



Defence
Safety
Authority

Defence Fire Safety Regulator

Fire Safety Review – Defence
Single Living Accommodation

August 2018

Defence Safety Authority

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Defence Fire Safety Regulator

The Defence Fire Safety Regulator (DFSR) is the appointed Fire Safety enforcing authority for the Ministry of Defence.

The role of the DFSR falls into two main provisions derived from the requirements of the UK Fire Safety legislation; namely the Regulatory Reform (Fire Safety) Order 2005 and allied legislation as applicable to premises in Scotland and Northern Ireland. The principal provisions are to ensure and assure that the requirement to take general fire precautions for the safety of relevant persons are taken by the Responsible Person (in Defence this is termed the Accountable Person); and to ensure those that propose to erect premises or make changes to existing premises consult with the fire enforcing authority in relation to those proposed building works.

These two duties are discharged respectively by Risk Based Audits and a mandated consultation process to fulfil the legal duty to consult. Allied with this, post-fire audits may be undertaken to determine possible breaches or offences under the legislation or Defence regulation. Where failings are identified and sufficient evidence exists, where appropriate, enforcement action in accordance with national enforcement expectations may be taken.

Glossary

2PA	Second Party Assurance
AAR	Annual Assurance Report
AP	Appointed Person
AR	Annual Report
DCFRA	Defence Chief Fire & Rescue Advisor
DFRMO	Defence Fire Risk Management Organisation
DFRP	Defence Fire & Rescue Project
DFRS	Defence Fire & Rescue Service
DFSR	Defence Fire Safety Regulator
DG	Director General
DIMR	Defence Infrastructure Management Review
DIO	Defence Infrastructure Organisation
DSA	Defence Safety Authority
FM	Facilities Management
FSO	Regulatory Reform (Fire Safety) Order 2005
HoE	Head of Establishment/Commanding Officer
MMO	Maintenance Management Organisation
OSA	Organisational Safety Assessment
RP	Responsible Person
RtL	Risk to Life
SLA	Single Living Accommodation
SQEP	Suitably Qualified and Experienced Personnel

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1 Executive Summary and Recommendations

1.1 Fire Safety has been a growing concern in the last two Defence Fire Safety Regulator (DFSR) Annual Reports (ARs) and associated Director General (DG) Defence Safety Authority (DSA) Annual Assurance Reports (AARs). The 2016/17 DSA AAR¹ identified a 30% increase in non-compliance with Fire Safety regulations and declining Fire Safety Assurance levels across Defence, with an overall assessment of LIMITED ASSURANCE.² A broader context was also provided by the Grenfell Tower fire in June 2017 and the subsequent media coverage and investigations. The investigation of a fire at Thiepval Barracks, Lisburn, in August 2017 observed a significant number of general concerns at unit level, with significant Risk to Life (RtL) to those occupying Single Living Accommodation (SLA). The DG DSA therefore directed a focused review of the management of Fire Safety in SLA. This report presents the findings of that review.

1.2 The majority of the issues identified in this report result from a failure by Top Level Budget (TLB) Holders and Heads of Establishment (HoE), as Accountable Persons (AP), to comply with Fire Safety legislative duties requiring them to have adequate arrangements in place to manage Fire Safety. This in turn represents a failure to follow the direction from the Secretary of State in his policy statement for Health, Safety and Environmental Protection (HS&EP) as amplified by Defence policy, which requires the MOD to manage safety to produce outcomes as required by statute legislation.

1.3 Current Fire Safety management for Defence SLA requires corrective action to address an unacceptable degradation of safety management. Current arrangements are unsatisfactory due to weaknesses in key elements of safety management systems (arrangements). Without satisfactory organisational arrangements, the roles and responsibilities of Appointed Persons with Fire Safety duties are not clear. This makes it difficult for APs to understand fully their Fire Safety duties and who is responsible for undertaking those duties on their behalf. The absence of robust safety management systems at both TLB and HoE levels is creating downstream failures and has resulted in Fire Safety systems that are not suitable and sufficient to mitigate Fire Safety risks.

1.4 Many contributory factors are linked to current and previous Defence change programmes. The absence of an Organisational Safety Assessment (OSA) during the formation of the Defence Fire Risk Management Organisation (DFRMO) predicated the loss of embedded Fire Safety Suitably Qualified and Experience Personnel (SQEP) in the TLBs' safety teams. The resulting lack of SQEP to advise senior TLB staff on how they should meet their Fire Safety duties outlined in legislation, Defence policy and regulation is also a contributory factor. Although the resulting move from a TLB-based service to a regionally based DFRMO one was assessed to be a more efficient delivery model, removing the application of inconsistency and differing Fire Safety advice, it also created a misunderstood expectation across TLBs that DFRMO would provide a total fire risk management service. This has not been the case and DFRMO has been unable to deliver 2nd Party Assurance (2PA) to TLB Holders. Exacerbated by a lack of embedded SQEP, TLBs are unable to prioritise effectively their resources, including the infrastructure funding they receive as a result of the transfer of infrastructure funding from the Defence Infrastructure Organisation (DIO) to TLBs following the Defence Infrastructure Management Review (DIMR). No evidence was observed during the review to back up what may be best described as an optimistic expectation

¹ Defence Safety Authority Annual Assurance Report April 2016 – March 2017, released on www.gov.uk on 31 October 2017.

² Limited Assurance: System of internal control operating effectively except for some areas where significant weaknesses have been identified. Defence Internal Audit classifications dated July 2014.

that either the Defence Fire & Rescue Project (DFRP) or DIMR will improve this area of safety assurance.

