicals and be provided with the appropriate personal protective equipment/respiratory protective equipment. Where required local exhaust ventilation to be provided.

For further information on working with chemicals please see Chapter 65 within this guide: Working with Chemicals

Weapons used as props - The Prop Master responsibility

NOTE: The property master should coordinate these duties with the weapons expert, armourer, or other assigned to the production.

- Where weapons are used, the prop master and armourer or other specialist should have in place risk assessments for all weapons on set.

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Sound

Risk assessments for all weapons are generated by the relevant HoDs for transportation to and from set and for on-set requirements, including security arrangements. The 1st AD is to be informed of risk assessment and any specific on-set measures required.

- For weapons used as props and under the control of the props master:
  - Designate individuals under the props master's direct supervision to assist them if necessary.
  - Be knowledgeable in the laws governing transportation, storage and use of these props and comply with relevant laws. There is an extensive range of firearms legislation, see the Department of Justice website for listings of Acts, Regulations, Orders and Directives: http://www.justice.ie/en/JELR/Pages/LegislationPublication
  - (See Firearms and Offensive Weapons Act 1990 – / Criminal Justice Act 2006 (Part 5, Section 26), 'Firearms means' - link: http://www.irishstatutebook.ie/eli/2006/act/26/enacted/en/pdf
  - Seek expert advice if they are not familiar with the prop weapons used.
  - Only issue hazardous props to trained/approved/competent persons.
  - Ensure proper storage, possession, control, and distribution of all props on the set that are under the control of the props master.
  - Retain possession of all props except during actual filming or rehearsal. The props master or an individual designated shall collect all such props as soon as they are not immediately required on the set.
  - Check each prop before each use. All props must be checked, and inventory maintained at the close of each day of shooting. All props must be accounted for before personnel are allowed to leave the area. The production company should allow time in its schedule for this procedure.
  - Use simulated or dummy props whenever possible.
  - Ensure action and breakaway props are of safe materials such as sugar glass, balsa wood, rubber etc.

See section: Armourer for use of Arms, weapons, and replicas on set.

The production sound department is responsible for the capturing of sound on set and is responsible for sound recording, the management of noise on location, the placement of microphones (both on actors and on-set), and managing equipment, budget, and interactions with other departments. The department consists of sound mixer, boom operators, and trainees.

Ensuring that the dialogue recorded during film shoots is suitably clear is a complex job; most film sets are challenging for the sound department as there are often unwanted noises to deal with, or the desired camera shots hamper the placing of microphones.

Although it is sometimes easier to re-record dialogue after the shoot (post-syncing), most actors and directors prefer to use the sound captured on set or location. Production sound crews also record atmosphere (without dialogue) or "wild" tracks on set or on location to assist the post-production sound department during the editing process.

The hierarchy and chain of command within the department is as follows:

- Production Sound Mixer
- 1st Assistant Sound
- 2nd Assistant Sound
- Sound Trainees

Sound Department Crew

All members of the production sound crew need a thorough knowledge of acoustics, electronics, microphones, and digital sound recording equipment, precise attention to detail, and excellent communication skills. They usually acquire some basic sound skills training before starting out at junior levels within production sound departments.

Production Sound Mixer

Before principal photography, the department meets with the producer and director to discuss their creative intentions, (is the sound naturalistic or stylised, etc.), technical requirements and budgetary issues. They also meet with the costume department to discuss the placement of microphones on or around the actors.

A representative from sound attends recce/tech recce to check studio/location for potential sound problems and determine logistics.

The production sound mixer is usually positioned off set and records the sound captured by microphones onto an audio recorder.

Roles and Responsibilities of the Production Sound Mixers

- The production sound mixer oversees other crew within the sound department.
- The production sound mixer and 1st assistant sound plan where they should place microphones to obtain the best possible sound quality.
- The sound mixer monitors the quality of sound recording and, if necessary, asks for another take.
- In the same way as directors endeavour to ensure that they have adequate overall coverage of each scene, the production sound mixer works with the assistant sound to select suitable types of microphone (e.g. close-ups or extreme angled shots may require radio microphones that do not appear in frame), and carefully reposition these microphones for each set-up, to ensure adequate sound coverage.
- If music is required in a scene, production sound mixers also set up playback equipment and speakers for the actors.
- At the end of each shooting day, the production sound mixer may send the day's sound recording files to postproduction as well as handing over the meticulously labelled rushes to the DIT, who packages them up with the camera rushes.

Essential knowledge and skills of the Production Sound Mixer

- Production sound mixers must have a good understanding of electronics and an expert knowledge of acoustics, sound recording and playback.
- They must understand the requirements of the other departments including camera, rigging, art department, wardrobe, hair, and makeup etc.
- They should also be aware of, and comply with, on set protocols.

1st Assistant Sound

The 1st Assistant Sound (AS) is the person who runs the floor for the sound department and is usually the first point of contact between the sound department and other departments on set. The 1st AS is generally the main boom operator. Depending on the requirements of the production there could be a requirement for more than one 1st AS.

Some of the tasks of the 1st AS are as follows:

- 1st AS are responsible for positioning various microphones so that the best possible quality sound is captured and ensuring that microphones don't get in

the way of cameras or actors.
- When radio microphones are needed the 1st AS positions them correctly around the set, location or on the actor's costume.
- 1st AS must position microphones correctly to ensure the best quality of dialogue and sound effects are captured.
- They are also responsible for checking sound equipment, ensuring it is in good condition and carrying out necessary repairs. Repairs should not be carried out by anyone who does not have the required knowledge and expertise to carry out the task(s) safely.
- During a setup/blocking (cast rehearsal with director) the 1st AS should be present to determine how the sound department will cover the scene.

2nd Assistant Sound

2nd assistant sound (AS) provides general backup and support to the production sound mixer and the 1st AS. Some of the tasks of the 2nd AS are as follows:

- Working with the 1st AS they help to unload the sound van. They are responsible for checking all equipment, stock, microphones, and batteries and ensuring it's prepared and fully operational. They ensure the sound department runs as smoothly as possible. They assist with checking equipment is in good condition and carry out necessary repairs. Repairs should not be carried out by anyone who does not have the required knowledge and expertise to carry out the task(s) safely.
- They may be required to prepare set areas by laying down carpeting or sound dampening materials in studio or at a location with acoustic issues.
- The 2nd AS and the 1st AS may both swing and operate a second boom in a busy scene or when actors are far apart.
- During rehearsals, the 2nd AS must pay close attention, in case they are required to move positional microphones, or assist the 1st AS to plan for difficult shots.
- When other members of the crew or guests visiting the set use headphones with audio receivers to check for dialogue continuity, it is the 2nd AS's responsibility to ensure that they are in good working order and that their batteries are fully charged. If there is unwanted noise during recording (talking, coughing, traffic, etc.), 2nd AS are required to find the source of the problem and deal with it as quickly and tactfully as possible.
- 2nd AS can also be responsible for wiring cast.
- They help the 1st AS to negotiate cables on the studio floor during recording, and at the end of each shooting day, to ensure that all the sound rushes are correctly packaged and labelled.

Trainees

Sound trainees perform general running duties and learn on the job. They are there to learn and observe all other sound dept roles. Trainees may be permitted to operate the Boom under supervision and for the purposes of training only.

General Considerations

Housekeeping and Trip Hazards

- For the sound dept to achieve clean recordings of dialogue, carpets may have to be placed under cast to eliminate footsteps. Carpets must be secured firmly with non-slip backing and taped/stapled down where necessary for safety.
- Consider the terrain and the action involved when laying carpets i.e. carpets on gravel can create a trip or slip hazard.
- When running cables, keep runs to one route where possible. Use mats or cable traps to avoid trip hazards.
- Keep equipment cases contained to one area. Standby trollies should be used to consolidate equipment.
- Trollies and sound carts should be kept accessible and clear at all times.
- The sound station should be set up in such a way as to maintain walkways and escape routes.
- Collaboration between the video village and the sound team should be used to keep cable runs as short and neat as possible.

Personal Protective Clothing

Protective clothing falls into two categories. Firstly, that which belongs to the individual and is carried by all crew. Secondly, specialist safety requirements which meet specific shooting situations and are usually addressed by production. Expert guidance is usually given in these circumstances.

- Sound dept crew should dress for weather and terrain relevant to the days shooting requirements. Back up weather protection may be required on days where there is inclement weather. Appropriate footwear should be worn (no open toed shoes).
- The production and/or specialized HoD may be required to supply additional protective equipment for non-standard shooting circumstances for example life jackets for on-water work, fire protection suits, waders for water, dust masks, safety goggles, hearing protection or others to ensure sound dept crew are protected from specific hazards.
- Sound department crew should wear and use PPE when requested to do so for their own safety.
- Crew are to be aware of good hand hygiene, hands should be washed regularly, hand sanitizers should be available.
- Gloves should be worn when handling cables, carpets and other items that have been on the ground.
- Crew members susceptible or sensitive to insect bites should keep a supply of insect repellent available. When filming in long grass or other areas where ticks may be present, appropriate clothing (long socks, trousers) should be worn due to Lyme Disease. Any insect bites to be reported to the medic or production as soon as possible.
- Crew should ensure they have adequate protection from the sun when filming outdoors (sunscreen, appropriate hat/clothing).

See also Chapter 4, section 4.1 regarding PPE.

Sound department Equipment on Set

- The boom operator should advise all persons within close vicinity of the boom to allow ample space to raise and lower the boom safely.
- The boom and microphone can be heavy and have the potential to cause personal injury to persons if hit accidentally.
- All crew members should be aware of the boom at all times during and after takes, giving the boom operator sufficient space to manoeuvre the boom safely and to rest the boom between takes.
- On walking/tracking shots where the camera is leading actors through crowd scenes, the boom operator can be the first crew member working on the shot to pass through the crowd. Background artists and cast should be advised of the range of the boom and ensure sufficient clear space is maintained allowing the operator carrying the boom to pass unimpeded to avoid injury.
- While preparing for or during a shot, the boom operators focus will be on the action in front of them so other crew/cast/background artists must not stand directly behind or near the boom operator as they may be required to move the boom backwards and forwards quickly to follow the action.

- Persons engaged in manual handling tasks should have received manual handling training. Risk assessments for tasks should be developed by the relevant HoD/production.
- Persons operating a boom need to be aware of the ergonomic risk factors of operating a boom. Boom operating can exert a lot of pressure on the back, shoulders, arms, and wrists.
- Boom operators should be aware of their posture, as they can be required to operate the boom for numerous hours throughout the working day.
- When possible, boom operators should know the set-up of scenes in advance so they can plan their positioning to reduce the need for twisting or overextending.
- Where possible, operators should balance their weight evenly on their feet and try to maintain good posture, maintaining the natural curve of the spine, have good physical fitness, in particular their upper body. The boom operator should hold the boom close to their body (centre of gravity where possible) and avoid unnecessary bending, twisting, and reaching. Avoid a static posture, to incorporate micromovements and use fluid movements.
- As the majority of a boom operators shots are handheld, and because of the trend towards takes of increasing length afforded by digital camera technology, there must be clear communication and agreement between the boom operator, the DoP and director regarding reasonable length of takes when boom operator is required to hold the boom in the H position (overhead) or others than can lead to reduced circulation, fatigue, or discomfort.
- Ensure equipment is fit for purpose. Consider the length and weight of the boom (for example carbon is lighter than aluminium) and microphone for each shot.
- Use lifting devices and supports, stands (example C Stand), a Fischer boom or others where possible.
- Consideration to be given to footwear and other clothing worn to ensure maximum comfort.
- If a boom operator experiences ongoing back, upper body, or other discomfort due to their work they should seek medical advice before the onset of chronic back pain and musculoskeletal disorders. The boom operator should inform their production sound mixer/1st AS and UPM/LP/PM.
- The production sound mixer and production company should take into account the ergonomic risk factors of boom operators and determine what measures can be implemented to reduce risk of occupational injury or illness.
- Special care to be taken when operating boom poles around horses/animals. Sound Department to liaise with the animal wrangler/horse handler, re boom pole operating in the vicinity of animals/horses.
- Boom poles should be operated by the 1st AS or 2nd AS only. Trainees may be permitted to operate the boom under supervision and for the purposes of training only.
- Radio mics must be muted at all times when not shooting to protect from invasion of privacy.
- Carpets or other sound dampening materials should be kept clean and dry where possible.

Work at Height

- Part 4 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 relates to Work at Height. As per the regulations they apply to all work at height where there is a risk of a fall liable to cause personal injury. Examples of activities covered include using a kick stool, ladder, or stepladder. Using a mobile elevating work platform, trestles, rigging, using harnesses, erecting, or working on a scaffold are all working at a height. See Chapter 4 - Section 4.7: Working at Heights, and Chapter 28: Construction. Ref Guidance to the above regulations. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Work_at_Height.pdf#targetText=Regulation%2096%3A%20Checking%20of%20places%20of%20work%20at%20height&targetText=An%20employer%20shall%20ensure%20that,at%20appropriate%20intervals%20during%20use.
- Sometimes it may be necessary for a boom operator to operate a boom from a height.
- Crew should be aware of the safe systems of work when working at height and they should understand the principles of fall prevention.
- For any height where there is a risk of a fall causing personal injury then preventative measures should be taken.
- Ladders are not considered a suitable means for operating a boom at height.
- Ladders should be used for a short duration only (under 30 mins) and where a risk assessment shows the use of other work equipment is not justified or practical.
- You must never straddle a stepladder or frame ladder. On a ladder do not use the top three rungs, on a stepladder do not use the top two steps unless an appropriate handrail is fitted.
- Safety should not be compromised by haste to complete the job.
- Refer to manufacturer's instructions and risk assessment before any set up of a ladder.
- Every time you use a ladder you must comply with the Work at Height Regulations and you must carry out a risk assessment.
- Working on a platform: The work at height regulations define a working platform as any platform used as a place of work, including any scaffold, suspended scaffold, cradle, mobile platform, trestle, gangway, gantry and stairway that is so used.
- For further information on the use of a Ladder please see HSA information sheet. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Using_Ladders_Safely_-_Information_Sheet.pdf
- For further information on safe use of work platforms and trestles please see HSA information sheet. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Safe_Use_of_Work_Platform_Trestles_Information_Sheet.pdf
- Where a platform or ladder or other is required a risk assessment should detail why work has to be carried out from a height, reasoning behind choice of equipment, control measures in place and what training operator requires and or has received.
- Where there is a necessity to rig microphones above sets, the assistance of a construction rigger should be engaged. The sound department should liaise with the construction scaffolder/rigger, to advise the rigger of the positioning required, and the microphone put in place by a competent person. The production sound mixer may need to instruct the rigger on some elements of the microphone being rigged (turning on and off, adjustments to be made, when the microphone is in place).

For further information on all work at height, including use of ladders please see sections: Working with Ladders, Construction and Working at Heights, for all Work Involving Heights.

Transportation and Moving Around Set

It has become common practice for a separate department and qualified persons to handle the on-set transportation of equipment, especially for difficult terrain. Advance consultation

between the location dept. and sound department can make this a safe and efficient process.

An employer should take appropriate organisational measures, or use the appropriate means, in particular mechanical equipment, to avoid the need for the manual handling of loads by the employer's employees. [This is set out in Regulation 69 of the SHWW (GA Regs) 2007].

If transportation is not supplied, crew levels within the sound department should be sufficient to ensure safe handling. Crew members should not be left alone to move trollies or large pieces of equipment over dangerous terrain.

In the SHWW (GA Regs) 2007 – Regulation 68, manual handling of loads means any transporting or supporting of a load by one or more employees and includes lifting, putting down, pushing, pulling, carrying or moving a load, which, by reason of its characteristics or of unfavourable ergonomic conditions, involves risk, particularly of back injury, to employees.

Use of All-terrain Vehicles (ATV)s and Trailers:

- At times ATVs may be needed to move equipment between the sound truck/ van and set, these should only be operated by qualified personnel.
- Trailers should be of an appropriate standard and come supplied with the necessary straps to secure carts and other wheeled items.
- Trailers should not be overloaded or have too high a centre of gravity.
- Crew must follow the advice of the vehicle operator if traveling with such equipment and
- always make personal safety a priority.
- All equipment on carts should be secured for transportation prior to loading on trailers.
- Where possible, locations should consult with the sound crew in advance regarding difficult
- terrain for moving equipment.
- Persons engaged in manual handling tasks should have received manual handling training, risk assessments for tasks are developed by the relevant HoD/production.

As regards work equipment, an employer must ensure that work equipment with ride-on employees is fitted out in such a way as to reduce the risks for employees during the journey, including risk of contact with or trapping by wheels or tracks. It is also necessary to ensure that the risks from wheels and tracks when the equipment is travelling are controlled by the design of the machine. [Note that the above requirements are set out in Regulation 35 (Chapter 2 of Part 2) of the Safety, Health and Welfare at Work (General Application) Regulations 2007].

Electrical Requirements

- The sound dept liaises with the electrical department to ensure that the electrical supply is appropriate and sufficient for the sound department requirements.
- All electrical equipment should be PAT tested and to have a visual PAT test sticker attached.
- Only authorized electrical connections should be connected to generators and connections made by qualified, competent electricians.
- Sound equipment must be on the same source as video assist or anyone else who may be connected by cable to the sound dept.

Please also reference Chapter 31: Electrical for further information.

Batteries

Batteries should be stored safely and disposed of as per the production company's environmental policy. Storage as per manufacturer's instructions, including taking into account temperature, humidity, and other requirements.
To the extent necessary, consider application of Regulation 84 of the SHWW (GA) Regs 2007 - Auxiliary generator and battery supply, depending on generators and/or battery supply.

Working with Children

- Garda vetting provides a statutory basis for the vetting of persons carrying out relevant work with children or vulnerable persons. Crew working with children must be Garda vetted.
- Sound department crew who will be required to work with children, fitting microphones on children, must be familiar with the section in this document Working with Children in Film and TV.

Filming in Action Vehicles

- The sound dept should liaise with the action vehicle coordinator and grip as necessary, re fitting of microphone rigs.
- If seat belts are fitted in a vehicle, they must be worn by both drivers and passengers. Persons must not travel in the boot of a vehicle. For further information see section 'Filming on Public Roads, Action Vehicles and Low Loaders' section in this guide.

Sound Truck and Sound Room

The sound truck can be subjected to constant movement over different terrain and conditions while transporting equipment between locations. This can give rise to potential safety issues. Careful planning will be required to ensure the safety of the truck and its contents is not compromised.

- Drivers must have a driving licence suitable for the class of vehicle being driven.
- Sound truck must be fit for purpose and fitted with shelving.
- Access steps and tailgate should be kept clean and safe at all times.
- Shelves and work benches should be suitable for the weight and size of the equipment stored and transported, be properly constructed, and secured to the body of the truck.
- All shelves have proper restraints to ensure items cannot fall from them. Heavy items should not be stored on upper shelves.
- Provision will be required to ensure carts and other wheeled items can be safely restrained, so they cannot move during transportation.
- Electrical power supplies to the sound truck should be appropriate and adequate for the load required. Power supply and connections to the truck to be made by and approved by an electrician. Sockets must never be overloaded.
- Tailgate operators should make visual checks and verbal announcements before and during operation.
- Trucks should be parked on level and appropriate ground with sufficient working space for loading and unloading.
- Compressed gas containers and solvent sprays should be properly marked and stored so they cannot fall.
- Only suitable radiant heaters should be used on the truck.
- The truck workspace should be properly maintained, free of slip and trip hazards.
- Persons are not permitted to travel inside the truck when moving.
- As crew members may need to work for prolonged periods on the truck, so proper ventilation and good air quality as well as moisture and damp issues should be considered. The truck and tailgate area are strictly no smoking zones.
- Sound trucks are to be equipped with appropriate lighting and have sufficient

backup lighting should the power supply be disconnected. Tailgate area should also have good lighting.
- Electrical appliances including heaters, kettles and coffee machines are to be unplugged when not in use.
- Appropriate and serviced fire extinguishers should be available on sound trucks.

Scheduling

Scheduling requirements for sound department crew should take into account the number of areas and persons requiring microphones, the terrain and any location difficulties to ensure crew do not have to work excessively long hours which can lead to fatigue or stress. Enough crew should be engaged to safely meet the requirements of the task and cover the entire working day. If there are any concerns regarding crewing they should be brought to the attention of a superior (HoD) and highlighted to the production office (UPM/LP/PM) as early as possible, if necessary.

Further reading

HSA Physical Agent/Noise. Link: https://www.hsa.ie/eng/Topics/Physical_Agents/Noise/

HSA Guidance SHWW (GA) Regs 2007 Chapter 1 of Part 5: Control of Noise at Work Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Control_of_Noise.pdf

HSA Noise FAQ's Link: https://www.hsa.ie/eng/Topics/Physical_Agents/Noise/Noise_-_Frequently_Asked_Questions/

HSA Managing Ergonomic Risk in the Workplace to Improve Musculoskeletal Health. Link: https://www.hsa.ie/eng/publications_and_forms/publications/manual_handling_and_musculoskeletal_disorders/managing_ergonomic_risk_in_the_workplace_to_improve_musculoskeletal_health.pdf

HSA Ergonomics Good Practice. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Manual_Handling_and_Musculoskeletal_Disorders/Ergonomics_Good_Practice.pdf

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Stunts

The stunts department is responsible for any stunts, including action, fighting, or driving stunts. They devise, set-up and perform complex action set pieces in collaboration with the director, and often collaborate closely with the special effects team. The department includes the stunt coordinator, stunt performer, and stunt riggers. Stunt performers often progress to stunt coordinator.

The stunt coordinator is the head of the stunt department. They work alongside the producer, director and writer facilitating action and stunt sequences as required for the production. The stunt coordinator will provide a stunt breakdown and a relevant budget for each script.

The stunt coordinator applies due care and diligence in preparing and overseeing each action that incorporates a stunt sequence. This involves implementing appropriate preparation, risk assessments and control and safety measures for every sequence that involves a stunt.

It is the sole responsibility of the stunt coordinator to provide risk assessments and method statements as applicable for the stunt action, providing details of potential risks and the control measures being taken by production and the stunt dept to reduce risks.

The stunt coordinator will be required to liaise with different department HoDs, examples could include the costume department to ensure costume accommodates safety elements as per stunt coordinators requirements (i.e.: for fire/water/PPE). The stunt coordinator will also be required to liaise with props, model making, makeup and prosthetics department depending on scene requirements.

The stunt coordinator will collaborate directly with production in identifying what constitutes a stunt and agreeing on the best approach to achieving the required shots, relative to budget and available time. It is the stunt coordinator's duty to maintain the appropriate level of safety and risk management throughout.

Stunt crew: the stunt coordinator will be responsible for deciding on the minimum number of personnel required to execute a stunt action or rehearsal. They hire their own team and verify that each employee possesses the prerequisite skills, qualifications, and experience to perform the duties that are required. The stunt dept may include the stunt coordinator, assistant coordinator, safety supervisors, stunt riggers, stunt water safety (including commercial divers) stunt performers, and utility stunts.

The stunt coordinator is responsible for assessing cast and stunt performers for suitability for engagement in action sequences. This is required prior to rehearsal. They have final say as to the suitability of cast and stunt performers engaging in stunts and action.

The chain of command on set is that the stunt coordinator, stunt rigger and 1st AD has final say and that any changes must be agreed and approved by the stunt coordinator, no matter how small or insignificant the change may seem in the scene or action.The hierarchy and chain of command within the department is as follows:

- Stunt Coordinator/Safety Supervisor
- Assistant Stunt Coordinator
- Head Stunt Rigger/Dive Manager
- Stunt Rigger/Stunt Safety/Stunt Water Safety
- Stunt Performer
- Utility Stunts/Wrangler

Medical Cover

The UPM/PM/LP/producer and stunt coordinator are to determine what level of cover, including the number of persons providing cover, is required for stunt rehearsals and shoots. Medics must and have the appropriate insurance cover.

What Qualifies a Stunt Coordinator?

In line with UK's British Stunt Register and the USA's SAG-AFTRA standards and best practice, for a stunt performer to present themselves as a stunt coordinator, they must first hold a minimum of 6 official qualifications – Ref: British Stunt Register:http://www.thebritishstuntregister.com/wp-content/uploads/2019/04/BSR-Upgrade-Criteria-annotated-re-review.pdf).

A person wishing to become a stunt coordinator must have a minimum of 500 stunt contracted working days (ref: SAG–AFTRA): https://www.sagaftra.org/files/sa_documents/Stunt_Coordinator_EligibilityProcess_0.pdf).

The above is looking outside of Ireland for best practice benchmark. Note: For stunt performers that are not part of a union or recognised organisation, it should be outlined by what means proof of competency should be determined by a production.

Stunt Performer

It is the stunt performer's responsibility to be adequately trained and experienced in the skills required to perform action. The stunt coordinator can ask for relevant

Discipline	Web Address
Irish Martial Arts Commission	http://www.imac.ie
Karate Ireland – ONAKAI	http://www.onakai.ie
Irish Judo Association	https://irishjudoassociation.ie
Taekwondo Ireland	https://taekwondoireland.ie
Fencing Ireland	https://irishfencing.net
Irish Amateur Boxing Association	http://www.iaba.ie

Figure 5
Table of Sporting Bodies

certification and video evidence of such before employing a performer. A certificate alone is not proof of ability. Video should demonstrate the skill(s) required, the video should not be edited to enhance skills and should not have a music soundtrack.

Probationary members of a stunt organisation may only work under the supervision of a suitably qualified and competent stunt coordinator, and in activities agreed with the stunt coordinator. Not all stunt performers are members of an association.

For stunt performers engaged by a production directly or through an agent, the production company should determine competency based on the portfolio: CV, record of previous work, qualification, logbook, and video footage of stunts carried out.

Qualifications as per stunt organisation's criteria

Please see British Stunt Register criteria (May 2019), which would/could be considered "best practice". Link: http://www.thebritishstuntregister.com/wp-content/uploads/2019/06/BSR-Application-Requirements-MAY-2019-Appendices-A-and-B-included.pdf

Note the criteria for the BSR are subject to change. The BSR can be considered the "best practice/benchmark".

Logbook

Probationary stunt performers in the UK, Stunt Register UK, are required to maintain a logbook in order to record their experience and knowledge. The information in this logbook is used as evidence during the application process when applying for an upgrade in membership.

It is recommended that stunt performers of all levels, stunt coordinators and stunt riggers maintain a logbook and a video log of their work.

Hold Harmless

In Ireland, UK and US stunt coordinators shall be held harmless by being covered under the producer's general liability insurance policy. (see page 17-18 of SAG-AFTRA document on Stunt Safety – https://www.sagaftra.org/files/stunt_safety_digest_2014.pdf.

This includes a producer holding a stunt performer or stunt coordinator harmless from and against all liability, loss, damages and costs, including counsel fees, which the stunt performer or stunt coordinator may, for any cause, at any time, sustain while under the direction and control of the producer.

Stunt Schools

Where people attain qualifications and certificates of competency from a stunt school, the qualification would only be recognised if the stunt school is a business that is overseen by competent stunt coordinators and the stunt school operates under the following criteria, including, but not limited to:

The Business:

- The business has appropriate insurance, public liability, employer liability and professional indemnity.
- The company has a safety statement.
- The school has a vetting policy in place and all Instructors and coaches have been Garda vetted, if children or vulnerable persons can attend classes.

Instructors/Coach Tutors

- All stunt classes are delivered by qualified coach tutors that hold national coaching qualification with the relevant national governing body for skills being taught and for the level being taught.
- Certification for training for learners is provided through a national governing body and Sports Ireland.
- All courses have documented syllabus, modules and assessment criteria and grading structures.

Martial Arts/Fighting

- Martial arts are just some of the training courses that may be available through stunts schools. Coach tutors need to be qualified for each discipline they coach.
- For persons to be stunt performers, a discipline should include martial arts/fighting. To obtain a qualification with an NGB under a qualified coach in this sporting discipline is evidence that a performer has attained a recognised standard. Stunt performers can engage in additional training through stunt schools to develop their skills.

For further information on some of the NGBs and coaching for martial arts disciplines, please see links below:
See figure 6

Precision Driving

- Where courses in precision driving are available through a stunt school, the training should be delivered by instructors that are on the Motorsport Ireland and Coaching Ireland Registers.
- Certificates awarded to attendees are to be issued through Motorsport Ireland and Sport Ireland.

Note: Attending a stunt school can provide additional training and development of skills for stunt performers. Where persons have attended training and/or attained qualification at a stunt school, and do not obtain qualification for skills through an NGB or Sport Ireland, or other recognised training association these qualifications may not be recognised.

Rehearsal and Rehearsal Space

- Adequate time must be provided within the schedule to allow actors and stunt performers to rehearse action and stunt sequences to help minimise the potential for accidents and reduce risk.
- Rehearsal space needs to have appropriate access, adequate light, heat, and ventilation to facilitate a safe working environment, free from excessive dust, reducing the risk of injury.
- Rehearsal space needs to have the appropriate dimensions (including height clearance) required for the relevant sequence, be it fight choreography, car sequences, preparation for stunt sequences, rigging implementation etc.
- Rehearsal space requires access to toilet and changing facilities for actors and stunt performers.
- The premises should have provision for fire detection and fire extinguishers. Clear routes to emergency exits to be maintained at all times.
- When prop 'weapons' are required, appropriate time must be provided to allow the stunt team to familiarise themselves with them.
- Any prop 'weapon' will be checked prior to rehearsals by the stunt coordinator or a person designated by the stunt coordinator to ensure that they are safe to use.

On Set

- The stunt coordinator advises and determines with the 1st AD the space and access required for stunt rehearsal and set areas where stunts take place so that potential conflicts and risks can be mitigated that would give rise to subsequent risk.
- The stunt coordinator requires appropriate time scheduling for the stunt team to perform adequate preparation, implementation, safety checks on all action and stunt sequences on set.
- As appropriate, actors will require individual rehearsal with the stunt team on set to familiarise themselves with the choreography in the working environment.
- Any and all changes to the set, environment or location (for example dealing with animals, working in different weather conditions, and taking into account any mechanical element – vehicles, machinery or equipment), that could potentially affect the action and stunt sequence needs to be signed off by the stunt coordinator and production.
- Equipment belonging to the stunt department, however innocuous it may seem, should not be tampered with, moved, or removed without prior authorisation from the stunt coordinator. Safety and warning signage and designation may be implemented where appropriate. Where equipment has been left unattended for any period of time, it must be checked visually prior to use.
- Dynamic risk assessments are to be used when changes to action happens on the day. These are to be written in advance of continuing action detailing the changes and how they will affect the action. This includes what measures have been put in place to minimise any risks to cast, crew, stunt performers or any person who could be affected.
- After a change in action and a dynamic risk assessment is in effect, all decisions on safety and how the action is to be carried out will be the decision of the stunt coordinator and production. The stunt coordinator in conjunction with the 1st AD will have the final say as to whether or not the action will take place.

Pads, Protective Equipment and Work at Height Equipment

- All equipment used for stunt actions should be employed at the discretion of the stunt coordinator. Within the dept there should be a nominated equipment wrangler or dept member whose responsibility it is to inspect and check all equipment.
- Any props/structures/FX/natural occurrences (i.e., rocks, trees, weapons, explosives, breakaways etc) must be provided for and/or tested with the relevant department(s) before any action is shot or rehearsed.
- While rehearsing and filming, actors will be offered protective pads appropriate to the action.
- Stunt performers are required to provide their own appropriate personal protective equipment (PPE), such as knee pads, elbow pads, safety harness, helmet etc, for rehearsal/shoot days.
- All persons using work at height equipment should be competent and qualified in the safe use and inspection of work at height equipment, including safety harness and fall protection equipment.
- PPE such as knee pads, elbow pads, safety harness, helmet required by actors for rehearsal shoot days shall be provided by the stunt coordinator.
- Equipment that is required for a particular action or stunt sequence that is not deemed to be personal protective equipment shall be provided by the stunt coordinator.
- Due diligence is required by the stunt coordinator with regard to the preparation and implementation of any relevant equipment being utilised.
- All equipment and PPE including harnesses are to be inspected as per statutory requirements. A stunt coordinator shall assign a designated competent and qualified person to ensure that all equipment and PPE including work at height equipment is inspected daily and has thorough inspections carried as per statutory requirements.
- Where there may be a requirement to modify any scaffold structure for the purpose of facilitating access/egress or to enable stunt action, the stunt rigger shall do this as agreed with the scaffolder or advanced scaffolder. Responsibilities should be clearly defined prior to any modification.
- (Please also refer to Chapters 28 - 'Construction' for further information regarding Working at Height).

Vehicle's being used during stunt sequences

- Vehicles being used must be fit for purpose and in good mechanical working order.
- Vehicles used on roads must be roadworthy, have appropriate NCT/ DOE, and insurance.
- All adjustments required on vehicles should be carried out as per stunt coordinator's requirements by action vehicles provider prior to each action. The stunt coordinator and stunt drivers should check vehicles are fit for purpose with vehicular safety at the forefront of any modifications and safety factors tested and certified before any rehearsal or action.
- An open communication system must be in place between the 1st AD, the stunt coordinator, stunt safety, grip, lock off crew and drivers before any action or rehearsal.
- Stunt doubles must be used when attaching a camera to (or in) the car in the event of the car driving independently of a frame or equivalent.
- Production and stunt coordinator must be familiar with and comply with the road traffic act legislation, the Metropolitan Police guidance to filming on the move 2020 revision (or if there is a more recent version available), and UK -HSE safe filming and recording in, from and around vehicles. Note where reference is made to the metropolitan police service (MPS), in Ireland an Garda Síochána are the MPS equivalent.

Please see links below: https://www.met.police.uk/SysSiteAssets/media/downloads/central/advice/filming/guidelines-filming-move-london.pdf http://www.hse.gov.uk/pubns/etis22.pdf

- Where there is a requirement for a temporary road closure, the application should be made by production through the relevant city/county council. A traffic management plan will be required for filming on public roads.
- Reference section on 'Filming on Public Roads, Action Vehicles and Low Loaders' for further information.

Stunt sequences and Water

- Underwater stunt coordinators and stunt performers (i.e. divers according to the Safety, Health and Welfare at Work (Diving) 2018 Regulations) must hold a recognised, valid commercial diving certificate, and be competent and fit to do so (as per above the regulations and CoP). Their training must be suitable for the depth to which the diving operations are being conducted. Example of commercial diving certificate: Quality & Qualifications Ireland (QQI) Level 6 Certificate in Commercial SCUBA Diving Operations.
- Commercial divers must have a certificate of medical fitness to dive (current 12-month period) and may be required to have their own insurances.
- Note: Professional Association of Diving Instructors (PADI) is a 'recreational' diving membership and diver training organization.
- Where cast or stunt performers are required to carry out action in the water the diving supervisor (stunt coordinator, marine coordinator or other commercial diver) will be responsible for carrying out risk assessments for all activities, including determining medical and emergency cover and arrangements. They also determine the sufficient number of competent and fit persons available (for example supervisor, commercial diver for underwater work and standby person) to carry out, safely and without risk to the health or welfare of such persons the water sequence activity, equipment requirements, divers required for either surface rescue or underwater rescue.
- For a stunt coordinator to maintain responsibility and care for a cast member/stunt performer when in the water (where the stunt coordinator has been assigned responsibility for that person and the stunt activity) there may be a requirement for a member of the stunt team (commercial diving certificate holder) to be in the water with the member of cast or stunt performer.

Surface Water Safety

All surface stunt water safety crew must hold at minimum a Dive Master/Beach lifeguard or equivalent qualification and are answerable to the stunt coordinator.

Diving for Work

The Safety, Health and Welfare at Work (Diving) Regulations 2018 and 2019 (S.I. No. 254 of 2018 as amended by S.I. No. 180 of 2019) came into force on 1st May 2019. These regulations are made under and enforced under the Safety, Health and Welfare at Work Act 2005 .

The regulations apply to any diving project in which a person who dives is at work. They apply to all places of work and work activities where diving projects are carried out and to which the 2005 act applies.

Diving Codes of Practice

There are two CoPs for Diving:

1. Inland Diving and Inshore Diving and
2. Offshore Diving. The majority of diving at work in Ireland tends to fall under the Code of Practice for Inland Diving and Inshore Diving.

