



**Ministry
of Defence**

JSP 403 Volume 1

Handbook of Defence Ranges Safety

Part 2: Guidance

Foreword

1. This Part 2 of JSP403 Volume 1 provides guidance in accordance with the policy set out in Part 1 of this JSP; the document is sponsored by Defence OME Safety Regulator (DOSR) who are responsible for developing, promulgating and enforcing the MoD regulatory regime for OME Safety and Environmental Protection across Defence. It provides policy-compliant business practices which should be considered current best practice in the absence of any contradicting instruction.

Preface

How to use this JSP

2. This JSP is intended as a practical handbook to explain the requirements needed to demonstrate that the inherent risks from MoD Ranges are broadly Acceptable or Tolerable and As Low as Reasonably Practicable (ALARP) for the MoD, third parties and the environment.
3. It applies to all MoD Ranges.
4. It is designed to be used by personnel responsible for Ranges safety employed by or contracted to the MoD.
 - a. It provides direction on the use, safe operation and maintenance of MoD Ranges.
5. The JSP is structured in two parts:
 - a. Part 1 – The overarching policy which gives clear direction as to what must be followed in accordance with Legislation, Regulation, Direction, Instructions mandated by Defence or on Defence by Central Government.
 - b. Part 2 – Direction as to the implementation of the safe operation, use maintenance of Defence Ranges in compliance with the policy set out in Part 1 of this JSP.

Further Advice and Feedback- Contacts

6. The sponsor of this JSP is DSA-DOSR-PRG-1a. For further information on any aspect of this guide, or questions not answered within the subsequent sections, or to provide feedback on the content, contact:

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Coherence with other Defence Authority Policy and Guidance

7. Where applicable, this document contains links to other relevant JSPs, some of which may be published by different Defence Authorities. Where particular dependencies exist, these other Defence Authorities have been consulted in the formulation of the policy and guidance detailed in this publication.
8. This JSP has been developed for use by Suitably Qualified and Experienced Personnel (SQEP) involved with MoD Ranges safety. It assumes that they will have a broad knowledge of Health and Safety Legislation. Simply following this JSP will not fulfil all your obligations arising from other legislation.

Authority

9. This JSP403 Version 1.1 dated May 15, supersedes JSP403 Volume 1 Part 2 Version 1.0 dated Feb 15.

10. This work is Crown copyright and the intellectual property rights of this publication belong exclusively to the Ministry of Defence. However, material or information contained in this publication can be reproduced, stored in a retrieval system or transmitted in any form provided it is used for the purposes of furthering MoD Ranges Safety Management System.

Status

11. All hard copies of JSP403 Version 1.1 (May 15) Part 1 or 2 are uncontrolled. The JSP will be updated whenever additional or improved guidance becomes available. This JSP will be reviewed and updated electronically at least annually.

12. Readers are encouraged to assist in the continued update of this document by informing the DSA-DOSR-PRG-1a@mod.uk of any required changes particularly those resulting from their experiences in the development of MoD Ranges safety regimes.

13. To check the latest amendment status reference should be made to JSPs within the Library section of the Defence Intranet.

MoD Forms

14. Any MoD Forms shown in this document are **non-functional** examples. The following Forms are accessible using the following links:

a. Defence Intranet:

<http://diif.r.mil.uk/Organisations/Orgs/HOCS/Organisations/Orgs/DSEA/Pages/RangeForms.aspx>

b. Defence Internet:

<https://www.gov.uk/government/collections/jsp-403-handbook-of-defence-land-ranges-safety>

15. The following MoD Forms are available:

a. **MoD Form 904.** MoD Range Authorisation Certificate.

b. **MoD Form 905.** MoD Range Safety Certificate.

c. **MoD Form 906.** Range Log (Single Nature Ammunition).

d. **MoD Form 906a.** Range Log (Multi Nature Ammunition).

e. **MoD Form 906b.** Test and Evaluation Range Log.

f. **MoD Form 907.** Monthly Inspection of a Range is the questionnaire to be used by inspectors for the monthly inspections of ranges unless the CO / OC / Manager of the RAU directs that a locally produced alternative be used instead. The form comes in five variants:

- (1) 907-1 Indoor Range.
- (2) 907-2 Outdoor Marksmanship Range.
- (3) 907-3 Live Firing Tactical Training Area (LFTTA).
- (4) 907-4 EOD Range.
- (5) 907-5 Air Weapons Range.

g. **MoD Form 907A.** Annual / Independent Inspection of a MoD Range is the questionnaire to be used by inspectors to record their annual / independent inspections of ranges on behalf of the RAO. The form comes in five variants:

- (1) 907A-1 Indoor range.
- (2) 907A-2 Barrack range.
- (3) 907A-3 Range complex.
- (4) 907A-4 Gallery / ETR range.
- (5) 907A-5 Open Range.
- (6) 907A Section 4 – Follow Up Action Ordered by Range Authorising HQ.
- (7) 907A Section 5 – DRSC Comments and Recommendations.

h. **MoD Form 907A-1.** Annual Inspection of a TERP Range.

i. **MoD Form 1057.** Proceedings of a Board of Officers for a MoD Range.

j. **MoD Form 1057A.** Proceedings of a Board of Officers for a MoD Air Weapons Range.

