# 8 Safety risk assessment and safe systems of work

This chapter is split into two parts:

**Part 1: Directive**. This part provides direction that you **must** follow to help you comply with (keep to) health and safety law, Defence policy or Government policy.

**Part 2: Guidance.** This part provides the guidance and best practice that should be followed and will help you to keep to this policy.

#### **Contents**

Title	Page
Amendment record Terms and definitions Scope	2 2 4
Part 1: Directive Introduction Safety risk assessment process Safety risk assessment policy statements	5 6 6
Part 2: Guidance Plan activities and identify hazards Evaluate the risk Review the risk assessment Learn from experience Retention of records Related documents	18 19 21 23 24 24
Annex A – Risk assessment flow chart Annex B – Site risk assessment checklist	A1 B1

#### **Amendment record**

This chapter has been reviewed by the Health, Safety and Environmental Protection (HS&EP) Directorate together with relevant subject matter experts and key HS&EP stakeholders. Any suggestions for amendments should be sent to <a href="https://example.com/hsep-2">HSEP-GroupMailbox@mod.gov.uk.</a>

Version No	Date	Text affected	Authority
1.2	Oct 20	Interim update post-handover of policy from DSA to D HS&EP	Dir HS&EP
1.3	Jan 22	Updated to remove reference to maturity and bring the definition of a competent person in line with the HSE definition of competence.	Dir HS&EP
1.4	Dec 22	Release of two-part chapter structure.	Dir HS&EP

#### **Terms and definitions**

The following table sets out definitions of some of the key terms used in this chapter. Definitions for other JSP 375 health and safety terms are given in the master glossary on the <u>JSP 375 Defnet</u> or <u>GOV.UK</u> page.

Accountable person	The person whose terms of reference state that they are responsible for making sure there are suitable and sufficient systems in place to control health, safety and environmental protection risks in their establishment, unit, or platform. The term 'accountable person' is used in place of CO, HoE, OC, Station Commander and so on, which are sometimes used by Defence organisations.
As low as reasonably practicable (ALARP)	When risk has been reduced to a level where applying further control measures would be grossly disproportionate to the benefit that would be gained.
Commander	A military person responsible for planning activities, supervising activities, and making sure that personnel under their area of responsibility are safe. This term refers to a role rather than the rank of Commander, and it can be a permanent or temporary role (for example, lasting for the duration of a training exercise). In parts of Defence this person could be referred to as a 'responsible person'.
Competent person	A person who has the training, skills, experience, and knowledge necessary to perform a task safely, and is able to apply them. Other factors, such as attitude and physical ability, can also affect someone's competence. (See <a href="https://www.hse.gov.uk/competence/what-is-competence.htm">www.hse.gov.uk/competence/what-is-competence.htm</a> for information on competence.)
Control measures	Measures that can be taken to reduce the possibility of a risk arising or to reduce the effect of any risk that arises. These measures form the hierarchy of controls; elimination, substitution, engineering controls, administrative controls or personal protective equipment (PPE).

Defence organisation	This refers to Military Commands, Top Level Budgets (TLBs), the Defence Nuclear Organisation (DNO) and Enabling Organisations (EOs) collectively.
Dynamic risk assessment	A risk assessment that is carried out before / or while an activity is underway and builds on existing risk assessments.
Harm	An adverse effect on a person, including fatality, physical or psychological injury, or short or long term damage to health, the environment, equipment, or material damage.
Hazard	An item, event, activity, or situation with the potential to cause: <ul> <li>injury, ill-health, or death;</li> <li>damage to or loss of equipment or property; or</li> <li>damage to the environment.</li> </ul>
Likelihood	Estimate of the probability or frequency of a risk occurring in a specified time period, based on the description of its cause, event and consequences.
Manager	A person responsible for managing or supervising staff, planning activities, and making sure that personnel under their area of responsibility are safe. This could be a permanent or temporary role, and in parts of Defence this person could be referred to as a 'line manager', a 'responsible person' or a 'delivery manager'.
Military Command	This refers to the Front Line Commands or single Services.
Operational requirement	The standards to be demonstrated during operations.
Operational safe system of work (OSSW)	A method of work which puts in place control measures arising from a risk assessment, in order to eliminate identified hazards (where possible) and complete the work with minimum risk taking into consideration the realities of operations.
Risk (safety risk)	Combination of the likelihood of harm and the severity of that harm.
Residual risk	The level of risk remaining after control measures have been applied.
Risk assessment	A systematic process of identifying hazards and evaluating any risks associated with those hazards.
Safety case	A structured argument, supported by a body of evidence that provides a compelling, comprehensible, and valid case that a system is safe for a given application in a given operating environment.
Safe equipment	This is equipment that has the necessary safety documents and, for more complex equipment, a safety case. If the equipment does not have a safety case, any hazards associated with the equipment should be included in the activity-specific risk assessment.

Safe person	This is a person who has been given the appropriate information, training, instructions, and supervision to enable them to carry out a specific activity.
Safe place	This relates to the space personnel will be in when performing an activity, including any surrounding areas and areas where other people might be affected by the activity. The activity-specific risk assessment should consider the proposed use of the space and any control measures put in place.
Safe practices	This covers the safe conduct of any activity. Safe practices are usually written procedures detailing how to perform an activity with minimum risk to personnel, equipment, materials, and the environment. These written methods should be risk assessed to make sure the risk of harm or damage remains ALARP and tolerable.
Safe system of training (SST)	Part of a safe system of work, which sets the conditions under which training <b>must</b> be carried out, making sure that personnel who are not yet competent receive appropriate information, instruction, and supervision.
Safe system of work (SSW)	A method of work which puts in place control measures arising from a risk assessment, in order to eliminate identified hazards (where possible) and complete the work with minimum risk.
So Far As Is Reasonably Practicable (SFAIRP)	Legal phrase used in Health and Safety at Work etc Act 1974, which is alternatively referred to as ALARP, the degree of risk where the trouble, time and money needed to reduce that risk starts to become disproportional to the derived benefit.
Severity	A measure of the degree of harm.
Tolerable	A level of risk that we are willing to accept in order to perform an activity or achieve an outcome. A tolerable risk is one that is considered to be worth taking, if it has been evaluated and is being managed.
Training imperative	The standards to be demonstrated during training, and when preparing personnel and equipment for deployment, to enable personnel to meet the operational requirements.

#### Must and should

Where this chapter says 'must', this means that the action is a compulsory requirement.

Where this chapter says '**should**', this means that the action is not a compulsory requirement but is considered best practice to comply with the policy.

#### Scope

This policy applies to all those employed by Defence (military or civilian) as well as those working on behalf of Defence (for example, contractors). It applies to all Defence activities carried out in any location (UK or overseas).

