Freedom of Information request reference number: 8293.1

Date of response: 7 February 2024

Request:

Please could you give me a list of what rank falls under what command eg Firefighter = No Command LFF =No Command Sub Officer = Bronze so on and so on

Response:

The London Fire Brigade do not have a command structure for each rank that matches your request. You find the information held on the National Fire City Council Website NFCC

You may find the attached Foundation of Incident Command useful.

We have dealt with your request under the Freedom of Information Act 2000. For more information about this process please see the guidance we publish about making a request on our website

National Operational Guidance Programme

The Foundation for Incident Command

Contents

Introduction

The *Foundation for Incident Command* is designed to complement and support the *National Operational Guidance* for *Incident Command* which is intended to assist policy writers in fire and rescue services in producing their local policies or guidance for incident command. This accompanying foundation guidance is aimed at all fire and rescue service personnel to provide the detail required for assertive, effective and safe incident command to be practised and applied.

This foundation guidance supports fire and rescue services to put in place a robust emergency response for incident command. It is an essential guide for safe systems of work required at incidents and provides essential reading for all fire and rescue service operational personnel, including firefighters and control room operators.

Fire and rescue services must make suitable and sufficient arrangements to ensure that they have systems and processes in place to prepare incident commanders at all levels to understand, interpret and apply the incident command system appropriately to every incident. This foundation guidance describes the requirements of an incident commander.

The incident command system provides the incident commander with a clear framework to structure, organise and manage an incident. It can be adapted to all sizes and types of incident and will help them deploy and use resources in an efficient and safe way. The incident command system allows the incident commander to use health and safety arrangements, including standard operating procedures, tailored to the characteristics of an emergency. This helps the incident commander to achieve an appropriate balance between the benefit of undertaking planned actions and the risks associated with them.

Operational response is hazardous and firefighters respond to thousands of incidents each year. Some incidents may need only simple actions and procedures to deal with them effectively and safely as risks are low. Others are more challenging and may quickly increase in size, complexity and duration.

"At every incident, the greater the potential benefit of fire and rescue actions, the greater the risk that is accepted by commanders and firefighters. Activities that present a high risk to safety are limited to those that have the potential to save life or to prevent rapid and significant escalation of the incident."

This is known as the Firefighter Safety Maxim.

Commanding operational situations is different to managing controlled and defined situations or workplace scenarios. Commanders need a range of qualities together with command skills to deal with the wide-ranging nature of emergencies.

Assertive and effective commanders:

- Are confident and self aware

- Are well trained and competent

- Have sound situational awareness

- Are able to lead, direct and instruct others

- Can communicate effectively

- Are able to plan and implement

- Can apply sound judgement and effective decision-making

- Are able to adapt to changing situations

- Are calm and controlled

Fire and rescue services must be confident that their selection processes ensure that personnel who are responsible for performing command functions are capable of doing so. They should be able to demonstrate clear potential to deal with stressful situations where there is sustained pressure. Once appointed they should periodically be required to demonstrate competence in their role.

Fire and rescue services must ensure that they appropriately train and assess their incident commanders. They should ensure that incident commanders understand and have sufficient time and facilities to practise the skills they need for command. They must equip them with the operational knowledge and understanding needed to resolve the full range of reasonably foreseeable incidents and enable them to adapt to those that are not.

More details can be found in the CFOA document *Command Training, Assessment and Qualifications Fire and Rescue Service Guidance* and the *National Occupational Standards for Fire and Rescue Services*.

Fire and rescue service responsibilities

A fire and rescue authority's responsibilities are set out in the Fire and Rescue Services Act 2004, or equivalent legislation in devolved administrations. Some of these duties are classified as core duties. Those which relate to incident command are in sections 7, 8 and 9 of the Act. These duties should be read with other relevant legislation, specifically the Health and Safety at Work Act and the Management of Health and Safety at Work Regulations.

The Fire and Rescue Services Act requires each authority to make provision for the purpose of extinguishing fires, carrying out rescues and attending other emergencies in its area, including the provision of personnel, equipment and training.

The Health and Safety at Work Act includes a requirement on employers to provide information, instruction, training and, critical for this guidance on incident command, the provision of supervision as is necessary to ensure, as far as is reasonably practicable, the health, safety and welfare of its employees.

Other sections of the Health and Safety at Work Act place a duty on employers to conduct undertakings in such a way as to ensure, as far as is reasonably practicable, people not employed by them, who may be affected thereby, are not exposed to risk. [Note: in this context a risk has to be created or made worse by the service].

The Management of Health and Safety at Work Regulations places a duty on the employer to make a suitable and sufficient assessment of the risks to the health and safety of their employees and to record the significant findings of the assessment.

The Health and Safety Executive sets out how it will apply health and safety legislation to the fire and rescue service in the document *Striking the balance between operational and health and safety duties in the Fire and Rescue Service*.

Foundation guidance for fire service legislation will be published on the National Operational Guidance website in due course.

Selection

Incident commanders need to possess cognitive and interpersonal qualities, as well as technical knowledge. Together these are critical for assertive, effective and safe incident command. Robust selection processes are necessary to identify suitable personnel to be developed for the role of incident commander.

Effective selection process

Fire and rescue services must identify the knowledge and skills that they require in an incident commander and should consider the most appropriate way of selecting personnel for incident command roles. This should include suitable and sufficient systems to identify individuals for command roles, including a practical assessment of their command skills.

The CFOA Command Training, Assessment and Qualifications Fire and Rescue Service Guidance provides further information that may assist when developing a selection process for incident commanders.

Command skills

Command skills are the cognitive and interpersonal qualities critical for assertive, effective and safe incident command. To apply them, incident commanders should be able to understand the situation as it unfolds.

They should be able to:

- Identify and prioritise problems and develop a plan to resolve the incident

- Communicate this plan to others

- Co-ordinate and control activity in line with their plan

- Display the leadership needed to resolve the incident and operate effectively under the pressures of an incident

As well as having technical knowledge, an incident commander should possess command skills to underpin their judgements, decisions and behaviours. This section draws on research and incident ground observations that have helped identify the command skills necessary for incident commanders.

There are four levels of command, which are underpinned by command qualifications that apply to the fire and rescue service. *The CFOA Command Training, Assessment and Qualifications Fire and Rescue Service Guidance* provides further information.

Command skills are complex in nature and can be developed with understanding and practise. It is essential that fire and rescue services prepare and develop incident commanders to use these skills effectively when commanding an incident. This includes providing appropriate opportunity for practise under realistic pressures.

As part of the incident or training debrief process, the incident commander should seek feedback on their performance in resolving the incident. This allows them to identify best practice and where they can make improvements in the future.

Leadership

Leadership is an essential element of an incident commander's role in resolving incidents. At an emergency, personnel in the fire and rescue service, people from other organisations and members of the public will look to the incident commander to lead and resolve the incident. They expect the commander to be calm, confident, decisive and professional. Commanders should be able to apply the most appropriate leadership behaviours, technical knowledge and command skills to resolve an incident. An important element of this includes the need to give others confidence in the leader. This can be described as command presence and incident commanders should always consider the impression they are creating.

Incident commanders will lead others in dynamic and complex environments. They should be able to instil confidence and inspire others to help resolve the incident; recognising individual contributions whilst building and encouraging trust. People who are led well at an incident will invariably be willing, motivated and committed.

The incident commander is responsible for leading the incident to a successful conclusion, but they cannot be responsible for making all decisions or supervising every detail of an incident. For this reason, incidents are often divided into sectors and functions. Each person who commands one of these will also need to show competent leadership skills.

Effective leadership occurs when others follow or respond to the instructions and plans the leader sets. In the context of incident command, effective leadership is more than exercising authority and power. The way in which a leader behaves will influence how others respond. A positive relationship will improve the performance of the team, which can contribute to improved safety. Effective leaders have interpersonal qualities that make them more likely to achieve the best from others.

The incident commander's success is heavily dependent on their leadership knowledge, skills and attributes. Trust and confidence between the incident commander and crew member are essential. A key skill of a leader is motivating others to resolve an incident. There are many different leadership styles. Commanders are most likely to maximise performance by recognising that no single leadership style is ideal for all situations.

Leaders will need to adapt their style to the situation they are faced with.

They should consider the following before adopting the appropriate style:

- The level of risk
- How fast the incident is developing
- The type of incident
- The competence of the team
- The experience of the team

An effective incident commander also relies on good command skills to enhance the way in which they lead and command an incident. These skills are as important as their operational knowledge.

All personnel at the incident should take personal responsibility for the way they act, to ensure the safety of themselves and others and to achieve the objectives set out by the incident commander.

Personnel should be supervised. Incident commanders must gauge the level of supervision on the hazards and risks present. The greater the risk to operational personnel and others, the greater the degree of supervision required. This may be by direct or remote observation and monitoring; an example of this is breathing apparatus entry control.

The incident commander should ensure that the people they lead are appropriately briefed on the tasks and any hazards and risks they face. The briefing may also highlight the safest way to complete the task. They need to communicate effectively and confirm that people understand the brief.

As crews work on their tasks, new information about hazards and the risks they present may come to light. As the incident commander may not be aware of this information, they rely on each person to undertake their own risk assessment. New information may affect the incident plan and the safety of people operating in that area, so it is important that personnel are aware of their responsibilities for identifying hazards and assessing risks to influence their actions and undertake a personal (individual) risk assessment. The new information must be relayed to the incident commander in a timely manner.

The way a leader behaves will significantly influence others. Equally the way that individuals and crews behave will influence the way a leader responds. Incident commanders should be aware of this relationship. They should encourage effective responses and understanding from others to help support their leadership.

The leadership relationship exists at several levels involving the incident commander, the command team, crews and other agencies. For instance, a sector commander will be led by the incident commander but at the same time be the leader of crews in their sector.

Leadership behaviours

The following behaviours are representative, but not exclusive.

Being self-aware

An incident commander should be aware of the impact of their actions and behaviours on the people they are leading. Being self-aware can help them maximise team performance. They should be able to control and adapt their behaviours because they are aware of how these might be received. Commanders should also be aware of the way in which behaviours of others can influence their own responses and behaviour and ensure they control their reactions. It is important to be aware of and manage pre-conceptions that might influence the way the leader or others respond.

Displaying and instilling confidence

A leader should be aware that others at an incident take direction from them. Personnel will respond positively to a confident leader, which will improve the team's performance. They will also detect negative behaviours such as panic, insecurity or uncertainty. In both cases it will affect how crews respond to the situation and to a leader's instructions. Feedback should be provided to the incident commander. This makes sure everyone has a shared and realistic view of what is likely to happen. Stress can reduce an individual's capacity to process information. Displaying and instilling confidence makes personnel less anxious. Individuals should be able to ask for help or assistance when they need it.

Demonstrating and fostering trust

An incident commander needs to lead people in challenging and potentially dangerous circumstances. Trust between the incident commander and the crews they lead is essential. They should consider the impact that the characteristics of the incident and the tasks that need to be carried out have on crews and members of the public. Trust is also likely to reduce anxiety which is known to reduce people's capacity to process information.

Fostering two-way communication

The way an incident commander behaves will affect whether crews believe there is two-way communication. It affects how likely they are to share critical information. Two-way communication does not always mean an opportunity for lengthy debate. The incident will influence the style of two-way communication. This concept applies at all levels on the incident ground. Effective communication at all levels builds a shared situational awareness. It is this which underpins the identification of objectives and the development of operational plans.

Understanding the use of authority

An incident commander should be aware of and adopt an appropriate leadership style. This is the style which gets the desired response from others. Some situations will require a more authoritative style of leadership, whilst others may permit a style with greater interaction. The incident commander should be aware of the way in which these styles are likely to influence people. They should adopt the appropriate one for the given situation. Equally, others at an incident should understand that a leader may need to vary their style to achieve the best outcome.

Setting expectations and standards

Personnel and crews look to the incident commander to provide vision, a set of clear objectives and set an appropriate tempo to resolve the incident. It is important for the leader to make clear what they expect in terms of standards, role and outcomes. This could include compliance with essential standards, such as standard operational procedures, levels of personal protective equipment (PPE) or the manner in which a task is carried out. The incident commander sets these standards and expectations, but everyone remains accountable for achieving them.

Leadership and organisational culture

The leadership relationship begins before attending an incident. Fire and rescue services should be aware that the culture of their organisation can influence behaviours both on and off the incident ground. This may affect the way in which incident commanders lead and the way in which crews respond. Fire and rescue services should consider the organisational culture they expect for incident command.

Considerations of organisational culture

Some examples of areas to consider are given below, although the list is not exhaustive:

Consistent expectations

Incident commanders and crews at all levels may benefit from having a clear and common understanding of what is expected of them by the service in terms of leadership during incidents, and that this is consistently displayed. Clear expectations can reduce uncertainty and anxiety and therefore improve operational effectiveness.

Organisational policy and procedures

Guidance such as standard operational procedures provides a clear framework for incident commanders to operate in. Fire and rescue services may wish to consider how they enable incident commanders to deal flexibly with unusual incidents, and the extent to which any *operational discretion* may be exercised in such circumstances. Fire and rescue services may also wish to consider the degree to which organisational policy may influence the risk appetite of incident commanders.

Dealing with performance

The expectation of the way in which performance is dealt with by the fire and rescue service may influence the way in which leaders behave and others respond. It is appropriate to recognise and share examples of good performance and decision making on the incident ground. There will be times when under-performance should be dealt with immediately, whilst other areas requiring improvement may be raised during debriefing or post-incident reviews. The level of perceived stigma associated with recorded under-performance may influence factors such as openness, trust, risk appetite and response to errors.

Reaction to status and authority

This may affect how likely individuals are to share information to ensure accurate situational awareness.

Fire and rescue services may wish to consider how organisational culture influences the leadership relationship at incidents.

Operational team effectiveness

An essential skill for effective incident command is the ability to command and control teams of people. Understanding team dynamics is essential to get the best out of individuals and teams. Team dynamics is about how people affect each other, how this affects the team and how the team reacts to the incident.

The incident commander may need to develop a command team based on those officers that arrive at the scene first. They may or may not know these officers. An incident commander should understand how to form and control a command team and use them accordingly. It is particularly important that the work of the team contributes to the commander's incident plan.

Team membership factors

The urgent nature of an incident may limit the ability of a leader to match each function with the ideal team membership. When they have more time, or the situation allows, they should consider the following factors:

Knowledge matching

Consider individual and team knowledge and match this to the required function. An incident commander may support this knowledge with a clear briefing. They may provide additional support or additional monitoring.

Skills matching

Consider the existing skills of the teams and individuals in relation to the tasks needed by the incident plan. It may be possible at some incidents to also consider the need for developing skills or expertise. Where the situation allows, they may wish to consider managing the exposure of team members to situations or tasks which will build their skills and experience.

Attitude matching

Some aspects of attitude contribute to a team working well together, being cohesive and motivated. Such attitudes might be stable personality traits or they may come and go, affected by mood. The way a person reacts to pressure and stress at an incident can affect both of these. The leader may wish to consider these factors when allocating tasks to individuals or teams. Attitude can affect how likely they are to work well together and achieve the intended result.

Situational awareness

Situational awareness is a person's perception and understanding of the situation they face. It includes their anticipation of what the situation may become, including the impact of their actions. For an incident commander, it is their perspective of the scene of operations.

This situational awareness, or mental picture of the incident, is the foundation for the incident commander to formulate a plan of action. On the basis of this understanding, the commander will assess risk and make decisions, identify and prioritise objectives and develop an incident plan. The commander will also look ahead and consider how an incident will develop and also predict the consequences of actions.

Maintaining good situational awareness of the incident is a critical skill. Incident commanders need to have the ability to build an accurate mental picture of the situation. They need to be able to do this in challenging, dynamically changing and high pressure circumstances, sometimes with incomplete or inaccurate information.

A person's mental picture of an incident is like a jigsaw, made up of many sources of information interpreted as a single view. An example of this is shown below.

Some pieces of this jigsaw come from direct exposure, for example, to events that can be seen or directly experienced at the incident. However, an incident commander may not have all of the information available that they need to form a full and accurate picture.

Other pieces of the jigsaw come from memories of similar events, assumptions or communications with others. These elements combine with the information that is directly available to create a mental picture. Therefore it is important for incident commanders to constantly monitor their situational awareness, and verify the accuracy of any assumptions that might underpin their understanding of the situation.

A person's mental picture of an incident is made up of many sources of information. They are interpreted into a coherent picture in a way that makes sense to them in the current circumstances of the incident. It is important to consider the relationship between the information that was reasonably available and how the conditions have affected a commander's ability to process it.

The working conditions at an incident may affect their ability to process information. For instance, the amount of information they need to process, the tasks they are involved with and the amount of stress they are feeling all take up part of a commander's capacity to process information. Evaluations of operational decisions, whether post-incident or in a training environment, should take this relationship into account.

Good situational awareness is essential as it underpins operational decision making. Decision makers, both incident commanders and firefighters alike, make decisions based on their perception of the situation and their perception of the problem. For decision making to be effective, it is necessary for the incident commander to put in place the means to continuously monitor the environment to detect changes, and to ensure their understanding of the situation remains accurate, for example, an appropriate command structure and communication network.

Stages of situational awareness

There are three stages of situational awareness:

Information gathering

The incident commander will gather information from a variety of sources to gain accurate situational awareness. They use it to develop their mental picture, monitor changes and track progress. The information will relate to the incident as a whole, the task itself, available resources, and hazards.

Incident commanders should be aware of potential sources of information such as:

- Communication: with team, other agencies, specialists, people at the scene, fire control
- Surveying the scene: information from what they can see, hear, smell and touch
- Site specific risk information: sources from pre-planning, or available at the scene

Incident commanders also need to understand why they may fail to gather information correctly such as:

- Information is incomplete or unavailable
- Distractions causing information to be missed
- They fix their attention on an element of the situation, so they miss other information (tunnel vision)
- New information does not fit with their current view of the situation so they ignore it (confirmation bias)
- They fail to scan or re-scan the incident scene to gather information
- Information is difficult to detect
- Misperception or misunderstanding information
- Poor communication from others

Understanding information

After a commander gathers information, they will process it and extract the meaning. This helps them form an understanding of the situation.

They will integrate this information with knowledge and memories, which may include:

- Experience of the same or similar premises or locations
- Experience of the same or similar situations
- Assumptions
- Expectations
- Mental models:
  - Knowledge structures formed from previous learning. In this context, it is a file of information stored in memory that represents a combination of cues and their meaning. For example, an incident commander may have a mental model of how to resolve a type of incident, or how to operate a piece of equipment.
  - Combinations of cues or pieces of information may activate a previously formed mental model. When a particular mental model activates, it maps out what they expect to happen and typical actions or responses.
  - Activating a mental model may also lead the incident commander to direct attention to information relevant to the situation. This has some benefits. It saves time and frees up mental capacity to process information. However, it can also lead to neglecting other pieces of information that might prove to be important. It may also lead to confirmation bias.

Experience, context and assumptions can supplement or distort an incident commander's interpretation of the scene.

Anticipation

Incident commanders should be aware that they use their understanding of the situation to anticipate what is likely to happen next. For example, how the situation might develop and the consequences of their actions. This means it is vital that their interpretation reflects the actual situation as accurately as possible.

This is the highest level of situational awareness. It allows the incident commander to effectively plan their operational activities by understanding how the situation is likely to develop and predicting what impact a particular intervention might have. This helps the planning process ensure the right action is taken.

Maintaining situational awareness

Insufficient situational awareness may lead to commanders potentially overlooking information when they make decisions. It may result in a failure to revise a decision that has already been made in light of new information that does not fit the incident commanders' perception of the situation. This is known as confirmation bias, as attention is biased only to information that confirms the current view of the situation.

Other information that is highly relevant to the actual situation might be ignored if it does not fit with this view. This may adversely affect the way in which the risk picture posed by the incident is communicated in safety critical briefings and when command is transferred. Understanding the relationship between the information that was reasonably available to an incident commander at the time and the impact of the conditions experienced by them on their ability to process information is of particular importance when investigating bodies consider operational decisions.

Effective situational awareness

Effective situational awareness ensures that the interpretation reflects the actual situation. This is critical for making appropriate decisions and predicting the likely effects of activities. The following may assist effective situational awareness:

Clear briefing
Clear, accurate and timely briefings to and from the incident commander will help to ensure people share up-to-date information.

Minimising distractions during critical tasks
This may help to reduce demands on mental processing capacity. Effective organisation at an incident can assist with reducing distractions.

Appropriate spans of control
Can reduce the likelihood of becoming overloaded with information by delegating responsibility for certain areas or tasks. Delegation allows the incident commander to maintain an overall view of the situation. Maintaining good lines of communication is vital. They ensure people exchange accurate, relevant and timely information.

Regular review
Incident commanders should regularly compare their mental picture with cues and information from the current situation to ensure their situational awareness remains accurate to maintain accurate situational awareness and detect changes.

Self-awareness of stress and fatigue
The incident commander should be aware of the signs and symptoms of excessive stress. Stress and fatigue may impair situational awareness and they should take appropriate action to manage the impact on people. See *Personal Resilience*.

Factors that affect situational awareness

Incident commanders should be aware that some factors which might affect situational awareness are:

Location of incident command point
Its siting and the potential scale of the incident scene may prevent visual cues from the incident being seen.

Limitations of human perceptual systems
Human perceptual and memory systems are not infallible. A strong focus on one part of the situation, or element of the environment, can lead to other sources of information being neglected or missed.

Stress
Anxiety and stress take up part of a person's mental processing capacity. They can distract attention from the situation. They can also reduce available capacity for focusing on and understanding information. Neglecting important information or not processing it properly may lead to an inaccurate mental picture of the situation.

Fatigue
Can reduce mental processing capacity. As with the effects of stress, this can reduce the capacity available for processing and making sense of information.

Information overload
Can be overwhelming. It can take up mental processing capacity, leaving less to focus on and understand the wider situation.

Automatic actions
A cue might automatically cause a certain response. Automatically responding to an element of the situation may not always fit with the required overall incident response. See *Intuitive and Analytical decision making*.

Tunnel vision
Under some circumstances attention may become unduly focused on some elements of the situation, rather than looking at the incident as a whole. This is known as tunnel vision.

Confirmation bias
Under some circumstances, attention is focused on information that confirms a current interpretation of the incident, neglecting information that does not fit.

Mental model
The wrong mental model may be activating; the correct mental model may be activating but it may be a poorly formed mental model; there might not be a relevant mental model; or there may be too much reliance on some features of the model.

Remote situational awareness

There may be people involved in making decisions who are not at the scene of operations. They may be at a location such as a remote tactical command point or strategic co-ordination centre. The reliability of elements contributing to their situational awareness can vary. They should question any assumptions they might have and constantly review the accuracy of their situational awareness. Where appropriate, they may wish to visit the scene to confirm the accuracy of their mental picture, taking care to avoid creating a command gap. If available, they may choose to consider using other means such as a live video feed.

Shared situational awareness

Resolving an incident involves the efforts of many people and multiple teams. This might include a number of fire and rescue service personnel as well as other agencies. For any team to work effectively they need to have a common interpretation of events, or shared situational awareness. Incident commanders should be aware that a dynamic environment can lead team members to form different impressions of the incident. This can happen without teams being aware of it. It can cause conflict and make it more challenging to make decisions.

Shared information gathering

It is not necessary for all personnel to be aware of all of the information about an incident. Having too much information may result in information overload which could reduce an individual's ability to deliver tasks. Good shared situational awareness will mean that team members have the information necessary for their role and have a common view of the situation.

Teams are exposed to different areas of working and may be assigned specific tasks. This means that the direct information they have, such as what they can see and hear, is limited to their area of work.

Shared understanding

Team members will interpret information in a particular way based on their individual understanding. A team with good shared situational awareness will have a similar knowledge of the status of the goals they are working towards. They will also understand the status of the goals of other team members in relation to the operational plan. They should also have a common understanding of how their actions may affect others and the goals they are trying to achieve.

Shared expectations

The team should have a common understanding of what they expect to happen when they are carrying out activities. They should have a similar understanding of how their own and other people's roles work. For example, they should share the same expectations of their roles in accomplishing the task, the nature of the task, and the equipment they have. This can also improve the team's performance as they have similar expectations of each other's contribution in relation to the operational plan, and the likely impact of each other's activities. It can improve their ability to adapt to changing demands and to co-ordinate efforts. It will help individuals to anticipate the needs of both the task and other team members.

Fire and rescue services can encourage the development of these shared expectations. Training and development is important to develop this ability in teams. At an incident, an incident commander can encourage this with clear and concise briefing together with sharing relevant information.