1.5 The role of the Defence Chief Fire and Rescue Adviser (DCFRA) needs to be clarified. The DFRMO governance paper³ defines the DCFRA as the person Defence has appointed to meet the requirements of Article 18 of the Fire Safety Order (FSO).⁴ This could imply to the TLBs that the DCFRA fulfils the fire risk management duties and is legally culpable. The Article 18 requirement would be better met by a localised establishment based relationship under the control of the HoE; placing risk management with those best placed to exercise control and mitigation.

1.6 The DFRP seeks to make fundamental changes to the delivery of Fire Safety in Defence. Whilst the DFRP OSA has reached a level of final maturity, it is limited by an inability to state with confidence what if any impact the DFRP will have on MOD's organisational safety in relation to fire risk management.

1.7 This report recommends in order of priority 8 corrective actions to improve Fire Safety in SLA:

Priority 1 – within 3 months

- a. TLBs should review and revise their organisational and arrangement statements to ensure they fulfil their Fire Safety duties and assurance requirements. (Recommendation 2, para 5.6)
- b. TLBs should review their Fire Safety governance arrangements and ensure that the arrangements clearly define the roles and responsibilities of all appointed persons in the Fire Safety management chain. (Recommendation 5, para 6.8)
- c. The DFRP Senior Responsible Owner(SRO) should provide pan-departmental clarification as to the role of the DCFRA. Future Fire Safety management should align with the current Defence Safety Environmental Management System(SEMS) framework to ensure that TLBs can discharge their responsibility to manage the fire risks for which *they* are held to account. (Recommendation 8, para 9.3)
- d. DIO should establish an appropriate audit process to assure Defence that Facilities Management (FM) providers are maintaining premises in line with statutory and contractual requirements and that statutory and sector best guidance inspection/maintenance regimes are being followed. (Recommendation 3, para 6.3)

Priority 2 – within 6 months

- e. DIO should review the competency requirements for a Project Manager relating to Defence buildings works and update them to include a knowledge of the SEMS framework requirements. (Recommendation 6, para 6.10)
- f. The DFRMO should update the Joint Business Agreements (JBA) and Customer Supplier Agreements (CSA) between the DCFRA and the TLBs to detail what services and

³ Reference: DFRMO/DCFRA/Gov/01/2018 dated 18 Jun 18.

⁴ Regulatory Reform (Fire Safety) Order 2005.

Fire Safety duties DFRMO (and the DFRP Contractor) fulfil on behalf of the TLB.
(Recommendation 1, para 5.3)

Priority 3 – within 12 months

g. DIO should consider an appropriate policy which requires contractors to be United Kingdom Accreditation Service (UKAS) accredited when working on FM maintenance regimes. (Recommendation 4, para 6.4)

h. The DFRMO, as part of DFRP implementation, should develop a single authoritative premises database to allow the Accountable Persons to manage Fire Safety on premises based on risk and need. (Recommendation 7, para 7.3)

1.8 The findings in this report are not unexpected and accord with the content of the last 2 DFSA ARs which identified the limited ability of TLB holders to fulfil their Fire Safety duties.

1.9 On a positive note many of the observations and recommendations in this report should be addressed by following the Defence policy published in DSA 01.1 and 01.02. Importantly, the latter requires Accountable Persons to establish, maintain and demonstrate a comprehensive SEMS. If followed by TLBs in relation to Fire Safety management, this alone should fulfil most of the corrective action recommendations outlined in the report.

1.10 From a presentational perspective, the tragic events of the Grenfell fire placed Fire Safety and particularly the management of Fire Safety under extreme media and public scrutiny. This suggests that Defence would also be judged closely should more serious fires occur on the Defence estate and subsequent investigations find that Defence SEMS were at fault.

2 Background

2.1 Fire Safety has been a growing concern in the last two DFSA ARs and associated DG DSA AARs. The 2016/17 DG DSA AAR⁵ identified a 30% increase in non-compliance with Fire Safety regulations and declining Fire Safety Assurance levels across Defence. It concluded that across Defence there was a degrading ability to manage Fire Safety within its infrastructure caused by a combination of incomplete maintenance and repair work, a lack of understanding of Fire Safety management responsibilities and of the requirement for competent personnel to discharge these duties, together with minimal and un-coordinated 2PA. Consequently, there could be an increased Risk to Life (RtL) should a fire occur. The assessed assurance level for Fire Safety in Defence was downgraded from SUBSTANTIAL to LIMITED ASSURANCE for the reporting period 2016/17.

2.2 The conclusions of the AAR were confirmed during an investigation by the DSA into a fire incident within a SLA Barrack Block (BB) 320 at Thiepval Barracks, Lisburn, Northern Ireland on 6 August 2017. The incident resulted in the injury of one person and exposed a number of serious breaches of Fire Safety legislation.

2.3 In light of the findings at Thiepval Barracks, DG DSA directed a targeted review of Fire Safety within Defence SLA. This review was led by the DFSA with support from the Defence Accident Investigation Branch (DAIB) and the DSA's Legal Advisers. The aim of the review was to enable a better understanding of the level of Fire Safety risk to which Defence is currently exposed within its SLA and identify ownership of this risk, together with the underlying causes. DG DSA directed the review to make recommendations on risk ownership, management and the corrective action required.

⁵ Defence Safety Authority Annual Assurance Report April 2016 – March 2017, released on www.gov.uk on 31 October 2017.