### Part 1: Directive

#### Introduction

- 1. UK health and safety (H&S) legislation requires employers to make sure, so far as is reasonably practicable (SFAIRP), the H&S of employees and anyone else who may be affected by a work activity is not compromised. This is commonly referred to as the "duty of care" The legislation requires employers to fulfil their 'duty of care' responsibilities by reducing risks as low as is reasonably practicable (ALARP). In accordance with the Secretary of State's (SofS) Policy these requirements apply to all Defence activities.
- 2. Defence more commonly uses the term as low as reasonably practicable (ALARP). The Health and Safety Executive (HSE) consider that the two phrases (SFAIRP and ALARP) essentially mean the same thing. This Defence policy **must** be followed to manage:
  - a. the H&S risks to Defence personnel and those affected by Defence activities; and
  - b. the measures to be taken to eliminate those risks or reduce them to as low as reasonably practicable (ALARP), in order to minimise harm and comply with current UK H&S legislation.
- 3. All activities across Defence **must** be conducted within the elements of a Safe System of Work (SSW). An SSW is a method of work which puts in place control measures arising from a risk assessment, in order to manage identified hazards, which are broken down into four elements; safe person, safe equipment, safe place and safe practice.
- 4. Reducing a risk to ALARP does not always require activities to stop it means balancing the level of risk against the measures needed to control the risk (in terms of money, time, or trouble).
- 5. In addition to a risk being reduced to a level where it is considered to be ALARP, the principle of tolerability also needs to be considered and an evaluation made as to whether the risk can be tolerated (accepted) in order to perform an activity or achieve an outcome. The tolerability decision is made after the risk has been reduced to ALARP, and therefore, the risk can then be considered as being ALARP and tolerable.
- 6. A risk assessment considers the likelihood of an event happening, and the severity of any potential harm. It is about identifying potential risks in the workplace and taking suitable and sufficient measures to control them.
- 7. This part of chapter 8 sets out:
  - a. the **safety risk assessment** process, which explains how the commander, manager or accountable person **must** assess risk and incorporate risk management in their planning;
  - b. a list of risk assessment **policy statements**, that the commander, manager, or accountable person **must** follow to protect people and make sure the risks are identified and controlled.

#### Safety risk assessment process

- 8. As part of managing H&S within Defence, the appropriate commander, manager, or accountable person **must** identify hazards and the risks that may arise from them and decide whether reasonable steps are being taken to prevent harm. The limits to the levels of risk that a commander, manager or accountable person may be authorised to hold, will vary depending upon the type and scale of the Defence activity for example, the exercise or operation.
- 9. Any identified risks **must** be assessed using the methodology set out in this chapter unless a chapter of JSP 375 that is specific to a particular hazard states otherwise. However, the principles of risk assessment remain the same.
- 10. Safety risk assessment (in this policy referred to as 'risk assessment') is a logical process which can be broken down into the following five steps (the five-step risk assessment process):
  - Step 1 Identify the hazards.
  - Step 2 Decide who might be harmed and how.
  - Step 3 Evaluate the risks and identify suitable and sufficient control measures.
  - Step 4 Record and implement findings.
  - Step 5 Review the risk assessment and update as necessary.
- 11. The appropriate commander, manager or accountable person is responsible for controlling risk in the workplace, so they **must** make sure that suitable and sufficient risk assessments are carried out and recorded. All risk assessments **must** be carried out in line with the five-step risk assessment process set out in policy statements 1 to 5 below, the supporting guidance in Part 2 of this chapter, and the risk assessment flow chart in Annex A.

#### Safety risk assessment policy statements

- 12. The MOD has established the following policy statements, which **must** be followed.
  - a. Policy Statement 1 (step 1 Identify the hazards)

The commander, manager or accountable person **must** make sure that all hazards that are reasonably foreseeable (could reasonably be expected) associated with the activities under their command or supervision, are identified.

- b. Policy Statement 2 (step 2 Decide who might be harmed and how)
  The commander, manager or accountable person must make sure that they have arrangements in place to identify the people or groups of people who may be exposed to harm and how they might be harmed, by the activity being undertaken.
- c. Policy Statement 3 (step 3 Evaluate the risks and identify suitable and sufficient control measures)

The commander, manager or accountable person **must** make sure that the risks associated with the activity are evaluated and identify suitable and sufficient control measures, which **must** be put in place and maintained.

#### d. Policy Statement 4 (step 4 – Record and implement findings)

The commander, manager or accountable person **must** record the findings of the risk assessment along with the associated control measures and **must** communicate the risk assessment findings and details of the associated control measures to those people who may be harmed by the activity.

# e. Policy Statement 5 (step 5 – Review the risk assessment and update as necessary)

The commander, manager or accountable person **must** continuously assess the activity and where unexpected hazards arise or the activity changes, the risk assessment **must** be reviewed (this is referred to as a dynamic risk assessment) and additional control measures added if necessary. The formal risk assessment record **must** be reviewed at a frequency proportional to the risk or where the activity or other conditions have changed.

#### f. Policy Statement 6 (for training and operational activities)

A suitable system **must** be put in place to make sure military training and military operational activities are risk assessed and conducted safely.

#### Policy Statement 1 (step 1 – Identify the hazards)

The commander, manager or accountable person **must** make sure that all hazards that are reasonably foreseeable (could reasonably be expected) associated with the activities under their command or supervision, are identified.

- 13. A commander, manager or accountable person **must** be appointed to control the workplace. Where they are responsible for planning an activity or those taking part in an activity, they **must** make sure that all reasonably foreseeable hazards associated with those activities are identified. They may delegate the responsibility (but not the accountability) for identifying reasonably foreseeable hazards to a competent person but **must** make sure that the competent person has met that responsibility.
- 14. The person carrying out the hazard identification **should** have a good understanding of the activity, process or substance that is being assessed and **should** carry out this hazard identification in consultation with the personnel taking part in the activity.

#### Policy Statement 2 (step 2 – Decide who might be harmed and how)

The commander, manager or accountable person **must** make sure that they have arrangements in place to identify the people or groups of people who may be exposed to harm and how they might be harmed, by the activity being undertaken.

15. The commander, manager or accountable person **must** identify who might be at risk from the hazards associated with the activity and decide whether it is just those taking part in the activity at risk or could it be other workers, visitors, or members of the public.

- 16. Personnel **must** tell the commander, manager, or accountable person about the existence of any medical condition they know they have or that they are currently under investigation for (that may impact on their personal safety and / or affect their ability to take part in the activity safely) with sufficient detail to allow if necessary another risk assessment to be carried out so that appropriate corrective action can be taken. In such circumstances the commander, manager, or accountable person **should** seek the advice of a medical practitioner or guide the individual to a medical practitioner for the individual (in confidence) to seek their professional opinion. This is in line with the HSAWA 74, Section 7: 'employees have a duty to take reasonable care for the H&S of themselves and others who may be affected by their acts or omissions whilst at work'.
- 17. Special consideration **must** be given to vulnerable groups (for example, young workers and those with a disability) and to anyone who is not familiar with the activity or the location and so may be at an increased risk.
- 18. For some activities the risk assessment may require a medical plan to be developed. If a medical plan is required, the commander, manager or accountable person **must** make sure that it is developed in conjunction with advice from medical personnel. Further information on medical plans is covered under Policy Statement 6 (medical plans paragraph's) of this Part 1.