Code of Practice for Inland Diving and Inshore Diving Link: https://www.hsa.ie/eng/publications_and_forms/publications/codes_of_practice/code_of_practice_for_inland_diving_and_inshore_diving.html

Code of Practice for Offshore Diving Link:https://www.hsa.ie/eng/publications_and_forms/publications/docks_and_ports/code_of_practice_for_offshore_diving.pdf
For further information on water activities and tank work please see section Marine Coordinator.

Stunt Rig Element for Stunts

- The requirements for the stunt should be determined by the competent stunt coordinator.
- A risk assessment determines what will be required for the stunt and if a structure shall be required. The stunt coordinator determines the elements required for any rig including structural requirements.
- Where a structure requires specific competencies and qualifications, for example CSCS qualification in order to be compliant with legislation, the structure design and build should be carried out by a competent and qualified person.
- For stunts involving a structure that requires specific competencies, for example Construction Skills Certifications Scheme (CSCS) qualifications, the build and putting in place of the structure should be carried out by a competent and qualification person with the required CSCS card. Please refer to sections Construction, Working at Heights, Work at Height Rescue, Working with Ladders, Scaffolders and Riggers, Mobile Elevated Working Platforms (MEWP) for further information. Also ref HSA for further information on what tasks require CSCS registration cards : https://www.hsa.ie/eng/Your_Industry/Construction/Training_in_Construction/Construction_Skills_Certification_Scheme_CSCS/Construction_Skills_Certification_Scheme_CSCS_FAQs.html
- Stunt Rigging: There is no national governing body in Ireland or in the world providing training and certification/accreditation for stunt riggers (use of wire work or other), putting in place or for the safe use of equipment or other that may specifically be required for the stunt further to above works being carried out by CSCS card holder.
- Stunt riggers operate under the stunt dept, answerable to the head stunt rigger, who in turn is answerable to the stunt coordinator. Consultation with other relevant departments (construction, SFX etc) should occur if the structure required for the stunt is an existing structure that needs to be altered to facilitate any action, or if there is a requirement to build a structure requiring specific competencies.
- For a stunt rig, the competent and qualified head stunt rigger carries out specific rigging for the stunt, after any scaffold, tower and platform required has been put in place and inspected and certified by a competent person. Where there is a requirement for above works for stunt action, the head stunt rigger would be required to consult with the advanced scaffolder/rigger to determine specifications of the structure required for stunt action. They then design, build, and sign off on the structure. Any modifications to the structure should be carried out and signed off by a competent person - a CSCS card holder.
- Stunt rigging applies to the carriage and facilitation of live, dynamic loads within an action, not to be confused with static loads as per other depts.
- Personal rigging/work at height equipment should be up to date, comply with current standards and legislation, and be inspected by a competent qualified person to ensure its fit for purpose and in good condition

before each use.
- Stunt riggers should be able to provide proof of competency. They should be able to prove competency by industry recognised stunt rigging qualification (for example use of ropes, wirework, pulley systems) and proven on-set experience, with references from the relevant coordinator, logbook and video evidence of their stunt element rigging skills.
- Stunt rigging qualifications, for the 'stunt rig' element of a structure:
  - There is no National Governing Body in Ireland providing training or accreditation for stunt riggers.
  - Training is available in other jurisdictions for stunt coordinators for stunt rig/wire work.

Level 1 - examples

https://www.ap8actionpact.com/level-1-stunt-rigging
https://www.ap8actionpact.com/level-1-stunt-rigging
https://stuntrigging.org/level-1-stunt-rigging-berlin-2019/

Level 2 - example

https://stuntrigging.org/level-2-stunt-rigging-berlin-2019/
Note: Each of the above courses is typically five days in duration.
The above courses are not recognised by any Irish national governing body.

Fire safety preparations, extinguishers, rehearsals, and tests

- The stunt coordinator should liaise with and determine requirements with SFX coordinator and others as required.
- All flame protection and flammable gel requirements to be determined by the stunt coordinator and or SFX coordinator as applicable.
- Any tests carried out prior to rehearsal and shooting day should be recorded.
- Risk assessment and method statement (RAMS) outline what fire elements are required, what substances and equipment shall be used, what control measures are in place, and who is responsible for ensuring and monitoring control measures. They outline what fire extinguishers, including type, numbers, maintenance records will be available and if there will be a need for water bowser, fire hydrants or the fire brigade to be on standby.
- Cast, crew, background artists and all persons on set should be briefed about the control measures in place and actions to be taken in event of an emergency.
- All fire marshals, safety personnel and performers that are participating in fire action must be competent and able to demonstrate competence through certification. Performers must provide video evidence and references from stunt coordinators outlining fire action experience.

Horses

It will be at the discretion of the stunt coordinator to employ specialists for stunt horses. Performers should have appropriate competencies. See section above: Qualifications as per stunt organisation's criteria .

Children and young persons under 18 years of age

- Children and young people should not take part in a stunt where there is a significant risk of injury, even if they aren't required to perform any specific actions.
- Doubles/stunt doubles: competent persons over the age of 18 to be engaged where possible.
- If a child or young person is to be engaged in any stunt activity, the stunt coordinator and production must determine and document why it was not practical to engage an adult, stunt performer/double or dummy for the activity.
- If a child or young person is to be engaged in any stunt activity, the production must liaise with the parents or guardians of the child to ensure there is clear communication of activities involved. It is recommended these communications are documented.
- If a child or young person is to be engaged in any stunt activity, proof of competency in the specific area(s) for skills required should be provided and maintained by the stunt coordinator. Video records should be available and maintained as per company GDPR policy. In addition to providing and assessing proof of competency the stunt coordinator will also be required to assess and determine competency. Records of any such assessments and conclusions from assessments should be recorded and be made available to production on request.
- If a child or young person is to be engaged in any stunt activity the stunt coordinator (and other departments/parties as applicable) should provide risk assessment (or RAMS) for all stunt rehearsals and stunt activities for shooting days.
- If a child or young person is to be engaged in any stunt activity the insurance company for the production should be informed.
- For further information on working with children, including Garda vetting, please see Chapter 53 and in particular the section on 'Sensitive Risk Group – Children/Young Persons'.

Qualifications

- In UK 'Best Practice" - A stunt performer is required to have a minimum of six recognised qualifications, as laid out by industry standards, in order to be classified as a full member of the Stunt Register and a professional stunt person*.
  *See links for best practice in the UK: http://www.thebritishstuntregister.com/memberships/
  http://www.thebritishstuntregister.com/wp-content/uploads/2019/06/BSR-Application-Requirements-MAY-2019-Appendices-A-and-B-included.pdf
  Link for grading in Australia: https://www.stuntbookaustralia.com.au/grading-categories-requirements.php.
- At the time of generating this guide in the UK and Australia it is compulsory that all stunt performers require a martial art as one of their six qualifications. This includes probationary members.

In the UK Stunt performers with minimum qualifications can be granted probationary membership.

- The probationary period for stunt performers working in Ireland is to be reviewed every 12 months.
- Probationary stunt performers hired under the supervision of a qualified stunt coordinator shall not be placed in a position of responsibility that may increase the potential risk to cast, crew or themselves.
- To avoid any conflict of interests, all qualifications need to be adjudicated by recognised external bodies.
- In line with UK Stunt Register best practice http://www.thebritishstuntregister.com/faq/ training schemes, workshops and stunt schools that offer short courses (such as falling, working with fire, stunt rigging etc) are valuable when it comes to building experience and expanding one's knowledge, but are not accepted as qualifications or skill sets to be a stunt performer. Refer to the section on stunt schools above for further information. For persons to be stunt performers, qualifications with an NGB (or other recognised training association/body) under a qualified coach in this sporting (or other required) discipline is evidence that a

performer has attained a recognised standard. Stunt performers can engage in additional stunt performer training through stunt schools to develop their skills. It is the responsibility of the stunt coordinator and production company to exercise due diligence when hiring stunt performers. It is also their responsibility to ensure that all qualification certificates are valid.

Reference Links and Further information

Qualification standards in UK: http://www.thebritishstuntregister.com/memberships/

British Stunt Register Upgrade Criteria: http://www.thebritishstuntregister.com/wp-content/uploads/2019/04/BSR-Upgrade-Criteria-annotated-re-review.pdf).

Qualification standards in Australia: https://www.stuntbookaustralia.com.au/grading-categoriesrequirements.php

Qualification standards in New Zealand: https://stuntguildnz.com/sites/default/files/SGNZ-GradingManual-2017-.pdf http://www.thebritishstuntregister.com/faq/

Stunt Guild New Zealand – Health & Safety Document: https://stuntguildnz.com/sites/default/files/guild_files/SGNZ%20COP%204.1.pdf

USA SAG – AFTRA: https://www.sagaftra.org/files/sa_documents/Stunt_Coordinator_EligibilityProcess_0.pdf

CSCS registration cards: https://www.hsa.ie/eng/Your_Industry/Construction/Training_in_Construction/Construction_Skills_Certification_Scheme_CSCS/Construction_Skills_Certification_Scheme_CSCS_FAQs.html

Metropolitan Police Service (MPS) Filming Guidelines: https://www.met.police.uk/SysSiteAssets/media/downloads/central/advice/filming/guidelines-filming-move-london.pdf

Health and Safety Executive Safe filming: http://www.hse.gov.uk/pubns/etis22.pdf

Code of Practice for Inland Diving and Inshore Diving Link: https://www.hsa.ie/eng/publications_and_forms/publications/codes_of_practice/code_of_practice_for_inland_diving_and_inshore_diving.html

Code of Practice for Offshore Diving Link: https://www.hsa.ie/eng/publications_and_forms/publications/docks_and_ports/code_of_practice_for_offshore_diving.pdf

41 Special Effects (SFX)

Special effects refer to the mechanical, whereas visual effects refer to digital post-production. Mechanical effects (also called practical or physical effects) are usually accomplished during the live-action shooting. This includes the use of mechanized props, scenery, scale models, animatronics, pyrotechnics, and atmospheric effects, creating physical wind, rain, fog, snow, clouds, etc. Making a car appear to drive by itself and blowing up a building are examples of mechanical effects. Mechanical effects are often incorporated into the set design and makeup. For example, a set may be built with break-away doors or walls to enhance a fight scene, or prosthetic makeup can be used to make an actor look like a non-human creature.

Where a production requires the use of SFX an SFX coordinator should be consulted by production.

They will collaborate directly with production in identifying what constitutes an SFX and agreeing on the best approach to achieving the required shots, relative to budget and available time. It is the SFX coordinator's duty to maintain the appropriate level of safety and risk management throughout.

The production should ensure that the SFX coordinator and their crew have the necessary competencies including experience on working within the film and TV industry to perform the role on a production. The SFX coordinator is responsible for planning and overseeing all SFX requirements on a production.

They will also determine the number of assistants required for each day of a shoot. This will depend on the number of SFX activities and the number of areas where SFX are to be carried out.

The special effects (SFX) coordinator is the head of the SFX department. They work alongside the producer, director and writer facilitating SFX sequences as required for the production. The SFX coordinator will provide a SFX breakdown, and a relevant budget for each script.

The SFX coordinator should apply due care and diligence in preparing and overseeing each SFX action that incorporates a SFX sequence. This involves implementing appropriate preparation, risk assessments and control and safety measures for every sequence that involves SFX. It is their sole responsibility to provide risk assessments and method statements as applicable (RAMS) for all SFX, providing details of potential risks and the control measures being taken by production and the SFX coordinator to reduce risks.
The SFX coordinator will be required to liaise with different department HoDs. This could include costume department to ensure costume accommodates safety elements as per SFX coordinators requirements (i.e. for fire/water/squibs/PPE). The SFX coordinator may also liaise with stunts, props, model making, makeup and prosthetics departments depending on scene requirements.

Known Medical Conditions

The cast and background artists should have disclosed to production any known medical condition that the SFX Coordinator should be aware of, this could include skin infections, watery eye or dry eye syndrome, eye infections, claustrophobia, respiratory condition or others.

SFX Crew: The SFX coordinator will be responsible for deciding on the minimum number of personnel required to execute SFX during the shoot. They are responsible for hiring their own team and verifying that each employee possesses the prerequisite skills, qualifications, and experience to perform the duties required.

The SFX coordinator determines if cast are suitable to engage in SFX sequences. This is required prior to rehearsal. The SFX coordinator has final say as to the suitability of cast engaging in SFX action. The stunt coordinator determines if stunt performers are suitable to engage in SFX action.

In Ireland there is no formal grading scheme for SFX crew (at the time of generating this section of the guide Sept 2019). BECTU (UK), have a SFX Branch and a grading scheme through the Joint Industry Grading Scheme. It is recommended that a formal grading scheme is introduced in Ireland. Ref. Link: https://www.bectu.org.uk/advice-resources/sfx-grading

The chain of command on set is that the SFX coordinator and 1st AD has final say and that any changes must be agreed and approved by the SFX coordinator, no matter how small or insignificant the change may seem in the scene or action.

The hierarchy and chain of command within the department is as follows:

- SFX Coordinator/Safety Supervisor
- Assistant SFX Coordinator
- SFX Foreman
- SFX Senior Technician
- SFX Technician
- SFX Trainee Technician

Medical Cover

The UPM/PM/LP/producer and SFX coordinator should determine what level of cover, including the number of persons providing cover, is required for SFX rehearsals and shoots. Medics must have appropriate insurance cover. Medics must be pre-hospital emergency care practitioners (i.e. EMT, Paramedic and or Advanced Paramedic) and/or nurses registered with the Nursing and Midwifery Board of Ireland (NMBI), based on risk assessment.

Rehearsal and Rehearsal Space

Adequate preparation time must be provided within the schedule for set up and rehearsal of SFX sequences to help minimise the potential for accidents and reduce risk.

On Set

The SFX coordinator is to advise and determine with the 1st AD the space and access required for SFX rehearsal and set areas where SFX takes place. This is so that potential conflicts and risks can be mitigated and unnecessary delays that would give rise to subsequent risk.

- The SFX coordinator requires appropriate scheduled time for the SFX team to adequately prepare and implement safety checks on any SFX sequences on set.
- As appropriate, actors will require individual rehearsal with the SFX team on set to familiarise themselves with the choreography in the working environment.
- Any and all changes to the set, environment or location (for example dealing with animals, incorporating stunts, working in different weather conditions, and taking into account any mechanical element – vehicles, machinery or equipment) that could potentially affect the action and SFX sequence needs to be signed off by the SFX coordinator and production.
- Equipment belonging to the stunt department, however innocuous it may seem, should not be tampered with, moved, or removed without prior authorisation from the stunt coordinator. Safety and warning signage and designation may be implemented where appropriate. Where equipment has been left unattended for any period of time, it must be checked visually prior to use/action.
- Dynamic risk assessments are to be used when changes to action happen on the day. These are to be written in advance of continuing action, detailing the changes and how they will affect the action. This includes what measures have been put in place to minimise any risks to cast, crew or any person who could be affected by the SFX action.
- After a change in action and a dynamic risk assessment is in effect, all decisions on safety and how the action is to be carried will be the decision of the SFX Coordinator and production. The SFX coordinator in conjunction with the 1st AD will have the final say as to whether or not the action will take place.

Protective Equipment and Work at Height Equipment

- All equipment used for SFX actions should be employed at the discretion of the SFX coordinator.
- Any props/structures/FX/natural occurrences (i.e. rocks, trees, weapons, explosives, breakaways etc) must be provided for and tested with the relevant department(s) before any action is shot or rehearsed.
- While rehearsing and filming, actors will be offered protective equipment appropriate to the SFX action.
- Specific PPE required for cast and background artists due to SFX for rehearsals and on shoot days shall be provided by the production.
- All persons using work at height equipment should be competent and qualified in the safe use and inspection of work at height equipment, including safety harness and fall protection equipment.
- Due diligence is required by the SFX coordinator with regard to the preparation/ implementation of any relevant equipment being utilised.
- All equipment and PPE should be inspected as per statutory requirements. The SFX coordinator shall assign a competent and qualified person to ensure that all equipment and PPE is thoroughly inspected daily as per statutory requirements.
- Rig/Structure for SFX
  - A risk assessment determines what will be required for the SFX activity and if a structure shall be required. The SFX coordinator determines the elements required for any rig including structural requirements.
  - Where a structure requires specific competencies and qualifications, for example CSCS qualification in order to be compliant with legislation, the structure design and build should be carried out by an appropriately competent and qualified person.
  - For SFX requiring a structure that requires specific competencies, for example Construction Skills Certifications Scheme (CSCS) qualifications, the build and putting in place of structure should be carried out by a competent and qualification person with the required CSCS card.
  - Reference section HSA website CSCS registration cards : https://www.hsa.ie/eng/Your_Industry/Construction/Training_in_Construction/Construction_Skills_Certification_Scheme_CSCS/Construction_Skills_Certification_Scheme_CSCS_FAQs.html
  - Reference the following sections for further information on working at height - Construction, Working at Heights, Work at Height Rescue, Working with Ladders, and Mobile Elevated Working Platforms (MEWP'S).
  - Where there may be a requirement to modify any scaffold structure for the purpose of facilitating access/ egress or to enable SFX action, this is to be carried out by a competent person i.e. a scaffolder or advanced scaffolder. Responsibilities should be clearly defined prior to any modification.

Licensing

When working with explosives the SFX coordinator must hold licences for the explosives. Explosives are strictly controlled and a person may not import, store or manufacture explosives without a licence. For example, section 40(9) of the Explosives Act 1875 provides for the granting of an importation licence from the Minister for any explosive, and may include any conditions and restrictions as he sees fit for the protection of the public from danger.

Further information – Link: http://www.justice.ie/en/JELR/General%20Guidance%20Notes-%20Explosive%20Legislation.pdf/Files/General%20Guidance%20Notes-%20Explosive%20Legislation.pdf

Applications are made through the Dept of Justice. Link: http://www.justice.ie Documentation for all explosives and imported explosives is to be maintained by the SFX coordinator. Additional permits may be required from An Garda Siochána when using explosives.

Recce and Tech Recce

The SFX coordinator should attend recces and tech recces to locations/studios where SFX will be required during the shooting phase. This is to determine what SFX can or cannot be used safely for the assigned set area.

Qualifications and Use of Explosives

Formal qualifications should be held where necessary by SFX crew. In all cases, SFX crew should be competent and experienced in the area of work concerned. Unlicensed operators can only work under the supervision of licence holders.

Use of explosives general considerations

- A ban on smoking and naked lights must be enforced in the entire area involved in the special effect, including the related storage areas.
- Chains of communication for the specific effect and situation with emergency services and with crew, must be established and followed.
- Fire brigade clearance must be received for locations where a high fire classification or total fire ban is in place and the effect cancelled or deferred until clearance is received. The fire brigade may have to be present, depending on the nature and size of the effect, its location, and its potential to generate a serious fire hazard.
- The production office should notify the Garda Siochána of an effect occurring and ask that It be entered in the daybook for the information of the following shift. Other local boards, councils and authorities should also be notified.
- Residents, local industry, hospitals, and retirement homes should be given notice of explosions where they are obviously within earshot.
- Irish Aviation Authority clearance, as per Irish Aviation Authority (Standardised Rules of the Air) should be received for locations under or near a flight path.
- As a general rule, no explosive or pyrotechnical effect should occur unless there is a direct line of sight for the SFX coordinator to the site of the effect.
- In studio work, monitors should never be used to control explosive or pyrotechnical sequences.
- The SFX coordinator or other competent person assigned by the SFX coordinator should be the only person in possession of the source of power for firing, for instance the battery pack of the firing box. Whenever possible, there will be an assistant at the site who should familiarise themselves with the relevant legislation prior to commencement [See Part 8 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 for further detail].
- This procedure applies also to the lighting of fires. The person responsible for firing should maintain line of sight to the site of the effect.
- Where electrically fired detonators are in use, all transmitters including mobile phones and walkie-talkies should be switched off.
- Firing circuits should be tested without fail by a firing circuit galvanometer. Testing should only occur on a cleared set.
- Everyone should be clearly notified when a full action take is to occur, and the method of notification should be easily distinguished from a dry-run rehearsal. Rehearsals should occur with the effects at the intended level for the take. Any increase in flame levels should be notified to everyone on site.
- The battery box, key, etc, should always be disconnected following a firing.
- When multiple effects are being fired, the SFX coordinator must have an assistant to observe the nature of the effect and to check the number of effects which are fired.
- After a successful firing, the SFX coordinator should make a full inspection of the explosion area and take the necessary steps to render it safe prior to anyone else entering the site. This should include checking that all components have fired, that all hazardous, burning, or smouldering material is removed and that the site is made safe.
- Following a misfire:
  i. Everyone should be clearly told by the SFX coordinator
  ii. The whole area affected should be cleared
  iii. The battery, key or other device should be disconnected
  iv. All potential causes of failure should be checked before the effect is approached
- Following a misfire and after electrical connections have been checked:
  i. The effect should be observed from a safe distance for signs of hang-fire, smoke etc by the SFX coordinator and left for 15 or 30 minutes in the case of non-electrical devices
  ii. If nothing appears wrong, then it is best to re-site the new charge and delay unmaking the existing one for as long as possible
  iii. If the misfire must be unmade then only the SFX coordinator should do it, exercising the utmost caution and assisted by other department members only if necessary
- Where open flames are used on sets:
  i. It should be under controlled situations
  ii. All stationary open flame fixtures should be firmly secured
  iii. Flammable and combustible materials should be kept at a safe distance from flames and in approved containers where required
  iv. All gas lines related to the use of open flames should be in accordance with applicable building and fire codes
  v. Advance warning should be given to all performers, including stunt performers, or work involving open flames
  vi. Appropriate fire prevention equipment and personnel should be on set when open flames are involved, and the fire authorities advised. This applies to studio or location (See Chapter 13, section 13.3 Fire and Fire Escapes).
- Where breakaways are used:
  i. Safety procedures should reflect the fact that breakaways are designed to collapse and are therefore extremely dangerous
  ii. Only essential personnel should be allowed near breakaways

Safety Guidance Notes

- Safety lines should indicate essential "personnel only" areas
- The breakaway area should also be kept secure when not in use
- The time allowed for pre-production and set up should adequately reflect the complex nature of achieving safe breakaway effects
- Safe materials should be used at all times
- SFX formulations involving chemicals should be manufactured by cosmetic or chemical companies wherever possible and the SFX operative should be familiar with the relevant material safety data sheets. These sheets should be readily accessible on sets for checking purposes.

Rain and Snow

General Guidelines

As water and electricity together are potentially extremely hazardous, all electrical cables should be insulated and kept, wherever possible, off the ground.

- Regulations or official guidance notes concerning the use of residual current devices formulated by authorities such as Commission for Regulation of Utilities (CRU), should be understood and implemented by the Gaffer. https://www.cru.ie/home/about-cru/
- All single phase and three phase outlets, leads, and three pin connections should be kept dry and where possible, submersible cable should be used.
- Fire hoses should be routed so that danger will be minimised if a coupling failure occurs. Major injuries to personnel and damage to property can

result from the force of a whip-lashing fire hose. Safety precautions include tying hoses down and/or routing them around car tyres or other similar objects.
- Fire hoses should be visually inspected for excess wear and tear immediately prior to use.
- Hoses should be bled between takes to ensure they are not loaded and therefore potentially dangerous when left unattended.
- Ramps should be used to cover hoses wherever there is pedestrian and vehicular traffic.
- Only appropriately licensed personnel should draw water from hydrants and standpipes.
- All personnel operating nozzles should be adequately trained in their use.
- Rain-stands and sprinklers should be adequately sand bagged and secured to prevent them toppling over, which is a common hazard.
- The drainage capacity of the area should be assessed and where necessary made adequate to cope with the increased volume of water.
- Where reticulated piping is used on roofs, the structure should be inspected and assessed for its capacity to bear the additional pressure. The roof itself should be made watertight.

Snow

- New products to simulate snow are constantly being introduced. Consequently, when snow effects are being carried out, it is imperative to establish what is being used and whether it has been tested by appropriate scientific and health research.
- Shaved styrene flakes should never be used to create snow effects.
- Materials used for snow effects should be biodegradable and must not have a negative effect on the environment. Products typically used could include foam or salt. Safety data sheets should be available for all products used.
  - Whichever product is used the risk assessment should identify the controls required. The risk Assessment should be site and set specific. Example: Details of RA for salt could include the likelihood of need for first aid due to contact with eyes or other, corrosion on equipment, impact on persons' footwear. If used externally, there is a possible negative effect on the ground even when placed on top of sheeting in event of accidental release due to rain or other.

E

xplosives and Pyrotechnics

Note: Pyrotechnics are special effect props using chemical reactions to create effects such as flames, sparks, flashes, heat, light, and smoke. They are used in a production to visually enhance a scene.

Explosives

- It is a legal requirement in Ireland and in all other EU countries that the chemical constitution of all chemical, liquid, reactive and explosive substances are detailed in the "Manufacturers Materials Data Sheet" which must be available on set, from whichever department is using the substance.
- Explosives are solid, liquid or gas substances which, when ignited or detonated, generate gases at high temperatures with such volume and within such a short space of time that a disruptive effect is produced. The most significant aspect of high explosives is that they impart or transfer their velocity which is many times faster than a rifle bullet, to any object in their path.
- Forms of high explosives and ignitors include bullet hits, detonators, detonating cord, gelignite, and TNT.
- Low explosives of the burning (also known as deflagrating) or propulsive kind, work at lower velocity speeds than high explosives but the more they have to work to burst out of their container of wrapping, the bigger the disruption which will result and therefore the bigger the danger. Gunpowder and flash powder are examples of low explosives.
- Whenever high explosives, including bullet hits, are being used, it is essential that absolutely no changes whatsoever are made to either the action or the circumstances without the prior consultation and the approval of the special effects (SFX) co-ordinator. All such changes must be relayed to everyone concerned whether they are between tests, rehearsals or takes.
- Materials offered for SFX bullet hits should be suitably distressed to minimise the charge required.
- It should be remembered that if a button or other object on an item of wardrobe gets in the way of a body hit, that button could immediately become as effective as a .22 bullet.
- Explosive devices should always be constructed or confined in a way which allows the SFX co-ordinator to know with certainty the direction and nature of the subsequent explosive effect.
- The position where charges are laid and the safe paths to be used must always be clearly pointed out to all personnel, taking account of the fact that smoke or dust may reduce visibility. Careful planning and timing of explosive effects where a number of artists are involved is crucial. The SFX coordinator should take into account any known pre-existing medical condition that cast may have. Relevant pre-existing medical conditions for cast working with or in close proximity to SFX should be disclosed to the SFX coordinator by production.
- To minimise the consequences to an actor or crew member who accidentally leaves the safety path or area during a special effect, it is essential that devices incorporating materials of a soft nature such as debris without shaped edges are made and used. If there is doubt about anyone's position, the sequence should be stopped.
- The SFX coordinator must take up the best possible position for maximum control over timing and safety. There is no substitute for direct line of sight to the effect.
- The safety supervisor must ensure that, unless there is good reason, SFX personnel are not interrupted and the area is clear of nonessential personnel when laying charges or wiring up explosives.
- The choice of situating an explosive effect on location is critical and should include an allowance for wind direction at all times.
- Wind direction becomes an overriding consideration where fireballs, inflammable liquids or powders are being used. If the wind changes after a fireball or similar effect has been sited, then the effect must be cancelled or delayed without regard to the schedule or other production exigencies. The right of the SFX coordinator to halt shooting remains a standing rule.
- The nature and quantity of any dust in an area where effects will occur must be calculated. Dust of even low flammability can combine with an explosion to create fireballs of various sizes and further violent explosions.
- Squibs for explosives should be lead free (low lead content as permissible) and of the required CE standard. The CE marking is an administrative marking that indicates conformity with health, safety, and environmental protection standards for products sold within the European Economic Area. The CE marking is also found on products sold outside the EEA that have been manufactured to EEA standards. Note that CE marking is not a guarantee of quality but an indication by the manufacturer that the product complies with all relevant Directives.

High Explosives Special Considerations

Note: High explosives are explosives that detonate with extreme speed. Low explosives have a lower burn rate than high explosives. Examples of high explosives could include Semtex or Dynamite. Examples of low explosives could include black powder, or smokeless gunpowder.

- Detonators must always be carried in a separate, authorised container. They should never be carried or transported in the same containers as high or low explosives. This is because while it is generally true that for ordinary handling purposes, commercial high explosives are not especially sensitive to shock nor normally initiated by flame, detonators and other low explosives are extremely sensitive to shock and can be initiated by flame. They should be separated by a substantial physical barrier and at correct distances from each other according to the class of explosive involved. Detonators themselves should always be carried in a substantial wooden box and never in a plastic bag or box.
- The safe situation and direction of an explosion are of utmost importance to avoid injury and damage from particles or objects travelling at high velocity over considerable distances. Even small quantities of high explosives, whether above ground or underground, used to simulate large explosions, are capable of projecting fragments or larger objects at dangerous velocities for very considerable distances. Thorough planning and careful positioning can minimise the hazard, but the area must be cleared of all nonessential personnel and those who remain must be properly instructed and protected.
- The use of steel mortar pots could be utilised for ground hits to minimise contamination from loose stones or pebbles, and to direct the blast to a safe area.
- Warning should be given to all present of the very high sound levels which are experienced, even when small quantities of high explosives are used. Ear protection should be available for all cast and crew likely to be affected by high sound levels. Eye protection and suitable EC approved respirators should also be available where relevant. This applies also when firing buried charges.
- After firing high explosives, post-firing procedures must be carried out no matter how difficult or time-consuming the circumstance. These are:
  - Ascertain if a misfire has occurred
  - Ascertain if all charges have fired
  - Clear the area to deal with any misfires
  - Clear the area for fire safety personnel
  - Ensure that the area is safe before crew moves in

Detonators – Special Considerations

Owing to their sensitivity to shock or excessive heat, detonators are potential hazards that must always be treated with extreme care. In particular:

- Never carry detonators in the pocket
- Never separate the bare ends of firing wires (shunting) until required for connection (thus preventing the hazard from induced electrical potential)
- Never subject detonators to any physical ill treatment at any time
- Never remove a detonator from a charge by pulling the wires
- Never carry out work involving electrically initiated detonators during lightning and thunderstorms or even when such storms are imminent. Nor should such work be carried out in any proximity to overhead power lines, radio transmitting aerials or radar transmitters.
- Never throw coils of wire to which detonators are already connected
- An accurate record of the number and whereabouts of detonators should be maintained by making a note of the number of detonators expended shot by shot.

Pyrotechnics

Pyrotechnics covers a broad class of effects work that includes all those devices, compounds and mixtures which burn more or less fiercely and produce light, heat, smoke or sparks in varying colours and quantities without an explosive effect. Because of their flammable nature, pyrotechnics are a considerable incendiary hazard and should be given the same care and protection from naked flames, excessive heat and sparks as burning (deflagrating) explosives. Pyrotechnics is the art and technology used by the special effects department using chemical reactions to create effects such as flames, sparks, flashes, heat, light, smoke, or sound and can be used in a production to visually enhance a scene.

Smokes generated pyrotechnically or by burning/heating various substances/ fluids specifically for use in the creation of smoke effects. Whilst some research has clearly established that many substances used to create smoke and fog are dangerous, there are some which are less toxic, irritant, and allergenic than others. These are principally the water-based products.

- For interior use, water-soluble liquids are preferable and for exterior use, pharmaceutical paraffin is probably the safest. Proprietary brand fluids should have safety data sheets supplied by the manufacturer. These should be known to the SFX supervisor and made reasonably available if requested.
- Pyrotechnic smokes are not suitable for studio use except in certain specific cases and in very limited quantities.

The risk that the following hazards could occur should be factored into all planning for the safe use of smoke devices:

- Although coloured smokes burn at lower temperatures, their cases will still cause bad burns to skin or paperwork. Additionally, because the composition of coloured smoke is mainly pure dyestuff, irremovable stains may be left on walls and other property.
- Coloured smokes often contain poisonous anthraquinone dyes. There are some very low toxicity coloured smokes available from the United States.
- Black smoke compositions which are produced at very high temperatures are particularly obnoxious and little is known about their toxicity. Where the composition is known to contain naphthalene, which is a toxic poison, it should not be used. (Burning tyres are not an acceptable substitute).
- Even small hand-held smoke devices may emit sparks so great care is required when they are used near crew and artists, for instance when drifting smoke across the camera lens in close-up.
- All smoke devices, including the smallest hand-held ones, produce dangerous bursts of flame on first ignition.
- Great care should be taken to prevent all smokes causing injury and damage. They are a constant bushfire and fire hazard in dry weather.

Smoke Inhalation

- When smoke, as opposed to aerosol fog, is created, it must always be the minimum concentration necessary to achieve the desired visual result.
- When smoke is created on an interior set, the stage shall be periodically ventilated or exhausted, both vertically and laterally, or all personnel and animals shall be given a break away from the stage at appropriate intervals. The frequency of this should be agreed with the safety supervisor.

- When creating smoke on interior sets, the use of an appropriate type of respirator which restricts mist to 0.05 PEL (permissible exposure level) should be provided. The nature of the smoke, dust, etc. will determine the type of respirator to be used. Consideration to be given to who will be required to be on set, for example SFX crew, and any other persons, and how these persons will be protected. Will cast and or background artists be required to be within the vicinity of smoke? What measures will be in place to protect them and to ensure they are not negatively affected?
- When created smoke is used on any interior set, all nonessential personnel shall be excluded from the set. Whenever possible, personnel shall be evacuated from all dressing rooms located on the stage. Any schoolrooms or other non-crew and artists rooms located on the stage shall also be vacated.
- When creating a fire on an exterior location, all reasonable precautions must be taken to prevent fire and smoke inhalation and where appropriate respirators should be provided. Such respirators must be of a quality to deal with exterior smoke.
- When smoke is scheduled to be created on any set, prior notification of its use and type shall be given to all personnel and the call sheet should state that smoke is to be used. The nurse should find out if anyone has a medical condition that requires a breathing aid.

Flares

- Because flares are in fact incendiary devices, great care must be taken to use sufficient protection for the surface upon which the flare burns. When working in restricted spaces, sufficient ventilation must be available to remove the smoke and heat produced by flare combustion. Care should be taken to check the current legislative requirements when working in confined spaces and restricted re provision if working permits, air monitoring, on-line breathing apparatus etc will be required. See the Safety, Health and Welfare at Work (Confined Spaces) Regulations, 2001 and in particular Regulation 5 'Work in Confined Spaces', and Chapter 64: Confined Spaces within this guide for further information.
- Flares produce great quantities of heat because the brightness of the light is directly related to the temperature of the flame which produces it, the brighter the light, the higher the temperature. A typical cine flare burns at approximately 1200 degrees Celsius.
- When working on surfaces that may be damaged by heat, a sheet metal flare tray should be raised on bricks above a sheet of non-inflammable mineral insulation board which itself should be raised on more bricks.
- Personnel should be made aware of the possibility of high temperature particles being ejected from a flare at the end of the burning time. This may be caused by dampness in the device or pressure build-up. Flares beyond their shelf life are a hazard as they may explode if ignited and so should not be used.
- Material safety data sheets should be supplied to the SFX supervisor and be available as a guide for use and for emergency information.
- Flares have a lifespan and must not be used if they are not within their expiry date.

Spark Emitting Devices (Machines for emitting sparks effects on set to a required density, height etc).

- Always test burn one or two specimens from each batch of these devices, most of which are supplied commercially by firework manufacturers. This will reveal the nature and behaviour of the device being used.
- Each device should be tested in the position and conditions of its final use but done so that no damage or injury will occur if it malfunctions.
- The siting of the device must protect personnel from the risk of burning particles and also take account of anything above and adjoining it such as drapes and dressings.
- The SFX coordinator must choose the firing position which ensures the clearest possible view of the site of the effect and all the movements of cast and crew around it for the whole sequence.