3 Methodology

3.1 The review team's approach was to collaborate with the TLBs and other key Fire Safety stakeholders to consider all information and issues and identify any key concerns to inform the recommendations. The review was conducted over 3 key phases:

a. **Phase 1 - Understand.** This phase was designed to allow the TLBs' senior safety staffs, DIO and DFRMO in their Duty Holder facing role to self-assess⁶ their own arrangements against an exemplar strategic level specification published by the British Standard Institute.⁷ The specification follows the Plan, Do, Check, Act, methodology advocated in DSA 01.2 and other authoritative approved guidance on how to implement and manage Fire Safety management systems.⁸ The review team then visited the locations below to discuss the responses in the self-assessment. At TLB-owned establishments, a visit programme was agreed as part of the next phase of the review. The Phase 1 visits included:

Date	Visit
11 Dec 17	CESO(JFC) Abbeywood
12 Dec 17	CESO(Army) Andover
14 Dec 17	CESO(Air) High Wycombe
18 Dec 17	CESO(Navy) Portsmouth
17 Jan 18	DIO (Sutton Coldfield)
18 Jan 18	DFRMO (Andover)
19 Jan 18	CESO(Air) return visit

Phase 1 visits

b. **Phase 2 - Observation.** This phase observed the Fire Safety management arrangements in place at unit level and identified examples of Fire Safety management practices that contributed to the degradation of Fire Safety across TLBs. This phase also observed and considered the cooperation and coordination between all those with duties to manage Fire Safety compliance. The Phase 2 visits included:

Date	Visit
12 Jan 18	RAF Cranwell
16 Jan 18	RAF Brize Norton
11 Jan 18	RAF Halton
29 Jan 18	Army Home Command (Aldershot)
30 Jan 18	Tidworth Garrison
01 Feb 18	Catterick Garrison
02 Feb 18	AFC Harrogate
05 Feb 18	Palace Barracks, N. Ireland
06 Feb 18	Thiepval Barracks, N. Ireland
11 to 18 Feb 18	MPC Falklands, Hill Side Stanley, Mare Harbour

Phase 2 visits

⁶ See [References](#) A-E for self-assessment responses received.

⁷ The BSI Standards Publication PAS 7 2013.

⁸ HSG 65: Managing for Health and Safety.

c. **Phase 3 - Report.** This phase commenced with an interim report and included a number of bilateral meetings with key stakeholders in the Defence infra and safety areas. The draft final report was shared with the TLBs, DIO and DFRMO and included consideration of the changes relating to the DIMR, DFRP and other Fire Safety related reports.⁹

⁹ DFRMO Deep Dive of Infrastructure (Life Safety) Deficiencies within Defence dated 25 March 2017.

4 The Fire Safety Legal and Policy Framework in Defence

4.1 The review team considered Defence safety policy and TLB higher level arrangements in place to ensure the department is meeting its statutory duties. The policy and Fire Safety framework for Defence is outlined primarily in the Secretary of State's HS&EP Policy Statement, DSA 01.1, and JSP 426.¹⁰ It follows the same principles and arrangements as those used outside Defence in the Private Sector environment. They are based on the legal framework set out in the following legislation:

- a. Regulatory Reform (Fire Safety) Order 2005 (FSO)¹¹.
- b. The Building Regulations (2010).

4.2 The primary purpose of the FSO is to set out the legal requirements for occupied premises. It defines any person who has some level of control of premises as a Responsible Person (RP) and places a legal duty on RPs to take reasonable steps to reduce the risk from fire and to make sure that people can escape if there is a fire. An RP is referred to in Defence Policy and Regulations as an Accountable Person or Individual (AP). The RP/AP must also undertake an assessment of the risk and record any significant findings. These findings will allow for an assessment of the tolerability of the risk from fire to be determined and inform the RP of the actions necessary to adequately manage the risk.

4.3 The Building Regulations are functionally based and apply to the design and construction of new premises and also certain other notifiable works. They are intended to ensure a reasonable standard of life safety in case of fire. The supporting approved documents are written on the assumption that, once occupied, the building concerned will be properly managed.

4.4 The review concluded that Defence policies and the TLB arrangements directing what RPs/APs must do were clearly laid out in JSP 426 Vol 1 and Vol 2 and were aligned as far as possible to the arrangements followed in the Private Sector.

¹⁰ Planned to re-issue as DSA 02.6 and 03.6 in late 2018.

¹¹ Scotland and Northern Ireland have similar legislation that follows the same principles to that of England and Wales.

5 Fire Safety Risk Management Governance and Assurance Arrangements

5.1 Internal responsibility for fire risk management is delegated down to the HoEs.¹² Command Environment and Safety Officers (CESO) had in place safety audit processes that included Fire Safety related enquiries but most do not go into sufficient depth. The review found that questions¹³ were confined to asking if Fire Risk Assessments (FRA) were in place and if all corrective actions had been addressed. Fire Safety assurance levels from TLBs were informed by their internally generated safety audit data and in some cases included the number of DFSA Enforcement Notices as a matrix to inform the level achieved.

