Defence
Safety Authority

DFSR Regulation – DSA02

Defence Structural Fire Fighting Regulations (SFFR)

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Amendment Record

Date:	Version	Authority	Comments
XX XXX XX	1.0	DSA-DFSR-TL	First Draft

This document will be reviewed on a regular basis for accuracy. Any proposed editorial amendments are to be submitted in line with Defence Fire Safety Regulator (DFSR) Fire & Rescue (Oversight Assurance) Regulatory Processes, Alternative Means of Compliance, Waivers, Exemptions (AWE) Applications and Appeals.

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Foreword

The following message reinforces the DFSR Team Leaders commitment to improving safety across Defence. It includes our responsibility to fire-fighting and rescue service activities in the built environment, providing assurance that the services are contributing to safety.

Defence Fire Safety Regulator Team Leaders Message

Whilst the regulations within this document are key to achieving this objective, I am personally committed to enhancing the safe delivery of operational capability and the continuous improvement of the Defence FRS; through focusing on improved Safety, environmental protection and Quality Management. Key to this is the continued development of a widespread engaged Safety Culture and greater sharing of information through effective knowledge management.

To enable the DFSR to be recognised as a first-class Fire Safety Regulator we must continue to engage with the Regulated Community (RC) and other regulatory bodies to ensure that our regulatory activity remains effective, relevant, and proportional.

Authority

The Defence Safety Authority (DSA) is empowered, by Charter, on behalf of the Secretary of State for Defence for its roles as the independent regulator, investigator and assurer for Health, Safety and Environmental Protection (HS&EP) within Defence. In fulfilling these roles and associated activities in support of them, the DSA has operational independence and will not be subject to undue financial, political, or operational pressures. The MOD shall provide the DSA with sufficient resources to discharge its roles effectively. The DFSR Fire and Rescue (Oversight and Assurance) (F&R(OA)) team shall regulate in a manner consistent with UK good practice and the Regulators Code of Practice

My goal is for the DFSR F&R (OA) team to be conducting full risk-based activity underpinned by evidence. To support this, we will continue to develop our people and support other assurance organisation within the RC. We will also improve the knowledge management across the community to enable increased transparency and a greater sharing of information.

Citation

This document will be referred to as the Defence Fire & Rescue Structural Fire-fighting Regulations.

Regulation and Policy

The regulations contained within this document consist of a Rationale, Regulation, Acceptable Means of Compliance (AMC) and Guidance Material (GM).

DFSR Fire & Rescue (Oversight Assurance) Regulatory Processes, Alternative Means of Compliance, Waivers, Exemptions (AWE) Applications and Appeals describes the processes that enable interaction between the Regulated Community and the DFSR amendment process. This document is to be used for submission/ratification of Alternative Acceptable Means of Compliance (AAMC) and the process for requesting Regulatory Change, Waivers and Exemptions or when appealing enforcement action.

Reference Material
Statutory References
Fire and Rescue Services Act 2004 (legislation.gov.uk)
Fire (Scotland) Act 2005
Radiation - Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR)
Health and Safety at Work etc Act 1974
The Management of Health and Safety at Work Regulations 1999
Armed Forces Act 2016
Road Traffic Act 1988
The Working Time Regulations 1998
The Control of Substances Hazardous to Health Regulations 2002
Defence Publications
MTSR Regulation
DOSR TOOL SET AND DEFENCE REGULATIONS – (formerly JSP 482) – Defence Code of Practice (DCOP) For In-Service and Operational Safety Management of OME
JSP 375 – Management of Health and Safety Management of Health and Safety in Defence. Directive & Guidance
JSP 375 – Chapter 35 Organisational Change
JSP 375 – Chapter 39 Retention of Records
JSP 418– Management of Environmental Protection in Defence
JSP 426 – Defence Fire Safety and Fire Risk Management Policy Guidance and Information
JSP 440– The Defence Manual of Security
JSP 503 – The Defence Manual of Resilience
JSP 815– Defence Safety Management System

JSP 816 – Defence Environmental Management System
JSP 822 – Defence Direction and Guidance for Training and Education
JSP 850 – Infrastructure and Estate Policy, Standards and Guidance
JSP 892 – Risk Management
DIN 2021DIN01-045 - Guidance on the Working Time Regulations – Service Personnel.
North Atlantic Treaty Organization (NATO) Standardised Agreements
NATO STANAG 7051/AATMP 29 - Minimum Requirements For Crash Fire Rescue Operations in Support of Home Stations and Deployed Operations.
NATO STANAG 7132 CFR - Personal Protective and Fire-fighting Equipment Requirements for Fire and Emergency Operations.
NATO STANAG 7145 ATM (Edition 5) - Minimum Core Competency Levels and Proficiency of Skills for Firefighters.
NATO STANAG 7162 CFR (Edition 1) - Standardisation of Physical Fitness Maintenance Program for Firefighters.
NATO STANAG 7193/AATMP44: Incident Command System (ICS) for Fire and Emergency Services Responses to Incidents.
NATO STANAG 7206/AATMP47: Assessment Guides for the Provision of Fire Services during Deployed Ops.
United Kingdom Emergency Service Publications
GOV.UK - Integrated risk management planning: guidance
British Standards Institute Publications
BS 9990:2015 Non automatic fire-fighting systems in buildings. Code of practice
BS 7974 Published Document (PD)-5 2014+A1:2020 Application of Fire Engineering principles to the design of buildings – Part 5: Fire and Rescue Service intervention (Sub System 5)
BS 3251: 1991 Indicator plates for fire hydrant and emergency water supplies

BS EN ISO 22301:2019 - Security and resilience – Business continuity management systems – Requirements
National Operational Guidance
National Guidance Documents on the Provision of Water for Fire-fighting. 3rd Edition Jan 2007
HSE Guidance – Human Factors and ergonomics
Joint Emergency Services Interoperability Principles (JESIP)
National Fire Chief Council – Fire Standards Board
NFCC Fire Standards

DSA02 DFSR Fire and Rescue Regulations

Defence Fire & Rescue Structural Fire-Fighting Regulations (SFFR) mirror the layout used by the UK National Health and Safety Executive (HSE). A regulation is provided for each DFSR F&R Regulatory Article in the following format:

Rationale	The reason why the Defence Regulation is applied to the MOD, ideally with reference to National Legislation, British Standards Institute (BSI) or industry Codes of Practice and NATO Standardised Agreements (STANAGs)
Content	Lists the Articles contained within the Regulation.
Regulation	**The Defence Regulation is reiterated in the relevant regulation to aid clarity and reinforce the relationship and precedence of the Regulation. Each Regulation may contain a number of sub-clauses that are pertinent to that Regulation (*more than one Regulation may be referenced*)**
Acceptable Means of Compliance	The AMC provides practical advice on how to comply with the Defence Regulation. If AMC is followed, then this will be considered sufficient to demonstrate compliance. However, alternative approaches may be utilized where this produces an outcome that can be demonstrated to be as good as required by the FRS Regulation.
Guidance Material	Provides Guidance Material which, whilst not compulsory, may be considered '*good practice*' to further support the Regulation.