## Policy Statement 3 (step 3 – Evaluate the risks and identify suitable and sufficient control measures)

The commander, manager or accountable person **must** make sure that the risks associated with the activity are evaluated and identify suitable and sufficient control measures, which **must** be put in place and maintained.

- 19. A proportionate risk assessment **must** be carried out for all Defence related activity. This includes, but is not limited to, hazards arising from:
  - a. Training, exercise, operational, non-operational activities and administrative activities:
  - b. Constructing, operating, or maintaining, modifying, and repairing buildings or other infrastructure on the Defence estate; and
  - c. Constructing, operating, maintaining, modifying, and repairing equipment.
- 20. The risk assessment process **must** identify what could cause harm in the workplace, who and how it could harm, and consider what control measures are required to reduce the risk to ALARP and tolerable.
- 21. Control measures that have been identified **must** be put in place, clearly communicated to personnel, maintained, and used properly.
- 22. All risk assessments **must** be carried out with consideration to the 'hierarchy of controls' (the measures to control risk), the order **must** be followed; for example, always try to eliminate the hazard first and do not simply jump to the easiest control. It may require a combination of measures to control a risk. The order of the hierarchy of control is as follows:

#### 1. Elimination

Redesign the job or use a different process, substance, or piece of equipment and so on so that the hazard is removed or eliminated (for example, avoid working at height if possible).

#### 2. Substitution

Replace the process, substance, or equipment with a less hazardous one (for example, use a mobile elevating work platform instead of step ladders). Care **should** be taken to make sure the alternative is safer than the original.

#### 3. Engineering controls

Engineer the equipment to protect the operator (for example, make the equipment less noisy) or separate the hazard from the operator (for example, by having screens or guards on dangerous items of machinery or equipment).

#### 4. Administrative controls

These are all about identifying and implementing the procedures that need to be followed to work safely (for example, rotating tasks to reduce the time workers are exposed to hazards, banning the use of mobile phones in hazardous areas, putting up safety signs, and carrying out risk assessments and so on).

#### 5. Personal protective equipment

If all the previous hierarchy of control measures have been evaluated and found to be ineffective or not able to reduce risks to ALARP, personal protective equipment (PPE) **must** be used. For example, when you cannot eliminate the risk of a fall, use work equipment or other measures (such as harnesses) to minimise the consequences of a possible fall. PPE is the final control measure to be considered as this relies on the wearing of and reliance on human behaviour. This control measure requires proactive supervision to make sure this is sufficiently applied / followed.

- 23. Consideration **must** be given to the effects or new hazards that may be introduced as a result of implementing any of the controls.
- 24. The commander, manager or accountable person is responsible for controlling risk in the workplace, so they **must** make sure risk assessments are carried out and dynamically assessed throughout the duration of the task / activity. They may delegate the responsibility for carrying out a risk assessment to a competent person, but they:
  - a. must make sure that the risk assessment is suitable and sufficient; and
  - b. are responsible for approving it and remain accountable for it.
- 25. Once the risk assessment has been approved, it **must** be followed by all personnel involved with or affected by the activity.
- 26. A commander, manager or accountable person or any person who has been delegated the responsibility to carry out a risk assessment **must** be competent in risk assessment having successfully completed recognised risk assessment training.
- 27. The person carrying out the risk assessment **should** have a good understanding of the activity, process or substance that is being assessed and **must** carry out the assessment in consultation with the personnel taking part in / or affected by the activity and use local HS&EP support and SME's where appropriate.

- 28. If responsibility for carrying out the risk assessment has been delegated to a competent person, the significant findings **must** be explained to the commander, manager, or accountable person responsible for the risk, along with details of any control measures that need to be put in place to reduce those risks.
- 29. For some activities that share the same hazards and controls (for example, routine maintenance or cleaning), generic risk assessments can be produced. However, the assessment **must** take into consideration the environment and the situation where the activity is being carried out.
- 30. Where control measures have been put in place, yet there remains significant residual risk resulting from activities, this information **must** be evaluated to assess the requirement of additional control measures to bring the residual risk to ALARP and tolerable.
- 31. Where the residual risk identified is significant, this **must** be recorded in the risk assessment and communicated to those undertaking the activity. Where circumstances change, the risk assessment and control measures **must** be reviewed and modified as necessary.

#### Policy Statement 4 (step 4 – Record and implement findings)

The commander, manager or accountable person **must** record the findings of risk assessment along with the associated control measures and **must** communicate the risk assessment findings and associated control measures to those people who may be harmed by the activity.

- 32. The commander, manager or accountable person **must** make sure the control measures and the findings from the risk assessment are recorded. Based upon this, informed decisions can be made about incorporating further control measures if necessary.
- 33. The findings and associated control measures from the risk assessment **must** be implemented and effectively communicated to those undertaking or affected by the activity. The control measures in the risk assessment **must** be complied with (kept to). There are several methods of effective communication, examples of which are:
  - a. Allow all activity participants to read the risk assessment then get them to sign.
  - b. A written (or verbal) brief to all activity participants to be given by activity lead / deliverer. The written brief is an annex of the activity instruction.
  - c. The activity lead / deliverer confirms with the activity participants that control measures are in place prior to the activity.
- 34. Personnel **must** tell the commander, manager or accountable person about any ineffective control measures and **must** report any new hazards not previously identified in the original risk assessment. Personnel **must** co-operate with those carrying out risk assessments and comply with any necessary control measures.

- 35. The risk assessment **must** include details of the preventive and protective control measures in place to control the risks, and what further action (if any) needs to be taken to reduce any risk to ALARP and tolerable. MOD Form 5010 is the recommended template for recording risk assessments. Other risk-assessment forms for specific chapters of JSP 375 (for example, DSE or COSHH) **should** be used where appropriate.
- 36. Risk assessments and associated documents **should** be kept for audit and investigation purposes and **should** be held locally within the specific unit or establishment. When a risk assessment or document has been replaced or is no longer valid, it can either continue to be held locally or sent to archive (see JSP 441) and **should** be stored for at least three years. There are some exceptions (for example, health surveillance and health records) which have to be stored for longer. Timescales are set out in Chapter 39 of JSP 375 Volume 1.

## Policy Statement 5 (step 5 – Review the risk assessment and update as necessary)

The commander, manager or accountable person **must** continuously assess the activity and where unexpected hazards arise or the activity changes the risk assessment **must** be reviewed (this is referred to as a dynamic risk assessment) and additional control measures added if necessary. The formal risk assessment record **must** be reviewed at a frequency proportional to the risk or where the activity or other conditions have changed.

- 37. The commander, manager or accountable person **must** review and approve the risk assessment for an activity.
- 38. Risk assessments are live documents and **must** be reviewed at a frequency that is appropriate to the level of risk of the particular activity. When an unexpected hazard arises, or an activity changes (for example during the planning stage or whilst the activity is underway), the risk assessment in place must be reviewed (a dynamic risk assessment) and additional control measures added if necessary. This change could be as a result of an emergency or the activity or surrounding circumstances (for example, a sudden change to weather conditions).
- 39. As well as scheduled reviews, a risk assessment **must** be reviewed when any of the following apply.
  - a. There is reason to doubt the effectiveness of the assessment.
  - b. There has been an accident or a near miss.
  - c. The activity or procedure, or the commander or manager, has changed.
  - d. Vulnerable personnel (for example, people who are not familiar with the process, task or environment, or people who may have special needs) have become involved in the relevant activity.
  - e. The assumptions or information the risk assessment or a control measure is based on have changed in a way that could affect the risk assessment.
  - f. Recommendations have been made by trade unions, staff associations, safety leads, regulators, or functional specialists.