5.2 A key enabler for the TLBs to meet their Fire Safety duties are the services provided by the DFRMO who are responsible for managing and delivering a fire risk assessment programme across relevant Defence premises and also providing support and training to the TLB's appointed persons.¹⁴ These arrangements are recorded in a number of high level Joint Business Agreements (JBAs) and Customer Service Agreements (CSAs). At the time of the review, some of these agreements lacked detail, were out of date and also had no formal mechanism between the customer and provider to check on the quality of service. There was also no, or very little, reference to the JBA/CSA in the TLB Fire Safety organisational arrangements. From the time that the DFRMO was initially conceptualised, there appears to have been a fundamental misunderstanding in the concept of fire risk management between the TLBs and the DFRMO. Prior to the formation of the DFRMO, the TLBs managed their fire risks through embedded Fire Safety SQEP appointments. By the time of this review, with the exception of the DIO and Navy Command, all TLB Fire Safety SQEP had migrated to the DFRMO organisation or had been disestablished by the more recent DFRMO transformation change programme. Mistakenly, the TLBs believed that the DFRMO would continue to manage the TLBs' fire risks after their loss of SQEP.

5.3 Recommendation 1:

Priority: 2

Ownership: DFRMO.

Causal Factors: On the formation of DFRMO, JBA/CSAs were established to determine the services DFRMO provided to the TLBs and conversely what support the TLBs provided to DFRMO. Over time these arrangements have not been monitored and reviewed to determine their ongoing utility. Although work is now in progress to rectify this, only Joint Force Command and Air Command have been finalised.

Corrective Action: The DFRMO should update the JBA/CSA between the DCFRA owner and the TLBs to detail what services and Fire Safety duties DFRMO (and the DFRP Contractor) fulfil on behalf of the TLB. This is a task within the DFRP Statement of User Requirement (SuR) and forms one of the fundamental 'day one' tasks to be actioned upon implementation of a DFRP contract solution.

¹² JSP 426, Part 1, Chapter 3.

¹³ TLB CESO audit questions were generally based on the standard JSP 375 SHEF Audit Manual.

¹⁴ Regulatory Reform (Fire Safety) Order 2005 Article 18 places a duty on the Responsible Person to appoint one or more persons to assist them in undertaking their preventative and protective measures.

5.4 The DFRMO governance and assurance processes were found to lack any integration with TLB assurance. The data and information captured by DFRMO as part of the Fire Risk Assessment (FRA) activity could provide a Fire Safety risk picture for all Defence premises subject to the FSO. The FRA information is currently captured through three separate databases, which is presently not shared or exploited by TLBs. Such an omission severely weakens the TLB Fire Safety assurance process. In certain instances, the FRA form is only distributed to the Building Custodian on a building by building basis.

5.5 The TLB CESOs recognised that the absence of embedded Fire Safety SQEP meant that the fire element of the internal assurance process was limited and would greatly benefit from sharing of data captured by the Army-owned DFRMO to inform their TLB assurance. The DFRMO acknowledge that future relationships with the TLBs going forward under DFRP will have oversight through the 3* Defence Fire Rescue Management Board (DFRMB).

5.6 **Recommendation 2:**

Priority: 1

Ownership: DCFRA and TLB CESOs.

Causal Factors: TLBs conduct limited 2PA of their Fire Safety management systems, due to unclear organisational arrangements and lack of available Fire Safety SQEP.

Corrective Action: TLBs should review and revise their organisational and arrangement statements to ensure they fulfil their Fire Safety duties and assurance requirements.

6 Maintenance of Facilities and Devices Provided for Premises Fire Safety

6.1 The DIO are responsible for providing FM support to the TLBs through a number of contracts with industry providers with the aim of keeping the estate in a safe and compliant condition. These contracts cover minimum levels of maintenance and inspection schedules that should be based on sector guidance and recognised industry practices to keep the premises safe and compliant. All Fire Safety systems, including passive systems, require regular inspection and maintenance. The review found that a number of key maintenance and inspection items such as Fire Doors, External Fire Escapes and Fire Dampers appeared to have been missed off the Carillion Amey Maintenance Management Organisation (MMO) contract or that further clarification of the maintenance schedule required was needed.

6.2 The review team observed that there was no defined assurance process in place by the FM contract administrator. This was caused by a combination of the way the FM contract was designed to operate, using a level of self-assurance, and reduced technical resource within DIO to implement an effective independent assurance process. It was also noted that there is no explicit requirement for contractors working across Defence Infrastructure to be certified by the UKAS accredited body.¹⁵

6.3 Recommendation 3:

Priority: 1

Ownership: DIO.

Causal Factors: Several deficiencies in the DIO 2PA arrangements were observed, that may have contributed to inadequate Fire Safety inspection/maintenance regimes being implemented within the infrastructure environment.

Corrective Action: The DIO should establish an appropriate audit process to assure Defence that FM providers are maintaining premises in line with statutory and contractual requirements and that statutory and sector best guidance inspection/maintenance regimes are being followed.

6.4 Recommendation 4:

Priority: 3

Ownership: DIO.

Causal Factors: It was observed on several occasions that inspection/maintenance of Fire Safety systems were not always compliant with sector best guidance.

Corrective Action: The DIO should consider an appropriate policy which requires contractors to be UKAS accredited when working on FM maintenance regimes.

¹⁵ UKAS is the sole national accreditation body recognised by the UK Government to assess the competence of organisations that provide certification, testing, and inspection and calibration services.

6.5 Outside the regular statutory and mandatory checks there is also a requirement on the FM provider to react to repairs of faulty and unserviceable devices and safety systems. This reactive maintenance relies on the TLB occupying the premises, appointing competent staff to be responsible for the day-to-day Fire Safety management of premises. The TLB is also expected to undertake a number of user tests on devices and equipment such as Fire Alarm, Emergency Lighting Systems and First Aid Fire Extinguishers. These tasks require an appropriate level of competence and must be clearly detailed in the unit arrangements.