An important element of shared expectations is the tempo of the firefighting or rescue efforts. The incident commander should make it clear what pace they want to set for the incident depending on the urgency of actions, the nature of the incident etc. This setting and maintaining of an appropriate tempo throughout the stages of an incident is also referred to as battle rhythm.

Command decision making

Decision making is a fundamental command skill which can have far-reaching consequences. Decision making, like any complex skill, needs practise and understanding. Fire and rescue services should ensure they prepare incident commanders to make decisions at incidents, and effectively operate in a complex decision making environment. This environment is uncertain, with competing demands and problems that can affect many aspects of the scene. Incident commanders should be competent and confident to make effective command decisions under such pressures. Therefore they need to be given ample opportunity to practise and develop this critical skill.

Reaching a decision

Incident commanders need to have the ability to make sound decisions based on the elements that make up an incident, as well as having an accurate overall interpretation of the incident. This leads to effective, assertive and safe incident command.

Decisions are made throughout an incident and involve:

- Deciding what the problem is
- Assessing risk
- Identifying and prioritising objectives
- Deciding tactical priorities
- Developing a plan that gets from one position to another

There are a number of ways that incident commanders may reach these decisions. They can be broadly grouped into two main categories.

Intuitive decision making

These are rapid, reflexive processes that are experienced as relatively automatic. Some decisions can be very reflexive. Such intuitive processes are fast and are usually invoked without consciously thinking. They may be driven by cues and clues that can automatically and directly trigger a decision or response.

Commanders can react to elements of the situation, such as the cues and clues that act as triggers. This might be via Conditioned Processes (CP) or a Recognition Primed Decision (RPD) approach. A conditioned connection is very automatic, so does not involve explicit planning. This means that the rationale is not considered at the time, making it difficult to articulate the reasons that action is taken.

Recognition primed decision making is a similarly reflexive process whereby elements of the situation may prompt the commander to recognise, remember and select the responses they made to similar situations in the past. Because this process is also fast it feels like an automatic response. There is little conscious deliberation.

Recognition primed decision making processes may be useful for decision makers operating in a relatively familiar and routine situation. Such processes are less likely to be useful at more novel or unusual incidents where there may be less experience to draw on.

Incident commanders should also be aware that because recognition primed decision making involves matching cues from the current situation to one that the decision maker recognises, it might encourage the decision maker to look for evidence to support their interpretation of the situation. The actual situation may not reflect the interpreted situation. An incident commander should be aware of these possibilities and should consider using decision controls before they implement a decision. See *Decision controls*. This will help them avoid decision traps. See *Decision traps*.

Analytical decision making (AD)

These more reflective processes involve a greater degree of conscious mental effort. Here, the situation is analysed. The commander may draw on their knowledge, memories and experience that relates to the situation or problems faced.

They will then consider what to do. They might:

- Use a rule-based process, for example, a standard operating procedure
- Compare and evaluate possible options
- Create a completely new solution to an unfamiliar problem
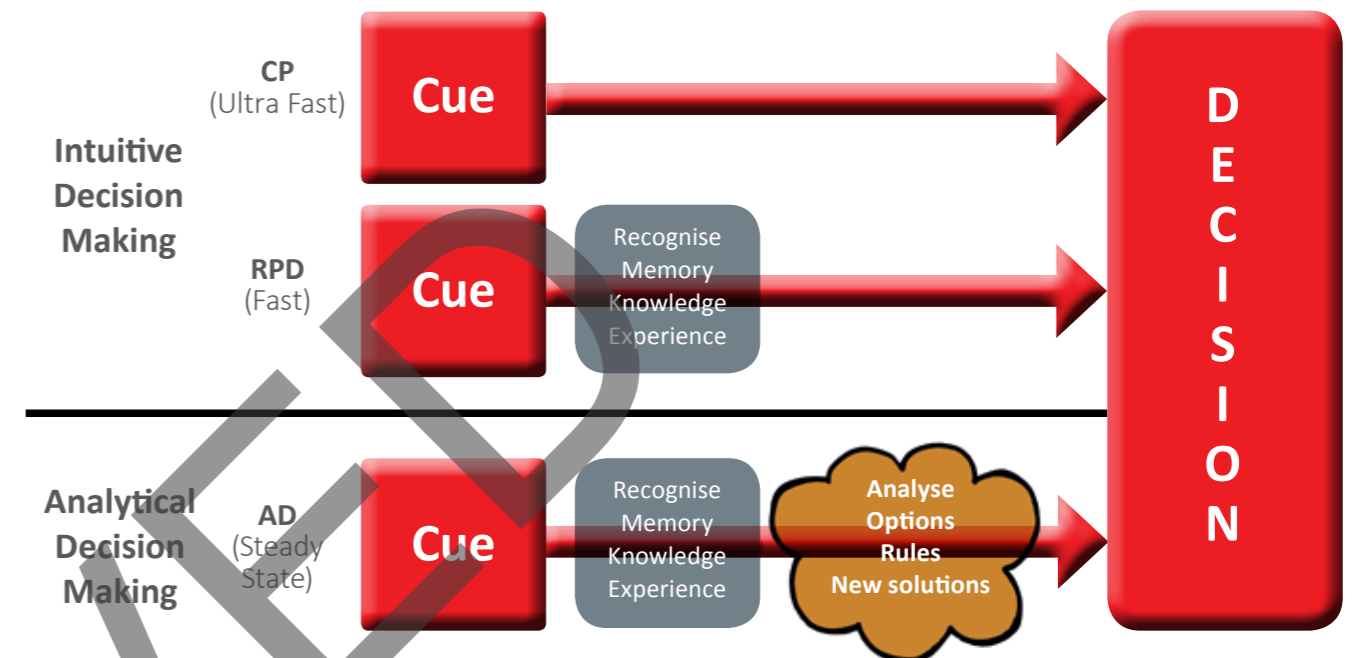
See *References* for incident command research papers.

These processes apply to all decision makers on the incident ground. They have equal importance for a firefighter wearing breathing apparatus who chooses what to do next, to an incident commander developing their plan. Although the method of decision making is not always a conscious choice, it is important for commanders to be aware of the processes that might drive their decision making. They should be aware of the potential decision traps. See *Decision traps*. Decision controls should be used. See *Decision controls*.

Decision making in the operational context

Fire and rescue services need incident commanders to operate in a complex decision making environment. This environment is uncertain, with competing demands and problems that can affect many aspects of the scene.

To resolve the incident, incident commanders should:

- Understand their starting position
- Know their desired end position
- Develop a plan that gets from one position to the other

To do this well, all decision makers should understand the factors that are likely to influence the way they make decisions. They should be aware of the potential decision traps. See *Decision traps*.

The table below shows some factors that might influence decision making in the operational context:

Situational factors	Emotional factors	Cognitive factors	Organisational factors
Time pressure	Anxieties over:	Mental capacity	No clear policy
Moral pressure	Accountability	Competence	Policy too restrictive
Stress/fatigue	Public scrutiny	Confidence	Organisational culture
High stakes	Peer scrutiny	Technical expertise	Safety culture
Uncertainty	Legal scrutiny	Risk perception	Organisational risk appetite/risk aversion
Accuracy of information	Experiencing/ anticipating negative emotions	Distraction	
Missing information	Trust	Information overload	
Changing environment	Complacency	Understanding of role	
Ill-structured problems		Uncertainty of options	
Familiarity with situation or specific premise		Multiple goals	
		Incident goals	
		Organisational goals	
		Other agency goals	
		Competing priorities	

Factors in the operational context, such as high pressure situations, may affect the way people reach a decision. In particular, analytical decision processes that are relatively reflective need more time and mental effort than other processes. It takes time to evaluate and select a course of action. Analytical processes can be more susceptible to the effects of excessive pressures and they reduce the capacity for mental processing.

There is more information on the effects of excessive pressure and stress in *Personal Resilience*.
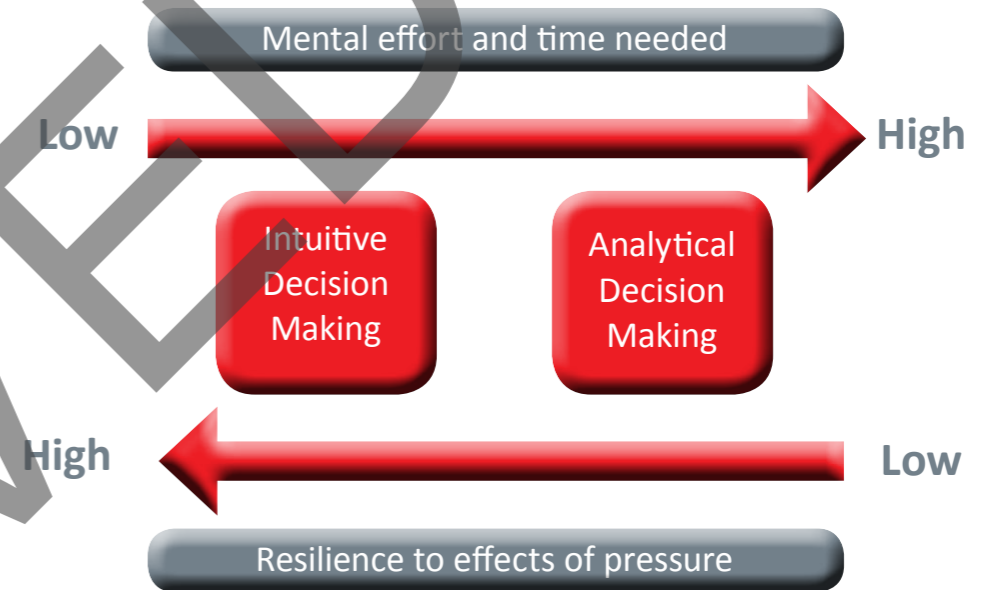
Decision traps

A decision trap can be described as a thought process that can lead to a situation going wrong.

There are a number of decision traps that may make decisions in the operational context less effective. Decision makers should be aware of these and should apply decision controls to guard against unintended consequences. See *Decision controls*.

Examples of decision traps include:

Decision does not fit with the objectives, tactical priorities or incident plan

One of the pitfalls of some of the more reflexive, intuitive process is that sometimes the planning processes are by-passed. This means that an action might be intuitively or automatically implemented without considering the actual incident objective, goal or tactical plan. There may be times when the response they select might not fit with achieving the wider goal for an incident.

Decision made on the basis of part of the situation (such as a cue or a goal) whilst not taking account of the overall picture

A great deal of decision making occurs on the incident ground, from crew members to those with commanding roles. The operational context is complex and there may be a requirement to make decisions on a wide variety of issues. There are times when decisions are made that relate to very narrow or specific elements of the situation, such as a particular cue or goal. However, there is a danger of unintended consequences if decisions are made on these elements in isolation, without considering the impact on other activities, objectives or the incident as a whole.

Decision is based on the wrong interpretation

Poor situational awareness can lead to an interpretation of the incident that does not match the reality of the situation. A decision then made on the wrong interpretation may lead to unintended consequences.

Decision aversion

Decision aversion is a failure to make a decision. High risk, high pressure and rapid change can create uncertainty about what to do. Decision makers may also be uncertain about possible alternatives and consequences. This may be challenging if the stakes are high and they have to choose what to do. For example, a commander must make a timely decision to determine if they are operating in either offensive or defensive mode, as there is no default tactical mode. Excessively focusing on accountability and scrutiny can make decision aversion worse. They may develop an excessive focus on potential negative consequences rather than the tactical concerns of the incident. Sometimes this may show as risk-aversion with a focus on self-protection rather than making an operational decision. They may not make a decision or seek to refer decisions to another decision maker. Fire and rescue services should be aware that their organisational culture may affect decision aversion.

Failure to actively monitor and review

Decision makers may not be aware of the progress of an incident. If they fail to monitor and review the impact of their decisions, it can affect their situational awareness. If they are not aware of progress it's difficult to make good predictions about what is happening. It also makes it harder to understand how the situation might develop.

Decision control process (DCP)

The decision control process supports decision making at an incident. This aims to take account of the natural decision processes a person might employ in an operational context. It seeks to support decision makers in a practical way to avoid unintended consequences arising from decision traps. See *Decision traps*.

The decision control process is scalable. It can be applied to basic decisions made on the incident ground for a task or problem. It can also scale up for use in planning the resolution of an entire incident. It complements the JESIP Joint Decision Model for multi-agency decision making, particularly for the element of 'assessing risk and developing a working strategy'.

The decision control process consists of four stages. These are:

- Situation: consists of incident, resource and risk information gathering
- Plan: this comprises identifying the objectives and tactical priorities and developing a tactical plan
- Decision controls: applied by asking yourself; Why am I taking this action? What are my expectations of these actions? Do the benefits justify the risks?
- Action: implementing the plan by communicating and controlling actions

Evidence from incidents shows that decisions are not always made in a linear way, as represented in previous decision making models. The decision control process recognises this to support practical decision making at an incident. See *References* for incident command research papers.

Under some circumstances, decision makers will respond rapidly and directly to an element of the situation, moving from situation assessment to action. This may be particularly likely when a cue (or cues) prompts an intuitive decision. The decision control process takes account of the way people naturally make rapid decisions. It presents some safeguards against potential decision traps. See *Decision traps*. It also accounts for the slower and more reflective analytical type decision processes where plans are explicitly formulated.

The way an individual will make a decision may not be consciously selected. It depends on a number of factors related to the incident, time pressures (perceived and actual), and the command role adopted. For instance, a senior commander planning the resolution of a large scale incident may be more likely to reach a decision using an analytical process. A commander who is first in attendance at a house fire where people need urgent rescue is less likely to use this type of process and more likely to use intuitive decision making.

The diagram below depicts the Decision Control Process:

Situation

Commanders base their decisions on the way they interpret a situation. Good situational awareness is key to understanding the situation in a coherent way. It helps to predict likely developments. By assessing the situation a decision maker can understand the current characteristics and details of an incident and consider the desired end state.

Decision makers should continually be assessing the situation to support an accurate awareness. They should gather relevant information whilst making the best use of the time available. Though this list is not exhaustive, they should consider:

Incident information:

- What is the current situation?

- What has led to the current situation?

- How might the situation develop?

Resource information:

- What resources are available?

- What resources are needed to deal with the current situation?

- What resources am I likely to need, if the incident develops as I expect, considering:

  - People
  - Equipment
  - Specialist skills
  - Other agencies

Risk information:

- What are the hazards?

- Who is at risk?

- What is at risk?

- How can the hazards be controlled?

- What are the potential benefits of a course of action?

Plan

When forming a plan the commander should understand the current situation and the desired outcome. From this they can identify their objectives and develop an incident plan.

Objectives:

- What are the incident objectives and goals?

Tactical priorities:

- What are the tactical priorities?

Operational tactics:

- What are the operational tactics? (considering standard operating procedures and, where necessary, operational discretion)

- How are people going to achieve them?

- Who by? Sector commander, other fire and rescue service crew, other agency?

- With what? What resources do they need?

- Where? What locations?

- What do I expect to happen and by when?

Decision controls

Decision controls are designed to help guard against decision traps that might occur as a result of the type of decision process people naturally adopt in a situation. Before moving to the action phase, decision makers should use decision controls. They can do this as a fast, mental check or use them as part of a briefing. See *Decision traps*.

Decision controls are a rapid mental check that asks:

- Why am I doing this?

  - What goals does this link to?

  - What is my rationale?

- What do I think will happen?

  - Anticipate the likely outcome of the action, in particular the impact on the objective and other activities.

  - How will the incident change as a result of this action, what cues do I expect to see?

- Is the benefit proportional to the risk?

  - Consider whether the benefit of our actions justifies the risks being accepted.

Decision makers should make good, fast use of decision controls at incidents where risks are high and time is short. This means they need to practise using decision controls until they are second nature. The best way to practise is for decision makers to use decision controls at all types of incident. Repeated use will make them more effective.

Action

This phase involves implementing the decisions that have been made. Where feasible, decision controls should be applied before this phase, or as soon as possible afterwards. This applies whether decision makers get to action from planning or directly from situation assessment. See *Decision controls*.

Communicate

Communicate the outcomes of the decision assertively and effectively. For example, this may be to issue instructions and share risk-critical information. It may also be to provide updates on the situation, on progress or detail about what is happening at an incident. See *Communication*.
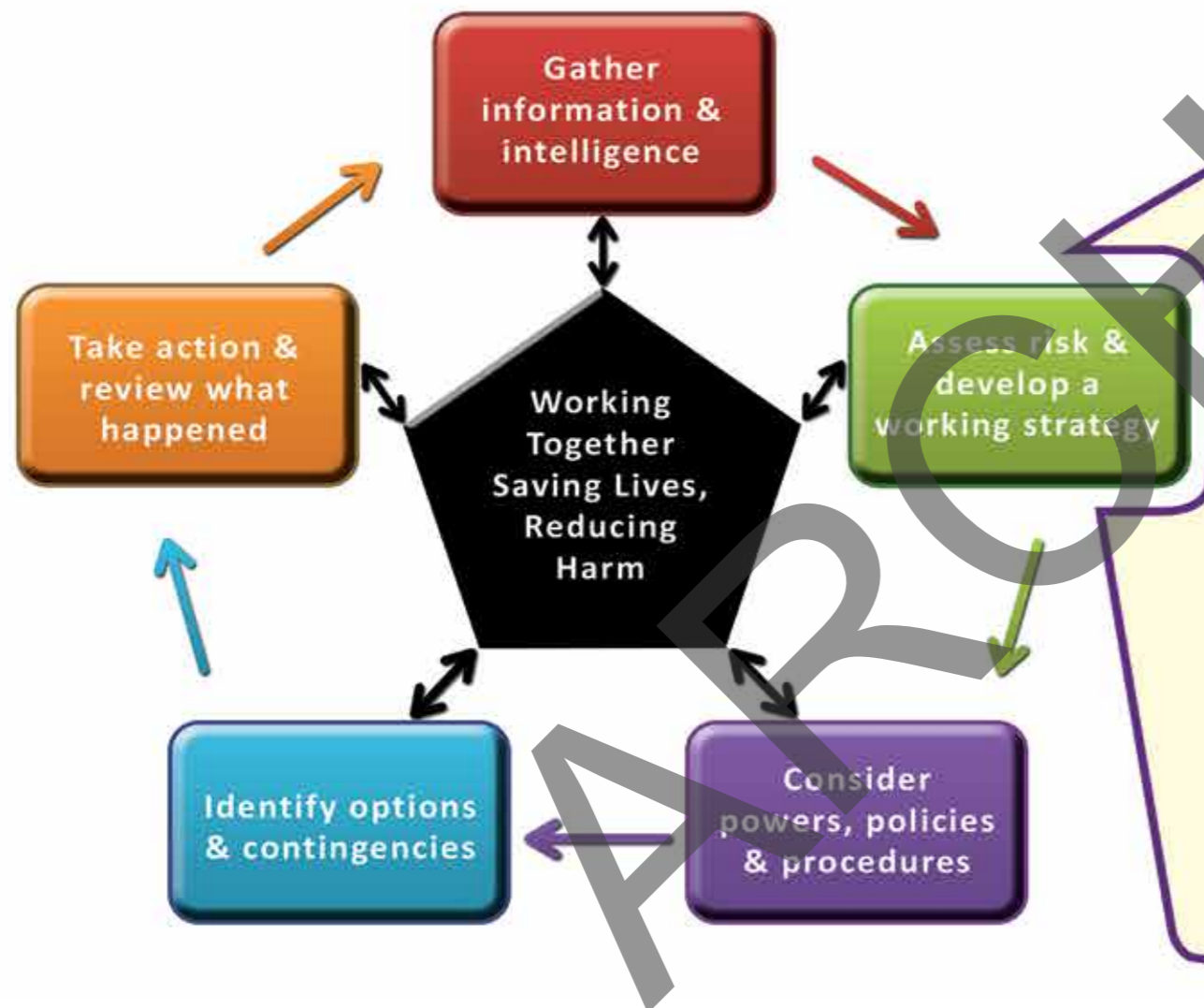
Control

Control how the activities are implemented to achieve the desired outcomes. Consider delegating responsibility where this will help increase or maintain control.

Active monitoring

The commander should be actively monitoring the situation, including information on progress being achieved against that expected. This ensures that their awareness remains an accurate reflection of the actual situation. They should consider whether their tactics or incident plans are suitable, sufficient and safe. They should consider and question any areas of uncertainty, especially where they have made assumptions. Operational assurance or active incident monitoring arrangements, can aid commanders in maintaining accurate situational awareness.

Progress information:

- Actual progress: what progress has actually been made?

- Expected progress: how does this compare to the expected progress?

- Predicted progress: what further progress do I predict? If I compare what happened to what I thought would happen, what do I now predict?
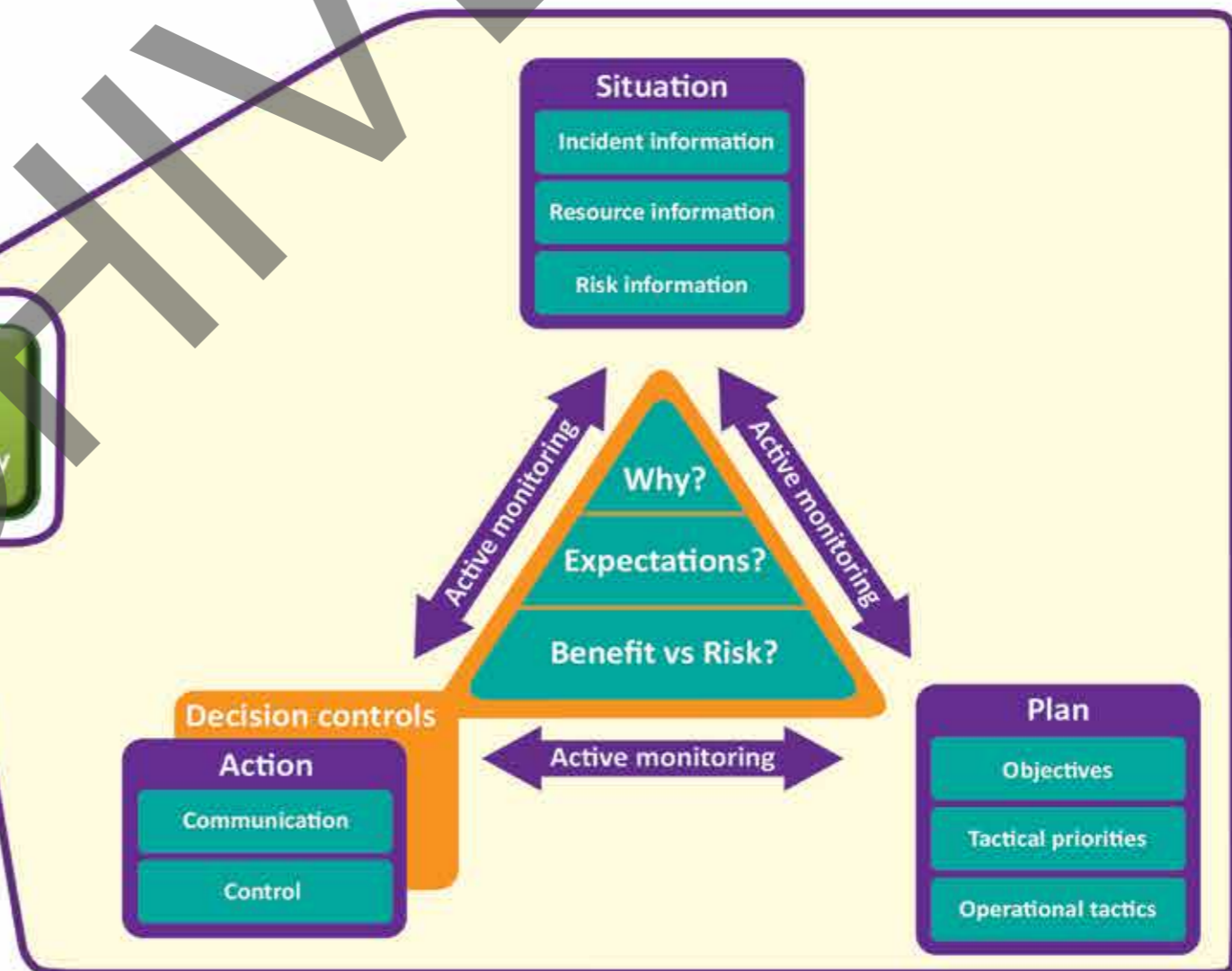

Joint decision making

The Joint Emergency Services Interoperability Principles (JESIP) Joint Decision Model is a method responders have agreed to use at multi-agency incidents.

The diagram below shows how the decision control process supports the JESIP Joint Decision Model; in particular the element of 'assessing risk and developing a working strategy'. It helps to feed information into the Joint Decision Model, and can be used as a process to plan and implement activities to achieve the fire and rescue objectives that have been agreed collectively using the Joint Decision Model.