- g. There has been a change to the activity and as a result this now invalidates a risk assessment that was being used before the change was made.
- h. There has been a change to a substance or equipment.
- 40. The findings from a dynamic risk assessment, and any control measures put in place, **must** be recorded when reasonably practicable (even if this is retrospectively) in line with step 4 of the five-step risk assessment process. That record **should** specify the information available at the time the risk assessment was carried out, and be held by the commander, manager, or accountable person as evidence of the dynamic risk assessment being carried out. The record can be, for example, a note in a notebook, a logged message over the radio network or an entry in the relevant section of MOD Form 5010.
- 41. If at any stage of the activity, including before it starts, the direction in this policy cannot be followed or the control measures in the risk assessment cannot be met, or if an accident, injury or near miss occurs the commander, manager or accountable person **must** re-assess the risk. They **must** then consider the following actions.

#### a. Pausing or stopping the activity

If an activity has been paused or stopped, the commander, manager or accountable person **must** not re-start the activity until further control measures have been identified and put in place, and / or the risk has been elevated and the decision has been made at the appropriate level within the chain of command that the activity can continue.

#### b. Adding further control measures

If further control measures are needed they **must** be put in place. Further control measures may include, for example, alternative ways of working or as a last measure of introducing personal protective equipment (PPE).

#### c. Elevating the risk

If the risk that remains after applying further control measures is higher than the level of risk the commander, manager or accountable person is authorised to accept, the risk **must** be elevated through their Military Command's or Defence organisation's elevation process as appropriate.

**Note:** all decisions made in connection with the actions above **must** be recorded in line with step 4 of the five-step risk assessment process during the planning stage, and in line with step 5 once the activity has started.

- 42. Activities that **must** continue despite a high level of risk are rare, but a risk assessment **must** still be carried out to reduce the risk to ALARP and tolerable. When this is the case:
  - a. the level of risk **must** be approved through the chain of command; and
  - b. any direction on the appropriate action to take **must** be followed.

#### Policy Statement 6 (Training and operational activities)

A suitable system **must** be put in place to make sure military training and military operational activities are risk assessed and conducted safely.

- 43. Within the Military Commands there are two derivatives of an SSW that may be applied. These are:
  - a. an operational safe system of work (OSSW); and
  - b. a safe system of training (SST).
- 44. An OSSW and an SST comprise of the same four elements as the SSW (safe person, safe equipment, safe place, and safe practices). The OSSW takes into consideration the realities of operations and the SST takes into consideration the extra training elements.
- 45. Those taking part in a training or operational activity **must** know who the commander manager or accountable person is. Before the activity begins, the commander, manager or accountable person **must** make sure that all those taking part in that activity receive a brief that clearly identifies them. This may be formalised by a written instruction or detailed orders.

#### **Exercise or activity instructions**

- 46. The exercise or activity instructions **must** contain a safety plan, either as part of the instructions or as a separate annex, that gives details of the control measures to be put in place and their use. The safety plans required are as follows:
  - 1. For activity involving blank ammunition and pyrotechnics, an exercise action safety plan (EASP).
  - 2. Where live firing is being undertaken, a range action safety plan (RASP) or range safety document (RSD).
  - 3. For all other activities, an activity safety plan.
  - 4. There also **must** be an approved medical plan.
- 47. **Medical Plan** As part of the overall risk assessment for a training or operational activity, commanders, managers or accountable person **must** make sure that a medical plan has been developed appropriate to the level of risk. The medical plan **must** identify the appropriate response to any casualties or medical incidents. When developing the medical plan, the commander, manager or accountable person **should**:
  - a. involve medical personnel;
  - b. consider the level of medical cover (staffing) needed for the activity;
  - c. consider the type and amounts of medical equipment needed for the activity; and
  - d. consider how and where any casualties will be evacuated to.
- 48. See Chapter 5 of JSP 375 Volume 1 (First aid at work), as well as Military Command policy for medical guidance and <u>JSP 950 Lft 5-2-8 Competent Medical Authority.</u>

- 49. The commander, manager or accountable person **must** make sure all risk assessments for a training or operational activity are continuously reviewed during the activity (including the requirement to conduct a dynamic risk assessment when appropriate).
- 50. There may be exceptional circumstances where requirements of this policy or control measures in the risk assessment cannot be met, but the activity has to go ahead (for example within the OSSW where risks from certain hazards arise from the operational environment). The risk assessment for these activities **must** explain why that activity needs to continue and that the greater level of risk is tolerable and to be accepted.
- 51. Activities that need to proceed despite a high level of risk are rare but, they **must** still be assessed to reduce any residual risk to ALARP and tolerable. In these situations, the commander, manager, or accountable person **must** re-assess the risk. They **must** then consider the following actions:
  - a. **Pausing or stopping the activity –** If the activity needs to be paused or stopped, a dynamic risk assessment **mus**t be carried out in line with Policy Statement 5. However, there are a very limited number of activities that may need to continue without pausing or stopping. Examples include combat operations and other instances where pausing or stopping the activity, could cause a greater risk to life than continuing. The original risk assessments for these activities **must** indicate that a greater level of risk is tolerable for the task to be achieved. When this is the case, the level of risk **must** be elevated and approved at the appropriate level in the chain of command before the activity can start.
  - b. **Applying further control measures –** If during training or operational activity the risk that remains after applying further control measures is higher than the level of risk the commander, manager or accountable person is authorised to accept, the risk **must** be elevated through their Military Command's elevation process.
  - c. **Elevating the risk –** If the risk of an activity is higher than the level of risk the commander, manager or accountable person is authorised to accept, the risk **must** be elevated in line with their Military Command's elevation process. In exceptional and unforeseeable circumstances where it is not possible or proportionate to refer the matter to a superior officer, the commander, manager, or accountable person may accept the risk and take personal responsibility for the consequences. However, in these circumstances the commander, manager or accountable person **must** report their decisions up through their chain of command at the earliest opportunity.

**Note:** all decisions made in connection with the actions above **must** be recorded in line with step 4 of the five-step risk assessment process during the planning stage, and in line with step 5 once the activity has started.

#### Operational safe system of work (OSSW)

52. Using the SSW methodology, the OSSW **must** make sure that activities are conducted on operations by trained personnel with risks reduced to ALARP whilst considering and balancing the tolerability of risk against the realities of operations. Operational risks may include those that arise from combat operations or other circumstances where personnel are required to operate outside of their normal working practices.

53. While UK Forces are deployed on operations outside of the UK the Secretary of State's HS&EP policy statement requires that "Overseas, we will comply with the laws of Host States, where they apply to us, and in circumstances where such requirements fall short of UK requirements, we will apply UK standards so far as it is reasonably practicable to do so".