6.6 The review examined evidence gathered by DFSR audit, assurance and enforcement activity and by an earlier Deep Dive by the DFRMO. This showed that the systems in place to maintain the premises are not sufficiently robust with numerous examples of failures that without regulatory intervention would place occupants at risk. The common contributory factors in this area mainly relate to a lack of competent Appointed Persons with clearly defined responsibilities for each building. This has resulted in a lack of control over the management of Fire Safety that manifests itself in a number of ways including:

- a. The ability of occupants of SLA to silence and reset fire alarm panels before a full or any investigation has been completed to determine the location and cause of the fire alarm.
- b. A failure to manage sources of ignition such as use of candles in rooms, tumble dryers and cooking appliance resulting in fire incidents.
- c. A failure to recognise and report faulty fire doors that could result in fires and smoke spreading from the room of fire origin into escape routes; thus, placing all the occupants at risk when a fire occurs.
- d. The failure to check the contractors schedule maintenance visits to initially confirm the checks have taken place; and secondly, to gain confirmation that the systems are in working order.
- e. A failure to request a review of the FRA when something has changed or a matter of concern is raised that requires Subject Matter Expert (SME) advice.

6.7 Historically, each front line TLB owned and published their own bespoke set of Fire Safety arrangements that were designed to meet their own particular operating model and command chain. These publications clearly outlined the governance and duties at all levels across the TLB. The Review team discussed this area with the TLBs who reported that they no longer had these in place and relied on JSP 426 and the DFRMO to advise on how Fire Safety should be managed.

6.8 **Recommendation 5:**

Priority: 1

Ownership: TLB CESOs

Causal Factors: Contrary to the requirement of Article 18 of the FSO, the Responsible Person(s) did not always appoint persons to assist with the Fire Safety management

arrangements. Nor, were the roles and responsibilities clearly defined, or sufficient time and training provided for some of the appointees to adequately fulfil their duties.

Corrective Action: TLBs should review their Fire Safety governance arrangements and ensure the arrangements clearly define the roles and responsibilities of all appointed persons in the Fire Safety management chain.

6.9 The application of Building Regulations to any projects and refurbishments is the responsibility of the FM provider who employs competent agents to fulfil the role of the Building Control Body (BCB); the same responsibility sits with the TLB/occupier when there is any change of use. Current DIO policy requires works that fall under Building Regulations to be approved by this BCB. The FSO places on the BCB a duty to consult with the DFSA who are the Fire Safety Enforcing Authority for Defence. Since the formation of DFSA these roles have become more clearly defined and the picture is one of improvement. However, an area that requires more attention when handing over premises is the requirement for the designers and BCB to pay more attention to the requirement for Building Regulation 38, which requires the person carrying out the work to give the (RP) Accountable Person Fire Safety information relating to the Fire Safety precautions in the building. This information will assist the FM provider in developing maintenance schedules and help the person undertaking the FRA to determine the tolerability of the residual fire risk based on the agreed fire strategy. There are a number of instances (mainly overseas) where premises are being constructed under the control of DIO and/or Royal Engineer PM without following these procedures, thus leaving a gap in the safety information and making it more challenging to manage the premises Fire Safety risk and making them less safe to occupy.

6.10 **Recommendation 6:**

Priority: 2

Ownership: DIO.

Causal Factors: The appointment of some Project Managers and BCBs, who have limited knowledge of the Defence SEMS framework, has led to in some instances, a gap in the provision of relevant Fire Safety information being available.

Corrective Action: The DIO should review the competency requirements for a Project Manager relating to Defence buildings works and update them to include a knowledge of the Defence SEMS framework requirements. DIO should ensure that [Policy Instruction 02/10 \(MOD Building Regulations Compliance System\)](#), [PI 04/2015 \(Fire Safety related works on the MOD estate\)](#) and other relevant documentation is updated accordingly.

Note: This recommendation will require further collaborative work between the DIO Building Control Authority and DFSA relating to the wider Article 45 Duty to Consult.

7 Risk Identification, Assessment, Management and Escalation from Units to Senior Duty Holders

7.1 As well as failures in contractual inspection and assurance regimes the review identified that the arrangements to share information between DIO, the FM sub-contractor and the occupying TLB are not sufficiently robust. The 4C's process is not always followed and there have been instances where issues of failing Fire Safety systems were not passed on to the relevant unit appointed staff. The same issue exists with the outcomes and actions relating to the DFRMO delivered FRAs that when completed are not always out-briefed with the Accountable Person¹⁶. There is also the ongoing perception that DFRMO manages the FRAs and can resolve all issues raised, including the need to revisit and review the FRA.¹⁷

7.2 The cause of this mis-perception is likely in part to be due to ill-defined roles and responsibilities and a lack of training available to the TLB staff. There is no single authoritative register of all Defence premises requiring an FRA. Such a register, if available, could be clearly owned and tracked by the AP, be that the TLB, DIO or HoE.

7.3 Recommendation 7:

Priority: 3

Ownership: Single ownership may not be presently possible due to the Carillion Amey MMO contract arrangements. However, an initial task of DFRP implementation is the development of a single Fire Safety database that can be populated with relevant information from assessors with access granted to relevant stakeholders.

Causal Factors: Relevant building Fire Safety information is distributed across several data sources, which can lead to a lack of visibility and thus adequate management and risk profiling is not being fully achieved.