This helps to feed information into the JDM process, and as a process to plan and implement activities to achieve the fire and rescue objectives that have been agreed collectively using the JDM.

For further information on the Joint Decision Model and how to use it see the *JESIP Joint Doctrine.*

Factors that affect joint decision making

There may be numerous situations when a team of people will need to reach a decision to achieve a common goal. Examples include a command team, a tactical co-ordinating group, or a crew working together on part of the operational plan. Often, teams will feed information to a leader who will make a decision for the team and control activities. But at times a crew may make decisions remote from their incident commander. An example is the decisions made by a BA crew in relation to their task.

Joint decisions are based on more than one perspective. The incident commander should be aware of this and the following factors which can affect joint decisions:

Poor communication

Team members may not communicate the right information to have a shared understanding of the situation. Terms may be misinterpreted or have different meanings to individuals. Clear briefing and communication between teams will help to avoid conflicts in understanding and what teams expect to happen.

Group think

On some occasions the group can suspend rational judgement to maintain group cohesion. People may set aside their personal opinions and adopt the opinion of the group. An example may be a team accepting an inappropriate proposal without challenge, or being hesitant to contradict their team leader with valid information. People who are opposed to the decision may remain quiet to avoid affecting the dynamic of the group, or their own status within it.

Interpersonal conflict

Interpersonal conflict between team members may manifest in a lack of co-operation, or a lack of motivation to engage.

Status

Incident commanders should avoid judging how relevant information is by the status of the person who offers it. Expertise or competence may sometimes be relevant to weighing information. But not always; Leaders should understand how their pre-conceptions about status can affect their judgement. Useful information can come from any member of the team.

Lack of confidence

Team members may lack the confidence to contribute new or relevant information. They may be affected by their own uncertainty or their status in the group.

Failure to challenge

Team members may fail to challenge assumptions because they wrongly assume that others share the same understanding of the situation and task.

Organisational culture

The culture of the organisation can drive behaviours both on and off the incident ground. Typical examples include how people react to status, and how likely they are to challenge assumptions. Fire and rescue services should understand the impact of their culture on team decision making.

Operational discretion

Most situations that incident commanders are faced with are not unique and are foreseeable. In resolving an incident, commanders use their own experience and knowledge of guidance, together with that of the command team and crew members. However, incident commanders may occasionally be presented with a situation that is extremely unusual and not reasonably foreseeable. In this circumstance they may have to make decisions using their professional judgement.

Operational discretion relates to rare or exceptional circumstances where strictly following an operational procedure would be a barrier to resolving an incident, or where there is no procedure that adequately deals with the incident. Commanders need to be sufficiently aware of procedures, the skills and qualities of crew members, and the capability of resources available.

Outcomes which would justify applying operational discretion include:

- Saving human life

- Taking decisive action to prevent an incident escalating

- Incidents where taking no action may lead others to put themselves in danger

The overarching principle should be that in the opinion of the incident commander the benefit of taking unusual, unorthodox or innovative action justifies the risk. See *Decision controls*.

Any decision to apply operational discretion should be the minimum necessary and only until the objective is achieved.

To support the post-incident learning process, fire and rescue services should have procedures for incident commanders to record the reasons that support their decision. The extent of the record should match the severity and/or complexity of the incident.

On occasion, crew members and/or members of the public might apply pressure on an incident commander to act. An incident commander can apply operational discretion, therefore it is unlikely that a crew member would intervene entirely of their own volition without putting colleagues or members of the public at additional serious risk. See HSE document *Heroism in the fire and rescue service*.

Incident commander communication

Effective communication is fundamental to achieving successful and safe resolution of incidents. It provides the incident commander with knowledge about the situation and progress of tasks. Obtaining accurate and timely information is crucial to underpin situational awareness and subsequent decision-making. It helps the incident commander perform the role in a confident and determined manner and thereby assert their leadership and authority.

Communication is vital for co-ordinating activities, completing tasks and handover of command. Sharing accurate and timely information is also critical for helping others to have a common understanding of the situation, what is happening and what needs to happen next. Even the most effective plans will only work if the people putting them into practice understand them.

Communication helps develop and maintain shared situation awareness across a command team and with colleagues from other agencies. For example, a common understanding of the situation, what is happening, and what needs to happen next, is particularly important at major incidents involving multiple agencies.

As well as exchanging information, good communication helps to build relationships. This is important to enable individuals to be effective in carrying out their tasks to resolve the incident. Incident commanders should be aware that effective communication is essential for good leadership and makes it easier for people to follow instructions, understand briefings and have confidence in what is being stated. See *Leadership*.

The manner in which an incident commander communicates influences how their personnel frame the situation they are confronted with. An incident commander who communicates confidently and in a calm manner when under pressure will instil confidence in others and make individuals more resilient to pressure and less likely to operate outside of the incident plan.

Communication and understanding

Even the most effective plans will only work if the people putting them into practice understand them. An incident commander should be aware that communications are not always understood in the way they are intended. Problems with communications arise because the sender often assumes the person receiving has the same understanding. Incident commanders should check the other person's understanding of important communications to ensure a shared understanding of the information.

Forms of communication at an incident

Different forms of communication are used at incidents and include:

Verbal

Most communication at incidents is verbal, either directly or through radio communications. Incident commanders should be aware that verbal communication is important for building a common understanding for teams to complete tasks.

Non-verbal

People are constantly communicating, even when not using words. Non-verbal communication can be used to complement or reinforce verbal communications and is also a major signal of emotional state. This may be intentional or non-intentional.

Non-verbal communication may include:

- Facial expressions and eye movement
- Body movement and gestures
- Voice characteristics and qualities

The manner in which an incident commander communicates verbally and non-verbally with others influences the development of relationships and the creation of a positive team working environment.

The incident commander should consider how their non-verbal communication is likely to be perceived when commanding an incident. It should be consistent with their message, which is important when briefing crews or liaising with other agencies. Non-verbal communication is particularly important when interacting with members of the public in an emergency situation.

Written

When written information is captured on the incident ground, care should be taken to ensure it is accurate, clear and relevant. This may involve a variety of personnel from a command support team member, to a loggist who will contemporaneously record the decisions and conversations of an incident commander. Close attention by the incident commander to the written records generated is essential to avoid misunderstandings.

Electronic

Mobile data terminals, computer-based command support systems, digital cameras, and mobile telephone devices may provide an incident commander with visual as well as written information about an incident; for example via a helicopter downlink, risk database, or social media websites. Equally, such systems may permit an incident commander to share information with members of the command team, colleagues from other agencies, and personnel remote from the incident.

When visual information is communicated in such a manner it is important for the receiver to understand the context surrounding it to avoid misunderstanding; for example, the meaning of symbols on a plan, or the nature of materials involved in a fire determining the operational tactics on view.

Having visual and other electronic information does not mean that other forms of communication are no longer required. Just because an incident commander has sent pictures of the incident via an email to a remote colleague does not mean that a shared understanding of the situation has been achieved. Such information must be supported by verbal or written communication to ensure the context and message an incident commander wishes to convey is understood. Security of the IT networks over which such information may be transmitted and received is vital to protect against sensitive information from reaching unauthorised individuals.

Effective communication

Effective communication is when information has been exchanged and is understood in the way it was intended. Quality, relevance and clarity of interpersonal and radio communication is essential, for example when relaying information on the incident ground and to fire control. See *National Operational Guidance: Operations.*

Effective communication:

Is clear

Avoid ambiguity by using commonly understood terms. This is especially important when working with other agencies. Remember that for other agencies some terms might have different meanings.

Is relevant and concise

Keep communications to the point. This is essential during high pressure situations. Incorrect information can overload the receiver and the meaning can be lost; information should only be exchanged with relevant individuals.

Is timely

Communications should be made at an appropriate point in time. To avoid distractions from critical tasks consider how urgent the information is and the current task demands of the receiver.

Is understood

This prevents misunderstanding and differences in shared situation awareness.

Questions assumptions

Both senders and receivers of information may have assumptions about the information. Incident commanders should question and clear up assumptions. This will help to make sure what they say is what the other person hears and understands.

Is assertive

There is a clear benefit to being assertive to clarify meaning and test assumptions. Both confidence and status can affect the ability to be assertive under pressure. It is important for an incident commander to be able to distinguish between being passive, assertive and aggressive. If an incident commander is passive, they may fail to represent their views effectively so that others take note of them. Where an incident commander is aggressive, they can ignore the views of others, be defensive and act in a superior manner. However, an assertive incident commander will respect the views of others and remain objective. Features of assertiveness are asking questions to acquire information, and advocating a particular point of view.

Encourages effective listening

The environment at an incident can make it more difficult to communicate. Noise, adverse weather conditions and heightened levels of activity can be distracting and make listening difficult. It is important to concentrate on content rather than delivery as pre-conceptions about the status of the person who is communicating may also affect listening. Incident commanders should not interrupt or complete the sentences of the other person. They should be supportive and patient with them. To listen actively, an incident commander should adopt positive body language, make eye contact, ask questions and paraphrase.

Matches words and behaviours

People are constantly communicating, even when not using words. When verbal and non-verbal messages match, it helps people to make sense of the message. For example, a calm approach reinforces a reassuring message.

Barriers to communication

There are many barriers to communication, which may lead to misunderstandings that impact on the effectiveness and safety of incident operations. The table includes examples of barriers to communication:

Form of communication	Barriers to communication
Verbal	• Remote from receiver • Inappropriate language • Language difference • Inability to hear • Noise • Interference • Distraction • Poor listening skills
Non-verbal	• Emotions • Incongruent body language (to nature of message) • Lack of body language (remote from communicator) • Voice level • Status • Culture • Stereotyping • Discrimination
Written	• Language difference • Poorly written script • Spelling errors • Punctuation errors • Poorly formatted documents
Electronic	• Hardware failure • Software failure • Communications network failure • Over reliance on electronic communication

Personal resilience

There are two types of stress that an individual may experience. These will adversely affect an incident commander's behaviour and distract them from commanding the incident. This in turn may jeopardise the safety of operations.

Chronic stress
A response to persistent, poorly managed pressures usually over a prolonged period of time. Such stress may lead to serious health conditions such as anxiety, insomnia, and high blood pressure.

Acute stress
A reaction to sudden, unexpected events such as those that may be experienced when working in a dynamic, high-risk environment when commanding an incident. Such stress will involve significant physiological and psychological effects akin to the fight, flight or freeze responses observed in animals.

Causes of stress

People differ in the way stress can affect them. Some effects can be subtle changes from normal behaviour. There is no definitive list of behavioural indicators and the effects can differ between individuals.

There are a number of significant factors associated with acute stress that may affect the incident commander and members of their teams. Even one team member who is affected in a negative way can be enough to affect the way a team functions. Incident commanders should be aware of the symptoms that suggest stress and pressure are damaging how the team works together.

These include:

Incident environment
Pressure from the incident ground may include physical aspects, such as noise, heat, darkness and adverse weather. It may also include distressing scenes and moral pressure to take action.

Uncertainty about the situation
If an incident commander does not understand the nature of the incident, the hazards and risk associated with it, they may not be able to accurately predict the outcomes of their operational tactics. Consequently, the correct decisions and actions may not immediately be known.

Workload management
A high workload that is not appropriately managed can lead to a number of issues that undermine assertive, effective and safe incident command. For example, critical information may be overlooked, or the incident commander may become overwhelmed. This may occur when spans of control become too broad.

Time pressure

The need to take risk critical actions within a short time frame versus the resources and ability to undertake those actions. This may be because life-critical rescues need to be carried out, or in rapidly changing situations.

Fatigue
Physical and psychological fatigue can cause stress. See *Coping with fatigue*.

Performance anxiety
Fear that is triggered when required to undertake the role of incident commander, or the anticipation of undertaking the role.

New or unusual situations
An unknown situation where the incident commander has no experience or recognised procedures to draw on to decide what actions are appropriate.

Expectations not met
An incident that alters in an unexpected way, or where indicators of progress or incident type do not fit with current situation awareness may violate expectations. Also system, procedural, or equipment failures, or human error may result in a plan not being implemented in accordance with expectations.

Missing critical information
Level of situational awareness is low, therefore the corresponding uncertainty makes it more difficult to anticipate what may happen next, especially in relation to risk critical actions.

Multiple goals
Complex incidents may generate critical situations that require more than one goal to be addressed resulting in conflicts between objectives, including those of other agencies.
This may lead to indecision and hesitation about prioritisation and the actions to be taken.

Unsuccessful implementation of a plan
Expectations associated with the plan about the sequence of events are not met, which introduces uncertainty about the situation.

Recognising the effects of stress
Incident commanders should understand and recognise the effects of acute stress in themselves and others. Some effects can be subtle changes from normal behaviour; however there is no definitive list of behavioural indicators.

Typical indicators of stress can be broadly categorised as behavioural, emotional, physical and cognitive:

	Impact	Signs and symptoms
Behavioural Indicators	A change in a normal pattern of behaviour can indicate acute stress.	• Hyperactivity • Irritability • Aggression • Becoming withdrawn or detached from situation • Apathy
Emotional Indicators	Experiencing stress can lead to emotional distress.	• Vulnerability or a feeling of loss of control • Panic • Anxiety • Fear of situation • Fear of failure
Physical Indicators	Situations that feel stressful can result in the body releasing Adrenaline. This can result in some physical changes that can indicate stress.	• Increased heart rate • Pupil dilation • Sweating • Dry mouth • Butterflies in stomach • Trembling
Cognitive (thought process) Indicators	In manageable amounts, some stress may enhance cognition through clearer thinking and improved memory. However, in less manageable amounts stress can have negative effects on thought processes.	• Disrupted concentration • Difficulty prioritising objectives or tasks • Narrow focus or tunnel vision • Lack of focus on relevant cues • Memory impairment information overload leading to forgetting • Task overload due to the limited capacity to undertake tasks resulting in tasks being dropped or not completed • Easily distracted • Focuses on information that supports mental picture of the situation, whilst ignoring other pieces of information • Forgetting to carry out an intended action at the time it was due to be done • Impaired decision-making • Blank mind • Resort to familiar or drilled routines

Impact of stress

Stress may lead to:

Impaired situational awareness

Impairments such as a narrow focus and becoming easily distracted may result in difficulties with scanning the scene. They may struggle to assimilate the information presented so they can understand the situation fully.

Impaired decision-making

Failure to consider all of the relevant issues (due to tunnel vision) can lead to poor decisions being made.

Impaired communication

The negative behavioural and emotional effects of stress, such as anger and irritability, may make communicating clearly with others difficult.

Impaired teamwork

Poor communication is likely to impair teamwork, leading to a lack of shared understanding about the situation, objectives and plan. Team members may focus on specific tasks, rather than team objectives.

Impaired performance

Individual and team performance may decline due to stress, with an increased likelihood of errors being made.

Impaired leadership

Negative emotional responses are likely to be detected by others, and are known to elicit similar emotions. This can result in a breakdown of the relationship and confidence may be lost.

Managing stress

Fire and rescue services should prepare their incident commanders and operational personnel to function under stressful conditions. The following factors help build team resilience to stress:

Awareness of stress indicators

Team members and supervising officers should be able to identify the symptoms of stress that can be detrimental to their own performance and of others. Individuals should feel able to say when an overload of stress is impairing their ability to carry out their function without fear of stigma.

Shared knowledge, understanding and expectations

Lack of understanding can underestimate issues and risks. Critical information may not be shared if the perceived risk is lower than the actual risk. Training that familiarises team members and supervising officers with a range of roles and tasks likely to be encountered will strengthen understanding of the likely impact of a team member's actions on the activity of others.

Team flexibility and adaptation

Factors such as time pressure and uncertainty can bring about changes to plans and activities to complete the task or achieve the goal. Teams that can adapt activities as the situation demands will be more likely to be effective in the face of situational pressures.

Good team communication skills

Stress factors can impair communication, leading to a lower level of shared situational awareness. Training that exercises effective communication in a pressurised operational environment can enhance skills and build resilience.

Comprehensive knowledge base

Developing a deep, broad knowledge base in relation to incident command, skills and key operational policies can make the unfamiliar more familiar.

Confidence

Frequent practise of command skills under pressure may build confidence and resilience. Training should correct errors and build learning in line with standard operational procedures. It also builds confidence in the team because it helps them to behave in the way others expect.

Coping strategies during an incident

- Prompt detection, by being able to recognise the indicators of stress in self and in others, will enable corrective action to be taken

- Standing back and taking stock: for example, if it is safe to do so, taking a moment to stand back and review activities may relieve a feeling of being overwhelmed, which in turn, may help to process the information and facilitate continued functioning

- Seeking support from others to confirm a perception of a situation is accurate and decisions are sound

- Requesting reliefs for commanders or staff undertaking tasks or functions, when it has been identified that stress is harming a person's ability to perform

Coping with fatigue

Fatigue is a physical and/or mental state of feeling tired and weak. Physical fatigue results in an inability to continue functioning at normal levels of physical ability. Mental fatigue affects concentration and thought processes. Although mental and physical fatigue are different, they often occur at the same time. Physical work and extremes such as temperature and weather can have an impact on crews.

Incident commanders should be aware of the effects of fatigue on themselves and others, and ensure people are relieved appropriately. Some effects include:

	Signs and symptoms
Behavioural indicators	● Less expressive communication ● Difficulty in expressing self ● Becoming withdrawn ● Reduced communication ● Irritability
Emotional indicators	● Anxiety ● Panic ● Vulnerability due to loss of control
Physical indicators	● Impaired motor skills ● Poor timing ● Failure of co-ordination
Cognitive (thought process) indicators	● Impaired thought processes ● Difficulty in adapting to changes ● Lowered creativity ● Difficulty in making decisions ● Acceptance of lower standards of behaviour ● Overtly distracted by discomfort ● Neglecting tasks

Incident commanders should recognise the effects of fatigue in themselves and their crews.

They can manage the effects of fatigue by:

● Rotating crews

● Arranging welfare

● Providing reliefs

The right time for these arrangements will depend on the type of incident and its duration. Incident commanders should take action before fatigue begins to reduce performance.

Organisation at an incident

Incident commanders must be sufficiently trained, capable and knowledgeable to be able to effectively and safely organise resources to obtain the best resolution to an incident. It is the responsibility of all personnel, who may attend or are involved with an incident, to ensure that they are familiar with the requirements of the incident command system and that they can operate safely and effectively within it. This applies to those who will perform a command role and equally to those who will be operating under the command of others, including fire control.

Incident command and support activities start on receipt of the emergency call to fire control and continue to the conclusion of the incident. See *National Operational Guidance: Operations*.

Roles and responsibilities

Operations on the incident ground should be well-organised and controlled. The incident command system provides the incident commander with a clear framework to help structure, organise and manage an emergency. It can be adapted to all sizes and types of incident and helps incident commanders to deploy and use resources in an efficient and safe way.

The incident command system is a scalable and flexible all-hazards approach to operational management and organisation. The system's design helps an incident commander manage and achieve their plan. It encourages a controlled and systematic approach to resolving incidents. It is not the incident command system which achieves this outcome. It is how the incident commander uses it in support of their decision making together with their application of sound firefighting and rescue techniques. The incident command system will only be successful when applied with good command skills. See *Command skills*.

The incident command system allows the incident commander to use health and safety arrangements, including standard operational procedures and tailored to an incident and its objectives. This helps to achieve a balance between risk and benefit. See *the Firefighter Safety Maxim*.

At a more challenging incident it may be appropriate for a senior officer to assume command. However, it is more important to maintain continuity of command than automatically hand over command just because a more senior officer is in attendance. Transfers should be kept to the minimum needed to resolve the incident or manage welfare.

Some factors which influence fire and rescue service policy on transferring command include:

- Service staffing levels

- Geography of the service

- Organisational structure

Incident commanders should be aware of becoming over-burdened and having too broad a span of control. This can lead to ineffective leadership, poor decision making and poor communications. See *Situational awareness*. Incident commanders should consider the issues of team dynamics to get the best from their team. See *Operational team effectiveness*.

Incident commanders should apply the incident command system at every incident and it should be familiar to all personnel. At larger incidents, many fire and rescue service crews and officers will be operating under this nationally recognised system of work. Using common language and components prepares fire and rescue services for local, cross-border and national incidents.

The incident commander at an incident is the nominated competent and responsible person. When a more senior officer attends an incident, they should assess the existing operational plan and priorities. They will need to review the current risk assessment and the incident plan. This assessment forms part of the command process and will help decide whether to take over command or to take on another role, for example, operational assurance or active incident monitoring.

The most senior officer present holds organisational accountability, even when they have not taken the role of incident commander. This cannot be passed to another person. This arrangement allows a senior officer to take a variety of other roles, including providing tactical advice, mentoring and monitoring. Therefore the most senior officer present does not need to take the role of incident commander.

When command is handed over there should be a structured transfer with a formal acknowledgement. This should be communicated to all personnel and fire control. This is equally as important when an incident scales down and a more junior commander takes over the remaining tasks. For the incident command system to work well, the incident commander and other key roles should be clearly identifiable. It is important that command personnel:

- Are adequately trained

- Are familiar with policies and procedures

- Have the necessary competencies for their role

- Demonstrate effective command skills

- Are confident in their ability

- Know who they are responsible for

- Know who they need to report to

- Know what their operational brief is

The role of the incident commander

The incident commander has overall responsibility on the incident ground. In order to resolve an incident assertively, effectively and safely they should:

- Command and control the incident
- Identify hazards and manage risk
- Assess resource requirements
- Determine an incident plan
- Co-ordinate and deploy available resources
- Evaluate progress against the plan

See the *National Occupational Standards for Fire and Rescue Services*.

There are common elements to all incidents. Where they differ, incident commanders will need to adapt their actions using their experience and knowledge. They will need to consider the hazards they face and the resources available to deal with them.

It is vital for the incident commander to have accurate situational awareness. This will allow them to make early decisions, develop an incident plan and commit resources. On arrival at an incident the incident commander will carry out an immediate evaluation, including a *Dynamic risk assessment*. See *Dynamic risk assessment*.

As soon as time permits commanders should conduct a detailed assessment of the situation. For example, this may include the structures involved, construction types, hazards and water supplies. They should use the decision control process (DCP) to help set objectives and organise their actions. See *Situational awareness* and *Decision control process*.

Throughout the incident, the commander must ensure a suitable and sufficient risk assessment is in place and is regularly updated. They should ensure control measures are in place and any significant findings recorded. See *Analytical risk assessment*.

Incident command becomes more complex with greater scale and duration. An individual cannot be expected to manage and control all aspects of command on their own at a larger incident. See *Span of control*. It is important for the incident commander to create an appropriate command structure.

This may include:

- Setting appropriate reporting lines
- Delegating levels and tiers of authority and responsibility
- Agreeing spans of control for each commander
- What role the outgoing incident commander will take to maximise their situational awareness

Effective communication is important at all incidents. Accurate information has to pass between the incident commander and all persons on the incident ground. A thorough briefing of crews should take place before deployment. Crews need to know which tactics the commander wants to use, as well as sharing safety critical information. Without such briefings there is the potential for crews self-deploying or operating outside the incident plan.

Incident commanders should be aware of activity and developments on the incident ground and has a responsibility to ensure messages and information pass to the fire control. This ensures a record is maintained that captures an accurate picture of an incident. See *Incident command communications* and *Situational awareness*.

The incident commander should establish effective arrangements for communication are in place to ensure a good flow of information is maintained.

An incident commander should make sure that they can:

- Gather and share information
- Issue instructions to personnel
- Receive situation reports from all areas, including sector commanders
- Assess and provide for the needs of other agencies

Thorough briefing of crews is essential to ensure personnel know the incident commander's intentions and objectives and any safety critical information. Incident commanders may hold briefings en route to an incident. On arrival they should carry out a risk assessment and add this to the briefing. See *Incident command communications*.

The extent of the briefing will depend on an incident's type and scale. For example, the pre-briefing for small fires may be straightforward. Where crews have little experience or there is high risk then a more comprehensive brief may be needed.

It is also important to debrief crews that have withdrawn from a working area during an incident. Debriefs are a good source of safety information and this should not be overlooked.

The incident commander needs to gather information, issue instructions and receive situation reports. They also need to assess the needs of other agencies and plan to meet them. They should establish suitable arrangements for communications.

The incident commander will need to:

- Establish communication links with fire control
- Ensure radio channels and call signs are correctly assigned
- Establish communications with other agencies
- Establish communications with sector commanders and receive regular situation reports
- Ensure sector commanders can communicate between themselves
- Make use of site specific communication systems, for example, some complex buildings and structures, including those extending underground, have communication systems installed for use by emergency services

These tasks will usually be the role of command support, under the guidance of the incident commander.