#### Operational and training activities

- 54. Those directing operational and training activities **must** make sure that activities are performed in line with legislation, regulation, approved codes of practice (ACOPs), Service instructions, Defence codes of practice (DCOPs), directives and policies, while taking account of any risks to personnel. To do this they **must** make sure that:
  - a. operational and training activities take place in a way that is as safe as is reasonably practicable;
  - b. any Service instructions, DCOPs, policies and so on that apply to the operational and training activities are complied with and are communicated to those providing and supervising the activity, as well as those taking part in the activity: and
  - c. those taking part in the operational and training activities are told about the hazards they will face during those activities.

#### Safe system of training (SST)

- 55. The SST forms part of the SSW but takes into account that those undergoing training cannot be assumed to be competent until they have successfully completed their training, met any required standards, and gained the necessary experience. All those undergoing training **must** follow all instructions given before and during the training. Further detailed information regarding the SST is set out in Part 2 of this Chapter 8.
- 56. The SST sets the conditions under which training **must** be delivered, so making sure that trainees are given the appropriate information, instruction, and supervision to provide them with the best possible preparation for the roles they may undertake in times of conflict, while keeping risks ALARP. This enables the military to meet the training imperative required to achieve the operational requirement.

#### Risk assessing training activity

- 57. The aim of the risk assessment for a training activity is to do the following.
  - a. Establish if all elements of the SST are in place, identify any hazards that are not covered by the SST and consider what additional controls are needed to reduce the risk to ALARP.
  - b. Analyse any residual risk to decide if it is:
    - (1) adequately controlled (in which case the training activity can be carried out); or
    - (2) not adequately controlled (in which case, further measures will need to be put in place to reduce the risk to ALARP and tolerable).

- 58. The first step when carrying out a risk assessment of a training activity is to establish whether all elements of the SST are in place. If all elements are in place, the relevant control measures **must** be recorded in the risk assessment.
- 59. If activities carry significant risk and are considered not to be adequately controlled, the training imperative **must** be modified to reduce the risk.

#### Managing the safe system of training

- 60. For military training activities, the hazards **must** have already been assessed. The resulting control measures **must** have been approved by the appropriate authority and built into formal procedures to reduce the risks to ALARP, within the constraints of the training imperative.
- 61. If there are proposed changes to training exercises, the SST **should** be checked to make sure it will still apply and there will be no new hazards. If there is any doubt, a full risk assessment of the changed activity **must** be carried out.
- 62. The commander, manager or accountable person **must** consider the effects of any changes to training activities, before and particularly during the activities, before those changes are made.
- 63. The commander, manager or accountable person **should** monitor the training activity, liaising with junior commanders, safety staff and medical providers where appropriate.
- 64. If an accident, injury or near miss happens, the training activity **must** be paused. A dynamic risk assessment **must** be carried out to consider introducing further control measures to prevent further incidents.
- 65. The training activity **must** only start again once any further control measures identified by the dynamic risk assessment have been applied or the risk has been elevated through the chain of command and direction given.

#### Safe person (in a training environment)

66. The commander, manager or accountable person **must** make sure that instructors and those supervising training are competent to do so (a competent person) and have received an appropriate level of supervision to make sure that the training they provide matches the ability of those being trained and complies with all the elements of the SST. Trainees **must** be fully briefed on all hazards they will face during training.

#### Safe equipment (in a training environment)

- 67. For equipment (including explosives and ammunition) that has been brought into service, it **must** have appropriate documents that define their safe operation and maintenance, the commander, manager or accountable person **must** make sure that:
  - a. instructors and those supervising training have and make proper use of that equipment in order to provide training in line with the appropriate Service publications or a similar set of instructions;
  - b. only competent people, or those receiving training under the appropriate supervision, are allowed to operate and service the equipment; and

c. all training and maintenance records are stored in line with Chapter 39 of JSP 375 Volume 1.

#### Safe place (in a training environment)

- 68. The place training is provided in **must** have the control measures necessary to enable the training to be provided safely. Those control measures **must** have been identified by a site-specific risk assessment.
- 69. The commander, manager or accountable person **must** make sure instructors and the personnel receiving training are fully briefed on all necessary control measures.

#### Safe practices (in a training environment)

- 70. Safe practices are ones that are carried out in line with procedures and instructions laid down by the Military Command. These procedures and instructions are set out in the safety case and developed in line with the Defence Systems Approach to Training (DSAT).
- 71. Safe practice includes following correct procedures, providing effective supervision, delivering effective training, providing all warnings, cautions and controls, and using appropriate personal protective equipment (PPE), to make sure risks remain ALARP and tolerable.
- 72. Training **must** only be provided by a competent person in order to make sure that procedures are strictly followed and training is closely supervised.

### Part 2: Guidance

This part provides the guidance and best practice that **should** be followed and will help you to keep to this policy.

#### Plan activities and identify hazards

- 1. The commander, manager or accountable person is responsible for making sure that all reasonably foreseeable hazards associated with the activity are identified and a risk assessment is carried out as part of the planning process where they have:
  - a. control of the workplace;
  - b. responsibility for planning an activity; or
  - c. control of those taking part in an activity;
- 2. The commander, manager or accountable person is responsible for making sure that all those who might be exposed to a hazard are made aware of, and understand, the findings of the risk assessment and the results of the risk assessments are communicated.
- 3. The purpose of a risk assessment is to identify the reasonably foreseeable hazards arising from activities and processes, and to put in place suitable and sufficient control measures. The risk assessment **should** also identify the level of resources required to reduce the risk to ALARP, and tell the commander, manager, or accountable person the degree of risk they are responsible for and may be accountable for. The commander, manager or accountable person **should** make sure that risk assessments and associated control measures are kept in place and that they continue to be suitable and effective.
- 4. The five-step risk assessment process set out in policy statements 1 to 5 in Part 1 of this chapter are supplemented with guidance in this Part 2 and illustrated in the risk assessment flow chart in Annex A. Further information regarding risk management is available from the HSE links: <u>Steps needed to manage risk</u>, <u>The health and safety toolbox HSG 268 and How to control risks at work.</u>

#### Policy Statement 1 (step 1 – Identify the hazards)

The commander, manager or accountable person **must** make sure that all hazards that are reasonably foreseeable (could reasonably be expected) associated with the activities under their command or supervision, are identified.

- 5. The first step is to look for hazards. Consider the location of the activity or process and check for potential dangers. Concentrate on anything with the potential to cause serious harm to Defence personnel, contractors, and visitors. Also ask for input from Defence personnel involved in or affected by the activity or process.
- 6. When identifying hazards, consideration needs to be made as to the physical capabilities and mental limitations of the individual. If there is an imbalance between what the task / environment demands are, and the capability of the individual, it is more likely to result in individuals who are fatigued, injured or at higher risk of making an error (human factors).

7. Accident and ill-health records are a good way of revealing how occurrences have happened in the past. Manufacturer's instructions and datasheets contain information that **should** also be considered. Consider any hazards with the potential to cause long-term (chronic) ill health to personnel (for example, loud or persistent noise, vibration, or toxic substances).