Corrective Action: The DFRMO, as part of DFRP implementation, should develop a single authoritative premises database to allow the AP to manage Fire Safety on premises based on risk and need. This will also require input from the TLBs.

7.4 While a number of higher profile Fire Safety related risks and issues are elevated to higher management levels, as demonstrated by the recent Wellington Barracks Enforcement Notice matter, many day-to-day remedial actions can be left to accumulate without any meaningful attention or appropriate AP ownership.¹⁸ This results in an increased risk caused by the aggregation of numerous, sometimes untracked, issues that accumulate without resolution or elevation. The underlying causes of this is considered to be a lack of unit Fire Safety SQEP, due to a combination of rapid turn-over of personnel, issues with training course availability, training that does not meet the needs of the unit and no follow up mentoring. However, the revision and cross-mapping of the training to the national competency framework standards for Fire Safety Level 3 Certificate should address this observation.

¹⁶ An example being Wellington Barracks where despite serious RIL shortfalls, until the DFRS made comment, the risk assessor could only initially brief a Staff Sgt representing a Lt Col who was the Accountable Person.

¹⁷ The DCFRA has recently written out to the Heads of Establishments to clarify where the fire safety responsibilities lay.

¹⁸ High level correspondence between CE DIO, Comd HC and DG DSA highlighted the issues over 12 months ago that appear to have generated further lower level tasking without any noticeable improvements.

8 The Safety Culture, Human Factors and Behaviours Demonstrated by the Defence community

8.1 The challenge of developing an appropriate safety culture in Defence has been an ongoing debate for some years. This is particularly apparent in the areas, including Fire Safety in SLA, that do not fall into the high hazard category and where the day-to-day risks are seen as routine. Defence is also not unique in that certain areas of safety only gain attention following a significant event that involves the loss of life.

8.2 Commanders and personnel also become complacent and to an extent fatigued by trying to keep the bar high when managing the daily risk posed by an infrastructure reporting and repair system that is universally recognised as under resourced in terms of SQEP and process.

8.3 The resulting tacit acceptance of faulty equipment and broken or unserviceable infrastructure and the lack of clear accountability becomes problematic in itself. It does not help that, due to reduced DIO resource to provide oversight and a misguided view that all matters should be kept at middle management level, commanders believe they have done all they can when they have raised a Statement of Need.

8.4 In the SLA environment this problem can be exacerbated by the fact many of the occupants consider themselves off-duty and therefore not responsible for the immediate reporting of damage to Fire Safety protective measures. Other contributory factors include pay-as-you-dine, which results in personnel cooking meals within the SLA, sometimes without dedicated facilities to do so.

8.5 One of the most perplexing issues relating to culture and human behaviour is why disciplined military personnel deliberately interfere with and disable active and passive Fire Safety systems, installed to protect themselves and colleagues. This behaviour appears relational to the intellectual levels and systemic culture within groups of service personnel. It is suggested that these factors should be considered by those who formulate Fire Safety educational messages and supporting community safety initiatives. Unless the message is tailored to the societal audience, the risk awareness message may be lost. It is considered that organisational culture and human behaviour require far more detailed study than that undertaken by this review. Such greater understanding and awareness could benefit all levels of command and help eradicate what is at times very disturbing behaviour from otherwise disciplined personnel.

9 The Governance Arrangements for Fire Safety and Potential Impact of DFRP and Infrastructure Funding Delegation to TLBs

9.1 The role of the Defence Chief Fire and Rescue Adviser (DCFRA) needs to be clarified. The DFRMO governance paper defines the DCFRA as the person Defence has appointed to meet the requirements of Article 18 of the FSO. This could imply to the TLBs that the DCFRA fulfils the fire risk management duties and legal culpability for all the TLBs. The DCFRA thus appears to have Fire Safety duties in the DFRMO governance model with no overall accountability for RtL or the loss of military capability. The review was unable to identify the Defence Authority that has appointed the DCFRA to this role.

9.2 Article 18 of the FSO was not written with the above scenario of a single person for a whole Government Department in mind. Defence Safety policy is based on the premise that the HoE is the AP and is "unconditionally" responsible for Fire Safety within their AoR as the person "who has control of the premises". On this basis it should be the HoE who appoints persons to assist them in undertaking the fire risk assessment from which suitable and appropriate preventative and protective measures are put in place that meet the legal requirement to take "General Fire Precautions". The Article 18 requirement would be better met by a localised establishment based relationship that would require the HoE, as AP, to appoint persons who have a comprehensive understanding of localised Fire Safety risks including the layout and risk profile of specific premises.

9.3 Recommendation 8:

Priority: 1

Ownership: DFRP SRO.

Causal Factors: The DCFRA is defined in the DFRMO governance paper as the person Defence has appointed as the Article 18 Person. This statement is by no means clear and could imply to the TLBs that the role fulfils the fire risk management duties and legal culpability for all the TLBs.

Corrective Action: The DFRP SRO should provide pan-departmental clarification as to the role of the DCFRA. Future Fire Safety management should align with the current Defence SEMS framework to ensure that TLBs can discharge their responsibility to manage the fire risks for which *they* are held to account.