►This Regulation is new – for clarity no change marks are presented – please read the Regulation in its entirety◄

Rationale	*This Regulation requires Risk Owners (RO) to assess the risks of fire across Defence and that the probable risks and consequences be assessed in relation to the need to maintain and sustain the Defence Mission.* *The fire protection measures that are incorporated in Defence may provide inadequate protection for operationally critical assets, processes, or activities.* *Defence establishments may need to consider the response capabilities of the Civil Emergency Services (CES) or Host Nation (HN) Fire and Rescue Service (FRS).* *The RO in consultation with fire sector subject matter experts[1], is required to assess risk and consider the effectiveness of the optimum fire prevention, protection, and response measures[2] to ensure they remain proportionately balanced against the criticality of Defence capability.* *Regulations 0210 – 0216 are only relevant once an On-Site FRS has been deemed necessary, following work conducted in compliance with Regulation 0209.*

[1] SME advice can be sought from DFR HQ DFR-HQContact@mod.gov.uk regarding the requirement for fire services within Defence.

[2] Regulation 0209 identifies the process to be conducted by the RO, to determine the suitability of the fire prevention and protection measures and the provision and maintenance of an On-Site Fire and Rescue capability.

Content	DFSR 0209 - Fire Prevention, Protection and Response Assessment DFSR 0210 - Fire and Rescue Service (FRS) Emergency Preparedness and Resilience. DFSR 0211 - FRS Vehicle and Equipment Requirements DFSR 0212 – FRS Personnel Requirements DFSR 0213 – FRS Fire-fighting Media DFSR 0214 – FRS Operations DFSR 0215 – Reductions in FRS Cover DFSR 0216 – FRS Training Requirements

There are two key definitions that are considered necessary to the implementation of Defence Fire Safety Regulator (DFSR), these are:

Shall - A Defence specific requirement which describes an activity that is mandated by Defence.

Should - Defence regulatory advice which if the advice is followed then this will be considered sufficient to demonstrate compliance with a regulation. However, alternative approaches may be utilized where this produces an outcome as good as required by the regulation. These alternative approaches should be presented to the DFSR using the appropriate request form.[3]

[3] Available via DSA02 DFSR Regulations DFSR Form 08: Request for Waiver/Exemption or Form 09: Request for Alternative Acceptable Means of Compliance.

Regulation 0209

Fire Prevention, Protection and Response Assessment

0209 Risk Owner[4] (RO), Commanding Officer (CO) and Head of Establishment (HoE) **shall** ensure the credible risks and consequences of fire are assessed and the optimum fire prevention, protection and response measures remain proportionately balanced against the criticality of Defence capability and other risks.

Acceptable Means of Compliance 0209

Fire Prevention, Protection and Response Assessment

1. RO/CO/HoE **should** conduct a Business Impact Analysis (BIA)[5] against Defence Critical National Infrastructure (DCNI) and other risks to predict the consequences of disruption of a Defence function or process.

2. The BIA **should** gather information needed to develop effective strategies for the protection of DCNI and other risks. Potential loss scenarios should be identified and documented in a risk register as detailed in JSP 503 Part 2 and in accordance with Security Classifications outlined in JSP 440[6].

3. Where the BIA identifies Fire Prevention and Protection measures are insufficient to protect a critical Defence output, the RO/CO/HoE **should** consult with Fire Sector Subject Matter Experts[7] (SME).

4. If it is established that there is no redundancy and/or resilience for the loss of the identified DCNI asset or output, an Integrated Risk Management Review (IRMR) **should** be considered. This **should** be requested through, and in consultation with the relevant TLB Resilience Focal Point.

5. The IRMR will determine if an FRRA/IRMP is required and **should** assess[8];

   a. The Fire Safety measures (Prevention, Protection) in place are appropriate to the risk identified by the BIA.

   b. The fire response from the Civil Emergency Services/Host Nation (CES/HN) is acceptable, taking into consideration the local fire authority responsibilities under the Fire and Rescue Services Act 2004, or equivalent legislation.

6. The outcome of the FRRA/IRMP **should** determine appropriate levels of fire prevention, protection and response,

[4] In accordance with JSP 503 Part 1 Chapter 2
[5] JSP 503 Part 2 - Defence Manual of Resilience - Leaflet 5
[6] JSP 440, Leaflet 3A, Para 19a - d
[7] DFR HQ via DFR-HQContact@mod.gov.uk
[8] This list is not exhaustive nor is it limited.

which may include the provision of an onsite fire and rescue capability.

7. The RO/CO/HoE **should** review the BIA when associated risk profiles change.

8. The fire sector SME **should** review the IRMP at agreed periodic intervals[9] and when associated risk profiles change.

9. Changes to the IRMP **should** be agreed and endorsed by the RO/CO/HoE following consultation with relevant stakeholders.

10. When considering the need to implement organisational change, the change owner[10] should comply with JSP 815 Volume 2 Element 2 Organisational Change and JSP 375 Chapter 35

11. Where organisational change[11] occurs, an Organisational Safety Assessment (OSA) **should** be conducted by a person in a position of authority, with suitable knowledge and competence to conduct such an assessment.

12. The OSA **should** identify potential risks and required mitigation measures to manage the proposed change, to ensure that there is no adverse impact to the safe conduct of Defence activities.

[9] Not exceeding 5 years

[10] The Change Owner is the initiator of any change programme and may not always be the TLB Holder or CE of an agency / other government organisation i.e., its sponsor.