#### Policy Statement 2 (step 2 – Decide who might be harmed and how)

The commander, manager or accountable person **must** make sure that they have arrangements in place to identify the people or groups of people who may be exposed to harm, and how they might be harmed, by the activity being undertaken.

- 8. The commander, manager or accountable person need to decide who might be at risk is it just those taking part in the activity or could it affect other workers, visitors, or members of the public? How many people would be harmed through, for example, contact with equipment, poor air quality or fumes, dust, environmental conditions, or extreme temperatures?
- 9. Some workers may have particular requirements, for example new and young workers new or expectant mothers, people with disabilities, temporary workers, contractors, homeworkers, and lone workers. For each hazard the commander, manager or accountable person need to clear about who might be harmed.
- 10. Involving safety representatives (from within Defence and from trade unions) will provide useful information and make the risk-assessment process more thorough and effective. Advice and guidance may also be available from the particular unit's or establishment's safety adviser.

#### Evaluate the risk

# Policy Statement 3 (step 3 – Evaluate the risks and identify suitable and sufficient control measures)

The commander, manager or accountable person **must** make sure that the risks associated with the activity are evaluated and identify suitable and sufficient control measures, which **must** be put in place and maintained.

- 11. If a hazard cannot be eliminated, the commander, manager or accountable person **should** assess the residual risk with the existing control measures in place (this can be done by using MOD Form 5010) and consider whether the existing control measures are adequate or if action is needed to reduce the risk further. However, the principles of ALARP **should** be considered where applying further control measures (in terms of money, time, and the operational consequences of the activity not going ahead) would be grossly disproportionate to the benefit that would be gained. Undertaking a cost / benefit analysis is one example of a method to check that all reasonably possible risk-reduction measures are in place.
- 12. HSE guidance makes clear that when there is a practical cost-effective solution to a risk, that solution **should** be adopted. If specific control measures have been identified but it is not reasonably practicable to implement them, the reason for rejecting the measures is to be recorded and included in formal documents relating to the activity, process, or project.

- 13. For some common activities that share the same hazards and controls (for example, routine maintenance or cleaning) generic risk assessments can be used, rather than individual risk assessments being put in place. A generic assessment should only be used if you consider that the control measures set out in it adequately reduce risks to ALARP and tolerable.
- 14. Using a generic risk assessment for an activity may appear the easiest option, but it does not take into account the specific location or environment the activity is taking place in or consider the consequences that may arise when more than one activity or process is taking place at the same time. Therefore, the assessment **should**:
  - a. be reviewed before commencement of the activity;
  - b. fully identify and describe the activities or processes;
  - c. identify all reasonably foreseeable hazards;
  - d. identify how people may be harmed;
  - e. consider who is likely to be exposed to the risk, how and for how long (including third parties who may be affected due to their proximity);
  - f. identify the potential severity of the harm that could be caused;
  - g. evaluate the residual risk after all required control measures are put in place;
  - h. identify and communicate the required control measures; and
  - i. consider the findings of other related risk assessments that may affect the activity (for example, a fire-safety risk assessment).
- 15. All risk assessments are to be carried out with consideration to the 'hierarchy' of measures to control risk as set out in more detail in Part 1 of this Chapter.

#### Policy Statement 4 (Step 4 – Record and implement findings)

The commander, manager or accountable person **must** record the findings of risk assessment along with the associated control measures and **must** communicate the risk assessment findings and details of the associated control measures to those people who may be harmed by the activity.

- 16. Everyone who might be exposed to a hazard, are to receive training on the risks from the process, equipment, or substances they work with, and the control measures developed to minimise the risks. It would not be practicable to train members of the public however, so it is necessary that they are informed and warned of any hazards that could affect them. You **should** make sure that:
  - a. information about H&S risks, and the control measures, are communicated to those carrying out the task;
  - b. any training needed to carry out the task has been completed and recorded;
  - c. work instructions specify the control measures to be used;
  - d. emergency procedures are in place and drills are carried out on a regular basis (for example fire drills);
  - e. control measures are assessed and adjusted to prevent new risks being introduced and are adequately controlled so that the overall risk is minimised;

- f. when appropriate for exposure to hazard that requires health surveillance, this is put in place for those personnel exposed; and
- g. notices and warning signs are clearly displayed where there is a potential hazard to members of the public.
- 17. Risk assessments **should** consider the foreseeable hazards arising from all activities and processes, as well as any hazards relating to the workplace (for example, poor lighting or restricted headroom).
- 18. For risks on the Defence estate these are to be recorded in the site risk assessments (see the checklist in Annex B).

#### Review the risk assessment

#### Policy Statement 5 (Step 5 – Review the risk assessment and update as necessary)

The commander, manager or accountable person **must** continuously assess the activity and where unexpected hazards arise or the activity changes the risk assessment **must** be reviewed (this is referred to as a dynamic risk assessment) and additional control measures added if necessary. The formal risk assessment record **must** be reviewed at a frequency proportional to the risk or where the activity or other conditions have changed.

- 19. When control measures have been put in place, an initial review **should** take place shortly afterwards to check their effectiveness and **should** be regularly reviewed at a frequency that is appropriate to the risk (for example, every six months for high-risk activities, once a year for medium-risk activities, and at least every three years for low-risk activities). When necessary, reviews **should** be carried out as soon as possible, rather than waiting for the scheduled review date.
- 20. Each review **should** include the commander's, manager's, or accountable person's assessment of the effectiveness of control measures, and any further controls that may be needed.
- 21. Rapid responses to changing conditions or signs of risk are vital for avoiding serious injuries or environmental damage. The 'RAPID' checklist below is intended as a guide to be used immediately before and during a planned activity to make sure the key elements of the safe system of work are in place. It does not replace the MOD five-step risk-assessment process used to carry out a formal risk assessment.

What to do		Comment
R	Assess, understand, and control the <b>R</b> isks.	<ul> <li>Make sure there is an up-to-date risk assessment.</li> <li>Make sure the risk assessment is checked and signed by the person responsible for the activity.</li> <li>Do you understand the controls set out in the risk assessment?</li> </ul>
A	What are the specific considerations relating to the <b>A</b> ctivity?	<ul> <li>Does the activity increase risk? Do you understand the intensity of the activity? What clothing and equipment is needed?</li> <li>Do you have the correct equipment?</li> <li>How would you manage an emergency?</li> </ul>
Р	Are the <b>P</b> ersonnel prepared and competent for the activity?	<ul> <li>Consider education and training, experience, knowledge of the activity.</li> <li>Do you have enough personnel with the necessary skills, knowledge, experience, and behaviours (SKEB) for the activity?</li> </ul>
I	Has the correct Information been supplied to the workforce?	<ul> <li>Does everybody understand the control measures?</li> <li>Do those taking part in the activity understand the processes they are following and what to do if things go wrong?</li> </ul>
D	<b>D</b> ynamically risk manage the activity?	<ul> <li>An activity must be 'dynamically' risk assessed when an unexpected hazard arises, in an emergency, or if there is a change to the activity or surrounding circumstances. A dynamic risk assessment can be carried out while the activity is underway or before it starts, as the control measures may now not be adequate.</li> <li>How will you manage a situation and prevent an emergency?</li> <li>What could trigger a dynamic risk assessment?</li> <li>Difficulty – is the activity more difficult than you thought?</li> <li>Duration – is the activity lasting longer than planned?</li> <li>A variation to usual operating procedures?</li> <li>A sudden change in the weather conditions?</li> <li>A casualty or a medical condition becomes apparent?</li> </ul>

#### Policy Statement 6 (for training and operational activities)

A suitable system **must** be put in place to make sure military training and military operational activities are risk assessed and conducted safely.