9.4 Although it has now reached a level of final maturity the DFRP OSA was not conducted sufficiently early at the project's lifecycle. Its late production prevented any meaningful contribution to the selection of change options or the final Investment Appraisal decision. The lack of Defence fire & rescue performance data has hampered the DFRP's ability to establish a meaningful HS&EP performance and standards baseline. Without such a baseline, it is not possible to assess the potential impacts on HS&EP of outsourcing fire & rescue provision. More significantly, the OSA has made no attempt to assess the impact of DFRP on the future role and performance of DFRMO. The implications of the reliance on DFRMO's role and performance for the success of DFRP and future standards of Fire Safety in Defence is unassessed. More specifically, the decision to re-centralise TLB-embedded Fire Safety expertise may significantly compromise the ability of TLBs and HoEs in achieving high standards of Fire Safety in SLAs.

9.5 As a result of the DIMR infrastructure funding was delegated to the TLBs from April 18 in order to enable better decisions to be made about how infrastructure funding is spent. This should also bring greater clarity about what the DIO is funded to deliver, and therefore what it is accountable for. Although the level of financial resource may not change, the ability of TLBs to both own and target the resource may improve prioritisation in safety related works areas.

10 Competency of Accountable and Appointed Persons

10.1 The DFRMO deliver training services at the Defence Fire Training & Development Centre (DFTDC) where they have developed a course to train all staff undertaking FRAs. It is based on the Fire Safety National Occupational Standards (NOS) Level 4 Certificate. They also provide advice to the Army HOCS CSS who are the Training Requirements Authority (TRA) for the Army-based Unit Fire Safety Manager (UFSM) courses and this training is cross mapped to Fire Safety National Occupational Standards (NOS) Level 3 Certificate.

10.2 The DFRMO course relating to the FRA is a recent development that will lead to a continuous improvement in the quality of the FRAs delivered to the TLB. In the past, FRAs have lacked detail and tended to focus on compliance checking that encourages the unit to raise works to replace equipment that is adequate albeit not compliant to the current standards for Fire Safety infrastructure. The FSO does not require existing infrastructure to be brought up to the latest standards at any cost, rather, the FRA process should allow Fire Safety risk to be managed to keep it As Low As Reasonably Practicable (ALARP) and tolerable.

11 Recommendations

11.1 Recommendation 1 (para 5.3):

Priority: 2

Ownership: DFRMO.

Causal Factors: On the formation of DFRMO, JBA/CSAs were established to determine the services DFRMO provided to the TLBs and conversely what support the TLBs provided to DFRMO. Over time these arrangements have not been monitored and reviewed to determine their ongoing utility. Although work is now in progress to rectify this, only Joint Force Command and Air Command have been finalised.

Corrective Action: The DFRMO should updated the JBA/CSA between the DFRMO owner and the TLBs to detail what services and Fire Safety duties DFRMO (and the DFRP Contractor) fulfil on behalf of the TLB. This is a task within the DFRP SUR and forms one of the fundamental 'day one' tasks to be actioned upon implementation of a DFRP contract solution.

11.2 Recommendation 2 (para 5.6):

Priority: 1

Ownership: DCFRA and TLB CESOs.

Causal Factors: TLBs conduct limited 2PA of their Fire Safety management systems, due to unclear organisational arrangements and lack of available Fire Safety SQEP.

Corrective Action: TLBs should review and revise their organisational and arrangement statements to ensure they fulfil their Fire Safety duties and assurance requirements.

11.3 Recommendation 3 (para 6.3):

Priority: 1

Ownership: DIO.

Causal Factors: Several deficiencies in the DIO 2PA arrangements were observed, that may have contributed to inadequate Fire Safety inspection/maintenance regimes being implemented within the infrastructure environment.

Corrective Action: DIO should establish an appropriate audit process to assure Defence that FM providers are maintaining premises in line with statutory and contractual requirements and that statutory and sector best guidance inspection/maintenance regimes are being followed.

11.4 Recommendation 4 (para 6.4):

Priority: 3

Ownership: DIO.

Causal Factors: It was observed on several occasions that inspection/maintenance of Fire Safety systems were not always compliant with sector best guidance.

Corrective Action: DIO should consider an appropriate policy which requires contractors to be UKAS accredited when working on FM maintenance regimes.

11.5 Recommendation 5 (para 6.8):

Priority: 1

Ownership: TLB CESOs

Causal Factors: Contrary to the requirement of Article 18 of the FSO, the Responsible Person(s) did not always appoint persons to assist with the Fire Safety management arrangements. Furthermore, the roles and responsibilities were not always clearly defined, or sufficient time and training provided for some of the appointees to adequately fulfil their duties.

Corrective Action: TLBs should review their Fire Safety governance arrangements and revise if necessary to clearly define the roles and responsibilities of all appointed persons in the Fire Safety management chain.

11.6 Recommendation 6 (para 6.10):

Priority: 2

Ownership: DIO.

Causal Factors: The appointment of some Project Managers and BCBs, who have limited knowledge of the Defence SEMS framework, has led to in some instances, a gap in the provision of relevant Fire Safety information been available.

Corrective Action: DIO should review the competency requirements for a Project Manager relating to Defence buildings works and updated them to include a knowledge of the Defence Safety and Environment Management System (SEMS) framework requirements. DIO should ensure that [Policy Instruction 02/10 \(MOD Building Regulations Compliance System\)](#), [PI 04/2015 \(Fire Safety related works on the MOD estate\)](#) and other relevant documentation is updated accordingly.

Note: This will require further collaborative work between the DIO Building Control Authority and DFSA relating to the wider Article 45 Duty to Consult.