[11] Organisational change encompasses any changes affecting the structure or range of duties currently conducted by personnel within that organisation and may include mergers, organisational restructuring, transfers of Defence personnel or changes to staffing levels and alterations to procedures, roles, and responsibilities. Even subtle changes to organisations can have a detrimental effect on health and increase the workforce's experience of stress.

Guidance Material 0209

Fire Prevention, Protection and Response Assessment

13. The purpose of the BIA is to predict the consequences of disruption to Defence capability and gather information needed to develop recovery strategies.

14. The BIA is to consider the key functions to be assessed, including.

a. People

(1) Key Staff
(2) Skills/Expertise/Training
(3) Minimum Staffing Levels

b. Premises

(1) Buildings
(2) Facilities
(3) Equipment/Resources

c. Processes

(1) IT
(2) Documentation
(3) Systems & Communications

d. Providers

(1) Reciprocal Arrangements
(2) Contractors/External Providers
(3) Suppliers

e. Profile

(1) Reputation
(2) Legal/Statutory or Defence Regulatory Considerations
(3) Vulnerable Groups

15. The purpose of the FRRA is to identify all known vulnerabilities to fire and contribute towards providing resilience in protecting life, processes, information, technology, and facilities in the event of fires.

16. The outcome is to provide the RO/CO/HoE with the ability to anticipate, prepare for, respond, and adapt to incremental change and sudden disruption to survive and prosper.

17. The FRRA is to be conducted in consultation with fire sector SME and relevant stakeholders i.e., TLB, Safety Centre, CESO, Defence Regulators, etc.

18. The IRMP provides an approach to delivering the business activities of the Unit/Establishment and is to consist of the following steps.

a. **Step 1: Scope**. Identify all of the issues/risks from fire, which jeopardise defence capability. Identify all the

internal and external controlling factors that impact upon the Defence establishment.

b. **Step 2: Risk Assess** each of the issues/risks that are in scope.

1) How likely are they to materialise?
2) How harmful are they to Defence capability?

Prioritize them according to overall risk and determine performance outcome target (the degree to which you would like the risk to be reduced).

c. **Step 3: Develop strategies** to reduce the risk. Identify the resource needed to deliver each strategy. Allocate resources according to the degree of risk. Identify the inputs and outputs of delivery strategies – if short term inputs and outputs are achieved, long term outcome should be satisfactory.

d. **Step 4: Delivery.** People are the most important part of any delivery strategy. So to make sure that the strategies work, consult staff about the practicalities of the delivery mechanisms.

e. **Step 5: Monitor** the whole process from step 1 to 4. Constantly look for new risks and change to existing risks. Monitor performance against inputs, outputs, and outcomes.

f. **Step 6: Review** the process in the light of performance. Did the strategies deliver the performance outcomes? If so, continue with them, if not, develop new strategies for the next planning cycle.

Regulation 0210

Fire and Rescue Service (FRS) Emergency Preparedness and Resilience

0210 Risk Owner (RO), Commanding Officer (CO), Head of Establishment (HoE) and Fire and Rescue Service (FRS) provider[12] **shall** ensure that FRS is prepared to respond to incidents and emergencies.

This is to reduce, control, and mitigate the impact to Defence through effective preparedness, response, and recovery where Civilian Emergency Services / Host Nation (CES/HN) FRS resources have been deemed insufficient and an On-site FRS capability has been funded and provided, to meet the increased Defence requirement.

The FRS **shall** continue to deliver an emergency response when Business Continuity Plans (BCP) are activated. It **shall** be prepared to respond as a single service; working with other fire and rescue services or as part of a multi-agency response.

Acceptable Means of Compliance 0210

Fire and Rescue Service (FRS) Emergency Preparedness and Resilience

1. The RO, CO and HoE **should** ensure the FRS Service Provider (SP), in accordance with the agreed and funded operating model, delivers an FRS for the purpose of;

   a. extinguishing fires;

   b. protecting life, processes, information, technology, and facilities in the event of fires in its area; and

   c. respond to Special Services, including Road Traffic Incidents which are captured in the Unit Response Plans.

2. The FRS provider **should** provide sufficient personnel[13], services and equipment to support the needs of the Emergency Response Plan[14] (ERP) in accordance with the establishments risk profile, as identified within the establishment IRMP.

3. The FRS **should** prepare for emergencies and take preventative or pre-emptive actions as required, that are:

   a. based on a robust assessment of foreseeable risks to the establishments Area of Responsibility (AOR) and are informed by Defence Critical National Infrastructure (DCNI) and its establishment risk profile;

[12] FRS Provider refers to the organisation that is required, as defined within a formal Defence agreement, to provide FRSs to a Defence customer (Defence Delivery Organisations / TLBs, Enabling Organisations and / or Arms Reach Organisations).
[13] Consideration should be given to Working Time Regulations and 2021DIN01-045.
[14] Also referred to as; Major Incident Plans (MIP), Major Accident Plans, etc

b. containing supporting materials which reflect and embed Joint Emergency Service Interoperability Principles (JESIP); and

c. aligned to all ERP, and where relevant, meet regulatory requirements. These plans may include those for Major Accident Control Regulations (MACR) and Radiation (Emergency Preparedness and Public Information) Regulations (REPPIR).

4. The service provider **should** have Safe Systems of Work (SSoW) for all incidents likely to be encountered on Defence Establishments. Providing Tactics, Techniques and Procedures (TTP) for all incidents likely to impact Defence capability, as identified within the establishments risk profile. To;

a. reduce all risks to As Low As Reasonably Practicable (ALARP) and Tolerable by the introduction of TTP; and

b. have Business Continuity Plans (BCP) in place relating to all critical functions, that;

1) demonstrate a clear procedure for invoking the BCP and set out the principal for responding to emergencies; and

2) are reviewed and exercised periodically.

5. The FRS **should** align their operational policies, procedures, and standards on National Operational Guidance (NOG) and National Fire Chief Council (NFCC) Fire Standards, unless by exception its content is not relevant and **should** be compliant with Defence Systems Approach to Training (DSAT) Role Performance Statement (Role PS).

6. The FRS **should** have policies, procedures, and tailored guidance in place, which provide operational and fire control personnel with current information and instruction about foreseeable hazards and the control measures that can be applied.

7. The FRS **should** contribute to the development and review of all establishment ERP where they provide a response service and ensure that all fire and rescue related aspects are included within the plans.

8. The HoE **should** ensure up to date site risk information is produced and made is developed and made available to all responding emergency services.