Levels of command

This part of the guidance should be read in conjunction with the *CFOA Command Training, Assessment and Qualifications Fire and Rescue Service Guidance*. This provides details about the four nationally agreed levels of command qualification for fire service operations.

Level 1 - Initial

Command and control operations at a task focused supervisory level or a more senior level at a serious escalating incident.

Level 2 - Intermediate

Command and control operations at a tactical middle manager level or a more senior level for large or significant incidents.

Level 3 - Advanced

Tactical command at the largest and most serious incidents, either at the scene or at a remote location. There is a requirement for tactical co-ordination and of having reached the stage of using a developed command support and a full ICS structure.

Level 4 - Strategic

Strategic command associated with commanding within a Strategic Co-ordinating Group (SCG), or Regional Resilience Partnership (RRP) in Scotland.

At a multi-agency incident, different agencies may use three levels of command and control. These are Operational, Tactical and Strategic. They relate to roles not rank. The titles do not show seniority, they show the function of that person or group. Some organisations still use the terms Bronze, Silver and Gold instead of Operational, Tactical and Strategic.

- Operational (Bronze)
- Tactical (Silver)
- Strategic (Gold)

It is important that officers understand the levels of command and can be flexible in using them.

Command Level (Role related)	Operational (Bronze)	Tactical (Silver)	Strategic (Gold)
Location	At scene.	At scene or remote	Remote
Level 1: Initial	✓		
Level 2: Intermediate	✓	✓ (Reflecting organisational policy / JESIP Doctrine)	
Level 3: Advanced		✓	
Level 4: Strategic			✓

These levels are role-related and the titles may not reflect seniority of rank. Instead, they show the function carried out by that particular person or group.

Incident commanders should be aware that when working with military personnel they use the terms Operational and Tactical in the reverse of the fire service incident command system.

Responsibilities of the incident commander at Level 1

When the incident commander arrives at an incident they will have a range of information to consider. This will become even more complex and difficult as the incident escalates. The incident command structure must be introduced at the earliest opportunity. This includes command support and any additional functions to support operations at the scene.

The incident commander may need to access technical advice to help them make decisions and set tactical priorities.

Responsibilities of the incident commander at Level 2/3

On arrival of the more senior officer, consideration should be given to allowing the existing incident commander to remain in charge, or to take over.

When command of an incident changes it should be disciplined and formal. In every case a clear and precise exchange of information should be undertaken to confirm the status of the incident or sector, before assuming command or delegating responsibility. It is the responsibility of the person passing over command to ensure that all relevant information is handed over. The best method of transferring command is through face-to-face briefings between the current commander and the new commander.

The following should be considered when taking over command:

- The rationale for taking over

- Whether the new commander has sufficient situational awareness or requires additional information

- Whether to confirm or amend the plan according to the agreed operational priorities and objective, risk assessment and tactical mode

- Ensuring safe systems of work are in place

- Checking resources are adequate and deployed to match the tactical priorities

- Reviewing communications, including with other responders

- Whether the command structure is appropriate

Personnel at the incident, the designated control point and fire control must be informed of the change of incident commander. There should be no doubt about the handover.

The degree of control an incident commander needs to maintain may depend on the size and demands of an incident. In addition to the normal command team role, at larger incidents they may assign specific areas to appointed officers.

These may include:

- Marshalling

- Breathing apparatus sector

- Hazardous materials or environmental protection

- Water

- Foam

- Management of reliefs including crew rehabilitation and welfare

- Communications

- Media liaison

- Others as necessary according to need and local arrangements

The incident commander may need to access technical advice to help them make decisions and set tactical priorities. See *Tactical advisers*. Commanders should be clear that tactical advisers and support sectors are there to assist. The commander remains in charge, with the responsibility for decision making and the incident plan.

Where crews are working on technical or widespread operations, specialist support sectors may assist them. Examples of technical or widespread operations include high volume pumping, mass decontamination or urban search and rescue.

The incident commander should ensure clear communications with sector commanders. This is critical to maintaining situational awareness. See *Situational awareness*.

Care must be taken not to create a 'command gap' because the incident commander is not available. This could be because they are undertaking a reconnoitre of the incident ground, for example, or because they are in a briefing. The incident commander can mitigate this, for example, by being available by radio.

The following should continue until the last appliance leaves an incident:

- Identifying tasks and hazards

- Assessing risk

- Managing control measures

- Reviewing control measures

- Handing responsibility for health and safety to the appropriate person or agency

The incident commander may wish to nominate an officer to gather information for the post-incident review. Where possible and appropriate, statements should be taken from crews before they leave.

Tactical advisers

At incidents requiring specialist equipment such as water rescue, USAR, HVP or mass decontamination, a specialist tactical adviser (TacAd) may be deployed to assist the incident commander. They can be used at a range of incidents regardless of size. At more complex incidents, several advisers may be used by the blue light services. More details can be found in the *National Co-ordination and Advisory Framework*.

When a tactical adviser is present, the incident commander will retain ultimate responsibility for tactics, deployment and safety. Tactical advisers should not take command; they are there to advise the incident commander or personnel nominated by them. They should also make sure that they understand the aims and objectives of the incident commander, and that any advice they provide the commander is understood and when applicable, recorded.

Where tactical advisers are deployed by more than one blue light service, this can assist in effective communication between blue light partners. This should support a common understanding of risks, hazards and tactics to inform the overall plan for resolving the incident, especially when sensitive information is involved. Each organisation is responsible for providing their personnel with suitable training.
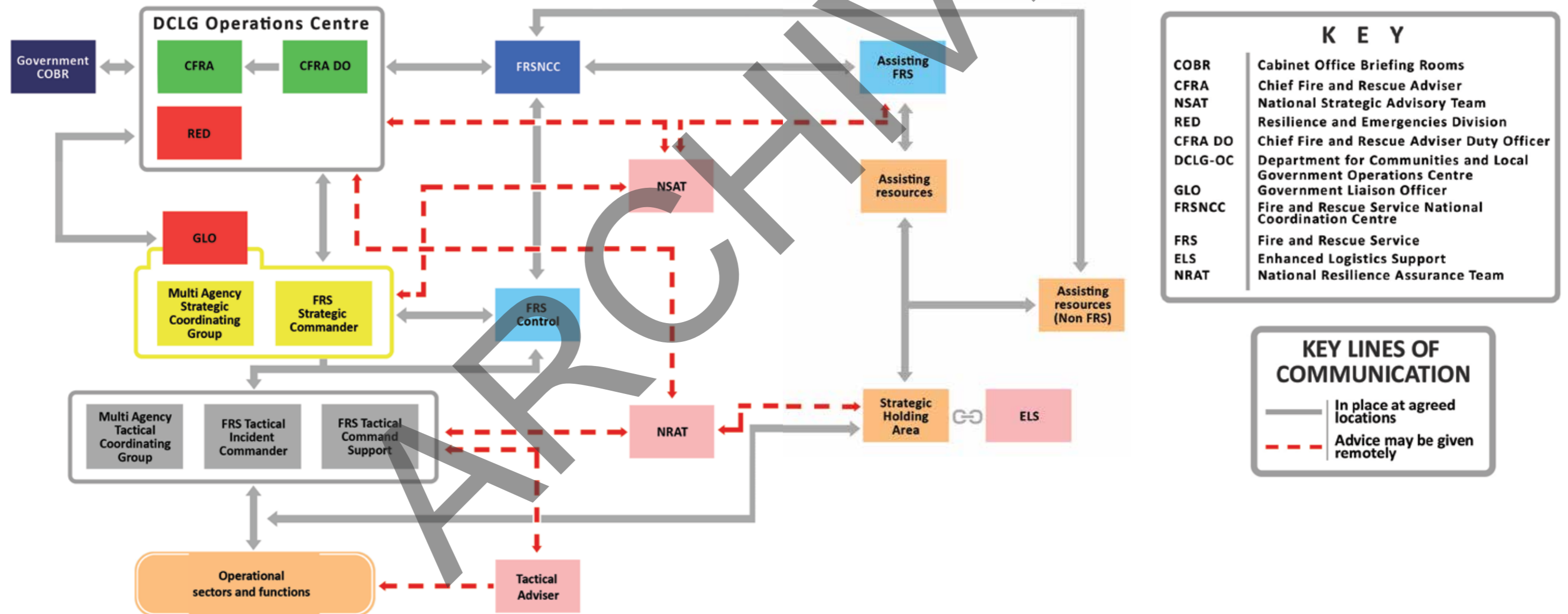
Interoperability and intraoperability

Multi-agency interoperability is essential for incidents of all sizes. The *Joint Emergency Services Principles Joint Doctrine* aims to promote greater consistency across blue light services. This includes the use of key terms and common terminology. There is no legislation that states the primacy of one agency over another. The joint doctrine gives further guidance on co-ordination between emergency services.

The key principles of effective joint working are:

- Co-location
- Communication
- Co-ordination
- Joint understanding of risks
- Shared situational awareness

The National Co-ordination Advisory Framework (NCAF).

Interoperability is defined as the extent to which organisations can work together coherently as a matter of routine.

Intraoperability means the ability of a fire and rescue service to work together with other fire and rescue services.

It is important that fire and rescue services can provide an integrated response to local, cross border and national incidents. This approach supports the principles of national resilience.
It also promotes a better response at local and cross-border levels. In such situations, services need a mutual understanding of their resources and capabilities.

Fire and rescue services have had supporting arrangements for assistance between services for many years, some of which are based on legislative requirements. The *NCAF framework* details this.

KEY

COBR	Cabinet Office Briefing Rooms
CFRA	Chief Fire and Rescue Adviser
NSAT	National Strategic Advisory Team
RED	Resilience and Emergencies Division
CFRA DO	Chief Fire and Rescue Adviser Duty Officer
DCLG-OC	Department for Communities and Local Government Operations Centre
GLO	Government Liaison Officer
FRSNCC	Fire and Rescue Service National Coordination Centre
FRS	Fire and Rescue Service
ELS	Enhanced Logistics Support
NRAT	National Resilience Assurance Team

KEY LINES OF COMMUNICATION

- In place at agreed locations
- Advice may be given remotely

Shared situational awareness is important. At major or complex incidents, a more formal approach to planning and outcomes should be taken. All responding services should agree these using the approach aligned with the *JESIP Joint Doctrine Interoperability Framework, the JESIP Joint Decision Model*.

Incident commanders should be well versed with the JESIP doctrine. It is particularly important that they are familiar with the Joint Decision Model.

For intraoperability, fire and rescue services should have regular contact to ensure that appropriate cross-border plans are in place. They should test these plans under realistic conditions. Joint training is also valuable and will help to find differences in policy or procedure to avoid confusion arising at incidents.

The UK's emergency responders' model is through the use of operational, tactical, and strategic command. See *Cabinet Office, Emergency response and recovery Concept of Operations*.

Operational (Level 1 and 2)

The operational commander will control and deploy the resources of their respective service within a functional or geographical area and implement direction provided by the tactical commander. As the incident progresses and more resources attend the scene, the level of supervision will increase in proportion.

Tactical (Level 3)

The tactical commander will be located where they can maintain effective tactical command of the operation. Invariably the fire and rescue service incident commander will be in attendance at the scene. They will either attend the tactical co-ordinating group (TCG) when in operation or nominate a liaison officer to attend.

Strategic (Level 4)

The strategic commander in overall charge of each service is responsible for formulating the strategy for the incident. Each strategic commander has overall command of the resources of their own organisation, but will delegate implementation decisions to their respective tactical level commanders. When strategic commanders, from respective agencies, meet they are known as a Strategic Co-ordinating Group (SCG) in England and Wales, Regional Resilience Partnership (RRP) in Scotland and Civil Contingencies Group (CCG) in Northern Ireland.

The fire and rescue service ordinarily structures incidents without using strategic command. However, if agencies form a Strategic Co-ordinating Group (SCG), or Regional Resilience Partnership (RRP) in Scotland, the fire and rescue service should structure the levels below as Tactical and Operational. When a Tactical Co-ordination Group (TCG) has been established a designated Fire Tactical Commander will be required.

Depending on the circumstances, different emergency services may choose to command from different locations. The fire and rescue incident commander may choose to command from an incident scene or an established command location. The incident commander may choose to attend an off-site command location. In this case, an appropriate member of the incident command team would deputise in their absence. The designation and responsibilities of 'incident command' will sit with this officer on-scene.

The command team

The command team includes the incident commander and any other personnel that are operating in a commanding role (e.g. command support, operations commander and sector commanders).

Fire and rescue services will have different approaches towards deciding which roles and functions form part of the command team. However the main aim is to enable clear communications and decision making between the incident commander and those performing operational tasks.

It is important to keep the span of control for tactical roles as narrow as possible. Do not give individuals so many aspects that they cannot give them enough attention. The incident command system provides a structure which maintains manageable spans of control.

The system provides for additional roles within the incident command structure. This reduces the burden on the incident commander. The command team concept can also be applied to operations command, sector command, and functional command support activities.

Incident commanders must maintain open and effective communications. Examples include direct or indirect reports from individuals, crews or sectors. Other parties will also be communicating; emergency services, responding agencies and fire control(s). When assessing the span of control, the incident commander should consider how to manage communications and the pressure this may create. See *Situational awareness*.

It is important to limit both direct communication and information flows to manageable levels. Spans of control should ordinarily be limited to five lines of direct communications; this may be excessive if these channels are intense and active. See *Spans of control*.

At all incidents a command support function should operate. This should be scalable depending on the complexity of the incident to assist an incident commander to manage reporting lines. It can ensure that critical information and advice reaches the right people on the incident ground, in a timely manner.

The specific arrangements vary with the circumstances of the situation and the stage of the incident. The command team approach offers an incident commander the means of managing complex situations. It creates a team of commanders working together who can function better than an individual.

An incident commander may be able to manage and oversee small incidents on their own. Once there are a number of crews present, the incident commander should consider appointing sector commanders to supervise the crews.

Once an incident has become more complex, with a number of sectors in use, the incident commander may choose to appoint an operations commander. This role will manage the sectors and reduce the span of control for the incident commander. If the number of sectors continues to grow, they may need to group the sectors under more than one operations commander. The system is able to scale up to any situation as needed.

Despite delegating responsibilities the incident commander is responsible at all times for the overall incident management. They will focus on the command and control, the use of resources, incident planning and the co-ordination of the sector operations.

Command support

Command support and its related support sectors are critical to resolving incidents. An incident commander cannot manage a complex and rapidly developing incident alone. Effective and structured support systems that can vary with the size and demands of an incident need to be implemented.

Fire and rescue services will have different approaches to the roles and functions that make up the command support team. The aim at every incident is to ensure clear communications and decision making between the incident commander and operational personnel.
Some of the command support functions may be at locations remote from the incident.
This is particularly the case at major and multi-agency incidents, or where multiple incidents are occurring (e.g. wide-scale flooding). See *Joint decision making*.

The incident command system and command support arrangements described in this guidance provides a framework to assist the incident commander. This in turn helps the incident commander to organise and deploy available resources in an assertive, effective and safe way. To achieve this, it is important that everyone understands the different roles and responsibilities in the command support function. This helps maintain common expectations which feed into shared situational awareness. See *Situational awareness*.

It is important that personnel who work as part of command support are competent. Some tactical adviser roles have accredited courses and qualifications (e.g. national inter-agency liaison officer (NILO), hazardous materials adviser (HMA) and safety officer); however for other roles there are currently no recognised qualifications (e.g. command unit operator, marshalling officer). Despite this, fire and rescue services should ensure its people have the right skills and competencies.

Each service will need to consider the degree of training required for each role. They should consider how they will help people acquire, develop and maintain these skills. Skill development relates to the risk profile for an area. The training requirements for different officers will vary depending on their role.

Services will also need to consider the scale of an incident they expect personnel to deal with. Command support at a small incident will have different requirements to a similar role at a more complex incident.

Personnel with roles in specialist vehicles and major incident rooms should have the appropriate competencies (e.g. for using specialist equipment). Services will need to make sure they have systems to record training, assessment and exercises.

Command support should be used at all incidents to help the incident commander manage an incident. It should be put into place as soon as is practically possible. The importance of establishing command support in the early stages of an incident cannot be over emphasised. A suitably experienced member of personnel should be nominated to operate command support. This may be a firefighter during the early stages.

The command support function will operate from the command point, which should be clearly identified; usually by the use of blue lights or the use of a red flashing light or a red and white chequered flag.

The command point should be suitably located and may require relocating as the incident develops. For example, an appliance not involved in pumping, or an officer's car. This will prevent oncoming crews or other agencies from having to enter a higher risk area. It will also allow briefings and other activities to be carried out away from a noisy environment and make communications more effective.

At larger incidents there may be a delay in supporting personnel arriving.

In such cases some aspects of command support could be:

- Undertaken by other personnel: For example, a firefighter appointed as marshalling officer

- Undertaken within existing command structure: For example, sector commanders responsible for their own water supplies until a dedicated water officer arrives

- Not undertaken or postponed: For example, no media interviews or statements until the media officer arrives

All support sectors should report to the incident commander via the command support function. This is important to maintain spans of control. At more serious incidents, it is likely that the command support function will be led by a senior and experienced officer. See *Sectorisation diagram*.

When the incident requires national assets, then a strategic holding area with enhanced logistics support may be in use. This allows resources to be briefed and organised away from the incident ground. See *CFOA National Resilience*.

Remote command support may be of assistance for managing large, complex or protracted incidents for example, a major incident room. There are many different ways to provide this. Each fire and rescue service should decide what roles and functions are required. These may differ from service to service.

It will also depend on the type of incident and may include:

- Operations cell

- Planning cell

- Logistics cell

- Finance and administration cell

- Communication and media cell

Command support systems and equipment

An effective command support system and equipment are required to support incident commanders. Each service will need to decide what to provide and how to achieve this.

Command support packs should be provided on appliances for use by those first in attendance and all personnel should be familiar with their use.

The packs should include:

- Relevant tabards
- Resources for checking nominated roles (for appliances and officers)
- Dry wipe board or similar for recording significant incident details
- Command structures in place and site plans
- Message pads
- Risk assessment forms

For larger incidents, a dedicated command support vehicle can provide relevant equipment and trained personnel. Each service needs to identify the equipment they will provide. This should include communications, IT systems and relevant software. The service should also decide how they will provide support if the command vehicle is unavailable. They may use a different vehicle or equipment supplied under mutual aid with other services.

When multi-agency command vehicles are likely to be present, the command point site needs to be carefully selected, with enough space to avoid any radio or satellite interference between services. Pre-planning and regular exercises with other agencies can help services understand their own requirements.

Incident commanders should collect clear, concise and accurate information as fast as possible to help them make decisions. They should make sure they provide appropriate information to other decision makers. This is an important factor affecting the outcome of an incident. Command support will use the information to support planning and brief relevant parties.

Suitable management information systems should be provided to help the command support officer and their personnel carry out their role. Providing risk-critical information and site-specific plans at an incident is essential to planning and ensuring safe operations. A lack of risk information, or not passing on information, can have a significant impact on command decision-making. Several incident investigations have identified this as a contributing factor.

All incidents have unique features. The reason for providing good, up-to-date information is to help the commander to make the best decision at the time. Services should have appropriate means of recording information at command points and in sectors. This information will include the tactical mode, the number of personnel working in the area together with key risks and hazards. Information may be recorded at multiple locations, therefore care should to be taken to ensure that all critical information is recorded and retained.

Decision logs

Incident commanders and the command team are accountable for the decisions they make. They should be able to provide reasons for what they did and why. Appropriate records should be kept at incidents to log key events, critical decisions and the thinking behind the actions incident commanders take.

The method of recording and amount of detail will depend on the size and scale of the incident. For smaller incidents it may be enough to use informative messages and tactical modes. Records should be more detailed for larger or more complex incidents.

A decision log provides:

- An accurate, 'at the time', record of all significant decisions made
- An audit trail of decisions, along with the reasons for making them based on the information available at the time
- A record of new information or changes in the situation
- A record of risk critical information from other services
- A way of helping the handover between commanders

It is important to record the rationale behind each decision. This will help those who may examine the decision-making process in the future. A decision log is not designed to record every action taken, however if there is uncertainty over how important a decision might turn out to be, then they should record it.

In this context, the definition of a decision is:

"Anything which could be construed as having chosen a course of action that could affect the outcome of an incident in either a positive or a negative way"

If this information is not recorded, post-incident debriefs will not have a decision-making audit trail to review. This may limit the lessons learned from an incident and may not support effective feedback to aid service improvements.

Decision logs should not be confused with an individual's contemporaneous notes.

Scalable command arrangements

Managing and supervising crews on the incident ground is an essential part of the safe system of work used by the fire and rescue service. It allows the incident commander to delegate responsibility for tasks and functions, but does not absolve them of ultimate accountability.

The incident command system is a framework that assists with the management of resources at an incident. The incident commander may devolve authority for some aspects of operations. The incident command system reduces spans of control to a manageable level and improves control and communications. Taking these steps may protect the incident commander from becoming overloaded with information. It also supports effective situational awareness and decision-making.

This way the incident commander can maintain control under conditions of stress and rapid change.

The principles of the incident command system are:

- Clear, defined and visible lines of command

- Manageable spans of control of commanders

- A communications infrastructure

- Appropriate responsibility and authority

- Clearly defined and understood roles and responsibilities

- Sectorisation of the incident

Understanding the 'span of control' concept is important when managing a large amount of activity and information. Dividing an incident into sectors provides a clear line of reporting. The Appendix shows how an incident can be scaled up or down using operations and sector commanders to ensure the span of control does not become too great for any member of the command team.

The incident commander should anticipate the likely scale and complexity of an escalating incident and develop the necessary command structure at the earliest opportunity.

Sector commander

A sector commander may be appointed to be in charge of a defined physical, geographical or functional area of operations. The role of the sector commander is to command resources within their sector.

The sector commander will report to the incident commander, or operations commander if in place. They will take responsibility for the resources and the achievement of objectives within their sector. The sector commander will mainly focus on implementing the incident plan, effective command and control, resource deployment, firefighting tactics and rescues. They have control on how they are going to meet their objectives agreed with the incident commander. They need to set priorities and objectives for their sector working within the incident commander's overall objectives and incident plan. Importantly, they will focus on the health and safety of their personnel.

Despite having control of resources within the sector, any change in tactical mode should have the explicit approval of the incident or operations commander. This applies except where they need to withdraw people from a hazardous area. In such a case they should tell the incident commander as soon as is practical and update the tactical mode.

Sector commanders provide direct and visible leadership. They should be in direct communication with personnel in their sector, and remain available to the crews they are responsible for and ensure shared situational awareness. The progress of operations in each sector should be communicated to the incident or operations commander. The officer assigned to command a sector should adopt the incident ground radio call sign for that sector, for example 'sector one commander'.

There are times when an incident commander may require a sector commander to leave their post.

This might be for a briefing or another purpose. They should be replaced by someone with appropriate competence and authority to maintain continuous supervision. Personnel operating in the sector need to know about this change. This prevents the creation of a command gap. When there is a change in sector commander, personnel in the sector, together with the command team, should be notified of these changes.

It is good practice for sector commanders to have their own command support resource to help them manage their sector. This will depend on the size and nature of an incident, but is particularly the case for large incidents.

Sector commanders should have appropriate means of recording information, including:

- Key risks and hazards

- The tactical mode

- Numbers of personnel operating within the sector

- A means of accounting for personnel

Operations commander

The operations commander supervises and co-ordinates operations. This is to allow the incident commander to maintain a workable span of control. The operations commander is a member of the command team, operates on behalf of the incident commander, and can approve changes to tactical mode.

The operations commander should avoid becoming involved in activities other than operations for example, command support, functional sectors or dealing with the media.

This allows the operations commander to co-ordinate sector commanders to ensure that:

- Firefighting and search and rescue activities are co-ordinated

- Support is offered

- Resourcing issues are addressed

- Risk assessments to support the priorities and objectives are performed at the right times

- Assessments are of the expected quality and are appropriately recorded

If an incident needs more than one operations commander to maintain the span of control, it is essential that their call signs can be distinguished. Sectors also need to understand exactly which operations command they fall within. Different incident ground radio channels can be allocated to each operations commander if the facility exists.

Identification of command roles

The command team includes officers who have a variety of roles. It is important to make sure they can be easily identified using a commonly understood method. This is particularly important at incidents that cross borders and other large incidents where officers who may not know each other work together.