22. H&S legislation requires all activities to be performed within a safe system of work (SSW), as explained in part 1 of this Chapter. For the Military Commands this includes an operational safe system of work (OSSW) and safe systems of training (SST).

#### **Exercise or activity instructions**

- 23. Exercise or activity instructions **should** contain a copy of any exercise risk assessment, which **should** take account of the following;
  - a. The Defence personnel and the general public who may be involved with or affected by the activity;
  - b. Any equipment being used, including whether they have associated publications that contain hazard warnings and control measures;
  - c. Materials (including ammunition, food, water, and fuel) being used;
  - d. Any procedures and associated guidance relevant to the activity;
  - e. The environmental conditions (particularly climate, weather, and terrain); and
  - f. Any specific Military Command publications, drills, practices, and instructions that need to be followed in order to carry out the task safely.

#### Operational safe systems of work (OSSW)

- 24. Within an OSSW, risks resulting from certain hazards within the operational environment may have to be accepted due to limits on the controls which could be put in place to reduce the risk, for example this may be in a combat situation. Whether it is reasonably practicable to take alternative or additional measures to mitigate the risk will depend on the operational context.
- 25. If the activity is critical, the risk **must** be elevated through the Military Command's chain of command for a decision on whether or not to proceed with the activity. Where it is not possible or proportionate to refer the matter through the chain of command, the commander may accept the risk and take personal responsibility for the consequences, however, in these circumstances they **must** report their decisions up through their chain of command at the earliest opportunity.

#### Safe system of training (SST)

26. Within an SST the acceptable level of risk for training activities is set by the Military Command that owns the training activity, in line with the direction on the steps of training and education (analysis, design, delivery, assurance, management) set out in <u>JSP 822</u>. In exceptional circumstances, the acceptable level of risk may be set by the commander responsible for training within the operational environment.

#### People at risk during military training

- 27. There are three categories of people at risk during training:
  - a. those undergoing and providing training;
  - defence personnel and contractors carrying out activities that support training;
     and
  - c. the general public (including those unaware of the military training and, in the worst case, trespassers who deliberately ignore warnings or cannot interpret warning signs).
- 28. If further measures cannot adequately control residual risks, the training activity can only go ahead if the appropriate authority approves it.
- 29. If all the elements of the SSW and SST are in place, the risk assessment for an exercise or activity **should** list the control measures in place. If parts of the SSW or SST are missing or do not fully cover the exercise or activity, additional hazards **should** be added to the risk assessment.
- 30. Exercise or activity instructions **should** clearly state the written authority required to make changes to the exercise or activity.

#### Learn from experience

31. The Defence organisation **should** learn from occurrence reports and resultant investigations, to identify causal factors (root causes). This information, along with experience gained through risk assessments, including from audit and inspection **should** be used to revisit plans, policy documents and risk assessments and take appropriate corrective action where appropriate from any lessons learnt.

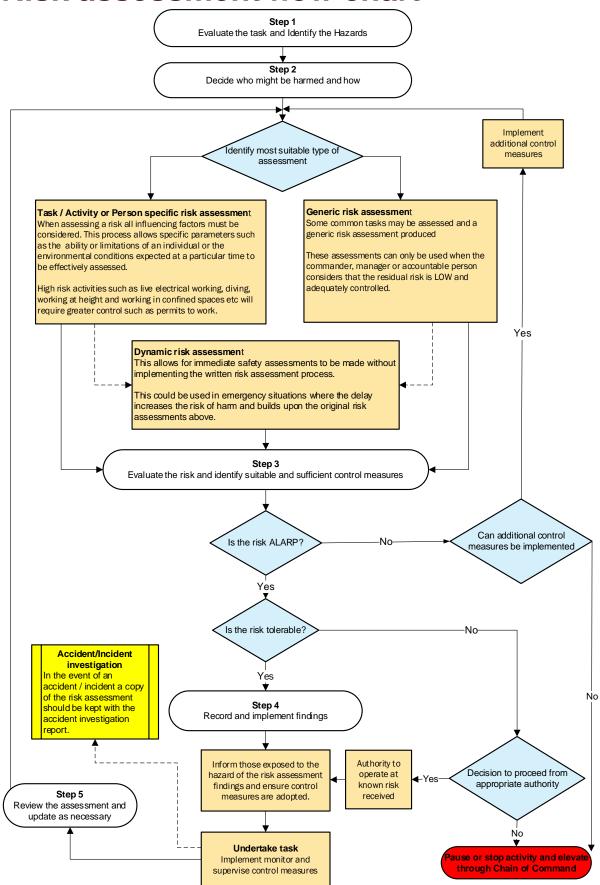
#### Retention of records

32. Risk assessments and associated documents **should** be kept for at least three years after they expire, and in line with Chapter 39 of JSP 375 Volume 1 (Retention of records).

#### **Related documents**

- 33. The following documents are related to this chapter.
  - a. JSP 815 Defence Safety Management System (SMS)
  - b. JSP 375 Volume 1
    - (1) Chapter 2 Military and Civilian Workplace Safety
    - (2) Chapter 5 First Aid at Work
    - (3) Chapter 18 Lone Working
    - (4) Chapter 19 The Health and Safety of Young Persons
    - (5) Chapter 20 New and Expectant Mothers at Work
    - (6) Chapter 39 Retention of Records
    - (7) Chapter 41 Heat Illness Prevention
    - (8) Chapter 42 Cold Injury Prevention
  - c. JSP 375 Volume 3
    - (1) Safety Rules and Procedures for working on the Defence Estate
  - d. JSP 950 Medical Policy
  - e. Legislation and guidance
    - (1) The Health and Safety at Work etc 1974
    - (2) Management of Health and Safety at Work Regulations 1999
    - (3) Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1999
    - (4) HSE INDG163 Risk assessment: a brief guide to controlling risks in the workplace
    - (5) HSE HSG268 The Health and Safety Toolbox: How to Control Risks at Work