9. The FRS provider, in collaboration with the RO/CO/HoE **should** ensure appropriate FRS response risk information is developed for all risks notified to them by the HoE.

10. The FRS provider **should** ensure collaboration with CES forming the Pre-Determined Attendance (PDA) for incidents at individual Defence Establishments.

11. The FRS provider **should** optimise the opportunity to gather lessons learnt, such as debrief outcomes following emergency response, training or exercises and share them on the available systems to ensure organisational learning.

12. The FRS **should** have a process in place to act on any learning received from systems such as Defence Operational Learning (DOL), Joint Operational Learning (JOL) and National Operational Learning (NOL) to drive innovation and continuous improvement and enhance future performance.

13. A thorough knowledge of the topography of the Defence Establishment and its immediate vicinity is fundamental for FRS personnel. The use of site maps and careful selection of routes is essential for success in meeting the response objective[15].

Guidance Material 0210

Fire and Rescue Service (FRS) Emergency Preparedness and Resilience

14. The site-specific risk information can be completed in consultation with the Civilian Emergency Service/Host Nation (CES/HN) aligned with their Integrated Risk Management Plans (IRMP) covering the CES/HN area of responsibility[16].

15. The FRS provider will have in place a suitable and effective Quality Management System (QMS)[17].

[15] On MACR establishments the Environmental Risk Assessment (ERA) will give a good idea of topography and any concerns e.g., aquifers, Site of Special Scientific Interest (SSSI) etc.

[16] For further detail on Emergency Plans, ERA etc. please see the DOSR Tool Set and Defence Regulations.

[17] In accordance with JSP 815 Defence Safety Management System

Regulation 0211	**FRS Vehicle, Equipment and Infrastructure Requirements** 0211 Risk Owner (RO), Commanding Officer (CO), Head of Establishment (HoE) and Fire and Rescue Service (FRS) provider **shall** provide a Fire and Rescue Service with adequate resources, vehicles, and equipment, to ensure an optimum emergency response[18] to identified risks.
Acceptable Means of Compliance 0211	**FRS Vehicle, Equipment and Infrastructure Requirements** 1. The FRS **should** ensure all vehicles meet the requirement of an establishment's risk profile, taking into consideration CES/HN support. 2. The provision of vehicles **should** be capable of carrying crew and equipment simultaneously to incidents within the Area of Responsibility (AOR). 3. The minimum number of FRS vehicles provided **should** be capable of delivering equipment to meet the principle objectives of the FRS at the incident or accident scene. 4. Equipment **should** be provided appropriate with the level of operations, easily accessible, taking into consideration: a. the risk profiles; b. a Task Needs Analysis (TNA); c. an Equipment Needs Analysis (ENA); d. response from CES/HN FRS; and e. relevant Health and Safety legislation, e.g. Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work Regulations (PPE) require that equipment is; 1) suitable for the intended use; 2) safe for use; maintained in a safe condition and, in certain circumstances, inspected to ensure this remains the case; 3) used only by personnel who have received adequate information, instruction, and training; and 4) accompanied by suitable safety measures (e.g., protective devices, markings, warnings). f. a suitable Test and Inspection regime for which appropriate records **should** be maintained iaw JSP 375 Ch 39.

[18] In accordance with the agreed and funded operating model.

g. records **should** include details of consequential action where an inspection has revealed a defect or deficiency and include:

1) Details of the individual conducting the check.

2) Details of faults found, and action taken.

3) Details of the vehicle/equipment status.

5. Vehicle(s)/Equipment **should** not be used outside of periodic test/inspection/maintenance date.

6. An Equipment Need Analysis (ENA) **should** determine the appropriate level of fire-fighting and rescue equipment required to address and meet the needs of an establishment's risk profile.

7. A system of preventative maintenance of FRS vehicles and equipment **should** be employed to ensure effectiveness of the equipment and compliance with Defence Regulations and legislation throughout the life of the vehicle and equipment.

8. Drivers are required by law to ensure the vehicle they are using is in a roadworthy condition and any load or ancillary equipment is safe and secure. Prior to an MOD provided vehicle being used a safety check **should** be conducted by the driver to ensure it is fit for purpose and does not pose a danger to themselves, their passengers or other road users.

9. Management procedures **should** be in place to ensure that pre-use vehicle and equipment checks are conducted prior to use.

10. The check **should** ensure that there are no obvious faults that would affect safe use and/or occupant safety. Where a fault(s) is found the fault(s) are to be reported and the vehicle/equipment is not to be used until the fault(s) are rectified.

11. Defect reporting. Those responsible for the tasking, allocation and use of MOD provided vehicles **should** ensure that a defect reporting system is in place to prevent unfit vehicles from being made available for use.

12. The operating[19] and management of the vehicles **should** be compliant with Defence Movement and Transport Regulations.

13. Arrangements **should** be in place for the provision of an additional vehicle(s) during periods of maintenance or when a vehicle is out of service.

14. Where a structural response capability is provided by an Aerodrome Rescue Fire Fighting (ARFF) vehicle, the ability to deliver water jets would be desirable. Care **should** be taken in providing this additional capability to ensure that the primary role of the vehicle (aircraft fire-fighting) is not impaired.

[19] Excluding the fire-fighting operations.

15. All FRS personnel **should** be provided with Personal Protective Equipment (BS EN 469: 2020) to enable them to perform their duties in a safe and effective manner.

16. A vehicle mounted radio communication system **should** be provided linking the FRS to other responding elements identified within the Unit Emergency Response Plan (ERP).

17. An alerting system for FRS personnel, **should** be provided at the Fire Station.

18. Communications equipment **should** be provided which will have an effective range such that it ensures reception within all the response areas that the FRS may be required to operate in. The FRS Response Area **should** be identified within the Unit ERP.

19. In order that FRS personnel can communicate in difficult environments such as underground facilities, un-fenestrated buildings, and mines, consideration **should** be given to the provision of leaky feeder communication systems.

20. Communication equipment **should** be provided to enable the FRS to communicate with the responding CES.

21. Radio equipment **should** be provided to enable FRS personnel to maintain communications with a Command Centre[20] when not in their vehicles.