The following are common methods of identification:

- Incident commander: white and yellow tabard (or in Scotland, red and white quadrants)
- Operations commander: red tabard
- Sector commander: red and yellow tabard
- Safety officer: blue and yellow tabard
- Command support: red and white chequered tabard (may include yellow)
- BA entry control operative: black and yellow chequered tabard
- Mass decontamination officer: green and purple tabard
- Tactical adviser: red and white chequered tabard with the reference, for example, HVP, NILO

Tabards

Incident Commander   Operations Commander   Sector Commander   Safety Officer

Command Support   BA Entry Control Operative   Mass Decontamination Officer   Tactical Adviser

Structuring an incident

The incident command system enables the structure of an incident to develop in a predictable and manageable way. It is important to use common terminology. This will help to develop a common understanding of the situation. See the *Joint Emergency Services Interoperability Principles* and the *CCS Lexicon for Emergency Responders*.

An incident commander will use their situational awareness as a basis for making decisions to formulate plans and objectives. They should apply a consistent and predictable model of incident organisation to help achieve a safe system of work. It may be useful to record this structure for large or complex incidents.

The incident commander and sector commanders will need to establish a command point where they can track progress. Commanders should assess levels of risk and consider appointing one or more safety officers to act as advisers.

Crews need supervision and support, including:

- Provision of appropriate resources and timely reliefs
- Managing welfare for example, rest, hydration and food

Each fire and rescue service will have their own policy for reliefs and welfare. During protracted rescues, incident commanders should be aware of crews forming a personal connection to the victims. They should measure levels of fatigue against any continuing benefit to operations. They will need to find a balance between safe operations and crew morale. See *Personal resilience*.

Sectorisation

Operations often take place in more than one location during an incident for example, at the front and rear of a building. In such cases the incident commander's span of control may only be limited. Where an incident commander has the ability to monitor tasks by moving around the incident ground it is unlikely that sectors are needed. However, if the incident commander is unable to effectively manage operations and supervise safety at more than one location, then sectorisation should be considered.

Sectors should only be used when necessary and commanders should keep the structure as simple as possible. This is to reduce the possibility of barriers to information flow between crews and the incident commander.

Sectors should be introduced when the demands placed on an incident commander are high. In these cases, it is essential to delegate responsibility and authority. This ensures that the level of command and safety monitoring is appropriate for all activities.

The creation of sectors should only occur on the instruction of the incident commander to meet the demands of an incident. Except for exceptional circumstances, the use of sectors should follow the standard models.

Four sectors

Sector 2

Sector 3

Sector 1

Sector 4

Five sectors

Sector 2

Sector 5
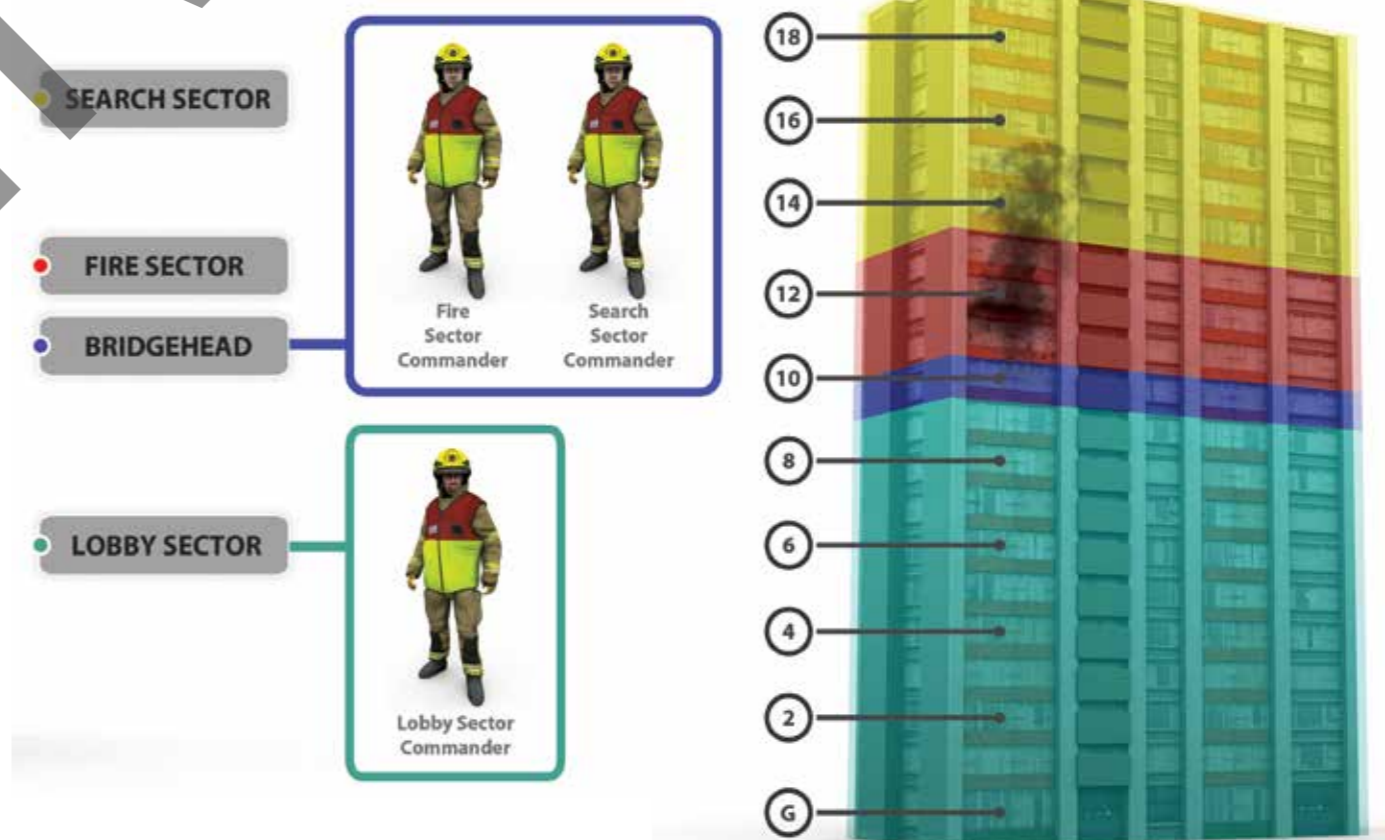
Sector 3
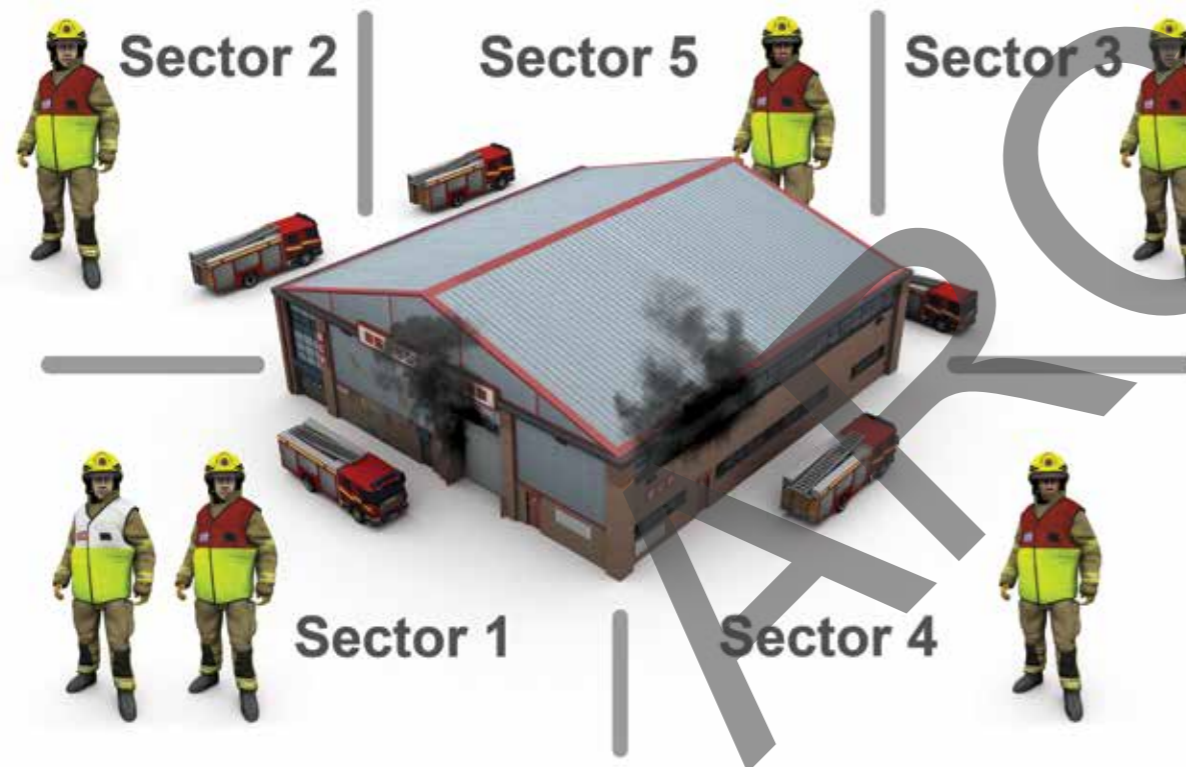
Sector 1

Sector 4

Using this approach the front of a simple building is Sector One. Progressing in a clockwise direction, Sector Three is normally at the rear. Sector One could also be the main scene of operations if this is not the front. Where this is the case all personnel should be aware.

This will ensure consistency at major or cross border incidents where crews attend from two or more services. A plan showing demarcation of sectors at the command point can be useful for briefing purposes.

There may be some buildings or environments that do not suit the standard model. In these cases it is important to designate the sectors carefully. There needs to be a good understanding of both the physical boundary and operating parameters and this needs to be communicated to avoid confusion.

Vertical sectors

The standard model of sector one being the main scene of operations would be difficult to use in some situations for example, in a multi-storey building or structure where operations are over several levels. The vertical sector model is used to maintain effective spans of control when sector commanders are remote from their scene of operations.

SEARCH SECTOR

FIRE SECTOR

BRIDGEHEAD

Fire Sector Commander

Search Sector Commander

LOBBY SECTOR

Lobby Sector Commander

18
16
14
12
10
8
6
4
2
G

Sectorisation should take account of the restrictions of operating in an environment where the fire floor is a barrier to accessing the areas above. The entire area above the bridgehead should be considered a hazard area in a high rise.

It may only be necessary to operate a single operational sector internally, with firefighting and support sectors operating outside. More than one internal sector may be required at an incident where a large number of personnel are firefighting, searching, or ventilating; this is to ensure that the commander's span of control is not exceeded. The zones of activity within the structure, for example, internal firefighting operations, should be identified using the following examples:

Fire sector

This is an operational sector and would be the main area of firefighting and rescue operations. It consists of the floors from the bridgehead to the fire, the floor(s) directly involved in fire, plus one level above. The fire sector commander will, on most occasions, need to be located at the bridgehead directing operations.

Bridgehead

This is normally two floors below the fire floor, provided they are clear of smoke. It is a location rather than a sector on its own. If the distance from the ground floor lobby to the bridgehead is more than two or three floors and spans of control require it, the use of a lobby sector should be considered. The *Generic risk assessment 3.2: fighting fires in high rise buildings* provides further details.

Search sector

This is an operational sector and is located above the fire sector where search and rescue, ventilation and other operations are taking place. Where possible, the search sector commander should be located at the bridgehead with the fire sector commander. If this is not possible, they should be located one floor below the bridgehead, or where not practical, the nearest suitable alternative location.

Lobby sector

This is a support sector and would cover the area of operations from the ground floor lobby to the bridgehead. The lobby sector commander will act as the co-ordinator of all the logistics needed by the fire and search sector commanders. The lobby sector commander would also co-ordinate all operations beneath the bridgehead. This includes salvage and ventilation. The lobby sector commander is normally located at the building access point.

This system of sectorisation provides for flexibility. There may be times when other approaches are needed for example, it may be necessary to have more than one sector per floor in a complex building, or a large high rise building may require two firefighting sectors, each with its own bridgehead. These may be operating in different stairwells with an operations commander co-ordinating from the lobby area.

These principles can be applied to other situations where vertical, internal sectors are necessary, for example at basement fires. In this case the search sector may extend above and below the fire, and the lobby sector may be located outside the building.
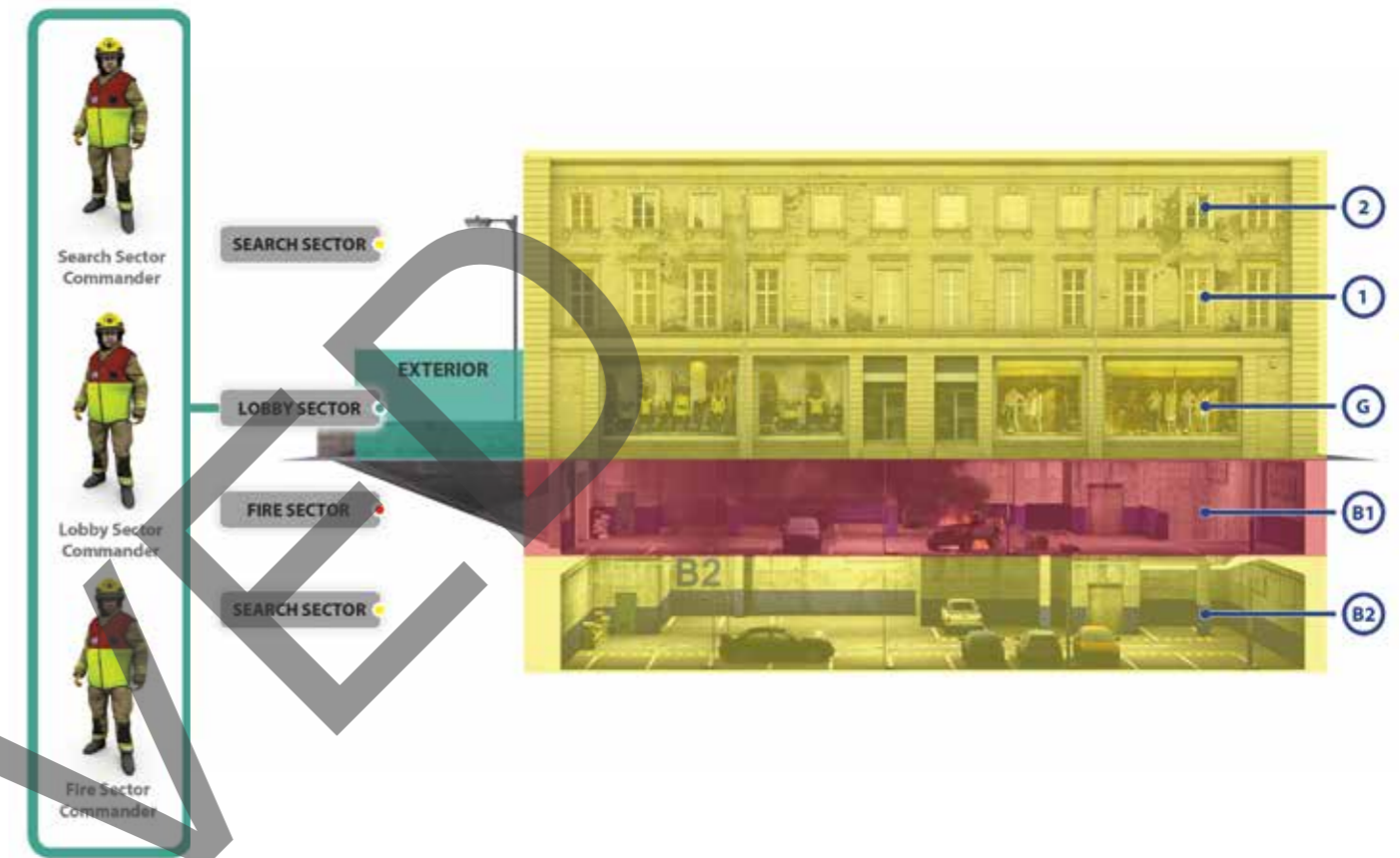
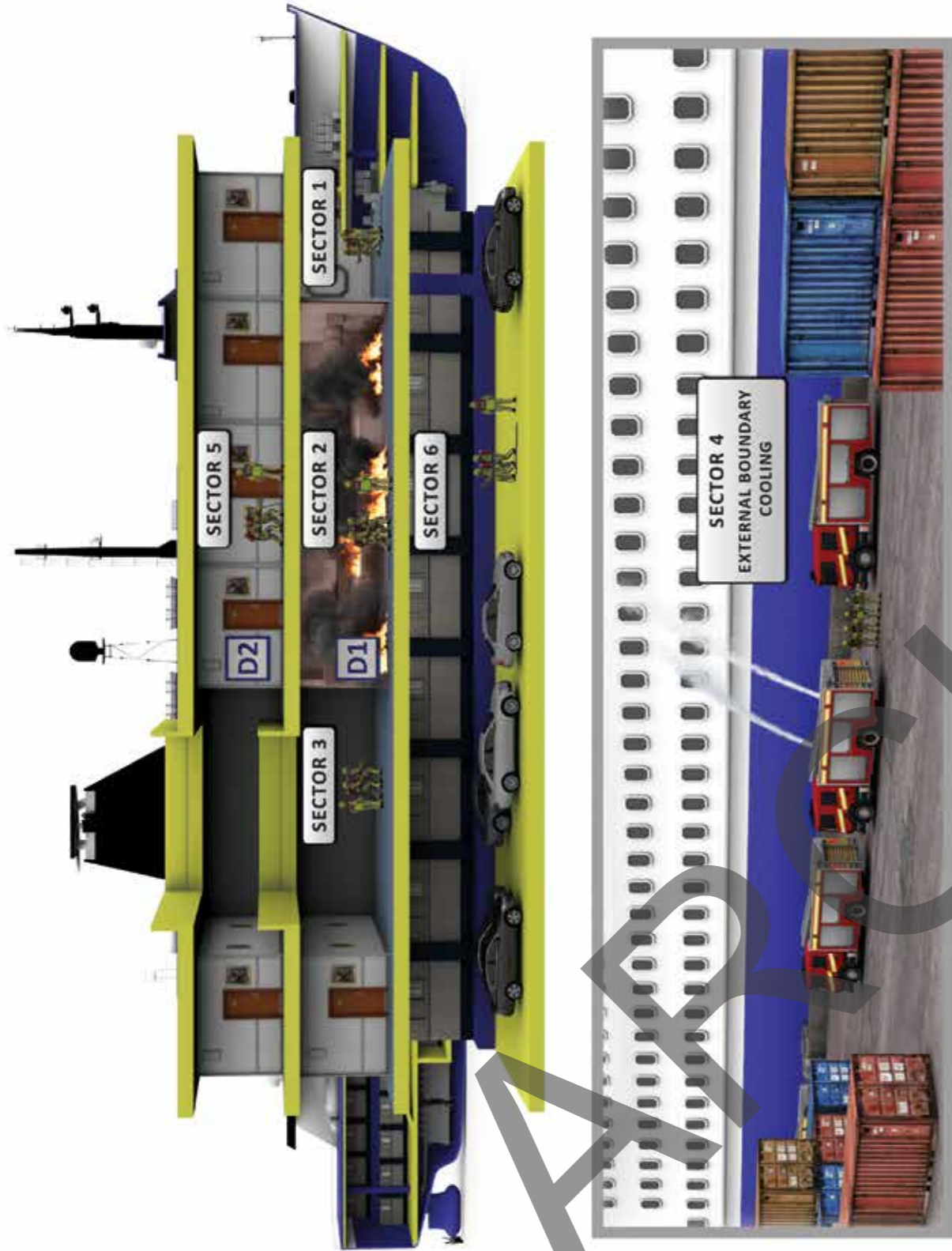
Other examples of sectorisation

Sectorisation of vessels

Sectorisation of a vessel will depend on the access point to the vessel. It is preferable that Sector 1 is nearest the bow of the vessel, but this may not always be possible. If this is not possible, Sector 3 would be nearest the bow of the vessel.
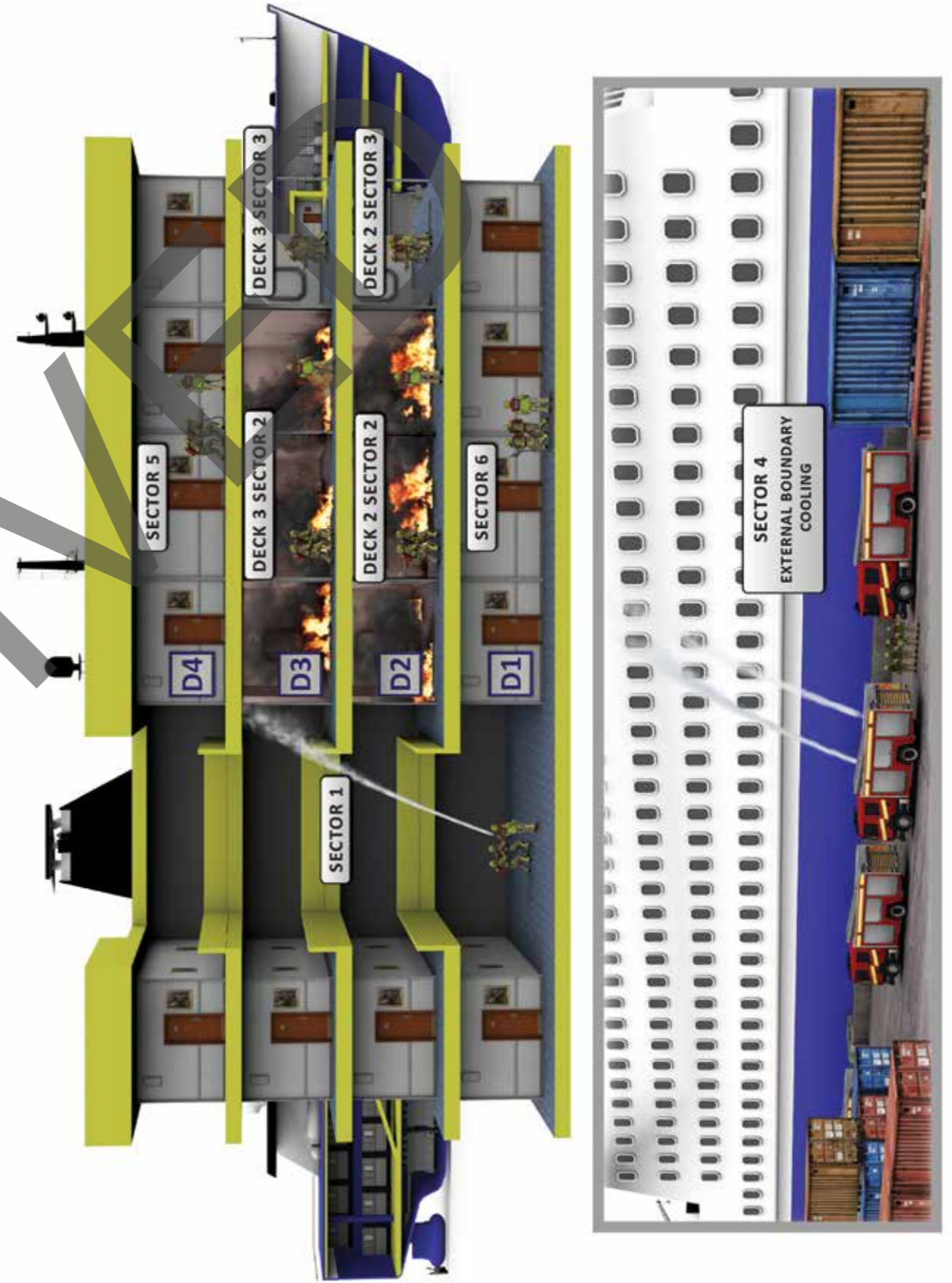
The principle of using sector one as the main scene of operations can be employed in other scenarios. This particularly applies to fighting fires on vessels which have complex layouts. With greater risk of fire spread in six directions, sectors on a vessel should use the standard model of sectors one, two, three, and four around the affected area. It should also include the potential need for a sector five above the scene, and sector six below the scene.

Because of the risk of fire spread through ventilation shafts or large compartments adjacent to multiple decks, there may also be a need to divide sectors into deck levels. Alternatively, on a vessel where only an individual compartment or a larger area may be involved, sectorisation can be undertaken by giving the sector a name, for example, forward hold or engine room.