11.7 Recommendation 7 (para 7.3):

Priority: 3

Ownership: Single ownership may not be presently possible due to the Carillion Amey Maintenance Management Organisation (MMO) contract arrangements. However, from discussion with the DCFRA, it is understood that an initial task of DFRP implementation is the development of a single Fire Safety database that can be populated with relevant information from assessors with access granted to relevant stakeholders.

Causal Factors: Relevant building Fire Safety information is distributed across several data sources, which can lead to a lack of visibility and thus adequate management and risk profiling is not being fully achieved.

Corrective Action: The DFRP, as part of DFRP implementation, should develop a single authoritative premises database to allow the Accountable Persons to manage Fire Safety on premises based on risk and need.

11.8 Recommendation 8 (para 9.3):

Priority: 1

Ownership: SRO DFRP.

Causal Factors: The DCFRA is defined in the DFRMO governance paper as the person Defence has appointed as the Article 18 Person. This statement is by no means clear and could imply to the TLBs that the role fulfils the fire risk management duties and legal culpability for all the TLBs.

Corrective Action: The DFRP SRO should provide pan-departmental clarification as to the role of the DCFRA. Future Fire Safety management should align with the current Defence SEMS framework to ensure that TLBs can discharge their responsibility to manage the fire risks for which *they* are held to account.

12 Supporting Evidence

12.1 Annex

- A. Terms of Reference for a targeted review of Fire Safety in Defence Single Living Accommodation.
- B. Timescales for Corrective Action.

12.2 References

Other documents considered as part of this investigation, held on file by the DFSR and referenced in the report are as follows:

Reference	Title	Provided by
A	CESO (Army) Self-Assessment Response.	CESO (Army)
B	CESO(Air) Self-Assessment Response	CESO (AIR)
C	CESO(JFC) Self-Assessment Response	CESO (JFC)
D	CESO(Navy) Self-Assessment Response	CESO (Navy)
E	DIO Self-Assessment Response	DIO
F	RAF Halton site visit.	FSI4C
G	BFSAI site visit.	FSI4C

Annex A - Terms of Reference

TERMS OF REFERENCE FOR A TARGETED REVIEW OF FIRE SAFETY IN DEFENCE SINGLE LIVING ACCOMMODATION

Background

1. The DG DSA raised significant concerns over Fire Safety in his 2016/17 Annual Assurance Report (AAR) to the Defence Board in Jul 17.²¹ The AAR concluded that there is a degrading ability to manage Fire Safety across Defence infrastructure caused by a combination of incomplete maintenance and repair work. Also, a lack of understanding of Fire Safety responsibilities and the need to appoint competent people to discharge them. These issues were also manifested in the findings of the Defence Accident Investigation Branch (DAIB) investigators and Defence Fire Safety Regulator (DFSR) Fire Safety inspectors after a fire incident in a Single Living Accommodation (SLA) Building on 6 Aug 17 at Theipval Barracks in Lisburn, Northern Ireland.²²

2. In light of the findings at Thiepval Barracks, DG DSA has initiated a targeted review of Fire Safety within Defence SLA. This review will be led by the DFSR with support from the DAIB, DSA Legal Advisers and other DSA regulators as necessary.

Aim

3. This aim of this review is to develop a better understanding of the level of Fire Safety risk to which Defence is currently exposed in its SLA, the ownership and management of the risk, and the factors which contribute to this.

Outcome

4. This review will identify the TLBs and other Accountable Persons who are holding Fire Safety risk and inform of the levels of risk being held. The report will make recommendations on the corrective action required and may supplement and accelerate actions already detailed in the AAR. The review will also comment on the governance of Fire Safety and the potential implications of the Defence Fire and Rescue Programme (DFRP) and imminent infrastructure funding delegation to TLBs.

Scope

5. The review will be led by the DFSR with assistance from the wider DSA (DAIB, DSA LegAd and other Regulators as required). It will examine the arrangements for managing Fire Safety in SLA premises across TLBs in the UK and the Permanent Joint Operating Bases (PJOBs) and, where possible, will include accommodation in operational theatres. It will cover a variety of operating and training establishments to examine a range of types of SLA. The review will rely on the support of the TLB CESOs and the Defence Fire Risk Management Organisation (DFRMO), particularly at the early stage to allow the review team to fully understand the current processes and arrangements.

6. The key areas to be examined include:

- a. The Fire Safety legal and policy framework in Defence.

²¹ Defence Safety Authority Annual Assurance Report April 2016 – March 2017, 20170713-DSA Annual Assurance Report to Defence Board 2016/17.

²² 20170809-DAIB-17-019 Triage Report-OS.

- b. The Governance and Assurance (in particular 2nd Party assurance) arrangements in place for Fire (Safety) Risk Management Systems.
- c. The arrangements in place to maintain, premises, facilities and devices in connection with Fire Safety, including compliance with Fire Articles and Building Regulations and funding and execution of maintenance and repairs.
- d. The processes for identification assessment and management of risk and for escalation from unit to SDH.
- e. The safety culture, human factors and behaviours demonstrated by the Defence community in respect of Fire Safety risk.
- f. The governance arrangements for Fire Safety and potential impacts of DFRP and infrastructure funding delegation to TLBs.
- g. The training and competencies of accountable and appointed persons and their understanding of the extent of their responsibilities.

Annex B – Timescales for Corrective Action

The following table lists the priorities which are considered to offer reasonable and appropriate timelines for the completion of corrective actions.

Priority	Timelines for Completion
1	Within 3 Months
2	Within 6 Months
3	Within 12 Months