22. A reliable method of summoning assistance from external emergency services **should** be provided.

23. The onsite FRS should be housed in a Fire Station[21] which consist of:

a. Vehicle Bays to include Local Exhaust Ventilation Systems, where required:

b. Control/Watch Room

c. OIC Station Office

d. Administration Office

e. Drying Room

f. Changing/Locker Room

g. PPE Storage (in use/spare)

h. Ablutions

i. Dormitory (where applicable)

j. Kitchen/Rest Room

k. Training/Classroom

l. Storeroom

[20] E.G. Main Guardroom, Donnington Fire Control, Emergency Control Centre etc
[21] Through consultation with Defence Infrastructure Policy and Performance Standards JSP 850 Building Performance Standards.

m. BA Servicing Room (and soundproof annex for Compressor)

n. Workshop

o. Cleaners Room

24. The FRS **should** be provided with a fire training area with suitable training resources:

a. that are commensurate with the type and scale of operations and the size and complexity of the training and Maintenance of Competence Scheme (MOCS).

b. These may include[22]:

1) Drill Tower

2) BA training complex, supporting the requirement of Heat and Smoke training.

Guidance Material 0211

FRS Vehicle and Equipment Requirements

25. Guidance on the rescue equipment to be provided at a Fire Station is given in NATO STANAG 7132 CFR - Personal Protective and Fire-fighting Equipment Requirements for Fire and Emergency Operations.

26. The management of information and record keeping including the disposal of records can be found in JSP 375 Chapter 39 – Retention of Records.

[22] Designed to meet the risk profile of the Station.

Regulation 0212

FRS Personnel Requirements

0212 Risk Owner (RO), Commanding Officer (CO), Head of Establishment (HoE) and Fire and Rescue Service (FRS) provider **shall** provide a fully resourced Fire and Rescue Service with appropriate numbers of Suitably Trained and Competent Personnel (STCP) at the Defence Establishments for which they are responsible[23].

Acceptable Means of Compliance 0212

FRS Personnel Requirements

1. The Defence FRS Provider **should** ensure that:

   a. All FRS personnel are trained and developed to maintain a competent and professional standard enabling the service to conduct its role in preparedness, response, and recovery to emergencies.

   b. All FRS personnel required to act in emergencies, demonstrate their medical fitness[24] to execute their role, taking into consideration the type of activity.

   c. All FRS personnel are employed in a way that ensures appropriate response times can be achieved in accordance with operational needs.

   d. All responding FRS personnel are provided with personal protective equipment (PPE) and respiratory protective equipment (RPE) to enable them to perform their duties in an effective manner.

2. A Training Analysis (TA) **should** determine the actions required of the FRS to deal with principle objectives to address and meet the needs of an establishment's risk profile.

3. The TA **should** be organised, managed, and conducted in consultation between the HoE and FRS Service Provider (SP).

4. The appropriate number of personnel and supervisory grades, resources and any additional training requirements should be determined through a quantitative and qualitative assessment process. This assessment should address and meet the needs of an establishment's risk profile.

5. The HoE **should** ensure that a TA is conducted to determine the actions required of the FRS to deal with designed[25] objectives to address and meet the needs of an establishment's

[23] in accordance with the agreed and funded operating model
[24] Medical fitness assessments specific to FRS **should** be conducted for pre-employment entry as a fire fighter as well as ongoing medical fitness assessments for existing staff.
[25] The word designed is used to enable the risk owner to achieve the desired outcome set against a series of enabling objectives.

risk profile. Other reasons requiring a TA include, but are not limited to, the following:

a. change(s) to the risk profile of the establishment;

b. change in type of vehicle(s) which introduce modern technology;

c. change in the Pre-Determined Attendance (PDA) delivered by CES/HN Support;

d. adoption of new FRS Guidance, where change impacts upon operational response;

e. where a Deployed Operations becomes an Enduring Operation; and

f. continuous Improvement, following Lessons Identified (LI) and learnt from incidents, exercise reports, Operational Learning (OL) etc.

6. The outcome of the TA **should** be agreed and endorsed by the HoE. It is to be shared with the CES or Host Nation (HN) equivalent and Local Resilience Forums.

7. Independent assurance of the TA **should** be determined and provided by the DFSR F&R (OA) Team. Once completed, the TA **should** be recorded in the Unit's Safety Environmental Management System (SEMS).

8. The appropriate number of personnel and supervisory grades[26] resources and any additional training requirements **should** be determined through a quantitative and qualitative assessment process. This assessment **should** address and meet the needs of an establishment's risk profile.

9. The objective of providing the appropriate number of competent personnel **should** be based on the 'Safe Person Concept' to have available sufficient staff, at all responsibility levels, operating Safe Systems of Work (SSoW) to ensure that,

a. the FRS can achieve the principle objective;

b. vehicles and equipment can be operated effectively and safely;

c. sufficient supervisory grades can initiate[27] an Incident Command System;[28]

d. gain access and carry out specific tasks if required e.g. fire-fighting, rescue and making safe any special risks;

[26] Consideration **should** be given to the maximum number of personnel under development and permitted to operate in an operational capacity to meet the needs of an establishment's risk profile.

[27] Oxford Concise English Dictionary definition is; "Cause (a process or action) to begin."

[28] In accordance with NATO STANAG 7193/AATMP 44 Incident Command System (ICS) for Fire and Emergency Services Response to Incidents.

e. support and sustain the deployment of fire-fighting and rescue equipment as determined by the TA and ENA; and

f. the FRS elements of the Establishment's Emergency Response Plan (ERP) can be effectively achieved.

Note: The above list is not exhaustive, and all relevant tasks must be identified before proceeding through the qualitative and quantitative assessment. Each task may include numerous functional activities.

10. It is recognised that FRS personnel may be engaged in duties other than those directly associated with their role. These 'supplementary' activities **should** be the subject of an Impact Assessment and are to be organised so as not to create conditions likely to compromise individual or crew performance or introduce additional hazards.

11. During deployed operations, where no Civilian Emergency Services (CES) or Host Nation (HN) support is available, the provision of FRS **should** be scaled to ensure that all tasks associated with the TA are effectively and safely dealt with by on-site arrangements.

12. Training of FRS personnel **should** be carried out in accordance with DFSR Regulation 0216: FRS Training Requirements.

Guidance Material 0212

FRS Personnel Requirements

13. Medical standards for FRS personnel are a single Service (sS) requirement.

14. FRS personnel designated as part of the appropriate level for response, who are engaged on supplementary tasks, must be able to disengage safely to provide an appropriate and timely response.