SECTOR 1

SECTOR 5

SECTOR 2

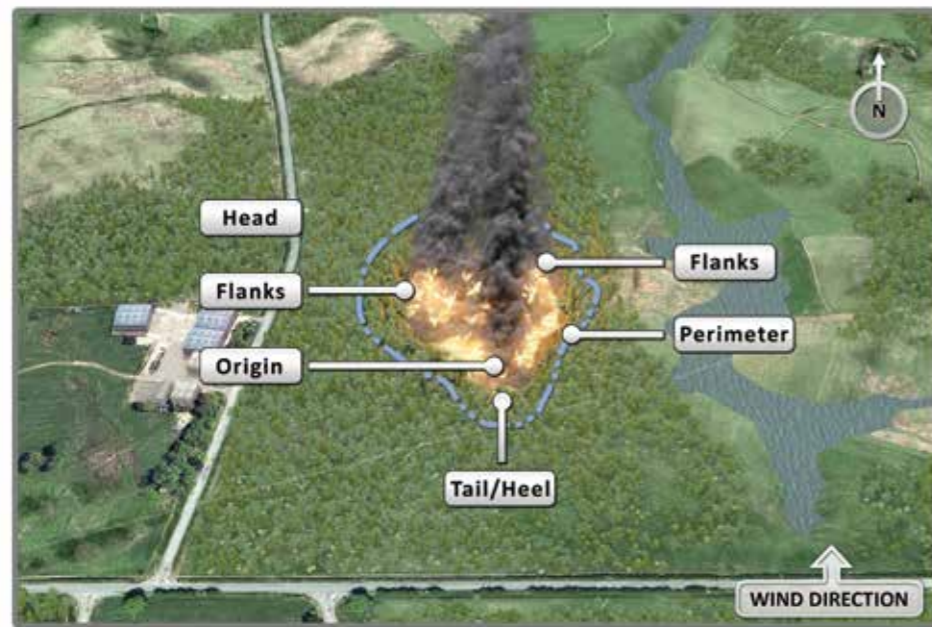SECTOR 6

SECTOR 3

D2

D1

SECTOR 4
EXTERNAL BOUNDARY COOLING

DECK 3 SECTOR 3

DECK 2 SECTOR 3

SECTOR 5

DECK 3 SECTOR 2

DECK 2 SECTOR 2

SECTOR 6

D4

D3

D2

D1

SECTOR 1

SECTOR 4
EXTERNAL BOUNDARY COOLING

A similar principle can be used for sectorisation of a variety of incidents including wildfires, road traffic collisions and aircraft incidents.
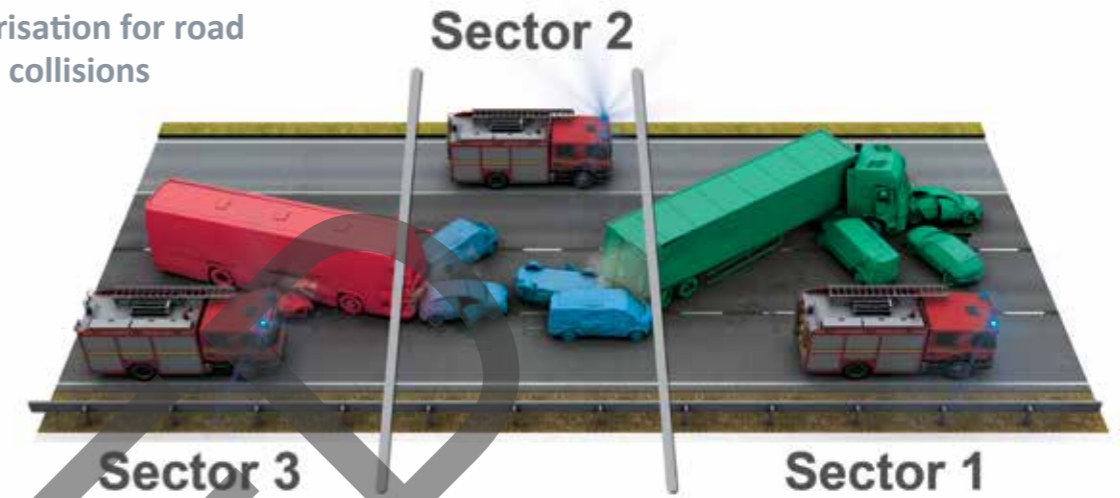
Sectorisation for wildfires

At larger protracted incidents or more complex fires where the fire behaviour is likely to change, it will be necessary to provide clarity regarding the geographical area covered by each sector. This can be achieved by setting sector perimeters based on easily identified features on the landscape, whether natural or man-made, which provide visual conformation of the sector limits and areas of responsibility.
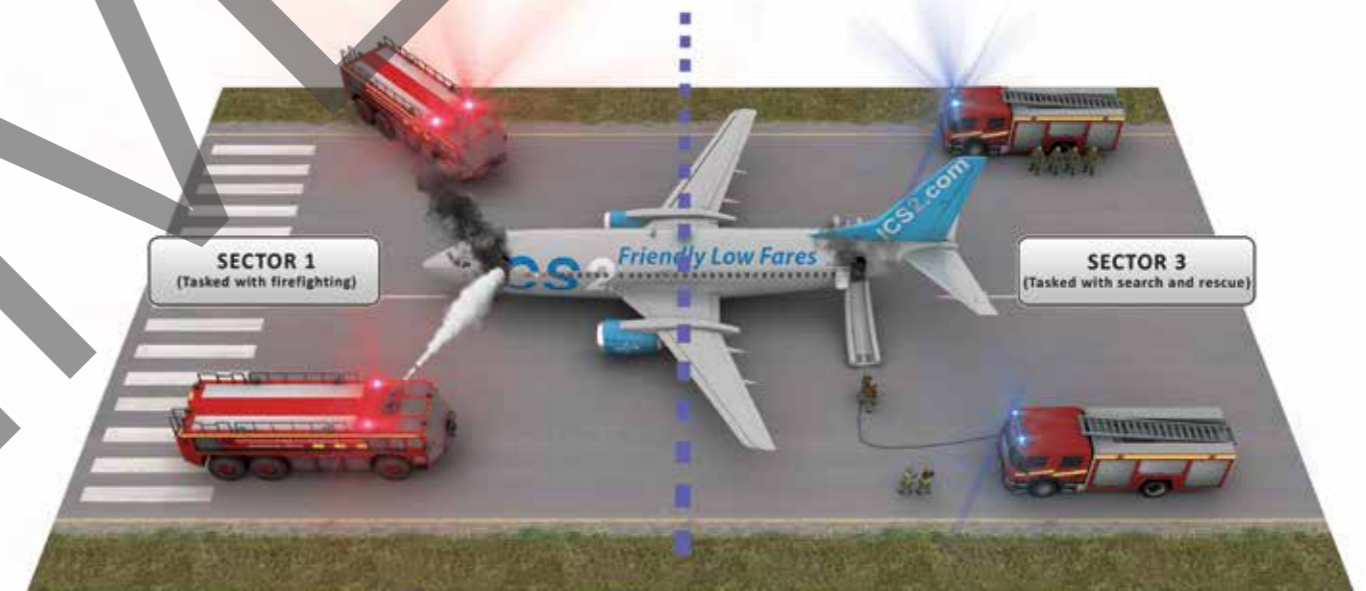
In this example the fire has been divided into four sectors which use topographical features or changes in vegetation to clearly differentiate the sectors.
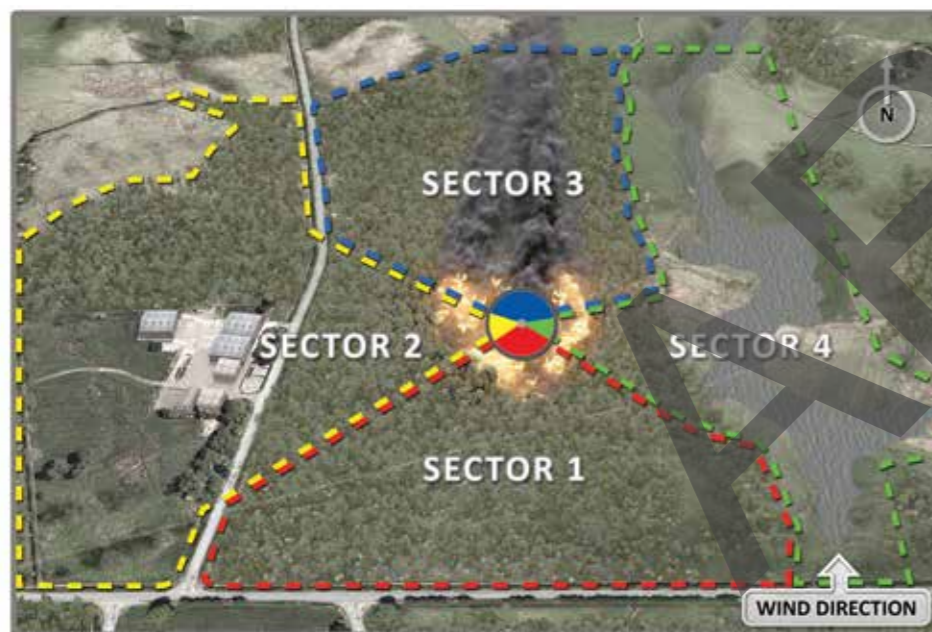
Sectorisation for road traffic collisions

Sectorisation for aircraft incidents
Cabin fire

Engine fire

Cordons

The incident commander must consider the safety of firefighters, members of other agencies and the public. Cordons are an effective way of controlling resources and maintaining safety.

After the initial cordon has been established to secure the scene, normally by the police, the incident is usually divided into two distinct areas:

- Inner cordon

- Outer cordon

Inner cordon

The inner cordon controls access to the immediate scene of operations. Incident commanders should restrict access to the lowest numbers needed for safe and effective work. The inner cordon denotes the hazard area. The control of the inner cordon is detailed in the Cabinet Office document *Emergency Response and Recovery*.

It is important that agencies pre-plan and exercise regularly to ensure there are no misunderstandings of roles and responsibilities during an incident.

Incident commanders must account for people's safety and location. If an incident is using sectors they can delegate this responsibility to the sector commander, who should be aware of the people and personnel who are active in their sector.

An inner cordon gateway control system should be established and may include:

- Means of recording all people entering and exiting the inner cordon area

- Provision of safety briefing and agreed evacuation signals

- Checklists for PPE

- Personnel to escort non-FRS staff

- Details of working locations

- Tasks of other agencies

Other agencies remain responsible for the health and safety of their personnel working within the inner cordon. These agencies should ensure that their personnel are competent, have appropriate PPE, and are briefed.

Outer cordon

This cordon limits access to an area being used by the emergency services and other relevant agencies. The police will usually control outer cordons, and may also use traffic cordons. The police will identify safe routes into and out of the cordon for emergency vehicles and other agencies. Marshalling areas will usually be located within the outer cordon.

Firefighter emergencies

The rescue and recovery of firefighters is a challenging situation for an incident commander. They may face difficult decisions. The situation calls for clear judgement, often while struggling to keep emotions under control.

If the incident commander and other commanders fail to maintain control, it may lead to an outcome with serious health and safety consequences. Crews are likely to place themselves at considerable risk to rescue or recover colleagues.

A situation where a firefighter needs rescuing is very likely to lead to fire and rescue service personnel and others experiencing increased stress. This can affect the way people make decisions and process information. See *Personal resilience*.

Where there is an indication of a firefighter emergency, then the command team must work quickly but consider firefighter safety at the same time. They should alert all personnel on the scene and take a roll call if necessary. They should also assess the resources needed, for example, fresh crews to carry out search and rescue and consider the need for specialist crews and associated tactical advisers. Commanders should be aware that when BA emergency rescue operations are to be undertaken, a significant amount of resources will be required.

The incident commander's resilience and ability to manage pressure in this situation is critical to maintain control. Other important factors are maintaining good *situational awareness* and sharing accurate information such as last known locations and tasks they were undertaking.

The incident commander should consider a number of factors before making a decision, particularly the benefit of taking action against the risks:

- Likely condition of trapped personnel (is this rescue or recovery?)

- Risk of harm posed to the rescue personnel against the likely chance of a successful rescue

- Extent of any fire spread

- Likely reoccurrence of the situation that may have caused the difficulties for example, explosion

- Where a collapse has taken place, possibility of a secondary or further collapse

- The impact of total evacuation on the rescue effort

Where crews are committed to undertake a rescue, their safety is a priority. They should hold a thorough briefing even if crews are impatient to enter the hazard area. They should consider the appropriate level of additional control measures and resources to support the rescue operation.

Once resources permit, consideration should be given to replacing some or all of the command team.

This is not a reflection on their ability, but for the following reasons:

- Managing the welfare of personnel at a difficult and potentially traumatic stage of the incident

- Personal capacity to continue working in such an environment

- Time for commanders to gather their thoughts and to make a contemporaneous note of their actions

- The likely impact of a police investigation starting will have on the command team decision making process

Commanders must also consider the welfare of other personnel at an incident, including those who have been working on rescue or recovery. Further information is available in the CFOA guide *Death in the Workplace: Guidance for United Kingdom fire and rescue services* and the *HSE Work related deaths protocol*.

Additional command considerations

Incident commanders should avoid complacency at the closing stages of an incident to maintain safety. In the closing stages, important factors include:

- Risk management

- Transfer of health and safety issues

- Welfare of people and teams

- Arranging or managing all relevant investigations

- Other post-incident considerations

Arranging or managing relevant investigations

After an incident there may be a requirement to investigate its cause. This may be part of a fire and rescue service review to identify the cause of the fire; to look at how effective fire safety measures were; or it may be part of a criminal investigation by the police. Other agencies may also have a legal requirement to investigate an incident, for example, Air Accident Investigation Branch, Marine Accident Investigation Branch, or the Health and Safety Executive.

From the start of an investigation, fire and rescue service personnel should endeavour to make sure that evidence is not destroyed or disturbed where possible. They should also make observations and notes to help investigators.

The Work Related Deaths Protocol applies to incidents where there has been a fatality at work. The police will be responsible for investigating a fatal incident involving fire and rescue service personnel and they may need to help secure evidence. The protocol is between the police, Health and Safety Executive, Crown Prosecution Service and the Local Government Association. The fire and rescue service and other organisations have agreed to follow the rules of the protocol whilst carrying out their investigations.

Debriefing

Debriefing is an important part of reviewing and improving performance. There should be a debrief whenever there is a chance to improve standards of service delivery. See N*ational Operational Guidance: Fires and Firefighting*.

Commanders should choose an appropriate format for the review. They should conduct it in a way which encourages open, supportive and constructive discussion. If the review covers individual performance, discuss it against the standards for that role and acknowledge good performance and conduct worthy of merit.

Closure and handover

Fire and rescue services are primarily involved at the emergency phase of an incident, however they may be involved with associated protracted activities, e.g.

- Fire investigation

- Accident investigation (where a death has or may result then the Work Related Deaths Protocol should be adhered to)

- Criminal investigation

- Fire safety issues

- Critical incident ongoing emotional and welfare support

- Incident debriefing and evaluation

- Learning and recommendations, both local and national

- Post-mortem enquiries and Coroner's hearings

- Public or judicial inquiries

- Litigation

The incident commander should assess the need for post-incident requirements as soon as possible. Based on this assessment, the following tasks might be needed:

Scene preservation

If the scene needs to be examined as part of a criminal investigation, it should be carefully preserved to protect evidence. Where there is a work-related fatality the procedures in the Work Related Deaths Protocol should be followed.

Recording and logging

This may include a written log available from fire control. It may also include voice recording of critical messages. The early attendance of photographic and/or video personnel can be of great benefit. Obtaining security videos from on-site equipment can often be valuable to future investigations. Some security systems will reuse their tapes and so action to retrieve the tapes should be taken without delay.

Accident investigation

If an accident or fault occurs, an investigation should be started. The incident commander should notify relevant personnel. Any relevant fire and rescue service equipment should be preserved for investigation. Should equipment have failed, then relevant guidance should be followed.

Identification of key personnel

The names and location of witnesses should be obtained and recorded for interviews. It may be necessary or appropriate to start interviewing during an incident.

When closing an incident the incident commander should consider how it will be handed over. Before finally closing an incident and removing all fire and rescue service resources, the incident commander should consider the following points:

- The need to inform those affected by an incident, such as the responsible person and neighbours that fire and rescue service operations have concluded

- Inform relevant people of any remaining hazards, which includes potential environmental hazards caused by fire and rescue service operations

- Any security issues (this is particularly important when premises are left unsecured)

- Any fire protection or prevention issues

See *National Operational Guidance: Operations.*

Safety management

The fire and rescue service may work in adverse and dangerous environments involving significant risks. The priority for an incident commander is the safety of the public, people under their control and anyone affected by their actions.

The *Health, Safety and Welfare Framework for the Operational Environment* contains detailed strategic guidance on the planning and delivery health and safety policies relating to operational activity.

This guidance details the safe person principles and the risk assessment methodologies that would be considered best practice.

Operational personnel can remain as safe as possible if incident commanders:

- Identify hazards and risks

- Communicate the identified hazards and risks

- Adopt appropriate risk control measures

- Ensure people are using safe systems of work

The Firefighter Safety Maxim

There is a balance between ensuring firefighter safety and carrying out the role of the fire and rescue service.

This is known as the Firefighter Safety Maxim, and is as follows:

"At every incident the greater the potential benefit of fire and rescue actions, the greater the risk that is accepted by commanders and firefighters. Activities that present a high risk to safety are limited to those that have the potential to save life or to prevent rapid and significant escalation of the incident."

The Maxim acknowledges that firefighters operate in hazardous environments whilst recognising the legal duty to ensure, as far as is reasonably practicable, the safety of everyone our operations may affect and the professional dilemma of maintaining safety and taking action to effect a rescue or mitigate an emergency.

This Maxim will apply at every incident. It describes how an incident commander will consider the benefits of our activities and the risks to those involved. This should not necessarily be seen as a balance of one against the other, but more as an assessment of whether the benefit is worth the risk; for example, where lives are in danger, the benefit of saving life is high, then a higher risk to firefighters may be accepted.

Where the incident has high risk but with low benefit, commanders should only tolerate a limited risk to firefighters. Activities in the hazard area are unlikely to take place until the risk is reduced.

An example might be a property where fire is confirmed with no persons missing and the fire has not ventilated. Here the crews are unlikely to enter the building until ventilation has been carried out and the risk of backdraught reduced. There is still benefit to be gained in saving the building once the higher risks have been reduced.

At some apparent high risk, low benefit incidents, additional information may emerge, which means the benefit increases. An example of this would be where people are later reported to be missing in a fire.

Risk assessment at an incident

An incident ground is an operational workplace and health and safety legislation requires fire and rescue services to assess and reduce the risk to personnel, as far as is reasonably practicable. As well as a duty of care to fire and rescue personnel there is also a duty to safeguard others.

An incident commander's objectives are to resolve the incident with minimal impact to the community, prevent or minimise harm to people and protect the environment. Incident commanders must establish a safe working environment as soon as is practicable.

To ensure a safe working environment they will need to:

- Select the most appropriate control measures
- Consider the benefits of proceeding with actions taking account of the risk
- Take into account any time constraints

Safe systems of work must be developed, implemented, maintained and reviewed throughout the incident.

Risk concepts

To perform an effective risk assessment, incident commanders should understand the following concepts:

Hazard
An event or situation with the potential to cause death or physical/psychological harm, damage/loss to property, and/or disruption to the environment and/or to economic, social and political structures.

Risk
The measure of the significance of a potential harm in terms of its assessed likelihood and impact.

Control measure
These are measures to reduce the likelihood of exposure to a hazard from a given risk, and/or mitigate the impacts of that exposure.

Dynamic risk assessment
The term dynamic risk assessment (DRA) describes the assessment of risk in a rapidly changing environment at an incident where decisions are sometimes made in fast-moving situations with incomplete or inaccurate information. It is a process not a control measure. The outcome of the dynamic risk assessment will contribute to the incident commander's incident plan. It helps to inform whether crews should be operating in the risk area. This in turn determines the tactical mode.

Analytical risk assessment
As the incident progresses, or becomes more complex, it requires a more detailed and formal record of the significant findings of the risk assessment. The fire and rescue service call this analytical risk assessment (ARA).
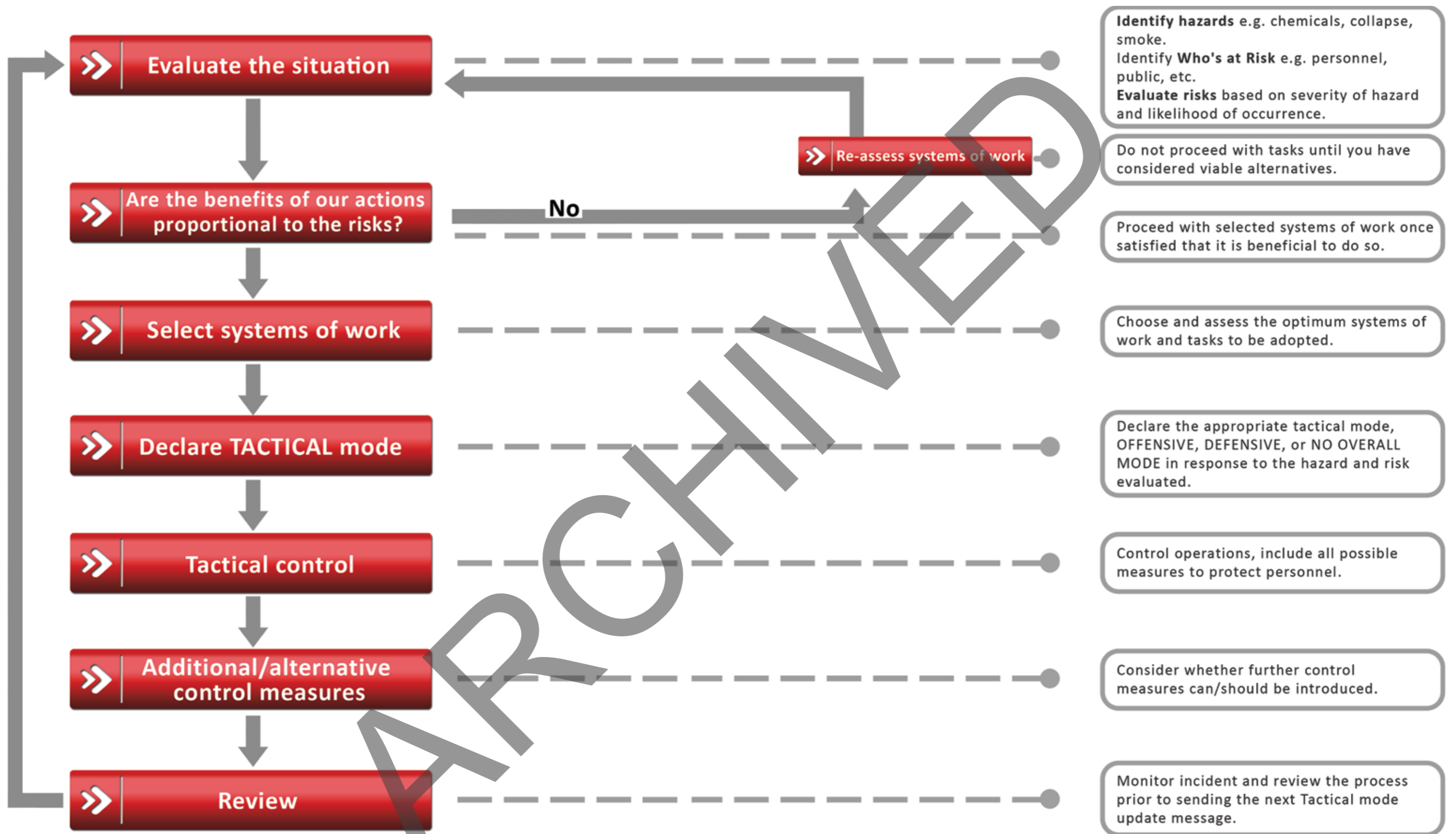
Personal (or individual) risk assessment

Personal (or individual) risk assessment helps firefighters remain safe when working unsupervised, which is derived from the *Health, Safety and Welfare Framework for the Operational Environment*.

Dynamic risk assessment

Dynamic risk assessment is the continuing assessment of risk in a rapidly changing environment at an incident. It is a process of quickly determining the nature of the risk and what the response should be. It confirms the response is appropriate by taking into account the benefit and risk. This assessment should determine the reasonably practicable measures which should be taken to manage the risk.

The person undertaking the assessment must also apply the statutory requirements for risk assessment, which will assist the incident commander in making informed decisions.

Evaluate the situation — Identify hazards e.g. chemicals, collapse, smoke. Identify **Who's at Risk** e.g. personnel, public, etc. **Evaluate risks** based on severity of hazard and likelihood of occurrence.

Re-assess systems of work — Do not proceed with tasks until you have considered viable alternatives.

Are the benefits of our actions proportional to the risks? — No — Proceed with selected systems of work once satisfied that it is beneficial to do so.