Special Devices and Mixtures

From time to time the SFX coordinator will be asked to construct "specials". Whether or not these specials are simple or complex, or made from well-known and predictable ingredients, there are certain basic rules, which must be followed in every case:

- Always consult the best possible advice (taking into account legislative requirements and manufacturers guidelines) before starting to make the special.
- Always work in the most methodical way possible, recording clearly the processes involved at each stage of making and keeping a record for future reference.
- Weight all constituents accurately. Only work by weight. Never use measures for this type of development work.
- Make many more specials than are needed to allow for sufficient testing to establish its reliability.
- Allow ample time if a maturing process, such as the drying of casings or curing of resins, is required. This will reduce the possibility of unreliable tests. Other means of achieving this must be used if there is not enough time for ageing.
- Re-testing of the special must occur if there has been any increase to the physical dimensions or weight, or explosive or pyrotechnic material in the special. It should always be remembered that any variation to any part of a device may radically change its behaviour.

NB: As always, any changes to SFX devices during testing, rehearsals or shooting, should be relayed to all concerned. Local explosive factory rules and ordinances must be observed when making special devices or compounding pyrotechnic mixtures.

Fogs, Smokes and Dust

(Note: fog, smoke and dust can be used on a set to create an atmospheric effect known as 'Atmo'. For example, they can be used to create fog on a street, smoke in a pub scene or sand on the ground).

General Guidelines

Interest in the exact nature of the ingredients used to produce fogs, smokes, and dust special effects (SFX) and concern about their potential or real health hazards is now well established. There has been an increase in the use of safer products over some which were clearly dangerous. The trend in occupational health and safety legislation to require safe workplaces, safe equipment and safe work practices will assist this process. This guidance is not, like all the others, intended for general readership and does not deal at length with chemical analyses of various products (or recommend particular equipment). However, it is the right of all cast and crew to know the chemical composition of SFX products, just as it is equally in the best interests of production companies to know them in order to avoid, wherever possible, the health hazards and compensation claims which might arise from them.

Categories of Smokes and Fogs

- Smokes and fogs produced through most smoke machines are actually aerosols – clouds of tiny liquid droplets, so minute in size that they drift through the air, carried by the smallest wind currents.
- There are basically two main types of smoke fluid: water-based and oil-based. Smoke is also produced by using petroleum products, organic chemicals, burned materials, fumed chlorides, dusts and powders and gases.
- Water based smoke fluids generally consist of a blend of various types of water-soluble glycols, some water, a dye for colour and a perfumed scent. Propylene glycol is the most common glycol used. It is a viscous, colourless, odourless liquid that is non-irritating to eyes and skin. It is now expected to be non-hazardous to health through inhalation and has been deemed generally safe for human consumption by the United States Food and Drug Administration Agency.
- Propylene glycol on its own produces a thick smoke, which does not last long in the atmosphere. For this reason, it is often mixed with other glycols. Of these, triethylene glycol is considered the safest, whereas ethylene glycol and diethylene glycol are not advised for use. Rosco's Fog Fluids and Martin's Fog Liquid are examples of glycol-based products.
- Oil-based smokes that contain mineral, paraffin, fuel and baby oils are generally used in conjunction with gas operated smoke machines or larger smoke machines for external use. Mole Richardson's Fog Juice for gas-powered machines and various "oil cracker" fluids are examples of oil-based products.
- Oil cracking machines should not be used (as per BECTU guidance for SFX).
- Examples of other organic chemicals are glycerine and vegetable oils.
- Examples of burned materials are frankincense (which is burned in bee smokers), oil and other combustibles. Some fog machines overheat or burn fog chemicals unintentionally and this can create other hazards.
- Examples of dusts and powders are talcum powder, vermiculite, and wheat flour.
- Gases such as carbon dioxide from dry ice, freons and liquid nitrogen.
- Fragrances and dyes of various types are now often added to fogs to make them smell good, look attractive and in some instances, mask chemical odours.

Least Toxic Fog and Smoke Chemicals

Note: The chemical substances and product chosen is to be based on a risk assessment carried out by the SFX coordinator, taking account of the set area, internal or external, whether other special effects are being used on set at the same time, and the persons and number of persons that will be present on set. These products could be chosen over other products that may be more hazardous.

Least Toxic Fog and Smoke Chemicals can include:

- Water fog systems.
- Dry ice fog is composed of water mist condensed from water vapour by the very cold solid (ice) carbon dioxide. Dry ice fog can cause some breathlessness if the carbon dioxide becomes too concentrated.
- Liquid nitrogen is considered to be a relatively safe method so long as contact with the cold liquid is avoided.
- Wheat flour, starch and other vegetable flours are also safe except for those with allergies. Certain extreme conditions can combine to cause vegetable or organic dust to explode.
- Vegetable oil mists are probably safe except for those with allergies.
- Propylene glycol (mentioned above) is considered safe. Some allergy problems and eye irritation can occur.
- Clean water mists are very safe. Some humidity problems for equipment, floors etc.

Fog/Smoke Chemicals which should be avoided

- Poisonous or carcinogenic chemicals: Substances such as hexachloroethane, cyclohexylamine (a component of A/B smoke), ethylene glycol and diethylene-glycol.
- Products unintentionally burned: Almost any organic material heated to burning point will produce toxic substances. This can occur for instance if fog machines overheat.
- Inert mineral dusts: Any dust containing significant amounts of inert minerals which can cause chronic lung diseases such as Fuller's Earth, clay vermiculite, industrial talc, silica, and asbestos.
- Wood flour: Wood dust has an ability to cause lung diseases and should be considered too toxic for this use.
- Organic chemical pigments and dyes: These chemicals should be avoided since many of them have been found to be toxic and or carcinogenic.
- Industrial paraffin, diesel and cutting oils: These are too toxic for use in indoor effects.
- Trade secret products: These should be avoided because, even if they are not toxic, their ingredients cannot be checked.
- Freons: Most of these are not very toxic but they are environmentally unsound and can be replaced by other compressed gases. Also, they become highly toxic when in contact with high heat, flame, or ultraviolet light.

For further information on working with chemicals please see Chapter 65 within this guide: Working with Chemicals.

Respiratory and Health Hazards

- It is recommended that smokes which are produced by combustion be avoided in enclosed studios and locations. Smoke produced by water fog systems or dry ice are preferable.
- In any case, most care should be taken when working in enclosed spaces, particularly if sequences take days or weeks to complete.
- Most toxicological information available is based on tests done on laboratory animals and the figures are based on ingestions and eye and skin irritation. Human exposure to smoke fluids, which are aerosols, is mainly by way of inhalation.
- Sensitivity to smoke products will vary with individuals. Anyone with breathing problems such as asthma should obviously take precautions to avoid high concentrations of smoke.
- Dust particle masks or handkerchiefs will do little to filter smoke. If protection is required, respirators equipped with organic vapour cartridges should be used.
- Water-based smoke fluids that use formulations of propylene glycol and/or triethylene glycol are referred to as GRAS – generally regarded as safe.
- Problems experienced are likely to be compounded for persons with pre-existing respiratory disorders/breathing difficulties and for smokers (cigarettes/vaping).

NB: It should be noted that information on the safety levels of various products is constantly being upgraded and that new products are entering the market regularly. Therefore, the information contained in this note is given in good faith but no warranty, expressed or implied, is made.

FIRE

General Guidelines

Fire authorities should always be informed of the use of open flames whether at the

studio or on location. All performers, including stunt performers, should be notified well in advance of their involvement with open flames.

- Special effect fires will usually be created by free burns or gas jets.
- Fire created by gas rigs may need to be inspected by a licensed gas fitter. If in doubt, consult the relevant department of the local authority.
- To avoid damaging safety valves, propane or butane gas cylinders intended for vapour delivery should never be inverted or tipped to become used for liquid gas delivery.
- Appropriate nitrogen purges or inert gas flushing for gas rigs should be carried out regularly under the supervision of a licensed gas fitter. All fittings must be of an acceptable reliable quality.
- Fuel injection pumps should be correctly rated for the fuel being used.
- The gelling up of liquid fuels such as diesel and kerosene creates the equivalent of napalm. It becomes sticky and is extremely volatile. Any mixing of gelling agents and their use should be carried out by and controlled by competent persons only. As with all SFX, a risk assessment to detail the composition, the risks associated with use of gelling liquids and the control measures should be put in place. Therefore, the following precautions are essential:
  i. Extreme caution must be exercised under the supervision of the special effects (SFX) co-ordinator and other SFX crew.
  ii. Comprehensive planning and fully detailed rehearsals to ensure total coordination of all elements is critical. Special attention should be given to the light up and extinguish cues with all personnel aware of their exact sequence.
  iii. Care should be taken when extinguishing fires from these products to avoid dispersing them and sufficient time should be allowed between takes and before more application to avoid re-ignition.
- Tasks involving fire must be kept to their absolute minimum. Rehearsals should always occur with the effects at the intended level for the take. Any increase in flame levels should be notified to everyone concerned.
- Sequences comprising several simple shots rather than a complication master or sub-masters are safer and therefore preferred.
- The SFX co-ordinator shall have the right to call 'cut' at any point during rehearsals and or on shooting days.
- The area must be adequately ventilated and have sufficient exits served by well-marked paths that are kept clear at all times.
- All personnel working in the area should be well briefed on the scope of the special effect and on the related emergency procedure.
- Studio areas should be cleared of excess rubbish, extra set materials and sawdust, etc.
- Special care should be taken where soundproofed walls and ceilings are made of flammable material.
- Overhead ventilation should be available for large studio fire effects to prevent heat building up at ceiling level which might ignite dust, etc.
- The nearest fire brigade must be notified and be present whenever deemed necessary. Additionally, stand-by fire prevention resources should be available.
- The preferred order of coping with an outbreak of fire is:
  - Use damp rags
  - Use carbon dioxide fire extinguishers
  - Use water, but not on electrical fires, or near electrical hazards
- ABC multipurpose fire extinguishers should be used. Fire extinguishers are highly dangerous unless used with extreme care and discipline and by competent persons.
- An adequate number of 100% pure wool blankets should be available whenever fire effects are being carried out. The blankets should be wet or used with water gel of CO_2. Generally, they are the most effective form of protecting personnel from heat and provide even more efficient protection when used with silver space blankets. They are also effective for damping down fire.
- So-called empty petrol tanks have exploded violently after all visible flame has gone. Where vehicles are involved in fire or explosive effects, the SFX co-ordinator must personally be responsible for ensuring that the petrol tank is empty and split wide open, or flushed of fuel and filled with water, or preferably completely removed. The drive shaft should be drilled in several places and all loose material inside the cabin removed. Vehicles should also be checked for rusted mountings, welding, and body fixtures. Air bags should be removed.
- Plans for the removal of the burnt-out remains must be made prior to the effect occurring and any damaged road or other surfaces made good.
- Depending on prevailing circumstances, practical fires on set can generally be safely simulated in grates or fireplaces using the following methods – wall service gas supply, bottled gas, electricity, or firelighters if adequate ventilation is in place.
- Any practical fire must be adequately supported on metal plates, which are covered by fire resistant material of an approved type and raised sufficiently to prevent damage.
- Any scenery adjacent to the fire must be adequately protected by fire resistant material.
- Naked flames from candles, etc., must be protected from draughts and kept at a safe distance from materials.
- In the absence of a safety supervisor or SFX coordinator, the first assistant director should nominate a person to monitor the fire, which should be extinguished if left unattended.
- All stationary open flame fixtures should be firmly secured.
- Flammable and combustible materials should be kept at a safe distance from open flames and where necessary in approved containers.
- Water-based paints are preferable to oil or plastic/latex-based paints. However, fire retardant can be added to paint used for sets and props where necessary. It should be remembered that fire retardants dry out over time and so materials should be tested and treated regularly.
- All gas lines used in connection with open flames shall be approved in accordance with the applicable building and fire codes.
- Appropriate fire prevention equipment and personnel should be available at the set whenever open flames are involved.
- Wardrobe and wigs, where applicable, must be made of natural fabrics – never synthetics – whenever actors are required to work near fire. Planning for this should occur in pre-production discussions between the SFX and art and wardrobe departments. Additional protection, such as washing wardrobe fire retardant, should also be considered.

Fireproof Materials used to construct sets or used on sets

Materials should be fire retardant or flame proofed as required, to ensure they are fit for purpose and to reduce risk of fire on sets. The SFX coordinator should liaise with the electrical department and construction manager to determine what set materials must be fire retardant and what specification is required. See also Chapter 13, section 13.3 Fire and Fire Escapes

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Further reading

Health & Safety Executive UK Guidance on Explosives. Link: http://www.hse.gov.uk/explosives/licensing/index.htm#what

Health & Safety Executive UK Guidance on Smoke and Vapour Effects. Link: http://www.hse.gov.uk/pubns/etis3.pdf

Information on the storage of pyrotechnics. Link: http://www.justice.ie/en/JELR/Pages/storing_explosives

Explosive Legislation Ireland. Link:Safety, Health and Welfare at Work (General Application) Regulations 2007 – Part 8: http://www.irishstatutebook.ie/eli/2007/si/299/made/en/print

Explosives Act 1875: http://www.irishstatutebook.ie/eli/1875/act/17/enacted/en/print.html#:~:text=CHAPTER%20XVII.,glycerine%2C%20and%20other%20Explosive%20Substances.

Explosive Guidelines Ireland. Link: http://www.justice.ie/en/JELR/General%20Guidance%20Notes-%20Explosive%20Legislation.pdf/Files/General%20Guidance%20Notes-%20Explosive%20Legislation.pdf

Pyrotechnics: Link: http://www.justice.ie/en/JELR/GD_2010-6_Public__Guidance_Notes_-_Explosives_Legislation.pdf/Files/GD_2010-6_Public__Guidance_Notes_-_Explosives_Legislation.pdf

EU Legislation Link: http://www.justice.ie/en/JELR/Pages/fireworks

National Legislation Link:S.I 174 of 2015 - European Union (Making Available on the Market of Pyrotechnic Articles) Regulations 2015 (PDF 147KB)

Visual effects (VFX) use digital technology to bring together computer generated imagery (CGI) with moving images from a camera. It is a creative industry using advanced digital technology to create incredible effects for the big screen.

VFX is utilised for a myriad of reasons, from creating landscapes, sets, props or characters that do not actually exist, enhancing and augmenting real world footage for aesthetic or financial benefits, and at times rendering action that may be too dangerous or even impossible to recreate in their entirety in the physical world. In this regard, VFX plays a central role in protecting the health and safety of the cast and crew and their environments.

Department Personnel

The visual effects, or VFX, department is usually headed up by the VFX producer or VFX supervisor. They work with the director, production designer and all the other departments to help deliver the director's vision on screen, by supplementing live action footage with computer generated, or CG, elements in post-production. On occasion some shots may be entirely CG and have no involvement of the shooting crew.

Depending on the needs of the production, the VFX department may also employ anon set supervisor, VFX coordinator, plate supervisor, data wranglers and trainees.

The VFX producer generally manages the overall VFX pipeline, with particular focus on concepts, budgets and delivering completed shots. Although each member of the department should be conscious of their own safety on set and ensure that their actions do not endanger others, it would usually fall to the VFX supervisor or on set supervisor to represent the department while shooting and so be responsible for general safety concerns.

General Considerations

Use of Green and Blue Screens Green and blue screens can very often be required on set and are a huge part of the VFX world. On larger productions, there will be a separate screen dept who will ensure all screens are ordered to the VFX supervisor's specific request, maintained to the highest standard and constructed safely and properly. These screens should always be rigged and fitted by qualified personnel from the construction department.

Where there is use of exceptionally large screens or large inflatable screens, these will often be rigged to a Manitou, MEWP or other suitable equipment based on risk assessment specific to the task. The construction dept (and or UPM/LP/PM) should employ qualified personnel to provide and manoeuvre these machines safely and promptly.

Work at Height

Legislation for Work at Height: Part 4 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 – Work at Height. Ref Guidance to the above. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Work_at_Height.pdf#targetText=Regulation%2096%3A%20Checking%20of%20places%20of%20work%20at%20height&targetText=An%20employer%20shall%20ensure%20that,at%20appropriate%20intervals%20during%20use.

Where a platform, ladder, use of MEWP or other is required, a risk assessment should detail why work has to be carried out from a height, the reasoning behind choice of equipment, control measures in place and what training the operator requires or has received.

VFX Crew may need assistance when placing tracking markers onto green and blue screens, an appropriate and safe means of access should be provided.

For further information re Working at Height within this guide see Chapter 4 - Section 4.7 Working at Heights and Chapter 28: Construction.

Use of Ladders

Ladders should be used for a short duration only (under 30 mins) and where a risk assessment shows the use of other work equipment is not justified or practical.

A stepladder or A-frame ladder must never be straddled. On a ladder do not use the top three rungs, on a stepladder do not use the top two steps unless an appropriate handrail is fitted. Refer to manufacturer's instructions and risk assessment before any set up of a ladder. Every time you use a ladder you must comply with the Work at Height Regulations and you must carry out a risk assessment.

For further information on use of a ladder please see section Working with Ladders and HSA information sheet. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Using_Ladders_Safely_-_Information_Sheet.pdf

Use of Mobile Elevated Working Platform (MEWPs)

VFX may often require assistance accessing height when photographing sets and large props, or when placing tracking markers on green and blue screens. Operating these machines safely requires training and certification and suitable personnel should be provided by the construction department (or through UPM/LP/PM) should this need arise. It is recommended that harnesses are worn in MEWPs, confirmation from the manufacturer should be sought and based on the operator's risk assessment.

Persons working with MEWPs must be familiar with the HSA Guidance document on safe operation procedures for MEWPs. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/HSA_MEWPs_Guidance.pdf

Proof of thorough inspection and other inspection should be provided for all lifting equipment used (Example GA1 & GA2 for all lifting equipment and GA3 for Work at Height). of these forms can be found on the HSA website, link: https://www.hsa.ie/eng/Publications_and_Forms/Forms/

For further information on safe use of work platforms and trestles please see HSA information sheet. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Safe_Use_of_Work_Platform_Trestles_Information_Sheet.pdf#targetText=It%20also%20tells%20you%20what,liable%20to%20cause%20personal%20injury.

Only if a member of the VFX team holds current certification and is deemed competent to operate such machinery, after receiving permission from the department in control of the machine, should they be allowed to use it.

Use of Drones

Though primarily part of the camera dept, a VFX supervisor may request specific use of the drone for shooting photogrammetry or tiles and plates. At all times, the VFX crew should adhere to any safety directions implemented by the drone team. (Please refer to the 'Drones' section of this guide for more details).

VFX Electrical Requirements

At times, the DOP may devise a lighting rig to aid a VFX shot and reduce the amount of CGI that a shot requires. The VFX department may require assistance with lighting for photographing characters, sets and props, or for shooting lens grid tests. As Per electrical department guidelines within this guide, this equipment should also be supplied and installed by suitably qualified electricians.

All portable equipment must be maintained in a manner fit for safe use and should be subject to an appropriate inspection regime by employers to ensure that this is the case.

The nature and frequency of maintenance should be adequate to prevent danger. The nature and frequency of inspections will vary dependent on the equipment, its use and location of the equipment.

The results of PAT inspections and tests should be recorded and kept available for 5 years from the date of inspection.

Use of Laser Equipment

Using lasers in the form of disto (Laser Measuring Tools) or as a marker for set layout etc. should be undertaken with caution as they can cause damage to eyes. Depending on the grade of the laser, it may be necessary to alert other crew to the potential dangers and to encourage awareness of such dangers. Generally, the lasers used in laser scanning pose no possible danger and are classified as Class 1. The Lasers from distance measuring devices are usually Class 2, and although prolonged staring into the laser can damage the eyes, they are safe to use on set without any need for eye protection as long as common sense and due care are employed.

Storage of Equipment on Set

On occasion VFX equipment is required to be on stand-by within close proximity of the shoot. It is the responsibility of the VFX crew to leave equipment in as safe a location as possible i.e. never obstructing access of crew or equipment to the set, or access/egress to emergency routes.

Use of Flash Photography

VFX will often use flash photography to photograph characters and animals in a controlled lighting environment. This may require hundreds of shots.

Care should be taken around animals, so they do not become stressed during these sessions. Consultation between the VFX depart and the animal wrangler will be necessary before the shooting day to ensure it is appropriate and safe to use required flash photography/strobe lighting.

All persons required to be on set are to be warned in advance of the risk to ensure they do not have particular issues with strobe lighting, for example photosensitive epileptic seizures (not all persons with epilepsy are photosensitive).

Strobe lighting should not be used on stairs or where persons are required to walk up or down steps or onto or off platforms as vision can be impacted, leading to a risk of trips and falls. Only designated competent persons (VFX producer, VFX supervisor, or a person appointed by VFX HoD) should set up and control strobe devices.

Risk Assessments

Risk assessments for each location should be provided and circulated to all crew, background artists and others who may be affected by production company operations, including 2nd Unit personnel. The UPM/LP/PM should arrange for location risk assessments to be generated as required. Reference considerations for 2nd Units within this guide for further information.

Specific risk assessments and method statements from other departments are to be in place prior to works being carried out or filming at any location.

See Chapter 7 regarding: Hazard Identification and Risk Assessments.

Section 08
Specialised Departments

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Aircraft - Fixed Wing Aircraft

Production companies engaging a pilot for either a fixed wing aircraft or a helicopter should obtain and confirm the following:

- The pilot's or company's manual,
- Proof of pilot licence of competency, each pilot must hold a valid Commercial Pilot's Licence (CPL), or Commercial Pilots Licence (Helicopter) - CPL(H),
- Proof of aircraft registration,
- Insurance details,
- Certificate of Airworthiness,
- Aerodrome licence,
- Written agreement and contract with registered owner or authorised person,
- Specific clearance from the Irish Aviation Authority if applicable.

Registration for Fixed Wing Aircraft and Helicopters

Registration can be checked on the Commission for Aviation Regulations (CAR) website. Link: https://www.iaa.ie/general-aviation

Laws and Regulations

- All aircraft and equipment must be fully certified and airworthy under Irish law.
- All persons involved in the filming of aircraft or from aircraft must comply with Irish law and procedures.

General Legislative Information

- Fixed wing aircraft cannot fly in controlled airspace unless permission is obtained from Air Traffic Control.
- An airspace infringement can result in fines and is a serious risk to aviation safety. The risk is particularly serious when the infringing aircraft is a general aviation light aircraft.
- At all times that aircraft operate outside of the normal regulations, dispensation must be sought and obtained from the Irish Aviation Authority (IAA).
- For two or more aircraft operated at less than the normal legal minimum distances from each other, each pilot must hold formation flying approval.
- An aircraft is not allowed to land anywhere unless it is an authorised or licensed aerodrome. An aircraft may land in another area providing it meets the requirements of an authorised landing area and the pilot has informed local Gardai and obtained the landowner's permission.
- People are prohibited from riding on wings, struts, and undercarriages unless special dispensation has been given.
- Parachutists must be certified. Articles may not be dropped from aircraft without the permission of the Irish Aviation Authority and all other relevant bodies.
- The producer will direct that personnel filming from aircraft will at all times abide by Irish Aviation Authority regulations concerning filming from aircraft.

Briefing prior to Stunt Sequence & Risk Assessment

All those involved in a stunt sequence should receive a thorough briefing on the following key points:

- The sequence of events involved in the stunt.
- The dangers and the action to be taken if an accident occurs.
- Escape paths and procedures.
- The stunt plan made in consultation with the pilot in command of the stunt aircraft. No changes may be made to the agreed sequence of execution of the stunt without the direct approval of the pilot(s) involved.
- The risk assessment and method statements provided by both the pilot in command and stunt coordinator, and any dynamic risk assessment generated if there are any changes to action required on the day.

Note re dynamic risk assessment: These are to be written in advance of continuing action detailing the changes and how they will affect the action. This includes what measures have been put in place to minimise any risks to cast, crew, stunt performers or any person who could be affected by the action. After a change in action and a dynamic risk assessment is in effect, all decisions on safety and how the action is to be carried will be the decision of the pilot in command, stunt coordinator and production. For further information on dynamic risk assessment, please see section Dynamic Risk Assessments in this guide.

General Guidance

In addition, the following points are imperative:

- Pre-flight planning checklist must be completed and maintained for all flights. A copy of same is to be made available to production prior to flight by whichever means is most convenient to the pilot in command.
- An aerial coordinator must be appointed by the chief pilot/pilot in command of the operating company.
- The pilot in command of the aircraft will have final authority over the execution of the prearranged stunt and the right to abort it at any stage.
- Only personnel directly required for filming should be in the area and these persons should be briefed by the pilot or a competent deputy on the dangers of being close to operating aircraft.
- Marshalling areas and pathways are required whenever the aircraft is operating on the ground, or personnel and equipment are being loaded while engines are running.
- Air-to-air communication will be maintained at all times during operations.
- No-one is allowed to walk under or nearby propeller driven aircraft after the engines have been initially turned off and until the propellers have come to a complete stop.
- Appropriate safety measures such as barriers and marked safe areas must be provided where aircraft are operating near people.
- No smoking is permitted within 50 metres of aircraft or support vehicles.
- No electrical connections are to be adjusted without the express permission of the pilot in command. The pilot must also be notified of any proposed mechanical alteration. The pilot in command will inspect all installations such as camera mounts before each flight.
- Aerobatic manoeuvres are to be performed in accordance with the rules of aerial displays. Any person who wishes to organise and conduct an air display in the State must be the holder of a Flying Display Permission, issued by the Authority. Full application must arrive no later than 30 days before the planned date of the event.
- Aerial work permissions may be required. Pilots to confirm requirements with the Flight Operations Department of the Irish Aviation Authority.
- Locked off cameras should be used wherever possible when aircraft are planned to fly close by. If this is not possible then the camera position should be marked clearly enough to be seen from the air and to allow for the easy calculation of the aircraft's line and distance from it. Fixed distance markers would be suitable.
- Should it be necessary to film on the extended centre line of a runway, the provisions above must also be considered. In addition, the pilot will calculate the required take-off distance, or the accelerated stop distance required and ensure that the camera is placed at least that distance from the beginning of the take-off run.
- The pilot should ensure that an escape route is available and that all personnel are briefed and clear of the area prior

to commencing the take-off. In the case of helicopters, a clear area, free of personnel, should be made available for forced landing.
- The pilot and safety supervisor will always have the right to insist that the shot be redesigned or the camera repositioned or locked off and unattended.

Passenger safety information for flights

If you are to be a passenger on a light aircraft, there are some actions that you should take into consideration prior to embarking on a flight. The IAA has created a document that includes a checklist that can be used by all passengers, link: https://www.iaa.ie/docs/default-source/publications/corporate-publications/safety-leaflets/ga-passenger-safety-considerations.pdf?sfvrsn=daa90df3_4

Occurrences Reporting: Aviation

Persons involved in aviation activities are required to report certain occurrences in accordance with regulations. Occurrence reporting in Europe is subject to EU Regulation (namely Regulation (EU) 376/2014). For further information, link:https://www.iaa.ie/commercial-aviation/safety-reporting-1

https://www.iaa.ie/docs/default-source/misc/occurence-reporting-guidance-material.pdf?sfvrsn=11e90bf3_0

For further information on EU rules please see the EASA website, Link: https://www.easa.europa.eu/

Flying a drone is legal in Ireland, but operators need to be aware of and compliant with the drone regulations before doing so. Since the 21st December 2015, drone registration has been mandatory in accordance with the Small Unmanned Aircraft (Drones) and Rockets Order S.I. 563 of 2015 for certain drones.

Production companies engaging a drone operator should seek sight of the following

- The drone operator's (pilot/company) operator manual,
- Example of previous locations and site-specific risk assessments,
- Proof of chief pilot and pilot in command's (PIC) Remote Pilot Licence of competency,
- Insurance details and
- Specific Operating Permission issued by the Irish Aviation Authority.
- Permission must be sought from the relevant county/city council for filming in the public domain.

Production companies must use an IAA licenced drone operator generally known as an "SOP holder".

EU Rules and IAA Guidance

At time of generating this document the IAA advised that the rules in the areas of drones are due to change to be in line with new EU rules and revised IAA guidance will be issued once available.

The IAA licenced drone operator / "SOP holder" is responsible to know and obey the rules re use of drones. For information about the EU rules please see the EASA website. Links: https://www.easa.europa.eu/

EU Rules News: https://ec.europa.eu/transport/modes/air/news/2019-05-24-rules-operating-drones_en

Commission Delegated Regulation (Eu) 2019/945 Link: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0945&from=EN

Commission Implementing Regulation (EU) 2019/947 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0947&from=EN

Drones registration

All drones over 1kg (this includes the weight of the battery and all attached equipment) and less than 25kg (without fuel) must be registered, as do all drones, irrespective of weight, flown higher than 15m above the ground or water.

Registration is a Two Step Process.

First register with ASSET, the IAA's online terrain mapping system. Once done, there is a requirement to register your drone via the ASSET system. This can be done through the IAA website: https://www.iaa.ie/general-aviation/drones/drone-registration

Companies that are registered with the IAA are listed on the IAA website (this list is updated approximately every 6 weeks). The register can be checked on IAA website. Link: https://www.iaa.ie/general-aviation/drones/rpas-aerial-work-permission-holders

Drone airspace restrictions

The IAA specify a number of airspace restrictions, they are as follows:

You must never fly your drone unless you have specifically applied for and have approval from the IAA using the UF101 process:

- In civil or military controlled airspace.
- Over restricted airspace, such as prisons and military installations.
- Closer than 5km to an active aerodrome.
- Over urban areas, such as cities, towns, and villages.

Operating Drones commercially in Ireland, the following is required

- A person who has charge of the operation of a small, unmanned aircraft (SUA) which has a mass of 25 kilograms or more, and less than 150 kilograms, shall not allow such an SUA to be flown without the permission of the Authority and subject to such conditions as are required by such permission. Permissions issued in accordance with this order may take the form of Specific Operating Permission.
- Specific Operating Permission (SOP). This is issued by the IAA to a company/individual that has proven its compliance with current regulation by having their Operations Manual approved by IAA, has submitted proof of pilot competency from an approved ground school, has submitted proof of insurance and paid IAA fees. This permission needs to be (currently) updated every 2 years.
- Pilot Competency Certificate (PCC). This is issued by the IAA to individual pilots who have proven their abilities to operate drones safely by attending an IAA approved ground school and have completed a flight assessment judged by an instructor.

Using a Drone for Commercial Activities and Permissions from IAA

Companies looking to operate outside the stated limits need to obtain permission from IAA by completing Form UF 101 (SUA Flight in Controlled Airspace Application Form).

As per the Small Unmanned Aircraft (Drones) and Rockets Order S.I. 563 of 2015 the person in charge of the operation of a drone shall not allow such an aircraft to be flown unless otherwise permitted by the IAA:

A. within a prohibited area, a restricted area, or controlled airspace.
B. in Air Traffic Services airspace, other than controlled airspace, within 5km of an aerodrome during periods of aircraft operations, unless the aerodrome operator has given permission.
C. at a distance of less than 30 metres from a person, vessel, vehicle or structure not under the direct control of the operator.
D. at a distance of less than 120 metres from an assembly of 12 or more persons not under the direct control of the operator.
E. beyond direct unaided visual line of sight and not farther than 300 metres from the point of operation.
F. at a height of more than 120 metres above the ground or water.
G. permitting or attempting to permit, any article or animal, whether or not attached to a parachute, to be released from that aircraft.

Pilot in Command Responsibilities

The pilot in command (PIC) of the small, unmanned aircraft (SUA) shall, whether manipulating the controls or not, be responsible for the operation of the SUA in accordance with regulations and guidance material except that the PIC may depart from these rules in circumstances that render such departure absolutely necessary in the interests of safety. The PIC must:

- At all times maintain a safe flight and cancel or delay the flight if safe flying cannot be conducted.
- Ensure that all pre-flight procedures have been carried out.
- Ensure that appropriate permissions have been obtained and IAA regulations are adhered to.
- Ensure that the site-specific risk assessments have been completed.
- Define safe working areas and cordon, as necessary. Note boundaries and alternate landing sites.
- Liaise with crew, clients, and the public before flight to brief fully and ensure. that they understand the need to be compliant with requests or orders of the Chief Pilot. Brief observer(s) on their responsibilities.
- Wear protective clothing and/or high visibility equipment, as necessary.
- Adhere to site safety procedures.
- Operate the SUA in a safe, responsible, and professional manner.
- Keep records of their own flight logbook in addition to completing all SUA logbooks and maintenance logs as required.
- The liability for trespass is with the operator.

Permissions and Take-off and Landing of a Drone

Permissions for the take-off and landing site must be sought from the landowner before commencement of any operation. A person in charge of the operation of a small, unmanned aircraft shall not permit such aircraft to be operated from any place unless the aircraft may take-off and land without undue hazard to persons or property. Production companies should check with their local city council re permissions required for a drone for take-off, landing and flight path.

Insurance

Drone insurance is recommended by the IAA but is not legally required. Insurance is required in order to obtain Specific Operating Permission.

Weather

Three days before an operation, the pilot in command should check anticipated weather conditions. On the day of operation, the PIC monitors onsite weather conditions. If conditions fall outside the safe operations limits of a small, unmanned aircraft the pilot in command shall not commence the flight. No operation may be executed if forecast conditions within one hour prior to take off and or one hour of scheduled landing include:

- Thunderstorms
- Heavy turbulence and/or wind shear
- Heavy Precipitation

Hazard Identification and Risk Assessment

The drone operator should generate a location-specific hazard identification risk assessment for operation of the drone.

The risk assessment should comply with the requirements of 'Article 11 Rules for conducting an operational risk assessment' of the Commission Delegated Regulation (Eu) 2019/945 Link: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0945&from=EN

Site Safety Assessment, Site Survey, Flight Plan/Pattern and Dynamic Risk Assessment

Prior to the day of operation, the pilot in command shall assess the areas and carry out a site safety assessment/risk assessment.

The pilot in command plans the flight path/flight pattern of the drone with the camera operator to determine the shots required.

On the day of operation, the pilot in command should carry out a site survey and ensure the site is as expected. If there are any variations a dynamic risk assessment is to be carried out.

On the day of operation, the pilot in command should give a crew briefing to advise on the take-off and landing site, flight plan, and emphasise the need to ensure good communications are maintained during operation.

On the day of the shoot if there is a requirement to amend the shoot, the pilot in command and camera operator should reassess the flight plan, make the required amends to it and communicate any changes between the pilot in command, camera operator and 1st AD, who shall be required to liaise relevant information to all other crew, to ensure equipment and persons are not put at risk.

Chain of Command on Day of Shoot

The chain of command on set is that the pilot in command and 1st AD has final say and that any changes must be agreed and approved by the pilot in command, no matter how small or insignificant the change may seem in the operation.

An open communication system must be in place between the pilot in command, camera operator and 1st AD. All crew should be aware that the line of sight of the pilot in command and the drone is to remain unobstructed and the landing area clear until the drone has landed and the pilot calls 'SAFE'. The 1st AD ensures the drone has landed safely prior to moving onto the next setup.

Further Information

Please see link below for further information on the Irish Aviation Authority website: https://www.iaa.ie/general-aviation/drones/drone-regulations-guidance

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Helicopters

Please see link below for further information on the Irish Aviation Authority website Q&As: https://www.iaa.ie/docs/default-source/misc/drones-questions-and-answers.pdf?sfvrsn=2

Commission Delegated Regulation (Eu) 2019/945 Link: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0945&from=EN

All aircraft and equipment must be fully certified and airworthy under Irish law. All persons involved in the filming of aircraft or from aircraft must comply with Irish law and procedures. These safety guidance notes do not replace or override and are subservient to any law, act, or regulation.

On the Ground

- A pre-flight planning checklist should be completed and maintained for all flights. A copy of this should be made available to production prior to the flight, by whichever means is most convenient to the pilot in command.
- Supervision of safety around the helicopter shall be the responsibility of the controller of the helicopter support truck or, if not available, the safety supervisor or the first assistant director (1st AD) in that order. The pilot in command is always able to exercise overriding authority.
- There will be no smoking within 25 metres of the helicopter.
- Nonessential personnel will keep 25 metres away from the helicopter.
- Extreme caution must be exercised when working around helicopter(s), especially when the engine or rotor is turning.
- Persons should approach and leave the helicopter from the front with great caution.
- The rear and tail sections of helicopters must be avoided at all times. No-one should ever walk under the tail section of a helicopter.
- All equipment must be carried parallel with the ground within 25 metres of a helicopter. No equipment, such as cameras, rigs, lights, and booms, should be permitted to extend vertically into the rotor blades or below the skids.
- Nothing whatsoever should be thrown anywhere near a helicopter.