15. FRS personnel designated as part of the appropriate level for response are not to be engaged on duties involving the handling of flammable liquids.

Regulation 0213

FRS Fire-fighting Media

0213 Risk Owner (RO), Commanding Officer (CO), Head of Establishment (HoE) and Fire and Rescue Service (FRS) provider **shall** provide Fire and Rescue Services with adequate quantities and properties of fire extinguishing agents at Defence Establishments for which they are responsible[29].

Acceptable Means of Compliance 0213

FRS Fire-fighting Media

Water Supplies

1. The FRS Provider **should** ensure a sufficient supply of uninterrupted water is available to ensure that intervention is not delayed while water supplies are located, and hose laid.

2. The provision of an uninterrupted adequate water supply **should** be provided for continuation fire-fighting at the scene of an incident.

3. The FRS in consultation with the HoE and Defence Infrastructure Organisation (DIO) **should** consider the following when assessing establishment water supplies:

   a. type of risk;

   b. vehicular access;

   c. the provision of hydrants;

   d. the provision of static water supplies;

   e. utilisation of existing unlimited and guaranteed natural water sources, subject to;

      1) access and provision of hard standing for fire appliances being provided;

   f. the need and availability of supplementary pumping capacity;

   g. the Pre-Determined Attendance (PDA) response and the level of support provided by CES/HN; and

   h. fixed pumps, where these may provide a rapid and less resource-intensive method of replenishment.

4. A Water Assessment (DFSR Form 14) **should** be completed to ensure adequate flow rates are provided to meet the risk specified.

5. The provision of fire-fighting water systems **should** be provided:

[29] in accordance with the agreed and funded operating model.

a. in accordance with BS 9990: 2015 with a flow rate for normal risks of 25 litres per second for 60 minutes; and

b. with enhanced flow rates of;

1) 75 litres per second for 90 minutes for high risks such as industrial risk and storage.

2) 75 litres per second for hardened aircraft shelters (HAS) for 60 minutes.

3) 100 litres per second for aircraft hangers for 60 minutes.

4) 120 litres per second for 120 minutes for oil fuel depots and oil fuel jetties.

5) For ammunition and explosive risks, the water supply requirements vary depending on the type and degree of risk. In such instances the water supply should comply with DOSR Tool Set and Defence Regulations[30]

6. These rates can be achieved from up to 3 hydrants in concurrent use within 90m of the risk from a ring main and not a spur/dead end leg and not more than 90m apart (70m for ammunition risks in accordance with DOSR Tool Set and Defence Regulations).

7. Where insufficient water supplies are identified, it **should** be documented, in the Station[31] Risk Register and identified in the Emergency Plan, so all parties are aware of the issues and mitigations (pumps etc) in place or required by the CES.

8. Where water supplies are insufficient to meet the required flow rates, suitable engineered mitigation **should** be applied using an appropriate Determination Process in consultation with key stakeholders.

Fire Hydrants

9. Every Hydrant and Emergency Water Supply (EWS) **should** be clearly marked in accordance with BS 3251: Indicator plates for fire hydrant and EWS.

10. Maintenance and testing of hydrant systems should be in accordance with BS 9990:2015

11. Six (6) weeks' notice in writing **should** be given to the FRS of any intention to conduct work on the water mains affecting the fire-fighting water supplies.

12. A minimum of 7 days' notice in writing **should** be given when proposed works affect a fire hydrant.

[30] DSA 03.OME Part 2 Chapter 15 - Fire Safety
[31] This can also be referred to Unit or Establishment Risk Register

Fire-fighting Foam

13. Fire-fighting foams **should** be maintained and stored in accordance with the manufacturer's instructions.

14. The fire-fighting agents **should** be compliant with Persistent Organic Pollutant Regulations. The foam products **should** be free of any Perfluorooctanoic acid (PFOA), Perfluorooctane sulfonate (PFOS) and Perfluoroalkyl and Polyfluoroalkyl substances (PFAS), or any derivative that is persistent in the environment (there **should** be no acceptable lower limit or threshold).

15. The foam solution **should** be acceptable to the local water utilities for discharge into the foul sewer. Where this is not possible, during training[32] and operational use, the fire-fighting effluent (where possible) **should** be captured to minimise, the impact on the environment and reducing the risk of enforcement action from an environmental release.

16. FRS Integrated Risk Management Plans (IRMP) **should** consider environmental risk. They **should** identify and assess,

a. Potential pollution sources from an operational intervention;

1) The sensitivity and vulnerability of the local environment.

b. Factors to consider include impact on;

1) Public and private water abstraction points.

2) Aquifers.

3) Bathing water, fisheries, and other recreational uses of water.

4) Nature conservation sites, such as SSSI's.

5) Other uses of water.

6) Pathways the pollutant will follow using drainage plans and control options, such as the type and location of pollution prevention systems.

17. All reasonable steps must be taken to minimise pollution.

18. HoE must have systems in place to advise environment agencies[33] when there is potential for pollution, or when pollution has occurred from FRS actions/activities.

19. The Control of Substances Hazardous to Health Regulations (COSHH) require the safe storage of substances where hazardous substances are present in the workplace.

[32] Were foam effluent cannot be captured during training, the training **should** not take place.
[33] Including informing the Defence Environmental Protection Regulator (DEPR).

20. In pursuance of paragraph 0213.AMC.17 above, the HoE **should** ensure that risk assessments are conducted, with consideration of how substances are to be used and stored safely.

21. Vehicle foam tanks where fitted, **should** be kept full at all times when the vehicle is in operational service.

Guidance Material 0213

FRS Fire-fighting Media

22. Inadequate fire-fighting water supplies both from the amount of water available (flow/demand) and the length of time the supply is available (duration) could lead to an increase in fire losses and hinder fire-fighting activities.

23. Insufficient supplies may contribute to the continued growth of a fire and as a consequence more water is likely to be required to suppress the fire growth, leading to an increased environmental impact from airborne and water borne pollution.

24. When conducting a Water Assessment consider:

a. How the fire alarm is raised;

1) Automatically – automatic fire detection;

2) Manually – break glass alarms, running call etc;

b. Length of time from the time from the fire starting to fire-fighting efforts starting;

c. Provision of any fire suppression systems;

d. Building Construction and internal compartmentation;

e. Activities, processes, and risks contained in the building;

f. Nature, size, and fire loading of combustible materials;

g. Potential for internal rapid fire spread;

h. Potential for fire spreading to other buildings, and

i. MACR.