Select systems of work — Choose and assess the optimum systems of work and tasks to be adopted.

Declare TACTICAL mode — Declare the appropriate tactical mode, OFFENSIVE, DEFENSIVE, or NO OVERALL MODE in response to the hazard and risk evaluated.

Tactical control — Control operations, include all possible measures to protect personnel.

Additional/alternative control measures — Consider whether further control measures can/should be introduced.

Review — Monitor incident and review the process prior to sending the next Tactical mode update message.

Evaluate the situation, including deciding who might be harmed and how

To identify hazards and suitable control measures the incident commander will first need to consider:

- Operational risk information available from site visits, fire safety plans, standard operational procedures and crews on scene
- Information available from the owner or responsible person at the scene
- The nature of the tasks to be carried out
- The significant hazards presented by the incident
- The risks presented to:

- casualties
- firefighters
- other emergency service personnel
- the public
- the environment

- The resources that are available, for example, competent personnel, appliances and equipment, specialist advice.

Benefits of actions proportionate to risk

Once they identify what they are going to do, they need to make a judgement about the benefits and risks. Are the benefits of the outcomes proportional to the risks for those involved?

- If YES, proceed
- If NO, then consider how else the incident may be dealt with

Select system of work

Incident commanders will need to consider the possible systems of work and choose the most appropriate for the situation. Are the proposed control measures reasonably practicable and achievable?

Declare tactical mode

The outcome of this assessment will contribute to the incident plan. This will include a decision about whether crews should work in the hazard area, which will require the appropriate tactical mode to be announced. The declaration of a tactical mode is a simple method of recording the outcome of the incident commander's risk assessment.

Tactical control

When proceeding with a task an incident commander will need to make sure that:

- Individuals and teams understand their objectives
- They have allocated clear responsibilities
- People understand the safety measures and procedures

Additional alternative control measures

Incident commanders will still need to eliminate, reduce or contain any remaining risks to an acceptable level by introducing additional control measures, such as:

- Appropriate procedures and methods of work
- Additional personal protective equipment, for example, safety glasses, safety harnesses
- Breathing apparatus
- Specialist personnel or equipment, for example, USAR, aerial appliance, boats etc

As the incident develops, changing circumstances may require the original course of action to be revised, for example:

- Firefighting tactics may change from defensive to offensive, or vice versa
- New hazards and their associated risks may arise, for example, the effects of fire on building stability
- Existing hazards may present different risks
- Personnel may experience fatigue

Review

Incident and sector commanders need to manage safety by monitoring the situation. This monitoring should include a regular review of how effective the existing control measures are.

As the environment changes, the incident commander should review the risk assessment. Even when a safe system of work is in place the incident commander should take into account changing priorities as this may alter the risk or the perception of risk. See *Decision control process*.

A change of plan will need to be put in place with minimal delay. Incident commanders should declare the revised tactical mode, make sure they communicate the change and continue with the dynamic risk assessment process.

Analytical risk assessment

Having carried out the dynamic risk assessment and established a tactical mode, an incident commander should be aware of the immediate hazards, who is at risk and the control measures necessary to protect them. This assessment should determine the reasonably practicable measures that personnel should take to control the risk.

This initial assessment now forms the basis of a more detailed incident risk assessment known as an analytical risk assessment (ARA). This should be completed and recorded on all occasions when the recorded dynamic risk assessment is not sufficient.
See the *Health, Safety and Welfare Framework for the Operational Environment*.

An incident commander should ensure an analytical risk assessment is carried out as soon as time or resources permit. Responsibility for carrying out the risk assessment within a sector may be delegated to sector commanders. However, the incident commander still retains responsibility for approving the tactical mode.

The person who completes the analytical risk assessment should be competent. They need to bring their findings to the attention of the incident or sector commander. These should include details of any hazards, risks and control measures.

In addition, the key findings of the analytical risk assessment should be shared with all responders that are at the incident ground. This information may form part of the multi-agency decision making process at the incident.

Incident or sector commanders should review the analytical risk assessment whenever the risk to crews changes and at suitable intervals. It is for each service to decide what a suitable interval is; however the incident commander can vary the interval after consulting any sectors or safety sector. One example of this kind of static incident is a controlled burn at a barn fire.

Reviewing the risk assessment may confirm the existing control measures and tactical mode are correct. It may also show the incident needs extra control measures or a change in tactical mode. Incident commanders should make sure changes are announced and new actions happen without delay. The new situation is also the basis for any future risk assessment.

Where there is a formal debrief, the use of the analytical risk assessment forms can help show the risks known at the time. The suitability of the risk assessment should also be reviewed at this time.

Fire and rescue services should keep analytical risk assessments for audit and periodic review. They should also be considered for training and guidance development.

Personal (or individual) risk assessment

This term is contained in the *Health, Safety and Welfare Framework for the Operational Environment* document. There will be circumstances where firefighters may encounter unexpected or unforeseen situations. Personal (or individual) risk assessment is the process a firefighter undertakes to identify hazards and determine the level of risk they will accept. The outcomes of an individual risk assessment informs and influences their decisions.

Control measures

The UK fire and rescue service operates within a framework that uses trained personnel, safe systems of work and specialist equipment. The incident commander must reduce risks as far as reasonably practicable.

The Health and Safety Executive offer useful guidance on the hierarchy of risk control measures which can be found at http://www.hse.gov.uk/risk/faq.htm.

Tactical mode

The communication of the tactical mode is a way of recording a decision by the incident commander on the completion of the risk assessment and determination of the incident plan. It indicates the decision by the commander to deploy crews within the hazard area or not. All incidents require tactical modes to be declared at the earliest opportunity following arrival at an incident and at regular intervals thereafter. Where sectors are in place, a tactical mode for each sector is required.

The declaration of the tactical mode at any given point of the incident describes the current level of risk exposure to operational personnel.

There is no default tactical mode. The incident commander should decide their incident plan and associated operational tactics following their risk assessment and decision control process. The selection of a tactical mode is a conscious decision underpinned by a clear rationale. This is key to assertive, effective and safe incident command delivered by competent commanders, and the avoidance of risk aversion and decision inertia.

Types of tactical mode

There are two modes of operation: offensive and defensive.

Offensive
Crews are working within the designated hazard area and thereby, exposed to greater risk.

Defensive
Crews are outside of the designated hazard area.
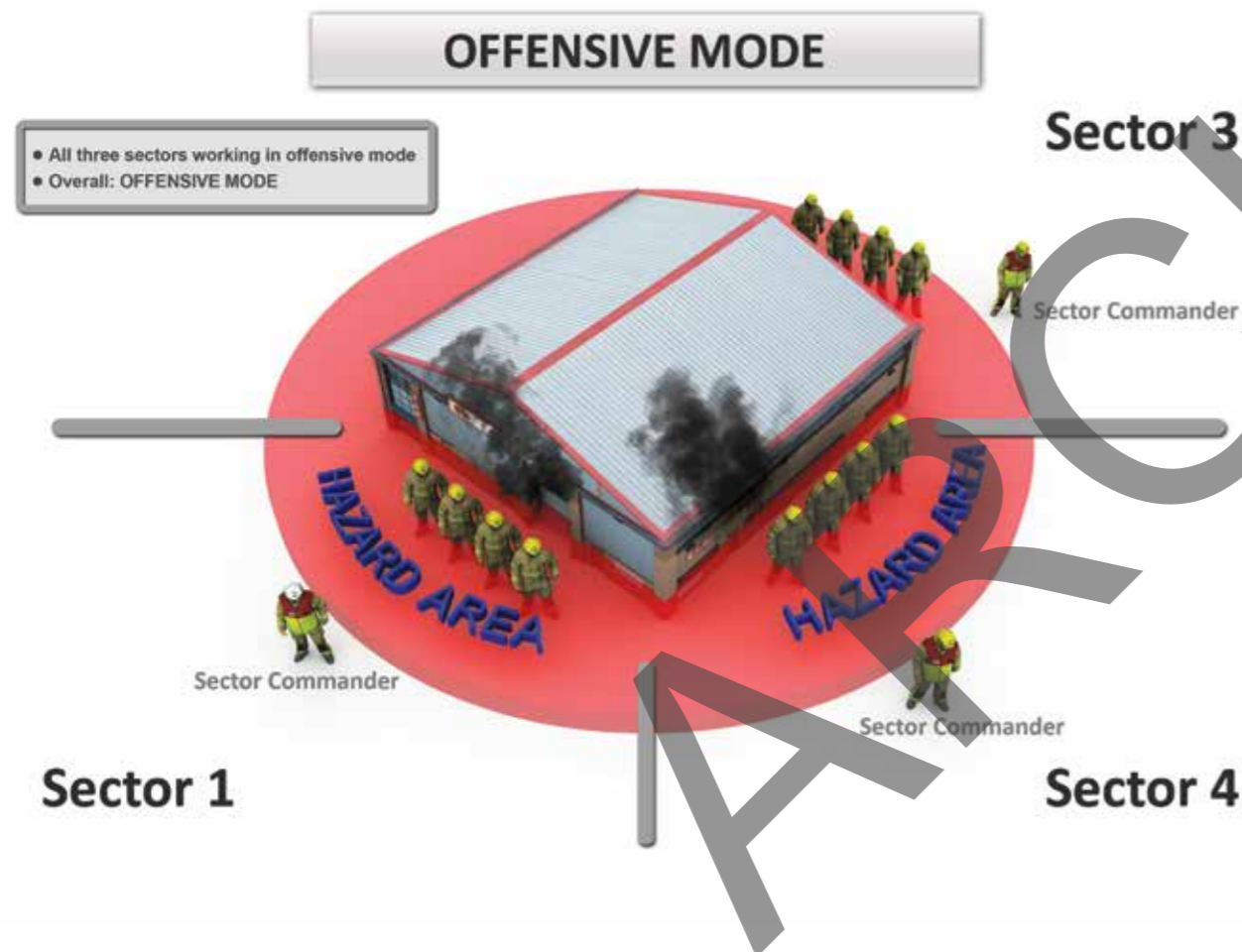
Hazard areas

The hazard area is an area in which significant hazards have been identified by the relevant commanders. The hazard area may extend beyond the immediate scene of operations and in some cases can move or change during the incident.

Offensive mode

This is where fire service personnel are working within the hazard area and exposed to greater risk, because the incident commander has decided it is appropriate following their risk assessment.

This mode may apply to an individual sector or to the whole incident when every sector is offensive.

Offensive mode is likely to be the common mode of operation. Examples include house fires, road traffic collisions and industrial premises where we might fight the fire, effect rescues or close down the plant.

Examples of offensive mode:

- A property fire where crews enter the building for firefighting
- Crews dealing with an incident outside a building but still operating in the hazard area
- Crews dealing with a road traffic collision and working on the carriageway
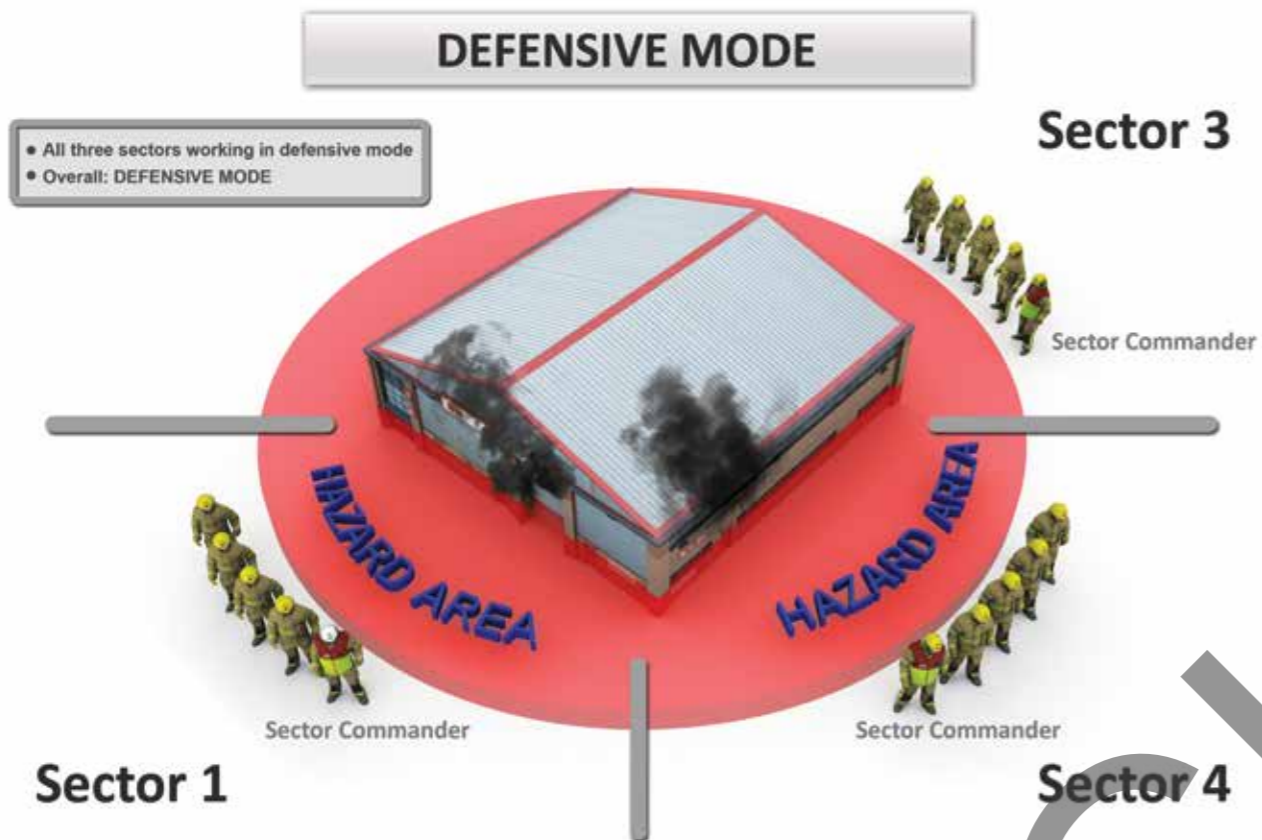- Withdrawing a crew from a hazardous area because the risk has increased

In the last example, although crews are being withdrawn they are still in the hazard area and the tactical mode is still offensive. It would not change to defensive mode until all crews have left the hazard area and been accounted for. Use the message "tactical withdrawal in progress" or "emergency evacuation in progress" to time stamp the decision of the incident commander's dynamic risk assessment, including the need to change to defensive mode.

Defensive mode

This is where commanders deal with an incident from a defensive position. In defensive mode, the identified risks are unacceptable and outweigh the potential benefits. No matter how many extra control measures could be put in place at that particular time, the risks remain too great to commit crews into the hazard area.

DEFENSIVE MODE

- All three sectors working in defensive mode
- Overall: DEFENSIVE MODE

Sector 3

Sector Commander

Sector Commander

Sector Commander

Sector 1

Sector 4

Defensive mode indicates that no crews are working in the hazard area. It does not indicate the no operational activity is taking place.

Examples of defensive mode:

- Firefighting outside a hazard area

- Standing by awaiting expert advice, before committing crews

- Standing by in a safe area while other services deal with an incident, for example, a terrorist related incident
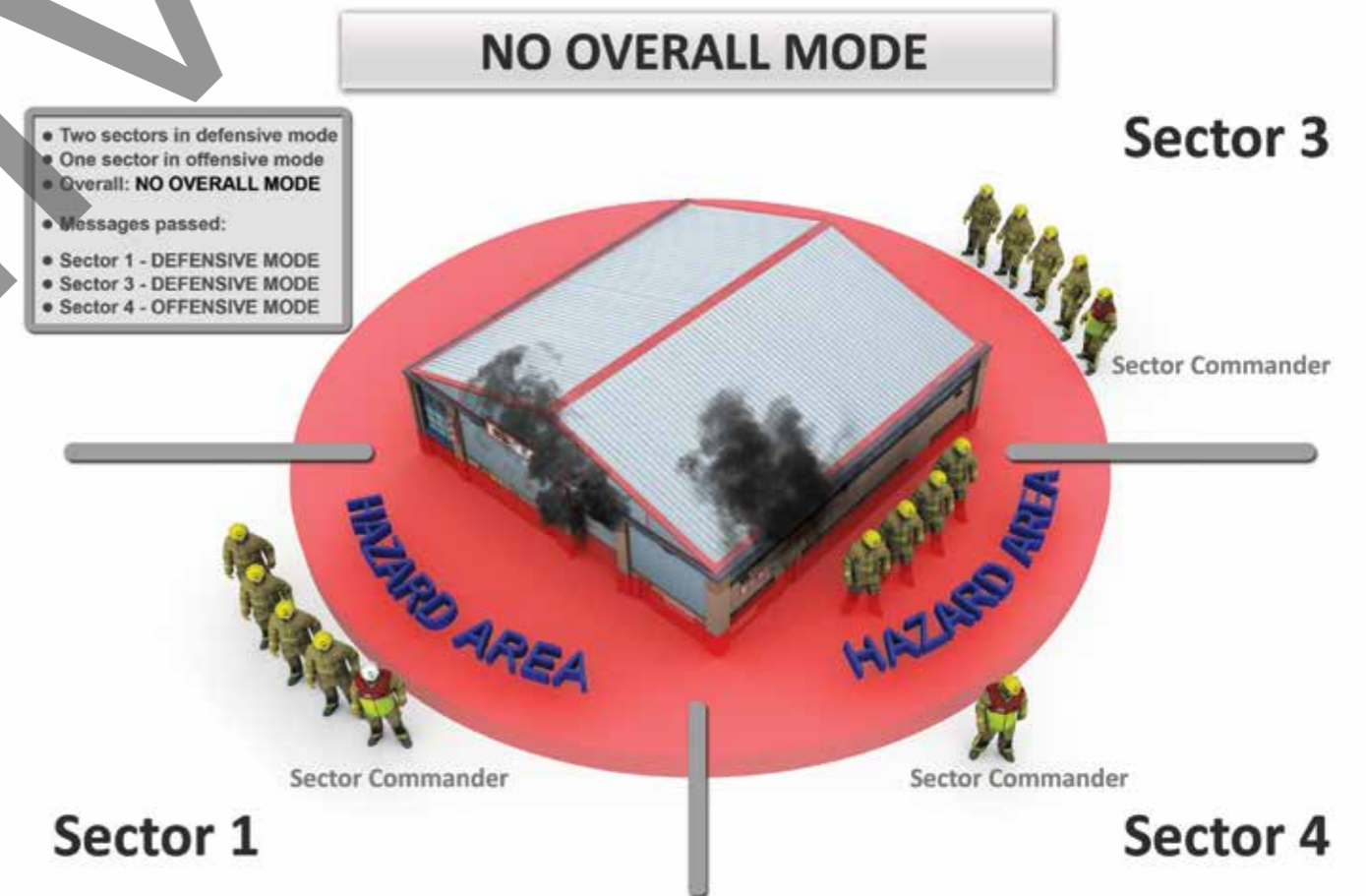
There will be circumstances, where having been in defensive mode, the risk has changed, tactical priorities have been revised or additional control measures are available. This may mean it is acceptable to enter or re-enter the hazard area. In this case as crews are committed the tactical mode will change to offensive.

Using tactical mode when sectors are in use

When the incident has been divided into sectors, the incident commander remains responsible for the tactical mode at all times. There will be occasions when an operations commander has been appointed. Whilst they may determine or approve a change in tactical mode, the incident commander still retains overall responsibility.

When more than one sector is in use:

- Where each sector is in offensive mode then the overall mode of the incident is offensive.

- Where each sector is in defensive mode then the overall mode of the incident will be defensive

- Where different modes are in use at the same incident, there is no overall mode for the incident. For example, when two sectors in offensive mode and one sector in defensive mode. All messages to fire control room or across the incident ground should list each sector and the mode it is in. for example, "Sector one defensive mode, Sector three defensive mode, Sector four offensive mode"

NO OVERALL MODE

- Two sectors in defensive mode
- One sector in offensive mode
- Overall: **NO OVERALL MODE**

- Messages passed:

- Sector 1 - DEFENSIVE MODE
- Sector 3 - DEFENSIVE MODE
- Sector 4 - OFFENSIVE MODE

Sector 3

Sector Commander

Sector Commander

Sector Commander

Sector 1

Sector 4

Where appropriate, incident commanders should confer with sector commanders when making a decision to change the tactical mode. It is more usual for the suggestion to change tactical mode to come from a sector commander.

If a sector commander wishes to commit personnel into the hazard area, for example, change to offensive mode when the prevailing mode is defensive, they should seek permission from the incident or operations commander. They should not make any change until they have received permission.

Where a rapid change in circumstances occurs, the sector commander should revise the risk assessment. There may be occasions when they need to act first in the interests of safety and then inform the incident commander of their decision.

Announcement of tactical mode

Commanders should make sure everyone on the incident ground is aware of the tactical mode. They should communicate this at regular intervals and when it changes. It is also essential that fire control is informed of the current mode to ensure it is recorded. All messages should include sufficient information regarding the findings of the risk assessment. It is for individual services to decide the frequency of announcements.

The radio message to fire control may also be the method of recording significant findings from a risk assessment. If this is the case it should include sufficient information about why the mode is appropriate.

For example:

- 'Crews in offensive mode: persons reported or saveable life'

- 'Crews in offensive mode: saveable property'

- 'Crews in offensive mode: environmental protection'

- 'Crews in defensive mode: awaiting isolation of power cables'

All incidents need a tactical mode and it should be kept current.

Change in tactical mode

There will be occasions when it is necessary to change the tactical mode, following the revision and updating of the risk assessment. This change may be on receipt of new information, a change in tactical priorities or a revision of control measures.

Where the decision is made to commit crews into the hazard area, when defensive operations are in place, the tactical mode for the incident or sector will change to offensive mode as preparations are being made to enter the hazard area.

When it is necessary to change from offensive mode to defensive mode, following the outcome of the risk assessment, the commander should announce and implement the

withdrawal of crews or personnel from the hazard area. The use of 'tactical withdrawal' or 'emergency evacuation' should be included in communicating the change in mode to the incident ground and fire control. The tactical mode does not change until fire and rescue service personnel have withdrawn from the hazard area.

There are a number of reasons why the change to defensive does not take place until after fire and rescue service personnel have left the hazard area. This is because personnel will still be in the hazard area and it may take some time to withdraw, for example, at high rise and large or complex structures. There may also be a need to commit crews to assist with the tactical withdrawal or emergency evacuation, to relay messages, protect escape routes or effect rescues of colleagues.

The terms 'tactical withdrawal' or 'emergency evacuation' should be used within the message to fire control to time-stamp the decision of the incident commander's dynamic risk assessment. Radio messages should be timely, without detracting from risk critical operations, and include sufficient information demonstrating the need to change to defensive mode.

For example:

- 'Offensive mode: all persons accounted for, tactical withdrawal in progress'…. followed by;

- 'Defensive mode: all crews withdrawn'

- 'Offensive mode – emergency evacuation, signs of structural collapse' … followed by;

- 'Offensive mode – emergency evacuation in progress, crews committed to assist in evacuation'… followed by;

- 'Defensive mode – all personnel accounted for, roll call complete'

At certain incidents, other responders may continue to work in the hazard area, for example at a CBRN (E) incident.

Emergency evacuation and tactical withdrawal

Incident commanders must establish a safe system of work. This will include a plan for emergency evacuation or tactical withdrawal.

The fire and rescue service retains responsibility for the health, safety and welfare of its people working within the risk area. It also has a duty to consider the effect of its actions on the safety of other people. When undertaking emergency evacuation or tactical withdrawal, commanders should consider people from other agencies.

The incident command system provides two formal means of withdrawing personnel from the scene of operations:

- An emergency evacuation
- A tactical withdrawal

The plans they make should enable emergency evacuation or tactical withdrawal which:

- Evacuates people at highest risk while protecting escape routes
- Removes people from areas where the risk has become too high

Emergency evacuation

The incident commander should inform all personnel at an incident of the location of the muster point. At a prolonged incident the location of the muster point may change.
They should ensure that all personnel know about any change.

The standard evacuation signal within the fire and rescue service is repeated short blasts on an Acme Thunderer type whistle. On hearing this signal all other personnel with whistles should also give the warning to amplify its importance and ensure all personnel are aware across the whole incident. This signal tells everyone that they need to evacuate the incident ground.

Where personnel are working in a noisy or remote area, the incident commander should consider other methods of sounding the evacuation as well as using the whistle.
The incident commander should make sure that all other agencies know the evacuation signal. This should be part of the joint agency briefing. When the fire service sounds an evacuation signal, they should tell other agencies as soon as possible.