### Risk assessment flow chart



### Site risk assessment checklist

SITE HAZARD	DETAILED ASPECTS/STANDARD CONTROLS (Non-Exhaustive list)
1 Site Security	<ul> <li>Perimeter fences, gates maintained, known hazards fenced</li> <li>Access to hazards within the wire prohibited from Service Families Accommodation / crèches etc.</li> <li>Site regularly patrolled, especially hazard areas - water courses etc (are patrols "lone workers"?)</li> <li>Security cameras, lights and alarms installed and operational</li> <li>Unused buildings locked, windows shuttered etc</li> <li>Key control (issue and returns) in operation with centrally managed 24 hour accessibility</li> <li>Health and safety performance considered in selection of private guards</li> <li>Control of guard dogs</li> <li>Signs and notices posted</li> </ul>
2 Emergencies	<ul> <li>Emergency procedures devised and tested</li> <li>Assembly points and shelters identified</li> <li>Emergency exits indicated and emergency lighting operable</li> <li>Signs and notices posted</li> <li>Procedures for rapid access to locked rooms (for example, release of master keys)</li> </ul>
3 Fire	<ul> <li>Fire patrols / fire wardens established</li> <li>Liaison with Local Authority Fire &amp; Rescue Service (LAFRS) established - contact telephone numbers available to Duty Staff</li> <li>Alarms, sprinklers etc. maintained</li> <li>Secure storage of flammable materials</li> <li>Extinguishers available and maintained</li> <li>"Housekeeping" maintained to prevent flammable / combustible materials accumulating</li> <li>Emergency water supply tanks provided</li> <li>Signs and notices posted</li> </ul>
4 Explosives	<ul> <li>Is the site licensed?</li> <li>Policies for disposal / removal established</li> <li>Records of type / quantities of explosives used</li> <li>Records available of Explosives Inspections / Audits</li> <li>Signs and notices posted</li> </ul>
5 Chemicals, Fuels & Oils	<ul><li>Is the site licensed?</li><li>List of substances held, stored, or used</li></ul>

	<ul> <li>DSEAR, COSHH and Risk Assessments available and up-to-date</li> <li>Any chemically contaminated areas identified</li> <li>Chemicals segregated where appropriate</li> <li>Signs and notices posted</li> </ul>
6 Biological	<ul> <li>Activities involving biological agents carried out on site and organisms involved identified</li> <li>Contaminated areas identified</li> <li>Organic waste disposal areas on site identified and controlled</li> <li>COSHH Assessments available and arrangements in place to maintain and review assessments</li> <li>Standing water treated / drained</li> <li>Cooling towers, showers etc. treated for Legionella</li> <li>Signs and notices posted</li> </ul>
7 Asbestos	<ul> <li>Asbestos register maintained</li> <li>Information available to contractors and maintenance workers</li> <li>Signs and notices posted</li> </ul>
8 Radiation	<ul> <li>Activities carried out on site involving the use / production of radioactive material</li> <li>Registers and records maintained</li> <li>Disposals recorded</li> <li>Radioactive contaminated areas identified</li> <li>Exclusion zones / control of access</li> <li>Signs and notices posted</li> </ul>
9 Pathways and Roads, Access and Egress	<ul> <li>Condition of roads, paths, gangways, stairs, bridges, etc maintained</li> <li>Emergency access routes clear of obstructions, operable and maintained</li> <li>Trip hazards and protruding object hazards removed</li> <li>Access to high places restricted / controlled</li> <li>Speed limits posted</li> <li>Street lighting</li> <li>Condition of doors, gates etc. monitored and maintained</li> <li>Hedges and ditches maintained</li> <li>Essential paths and roads included in snow and ice clearance plans</li> <li>Speed reduction measures, traffic lights, controlled access onto main roads where appropriate</li> <li>Signs and notices posted</li> </ul>
10 Vehicles, Plant and Equipment	<ul> <li>Ownership identified and all plant included in Risk Assessments</li> <li>Access to vehicles, plant and equipment restricted / made safe - especially for children</li> <li>Measures to reduce plant noise where appropriate</li> </ul>

	<ul><li>Inspection and maintenance programme in place</li><li>Vehicle / pedestrian separation</li></ul>
11 Condition of Buildings and Estate	<ul> <li>Inspection and maintenance programme in place</li> <li>Maintenance work monitored</li> <li>Vacated / derelict buildings secured against access, services drained / isolated</li> <li>Dangerous / hazardous trees or shrubs (fire / falling)</li> <li>Signs and notices posted</li> </ul>
12 Site House- keeping	<ul> <li>Site clearance policy</li> <li>Approved waste removal contractors employed</li> <li>Ground maintenance programme</li> <li>Shelves, racking and stacked / stored items maintained safely</li> <li>Signs and notices posted</li> </ul>
13 Confined Spaces	<ul> <li>Register of confined spaces maintained</li> <li>Unauthorised entry prevented by security and permit to work</li> <li>Policy formulated for removal / opening up</li> <li>Inspection / maintenance programme instituted with permit to work control</li> <li>Signs and notices posted</li> </ul>
14 Electrical	<ul> <li>Position of below ground supply cables recorded</li> <li>Overhead supply cable runs maintained / protected</li> <li>Inspection / maintenance programme in place</li> <li>Lightning conductors maintained</li> <li>Signs and notices posted</li> </ul>
15 Water	<ul> <li>Underground pipe runs recorded</li> <li>Inspection / maintenance procedures in place</li> <li>Access to deep storage tanks strictly controlled</li> <li>Signs and notices posted</li> </ul>
16 Gas	<ul> <li>Effective shut off method location known and available</li> <li>Underground pipe runs recorded</li> <li>Inspection / maintenance procedures in place</li> <li>Liaison with Gas Authority maintained</li> <li>Signs and notices posted</li> </ul>
17 Pressurised Gas	<ul> <li>Quantities held and location of pressurised gas holdings recorded</li> <li>Storage methods secure and adequate</li> <li>Inspection / maintenance programme in place</li> <li>Policy for removal formulated</li> <li>Signs and notices posted</li> </ul>

18 Storage Tanks	<ul> <li>Position of substances and quantity held recorded</li> <li>Policy for emptying / removal / making inert</li> <li>Inspection / maintenance programme in place</li> <li>Condition of containment bunds monitored</li> <li>Signs and notices posted</li> </ul>
19 Falls and Falling Objects	<ul> <li>Access to roofs, towers etc. strictly controlled</li> <li>Inspection / maintenance programme for stairs, towers, masts etc</li> <li>Inspection pits filled, fenced, or securely covered</li> <li>Drain covers secure</li> <li>Crawler board areas of roofs identified</li> <li>Stability of towers / masts assured</li> <li>Storm drains Risk Assessments completed, and any necessary action taken</li> <li>Signs and notices posted</li> </ul>
20 Contractors and Visitors	<ul> <li>Control / record of contractors / visitors coming on to site exercised at point of entry</li> <li>Contractors / visitors informed of emergency procedures</li> <li>Risk Assessments completed for contractors' work involving significant hazards</li> <li>Permit to Work and written Safe Systems of Work for contractors strictly applied</li> <li>Contractors' compounds are included in Site Safety Tour programme</li> <li>Exchange information with contractors (including, where appropriate, risk assessments)</li> <li>Signs and notices posted</li> </ul>
21 Emissions and Processes	<ul> <li>Hazardous / polluting Emissions identified:         <ul> <li>Air</li> <li>Land</li> <li>Water</li> </ul> </li> <li>Emission control policy established and in operation</li> <li>Process waste identified and controlled</li> <li>Records of all transactions concerning waste</li> <li>Monitoring of emissions / waste</li> </ul>