Take-Offs and Landings

- Plot plans etc. must be prepared to indicate the landing area, intended flight paths and designated emergency landing sites.
- The pilot in command will have final approval over the aerial traverse and hovering positions of the helicopter.
- Eyes and equipment must be protected when helicopters are taking off or landing.
- The landing area must be cleared of debris and wet down where necessary.
- Communications between ground and air shall be established at all times during the operation of the helicopter using one ground contact.
- Compliance must be maintained at all times with all applicable laws and regulations.

Passenger safety information for flights

If you are to be a passenger on a light aircraft, there are some actions that you should take into consideration prior to embarking on a flight. The IAA has created a document that includes a checklist that can be used by all passengers. Link: https://www.iaa.ie/docs/default-source/publications/corporate-publications/safety-leaflets/ga-passenger-safety-considerations.pdf?sfvrsn=daa90df3_4

Occurrences Reporting: Aviation

Persons involved in aviation activities are required to report certain occurrences in accordance with regulations. Occurrence reporting in Europe is subject to EU Regulation (namely Regulation (EU) 376/2014). For further information: https://www.iaa.ie/commercial-aviation/safety-reporting-1

https://www.iaa.ie/docs/default-source/misc/occurence-reporting-guidance-material.pdf?sfvrsn=11e90bf3_0

For further information on EU rules please see the EASA website link: https://www.easa.europa.eu/

46 Hot Air Balloons

All aircraft and equipment must be fully certified and airworthy under Irish law. All persons involved in the filming of aircraft or from aircraft must comply with Irish law and procedures. These safety guidance notes do not replace or override any law, act, or regulation.

Production companies engaging a hot air balloon operator should seek sight of the following:

- The operator's (pilot/company) operator manual,
- xample of previous locations/activity specific risk assessments,
- Proof of pilot in command licence, - commercial pilot licence,
- Proof of registration and airworthiness,
- Air Operation Certificate (AOC)/ declaration*,
- Insurance details and,
- Any relevant permission issued by the Irish Aviation Authority.

At the time of generating this document the IAA advised that the rules regarding hot air balloons are due to change to be in line with new EU rules. Revised IAA guidance will be issued by the IAA once available. The IAA licenced operator/ SOP holder is obliged to know and obey the rules re use of hot air balloons. For information about the EU rules please see the EASA website. Link: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R0395&from=EN

*Note re Certificates and Declarations, reference Commission Regulations (EU) 2018/395 including Article 4.

Hot Air Balloons

A hot air balloon is a balloon that derives its lift from heated air. It has three main components: The basket, the burner, and the envelope.

- The baskets vary in size depending on requirements and are manufactured using wicker.
- The burner draws fuel from the on-board propane tanks as liquid, liquid propane under pressure.
- The envelope on passenger balloons is always of the conventional shape, special shaped balloons are not allowed to carry fare-paying passengers.

Air Operation Licence

All aircraft operators including balloons operators transporting passengers for hire or reward must hold an Air Operation Licence (AOC). An AOC issued by an EU member State is valid in Ireland. At the time of creating this section of the guide (July 2019) there was no IAA approved balloon AOC It is expected that the IAA will have an approved balloon AOC within the coming months. https://www.iaa.ie/general-aviation/is-your-aircraft-operator-licensed-

Registration

Balloons used as commercial transport aircraft, carrying passengers where payment is required, should be registered. There are specific requirements re registration with the Irish Aviation Authority, as per Irish Aviation Authority (Nationality and Registration of Aircraft) Order, 2015. Link: https://www.iaa.ie/docs/default-source/publications/legislation/statutory-instruments-(orders)/irish-aviation-authority-(nationality-and-registration-of-aircraft)-order-2015.pdf?sfvrsn=ecb70df3_4

General

Any balloon that is inflated and standing must have a certified pilot, with a commercial rating for lighter-than-air aircraft.

- Employ a qualified pilot to pilot the hot air balloon. All national and local regulations must be followed. Obtain proper documentation.
- Prepare plot plans and graphics to locate the intended landing areas, intended flight paths and designated emergency landing sites. Indicate the location and types of special effects.
- A pre-flight safety meeting shall be held and documented with the appropriate personnel involved in the sequence. The pilot in command shall ensure that before and during the flight, passengers are given a briefing of normal, abnormal, and emergency procedures.
- Allow only personnel essential to the filming of the balloon to be in the area. All other personnel shall remain at least 25 meters away from the balloon.
- Prior to the launch and during operation of the balloon, communication between one designated ground contact person and the pilot in command shall be established and maintained on an approved radio.
- If safety becomes questionable at any time, the aerial coordinator or the pilot in command shall have the authority and the responsibility to call an abort of the operation. The pilot in command shall have the ultimate authority to abort the operation.
- No smoking is allowed within 50 meters of the balloon or any of its components.
- Refuelling of balloons shall not be conducted when persons are on board.
- The pilot in command should check weather conditions in the areas of the launch site, flight paths and landing site. They should advise on any weather problems, including forecasted weather problems, such as high winds, rain, or lightning. Sudden changes in any of the above may require the flight to be delayed or cancelled.
- Balloon support equipment is very important as parts are easily damaged while on the ground. Do not step on any part of the balloon or tether ropes.
- Keep all sharp objects, heat sources or open flames and non-essential equipment at least 100 feet from the balloon.
- A chase vehicle shall be assigned with no other duty than to support the balloon crew.
- Before any stunt or special effects sequence is to be performed, all persons involved shall be thoroughly briefed as to any potential hazards and safety questions prior to the filming.
- If an emergency occurs, DO NOT TOUCH any part of the balloon. A designated balloon ground crew member will take charge and coordinate rescue operations. Immediately alert the stand-by EMS (nurse and/or ambulance) and call 112 or 999 or the designated emergency number for the area.
- No change will be made without an additional flight safety meeting being held with all appropriate personnel involved in the sequence.
- If you are unsure about any part of the balloon operation, ask the pilot in command.

On the Ground

- Supervision of safety around the balloon shall be the responsibility of the controller of the balloon and balloon operator's crew members, the safety supervisor and the first assistant director (1st AD) in that order. The pilot in command is always able to exercise overriding authority.
- There will be no smoking within 25 metres of the balloon or its fuel supply.
- Non-essential personnel will keep 25 metres away from the balloon.
- Extreme caution must be exercised when working around balloons, especially when the heater/engine is running.
- Persons should approach and leave the balloon from one direction with great caution and as directed by the pilot in command.
- Personnel should pay attention to training cables and ropes at all times.
- All equipment must be carried parallel with the ground within 25 metres of

a balloon. The pilot in command will be responsible for advising on the positioning and use of equipment when in the basket.
- The heating engine of balloons must be avoided at all times. Unauthorised personnel should never walk on, over or in other way make contact with the components of the balloon, including the canopy, support ropes or basket.

Take-Offs and Landings

- Permissions for take-off and landing site with landowner should be sought before the commencement of any operation.
- Plot plans etc. must be prepared to indicate the landing area, intended flight paths and designated emergency landing sites (as determined by current wind direction).
- The pilot in command will have final approval over all aspects of the flight.
- Communications between ground and air shall be established at all times during the operation of the balloon using one ground contact.
- Compliance must be maintained at all times with all applicable laws and regulations.
- Hot-air balloons shall not land during the night, except in emergency situations. They may take off during the night, provided that sufficient fuel or ballast is carried for a landing during the day. Where balloons do fly at night they must be equipped with anti-collision light and have on board an independent portable light.

Hazard Identification and Risk Assessment

The hot air balloon operator/pilot-in-command should generate location and activity-specific hazard identification and risk assessment of the intended operation of the balloon and establish control measures, as necessary. The pilot in command should establish a checklist and ensure it is appropriate to the activity and balloon used. This checklist is to be readily available on the flight.

For complete responsibilities of the pilot in command, authority of the pilot in command, responsibilities of crew members please see the EU rules and other applicable regulations and guidelines. EU rules Link: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R0395&from=EN

Compliance

Compliance with laws and, regulations and procedures as per Commission Regulations (EU) 2018/395 the pilot in command and other crew should ensure:

A. The pilot and all other crew members shall comply with the laws, regulations, and procedures of those states where operations are conducted.
B. The pilot shall be familiar with the laws, regulations and procedures, pertinent to the performance of his or her duties, prescribed for the areas to be traversed, the operating sites to be used and the related air navigation facilities.

Documents, manuals, and information to be carried on each flight

Documents, manuals, and information to be carried on each flight as per Commission Regulations (EU) 2018/395:

A. All of the following documents, manuals and information shall be carried on each flight, as originals or copies:
   1. the operating limitations, normal, abnormal, and emergency procedures, and other relevant information specific to the balloon's operating characteristics.
   2. details of the filed air traffic service (ATS) flight plan, when required in accordance with Section 4 of the Annex to Commission Implementing Regulation (EU) No 923/2012 (1
   3. current and suitable aeronautical charts for the area of the intended flight.
B. All of the following documents, manuals and information shall be carried on each flight or shall be stowed in the retrieve vehicle, as originals or copies:
   1. the certificate of registration.
   2. the certificate of airworthiness, including the annexes.
   3. the aircraft flight manual (AFM) or equivalent document(s).
   4. the aircraft radio licence, where the balloon is equipped with radio communication equipment in accordance with point (a) of point BOP.BAS.355.
   5. the third-party liability insurance certificate(s).
   6. the balloon logbook or equivalent document(s).
   7. any other documentation that may be pertinent to the flight or is required by the states concerned with the flight.
C. when requested by the competent authority, the pilot in command or the operator shall make available to that authority the original documentation within the time period specified by the authority which shall not be less than 24 hours.

Occurrences Reporting: Aviation

Persons involved in aviation activities are required to report certain occurrences in accordance with regulations. Operators should be aware of the requirements of the Basic Operational Requirements set out within the Commission Regulations (EU) 2018/395.

Occurrence reporting in Europe is subject to EU Regulation (namely Regulation (EU) 376/2014). For further information, link: https://www.iaa.ie/commercial-aviation/safety-reporting-1

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Parachuting and Skydiving

The following recommendations and guidelines are to aid in the promotion of safety with respect to parachuting and skydiving film sequences. Adjustments may have to be made in any given case as circumstances warrant for the safety of the persons involved in the parachuting or skydiving activity, on the set or location. All skydiving or parachuting in Ireland must, (except in an emergency), be performed in a designated area or with special permission of the Irish Aviation Authority and possibly may require Air Traffic Control clearance. Be advised that these permissions may take some time (4-6weeks) to process.

- Radio communications shall be maintained between the aircraft carrying the jumpers and the landing site at all times. Ground signals (smoke, panels, etc) shall be provided as a backup.
- The parachuting coordinator shall be a qualified jumper. When only one jumper is employed, that jumper should be the coordinator.
- The parachuting coordinator shall determine whether security is necessary to exclude non-essential crew and non-participating spectators from the landing area. Open field landings may not require security.
- The producer shall require each parachutist or parachuting coordinator to hold an appropriate parachuting qualification under law, or present satisfactory evidence of the necessary experience, knowledge and skill required to attain this rating.
- All jumps shall be conducted in accordance with Irish aviation law.
- Before each jump is to be performed, all persons involved shall be thoroughly briefed. There should be a dry run on the ground at the site.
- All equipment, props, costume, etc shall be made available to the coordinator prior to the stunt/jump for safety evaluation. Final safety approval rests with the coordinator with respect to the equipment and costume used in the jump.
- The coordinator is responsible for temporarily holding or cancelling the authorised operations if at any time the safety to persons or property on the ground or in the air is in jeopardy, or if there is a contravention of the terms or conditions of an IAA Letter of Authorisation.
- All operations involving fixed wing aircraft and helicopters shall conform with the above.
- All pilots must be familiar with the dropping of jumpers.
- Pickup boats and flotation gear should be available when the possibility of a water landing exists, and each boat pilot shall participate in the pre-jump briefing.
- Lighting for night shots should be reviewed with the parachute co-ordinator. That landing site for a night shot should be viewed during daylight hours before jumping.

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Animals including Horses and Carriages and Ridden Horses

The animal wrangler/handler/horse master is the department head and works closely with many different persons within the production. These can include the UPM/PM/LP, the director, 1st AD, props master, stunts coordinator and others. They are responsible for the logistics of bringing animals, including horses, to and from set and having animals on set.

Use of Animals

The Animal Health and Welfare Act 2013, makes it a criminal offence to commit acts of cruelty to any animal or to be a party to such offences (See Section 12 Part 3 listed below).

Protected Animals: Part 3, Section 11 states that

1. 11 (1) A person who has a protected animal in his or her possession or under his or her control shall, having regard to the animal's nature, type, species, breed, development, adaptation, domestication, physiological and behavioural needs and environment, and in accordance with established experience and scientific knowledge, take all necessary steps to ensure that:
   A. the animal is kept and treated in a manner that:
      i. safeguards the health and welfare of the animal, and
      ii. does not threaten the health or welfare of the animal or another animal, and
   B. all buildings, gates, fences, hedges, boundary walls and other structures used to contain the animal are constructed and maintained in a manner so that they do not cause injury or unnecessary suffering to the animal.
2. A person who fails to comply with this section commits an offence.

Prohibition on animal cruelty. Part 3, Section 12 states:

1. A person shall not:
   A. do, or fail to do, anything or cause or permit anything to be done to an animal that causes unnecessary suffering to, or endanger the health or welfare of, an animal, or
   B. neglect, or be reckless, regarding the health or welfare of an animal.
2. A person who contravenes this section commits an offence.

In the above case, a person is either liable, on summary conviction, to a class A fine or imprisonment for a term not exceeding 6 months, or to both, or is liable, on conviction on indictment, to a fine not exceeding €250,000 or imprisonment for

a term not exceeding 5 years, or to both.

The Department of Agriculture requires that records be maintained by the animal wrangler for certain animals/livestock, for their acquisition and disposal.

Quarantine requirements may apply where inter territory or overseas travel is involved (outside EC).

Anaesthetising Animals for Filming Purposes

The American Humane Association (AHA) is the organization responsible for monitoring the use of animals in movies in the US and around the world for over 65 years and is considered the world's leading authority in protecting animals during filming.

The AHA guidelines state that although permitted for veterinary care, general anaesthesia and sedation are high-risk procedures and are prohibited for the sole purpose of filmmaking. Anaesthetising animals for filmmaking has the potential to cause harm without benefiting them in any way. Alternatives must be sought, for example by using replicas.

Source: Veterinary Council Ireland Newsletter – Summer 2015 – Issue 9. Link: https://www.vci.ie/Publications/Newsletters

https://www.vci.ie/Publications/Newsletters/Publication-1

Section 17 of Part 3 of the Animal Health and Welfare Act 2013 states that a person shall not, except in accordance with animal health and welfare regulations, perform an operation or procedure (with or without the use of instruments) involving interference with the sensitive tissue or bone structure of an animal without the use of an appropriate anaesthetic or analgesic administered so as to prevent or relieve any pain during or arising from the operation or procedure. A person who contravenes this section commits an offence.

Reference Animal Health and Welfare Act 2013 **&** Veterinary Practice Act 2005 for further information. Links: http://www.irishstatutebook.ie/eli/2013/act/15/enacted/en/pdf

http://www.irishstatutebook.ie/eli/2005/act/22/enacted/en/pdf

For further Guidance for the Welfare of Performing Animals please find below link to RSPCA document:

Links: https://www.rspca.org.uk/adviceandwelfare/performinganimals https://www.rspca.org.uk/adviceandwelfare/performinganimals/guidelines

Productions engaging animal wranglers/horse masters and persons providing animals (including horses) for work on set to be aware of UK Regulations:

The Animal Welfare (Licensing of Activities Involving Animals) (England) Regulations 2018 Guidance notes for conditions for keeping or training animals for exhibition. Link: https://www.gateshead.gov.uk/media/9876/DEFRA-Statutory-Guidance-for-Exhibition-of-Animals-2018/pdf/DEFRA_Statutory_Guidance_for_Exhibition_of_Animals_2018.pdf?m=636727821691900000

Prep Phase: Considerations for When Using Animals

- The animal wrangler/horse master should be aware of requirements for the animals for each scene/day that animals including horses will be on set.
- The animal wrangler/horse master is to be made aware of other department requirements for when on location, for example the use of cranes, drones, aircraft, SFX, including fire and atmospherics (rain, snow or wind), the use of guns and explosives, other animals or other.
- What time will be required prior to shooting day for training and familiarisation of animals and performers for particular sequences.
- Will the animal wrangler or horse master be required and available to attend recce/tech recce, depending on animals required and their role on set?
- Will animals be accustomed to working in a busy, noisy environment, be well socialised and handled, pre-conditioned to any unusual behaviour they are likely to experience, including familiarisation with clapper boards, boom poles, working close to work at height equipment, or strange noises likely to occur during the shooting day.

The animal wrangler/horse master should determine and confirm the suitability of animals on set and highlight any possible concerns with production in the pre-production meeting.

- The animal wrangler/horse master is to determine if PPE (for example hearing protection) is required for animals and supply same.
- The horse master is to determine and advise on the number of horse handlers and grooms required for each shooting day. Take into account the action required, the location, the number of horses to be ridden and or combination(s) of driving horses required.
- Is there an emergency plan in place in order to protect animals, people and property in case there is any unforeseen danger or incident?
- Will scripted activities need to be adjusted to suit an animal's capacity?
- Where reptiles are to be used, only non-venomous reptiles will be provided.
- Confirm action and breakaway props used in close vicinity of all animals shall be of safe materials such as sugar glass, balsawood, rubber etc.
- Shall a vet be needed on set, depending on the type and number of animals being used? Note: a qualified veterinarian is the only person able to prescribe drugs if required.
- Will it be necessary to engage an animal behaviour expert either before shooting day(s) or to be on set to assist with advising on animal's welfare? Identify risks to animal welfare and suggest measures that can be put in place to lessen those risks. Note: An animal behavioural expert is a person who has proven experience, knowledge, and skill in carrying out animal welfare risk assessments, taking into account the welfare of animals to be used on the production.
- The animal wrangler/horse master is to determine and advise of suitable times that each animal can be on set and at a location.
- Depending on the location and number of consecutive days of shoot, the horse master may request facilities to use their own portable stables. This can minimise transport requirements for horses required on consecutive days.
- The horse master is to confirm all horses will be microchipped and have a passport.
- A receipt of purchase should be held by the production office for any dead animals acquired for use in scenes. A receipt of disposal from the rendering plant by a licenced collector or vet is to be obtained and supplied to production. (Such animals should not have been killed expressly for the production). An animal may only be killed for a number of reasons. One such reason includes to safeguard or enhance animal welfare or protect public safety (See section 30 (1) (l) of Part 6 of the Animal Health and Welfare Act 2013 Act for further detail).
- The animal supervisor should ascertain (with veterinary advice if required) that all animals are disease-free, including dead animals (For example in the use of rats, a vet certificate to confirm

they were bred in captivity and are Weil's disease/Leptospirosis free) and whether special hygiene precautions are needed.

Pregnancy and working with animals

Production is to be aware that when working at a location where there are animals potentially giving birth or have recently given birth this can pose additional risk to any person that is pregnant. Please see the section on Pregnancy at Work within this guide for further details.

Risk Assessments

The animal wrangler/horse master will be required to have a risk assessment for any animals and activities that animals are to engage in while on set. The risk assessment should be given to production before shooting day(s). Anything that could give rise to injury or unnecessary suffering or other risk to the welfare of the animal or another animal must be taken into account.

Information within the risk assessment to include but not limited to:

- Details on the number and types of animals being brought to a location/ on set.
- Number of competent persons that shall accompany animals to location, to and from set and working with animals when on set.
- Relevant details on the health of animals being provided.
- Parking, unloading, loading areas required for specific animals.
- Exclusion zones required for parking, loading, and unloading.
- Exclusion zones for cast, crew and background artists, members of the public when animals are on set.
- How will exclusion zones be achieved? Will physical barriers be required?
- Tolerance of animals on set/location within close proximity of persons and other animals. For example, will the noise of pigs or sheep cause horses or cows to become agitated?
- Requirements for animal welfare.
- Requirements for animal activities on set. For horses, provide a clear outline of action sequences horses (both ridden and driven) will be engaged in.
- Who will be riding/driving the horses/ horses and carriages?
- If cast or stunt performers will be riding and/or driving horses, have they the required competency and have they been assessed to ensure they have the required skills, including skills required in the event the horse's behaviour becomes unpredictable, they get spooked or other factors?
- Will persons riding horses be wearing a recognised standard of PPE?
- Has it been necessary to engage a stunt coordinator for action sequences for riding horses, including overseeing competent stunt performers?
- Are horses engaging in stunts being provided by a recognised stunt horse provider.

Shooting Phase: Considerations for when using Animals

- Competent animal handler(s) should be on set.
- The 1st AD and medic on set should be advised when any animals are being brought to set.
- The horse master should have available passports for each horse on set.
- The facilities for animals both on and off set areas are to be consistent with maintaining the animals in good health. Food and water should be clean and unspoilt.
- All harnesses, saddle and tack and other animal-related accessories must be in good condition and approved by the animal wrangler/horse master.
- Cast, crew, and background artists are to refrain from handling or being close to animals unless a requirement of script and activity overseen by animal wrangler.
- Where persons are to be filmed working in close proximity with animals, competent animal handlers should be engaged as background artists as required – for example, shoeing a horse, driving carts and carriages.
- Safety directions given by animal wrangler to cast, crew and background performers are to be adhered to at all times.
- The animal wrangler should satisfy themselves concerning the precautions taken to protect the safety of people applying makeup or prosthetics to animals, and to the animals themselves.
- The precautions taken for the movement of cast, background artists during stunt and SFX sequences and sequences with firing of arms should apply equally when animals are on set.
- Horse-drawn vehicles may only be used when operated by, or under the instruction of, a qualified driver whose decisions regarding the capabilities or limitations of the rig is final.
- The animal wrangler/handler should always be able to raise a concern to the production team, during the shoot.

Chain of Command on Day of Shoot

When animals are on set, the animal wrangler/supervisor should have direct communication with the 1st AD, the stunt and special effects coordinators, armourer, and others as appropriate.

The chain of command on set is that the animal wrangler/horse master and 1st AD has final say and that any changes must be agreed and approved by the animal wrangler/horse master, no matter how small or insignificant the change may seem in the operation.

An open communication system must be in place between the animal wrangler/ horse master and 1st AD. The 1st AD is to ensure that the animal wrangler/ horse master is ready before the commencement of any action, and that the set areas are kept clear as necessary prior to moving onto the next setup to ensure the welfare of animals and safety of persons.

Transport and Holding

- Facilities on location are to be adequate for comfort and sufficient to prevent the escape of animals. Facilities to be approved by the animal wrangler.
- Licences (EU Transport Licences held by the animal wrangler) may be required for transportation of animals used in production., e.g. Licences for travel under 8 hours and/or over 8 hours.
- Transport methods should suit the species and number of animals to be transported.
- Transport containers should be constructed to prevent escape and injury.
- Transport containers should be constructed to minimise stress and designed and constructed to provide adequate shelter, noise reduction, inner shelters where necessary, ventilation, even temperature and humidity, motion support and space to lie. The animals' need for separation should be considered, regular food and water provided, and suitable release areas prepared for arrival as agreed with the animal wrangler/horse master.
- Any transportation of an animal for commercial purposes must have documentation of the animal's origin and ownership, date/time of departure, intended place of destination and expected duration of the intended journey.
- Transportation of animal's, further information – reference:
  - Transport of Live Animals - Gov. ie, Link: https://www.gov.ie/en/

publication/f7279-transport-of-live-animals/?referrer=http://www.agriculture.gov.ie/animaltransport/

- EU rule (Council Regulation (EC) 1 of 2005. Link: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32005R0001&from=EN
- European Communities (Protection of Animals During Transport) Regulations 2006. Link: http://www.irishstatutebook.ie/eli/2006/si/675/made/en/print

Irish Society for the Prevention of Cruelty to Animals (ISPCA)
Contact details for ISPCA: https://www.ispca.ie/

49 Armourer

Where a production requires the use of weapons including firearms an armourer should be consulted by production to determine what will be required and what weapons and or firearms including airsoft firearms, shall be real weapons or firearms. They determine what weapons or firearms require modifying by the armourer and or what weapons and or firearms shall be replicated, for example made of rubber or other materials.

The production should ensure that the armourer and his crew have the necessary competencies including experience on working within the film and TV industry to perform the role on a production and have the required licences. The armourer is responsible for planning and overseeing all use of firearms/weapon requirements on a production.

They determine the number of assistants required for each day of a shoot. This will be determined by the number of cast and/or background artists required to carry or use arms/weapons on set, and the type of firearms and weapons required. Assistants work under the supervision of the armourer.

The assistants will be tasked with overseeing the security of the weapons on and off set, the cleaning of the weapons and firearms. Best practice in the UK is that where there is a requirement for more than five firing weapons to be on set or at a location, an assistant armourer or other assistants will be required. Note: in the USA due to broad licensing for firearms available for members of the public, the rules differ.

A Film Armourer

A film armourer is “a registered firearms dealer, or their agent or another properly authorised person, who is insured to provide firearms for use in film and TV productions”.

Ref: Metropolitan Police Film Unit UK (MPS Film Unit). Link: https://www.met.police.uk/advice/advice-and-information/f/af/filming/guidelines-for-filming/

Licencing

When working with practical firearms the armourer must hold current certificates for each firearm or be registered as a firearms dealer. Individual firearms certificates are supplied through An Gardai Siochána and a firearm dealer licence is applied for through the Dept of Justice. The armourer must also hold a licence for the correct storage of blank ammunition and his/her premises must be registered with the local Fire Prevention Officer. Depending on the requirements of a production, firearms as supplied by an armourer may have to be imported. Such firearms need to be imported through the Dept of Justice. Documentation for all imported firearms and weapons including antique firearms or weapons (which are fire capable) are to be maintained by the armourer, detailing the serial number for each item. Additional permits may be required from An Garda Siochána to move firearms from one part of the country to another.

Weapons

Weapons have been defined by the Metropolitan Police Service Film Unit UK (MPS) as: “A weapon includes any object which is designed for the purpose of inflicting bodily harm such as crossbows, catapults, any sharp-edged instruments used in a fight sequence (swords and knives) or martial arts weapons (such as rice flails) and batons, battering rams, swords, spears, longbows”. The MPFU guidance also covers “replica weapons and props which are not designed specifically for inflicting bodily harm, but which may pose such a risk when used as a weapon”.

What are Firearms

An armourer should be able to provide a wide range of firearms. Firearms could include but are not limited to historical firearms such as wheellock, flintlock or percussion weapons to centre-fired modern-day automatic weapons. Any firearm including a pistol, rifle, machine gun, heavy machine gun falls under the realm of an armourer.

The word “firearm” means a lethal firearm or other lethal weapon of any description from which any shot, bullet, or other missile can be discharged (Ref: Firearms Act 1925).

For further information on ‘Firearms reference Dept of Justice website and Criminal Justice Act 2006, Links: Department of Justice: http://www.justice.ie/en/JELR/Pages/Firearms

Criminal Justice Act 2006: http://www.irishstatutebook.ie/eli/2006/act/26/enacted/en/pdf

Hiring of Firearms

In Ireland and the UK, companies that hire firearms to production companies typically will only hire the firearms to a production when an armourer from their

company is engaged. In the UK, the MPS states "any production requiring replica/ imitation or airsoft firearms, must have obtained them from a Registered Firearms Dealer (RFD) or a correctly licensed supplier that is a company whose business is to supply replica/imitation or airsoft firearms to film, television and theatrical productions". This would be considered best practice for production companies in Ireland.

Movement, Security and Storage of Weapons

The security of weapons being transported to and from a set/location is the responsibility of the armourer. The armourer's own insurance is to cover firearms at their own premises and during transit to and from set.

When firearms are on set, they are under the insurance of the production company. Appropriate provision for security of weapons on set should be provided and coordinated by the armourer.

Weapons and firearms cannot be left unattended at any time. An armourer may be able to attend and oversee the security of a small number of weapons while on set. There may be a need for an assistant to oversee the security of firearms on/off set. The armourer will advise, as necessary.

All firearms should be securely stowed in lockable cabinets and access to the cabinets restricted to persons assigned by the armourer.

The UPM/LP/PM and/or the location manager should liaise with the armourer to advise on determining requirements for the security of weapons when on location. The armourer may need to have vehicles close to the set area, taking into account the location itself, for example whether the location is in the public domain, the number of weapons on location, the number of vehicles containing weapons and the number of assistants working with the armourer for the duration of the shoot.

Cast and background artists must not be in possession of weapons when 'off set', they must not be in possession of weapons traveling to and from set areas. The safety and security of replica/imitation/airsoft firearms should be treated in the same way as above.

Modification of Firearms

Best practice recommends that real fully functioning firearms designed to fire live ammunition should be used for the purpose of firing blank cartridges. Practical firearms are manufactured to very high build standards and have been engineered to give long life and service. The materials used in their construction are of a strength and quality that allows for the safe discharging of multiple rounds over their lifespan.

Automatic firearms, long or short, require modification work that should only be carried out by a competent armourer. Internal works on such firearms require an engineering method to enable the safe cycling of blank ammunition and this requires competency in gunsmith work.

Blank Ammunition Loads used in Firearms

The armourer will advise on the most suitable blank cartridges to be used on a production. They will take into consideration the venue, interior or exterior, the size of the working space or set area and recommend what firearms and blank ammunition may be safely used.

Tailored blanks such as ½ or ¼ loads may be an option when using through the barrel firing firearms such as Colt Action Rifles or Revolvers. This has the effect of reducing noise levels and muzzle blast in set areas which are restricted or enclosed spaces.

Full load blank cartridges are required when using automatic firearms. Full load blank cartridges are loud and may not be safe to discharge in certain circumstances, such as set areas which are restricted or enclosed spaces., rooms with low ceilings, concrete constructions where there is likely to be little or no porting of sound. There may be restrictions imposed on certain automatic firearms and ammunition due to noise levels on locations and especially when in the public domain.

A city or county council may prohibit the discharging of firearms if there is a possibility that noise levels exceed standard safe norms.

PPE – Safety Equipment when Firearms or Weapons are in Use

The armourer should advise on the appropriate hearing protection and other PPE required for cast, crew, background artists, and how to wear them correctly.

The armourer will advise what protection camera crew will require and what protection will be required for camera and other equipment on set when working and operating in the vicinity of firing arms.

Hearing protection for persons other than cast and background artists 'in camera' could require the use of ear defenders. The armourer is to advise on the appropriate level of hearing protection and other PPE required for cast and background artists, and advise the costume, hair, and makeup departments of these requirements. Makeup and hair should provide wax moulding and other hearing protection for cast.

The camera operator should wear clothing that covers their entire arms and legs. An example of PPE for a camera operator could include gauntlets to protect the forearms, full face cowls/visor and safety glasses. In some instances, a complete boxed camera hide may be required to protect the operator, focus puller and grips. This will have been previously discussed with the camera and grips departments.

Where knives are in use, the armourer will recommend what protection is required for cast or others and can advise the costume department of any specific requirements to accommodate padding or other.

Specific costume requirements may be necessary for cast taking into account possible 'peppering' (unburnt repellent in blanks which can be miniscule but very hot) from the discharge of the load.

See also section 4.1 regarding PPE.

Training for cast /background artists and/ or specialist background artist

The armourer will require time with cast/ background artists and the specialist background artist to train and brief the person(s) on the safe handling and use of the weapons.

The armourer may require time with cast/ background artists and the specialist background artists ahead of the scheduled shooting day in order to train them to handle the weapon safely and with a level of proficiency.

Production should discuss with the armourer the time required to deliver adequate training and information to all those involved and to those that will be affected by the use of the weapons.

'Special Extras' and background artists can be invaluable to a production where there is requirement for proficiency and expertise in the handling and use of firearms and or weapons. The use of specialised extras can reduce the time required for training and result in a more authentic action. Special extras could be trained army or Gardai personnel.

Weapons:

Deactivated Weapons

A deactivated weapon is a firing weapon but is no longer fire capable.

Crossbows

Crossbows need to be under licence by the registered armourer as they are a prohibited weapon in Ireland

Crossbows, spearguns and all airguns with a muzzle velocity of over one joule (including paintball markers) are legally considered firearms and have to be licensed. The word "firearm" means a lethal firearm or other lethal weapon of any description from which any shot, bullet, or other missile can be discharged (Ref: Firearms Act 1925).

Firearms means – 'a crossbows' (Ref: Criminal Justice Act 2006, Link: http://www.irishstatutebook.ie/eli/2006/act/26/enacted/en/pdf)

Firing from a crossbow and or an archery bow is classed as projectile firing. Where there is a requirement for an arrow or a bolt to be loosed from such a weapon to a target on set, an armourer should be present.

Spear Throwing

For practical spear throwing the weapon may have a rubber tip, but it will still have a wooden shaft (or other material) and be capable of causing injury.

Swords

Swords are impaling hazards regardless of whether they are made of steel, aluminium, wood, or bamboo. If the weapon is misused, it has the potential to cause serious injury.

Knives

The range of knives can include kitchen knives, switch blades, daggers, jack-knives (a large knife with a folding blade). All knives made of steel or aluminium should be blunted weapons, edging to be blunted as the edge has the ability to cut, gash, abrade and or impale. On occasion for a non-practical hero knife, the edges may be required to be left unblunted – these must be non-practical only. All knives are hazardous and blunted knives can cause serious injury. Production should take the necessary precautions to allow for error, consultation is to be made with the armourer re the safe use of all knives.

Retractable Knives/Swords (plunger knives)

Retractable knives (even when blunted) can cause serious injury due to the likelihood of 'jamming'.

If the aim of the person using the retractable knife is not on target, this can cause the mechanism to jam when plunging into the target and can be an impaling hazard. If there is a necessity to use a retractable knife, strict controls must be in place and maintained by the armourer. The person the retractable is being 'plunged' into may be required to wear body armour. The armour could be of aluminium. Even when armour is worn additional padding may be required.

An alternative to using a retractable knife is to use a 'three-part knife'. This is a prop of three separate knives (units). It can be used to establish for the camera the different stages of the plunge and positioning of the knife. The visual effects (VFX dept) can create the CG effect on post. The 'three step knife' comprises of the hilt on its own, a quarter blade in the hilt and the full prop knife.

Use of Rubber Guns and Rubber Prop Weapons

It is recommended that productions consider the use of rubber guns/weapons. These can be provided by the armourer or made by a model maker. These are a safer alternative to real and replica guns and weapons and are highly recommended for background.

Use of replica/imitation or airsoft firearms.

In the UK, the MPS states "a film armourer must be engaged where a firearm that requires a licence or certificate is to be held or used by someone who is not working within the privileges of their own licence, such as an actor".

Use of a BB Gun

A BB gun is a type of air gun designed to shoot projectiles called BBs. There is no licence required for a BB gun. These should be considered if there is no requirement for blank firing. BB guns can appear extremely realistic in appearance, size, and weight.

The plastic BB projectile that can be discharged from the BB gun is hazardous, therefore BB guns need to be decommissioned completely before being used on set. The barrel should be permanently blocked and pinned, glued, and sealed and all firing components removed so the gun is unable to discharge.

An Garda Siochána view BB guns as looking totally realistic and permission must be sought when using them in the public domain.

BB guns should be treated with the same respect as a real firearm. They need to be securely stored on set to prevent theft. A person is to be assigned responsibility for the security of the BB gun when on set or on location. At the end of the shoot if no longer required, they should be disposed of responsibly by the production company.

Stunts requiring the use of Firearms and Weapons

Training for stunt performers using firearms and weapons will depend on their previous experience, it is for the armourer to determine what training will be required for use of weapons and or firearms under the control of the armourer.