Regulation 0214

FRS Operations

0214 Risk Owner (RO), Commanding Officer, Head of Establishment (HoE) and Fire and Rescue Service (FRS) provider **shall** ensure that Fire and Rescue Services are provided to cover all operations considered necessary at Defence Establishments for which they are responsible[34].

Acceptable Means of Compliance 0214

FRS Operations

1. When responding to incidents on or adjacent to Defence establishments, the principle objectives of the FRS **should** be to:

   a. Save Life;

   b. Reduce operational impact on Defence capability;

   c. Reduce damage to property;

   d. Reduce damage to the environment; and

   e. Reduce reputational damage to Defence.

2. The FRS **Should** analyse the risks identified in the Integrated Risk Management Plan (IRMP), determine the risk levels, and prioritise response accordingly.

3. The FRS **should** be organised and operated in such a manner as to ensure their response time enables the effective and efficient use of resources.

4. The FRS **should** make decisions about the deployment of resources based on the prioritised risk levels and planning assumptions involved.

5. This **should** be conducted with consideration given to internal and external resource availability, including collaboration with CES/HN and Defence resilience support.

6. All employees who drive using blue lights for a Defence FRS purpose, **should** be trained in accordance with Defence Regulation[35] and Role Performance Statement (Role PS).

7. When responding to emergencies the FRS **should** drive vehicles safely and within the vehicle capabilities, accounting for the driver's abilities.

8. The FRS **should** provide a Safe System of Work (SSoW) for responding to emergencies.

9. A SSoW **should** include a number of elements that come together to deliver an effective and safe service. The SSoW **should** consider but is not limited to the following:

[34] in accordance with the agreed and funded operating model.

[35] MTSR Regulation Number 16 - Control and Use of MOD Emergency Vehicles

a. Standard Operating Procedures (SOP);

b. call handling;

c. alerting system;

d. time of day;

e. prevailing weather conditions;

f. competent staff;

g. communications;

h. effective leadership and incident command;

i. an effective safety culture, and

j. human factors and ergonomics[36].

10. When assessing an effective response, the above points **should** be analysed and reviewed; however, when measuring effectiveness, each aspect need not be focused on in isolation.

11. The first members of the FRS to arrive on the scene **should** make a rapid assessment and inform their central location[37] in accordance with Joint Emergency Services Interoperability Principles (JESIP)[38]. The location receiving the initial report **should**, in accordance with the establishment's ERP, alert the other emergency services and relevant partner agencies.

12. The Senior FRS Officer present **should** retain incident command and control[39] (C2) of all deployed FRS assets until the incident is handed over to an appropriate member of the CES[40], or until the incident emergency response phase is terminated and formally handed over to the MOD Incident Officer.[41]

13. The FRS **should** participate in the exercising of site ERP, either by practical or tabletop means, and contribute to post-exercise debriefs. Practical exercising of the ERP should be undertaken once every three years[42].

14. The FRS **should** liaise with all other emergency responders in accordance with JESIP.

15. The FRS **should** comply with Health Safety and Environmental Legislation when delivering an operational response.

[36] https://www.hse.gov.uk/humanfactors
[37] Control/Watch room, Air Traffic Control, Guardroom, Operations Rooms, Capita Fire Control Donnington etc…
[38] Host Nation protocols and procedures are to be taken in to account in Overseas locations.
[39] In accordance with NATO STANAG 7193/AATMP 44 Incident Command System (ICS) for Fire and Emergency Services Response to Incidents.
[40] Host Nation (HN) support when on Deployed Operations.
[41] Duty Military Officer
[42] DSA 03.OME Part 4 Regulation and DCOP 406 – Emergency Plans

16. The FRS **should** develop working arrangements with other fire and rescue services and responder agencies, to improve their operational response to multi-agency incidents.

17. The FRS should be able to evidence how their policies, procedures and tailored guidance are linked to the training of operational and fire control personnel.

Guidance Material

0214

FRS Operations

18. When determining response time, the FRS are to note the response time comprises of 3 elements:

a. Call handling time – from time of call to the station being alerted;

b. Crew turnout time – from when alerted and the time the 1st vehicle departs (time taken for the firefighters to leave the station); and

c. Drive time – from the time the 1st vehicle departs the station to being at the scene of the incident.

Regulation 0215

Reductions in FRS Cover

0215 Risk Owner (RO), Commanding Officer (CO) Head of Establishment[43] (HoE) and Fire and Rescue Service (FRS) provider **shall** ensure that processes are in place for informing the RO/CO/HoE when there are reductions to the identified Fire and Rescue Service (FRS) provisions for which they are responsible.

Acceptable Means of Compliance 0215

Reductions in FRS Cover

1. The RO/CO/HoE **should** ensure FRS provider has arrangements in place to inform the risks associated with Risk to Life (RtL), the protection of the Defence capability and risk to the environment, when the onsite FRS are operating below the endorsed response model.

2. The FRS provider **should** have policy/procedures in place to notify the RO/CO/HoE of the risks associated with RtL, the protection of the Defence capability and risk to the environment, when operating below the endorsed response model.

3. The FRS provider **should** inform the RO/CO/HoE of issues that may impact on the Capability Outputs immediately they become aware of them.

Guidance Material 0215

Reductions in FRS Cover

4. The FRSs provided are to be appropriate to the Defence Establishment risk profile, as detailed in DFSR 0209 – Fire Prevention, Protection and Response Assessment.

a. In the event of an unexpected reduction in capability, e.g., unplanned shortage of fire personnel, unserviceability of a vehicle or specialist equipment as identified in the equipment needs analysis, the senior FRS Officer on duty will initiate the Risk Assessment;

b. Complete the relevant section of the Hazard Assessment Form (DFSR Form 15);

c. Detail the nature of the reduction in capability;

d. State any compensatory measures taken;

e. State what FRS capability remains[44]; and

f. Provide an estimate of how long the reduced capability is expected to persist.

[43] Duty Holder Risk to Life (RtL)
[44] Examples include; call challenge only, defensive capability only, etc.

	5. Once completed by the Senior FRS Officer present, the DFSR assessment Form is to be sent to the RO/CO/HoE. The RO/CO/HoE will need to consider what action, if any, will be required to mitigate the risk associated with RtL and protection of operationally critical assets, processes, or activities.