Following evacuation there must be a roll call at a suitable location. The incident commander must make sure there has been a roll call of non-fire service personnel at the scene.

As crews will still be in the hazard area during the evacuation, then the tactical mode will still be Offensive. Informative messages should use the phrase "Emergency evacuation in progress". This will timestamp the dynamic risk assessment.

After an evacuation or an evacuation signal, no one should re-enter the hazard area without the permission of, or explicit instruction from the incident commander.

Where personnel remain unaccounted for after an evacuation, the incident commander will need to assess the risks and commence appropriate search and rescue procedures.
See *Firefighter emergencies*.

Tactical withdrawal

The incident commander may need to redeploy resources or move people away from danger. This is a tactical withdrawal. When a tactical withdrawal has taken place there will not be an evacuation signal or full incident roll call.

As crews will still be in the hazard area then the tactical mode will still be offensive.
To timestamp the dynamic risk assessment that crews should be withdrawn, an informative message should be sent using the phrase "tactical withdrawal in progress".

Safety organisation on the incident ground including risk information

When the incident commander faces a situation that is becoming more complex, as scale and duration increase, the command support function will need to be expanded. A number of the incident safety responsibilities can be undertaken through command support.

These include:

- Acting as first contact point for all attending appliances and officers
- Maintaining a physical record of resources in attendance
- Briefing arriving resources on any safety related matters, including the tactical mode
- Maintaining a record of the findings of the risk assessment and any decisions or actions taken
- Recording information about the tactical mode and relaying that information both around the incident ground and back to the fire control room
- Liaising with other agencies, assisting in joint understanding of risk
- Supervising personnel from other agencies and conducting safety briefings for these personnel before they enter the incident ground
- Briefing designated people about their tasks and safety critical information
- Instigating the service system for logging fire and rescue service personnel on the incident ground
- Acting as the, or nominating alternative, muster points for an emergency evacuation
- Overseeing roll call with the incident commander after an emergency evacuation
- Logging and safety related decisions made and the reasons behind them

Safety briefings

It will be necessary to organise safety briefings. As the incident develops, or where the risk of injury increases, these briefings should be more comprehensive. See *Communication*.

Safety officer

The incident commander or sector commander may appoint a safety officer at any time. This person should have suitable competencies for the role.

A safety officer at larger incidents may be designated as the safety sector commander. They will co-ordinate the role of other safety officers.

The safety sector commander may be responsible for the following:

- Surveying operational sectors, identifying hazards, and advising the sector commander
- Working with sector safety officers to support and exchange information
- Confirming the validity of the initial risk assessment and recording as appropriate
- Collating and recording an analytical risk assessment
- Acting as an extra set of eyes and ears to the sector commanders in monitoring the safety of personnel
- Working with the incident commander or operations commander
- Reporting health and safety issues, including accident investigation

Safety officers will be responsible for the following:

- Identifying safety issues
- Starting corrective action
- Maintaining safe systems of work
- Ensuring people are wearing appropriate personal protection equipment
- Observing the working environment
- Monitoring physical condition of crews
- Regular reviews
- Recording an analytical risk assessment
- Updating the incident commander when circumstances change

This is not an exhaustive list.

Safety officers wear a blue and yellow tabard and the words 'Safety Officer'. If there is a safety sector, the safety officer will report to a command support officer.

Safety within sectors

Sector commanders are responsible for the health and safety of people within their sector. Due to the demands at an incident the sector commander might nominate a safety officer to assist them.

Although the safety officer should report to the sector commander, the organisation of safety officers will be managed by the safety sector commander if one exists.

Safety at multi-agency incidents

It is possible that other agencies who responded will also have risk-critical information. Incident commanders should request risk-critical information in the joint agency briefing as well as sharing any information they have. They should ensure this information flows throughout the incident.

As well as the common agreed principles contained within JESIP, there is a legal framework to share information between responders in an emergency situation. This will generally come from common law (save life/property), the Crime and Disorder Act 1998 or the Civil Contingencies Act 2004. There may be formal information sharing agreements (ISAs) between some or all agencies.

Provision of risk information

Providing risk-critical information is essential to ensure safe operations. Command decision making can be significantly affected if there is a lack of risk information or where information has not been passed on. Fire control operators will often be required to receive and communicate risk critical information. See *National Operational Guidance: Operations*. Where risk critical information is included on the initial turnout details it should be easy to identify.

One of the tasks of the incident commander is to apply suitable control measures. To be able to do this they must be able to gather all available information about an incident. This is likely to include: information from the pre-planning stage, such as risk information, available in electronic or written format; information from the caller; or information passed by persons already present (i.e. occupiers or other agencies). See *Situational awareness*.

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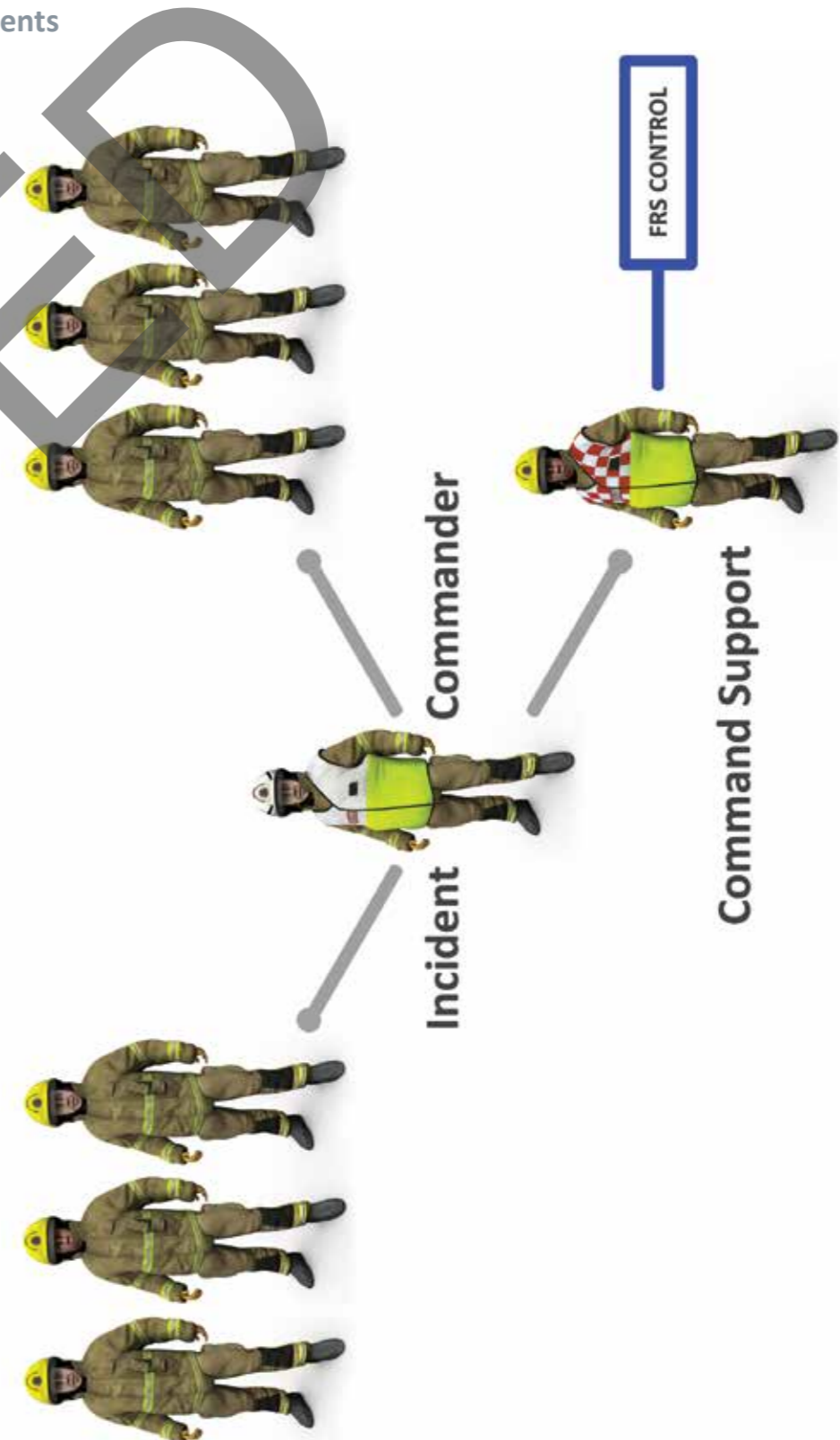
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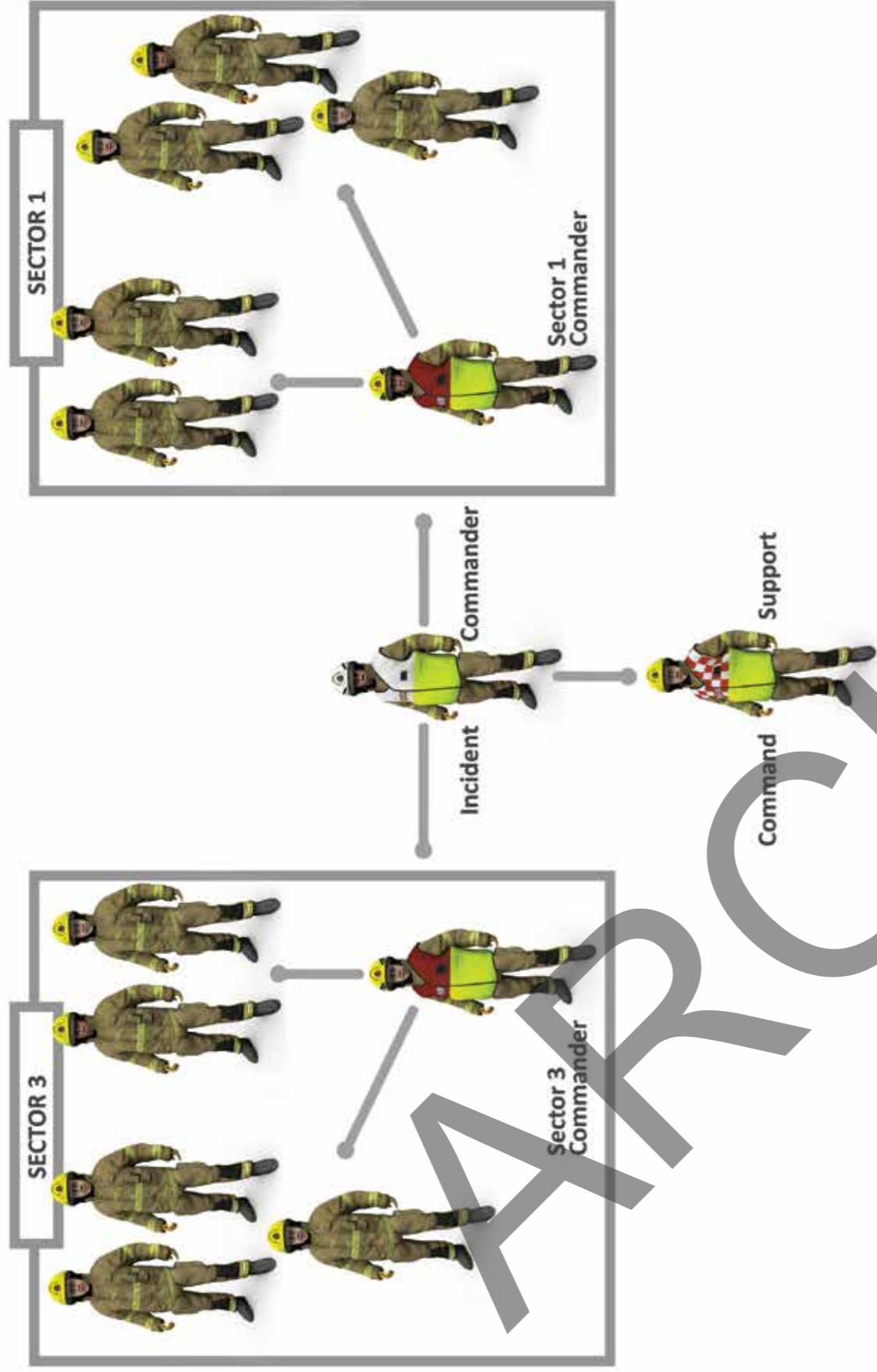
Appendix

The following pictures show how the command structure and sectorisation methodology can be used to keep individual spans of control to an acceptable level.
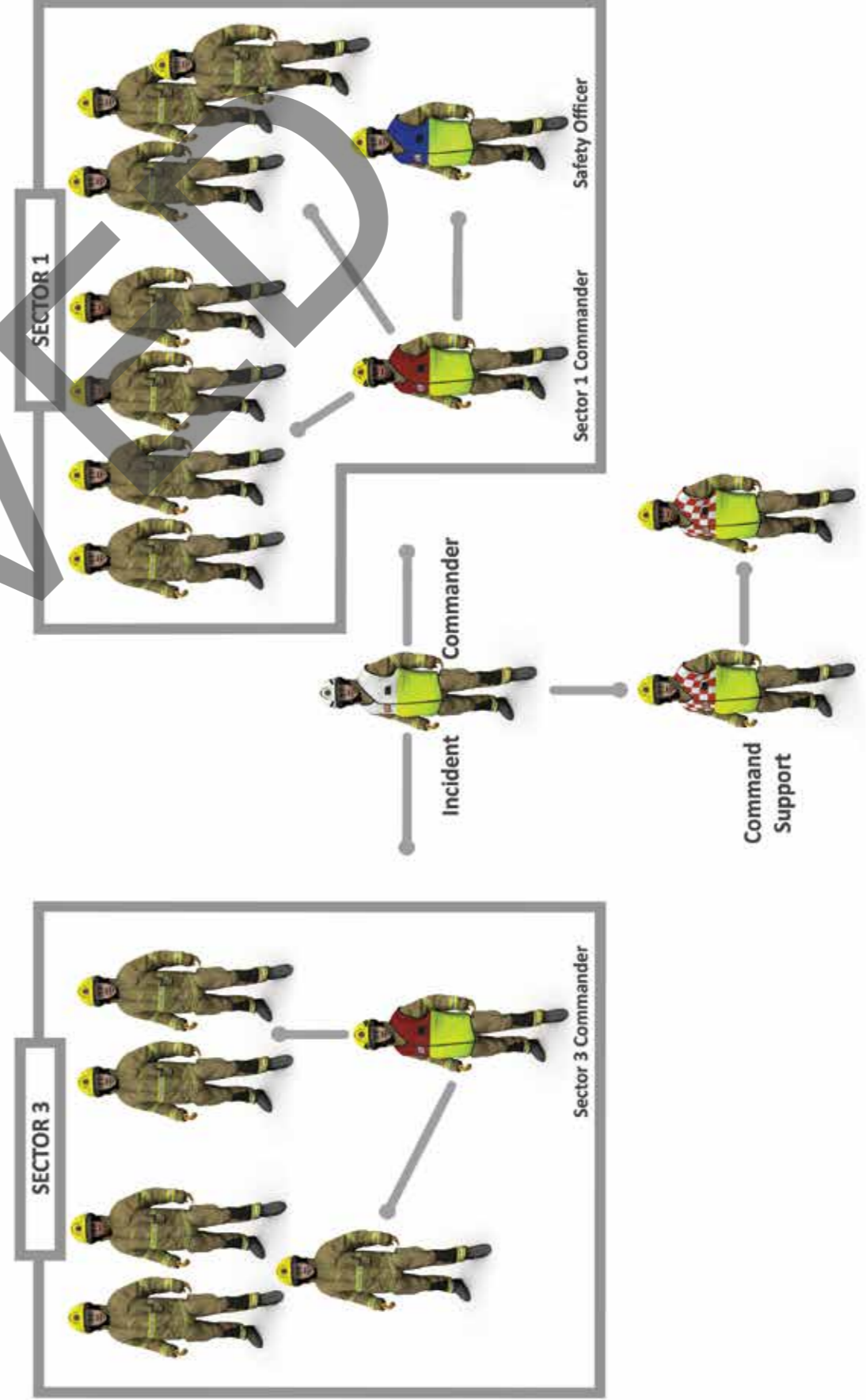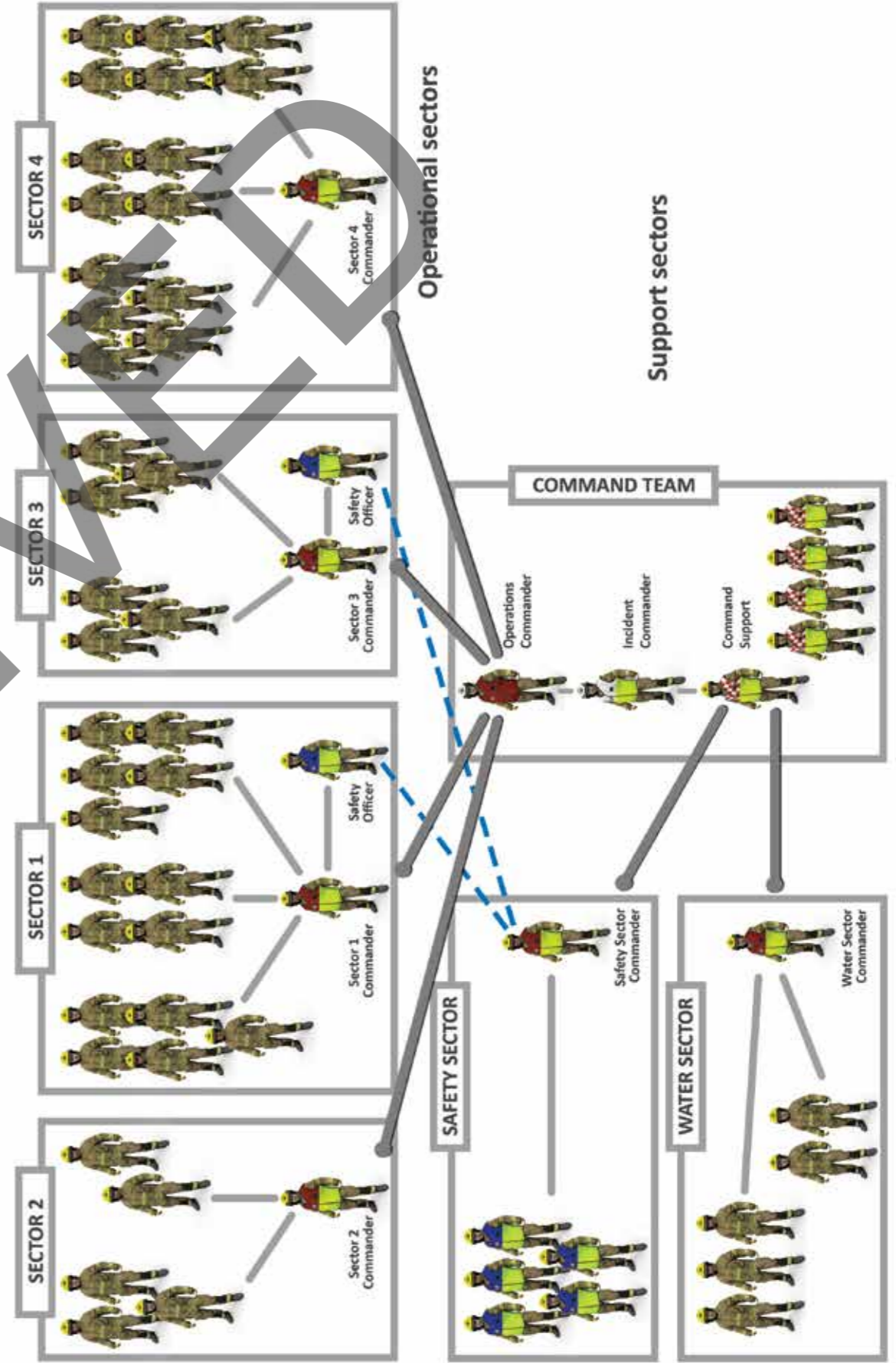
Two pump incidents

Four pump incidents
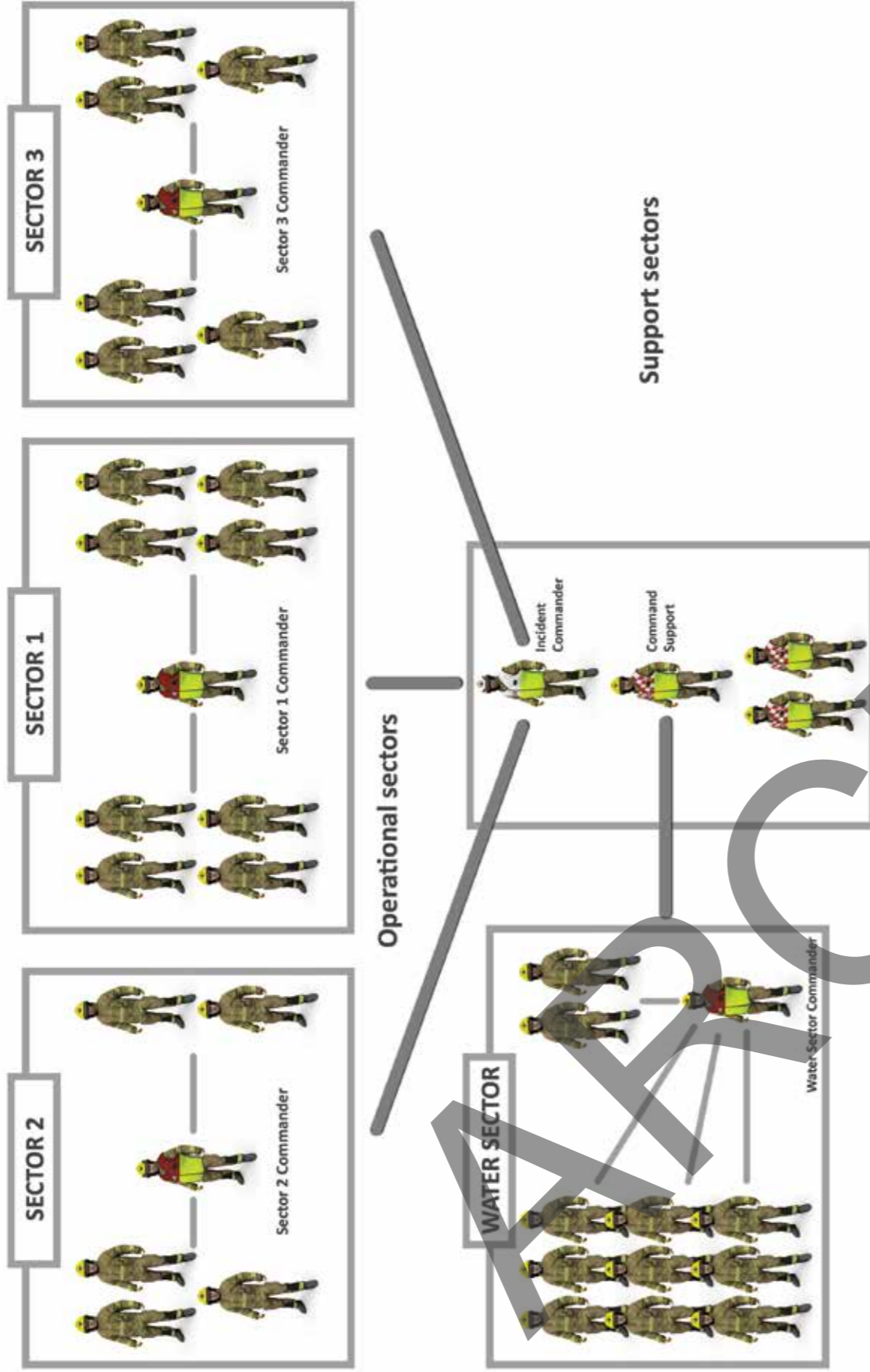

SECTOR 1

Sector 1 Commander

Incident Commander

Command Support

SECTOR 3

Sector 3 Commander

Five pump incidents

SECTOR 1

Safety Officer

Sector 1 Commander

Incident Commander

Command Support

SECTOR 3

Sector 3 Commander

SECTOR 3

SECTOR 1

SECTOR 2

Sector 3 Commander

Sector 1 Commander

Sector 2 Commander

Operational sectors

Support sectors

Incident Commander

Command Support

WATER SECTOR

Water Sector Commander

SECTOR 4

Sector 4 Commander

Operational sectors

Support sectors

SECTOR 3

Safety Officer

Sector 3 Commander

COMMAND TEAM

Operations Commander

Incident Commander

Command Support

SECTOR 1

Safety Officer

Sector 1 Commander

Safety Sector Commander

SAFETY SECTOR

SECTOR 2

Sector 2 Commander

WATER SECTOR

Water Sector Commander

Working with fire services and other experts to deliver new operational guidance.