Permissions to use Weapons in the Public Domain and Notification to An Garda Siochána

An Garda Siochána to be notified:

- When replica arms, weapons and imitation or airsoft firearms are expected to be visible at a location accessible to members of the public, or a private location that can be overlooked by the public.
- Where cast or background artists are required to wear fake An Garda Síochána, or military costume or impersonate An Garda Síochána or military personnel.
- If scenes require re-creation of a crime or violence.

Costume - Impersonating An Garda Síochána, or military personnel

Any cast, background artists or special extra impersonating and wearing fake An Garda Síochána, or military costume must not leave the set area wearing the costume and be advised to cover their costume in between takes if they are in the public domain, or are on a private location that can be overlooked by the public.

Recce/Tech Recce

The armourer should be requested to attend recces and tech recces to locations/studios where firearms and/or weapons will be required during the shooting phase to determine what can or cannot be used and used safely for the assigned set area.

Risk Assessment

The production should ensure that risk assessments are in place for all weapons and imitation weapons, and all firearms including replica and imitation firearms and airsoft firearms.

The armourer will be responsible for

generating site, location, and activity specific risk assessments for use of weapons and firearms during training and for shooting days.

The risk assessment should clearly identify control measures for all weapons and imitation weapons, and all firearms including replica and imitation firearms and airsoft firearms from procurement to disposal. The armourer is responsible for ensuring the members of cast and others as appropriate have read and understand the armourers specific risk assessment.

For further information on Risk Assessments see Chapter 7: Hazard Identification and Risk Assessments.

Number of persons on set during use of weapons including firearms

The production liaises with the armourer to determine restrictions to the number of persons, exclusions areas required, and positioning of crew and equipment on set during the use of the firearms or weapons. Persons must not access restricted areas. The cordon takes account of possible 'peppering' from the discharge of the load from firearms and other hazards associated with the use of weapons and firearms including flying objects, for example projectiles.

Communications with Cast Including Safety Briefing for Weapons and/or Firearms on Set

A safety briefing is to be given to cast by the armourer before beginning weapon and firearm training and when weapons and firearms are on set.

- The armourer should liaise with the camera department and grips re use of lens, angles, and camera height to reduce the risk of injury and damage.
- The armourer must be permitted to have full communication with persons using and holding weapons and firearms on set and must be able to maintain full sight of persons using and holding weapons and firearms on set.
- Persons firing arms and persons within close vicinity of gunfire are to be provided with and wear appropriate hearing protection as advised by the armourer, taking into account the expected decibel levels, the distances of persons from arms being fired, and the areas where arms are being fired.
- All firing of guns must be overseen by the armourer.
- All firearms to be inspected by the armourer prior to use to ensure they are in good working order and fit for purpose.
- All shells, powder and primer are to be inspected by the armourer prior to use to ensure they are in good condition and fit for purpose.
- Loading and reloading of weapons to be carried out by the armourer only.
- Cast or other persons must not be in possession of a firearm unless under the direct supervision of the armourer or armourer assistant engaged by the production company.
- Cast and others in possession of weapons and firearms are to follow all safety instructions given by the armourer when handling and discharging firearms.
- The armourer or armourer assistance should check weapons before and after each use.

Further reading

Health & Safety Executive UK Guidance on the management of firearms and weapons in film and TV productions. Link: http://www.hse.gov.uk/pubns/etis20.pdf

Metropolitan Police Film Unit UK (MPS Film Unit) Guidelines to Filming on Location. Link: https://www.met.police.uk/SysSiteAssets/media/downloads/central/advice/filming/guidelines-filming-location-london.pdf

Metropolitan Police Film Unit UK (MPS Film Unit) Guidance for Scenes involving Weapons. Link: https://www.met.police.uk/SysSiteAssets/media/downloads/central/advice/filming/guidance-for-scenes-involving-weapons.pdf

Metropolitan Police Film Unit UK (MPS Film Unit) Guidelines for Filming https://www.met.police.uk/advice/advice-and-information/f/af/filming/guidelines-for-filming/

Department of Justice – Firearms Legislation: Link: http://www.justice.ie/en/JELR/Pages/LegislationPublication

The Garda Commissioner's Guidelines as to the Practical Application and Operation of the Firearms Acts, 1925 – 2009. Issued in accordance with section 3A of The Firearms Act, 1925 as inserted by section 31 of the Criminal Justice Act, 2006. https://www.garda.ie/en/about-us/online-services/firearms-licensing/commissioner-s-guidelines-2018.pdf

50 Gimbal – Motion Platforms/ Set Platforms

This class of structure includes actively powered motion platforms (such as gimbals), and passive structures (such as rope bridges, rocking tables) necessary to hold and safely position a set on the day. It refers to a specialist element, beyond general construction work, where there is an unusually elevated risk arising from the requirements (such as working at height, violence of motion, weight of set). Definition of a gimbal: 'A gimbal is a pivoted support/hydraulic motion platform that allows the rotation of an object about a single axis'. It can be used to give the desired effect of a moving boat or ship, or other set that is required to move.

A suitably qualified and competent person should be appointed to oversee the design, manufacture, installation, and operation of the gimbal. That person would preferably work as a member of a company having substantial procedures (incl. quality, H&S, insurance) and previous experience directly relevant to the task in hand. Example of qualification for the 'competent person' as outlined above: To have attained a recognised 3rd level degree in engineering.

The design including structural integrity of the gimbal/motion platform should take account of the requirements including the load, shaking, pitch, roll and or other activities that will be required specifically for expected filming sequences (including rehearsals).

The 'competent' person/company will be required to complete a preliminary engineering evaluation which establishes the maximum extent of the requirements for the structure, in close consultation with all departments who may give rise to future requirements. Aside from the art department and construction department, efforts should be made to elicit future requirements from SFX, stunts, set decorators, props and locations department. The preliminary evaluation should set out clearly the solution proposed to meet the requirements, and its limitations taking into account functions (access, rigging etc), static/live loading (SFX, stunt), motion (violence, acceleration), lifetime (fatigue) and environment (weather, installation). To reduce the risk of 'pushing it' on the day, the solution/limitations should be agreed with the depts consulted to date, and with the UPM/PM/LP, 1st AD, safety officer/safety advisor and medic crew, before commencement of supply.

Consideration should be given by the qualified and competent person, taking into account other activities at the site. A

deployment method statement prepared and disseminated prior to installation would communicate to the depts the proposed installation procedure, including time, equipment, space and access required and exclusion zones required, so that potential conflicts and risks can be mitigated and unnecessary delays prevented.

A preliminary risk assessment should be performed by the qualified and competent person and submitted to the production at the time of supply and installation, with the purpose of communicating the risks, limitations, and mitigations of the structure, so that the proposed mitigations can be agreed with the production (at customer acceptance). For example, based on the assessment, the production may require the providing company to provide specific skilled crew to operate and oversee the structure on the rehearsal and shooting days.

Risk assessments and method statements (RAMS) and commissioning reports should be completed by a structural engineer/competent person for each phase of work and supplied to relevant persons in advance of any works for each phase.

Since changing conditions and requirements give rise to changed risks (such as rigging, SFX, script changes) the qualified/competent person should revisit and reissue the risk assessment just prior to the shoot day (at final commissioning), so that the mitigating actions are appropriate and in place on the day. The production should ensure that this person is fully updated regarding the latest requirements on the day (incl. access, motion, SFX) and will ensure that the production remains within these limits on the day. This will typically involve having specific competent persons present on the day.

On the shooting day, if there is a requirement for any changes, the UPM/PM/LP and safety officer/advisor must be informed prior to changes taking place. The requested changes must be discussed to determine if the required levels of safety can be achieved and maintained. The requested changes are to be agreed by all who may be affected by them. Changes must be implemented and all in agreement that it is safe to proceed. The agreed control measures must be clearly communicated to all relevant persons that may be affected, this may include crew, cast, background artists or others, prior to continuing rehearsals or shooting. The 1st AD is to ensure all parties understand the new/additional control measures. The dynamic risk assessment identifying any changes, control measures, and communications must be documented.

For further information on Risk Assessments see Chapter 7: Hazard Identification and Risk Assessments. See Chapter 4, Section 4.7 Work at Height as well as Chapters 28 Construction regarding Work at Height

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Marine - Marine Coordinator

A marine coordinator may be engaged where there is a requirement to film sequences in, on or under water including the use of water tanks. The marine coordinator can advise on use of vessels and assist with synchronising the use of vessels and people involved in water scenes, and safely operate vessels required. Where underwater action sequences are required this may be supervised by the senior commercial diver. Advise should be sought from a recognised marine coordinator.

The marine coordinator takes overall responsibility for the complete marine package for the welfare and safe operation of cast and crew on a production, so that a marine sequence can be delivered within national regulations.

The marine coordinator will work closely with many different departments including producers, production designers, UPM/PM/LP, locations managers, constructions, medical department, and others as appropriate for prep, shoot and striking phases

The marine coordinator should have professional qualifications and experience in power boats and sail as required. Example of qualification: ‘Commercial Endorsement Class B’ as issued by Irish Sailing Association on behalf of Minister for Transport as per the Merchant Shipping Regulations 2005 and to have appropriate insurances.

When determining suitability of a marine coordinator for a production, the producers/UPM/PM/LP need to ensure qualifications held are specific to the craft(s) required. The marine coordinator needs to be able to demonstrate experience in working with the relevant crafts and also demonstrate experience in working in the film industry on productions similar to the one they are engaged in.

At concept level the marine coordinator should assist with determining what will be required and what can be achieved for a production. The marine coordinator is to assist with determining suitability of cast and performers required to work in water and activities required. They determine suitable locations and working environments, including water tanks where marine work will be required. The marine coordinator needs to be proactive to ensure transparency from the concept stage of a production.

The marine coordinator determines marine crew numbers per shoot and per production and ensures those engaged are qualified and competent for their role and have the appropriate experience within the industry.

The marine coordinator is responsible for ensuring all auxiliary equipment used on a production is in good repair, fit for purpose and tested and inspected as required by applicable regulations.

The marine coordinator needs to be aware of the wellbeing of persons working in the water, including causes, signs and symptoms of hyperthermia and potential cold shock, and manage persons working in water.

The marine coordinator will need to be facilitated by enabling good means of communication prior to and during the shoot.

General considerations for a production where there are marine activities.

Considerations for a marine coordinator when working at sea:

- Need to comply with national and local marine regulations.
- Need to liaise with local harbour master.
- Engage a local ship's pilot.
- Where possible engage local operators/ marine labour to work alongside marine coordinators and marine crew.
- Determine requirements for servicing the marine unit at sea.
- Determine crew ratio for when on water, for example 1 safety swimmer/ lifeguard to 10 cast and shooting crew.
- Working at sea can only take place during daylight hours only
- The marine coordinator is to ensure all boats are licenced to be at sea.
- Assess suitability in advance of weather conditions (wind direction and strength, sea state, tidal conditions, and precipitation) and continuously monitor throughout the shoot.
- Have in place a safe system of work, and risk assessments for all activities.
- Direct liaison with department marine for special cases may be required, for example: converting a cargo ship to a passenger ship for purposes of filming.

Considerations for the marine coordinator when working on lakes, rivers, and streams:

- Comply with local regulations.
- Parks and wildlife department is to be liaised with as appropriate.
- Liaise with and comply with owners' requirements as applicable (for example: Shannon Navigation).
- Local boats and labour are to be used as required.
- The marine coordinator will require an exceptional knowledge of the operating of small boats on lakes and rivers.
- The marine coordinator must have a working knowledge of the differences operating small boats on lakes and rivers versus at sea.
- Work closely with the construction department, set decorator.

Considerations for marine coordinator when works require the use of a water tank:

- Liaise with all applicable departments to ensure a safe working environment is maintained.
- Heated water to be provided for the welfare of persons in water.
- Fresh water to be used as saltwater degrades equipment rapidly

52 Modelmakers

The role of a modelmaker is diverse and covers a wide variety of skill sets. Also called a modeller or prop maker, modelmakers make elements within the film, television and commercial industries and have become an integral part of modern productions. Every film and television production would have its own very specific requirements and modelmakers adapt their skill as needed.

A modelmaker's work is mostly carried out under the umbrella of the art/set dec departments but it can also crossover with the following departments when required: the art department, set decoration, props, construction, stunts, costume, hair, makeup, prosthetics, special fx, visual fx, lighting, drapes and armoury.

The Modelmaking department structure comprises of a selection of the following grades:

- HoD - Head of Department/Supervising Modelmaker
- Senior Modelmaker
- Assistant Modelmaker
- Trainee

The HoD modelmaker is to agree the required crewing levels with the production designer and LP/PM/UPM, and review, as necessary.

The HoD modelmaker is responsible for scheduling and assigning work tasks for his/her crew, and ensuring time allocated allows for crew to carry out tasks in a safe manner.

They agree with production what level of first aid/medical aid will be required throughout each phase of the production depending on activities.

They ensure that all machinery, equipment used is in good condition and fit for purpose and crew are competent for tasks to be carried out (See 'Safe Use of Machinery' within Chapter 28 – Construction). Specific training requirements could include safe pass, set pass, chemical awareness, abrasive wheel, safe use of power tools and manual handling. Certificates of training may be requested, and crew should provide proof of training where requested.

The HoD modelmaker should ensure crew are provided with and use required personal protective equipment and respiratory protective equipment as appropriate.

The HoD modelmaker is responsible for ensuring risk assessments are carried out for workshops (carried out by HoD or production) and there are safe systems of work in place for workshops. They are

responsible for ensuring risk assessments are carried out for set/location activities before work commences. They ensure their crew have seen and understand all relevant risk assessments and have been instructed on the safe working practices to be followed in the workshop, when on set or on location.

Workshop

The Modelmaker may have their own workshop, a workshop that is not provided by production and is under the complete control of the modelmaker at an alternative location. In the event that this is the case, the modelmaker is to have their own safety statement, insurances for these premises.

In the event that there are modelmakers in the employment of the production working in this workshop, their employer must comply with the general considerations below.

General Considerations for Modelmaking Workshop

Where a production company provides the HoD modelmaker with workshop facilities the following will be required:

- Workshops to be of adequate size to allow people to work safely, allowing ample room to work safely with and around equipment and machinery. Exclusion zones to be created around hazardous equipment or machinery.
- The modelmaking workshop is to have adequate lighting to allow people to work safely.
- As the modelmaking workshop can be similar to a warehouse, there may be need for additional heating or cooling, depending on the time of year. There may be a requirement for minimum/maximum temperatures depending on materials being used for the manufacture of props.
- Access to workshops should be controlled so people who do not work in this department do not inadvertently put themselves at risk by accessing an area where there is risk of fumes, vapours, dusts etc.
- Facilities must have adequate ventilation taking into account chemical/product usage and may require local exhaust ventilation (LEV) system as per SDS. Good design and being fit for purpose are the crucial initial considerations to ensure the effectiveness of a system, reference HSA guidance on LEV: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Local_Exhaust_Ventilation_LEV_Guidance.pdf
- Modelmaker department workers can work with a wide range of chemicals including solvents, thinners, acetone, paints, plaster. Risk assessments should be in place, the HSA's document 'Your steps to chemical safety - A guide for small business' shows you how to carry out a chemical risk assessment, which is required by law - Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 and 2015, Link: http://www.irishstatutebook.ie/eli/2015/si/623/made/en/pdf
- Link to the guide for small business (note due to date of issue of the guide, this guide does not reflect Safety, Health and Welfare at Work (Chemical Agents) (Amendment) Regulations 2015 Link:https://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/Your_Steps_to_Chemical_Safety.pdf
- Safety data sheets/material data sheets should be available for all chemical and hazardous products used, these products should be handled by competent and qualified persons only.
- Chemicals are to be stored as appropriate according to specific SDS.
- Persons using chemicals to be provided with the appropriate RPE/PPE as per SDS.
- For further information on working with chemicals please see Chapter 65 within this guide: Working with Chemicals.
- Sufficient stable shelving is to be available to facilitate orderly and safe storage of makes and materials. Storage systems used should be fit for purpose, secure and in good repair. Where racking is used, racking is to be inspected annually by an external competent inspector and regular inspections from technically competent staff to be carried out.
- Hot and cold running water is to be available in modelmaking workshop.
- Hand washing /drying facilities provided.
- Carbon monoxide detectors where gas is used.
- First Aid kits should be available within the workshop area and include eye wash facilities.
- The principles of lifting to be followed for all manual handling tasks. Mechanical aids provided for the department as necessary and used by crew as appropriate.
- Adequate electrical supply to be provided for requirements, and safely maintained.
- Tools and machinery should be in good working order and fit for purpose.
- PAT testing as per legislative requirements.
- Where 220v tools are used in the workshop, additional precautionary measures will be required, including ensuring no exposure to water, PAT testing, periodic inspections.
- Workshop to have required, maintained fire extinguishers for activities of crew in workshop (See also Chapter 13, section 13.3 Fire and Fire Escapes).
- Modelmaking workshops like all internal work areas are strictly no smoking areas.
- Workspaces must be kept clean and tidy. Floors areas should be non-slip and level.
- Lone work is to be risk assessed.
- Safety signage to be in place as required advising of requirement for PPE, location of extinguishers, safety guidance for machinery. An employer shall provide safety or health signs, or both, at the place of work where hazards cannot be avoided or adequately reduced by techniques for collective protection or measures methods or procedures used in the organisation of work (See Chapter 1 of Part 7 of the Safety, Health and Welfare at Work (General Application) Regulations 2007).
- Facilitate toolbox talks as appropriate.

Modelmaking department hazards can include the following (non-exhaustive):

Power Tools
Saws, Jigsaw, Table, Band, Tracks, Bench saws, Chainsaws, Lathe, Mill, Grinders, Sanders

Hand Tools
Scalpels, Knives, Saws, Chisels, Screwdrivers

Chemicals
Acetone, Polyurethane, Epoxy, Cyanoacrylate, IPA, Cellulose, Toluene

Dust
Wood, Plastics, Metal, Bone, Polystyrene, Resins, Foams

Air Quality
Dust, Fumes, Paints, Chemicals, High levels of airborne toxins, Heat

Adhesives
Cyanoacrylate, Chloroform, Xylene, Latex, Ammonia, Polyester

Hot Work
Welding, Burning, Aging, Drying.

Heavy Lifting
Props, Materials, Containers, Furniture, Metal, Timber, Polystyrene blocks,

Working at height
Cherry Picker, Ladders, Scissor Lifts

Flammable liquids
Meth's, Acetone, Spirits, Cellulose, Polyurethane

Weapons
Knives, Axes, Bows, Blades, Swords, Firearms, Weapon rigs.

Electronics
12 v, 220 v, Props rigs, RC servos,

Special FX
Explosives, Fire, Chemicals, Hydraulics, FX rigs triggered by phones.

Action/stunt props: The modelmaker's responsibility

If a modelmaker is required to work with or make weapons, precaution will be required.

- The modelmaker should be aware of laws governing transportation, storage and use of these props.
- They coordinate necessary duties with the weapons expert assigned to the production.
- Where weapons are to be made or modified, the armourer in conjunction with the modelmaker will be required to have risk assessments in place.
- The modelmaker is responsible for carrying out a detailed handover of the prop to the suitably trained 'on set' handler. The detailed handover should include instructions on the operation and function of the prop, materials used and its limitations of use. Where the prop has been handed over and shall be under the control of a person from another department, the person from the other department shall be responsible for the safe use, transport, security, and storage of the prop.
- Risk assessments for all weapons are to be generated by the relevant HoD (armourer, prop master, stunt coordinator or other) for transportation to and from set, when on set and for on set requirements, including security arrangements.
- The 1st AD is to be informed by the relevant on-set handler of content of risk assessment and any specific on-set measures required.
- Production to use simulated or dummy props whenever possible.
- Action and breakaway props should be made of safe materials and only used for the specific scene it was made for. For example, if a rubber prop is made for hitting someone on the back in one scene, it may not be suitable for hitting a person in the face for another scene.

Waste Management

Waste management is to be agreed with production as per the company's environmental policy.

Waste management to be considered for appropriate disposal of recycling material and general waste, chemicals, and chemical containers.

Carpentry and Woodworking

General Precautions: operators must:

- Inspect all equipment before using, ensure equipment is in good condition and remove from circulation any equipment that is not in good condition.
- Ensure safety shields/devices are used.
- Wear/use approved protective equipment at all times.
- Remove rings, watches and loose clothing; suitably confine long hair.
- Ensure work areas are in a clean and safe condition.
- Follow all lockout/tag-out procedures as required.

Hand Tools

- Keep all hand tools clean, sharp and in good repair.
- Use all hand tools for the purpose for which they were intended.
- Do not carry sharp/pointed objects in pockets.

Power Tools

Make all adjustments and tighten all locking devices before attaching the tool to the power supply.

- Make sure the tool is switched off before connecting to the power supply.
- Use a grounded outlet, grounded extension cords, and/or a Ground Fault Circuit Interrupter.
- Operate all tools with all safety guards in place.
- Use fence/guide, push-stick appropriately.
- Maintain appropriate safety margin between the cutting edge and hands.
- Keep blades/bits, etc. sharp.
- Keep the tool and surrounding work area in a clean and safe condition.
- Follow the manufacturer's maintenance instructions.
- Handle all air-actuated devices with extreme caution.
- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect it from the receptacle.
- Keep cords and hoses away from heat, oil, and sharp edges.
- Disconnect tools when not using them, before servicing and cleaning them, and when changing accessories such as blades, bits, and cutters.
- Secure work with clamps or a vice, freeing both hands to operate the tool.
- Avoid accidental starting. Do not hold fingers on the switch button while carrying a plugged-in tool.
- Be sure to keep good footing and maintain good balance when operating power tools.
- Machines to be securely fixed to benches or floors as required.
- Machines should have an emergency stop mechanism where required as per manufacturer's guidelines.
- Battery operated tools and machinery can reduce the risk of working with electricity and the risk of trips and falls particularly when used in areas other than the workshop.

Working with Industrial Plant and Equipment

Where there is a requirement for modelmaking crew to engage in work involving industrial plant and equipment, please refer to relevant sections under construction department.

Safe use of Machinery

Section 8 of the 2005 Safety, Health and Welfare at Work Act requires employers to ensure that machinery is designed, provided, and maintained so as to be safe and without risk to health. The use of any machinery should be covered by a risk assessment in accordance with section 19 of this Act.

More specific technical requirements are contained in Chapter 2 of the 2007 Safety, Health and Welfare at Work (General Application) Regulations [S.I.No.299/2007 and S.I.No.732/2007] which deal with the use of work equipment.

These regulations set down the minimum requirements for machinery in use including the requirement that it complies with the provisions of any relevant enactment implementing any relevant directive of the European Communities. An Employer shall ensure that work equipment is maintained in such a way as to reduce the risks to users of the work equipment and to other persons at work (Chapter 2 of Part 2: Use of Work Equipment Regulation 31 of SHWW (GA) Regs 2007).

Other parts of the General Application Regulations are also relevant to machinery safety such as those parts dealing with electricity, noise and vibration. Reference the guidance documents

published by the HSA for further information, link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/General_Application_Regulations/Guide_to_the_Safety,_Health_and_Welfare_at_Work_General_Application_Regulations_2007.html

The use of machinery is also addressed in legislation specific to certain industries such as offshore, construction, mines, and quarries (e.g. Safety Health and Welfare at Work (Construction) Regulations 2013).

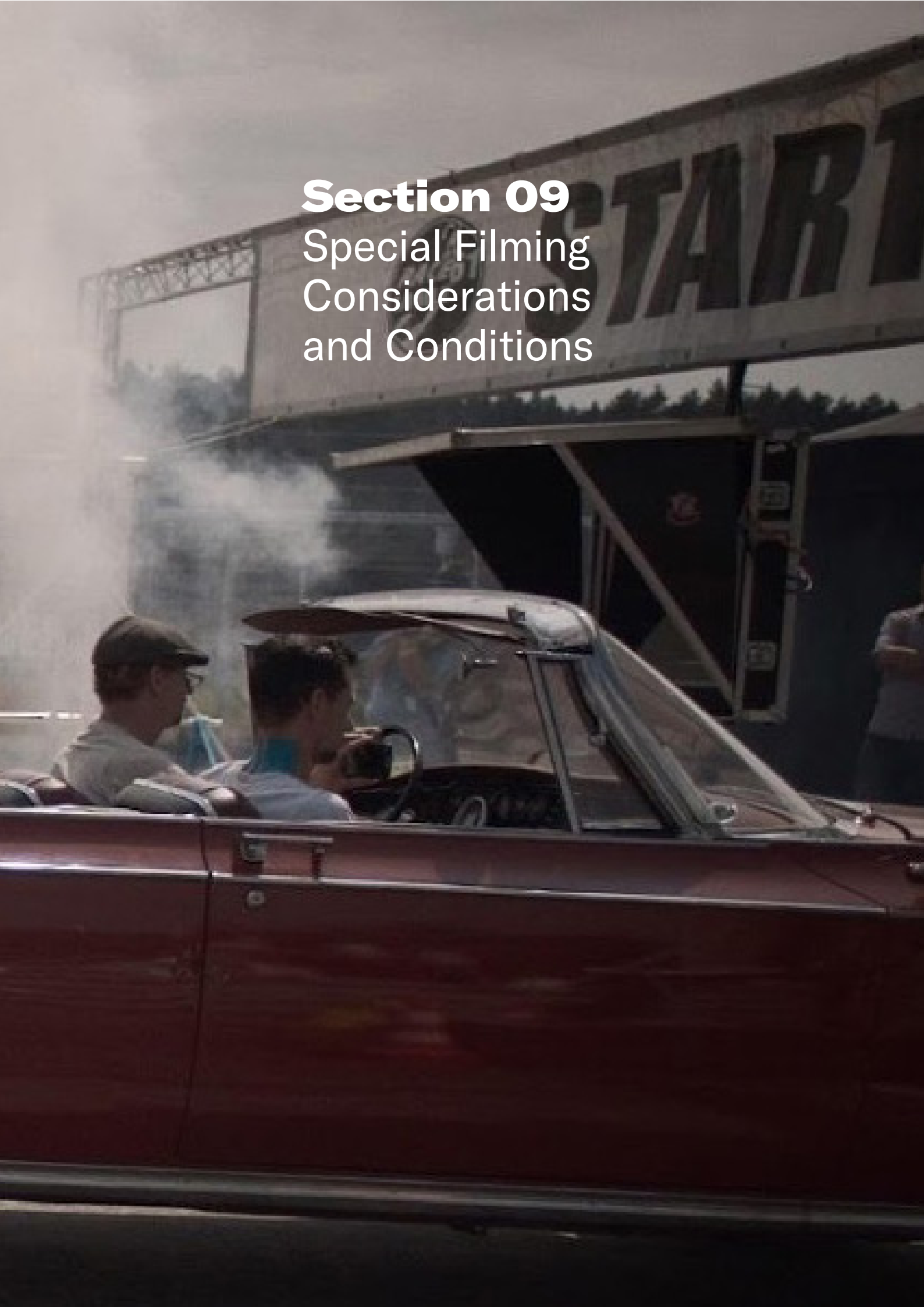
Where modelmaking crew engage in work involving use of dangerous machinery, please refer to relevant sections in Chapter 28:

- Working with Dangerous Machinery
- Guarding Against Dangerous Machinery
- Typical Hazards to look for when Identifying Dangerous Machine Parts
- Types of Machine Guarding

Where there is a requirement for modelmaking crew to engage in work at height activities, please refer to relevant sections under construction department including:

- General Guidelines for all Work Involving Heights
- Falling Objects
- Working with Ladders
- Mobile Elevating Work Platforms (MEWPS)

For further information on Working at Height, please see Chapter 4, Section 4.7 Work at Height as well as Chapters 28 Construction within this document.



Section 09
Special Filming Considerations and Conditions

53
Working with Children, General Considerations.

Please note: The Organisation of Working Time (General Exemptions) Regulations, 1998 is relevant to this chapter. It is particularly important that Employers are careful in how they approach the permitted exemptions under these Regulations. They are designed to allow certain Employers in the industry greater flexibility having regard to the needs of shooting schedules – but they should be carefully applied. In addition, they don't apply to all employees working for a production company. As with other parts of this guidance document, individual Employers are expected to carry out further research as necessary specific to their project.

Where children are employed, the directives of 'Protection of Young Persons (Employment) Act 1996'.

And 'Protection of Young Persons (Employment) Act 1996' Employing a child by licence under Section 3(2) - FILM/TV LICENCE to be adhered to.

The following links provide a production with legislative requirement for employing children on a production. Persons employing and working with children should be familiar with the same.

Protection of Young Persons (Employment) Act 1996:
http://www.irishstatutebook.ie/eli/1996/act/16/enacted/en/pdf

Employing a child by licence under Section 3(2) - FILM/TV LICENCE:
https://www.workplacerelations.ie/en/publications_forms/notes_on_employing_young_persons_in_film_tv.pdf

Citizens information- Rights of Young Workers:
https://www.citizensinformation.ie/en/employment/starting_work_and_changing_job/young_people_at_work/rights_of_young_workers.html

Section 3(2) of the Protection of Young Persons (Employment) Act, 1996 allows the Minister to authorise, by licence, in individual cases, the employment of a child up to 16 years of age in cultural, artistic, sports or advertising activities which are not likely to be harmful to the safety, health or development of the child and which are not likely to interfere with the child's attendance at school, vocational guidance or training programmes or capacity to benefit from the instruction received.

In Ireland, children may only be employed under licence by the Department of Labour in Dublin. This licence may take some time or organise, and Productions are advised to make their applications as early as possible, in order to avoid breaching the child labour laws. The licence for each child should be readily available for inspection if required at production offices and at Unit Base.

Applying for a license

An Employer should apply in writing to the Minister for a licence under section 3(2) of the Protection of Young Persons (Employment) Act 1996 at least 21 days before the employment commences.

As per legislative requirements the application is to include the following details:

- Name, address, and date of birth of the child.
- Name, address, and contact telephone number of child's parent/guardian.
- Nature of employment, e.g. film, theatre.
- Details of project (script, if available) on which the child is to be employed.
- Reasons which justify the employment of a child of the age concerned.
- Duration of employment (including rehearsals).
- The amount of night work (if any) and address of principal work location (if different from employer's address).
- The sums to be earned by the child.
  A note from school principal agreeing absence from school (if any).
- Alternative teaching arrangements (where necessary).
- Copy of signed contract relating to the child's employment.
- A letter giving parent's or guardian's consent.

Child Protection Policy

If children are engaged on a production, the production company should have a Child Protection Policy in place.

Incident Reporting

Production companies are to have in place procedures for reporting any incident involving children, including incidents of inappropriate behaviour towards a child. These procedures should be detailed in the company Child Protection Policy.

Circulating documents to all persons working with Children.

All persons that will be required to work with and/or care for children on a production should be provided with documentation specifically relating to children. Documentation could include:

- The production company's Child Protection Policy
- Copy of Protection of Young Persons (Employment) Act 1996'. Employing a child by licence under Section 3(2) - FILM/TV LICENCE
- Copy of 'Children First, National Guidance for the Protection and Welfare of Children

Hours of Work

Children under 7 years of age

A child under 7 years may not be present at the place of employment

- for more than 5 hours a day,
- before 09.30 a.m. or after 4.30 p.m. except in special circumstances
- may not be present at the place of employment for more than 250 hours in any twelve-month period.
- may not take part in a performance or rehearsal on any day:
  - for a continuous period of more than 30 minutes without an interval for rest,
  - for a total period of more than 2 hours.

Children over 7 and under 13 years of age

A child between 7 and 13 years may not be present at the place of employment

- for more than 7½ hours a day, or
- before 9 a.m. or after 5 p.m. except in special circumstances.
- may not be present at the place of employment for more than 700 hours in any twelve-month period.
- may not take part in a performance or rehearsal on any day:
  - for a continuous period of more than 45 minutes without an interval for rest,
  - for a total period of more than 3 hours.

Children over 13 years of age

A child over 13 years shall not be present at the place of employment

- for more than 8 hours a day, or
- before 9 a.m. or after 7 p.m. except in special circumstances.
- may not be present at the place of employment for more than 900 hours in any twelve-month period.
- may not take part in a performance or rehearsal on any day:
  - for a continuous period of more than 1 hour without an interval for rest,
  - for a total period of more than 4 hours.

Meal/rest breaks

1. A child must have a break for a meal of at least 1 hour and a separate 15-minute rest break for each period of 3½ hours at the place of employment.
2. A child may not take part in

performances or rehearsals on more than 5 days in any 7-day period (or 6 days in any 7-day period provided such performances or rehearsals do not take place on more than 20 days in any 28-day period).

Night Work

A child may take part in a performance after the latest relevant hour permitted only if it is essential for such performance to take place after that hour but this must be requested at the time of applying for a licence as it must be included in the Child Licence. An Employer should apply in writing to the Minister for a licence under section 3(2) of the Protection of Young Persons (Employment) Act 1996 at least 21 days before the employment commences

Garda Vetting – E Vetting

Each organisation is required to determine who should be Garda vetted according to the legislation.

The National Vetting Bureau (Children and Vulnerable Persons) Acts 2012 to 2016 provide a statutory basis for the vetting of persons carrying out relevant work with children or vulnerable persons. The Act also creates offences and penalties for persons who fail to comply with its provisions.

The Act stipulates that a relevant organisation shall not permit any person to undertake relevant work or activities on behalf of the organisation unless the organisation receives a vetting disclosure from the National Vetting Bureau in respect of that person.

The Vetting Act defines these people as "any person who is carrying out work or activity, a necessary and regular part of which consists mainly of the person having access to, or contact with, children or vulnerable persons. In addition to chaperones, crew that require Garda vetting could include but is not limited to the following departments: hair, costume, sound, makeup, 1st AD, any crew member that may need to have 'contact' with a child.

Garda vetting in line with the National Vetting Bureau (Children and Vulnerable Persons) Acts 2012-2016 to be carried out for crew or any person other than parent or child's appointed guardian that will have a need to have direct contact with children.

Garda Vetting Information:http://www.youth.ie/sites/youth.ie/files/NYCI-Garda-Vetting-Guide.pdf
https://vetting.garda.ie/Help/FAQ
Production companies should take into account that Garda vetting is only one part of a safe recruitment procedure and should not replace good practice such as face to face interviews, verbal and written reference checks, identity verification and a robust code of best practice, child protection policy and support and supervision process.

Emotional wellbeing

It is important that all production staff, crew, and on-screen talent are briefed appropriately so that they put the child's welfare first.

With babies and toddlers, it may sometimes be appropriate to consult an independent expert to discuss the child's involvement.

Take into account what is appropriate for a child to witness or participate in and what psychological repercussions this could have on the child. Young children have difficulty understanding what is "acting" and what is real.

Consider the impact on young actors of witnessing or participating in activities that might have a negative psychological effect on them.

A child should never be made to feel uncomfortable in any way. Make sure that the child and young person continues to feel comfortable with their participation throughout.

The BBC have good guidelines that can be used as a reference for Irish based productions (note any reference to legislative requirements will/may differ, as it is a different jurisdiction) Ref: https://www.bbc.com/editorialguidelines/guidance/children-young-people-working.

Green Rooms, Costume, Make-up, Hair Trailers, and other Areas
A Green Room area for children to rest should be available for when children are not on set. It should be a designated area for children, babies, and their parents/chaperones only. The area should be clean, warm and have adequate lighting.

The parents/chaperones are to remain with children at all times.

Welfare Facilities
Consideration to be given to ensure sufficient welfare facilities are provided close to standby areas so children do not have to travel too great a distance to use facilities if required.

Food and any known allergens

Parents are requested to provide written information on any known allergens for their children. This information is to be shared with chaperones. Catering to be advised as required. Food, beverages supplied by parents for their children should not be shared with other children.

Parents/guardians and sharing of information The contact details for each child's parents should be maintained by production and be shared with the chaperone for each child. Where possible the chaperone should meet with the parent(s).

Parent(s) are to be encouraged to develop a relationship with an appointed member of production so as to build a rapport to enable the parents to share information and any concerns they may have in relation to the child involved in the production. For example, if a child is tired towards the end of a working day or week, production can take this into consideration.