Regulation 0216

FRS Training Requirements

0216 Risk Owner (RO), Commanding Officer (CO) Head of Establishment (HoE) and Fire and Rescue Service (FRS) provider **shall** ensure that Fire and Rescue Services (FRS) are professionally trained and qualified to operate at Defence Establishments for which they are responsible.

Acceptable Means of Compliance 0216

FRS Training Requirements

1. FRS on Defence Establishments are seldom called upon to deal with fires/incidents. The maintenance of skills and core competencies required, are to be maintained by carefully following a planned and meticulous training programme. This assures that both personnel and equipment will be capable in dealing with a fire/incident and great emphasis **should** be placed upon the training of FRS personnel.

2. The RO/CO/HoE and FRS provider **should** ensure that:

   a. all FRS personnel required to act in emergencies, demonstrate their medical fitness to execute their function satisfactorily, taking in to account the type of activity;

   b. all FRS personnel are provided with training, including site specific risks[45] allowing personnel to safely conduct fire and rescue procedures for all identified station-based risks;

   c. all FRS personnel have access to site specific risk information;

   d. all FRS personnel are trained to conduct the role in which they are expected to perform operational duties;

   e. all FRS personnel maintain the required competencies through a Maintenance of Competence Scheme (MOCS) endorsed by the relevant Training Requirements Authority (TRA);

   f. suitable facilities or means for conducting the required training are provided. This is to include the use of breathing apparatus training facilities; and

   g. all FRS personnel participate in drills commensurate with the fire-fighting and rescue equipment in use at the Defence Establishment.

3. The FRS **should** be able to evidence how their policies, procedures and tailored guidance are linked to the training of operational personnel.

[45] Training material is to be in accordance with NATO STANAG 7145 – Minimum core competency level and proficiency of skills for NATO Firefighters.

4. The fire training facilities **should** make provision for FRS personnel to practice the tactics, techniques and procedures for the control and extinction of fires.

5. The RO/CO/HoE and FRS provider **should**:

   a. ensure there are sufficient numbers of Suitably Qualified Experienced Personnel (SQEP) trainers and assessors, as per JSP 822 Defence Direction and Guidance for Training and Education, for the effective implementation of the MOCS at the Defence Establishment;

   b. implement proficiency checks at adequate intervals to ensure continued competence of all FRS personnel;

   c. ensure assessment of the competency of the individual(s) determining, evaluating, and conducting training is in accordance with JSP 822 Defence Direction and Guidance for Training and Education; and

   d. ensure that all FRS personnel maintain appropriate qualification, training, and proficiency check records to demonstrate compliance to this regulation.

6. All FRS training **should** meet the requirements of the individual Role Performance Statements (Role PS) endorsed by the relevant TRA.

7. The FRS **should** use the training specification component of National Operational Guidance and National Fire Chief Council Training Standards to inform their training needs analysis.

8. FRS training **should** include initial and recurring[46] familiarization of all station-based risks.

9. All FRS personnel are to be at Training Performance Standard[47] (TPS) following attendance at an FRS Training Centre, prior to performing operational fire fighter duties. Those personnel at TPS are under development and the TPS crewing numbers **should** be outlined by the 1* Joint TRA and FRS Service Provider.

10. FRS training programmes should include training in Human Performance[48], including team co-ordination.

11. Proficiency checks **should** be carried out as agreed by the TRA in accordance with JSP 822 Defence Direction and Guidance for Training and Education.

[46] Frequency is to be determined by a Task Needs Analysis initiated by the Training Requirements Authority.
[47] FRS personnel at TPS (under development) will have restrictions on their duties, which will impact the number that can form part of the response crew.
[48] The interaction between; people and people, people and machine, people and procedures and people and the environment. The understanding and application of task performance, experience, knowledge, situational awareness, sensory physiological and other human factors in the design, operation, maintenance and management of aerial systems to optimise safety, performance and capacity. It is multidisciplinary, and embraces individuals, teams and organizations.

12. Qualification, training, and proficiency check records, endorsed by the TRA, **should** be maintained, and held for each individual in the FRS to the end of an individual's employment.

Guidance Material 0216

FRS Training Requirements

13. Physical fitness standards for FRS personnel are a single Service (sS) requirement. Guidance can be found in NATO STANAG 7162 CFR – Standardization of Physical Fitness Maintenance Program for fire-fighters.

14. Training of FRS personnel employed within Defence is to utilise the Defence Systems Approach to Training (DSAT), in accordance with the authoritative policy as directed by Joint Service Publication (JSP) 822 Defence Direction and Guidance for Training and Education. This policy directs and guides Defence personnel to ensure that training and education are appropriate, efficient, effective, risk focussed and most importantly, safe.

15. Air Officer Airbases is the 1* Joint TRA for all Professional Shoreside Firefighter training within Defence.

16. In accordance with JSP 822: Defence Direction and Guidance for Training and Education - following a thorough Task Needs Analysis (TNA), Role PS are to be developed for each role required by the FRS providers. These Role PS provide the requirements that are needed for each role within the FRS, as such all training is to be designed to meet the requirements of the Role PS.

17. A generic MOCS is to be utilized for all FRS personnel. However, this can be individually tailored to ensure that it meets all requirements of each Defence Establishment. The senior FRS Officer is to ensure that all site-specific training requirements are covered by the generic MOCS. Any shortfalls identified are to be met by the introduction of local training packages endorsed by the TRA.

18. Training facilities are provided at each Defence Establishment allowing FRS personnel to train (maintaining core competences and key skills), to ensure that all personnel remain SQEP.

19. Where training facilities are unavailable at the Defence Establishment, training can be achieved externally. Where a Unit elects to use an external training provider, it is important to ensure that FRS personnel are familiar with the types of vehicles and equipment used.

20. The tactics, techniques and procedures used during training scenarios are to be compliant with the SP operational policy and procedures.

21. The training facilities provided is to make provision for FRS personnel to practice:

a. Incident Command;
b. External fires;
c. Internal fires;
d. Gaining entry;
e. Search and Rescue; and
f. Site specific risks[49].

[49] Maritime, Explosive, HAZCHEM, Nuclear / Radio-active, Railway, High-rise, Underground, High-voltage, Road Traffic Incidents, Working from Water/Height