Chaperones

As per legislative requirements: 'A suitably qualified chaperone must be in charge of the child at all times while he/she is present at the place of employment except while the child is in the charge of a parent or guardian. The function of the chaperone shall include the care and control of the child with a view to securing his/her health, comfort, kind treatment and moral welfare. A chaperone shall not be in charge of more than twelve children at any time'.

Babies

When babies (engaged in certain states of the USA) are to be employed (i.e. under twelve weeks or age and at least 15 days old as per Screen Actors Guild American Federation of Television and Radio Artists (SAG - AFTA) regulations) a registered nurse with early childhood, specialist paediatric training/ post-natal qualifications must be retained and her/his recommendations must be acted upon in all aspects of a baby's needs and welfare on set.

A baby must not be allowed to encounter any person with a respiratory or skin infection.

A baby must not have traditional cosmetic makeup applied. Where there is a need to use products on a baby, these are usually food-based products that are allergen free for the baby.

The parent of the baby, the nurse/ medic are to be in agreement with what products, if any, are used.Note: The parent, and nurse or medic of an infant (up to 12 months) should be in agreement with what products might be used, if any are used. It is recommended that the above should be taken into account by Irish Production Companies.

Medic/Nurse

Reference above SAG – AFTA re requirements for a nurse with early childhood, specialist paediatric training / post-natal qualifications to be retained when a baby (under twelve weeks or age and at least 15 days old) is employed. Production is to determine the requirement for a nurse/medic when an infant (up to 12 month) and/or child is employed, based on risk assessment, ensuring there are necessary and adequate plans and procedures in place in the case of an emergency.

It is recommended that the above be taken into account by Irish production companies.

Education/Tutoring

Where the hours of work of the child involves an absence from school of more than one-week, appropriate alternative teaching arrangements must be arranged.

The need for tutoring should be determined in pre-production and performance schedules should be designed to allow purposeful periods of study with a qualified tutor away from the immediate set.

Transport

Children required to travel in unit support vehicles at any time should always be provided with the appropriate legal safety restraints, such as seat belts, boosters, harnesses etc. Such vehicles are to be road registered, insured, roadworthy and safe and driven by a licensed driver with appropriate class of licence. The parent or chaperone must ensure that safe travel arrangements are in place for the child. The child must always be accompanied from home to studios or the location and back home. At no time should a child be left unattended.

All children must use a child restraint system (CRS) suitable for their height and weight.

Drivers should be aware that they have a legal responsibility to ensure that all passengers under 17 are appropriately restrained in the vehicle as per RSA 'A guide to driving safely with children on board'.

RSA - A guide to driving safely with children on board Link: http://www.rsa.ie/Documents/Child%20Safety%20in%20Cars/Child%20Safety%20in%20Cars%20Booklet%20-%20Feb%202016.pdf

General

- The hours and circumstances that a child may be employed are defined by law and on the Licence granted by the department of Labour. Note: these vary depending on the age of the child. In order to avoid criminal prosecution, these conditions should be understood and implemented.
- Additional care needs to be taken whenever children are employed on a production. Special consideration needs to be taken with all aspects of a child's presence on set or location.
- It is unrealistic to expect the children to work the same hours as adults. Children are unable to sustain consistent levels of performance.
- There is a far greater likelihood of success working with children if the general atmosphere on set is calm and encouraging.
- The demands made on a child should take into consideration the child's age, development, and previous experience.
- It is a good idea to involve any children in the planning and rehearsing of a sequence as it will give them a greater sense of confidence that their wellbeing and safety are the primary considerations of the crew.
- A child should be supervised at all times by someone designated to solely carry out that duty.
- Do not assume sole responsibility for a child, as an employee do not be alone with a child.
- The safety and wellbeing of the child takes priority at all times.
- Never give out your personal contact details, or 'follow' a child on social media.
- Use appropriate language at all times.

Depiction of Distress and Trauma

For scenes that involve the depiction of highly traumatising or distressing events such as child abuse, physical or emotional violence, verbal abuse or graphic SFX, it should be ascertained that the child is emotionally able to deal with the demands of the performance. Advice should be sought from the child's parents, agent, casting agency or specialist child welfare practitioners experienced in the particular field being portrayed. Time should be set aside before and after shooting to explain and show the child the tricks being used to pretend, so that the child realises no real threat exists.

Physical Risk and Danger

All sequences involving children should be considered for their potential to expose them to physical danger.

- The demands of the production should be initiated at the pre-production stage to avoid last minute negotiations.
- Children and young persons should not take part in a stunt where there is a significant risk of injury, even if they aren't required to perform any specific actions. Reference Stunt section of this guide for further information.
- Where there is identified risk or danger on a production involving children a safety report authored by an appropriate qualified and competent person(s) (could include stunt coordinator, medic/nurse, safety officer/advisor, casting, background artists, extras coordinator or other as appropriate) should be produced and made available to the parent of the child and to the relevant government authority responsible for licensing and monitoring children's employment.
- The recommendations of the appropriate qualified/competent person(s) must be followed in respect of the safety of children.
- Wherever doubt exists, additional precautions must be taken to eliminate any danger to a child.
- Children should not be coerced or forced to perform if they feel afraid or unprepared. It is advisable to have another child as stand-by or use dummies or stunt doubles (adult).

Special Effects

- 'Safety precautions for special effects (SFX) should be more stringently applied where children are involved.
- Adequate time to explain the SFX and to prepare and rehearse children for them should be set aside to avoid the possibility of fear or panic.
- Application of makeup or prosthetics on children needs to be carefully monitored for sensitivity, reaction, and comfort. A baby must not have

traditional cosmetic makeup applied.
- Children should not be forced to perform if they feel afraid or unprepared. The option of being able to use a stand-by child (stunt double – adult) should be considered.

Smokes, Gases and Chemicals

- The use of toxic gases, smokes or chemicals around children is expressly prohibited and an offence. An employer shall:
  A. carry out a risk assessment before employing a child or young person and whenever there is a major change in the place of work which could affect the safety or health of such child or young person, an employer shall without prejudice to section 19 of the Act,
  B. assess any risk to the safety or health of a child or young person and any specific risk to their safety health and development arising from any work activity likely to involve a risk of harmful exposure to the physical, biological and chemical agents which are found to be toxic, very toxic or corrosive for example. [See Chapter 1 of Part 6: Regulation 144 of the SHWW (GA) Regs 2007 for further detail.]
- Substances that may cause skin irritation or respiratory distress are also not to be used or applied.
- The HoD (example SFX Coordinator) providing or using any fog, smoke or chemicals is to provide a safety data sheet for the same.
- A safety supervisor is to be consulted on the safety of using fog and smoke chemicals, and their composition, and conditions of use around children. The safety supervisor's recommendations are to be followed.

For further information on working with chemicals please see Chapter 65 within this guide: Working with Chemicals.

Water

- When working in or near water, the ratio of children to supervisory adults is to be determined.
- Supervising adults should be qualified to cope with any emergency that could arise (e.g. lifesaving, rescue, and resuscitation). Equipment such as flotation apparatus or rescue equipment or vessel should be on stand-by.
- Children required to perform in water should be comfortable and competent to cope with the demands of the scene. Particular vigilance needs to be exercised where flood, current, tides, rain or storms are to be filmed or simulated.
- Ready access to warm showers, air conditioned (heated or cooled) caravans, blankets, hot drinks, and additional protective costume need to be considered.

Reverse Season Shooting

- Preventative measures should be taken to avoid any possible risks involved in reverse season filming. Exposure to cold, overheating and dehydration needs to be considered and longer rest breaks and shorter performance times scheduled.
- Use of multi-camera coverage to reduce set-ups and time on set or on location may be advisable.

UV and Cold Weather Protection

- When filming in direct or indirect sunlight, children should be provided with Factor 50 sun block. Makeup or medic/nurse should ensure this protection is checked regularly. It is advisable to decide in advance who is to be responsible and the chaperone to be informed of the same.
- Sensitivity or reaction to any lotion or makeup needs to be carefully monitored.
- In cold weather use of thermals is essential and in water use of flesh-coloured wetsuits/dry suits may be required. Time in the water to be strictly controlled by a medic.
- It is the responsibility of the chaperone, costume dept crew or medic to regularly check the comfort of children on location both on set and during breaks in shooting.
- Weather conditions are to be monitored and the parent/chaperone, the medic and the 1st AD determine if a child should remain at work if weather conditions are extreme (very hot, cold, wet).

Vehicles and Stunts

Particular care should be taken with vehicle and stunt sequences involving children. Stunts must not be performed with children as passengers. Dummies or stunt doubles (adults) should be used wherever risk exists. Alternatives, such as low loading or towing vehicles should be considered. Where for instance the use of seat belts, seat boosters or even car seats are not correct for the period or inappropriate dramatically, under-clothing restraints or harnesses should be used.

The activity and requirements are to be risk assessed by the stunts coordinator/ action vehicle coordinator, outlining what restraints as per RSA guidelines are not being used/non-compliance with the law and clearly stating what controls will be implemented and by whom.

Special Skills

Where children are required to perform particular skills e.g. surfing, dancing, gymnastics, ball sports, skateboarding, rollerblading, BMX riding etc., they must have skills in those particular activities' sports or pursuits. Children must be provided with appropriate protective clothing, safety equipment and supervision. Risk assessments to be generated by the relevant HoD for these activities, taking account of environment, action required, child's age, child's capabilities, etc.

Sensitive Risk Group – Children/Young Persons

Under Chapter 1 of Part 6 of the Safety, Health and Welfare at Work (General Application) Regulations 2007, an employer shall carry out a risk assessment before employing a child (under 16 years of age) or young person (over 16 years of age but below 18 years of age) and whenever there is a major change in the place of work which could affect the safety or health of such child or young person.

This risk assessment includes taking account of: Regulation 114 (c)

iii. the fitting-out and the layout of the place of work/workstation,
iv. the nature, degree and exposure to any physical, chemical or biological agent at the place of work and
v. the form, range and use of work equipment, in particular agents, machines, apparatus and devices, and the way in which they are handled,
vi. the arrangement of work processes and of work operations at the place of work and of the way in which these may be organised in combination for the purposes of carrying out work, and
vii. the training, instruction and level of supervision provided to a child or young person at the place of work.

Other factors to be taken into account are set out in Regulation 144 of the 2007 Regulations.

Inform a child or young person of any risk identified and preventive and protective measures taken.

The results of the risk assessment should be disclosed to the child or young person and the parent/guardian (in the case of a child) and of the preventive and protective measures taken, and, in the case of a child, inform the parent or guardian of such child of such risk and such preventive and protective measures.

Regulation 145 of the 2007 Regulations sets out the circumstances prohibiting employment of a child or young person (e.g. where the risk assessment reveals that the work is beyond the physical or psychological capacity of the child or young person concerned).

Where a risk assessment reveals a risk to safety or health or to the physical or mental development of a child or young person, an employer must make available health surveillance which is appropriate to the risks to safety, health and welfare that may be incurred at the place of work identified by the risk assessment.

An employer shall also make available to a child or young person a free assessment of his or her health and capabilities before assignment to night work and at regular intervals thereafter. Furthermore, the employer must inform a child or young person and the parent/guardian (in the case of a child) of the result of any health surveillance or health assessment.

Additional Links re children and young persons which may be of interest.

Children First 2017 - Link: https://www.dcya.gov.ie/documents/publications/20171002ChildrenFirst2017.pdf

https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Children_Young_Persons.pdf

SHWW (GA) Regs 2007 Chapter 1 of Part 6: Protection of Children and Young Persons. Link: https://www.workplacerelations.ie/en/Publications_Forms/Notes_on_Employing_Young_Persons_in_Theatre.pdf

Protection of Young Persons Employment Act. Link: http://www.irishstatutebook.ie/eli/1996/act/16/enacted/en/pdf

Children First Act 2015. Link:http://www.irishstatutebook.ie/eli/2015/act/36/enacted/en/pdf

Citizens Information – Rights of Young Persons. Link: https://www.citizensinformation.ie/en/employment/starting_work_and_changing_job/young_people_at_work/rights_of_young_workers.html

How do I report a concern about a child – Tusla Website. Link: https://www.tusla.ie/children-first/individuals-working-with-children-and-young-people/how-do-i-report-a-concern-about-a-child/

Tusla: The Child and Family Agency – Link: https://www.tusla.ie/

54 Filming on Public Roads, Action Vehicles and Low Loaders

When there is a requirement for a production to film on any public road, the production company should engage a competent location manager. The location manager needs to be able to furnish the LP/PM/UPM with evidence of working on similar or larger productions where there was a requirement to film on public roads.

Permission

Permission to film on public roads must be obtained from the appropriate (local County Council) Roads and Traffic Department and the Office of the Garda Assistant Commissioner, Dublin Metropolitan Region, Harcourt Street headquarters (or local Garda Station). Dublin City Council (local County Council) may also require the applicant to notify specific local Garda stations. The Office of the Garda Assistant Commissioner may also instruct the applicant production company and relevant local Garda station on policing requirements. The legal requirement for road closure orders must be complied with.

Permission must be sought from Dublin City Council/local County Council, Roads and Traffic Department and the Office of the Garda Assistant Commissioner for the following:

- Full or partial road closures, lane closures and full or partial footpath closures, anything that diverts normal movement of pedestrian or vehicular traffic.
- The production company as part of any road closure application must submit a traffic management plan.
- The removal, alteration and disguising of street furniture. Reinstatement must happen as soon as possible after filming.
- The temporary painting-out or disguising of road markings, yellow lines, or other road signs, again reinstatement must happen as soon as possible after filming.
- The use of cranes, cherry pickers, track, low-loaders, and other potentially hazardous equipment in a public place.
- The parking of production vehicles on yellow lines, in meter bays or residents' bays.
- The use of special effects, pyrotechnics or explosions, rain or snow machines, wet downs and stunt work on public footpaths or carriageways.
- Wet downs of streets.

Generally speaking, if you are keeping up with the flow of traffic and adhering

to the rules of the road, with a camera in the vehicle or on a dashcam you may not need any specific permission.

The production team will need to ensure (as required) that:

- An application has been made to (and permission obtained) from the relevant council.
- The requirement for a temporary road closure or 'traffic holds' during filming is part of the application. A traffic management plan (containing details of the proposed diversion routes and how this will be controlled) should be forwarded to the relevant council and An Garda Síochána as appropriate. This traffic management plan should be written by a traffic management company or otherwise competent individual.
- Crew can NOT stop traffic. Only employees of a traffic management company can stop traffic legally and safely.
- On shooting day, filming locations must not be expanded unless this has been approved by the relevant council and/or An Garda Siochána;
- A site-specific risk assessment and method statement for all filming works on roads for each location has been provided.
- Each head of department (hereafter referred to as HoD) carrying out work activities while on the road (e.g. grips operating tracking vehicles, stunt performers, gaffers implementing lighting requirements) is to provide production with their risk assessment and method statement (RAMS) prior to the shooting day. These documents are to be available at the location and maintained by the location manager/ deputy manager.
- Where cranes, MEWPS, cherry pickers (or other equipment used for lifting/working at height) will be used at the location, certificates of inspections are to be readily available at the location. The responsibility of ensuring equipment has the required certification and records of inspection lies with the relevant HoD. See also Chapters 28 – Construction for further information.
- The armourer has the required licence in place for any arms/replica arms at the location and An Garda Siochána have been notified.
- All vehicles being used must be fit for purpose and in good mechanical working order. Vehicles used on roads must be roadworthy, have appropriate NCT/DOE/CRW (CVRT) cert, tax, and insurance.
- All drivers must be confident and competent to do the task.
- All drivers must hold licences for the vehicle they are driving.
- When filming from inside a vehicle, the camera person is to be restrained, equipment to be secured and all doors are to be securely closed.
- Grips, drivers of all vehicles and all of the production team must be familiar with, and comply with, the Road Traffic Act legislation, the guidance in the Metropolitan Police Guidance to Filming on the Move 2020 Revision (or if more recent version available), and Health and Safety Executive Safe filming and recording in, from and around vehicles. Note where reference is made to the Metropolitan Police Service (MPS), in Ireland An Garda Síochána are the MPS equivalent. Please see links below https://www.met.police.uk/SysSiteAssets/media/downloads/central/advice/filming/guidelines-filming-move-london.pdf http://www.hse.gov.uk/pubns/etis22.pdf
- A grip with the required qualification (NVQ 3 certified) is appointed where any camera rigging in, or on, vehicles and tracking vehicles will be carried is used.
- A competent stunt coordinator with appropriate experience on similar projects or larger productions with more complex stunt sequences is appointed.
- All crew working on public roads wear high-viz tops/jackets.
- An open communication system must be in place between the 1st AD, lock-off crew and drivers before any action or rehearsal.

Road Closure

How to apply for a road closure. Obtain an application form by applying to the local County Council.

Below are details for filming in the Dublin area to give an example of the process:

- Contacting the Roadworks Control Unit Link: http://www.dublincity.ie/main-menu-services-roads-and-traffic/roadworks-control-unit or
- By downloading and completing the application form. Link: http://www.dublincity.ie/sites/default/files/content/Documents/Application_Forms/Roads_and_Traffic/Temporary_Road_Closure_-_English_Version.pdf

Submit the completed form to the Roadworks Control Unit by post or in person to the public counter: Address:

Environment & Transportation Department
Roadworks Control Unit,
Block 2,
Floor 6,
Civic Offices,
Wood Quay,
Dublin 8.
Tel: 01 222 2246

Your application must be accompanied by:

- The required fee.
- A Traffic Management Plan with details of the proposed diversion routes.
- You must also have adequate public liability insurance in order to indemnify Dublin City Council against all claims

For further information on costs and other please follow link: http://www.dublincity.ie/main-menu-services-roads-and-traffic-permits-and-licences/how-apply-temporary-road-closure#contact

Traffic Management for the Film and TV Industry

A Traffic Management Plan must contain information on the following issues where relevant:

- Evidence of compliance with HSA requirements (mandatory in all Traffic Management Plans)
- Compliance with Department of Transport's Signs Manual, the type and locations of all temporary signage should be erected, Ref: https://www.trafficsigns.ie,
- The type and locations of all temporary road markings should be installed,
- Details of any temporary changes to existing road markings and signage that will be required to facilitate the road closure,
- The proposed operation of any contra flow traffic lanes,
- The location of proposed temporary traffic signals. Ref: https://assets.gov.ie/34731/20abae155ee5458993122838cb317ca9.pdf,
- Details of any changes to other street infrastructure (e.g. taxi ranks, bus stops, etc.) that will be required,
- Arrangements for local access and pedestrian access,
- Provision for pedestrian movements including any special provision required to facilitate the mobility impaired and disabled,
- Proposed changes to on-street parking arrangements, any proposals to erect barriers,
- Proposed lighting arrangements,
- Proposals for the use of flag men,
- The arrangements that will be made

to advise local property owners/ residents of the traffic management arrangements that will apply during the shoot.
- Arrangements for storage of materials and equipment.

Temporary Traffic Operations Supervisor

All pedestrian or vehicular traffic management must be carried out by An Garda Siochána or a **Temporary Traffic Operations Supervisor.** (Sign Lighting and Guarding **- SLG CSCS).** This person who has successfully completed the **SLG CSCS** course and is in possession of a valid **SLG CSCS card** must be on site/ location for all interaction with traffic on a public roadway.

Further information that applies to all works/shoots on a roads, regarding signage and any interaction with live traffic; http://www.dttas.ie/sites/default/files/publications/roads/english/traffic-signs-manual-2010/addendum-department-transport-chapter-8-%E2%80%93-temporary-traffic-measures-and-signs-roadworks-2008.PDF http://www.hsa.ie/eng/Your_Industry/Construction/Construction_FAQ's/Roadworks/ https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Working_on_Roads_Guidelines.pdf

Low Loaders - Filming with Low Loaders

There are several different styles of low loaders/trailers and ways of filming vehicles depending on whether you need front shots or side profile shots of the actors. A low loader is a special kind of open trailer that is exceptionally low to the ground to give a realistic perspective of height. The required action vehicle is positioned on the trailer. The advantages of using a low loader include that cast can concentrate on dialogue rather than concentrating on driving.

It is up to the applicant to ensure that the vehicle and trailer is compliant with all Irish and EU regulations prior to submitting a proposed driving scene in the city of Dublin or other County. Proof of the vehicle's roadworthy certificates will be requested.

All trailers must meet with Irish road traffic regulations when in use in a public place. The regulations set out the law in relation to weights, lights, brakes, plating, under-run, side-guards, securing of loads, etc. Link:http://www.rsa.ie/en/RSA/Your-Vehicle/About-your-Vehicle/Example-of-non-Dup/Trailers-/Legal-Requirements-for-towing-trailers-/

Shooting scenes from the side of a vehicle has other obvious dangers to the crew and to other road users. A process trailer would need to be discussed with the relevant Garda Sergeant in the district that you want to perform the stunt and permission should be sought for this wider than normal *process trailer* (insert trailer and low loader/trailer towed by a tracking vehicle for the purpose of being used as a moving camera platform). You may be required to apply for a road closure to get your required shots.

Towing

When towing another vehicle or a trailer remember the following points.

- Drivers are to have the appropriate category licence for towing vehicles. Information on licences: https://www.rsa.ie/en/RSA/Your-Vehicle/About-your-Vehicle/Example-of-non-Dup/Trailers-/Advice-and-Checks-for-Trailers-/
- Make sure the tow bar or other towing device is strong enough and is attached securely so that it does not break or become loose when used.
- Make sure the breakaway brake or secondary coupling is in place and secured. A 'breakaway brake' attached to a trailer is a braking device that can automatically stop the trailer if it becomes detached from the towing vehicle while moving. A 'secondary coupling' is usually a safety chain, wire rope or other similar connection which ensures the trailer stays attached to its towing vehicle if the main coupling fails or becomes detached. A secondary coupling is not needed if the trailer is equipped with a breakaway brake. Further information on these devices is available on www.rsa.ie.
- Do not allow a distance of more than 4.5 metres (about 15 feet) between the vehicles or the vehicle and the trailer. If more than 1.5 metres separates the vehicles, use some warning device such as a white flag of at least 30 centimetres squared to draw attention to the tow bar. If you need to tow another vehicle using a rope or strap – for example, a broken-down vehicle – you should only do so to the nearest convenient safe place of repair. If towing a vehicle that has its own steering gear, make sure somebody remains in that vehicle to take charge of the steering.
- If towing a vehicle, the person who steers the towed vehicle must hold a licence to drive the same category of vehicle.
- Make sure a trailer is fitted with brakes if it has a maximum authorised mass (MAM) of more than 750kg or is more than half the laden weight of the drawing vehicle (whichever is lower). This includes a parking brake and a breakaway brake. Older trailers that don't have a breakaway brake must have a secondary coupling (a chain or wire rope) fitted instead.
- A combination of vehicles or an articulated vehicle more than 13 metres long must display a 'LONG VEHICLE' sign or signs on the back of the last trailer. Loads must be safely distributed and securely tied down.
- You should avoid carrying loads that extend over the side of the trailer while it's being towed. Loads overhanging to the rear by more than 1 metre must be marked during the day with a red flag or cloth which is at least 300 millimetres square (about 12 inches square). However, at night-time, overhanging loads must be fitted with a red reflector and a red light. Loads (other than loose agricultural produce which is not baled or in crates) must not project more than 300 millimetres (about 12 inches square) over the outermost point of the side of the trailer. At night, these loads must be fitted with lights showing a white light to the front and a red light to the rear. These lights must be placed as close as possible to the outermost point of the load. If possible, loads should be evenly distributed across the trailer and positioned in such a way as to keep the nose weight (that is, the weight exerted by the trailer drawbar on the coupling) within the recommended limits for the drawing vehicle.
- When towing a trailer, the maximum speed at which the vehicle can travel may be different from the posted speed limit.

Vehicle with Overhang of Load

Where loads overhang to the front, rear or side of a vehicle there are Irish and UK requirements and guidelines. Ref:http://www.irishstatutebook.ie/eli/1963/si/190/made/en/print https://www.gov.uk/government/publications/overhanging-loads-on-vehicles/overhanging-loads

What is the law on seatbelts?

Where a seatbelt is fitted, it must be worn.

Are there exemptions (exceptions) from having to wear a seatbelt e.g. for medical conditions?

Yes. But only if the person holds a certificate from a registered medical practitioner excusing them from having

to wear a seatbelt or if they are wearing a disabled person's belt (e.g. if in a wheelchair). Other exemptions include driving instructors and driving testers during a lesson or a driving test, and members of An Garda Síochána or members of the Defence Forces in the course of their duties.

Security Arrangements

Production must engage a recognised security company, with experience in working on similar film projects, to oversee security arrangements and assist with pedestrian marshalling when working on public roads.

Specific notification to An Garda Síochána will be required in the following script-based incidences:

- When replica arms and weapons are expected to be visible at a location accessible to members of the public, in the public domain.
- Where cast or background artists are required to wear fake An Garda Síochána, or military costume.
- If scenes require the re-creation of a crime.
- If there will be nudity or perceived nudity.

Additional information of interest, ref:

Film London: http://filmlondon.org.uk/filming_in_london/international_crews
http://core.filmlondon.org.uk/library/documents/CodeOfPractice_.pdf

Film London Code of Practice

https://www.rbkc.gov.uk/sites/default/files/atoms/files/Film%20London%20Code%20of%20Practice.pdf

All driving on public roads requires you to adhere to the Roads and Traffic Acts, Parking Bye Laws, and all other relevant legislation, for more info please see below.

Road Traffic (Construction, Equipment and Use of Vehicles) Regulations 1963 & 2003

http://www.irishstatutebook.ie/eli/1963/si/190/made/en/print
http://www.irishstatutebook.ie/eli/2003/si/5/made/en/print

Road Traffic (Lighting of Vehicles) Regulations 1963

http://www.irishstatutebook.ie/eli/1963/si/189/made/en/print

Dublin city council parking control bye laws 2014

http://www.dublincity.ie/sites/default/files/content/RoadsandTraffic/Parking/Documents/ParkingControlByeLaws2014.pdf

RSA Vehicle and trailer requirements

http://www.rsa.ie/en/RSA/Your-Vehicle/Your-Vehicle-/Road-Worthiness--Related-Offences/Vehicle-and-trailer-requirements-/

Road traffic (licensing of trailers and semi-trailers) regulations, 1982

http://www.irishstatutebook.ie/eli/1982/si/35/made/en/print

Temporary traffic signals (see Section 4.5 on use of temporary traffic signals)

http://www.dublincity.ie/sites/default/files/content/RoadsandTraffic/Roadworks/Documents/Directions%20For%20The%20Control%20And%20Management%20Of%20Roadworks%20In%20Dublin%20City%20(June%202010).pdf

Further Reading

https://www.met.police.uk/SysSiteAssets/media/downloads/central/advice/filming/safe-filming-and-recording-involving-vehicles.pdf
https://www.met.police.uk/SysSiteAssets/media/downloads/central/advice/filming/guidelines-filming-location-london.pdf

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Studios – Working in Studios

A film studio is a premises that can be leased or rented by a production company. The studio can typically offer a production company a lease (rent) of offices, sound stages, facilities for construction and other workshops, facilities for wardrobe department and soundstages as required.

Note: A soundstage is a soundproof structure used for filming purposes. Constructed sets or other structures or props can be built/positioned within the secure soundstage to facilitate filming.

When production companies lease production offices and stage space from a studio, it can be beneficial for both parties to confirm details prior to or at the time of signing the agreement.

Below is a checklist which may be of benefit for both parties.

If the studios have a health and safety handbook, this should be shared with the production company. In the event that a studio has a handbook, some of the points below may have been addressed.

Production and studios are to confirm details which could include but are not limited to the following information.
See apendix on P169 for pages can be printed by either party for completing.

56 Night Work / Night Shoots

This guide (Chapter 59) refers to the Organisation of Working Time (General Exemptions) Regulations, 1998. It is particularly important that employers are careful in how they approach the permitted exemptions under these Regulations. They are designed to allow certain employers in the industry greater flexibility having regard to the needs of shooting schedules - but they should be carefully applied.

As with other parts of this guidance document individual employers are expected to carry out further research as necessary for their specific project and in there are additional rules/regulations beyond the rules/regulations set out in Chapter 59 (Working Time – Adults).

When there is a requirement for crew or other persons to work at night the employer and production company (UPM/LP/PM) is to be aware of the requirements of Chapter 3 of Part 6 of Safety, Health & Welfare at Work (General Application) Regulations 2007, Night Work and Shift Work. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Night_Shift_Work.pdf

As per Regulation 153, Chapter 3 of Part 6 - Safety, Health & Welfare at Work (General Application) Regulations 2007, "night work" and "night worker" have the same meaning as they have in the Organisation of Working Time Act 1997 Act as outlined below:

- "night time" means the period between midnight and 7 a.m. on the following day.
- "night work" means work carried out during night time.
- "night worker" means an employee—
  A. who normally works at least 3 hours of his or her daily working time during night time, and
  B. the number of hours worked by whom during night time, in each year, equals or exceeds 50 per cent of the total number of hours worked by him or her during that year.

Regulation 155, Chapter 3 of Part 6 - Safety, Health & Welfare at Work (General Application) Regulations 2007, require the employer to carry out a risk assessment and take account of and determine does night work involve any special hazards or heavy physical or mental strain. The employer is to put in place measures that are appropriate to protect the safety and health of night workers.

Shooting at night presents a variety of additional challenges to the safety of a production.

Production Considerations Ahead of Night Work

Considerations for personnel, the location, scheduling, risk assessments and other (non-exhaustive):

Personnel

- Give all persons that will be required to work at night as much notice as possible.
- Consider the journey times and travel arrangements of crew, background artists and cast to and from their place of work.
- Consider providing accommodation and/or pooled transport for crew, background artists and cast to reduce risk of fatigue and accidents while driving, particularly after a demanding shift of night work.
- Consider if any crew and/or cast are new (i.e. up to 26 weeks after birth) or expectant mothers, if yes, review their risk assessment if they will be required to work at night.
- 'Night work under Chapter 2 of Part 6 of the Safety, Health & Welfare at Work (General Application) Regulations 2007: Protection of Pregnant, Post Natal and Breastfeeding Employees' involves these types of employees working between 11.00 p.m. and 6.00 a.m. the next day, where an employee works at least three hours (not necessarily consecutive) in that period, or, where a minimum of 25 per cent of the employee's working hours in a month are worked between those times.
- See Regulations 149-151 of Chapter 2 of Part 6: Protection of Pregnant, Post Natal and Breastfeeding Employees - https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Pregnant_Post_Natal.pdf
- Take into account persons working at night may have lowered performance due to fatigue and sleep loss and persons could find working at night stressful. There is the potential for more accidents at the place of work.
- Take into account special requirements that may be necessary for any worker with pre-existing physical or mental health conditions such as depression, anxiety or disabilities (if this has been made known to the UPM/LP/PM and/or their HoD).
- Are young workers/children part of the script cast for the scheduled night work? How can the production ensure that the young people/children engaged in a production comply with the required working hours? Note: A child may take part in a performance after the latest relevant hour permitted only if it is essential for such performance to take place after that hour, this must be requested at the time of applying for licence as it must be included in the Child Licence. An employer should apply in writing to the Minister for a licence under section 3(2) of the Protection of Young Persons (Employment) Act 1996 at least 21 days before the employment commences. See also Chapter 53 and in particular the section on 'Sensitive Risk Group – Children/Young Persons' within this guide.

The Location, Members of Public, other Drivers and Security

- Determine if there is risk of violence at the location. If it is likely that cast, crew and or background artists will/could interact with people not associated with the production and there is any potential for threats or assaults.
- If crew members will be responsible for protecting equipment, and for keeping members of the public from entering the filming area, the crew members need to know how to handle the kinds of situations that could occur.
- Consider the possible need for additional security, including at set areas, standby areas, unit bases and crew parking areas.
- Consider the increased risk of drunken pedestrian intrusion to set, the increased risk of drunken drivers, joyriders and/or tired drivers.
- Will there be a risk of non-film related drivers being caught unaware of or surprised by the film unit and any detours or other?
- What provision will be required to ensure adequate lighting at unit base, and on all walkways during all hours of operation including set-up, shooting and wrap-up of the unit base?
- Will residents, businesses need to be informed ahead of filming, what information will residents and or businesses need to know, for example: how many days will the production be at the location, what are their hours of work, will there be any restrictions or diversions in place?

Scheduling

- Ensure high risk activities, such as performers working with firearms/weapons or engaging in stunts including stunt/precision driving, are not scheduled for the end of the shift when persons would be most tired, scheduling of these activities should take place when persons are most alert.
- Production and 1st AD to ensure that sufficient time is allocated for shooting

of scenes at night (number of pages may be less than if shooting during the day), and time enables scenes to be filmed safely.
- Production and HoDs to ensure that sufficient time is allocated to carry out tasks during night work and sufficient number of crew will be available to carry out work safely.
- When determining working and shooting schedule and crew number UPM/LP/PM and HoDs to ensure time and crew numbers will be sufficient in so far as is reasonably practicable.

Risk Assessments

- Will local county councils and/or An Garda Síochána need to be notified of proposed filming, will permissions need to be obtained?
- Production should generate location-specific risk assessment for proposed night work, including expected activities, for example stunts, SFX, use of action vehicles, use of armoury, weapons or other and circulate ahead of shooting day/night.
- Consider the effects of actual rain, 'Wet Down' and rain or wind machines (in conjunction with light glare) on conditions for members of the public, non-film related drivers and filming activities (including any stunt sequences).
- HoDs provide production with their risk assessments ahead of scheduled shooting day, typically after attending recce/tech recce.
- If filming on roads and in the public domain, please see section Filming on Public Roads, Action Vehicles and Low Loaders.
- Risk assessment to identify requirements for first aid/medical aid at the location. Take into account the location itself, the number of persons at the location, the working environment, weather conditions, the activities of crew, cast, background artists and stunt performers.

Considerations for production and crew during night work

In addition to considerations above 'ahead of night work' the following also should be taken into account on the night(s) of the shoot (non-exhaustive):

Personnel

- Crews should be appropriately dressed for the weather conditions, which may vary during the course of the night. Dress in layers and dress for the appropriate activity level.
- Crew to consider their travel arrangements for getting home, the distance to be travelled, the condition of the roads (including weather), their levels of fatigue.
- Don't undertake safety critical work or drive if you are tired or drowsy.
- Try to avoid overtime before or after a night shift.
- Persons to advise their HoD and or UPM/LP/PM if they are feeling fatigued and their levels of fatigue are of concern or if they believe their working hours are either unreasonable, excessive, or unfair.
- All crew should wear high visibility clothing, cast, and background artists should wear high visibility clothing when moving from unit base/standby areas and not on set.
- Torches should be made available for designation to the different departments (or all crew depending on the location) as necessary.
- Production catering to provide healthy foods that are not high in sugar, fats, or salt.

The Location, Members of Public, other Drivers and Security

- A specific location safety briefing to be given to all personnel at the location, by 1st AD or other appointed person. It may be appropriate to deliver part of the briefing to background artists before arriving at the location, however it may still be necessary to provide specific information on emergency exits/routes for example at the location.
- Adequate lighting at unit base is provided on all walkways to and from set areas during all hours of operation in darkness including set-up, shooting and wrap-up of the unit base. The lights must remain on until the last person is leaving unit base.
- Appropriate safety signage is in place.
- Required road closures and/or restricted areas secured and manned as required.
- Cordons are around plant and equipment, for example around cranes or cherry-pickers, and manitous.
- Working lights and lights from production vehicles do not dazzle other drivers, pedestrians or other.
- Access and egress routes to be kept clear of equipment and cables and cables to be properly managed.
- Persons in remote areas, away from main unit at a location, to be monitored and relieved on a rotational basis if possible, avoid lone working scenario.
- Monitor noise levels; keep noise to a minimum in public areas.
- Monitor glare from film related lighting and its affect, if any to members of the public, including non-film related drivers.

Scheduling

- On the night of the shoot the UPM/LP/PM and HoDs to assess crew numbers and activities and monitor workload, ensuring in so far as is reasonably practicable:
- no-one has to rush to get the job done
- no-one will need to miss rest or meal breaks.
- scheduling managed for crew, so they do not have a late finish followed by an early call.

Risk Assessments

- Production and HoD risk assessments to have been disseminated to all relevant persons.
- Safety officer/safety advisor or other appointed person to carry out safety checks at the location prior to rehearsals and periodically throughout the shoot each night. Any concerns to be brought to the attention of the UPM/LP/PM without undue delay.
- Production and all relevant HoDs to update and carry out dynamic risk assessments, as necessary. Dynamic risk assessment to be disseminated to all relevant persons.
- The risk assessment and or call sheet to advise on plans/procedures to be followed in the event of an emergency.
- The risk assessment and/or call sheet to advise on the provision for first aid/medical aid at the location.

Night Work and Personal Well Being

An employer before employing a person as a night worker, and at regular intervals during the period that that person is employed as a night worker, shall make available to that person, free of charge, an assessment by a registered medical practitioner, or a person under the practitioner's supervision, in relation to any adverse effects of that night work on the night worker's health. See regulation 157 of Chapter 3 of Part 6 SHWW (GA) Regs 2007 for further detail.

All crew cast and background artists should be aware of the possible impact from working at night, short term, and also long term. It can be difficult for persons to adapt to full time night work and it can be difficult to adapt to working a combination of day and night work. Persons may not experience the same symptoms and/or effects from working at night.

The impact on individuals can include changing their normal levels of alertness as individuals can have varying ability to overcome drowsiness. Individuals may find it difficult to sleep at 'unusual' times, i.e. times outside of the normal sleep routine.

Individuals' mood and emotional wellbeing may be impacted, this can be exacerbated by the above and also due to the work/non-work conflict which can impinge on highly valued time usually devoted to family, domestic and social activities.

Persons' physical wellbeing may be impacted when engaging in ongoing night and or shift work, persons may experience digestive and other health problems.

If a night worker becomes ill or otherwise exhibits symptoms of ill-health, and that illness is or those symptoms are recognised as being connected with the fact that the night worker performs night work, the employer, whenever possible, shall assign duties to the employee that do not involve performing any night work and to which the employee is suited. [See regulation 157 of Chapter 3 of Part 6 of the SHWW (GA) Regs 2007, and article 9 of Directive 2003/88/EC for further detail].

Below are points which can be considered by all persons to help reduce possible negative effects of night work (non - exhaustive):

- Choose healthy snacks of fruit, vegetables, homemade soups, small portions of wholemeal pasta, rice, and bread for a steady, slow-release energy supply rather than high sugar and high fat foods.
- Eat a healthy well-balanced diet, avoid caffeine, and heavy meals just prior to bedtime and avoid alcohol which may help you sleep but may make you more tired for your next shift.
- Working at night can disrupt your body clock and lack of sleep can leave you feeling fatigued affecting your performance of day-to-day tasks.
- Adapting to night work can be difficult to adjust to, if you are experiencing difficulties, you should advise your HoD & or UPM/LP/PM. As a HoD or UPM/LP/PM discuss with the crew member what measures can be taken to minimise the impact of working at night and what solutions can be put in place.
- If working at night could negatively impact you due to a medical condition (certified), you should advise the UPM/LP/PM of same, to determine what measures can be taken as required to ensure you are not unduly affected.
- Try to have a short sleep just before going on the first night shift.
- Listen to relaxing music, practice medication, or engage in other forms of relaxation before going to bed.
- Avoid eating or exercising too close to bedtime.
- If you are feeling drowsy or very tired during your shift, try to get some fresh air and avoid undertaking safety critical work or driving.
- The use of foam earplugs and eye masks can help to improve sleep. Blackout blinds on your bedroom windows can help keep your bedroom dark for sleeping during the day.
- Make sure your bedroom is cool which is best for sleeping.
- Make sure your family, friends and neighbours understand your shift work pattern, its challenges, and what they can do to help you. Especially making less noise at the times you are trying to sleep.
- Turn your mobile off and disconnect the phone if you can, so that you are not disturbed whilst sleeping.

For further information please see document available on the Health & Safety Authority website. Guidance document for Employers and Employees on Night and Shift Work. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Healthcare_Sector/Night_and_Shift_Work_2012.pdf

57 Weather & and Weather Warnings

Weather Categories. Met Eireann have categorized weather warnings in three categories as follows:

A. **STATUS YELLOW** – Weather Alert – Be Aware - The concept behind YELLOW level weather alerts is to notify those who are at risk because of their location and/or activity, and to allow them to take preventative action. It is implicit that YELLOW level weather alerts are for weather conditions that do not pose an immediate threat to the general population, but only to those exposed to risk by nature of their location and/or activity.
B. **STATUS ORANGE** – Weather Warning – Be Prepared - This category of ORANGE level weather warnings is for weather conditions which have the capacity to impact significantly on people in the affected areas. The issue of an Orange level weather warning implies that all recipients in the affected areas should prepare themselves in an appropriate way for the anticipated conditions.
C. **STATUS RED** – Severe Weather Warning – Take Action - The issue of RED level severe weather warnings should be a comparatively rare event and implies that recipients take action to protect themselves and/or their properties; this could be by moving their families out of the danger zone temporarily; by staying indoors; or by other specific actions aimed at mitigating the effects of the weather conditions.

Hazards deriving from the following weather-related types are covered by Met Eireann's weather warnings system: Wind, Rain, Snow, Low Temperatures, Fog, High Temperatures, Thunderstorms and Coastal Wind Warnings.

Further information on Met Eireann's weather warning. Link: https://www.met.ie/weather-warnings

Pre-planning

Productions companies – the Producers/UPM/LP/PM and location manager will need to take account of all-weather conditions.

In the event crew will be working at a location where adverse weather may present and or are at a location and adverse weather presents (example fog), the production company will need to react appropriately to ensure the safety of all persons.

Production companies may need to postpone filming (or call 'weather cover': film at a different venue /location) due

to weather extremes (heat, cold, fog, winds, storms etc), pre-planning can reduce many of the potential dangers posed by inclement weather. If there is the possibility of inclement or severe weather, the above-named persons will be responsible to determine an action plan.

Action plan could include the following

- Who shall be responsible for monitoring the weather conditions?
- What means of effective communication will be in place and can be maintained.
- Location specific procedures for routes and means of evacuation.
- Means of securing all equipment/ materials and all electrical power including shut down.
- Establishing meeting/holding areas.
- Means of establishing a head count for all person at designated meeting point.
- Will persons need to be provided with overnight accommodation until severe weather has passed?

Sun Protection for Outdoor Workers

Skin cancer is caused by abnormal growth of the cells nearest the skin. Annual rates of cancers are increasing steadily in Ireland. Health and Safety Authority statistic April 2019 - nearly 1000 cases of melanoma and almost 10,000 cases of non-melanoma annually. Sun exposure provides us with a natural source of vitamin D and is important for general health, however the main cause of skin cancer is ultraviolet (UV) light from the sun so we need to protect our skin. Both UVA and UVB, penetrate the atmosphere and play an important role in conditions such as premature skin aging, eye damage (including cataracts), and skin cancers.

When planning outdoor work during sunny weather, the employer to consider the following protective measures:

- If possible, plan outdoor work in sunny weather to limit duration and intensity of employee exposure to direct sunlight (1100 to 1500 sun rays are most intense)
- Provide shade if possible
- Give information to employees about dangers of sun exposure
- Educate and encourage employees to self-check skin for signs of skin cancer
- Ensure breaks are taken out of direct sunlight
- Encourage employees to cover up, keep clothing on with sleeves down and collars up, wear clothing with high ultraviolet protection factor (UPF), wear hat and sunglasses.
- Provide sunscreen, SPF of at least 30 and UVA/UVB (depending on skin type and or exposure, persons may require a higher protection, ensure persons are not allergic to product if being provided by production, repeat applications will be required).

Crew Footwear and Clothing

All crew to wear appropriate clothing for work they carry out, for the environment(s) that they work in, including appropriate warm waterproof clothing in wet and cold weather and appropriate footwear for ground conditions at each location.

58
Use of Radios on Set

Use of Radios on Set

'Walkie-Talkies are a tool of our trade. Like every other tool they require briefing for the use of the walkie talkies, headsets/ 'fist mic'. The following is a guide to what this briefing should cover. The training can be given by the 1st AD, Location Manager of Safety Officer / Advisor.

- Radio traffic (talking on a radio) should be short, concise but convey the message.
- Every person should understand the chain of command and who they need to report to (if in doubt or unable to contact the required person, contact the 1st AD especially in an emergency).
- Mobile Radio units should be secured to a person (loose radios can be damaged and cause injuries).
- When used in vehicles radios must be properly secured (never loose or likely to become loose).
- Talking into a radio should be done at normal voice level.
- In exterior windy conditions, the microphone should be shielded from the wind.
- Headset volume control should never be set at levels likely to cause hearing damage or block non-radio audio communications.
- Radio traffic should not be conducted around SFX sensitive pyrotechnics, or places likely to cause a hazard or public nuisance (consider the use of headsets in residential areas).
- If a sequence is changed and radio is used to transmit the change, a clear sequence of events should be sent to all participants and repeated back to the sender by each participant.
- All remote persons (on location) from a set should have contact with the set (by radio or mobile phone).
- All traffic control and lock-offs should be performed with radio verification.
- Absence of a confirmation by radio should be considered a 'no-go'.
- Caution should be exercised in the use of multi-channel operations.
- Clear lists of channel numbers should be given to all radio users and displayed on each handset and call sheet.
- If incorrect channel is used to air communications, the sender is to be notified.
- In all action sequences (and as required) the 1st AD must inform and give their instructions across all channels.
- All unclear messages should be clarified before actioned.
- Care must be exercised on Action sequences; performers will interpret any radio traffic as a 'cut'.

59 Working Time - Adults

This guide (and this chapter) refers to the Organisation of Working Time (General Exemptions) Regulations, 1998. It is particularly important that Employers are careful in how they approach the permitted exemptions under these Regulations. They are designed to allow certain Employers in the industry greater flexibility having regard to the needs of shooting schedules – but they should be carefully applied. In addition, they don't apply to all employees working for a production company. As with other parts of this guidance document, individual Employers are expected to carry out further research as necessary specific to their project.

In order to be compliant with the Working Time Act 1997 (and the European Court of Justice ruling (May 2019) companies in the EU must set up an objective, reliable and accessible system to record the hours of work of their employees.

Terms of Employment

The full contract of employment does not have to be put in writing. However, your employee must receive a written statement of 5 core terms of employment within the first 5 days of starting a job.

These core terms are

1. The full names of the employer and employee
2. The address of the employer
3. The expected duration of the contract (where the contract is temporary or fixed term)
4. The rate or method of calculating pay and the pay reference period for the purposes of the National Minimum Wage Act 2000 (a week, a fortnight, or a month)
5. What you reasonably expect the normal length of the employee's working day and week to be, in a normal working day and in a normal working week

Weekly time sheets

All crew are required to provide the accounts department with weekly time sheets in order to comply with the Working Time Act 1997. For further information about working hours, and breaks. Link: http://www.irishstatutebook.ie/eli/1997/act/20/enacted/en/pdf

Note: Working hours and breaks for children is different than for adults. For working hours and breaks for children, see section Working with Children in Film & TV Industry.

Scheduling of Crew

Each HoD will be required to ensure there are sufficient crew available to cover the entire working day, that crew are not in a lone worker situation, and they schedule crew so as each crew member does not *work* an excessively long working day, which can lead to fatigue and/or stress and lead to non-compliance with the Working Time Act 1997 & Collective Agreement.

Lone worker situations are not expressly prohibited in law. However, employers are faced with additional obligations in lone worker scenarios.

This requires consideration of the time needed for all departments, in particular departments where there may be an early call and requirements to remain at set areas until after wrap. An example of departments could include locations, transport, facilities, electrical, costume, hair, and make-up and other. The scheduling requirements should be highlighted to production as early as possible.

Working Time Act, 1997

Weekly working hours overview

Employers shall take the measures necessary to ensure that, in keeping with the need to protect the safety and health of workers the average working time for each seven-day period, including overtime, does not exceed 48 hours.

Where it is observed that any employee is working more than the legal maximum 48 hours (note that this is a four-month average, so your actual working hours could fluctuate considerably) as per Working Time Act, 1997 the Production Accountant shall highlight this to production so as the relevant HoD can be advised and ensure that the roster for crew does not require any crew member to work over 48 hours.

Weekly Rest Periods overview

Employers shall take the measures necessary to ensure that, per each seven-day period, every worker receives a minimum uninterrupted rest period of 24 hours plus the 11 hours' daily rest.

Rests and intervals at work overview

An employer shall not require an employee to work for a period of more than 4 hours and 30 minutes without allowing him or her a break of at least 15 minutes.

An employer shall not require an employee to work for a period of more than 6 hours without allowing him or her a break of at least 30 minutes, which can include the first 15-minute break.

General Exemptions

Extract from S.I No. 21/1998 - Organization of Working Time (General Exemptions) Regulations, 1998.

3. (1) Without prejudice to Regulations 4 and 5 of the Organization of Working Time Act 1997, activities specified in the Schedule to these Regulations are exempted from the application of sections 11, 12, 13 of the 1997 Act.

Activities specified in the schedule include: Persons working in production in the press, radio, television, cinematographic, postal or telecommunications industries.

Persons working in these industries should be aware of the above General Exemption Regulations. Link: http://www.irishstatutebook.ie/eli/1998/si/21/made/en/print

Collective Agreements

Under the Organisation of Working Time Act, 1997 a collective agreement can be approved by the Labour Court. Such collective agreements can provide for longer reference periods and variation in rest arrangements.

Collective agreements pertaining to the Organisation of Working Time Act are currently in place between Screen Producers Ireland (formerly known as Film Makers Ireland) and a number of industry unions.

Relevant persons working in the industry will be provided with the details of collective agreements pertaining to them upon commencing employment or can request further details from their union representative if they are a member.

The latest shooting crew agreement was signed in 2020, the Shooting Crew Agreement modernises the 2010 Shooting Crew Agreement including regularising evolving work practices while helping to promote good practice.

The agreement also implements an industry pension scheme operating under the Construction Workers Pension Scheme (CWPS) and establishes a monitoring structure to oversee the operation of the agreement. It also includes a commitment to developing the first Worklife Balance policy for the film and television industry.

This Agreement comes on the foot of the Workplace Relations Commission's Audit of the Republic of Ireland Independent Film and Television Drama Production Sector in the Industry and sends a strong message that the industry is committed to collaborative industrial relations.

For further information please see link below; https://www.screenproducersireland.com/shooting-crew

Further information about employers' obligations in Ireland, please see link to citizens information: https://www.citizensinformation.ie/en/employment/employment_rights_and_conditions/employment_rights_and_duties/employer_obligations.html

For further information on employees' rights and entitlements please see link to citizen's information: https://www.citizensinformation.ie/en/employment/employment_rights_and_conditions/employment_rights_and_duties/employee_rights_and_entitlements.html#ld641e

60 Considerations for 2nd Units (Reduced Units and 2nd Units)

General Considerations

Large crews often make use of reduced units or 2nd units to shoot sequences which, for a variety of reasons, it is decided will not be covered by the main unit. Actors are often involved. In all cases, however, the safety needs and concerns of crew, cast and background artists must be addressed. Sometimes, such units are called upon during main unit shooting in response to circumstances that have arisen and have not been considered in pre-production. Therefore, all reduced, or 2nd unit activity must be scrutinised for safety considerations, noting especially if any of the following are involved:

- Action sequences
- Vehicles
- Stunts
- Special effects
- Aircraft
- Animals
- Night shooting
- Underwater sequences
- Boats
- Children
- Visual Effects
- Any special or unusual circumstances or camera positions

Any reduced of 2nd unit must have appropriate crew levels, welfare facilities, safety personnel, risk assessments and emergency support, commensurate with the scope of the sequence to be filmed and the risks it might entail.

61 Air Quality On-Set

There are times when smoke, dust, and other airborne particles such as from practical fires and candles are required for visually creative reasons. Crew can be subjected to this atmosphere for many continuous hours and possibly weeks on end during the working day.

Small unventilated sets with large numbers of background artists and combined with open flame could lead to air quality being compromised.

Ideally all set areas should be well ventilated. There could be a reluctance to regularly ventilate sets by opening doors/windows or other means due to schedule and time concerns. A Risk Assessment addressing air quality should be created where there are any concerns by crew and or cast.

Many departments may be able to rotate crew in order to reduce the effects, each HoD shall be required to coordinate their crews' schedules where required to allow for required rotation of crew. Some departments may not have sufficient numbers to rotate crew sufficiently and or certain crew may be required on set at all times.

Each individual will have a different tolerance relating to air quality based on their own health and physical condition (asthma or other). Where air quality has been sampled/tested and does not indicate a risk, if a crew member is working on a set and they express the need to leave a set for fresh air they should be facilitated without question.

Sources of Carbon Monoxide: Unvented kerosene and gas space heaters, leaking chimneys and furnaces, back-drafting from furnaces, gas water heaters, wood stoves, and fireplaces, gas stoves, generators and other gasoline powered equipment, vehicle and generator exhaust, and tobacco smoke can be sources of carbon monoxide.

When there are any concerns re expected and or actual air quality due to dust particles, chemical substances, SFX smoke, smoke from real SFX fires or other a risk assessment should be carried out.

The risk assessment to be carried out by suitably qualified and competent person, control measures to be determined and implemented.

The following (non-exhaustive) may need to be considered for the risk assessment:

- When combustion is required on set (fires, candles, or gas) what is the safest option that is known/proven to be less hazardous?
- Why can / cannot the safest option that

is known/proven to be less hazardous be used?
- Audible carbon monoxide detectors to be used on sets where sets are not well ventilated and or there is a risk of carbon monoxide positioning.
- In so far as is reasonably practicable, sets should be ventilated when possible and as required, to ensure the wellbeing and health of persons at work is not compromised.
- If HoDs and other crew members, cast and background artists have just reason for concerns regarding air quality, the services of an occupational hygienist should be engaged to evaluate any health hazards in the working environment, determine exposure values and make recommendations to protect worker health and well-being.
- The recommendations and required control measures made by the occupational hygienist should be considered/implemented.
- Where Personal Protective Equipment and or Respiratory Protective Equipment is required and to be used, the equipment selection should be suitable to protect persons working in the environment.

62 Asbestos Containing Materials - ACM

What is Asbestos?

Asbestos is a natural mineral, a group of silicate minerals used in many products. The mineral fibres are strong and both heat and chemically resistant. Due to these properties, asbestos was commonly used in the past as insulation and fire proofing.

There are two varieties of asbestos: Amphibole and Serpentine.

Under the above two varieties of asbestos there are three types of asbestos: Chrysotile, Crocidolite, and Amosite.

- Chrysotile commonly called white asbestos
- Crocidolite commonly called blue asbestos and
- Amosite commonly called brown asbestos

Breathing in air containing asbestos fibres which have been released into the air can lead to asbestos-related diseases (mainly cancer of the chest and lungs).

Asbestos that is in good condition and is not disturbed or damaged does not pose a risk to health, as fibres are not released.

Where there is any works taking place involving demolition or refurbishment works on a premise that was constructed prior to 2002, duty holders are required **to ensure** Asbestos-Containing Materials (ACMs) are correctly identified before such works take place and are dealt with accordingly.

There is risk of exposure to employees or others that are subjected to ACMs and there is potential for development of Asbestos related diseases including lung cancer and mesothelioma. Source: www.HSA.ie

Where demolition or refurbishment of any existing property constructed prior to 2000 is to be carried out a Refurbishment and Demolition Asbestos Survey (RDAS) is required. A competent person should carry out the RD**A**S survey in advance of any works in order to comply with Safety Health and Welfare at Work (Construction) Regulations 2013, Safety, Health and Welfare at Work Asbestos Regulations 2006/2010.

Ref HSA's Asbestos Guidelines for further information: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/Asbestos_Guidelines.pdf

When a building is old and in a state of disrepair, it may have exposed asbestos. If crew from any department have any concerns re the presence of asbestos at time of scouting a location, the UPM/LP/PM to be advised without undue delay. If the production company and or UPM/LP/PM wish to pursue using the location and have concerns, it is recommended that the landlord or point of contact for the property be asked has there been an asbestos survey carried out and is there an asbestos register for the property. The production company should seek relevant details re ACM for the property if they wish to proceed to use the location to determine if the location is suitable to facilitate the needs of the production.

If there has been no survey carried out and there is no asbestos register for the building or area of concern, and if works by production crew may be carried out that could disturb ACM the area/structures should be assessed by a competent person (specialised asbestos company) prior to tech recce or carrying out any works.

Taking into account measures that may be necessary to ensure there is no risk of exposure to crew, cast and background artists, it may not be reasonably practicable to have a survey of the building carried out, and an alternative location may need to be sourced.

EPA for further information on:

- Asbestos
- What to Do
- Disposing of asbestos waste
- Licensed facilities
- Seeking further advise from the HSA

Please see links to Environmental Protection Agency website: https://www.epa.ie/waste/hazardous/asbestos/

Risk Assessment

All ACMs on-site must be identified and assessed prior to carrying out any maintenance, repair, demolition, or refurbishment work. Risk assessments must be prepared by a competent person, with training, knowledge, and experience of the type of work - exposure to Asbestos

Where there is a risk of disturbing ACM during any construction works for building of sets or other a Project Supervisor Design Process and Project Supervisor Construction Stage must be appointed in writing as asbestos is a 'Particular Risk' as set out in Schedule 1 of the Construction Regulations.

The PSDP must address all particular risks including asbestos within the Preliminary Safety and Health Plan, include the results/findings of any asbestos survey (RDAS).

63 Biological Hazards

Asbestos Removal

ACM must be removed by a competent trained/specialist contractor. An Asbestos Removal Contractor, full contracting members of the Asbestos Removal Contractors Association: ARCA.

The contractor's staff to be fully qualified and certified for asbestos removal.

Where works are planned to avoid disturbance of ACMs that are to remain in situ, details on the location of those ACMs must be communicated to the PSDP, documented in the Preliminary Health and Safety Plan, and documented by the PSCS through the Construction Safety and Health Plan and other appropriate communications to all contractors that will be carrying out works at the location.

The production company should ensure that risk assessments and safe systems of work are in place for the location and all crew and other persons working on the location are aware of same.

All asbestos waste to be disposed of in accordance with relevant waste legislation, the facility must be licensed by the Environmental Protection Agency (EPA).

All relevant ACM documentation must be filed and maintained in the Safety File.

Notification to HSA

Where the risk of exposure could expose persons to concentration fibres in excess of the exposure limit, the HSA must be notified in writing prior to any works taking place on notification form available through HSA website. Link: https://www.hsa.ie/eng/Your_Industry/Chemicals/Legislation_Enforcement/Asbestos/Asbestos_Notifications/Asbestos_Notifications.html

Further information Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/asbestos_flyer.pdf

HSA Online 'Asbestos Awareness for tradespeople'

The HSA have developed a short online course for persons who could potentially or unknowingly disturb asbestos containing materials (ACMs) causing asbestos fibres to be released into the air while at work. Note this awareness presentation does not deem a person competent to work with asbestos.

For further information for all crew: Link: https://hsalearning.ie/mod/page/view.php?id=262

Depending on the working environment, crew and cast working on a production may need to be aware of biological hazards. Sources of biological hazards can include bacteria, viruses from animals, insects, and plants. The health effects from biological hazards can include Coronavirus (COVID-19), Lyme Disease, Weil's Disease, Legionnaires' Disease, HIV/AIDS, Hepatitis, anaphylactic shock, respiratory distress from Moulds and Fungi.

"Biological agent" means micro-organisms, including those which have been genetically modified, cell cultures and human endoparasites, which may be able to provoke any infection, allergy or toxicity, classified into 4 risk groups according to their level of risk of infection, reference Part 1, Regulation 2 – interpretation, of the Safety, Health and Welfare at Work (Biological Agents) Regulations 2013.Link: https://www.hsa.ie/eng/Legislation/New_Legislation/Biological%20Agents%20Regulations%202013.pdf

Hazard Identification and Risk Assessments for Biological Hazards

At time of scouting a location, the location manager may identify a potential risk and should advise production of identified hazards. If biological hazards were not identified at time of location scout, each HoD to assess their working environment prior to carrying out any work. If they identify risks from biological hazards, they should advise production, and production should arrange for a risk assessment to be prepared.

It may be necessary for production to arrange for a risk assessment to be carried out, identifying the hazards, considering who might be affected, how they might be harmed, evaluating the risks and to determine control measures to be taken prior to other persons visiting and or working at the location.

As set out in Part 3 (Protective and Preventative Measures), Regulation 7 of the Safety, Health and Welfare at Work (Biological Agents) Regulations 2013 and 2020 an employer shall -

1. (1)(a) assess any risk, whether existing or potential, to the health and safety of employees resulting from any activity at that employer's place of work likely to involve a risk of exposure and for that purpose determine the nature, degree and duration of any such risk and apply -
   i. the prevention and risk reduction measures specified in Schedule 2 to be taken, and
   ii. any special protective measures which may be required, to ensure the safety and health of such employees.
2. (1)(d) Whenever there is a change in conditions at the place of work which may affect any employee's exposure to a biological agent, review and, as appropriate, amend the risk assessment required by subparagraph (a).

Where the results of the risk assessment referred to above reveal that it is not technically possible to prevent exposure, the employer must apply the prevention and risk reduction measures specified in Schedule 2 of the Safety, Health and Welfare at Work (Biological Agents) Regulations 2013 and 2020, in order to ensure that, as far as technically practicable, the level of exposure of employees is reduced to as low a level as necessary in order to adequately protect the health and safety of the employees concerned. One of the risk reduction measures specified in Schedule 2 is to keep as low as possible of the number of employees exposed or likely to be exposed to a biological agent.

In the case of any activity in relation to which there is a risk to the health or safety of employees due to work with a biological agent, an employer shall make provision for appropriate health surveillance to be made available, and undertaken by a responsible medical practitioner, for each employee for whom the results of a risk assessment under Regulation 7 of the Safety, Health and Welfare at Work (Biological Agents) Regulations 2013 reveal a risk to his or her health or safety as a result of exposure.

Incident Reporting

All injuries, near misses or incidents where a person has been affected by any biological hazard should be reported and recorded.

Duties of employees, see Regulation 6 of the Safety, Health and Welfare at Work (Biological Agents) Regulations 2013 and 2020 - An employee shall report immediately to his or her employer, or to the person responsible for safety and health at work in the employer's undertaking, any accident or incident of which he or she becomes aware, involving exposure, or risk of exposure, to, or release of, a biological agent involving, or likely to involve, a risk to the health or safety of an employee.

If there is a medic, nurse or first aider in attendance inform them of the incident. The medic, nurse or first aider should advise production of the reported incident

if the persons themselves have not already done so.

Production companies should have in place incident/accident report forms and procedures that give clear guidance for all crew on the steps to be taken in the event of a near miss, an accident, or a dangerous occurrence. Please see section Reporting of Accident, Incident, Near Miss and Dangerous Occurrence for further information.

Biological Hazards (non - exhaustive)

Below is an overview of some of the biological hazards and potential health effects that crew may need to be aware of.

Anaphylactic shock

Anaphylactic shock can occur when a person is exposed to something they're allergic to, they may experience a potentially life-threatening reaction called anaphylaxis, their immune system releases chemicals that flood the body which can lead to anaphylactic shock. Persons can be allergic to certain foods, example nuts, may have allergic reaction to bee stings or penicillin. Symptoms can include: Skin rashes, struggling to breathe due to constriction of the airways - swollen tongue or throat, dizziness, confusion, feeling of weakness and can lead to loss of consciousness

Seek emergency medical help if someone has a severe allergic reaction.

Anaphylactic shock prevention: Identify and avoid triggers. Advise other crew members if you have been diagnosed with any allergy and have been provided with medication (EpiPen or other). Carry your prescribed medication and don't delay in seeking assistance.

Allergens - Food ingredients

Food information regulations require that information on the 14 allergens has to be disclosed and visible for persons consuming food.

FSAI Link to further information on Allergens: https://www.fsai.ie/legislation/food_legislation/food_information/14_allergens.html

Below is listing / overview of food ingredients declared as allergens.

1. Cereals containing gluten,
2. Crustaceans and products thereof
3. Eggs and products thereof
4. Fish and products thereof, except:
5. Peanuts and products thereof
6. Soybeans and products thereof, except:
7. Milk and products thereof (including lactose),
8. Nuts,
9. Celery and products thereof
10. Mustard and products thereof
11. Sesame seeds and products thereof
12. Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre in terms of the total SO2 which are to be calculated for products as proposed ready for consumption or as reconstituted according to the instructions of the manufacturers
13. Lupin and products thereof
14. Molluscs and products thereof

Coronavirus (COVID-19)

COVID-19 is an illness that can affect your lungs and airways. It's caused by a virus called coronavirus

Common symptoms of COVID-19 include:

- a fever (high temperature - 38 degrees Celsius or above),
- a new cough - this can be any kind of cough, not just dry,
- shortness of breath or breathing difficulties,
- loss or change to your sense of smell or taste – this means if a person has noticed they cannot smell or taste anything, or things smell or taste different to normal.

A person may not have all of these symptoms. It can take up to 14 days for symptoms to show. They can be similar to symptoms of cold and flu.

An early diagnosis from a GP means a person can obtain the help they require and avoid spreading the virus.

Prevention for Coronavirus: Coronavirus is prevented by vaccination, followed by booster vaccine.

A Range of vaccinations on the Irish market from early 2021.

See Health Protection Surveillance Centre and World Health Organisation for further information. https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/covid-19a-z/

https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19

Please keep up to date on COVID Health and Safety guidelines in accordance with the HSA https://www.hsa.ie/eng/topics/covid-19_coronavirus_information_and_resources/

Return to Production Guidelines for the Creative Screen Industry developed by Screen Producers https://www.screenproducersireland.com/news/return-production-guidelines-creative-screen-industry

Faecal Material and Body Fluids

Persons who intentionally work with biological agents (example: contract cleaners) and/or persons (example: crew, cast, background artists) that could non-intentionally be exposed to biological agents such as animal waste, or human bodily fluids or human waste to be aware of the risk of contamination and infectious diseases through direct contact or indirect contact via contaminated material.

All persons working in external locations to be aware of the need for personal hygiene measures they can take, examples could include; wearing gloves when handling items that have been in contact with the ground, handwashing and/or use hand sanitisers prior to eating, smoking and/or drinking and any hand to nose, hand to mouth contact.

Giant Hogweed

Giant Hogweed poses a very real threat to humans as well as to our native fauna and flora.

The sap can cause severe reactions on skin which has touched it. The symptoms can be made worse if exposed to sunlight. The first symptom to occur is itching, then blistering and skin inflammation, the area may have scars which can last for months or years.

Prevention: Identify the plant and avoid contact. To help identify and for further information follow link below. http://invasivespecies.ie/invasive-plants-japanese-knotweed/giant-hogweed/

Hepatitis A, B and C

Hepatitis A, B and C are a group of diseases that affect the liver. Each have different symptoms and treatments.

Hepatitis A is present in an infected person's blood, stools, or other bodily fluids and can be transmitted by ingestion of contaminated food or water.

Hepatitis A prevention: Always wash your hands thoroughly after using the toilet. Ensure good hygiene when involved in food preparation.

Hepatitis B and C viruses (HBV/HCV) are transmitted through exposure to infective blood, and other bodily fluid waste (containing blood).

Hepatitis B and C prevention: Ensure all

sharps and bodily fluid waste (containing blood) are handled and disposed of in a safe manner, wearing the appropriate PPE and all sharps to be safely disposed of in a sharps container. The area to be cleaned with appropriate cleaning solution.

(Note: Safe and effective vaccines are available to prevent both Hepatitis A and B.

HIV/AIDS

HIV - Human Immunodeficiency Virus can be spread by contact with HIV infected blood or blood contaminated bodily fluids, through needle stick injury that contains blood, through broken skin, wounds, or mucous membranes.

AIDS - Acquired Immunodeficiency syndrome is a potentially life-threatening condition caused by HIV.

AIDS/HIV prevention: Do not handle sharps unless trained to do so. Ensure all sharps and bodily fluid waste (containing blood) are handled and disposed of in a safe manner, wearing the appropriate PPE and all sharps to be safely disposed of in a sharp's container. The area to be cleaned with appropriate cleaning solution.

Legionnaires' Disease

Legionnaires' disease is a type of pneumonia caused by bacteria. You usually get legionnaires' disease by breathing in/inhaling mist (microscopic water droplets) from water that contains the bacteria. The mist may come from a number of sources including showers and certain types of air-conditioning units. Symptoms usually develop 2 to 10 days after infection. Symptoms can include flu, high temperature, muscle pains and headaches.

Legionnaires' disease prevention: Ensure water systems are properly maintained. The Health Service Executive have produced a guide on prevention of Legionnaires' disease. Link: https://www.hse.ie/eng/services/publications/environmentalhealth/legionnaires-disease.pdf

Lyme Disease

Lyme disease can be transmitted from ticks. It is thought that removing a tick from your body within 12 hours of being bitten means an infected tick won't have had sufficient time to spread the bacteria into your body. Lyme disease can be effectively treated if it is diagnosed early. Seek Medic assistance for removal of the tick if medic is available. Remove using fine-tipped tweezers and grasp the tick as close to the skin's surface as possible, remove using even pressure. After removal, clean the area with rubbing alcohol and wash your hands after disposing of the tick. Don't crush the tick with you finger.

Tick bite prevention: Wear long-sleeved tops and trousers when working outdoors. Tuck trousers into your socks/boots. Check yourself from time to time and particularly at end of working day if you believe you are working in environment where you are likely to be exposed to ticks.

Moulds and Fungi

Moulds and Fungi (including Aspergillus) micro-organisms can enter buildings by their spores being carried in by the air and or can grow on wood, plaster, upholstery, fabric, wallpaper and other in a building.

Not all moulds cause health problems, however the inhalation of fragments of the moulds or spores can lead to health problems or make certain health conditions worse for some people.

Symptoms can include: Eye, nose, and throat irritation including coughing, aggravation of asthma, fatigue, and headaches.

Prevention of Ill health from moulds and fungi: Visually inspect internal premises prior to use. Where practicable find alternative premises. If a premises is to be used, have affected areas cleaned by a professional contractor (sampling may be required). Ensure internal buildings are well ventilated.

Psittacosis/histoplasmosis/ cryptococcosis

Bird droppings could pose a health hazard, diseases include histoplasmosis, cryptococcosis and psittacosis. Spread by inhaling of dust from dried bird droppings. Persons who have a pre-existing respiratory condition and come into contact with dried guano dust particles are most at risk.

Symptoms are commonly a flu-like illness, cough and other.

Respiratory Protective Equipment will be required by persons cleaning the area (professional contractor to be engaged) as cleaning could generate dust. Risk assessment will be required.

Prevention of ill health from guano: Minimize exposure to dust in contaminated and enclosed environments, wear protective mask and other PPE as appropriate.

Tetanus

Tetanus (commonly known as lockjaw). Bacteria (Clostridium tetani) found in the soil can release a toxin. The bacteria can enter the body through a break in the skin, cuts, open or puncture wounds by contaminated object. Symptoms can include: Spasms and stiffness in jaw and neck muscles, difficulty swallowing.

Prevention for Tetanus: Tetanus is prevented by vaccination, followed by booster vaccine.

Weil's Disease

Weil's Disease, (also known as Leptospirosis), is an infectious disease most commonly carried by rats and spread by their urine. Humans can become infected by the disease through broken skin, cuts, and open wounds. The bacteria thrive in wet and moist conditions.

Symptoms can occur between 3 – 20 days from time of infection. Symptoms can be similar to flu, including high fever, headache, chills, muscle aches, and vomiting. Seek medical treatment if symptoms persist and you have reason to believe you may have been infected.

Weil's Disease Prevention: Cover all cuts, scratches, and abrasions with a waterproof dressing. Wear long sleeved tops and trousers when working outdoors. Wear protective gloves when handling soil and vegetation.

Biological agents' further information – HSA FAQ, Link: https://www.hsa.ie/eng/Topics/Biological_Agents/Biological_Agents_Introduction/Biological_Agents_Frequently_Asked_Questions/

64 Confined Spaces

Confined spaces used in the film industry may include deep excavations, roof spaces, pipes, tanks, and trenches etc. Confined spaces are significantly more hazardous than normal workplaces. The hazards involved may not be unique to confined spaces but are always exacerbated by the enclosed nature of the confined space. Such work should be considered high risk and properly planned in advance before work begins.

The Safety Health and Welfare at Work (Confined Spaces) Regulations 2001 apply to all work activities involving confined spaces, with the exception of activities below ground at a mine and diving operations. Specifically, Regulation 5 therein states that (in summary):

- A person shall not enter a confined space to carry out work in confined spaces if it is reasonably practical to achieve that purpose without such entry.
- If the work must be carried out a hazard identification and risk assessment must be carried out prior to the work commencing.
- A person shall not enter a confined space unless there is a system of work in place that has been planned, organised, performed and maintained so as to render that work safe and without risks to health.
- Anyone entering a confined space must be provided with information, training, and instruction appropriate to the particular characteristics of the proposed work activities.

The Health and Safety Authority (HSA) has also published a detailed Code of Practice for Working in Confined Spaces to assist employers in complying with the requirements of the above regulations. https://www.hsa.ie/eng/Publications_and_Forms/Publications/Codes_of_Practice/COP_Confined_Space.pdf

In the first instance, the question of whether or not the shot can be cheated by simulating it in a set environment to eliminate the risk should be considered. If this is not agreeable, then the Code of Practice should be followed in full to ensure that a safe system of work is in place to adequately control the risk and render it safe and without risks to health. *Source: www.hsa.ie*

What is a confined space?

The HSA note that confined space refers to any place, including any vessel, tank, container, pit, bund, chamber, cellar or other similar space which, by virtue of its enclosed nature, creates conditions that give rise to a likelihood of an accident, harm or injury of such a nature as to require emergency action due to:

- The presence or reasonably foreseeable presence of
  - Flammable or explosive atmospheres.
  - Harmful gas, fume, or vapour
  - Free flowing solid or an increasing level of liquid
  - Excess of oxygen
  - Excessively high temperatures
- The lack or reasonably foreseeable lack of oxygen.

For work in Filming, some confined spaces may be obvious e.g. filming in pipes or vessels. However, there are other confined spaces that may be less obvious e.g. filming in attic spaces with the potential for excessively high temperatures or attic spaces containing pigeon guano. Open excavations may be identified as a confined space where there is a risk of asphyxiation from machinery fumes or ground gases or a risk of drowning from burst water pipes.

(Note: diving operations are exempt from the requirements of the confined space regulations as they are covered by separate regulations, see 'Specific Diving Legislation' section in Chapter 24 – Camera, DIT and Video Assist).

Noting the above, the first challenge, therefore, is to identify all potential confined spaces at the outset so the appropriate risk assessment can be carried out and control measures put in place to mitigate the risks. To assist, the HSA have identified the following key characteristics of a confined spaces:

- the space must be substantially enclosed
- there must be a risk of at least one of the hazards listed above occurring within the space
- the risk of serious injury from the hazard must be created by virtue of the enclosed nature of the space
- the potential injury must be serious and be such as to require emergency action to rescue the person involved.

Exec Producers, Producers, UPM / PM / LP must identify confined spaces and devise and implement a safe system of work for production activity in the identified confined spaces.

Risk Assessment

As noted previously it is a legal requirement that a confined space risk assessment is carried out by the producer/UPM/PM/LP (or a competent person) and that an action plan or safe system of work is put in place (and documented in the form of a method statement) in advance of the commencement of work. When carrying out the confined space risk assessment it should be noted that dangers can arise in confined spaces because of the following issues.

- A lack of oxygen. This can occur:
  - where there is a reaction between some soils and the oxygen in the atmosphere.
  - following the action of groundwater on chalk and limestone which can produce carbon dioxide and displace normal air.
  - in ships' holds, freight containers, lorries etc as a result of the cargo reacting with oxygen inside the space.
  - inside steel tanks and vessels when rust forms.
- Poisonous gas, fume, or vapour. These can:
  - build-up in sewers and manholes and in pits connected to the system.
  - enter tanks or vessels from connecting pipes.
  - leak into trenches and pits in contaminated land, such as old refuse tips and old gas works.
- Liquids and solids which can suddenly fill the space, or release gases into it, when disturbed.
  - Free-flowing solids such as grain can also partially solidify or 'bridge' in silos, causing blockages which can collapse unexpectedly.
- Fire and explosions (e.g. from flammable vapours, excess oxygen etc).
- Residues left in tanks, vessels etc, or remaining on internal surfaces, which can give off gas, fume, or vapour.
- Dust present in high concentrations, (e.g. in flour silos).
- Excessive Heat. Hot conditions leading to a dangerous increase in body temperature.

Some of the above conditions may already be present in the confined space. However, some may arise from the work being carried out, or because of ineffective isolation of plant nearby, (e.g. leakage from a pipe connected to the confined space).

The enclosure and working space may increase other dangers arising from the work being carried out, for example:

- machinery being used may require special precautions, such as provision of dust extraction for a portable grinder, or special precautions against electric shock,
- portable electrical equipment (other

than transformers, generators or equipment, whose rating exceeds 2 kilovolt amperes) that is intended for use in damp or confined locations must not be supplied at voltages exceeding 125 volts AC. Portable handlamps must not be supplied at a voltage exceeding 25 volts AC or 50 volts DC. These are requirements of regulation 81 of the Safety, Health and Welfare at Work (General Application) Regulations 2007 to 2016.
- gas, fume, or vapour can arise from welding, or by use of volatile and often flammable solvents, adhesives etc.
- a safe and convenient way in and out of the confined space should be provided for the individuals carrying out the work. The size of openings used for access to and egress from confined spaces needs to be adequate to allow ready passage. Certain confined spaces may have design deficiencies, which increase the level of risk to an unacceptable level, when entering. These include spaces whose openings are too tight for safe passage or which are of convoluted construction, or which involve excessive distances to a point of escape. Structural modifications (e.g. the making of temporary openings) will be necessary before entry is possible in these cases.

Safe Systems of Work

The key elements to consider when drawing up a safe system of work for confined spaces include:

- Training, supervision, and suitability of persons
- Permit-to-work procedure (i.e. A permit to work procedure is a means of achieving effective control of a system of work through formal written documentation known as a permit to work form or certificate. An example of such a form is shown in Appendix 2 of the Code of Practice for Working in Confined Space.
- Gas purging and ventilation
- Dangerous residues
- Testing and monitoring of the atmosphere
- Mechanical, electrical and process isolation
- Respiratory protective equipment
- Other personal protective equipment
- Safe use of work equipment
- Communications
- Access and egress
- Flammable or explosive atmospheres
- Combustible materials

These requirements are detailed further in the Health and Safety Authority's Code of Practice for Working in Confined Spaces and the risk assessment should consider all of these elements.

Rescue Arrangements

Whenever work in a confined space is carried out, arrangements that are suitable and sufficient for the rescue of persons in the event of an emergency therein must be in place and the necessary equipment to enable rescue and resuscitation procedures to be carried out must be available. Ref Regulation 6 of the Confined Space Regulations 2001 & section 7 of the Code of Practice for Working in Confined Space 2017.

The risk assessment must determine what emergency arrangements are necessary. Possible rescue strategies can include:

- Self-rescue, where the circumstances and nature of hazards allow.
- Rescue by trained team members using non entry methods.
- Rescue by trained team members using a safe entry technique; and
- Rescue using a safe entry technique by the local public emergency services subject to adequate time being available (depending on nature of the hazards, response time or emergency services).

The emergency arrangements must include (summary):

- all practical measures necessary to ensure the health and safety of those taking part in the rescue,
- the provision of a suitable and reliable means of raising the alarm in the event of an emergency,
- having all necessary rescue equipment nearby and in a well maintained, good condition,
- the provision of information, instruction, and training appropriate to the particular characteristics of the work activity involved to any person involved in the arrangements for rescue,
- the provision of equipment and training for resuscitation procedures if there is a foreseeable risk that they will be needed.

References & further information from HSA. Links:

Health and Safety Authority Code of Practice for Working in Confined Spaces. Links: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Codes_of_Practice/COP_Confined_Space.pdf

Safety, Health and Welfare At Work (Confined Spaces) Regulations, 2001: http://www.irishstatutebook.ie/eli/2001/si/218/made/en/print https://www.hsa.ie/eng/Topics/Confined_Spaces/

65 Working with Chemicals

Employers are required to identify which hazardous substances are present in the workplace and assess risks to employees and other persons from the presence and use of these hazardous substances. Through the risk assessment process, and consultation with employees and or contractors, employers are to determine control measures required to prevent or control exposure to the hazardous substances to as low a level as is reasonably practicable.

The Safety, Health and Welfare at Work (Construction) Regulations 2013 stipulate that preventative measures shall be taken such as the replacement of a hazardous substance by a harmless or less hazardous substance. In addition, an adequate number of appropriate fire-fighting devices and where required, fire detectors and alarm systems, should be available.

Employers have a duty to provide information, training, and consultation to employees. Employers are required to provide instruction, training, and supervision to employees on matters relating to their safety, health, and welfare at work. See section 10 of the Safety, Health and Welfare at Work Act 2005 for further detail.

Relevant legislation and Codes of Practice for further information includes (non - exhaustive):

Link to Safety, Health and Welfare at Work Act 2005 (S.I. No. 10 of 2005): http://www.irishstatutebook.ie/eli/2005/act/10/enacted/en/pdf,

Link to Chemical Legislation: https://www.hsa.ie/eng/Your_Industry/Chemicals/Legislation_Enforcement/The_Chemicals_Act/

Link to Chemical Codes of Practice: https://www.hsa.ie/eng/publications_and_forms/publications/codes_of_practice/chemical_agents_cop_2020.pdf

During a production many departments, crew, cast and background artists can have a requirement for the use of chemicals or be at risk of exposure to hazardous substances.

All crew, cast and background artists can be at risk of exposure to smoke, dust and other airborne particles such as from practical fires and candles or ground coverings when working on set.

Crew can be at risk of exposure to hazardous substances when visiting departments other than their own or visiting sets where chemicals are in use.

Cast (and background artists) can be at risk of exposure when on sets where hazardous substances are in use/present and-or when visiting departments as necessary for preparation for filming (for example having hair treatment/dyed or in make-up/prosthetics department having a body cast made.

In addition to the above some of the departments and persons that can be at risk of exposure to chemicals include:

Production office crew, products used for cleaning the canteen/toilets, inks and toners for the printer photocopier are chemicals. Accounts department crew may be at risk of exposure to inks and toners for printers/photocopiers.

Art Department may be required to use aerosol sprays containing chemical substances.

Camera department crew may have a requirement for use of chemicals and solvents through the use of cleaning and lubrication products. Crew can be at risk of exposure through contact and also from fumes of products used. Compressed gas products may be required to remove dust from equipment.

Construction crew can be required to use substances for building of set structures, chemicals can include acetone, paints, adhesives, and sprays. There can be risk of exposure to dust particles from wood or plaster products and crew may have a requirement to solder items giving rise to fumes.

Costume department crew can be required to work with dyes, glues, bleach, acetone, varnishes, fabric paint, talcum powder and many other products in the preparation of costumes to be worn by cast and background artists.

Hair department crew can be required to use shampoos, sprays, hair dyes and bleaches for preparation of cast and background artists on each day of filming.

Make-up & SFX make-up crew may be required to use a range of sprays and casting products for prosthetics. There is a risk of exposure to fumes, vapours, dusts etc when carrying out make-up/prosthetic work including cosmetic make-up and body make-up.

Model making department crew may be exposed to a range of chemicals substances for manufacturing of props, there is a risk of exposure to substances including acetone, adhesives and dust particles from wood or plaster products.

Set decoration crew may be required to handle hazardous chemicals, for example sand products for dressing a floor on set. Sand can become airborne and inhaled while dressing the set area.

Management and safe use of chemicals in the workplace:

Chemicals to be safely managed in the workplace including correct storage, handling, use and disposal and reducing potential harm to the environment.

Persons using chemicals must have received training for safe use of chemicals and be provided with the appropriate Respiratory Protective Equipment (RPE)/Personal Protective Equipment (PPE).

Employees must co-operate with their employer by following any procedures in place including reporting any incident which may have resulted in the release of a dangerous chemical/substance into the workplace.

The HSA have an online training course for Chemical Safety in the Workplace. Link: https://hsalearning.ie/mod/page/view.php?id=37

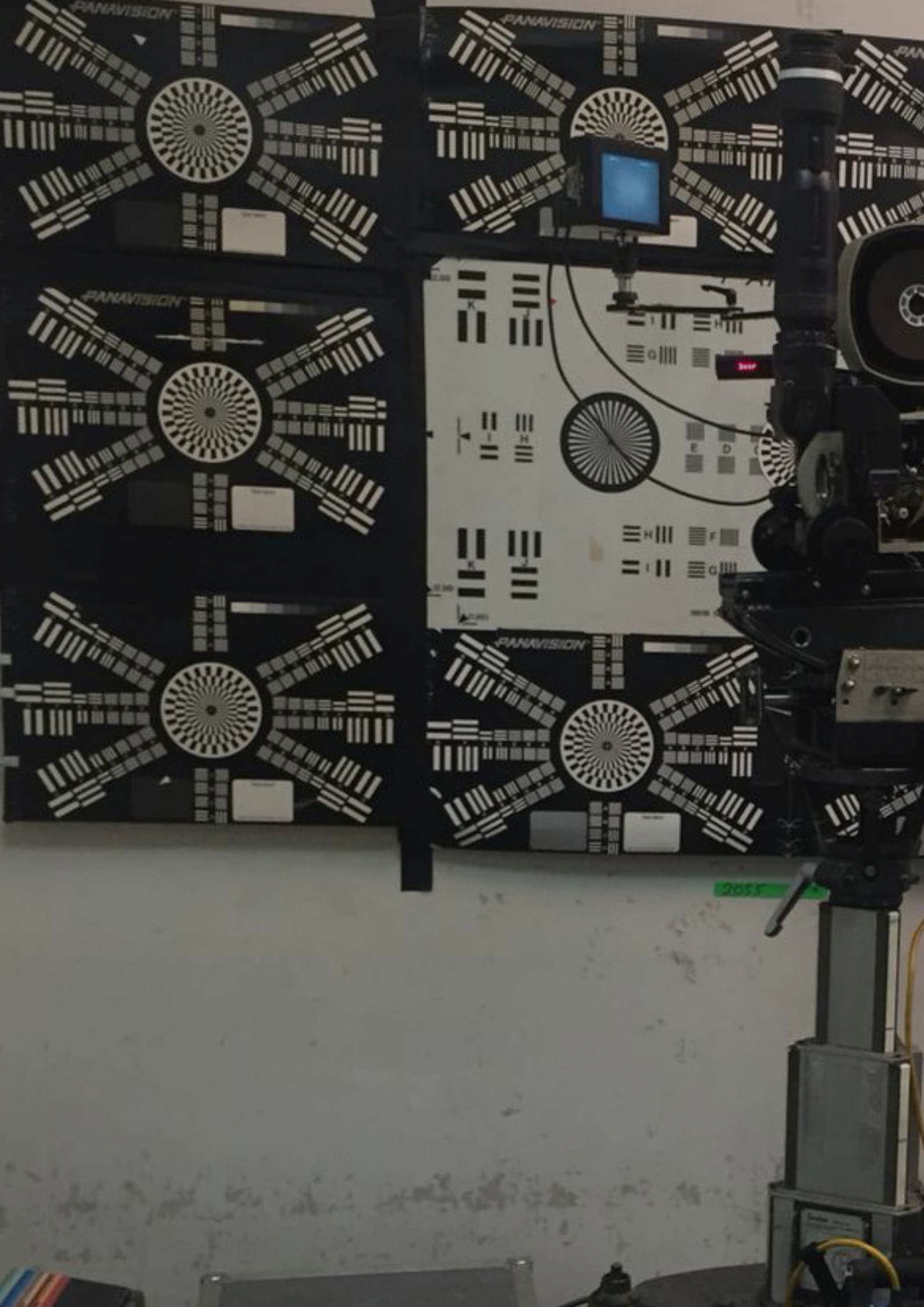
The HSA have a chemical safety fact sheet that can be used by employers, employees and contractors, providing information on what are chemicals, how can chemicals cause harm, assessing risks from chemicals, and what is a Safety Data Sheet and the importance of information provided on a Safety Data Sheet. Link to the BESMART Chemical Fact Sheet: https://www.besmart.ie/fs/doc/Chemicals_Fact_Sheet.pdf

Safety data sheets and material data sheets must be available for all chemical and hazardous products used. These products are to be handled and used by competent and qualified persons only. In line with the Safety, Health and Welfare At Work (Chemical Agents) Regulations, 2001 - 2015, persons using chemicals must have received training for their safe use and be provided with the appropriate RPE/PPE. The Safety, Health and Welfare at Work (Construction) Regulations 2013 stipulate that other preventative measures may also be taken such as the replacement of a hazardous substance by a harmless or less hazardous substance. In addition, an adequate number of appropriate fire-fighting devices and where required, fire detectors and alarm systems, should be available.

For further information see HSA Information Sheet on Safety Data Sheets. Link: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Information_Sheets/SDS_hazchem_info_sheet.pdf

Where chemicals are used Local Exhaust Ventilation (LEV) may be required to reduce risk of exposure to persons within the working environment. LEV is an engineering system to protect employees from exposure to hazardous substances by containing or capturing them locally, at the emission point. Good design and being fit for purpose are the crucial initial considerations to ensure the effectiveness of a system, reference HSA guidance on LEV: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Local_Exhaust_Ventilation_LEV_Guidance.pdf

Risk assessments to be in place for use of chemicals, the HSA's document 'Your steps to chemical safety - A guide for small business' shows you how to carry out a chemical risk assessment, which is required by law: https://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/Your_Steps_to_Chemical_Safety.pdf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Bibliography

Within this guide reference have been made to sources for information included as applicable.

Many hyperlinks have been included within the guide for the reader to find further information on topics included within the section being read.

In addition to the above, following is a list of the main Bodies where information was sourced and can be used to gather further information if required.

Please note the landing page for hyperlinks in this document may change. Landing pages for Hyperlinks used in this document were verified on 18th Sept 2019

The bodies listed below are in alphabetical order, not chronological order.

ALBERT - Link: http://wearealbert.org/about/what-is-albert

American Humane Association - Link: https://www.americanhumane.org/

British Standard Institution (UK) - Link: https://www.bsigroup.com/en-IE/

Citizens Information - Link: https://www.citizensinformation.ie/en/

Coiffure EU - Link: https://www.coiffure.eu/

Commission for Regulation of Utilities - Link: https://www.cru.ie/

CORU - Regulating Health & Social Care Professionals - Link: https://www.coru.ie/

Dental Council - Link: http://www.dentalcouncil.ie/

Department of Justice and Equality - Link: http://www.justice.ie/en/JELR/Pages/Home

Department of Children and Youth Affairs - Link: https://www.dcya.gov.ie//

Dublin City Council - Link: http://www.dublincity.ie/

Environmental Protection Agency - Link: https://www.epa.ie/

European Agency for Safety and Health at Work - Link: https://osha.europa.eu/

European Union Aviation Safety Agency - Link: https://www.easa.europa.eu/

Food Safety Authority of Ireland - Link: https://www.fsai.ie/home.html

Green Production Guide - Link: https://www.greenproductionguide.com/about/

Green shoot - Link: http://www.greenshoot.com/

Grip and Crane Technicians Branch (UK) - Link: http://www.gripsbranch.org.uk/index.php

Health and Safety Authority (Ire) - Link: https://www.hsa.ie/eng/

Health and Safety Executive (UK) - Link: https://www.hse.gov.uk/

Health Service Executive (Ire) - Link: https://www.hse.ie/eng/

INVAS Biosecurity - Link: http://invasivespecies.ie/

Irish Aviation Authority - Link: https://www.iaa.ie/

ISO – International Organization for Standardization - Link: https://www.iso.org/home.html

Joint Industry Grading Scheme (JIGS) UK - Link: https://www.jigs.org.uk/

Met Éireann - Link: https://www.met.ie/

Metropolitan Police (UK) - Link: https://www.met.police.uk/

National Access & Scaffolding Confederation (UK) - Link: https://www.nasc.org.uk/

National Standards Authority Ireland - Link: https://www.nsai.ie/

Pre Hospital Emergency Care Council - Link: https://www.phecit.ie/PHECC/Home/PHECC/Home.aspx?hkey=0f1809e6-e621-4dd2-aa1f-b956995802d7

Road Safety Authority - Link: https://www.rsa.ie/en/

Royal Society for Prevention of Cruelty to Animals (UK) - Link: https://www.rspca.org.uk/home

Safe Electric - Link: https://safeelectric.ie/contractors/

Safe Food - Link: https://www.safefood.eu/Home.aspx

SAGFA – Screen Actors Guild - American Federation of Television and Radio Artists - Link: https://www.sagaftra.org/404

Screen Ireland - Link: https://www.screenireland.ie/

Screen Producers Ireland – Link: https://www.screenproducersireland.com

Careers in Screen – Link: https://www.careersinscreen.ie/

SIPTU – Services Industrial Professional and Technical Union – Link: https://www.siptu.ie/

SOLAS - Link: http://www.solas.ie

Veterinary Council of Ireland – Link: https://www.vci.ie/

Appendices

Appendix 1
Pregnant Employee Risk Assessment Template

Pregnancy Risk Assessment Template	
Notes:	This template will assist employers in carrying out a risk assessment required by the Protection of Pregnant, Post Natal and Breastfeeding Employees Regulations 2007. In these regulations, an employee means a pregnant employee, an employee who is breastfeeding or a post-natal employee. On being informed that an employee is pregnant, you must carry out an assessment to consider if there are specific risks from the work to the employee and decide if any action needs to be taken to protect against something that could damage her health or that of her developing child. The existing workplace risk assessments should be available and may need to be examined whilst completing the individual risk assessment for the employee. There is no prescribed form that must be used to record the assessment, but the following has been made available to aid employers. For more information, the following guides and specific hazard control information are available on the HSA website: Workplace Health Toolkit to Assist Small Business Section 6 Guide to the General Application Regulations: Pregnant, Post Natal and Breastfeeding Employees
Section 1: EMPLOYEE RISK ASSESSMENT	
Name:	
Date:	
Company Address:	
Location:	
Job Title:	
Assessment Carried Out By:	
Manager / Supervisor's Name:	
Name & Address of Medical Advisor:	
Number of weeks pregnant:	
Expected Date of Delivery:	
Employee's Signature:	
Has the employee formally notified her employer that she is pregnant or is a new mother within 6 months and/or is breastfeeding?	Yes [ ] No [ ] To Whom: _____ Date: _____

Section 2:			
Physical Agents	Yes	No	Comments
Does the employee's work activities involve exposure to the following:			
Physical shocks (including direct blows to the abdomen) or vibration to the body?			
Handling of loads entailing risks?			
Climbing steps, ladders, or other heights?			
Excessive noise?			
Ionising or non-ionising radiation?			
Extremes of cold or heat?			
Movement, travelling or postures that are abrupt or severe or give rise to excessive fatigue?			
Underground mine work?			
Confined spaces?			
Within pressurisation chambers?			
Underwater diving?			
Biological Agents	Yes	No	Comments
Is there likely exposure to biological agents which can endanger human health (Groups 2, 3 or 4 biological agents)?			
Are control measures in place and personal protective equipment (PPE) provided if required?			
Is there possible exposure to? Toxoplasmosis? Rubella virus? Has the employee immunity to such agents?			

Chemical Agents Hazards	Yes	No	Comments
Do the employee's work activities involve exposure to the following chemical agents?			
Those labelled as the following: R40: Limited evidence of a carcinogenic effect R45 / H350 / H351: May cause cancer / suspected of causing cancer. R46 / H340 / H341: May cause genetic defects / suspected of causing genetic effects. R49 / H350i: May cause cancer by inhalation. R61 / R63 / H360 / H360D / H360FD / H360FD / H360Df / H361 / H361d / H361fd / H361d: May damage fertility or the unborn child / Suspected of damaging fertility or the unborn child. R64 / H362: May cause harm to breastfed children. R68: Possible risk of irreversible effects H350: May cause cancer H370: Causes damage to organs H371: May cause damage to organs			
Mercury or mercury derivatives?			
Antimitotic (cytotoxic) drugs?			
Carbon Monoxide?			
Chemical agents of known dangerous percutaneous (skin) absorption?			
Lead or lead derivatives?			
Are control measures in place and PPE provided if required?			
Night Work	Yes	No	Comments
Does the employee work at least three hours between 11pm and 6am?			
Does she have a medical certificate stating that night work should be avoided?			
Movement / Posture	Yes	No	Comments
Does the work involve long periods of time sitting or standing? Is there a chair accessible?			
Is the employee a visual display user (VDU)? Has a workstation assessment been carried out? Can the employee vary tasks at her own discretion?			
Is it necessary to reach over and around obstacles?			
Are there constraints preventing good posture?			
Is there exposure to strong air movements?			
Poor lighting?			
Use of ladders/platforms at height?			

Lone working? Is the employee aware of emergency procedures and has a means of communication?			
Aggressive or violent persons? Is the employee trained how to deal with aggressive or violent persons?			
Is there any difficulty for the employee wearing PPE due to her increased size as the pregnancy develops?			
Entry to tightly fitting workspaces which would present comfort difficulties to the employee?			
Is there any difficulty in the employee evacuating the building in an emergency due to lack of speed and movement?			
Have you identified any other safety and health hazards?	Yes	No	Comments

Section 3: Risk Assessment Recommendations:
The risk assessment is to be reviewed on a regular basis throughout the pregnancy or more frequently should circumstances dictate.

Source: https://www.hsa.ie/eng/Workplace_Health/Sensitive_Risk_Groups/Pregnancy_Risk_Assessment_Template.docx

Appendix 2
Sample ARTSO

ART DEPARTMENT
SET+LOCATION SAFETY OBSERVATIONS

NOTE NO: ☐

PART 1

CLIENT/EMPLOYER: BADLANDS 3 TV PRODUCTIONS DAC

PRODUCTION: INTO THE BADLANDS - SEASON 3

KEY DATES: SHOOT DATE: _____ ACCESS FROM: _____ PUT BACK BY: _____

LOCATION: _____ ADDRESS: _____

SET / DESCRIPTION OF WORKS:
(See Art Dept. Location Notes for detailed information regarding Set Design for all Depts.)

EMERGENCY DETAILS Medic Construction +353 89 413 1712 locationsmedic@gmail.com

KEY MEMBERS OF PROJECT TEAM DURING SET OR LOCATION CONSTRUCTION PREP & THEIR ROLE

Location Manager:		Chargehand Props:	
Production Designer:		Gaffer:	
Set Decorator:		HoD Rigger:	
Art Director:		SFX Supervisor:	
Construction Manager:		Vehicles Supervisor:	
Chargehand Carpenter:		Consulting Engineer	
PSDP:		PSCS:	
Stunt Supervisor			

IDENTIFIED KEY SAFETY RISKS / MOST LIKELY HAZARDS AT THIS SET/LOCATION
(These items to be noted in Art Dept Location Notes)

PART 2

TICK THE ☑ BOX TO IDENTIFY **HAZARDS, RISKS, REQUIREMENTS** ON SET / LOCATION

GENERAL	☐ Drawings	☐ Risk Assess.	☐ Method Statement	☐ Engineers Report	☐ Survey	☐ Ground Conditions	☐ Lighting	☐ Hazards	☐ Access Route	☐ Increased Fire Risk	☐ Use of Glass on set	☐ Slips +Trips	☐ Weather	☐
	☐ Biological Agents Asbestos	☐ Harmful Gases & Dust	☐ Safety Glasses	☐ Dust Mask	☐ Electrical & Overhead Wires	☐ SFX	☐ Vehicles	☐ Animals on Set	☐ PPE	☐ Manual Handling	☐ Sub-Contractor	☐	☐	☐
Locations: Natural / Man-Made	☐ Damp / Slippery Terrain	☐ Sudden Drops in Elevation	☐ Shifting Earth Falling Rocks	☐ Gas	☐ Rat / Bird Droppings	☐ Derelict/ Unsafe Structure	☐ Confined Space	☐ Working Within Excavations	☐ Weather-Appropriate Clothing	☐				
Falls and Falling Objects	☐ Scaffold / Working Platform	☐ Edge Protection	☐ Open Holes	☐ Safe Ladder	☐ Hoists/ Cranes	☐ Propping	☐ Working in / Felling Trees	☐ Falling Objects	☐ Stunt Construction Elements	☐				
Working Close to Water	☐ Personal Flotation Devices	☐ Safety Line/ Grab Line Life Ring	☐ Boat/Pontoon	☐ Diving	☐ Marine Co-ordinator to advise on all marine issues	OTHER RISKS/ HAZARDS	☐	☐	☐	☐				
Other Depts	☐ Construction Dept to advise regarding Access, Prep Time, Manual Handling, Mechanical Aids, Information Requirements for Safe Set/Location Work.			☐ Set Dec+Prop Dept to advise regarding Access, Prep Time, Manual Handling, Mechanical Aids, Information Requirements for Safe Set/Location Work.			☐ Location Dept to advise any impacts regarding Owner Liason, Access, Ground Conditions, Security, Pedestrian Routes, Traffic Control, Barriers, Fencing/Hoarding Requirements, Service Suppliers, Services, Permits, Diversions, etc.							

ADDITIONAL NOTES

NOTES: This list is not exhaustive and is in no particular order. If you notice any additional issues not listed above please report to the PSDP, PSCS, Safety Officer or Art Director on Location for inclusion in the Production Risk Assessment & Safety and Health Plan as appropriate.

PART 3

Note prepared by: _____ Date: _____

The controls to be used as per this form have been circulated to Production PSDP and Production PSCS.

ISSUED TO PSDP: ☐

DATE ISSUED:

ARTSO-V5-17.08.17

Icons sourced from The Noun Project | https://thenounproject.com

Reference Publications: 1) Irish HSA SSWP Form. 2) UK CDM 2015 Construction Phase Plan for Film & Television Productions. 3) ETIS19(rev1) UK HSE 'Safe Design amd Build of Production Sets used for film, television and media productions'.

Appendix 3
Studio Checklist

1 – General information overview	**Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:**
Point of contact for production and point of contact for studio	
Dates of lease required for each element / each phase of the production has been confirmed in contracts	
Safety Statement for each business	
Insurance details for each business	
Production offices required	
Stage specification	
Parking requirements expected for each phase	
Workshops specification	
For studios details of expected works	
For studios details of any works that may affect the structural integrity of a studio	
As appropriate discuss names and qualifications of crew (including specialised crew) that shall be carrying out, example: electrical, rigging or other	
Waste Management including water waste management requirements for each phase. Arrangements for location of Skips and segregated waste containers where required & also means to enable maintaining a safe distance from buildings to be compliant with European Guidelines	
Is there an Asbestos register for Studios (areas built prior to 2000)	
Inceptors to stop waste entering the drainage system	
Air quality monitoring arrangements for studios	
Will other productions be located at the studio for each phase - prep phase, principle photography and or strike. If yes, approx. size / requirements of these other productions	

2 – Fire **(Irish Standards below as of Sept 2019)**	**Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:**
Fire Alarm detection system: Areas (example: production offices, workshops, stages (smoke & or heat detection?), dressing rooms, green rooms and other) that have / do not have integrated fire alarm detection system as per current standards (at time of generating this guide - Irish Standards I.S.3218:2013)	
Fire Alarm detection system - If required - Service records available for fire alarm detection system	
Fire Alarm monitoring – is the fire alarm system monitored, if yes by whom & what is protocol	
Protocol required if production require any fire detection system and or emergency lights to be disarmed, is there a fire deactivation policy	
Emergency lighting: Areas (example: production offices, workshops, stages, dressing rooms, green rooms and other) that have / do not have integrated emergency lighting as per current standards (at time of generating this guide - Irish Standards I.S 3217:2013	
Emergency lighting: If required - Service records available for Emergency lighting	
If required - Records for inspection / testing of Break Glass Units for all areas that the production shall be using	
Fire Extinguishers in situ: Confirm location, types and servicing / maintenance of extinguishers. Is there a map outlining same available?	
Will production company be required to provide their own extinguishers (suitable in type, sufficient in numbers and serviced) for any areas within the studios	
Shall studios carry out Fire Drills or are the production companies responsible for carrying out their own Drills	
What is protocol for Fire Drills within the Studios	
Are there emergency evacuation plans for each area of the studios	
Confirm location of Assembly Points for each area (example: production offices, workshops, each stage, dressing rooms and other); Sign in, sign out system and availability of an evacuation	
Fire Wardens – will studios be providing personnel who have been formally trained as fire wardens and trained in safe use of extinguishers, for each area, or are production responsible for training sufficient number of persons	
Will production be carrying out any hot works? Do studio oversee a permit system, or are production responsible for having their own permit system & Safe System of Work in place	
Clear identification of fire lanes with the stages	
Adequate means of escape from the Gantry's in an emergency	

3 – Security	Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:
Is there a security alarm system for each area (example: production offices; workshops, stages, dressing rooms, green rooms and other)	
Is the security alarm monitored, if yes, by whom & what is protocol in event of activation	
Is there CCTV at office and around studios, if yes, who is this monitored by	
Visitors to the studios, what is the protocol	

5 – Heating Systems	Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:
Where boilers are used, if required confirm and provide report for last date of service	
Where mains gas is used – confirm location of shut off valve(s) for each area	
Where gas is used confirm if Carbon Monoxide detection measures are in place	

6 – Adverse Weather	Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:
In event of ice – who shall be responsible for spreading / using of grit / salt or other to prevent slip and falls on walkways	
In event of snow - who shall be responsible for clearing of snow from walkways	
In event of snow – will loading on structures including studio / workshop roof, and or external sets be of concern, if yes, what will the protocol be to assess the structural integrity of any building / roof, taking account any other factors of the building internally and or externally	
In event of high winds – are there any area within the studios, or external sets that would pose increased significant hazard in high winds / wind gusts	

7 – Electrical Installations	Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:
If required - Provide records of Inspection and Testing on electrical installations for each area being used by production company	
Studios provide details of PAT testing that has been carried out for any portable appliances being used by production within the studios (ex: kettles, toaster etc)	
Production provides details of how PAT testing records will be maintained for any portable appliances (owned or rented) being used by production's crew	
Protocol in event of power failure in studios	

8 – Working at Height and Lifting Equipment	Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:
Provide documentation which gives clear and accurate information on the safe working loads of the runways	
Studio to provide sing off from a qualified engineer on the proposed loading for runways prior to handover, production provide engineer report as required	
Provide details of inspections of stairs, cat ladders, handrails and kicker boards as applicable, and who is responsible for same	
Confirm details of Fire Points at Gantry level	
If required provide details of thorough and other inspections for chains in Stages that shall be used by production;	
If required provide details of inspections for overhead structures (example RSJ's/runways) that may be used for rigging	
Moving of any chain block must be approved in advance with the studios and carried out by a rigger holding a current advanced scaffolding certificate	
Provide details of inspections for any plant and equipment provided by studios that shall be used by production crew, once production provide proof of certification for operators;	
Ensure crew are aware of snow and wind loadings and the risk poised to the structure	

9 – Storage and proposed use of Pyrotechnics	Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:
Guideline from the Department of justice	
Secure windowless room	
No naked flames	
Proposed use of pyrotechnics	

10 – Safe use, Storage and disposal of Chemicals	Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:
What departments will be using hazardous substances / chemicals	
What arrangements are/will be in place for safe storage of chemicals	
Is Local Exhaust Ventilation required	
Is LEV provided by studio in workshops	
How is hazardous waste being disposed of	

11 – Other:	Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:

12 – Other:	Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:

13 – Other:	Confirm information has been shared between both parties. Yes / No or Details / Reference Documentation:

Additional Notes:

_____

_____

_____

_____

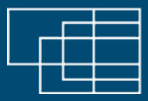
_____

Completed By:

On behalf of Studio: _____ Position: _____

On behalf of Production: _____ Position: _____

Date: ____/____/_____



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