16. The following Forms are available from JSP403 Part 1:

- a. Annex A – JSP403 Change Proposal Form.
- b. Annex B – DSA DOSR Range Safety Notice Template.
- c. Annex C - DSA DOSR Range Safety Policy Letter Template.

17. The following Forms are available from JSP403 Part 2:

- a. Chapter 2 Annex A – DIO Form 5665.
- b. Chapter 2 Annex C – Club Agreement and Order Form.
- c. Chapter 2 Annex D Appendix 1 – Clay and Pigeon Shotgun Shooting on MoD Ranges Certificate of Authorisation.
- d. Chapter 2 Annex E – Civil Police Force Range Practice Authorisation.

- e. Chapter 5 Annex C – Notification of Permanent Closure of a MoD Range.
- f. Chapter 5 Annex E – Notification of Establishing a Temporary Exercise Range.
- g. Chapter 7 Annex A – Notice of Improvement.
- h. DIO Policy Instruction 26 / 04.

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Chapter 1 MoD Service and Agency Responsibilities

This chapter lays down the MoD, Service and Agency responsibilities for Range safety.

Range Safety Management

18. **Range Authorising Officer.** A Range Authorising Officer (RAO) is to be appointed for every range used by MoD Service and civilian personnel on duty. The appointed officer is to be an appropriate person at the required level (see Chapter 5 paragraph 154) from the same chain of command / management line as the majority of users of the range. The RAO is the officer responsible for personally certifying in writing the weapon systems, munitions and explosive stores which can be used on the range, and for setting any limitations or restrictions on their use. Further detail on range authorisation is in Chapter 5.

19. **Range Allocating Authority.** The exercise of responsibility for allocating the use of a range, or a group of ranges, will normally be delegated to the HQ, unit or establishment controlling the area in which the facilities lie. In some cases this may be the Range Administering Unit (RAU). The Range Allocating Authority (RAA) decides who is to use the range in accordance with an agreed timetable, taking into account maintenance requirements and any local limiting factors, and issues the programme to all concerned. The RAA must be satisfied that any weapons or devices to be used conform to the safety criteria for that range. Where users are other than UK Services or MoD civilian employees the RAA is to satisfy itself that the user unit or organisation can provide a suitably qualified and accountable Range Conducting Officer (RCO) to conduct the practices to be fired on each range. The RAA is also to ensure that where there are differences in weapon drills and regulations the safest are to be used. Where there is any doubt concerning Weapon Danger Areas (WDA), formal DOSG advice is to be sought by the RAA at the time the range is allocated to the user unit or organisation.

20 **Range Administering Units.** A Range Administering Unit (RAU) is required for every range used by MoD Service and civilian personnel on duty and is to be appointed by the Service / Agency either controlling the budget for the MoD Range or, in the case of non- MoD Ranges, the Service / Agency with the majority of users. The CO / Manager of RAU does not need to be in the same command / line management chain as the RAO but is accountable¹ to the RAO for the safe operation of a particular range or range complex. The CO / Manager of RAU is directly responsible² to the Service / Agency controlling the budget for the MoD Range for the safe operation and maintenance of MoD Ranges structures and range equipment. The CO / Manager of RAU will always be personally responsible for the safety of any MoD Range or range complex for which he completes the Site Specific Risk Assessment and Range Standing Orders regardless of who controls the budget or who is the RAO. In the case of DE&S (contractor operated) ranges, the nominated DE&S TEST PT representative fulfils the function of Manager of the RAU and is accountable to the RAO and assures the contractor's compliance with agreed contract requirements.

21. **Provision and Use of Facilities.** The CO / Manager of the RAU is responsible for the provision of safe range facilities. Where there are several facilities grouped into a range complex, the CO / Manager of the RAU can be assisted by other appointments such as a Range Officer (RO) or Range Safety Officer (RSO) / Range Liaison Officer (RLO) or Training Safety Officer (TSO). The responsibility and duties of the RO / RSO / RLO / TSO are contained in Chapter 1 Annex O to this JSP. The user unit / organisation is responsible for the safe conduct of firing on the range.

¹ Obligated to give a reckoning or explanation for one's actions.

² Legally or morally obliged to take care of something or to carry out a duty, liable to be blamed for loss or failure.

Arrangements must ensure that, as far as is reasonably practicable, no MoD personnel or civilian on duty is harmed as a result of the activity carried out on the range. Units and organisations are to use ranges in accordance with the Range SO and the rules laid down in authorised training or other publications. Where ranges are in multiple use, the RAU will be responsible for formulating and maintaining an appropriate system so that all users and their times on the range are recorded in the Range Log (MoD Form 906 / 906A / 906B). Duties of Range Wardens are at Annex P.

22. **Range Conducting Officer.** In this JSP the terms Range Conducting Officer (RCO), Demolition Conducting Officer (DCO) and Trials Conducting Officer (TCO) are used to refer to the Competent person from a user unit or organisation who is appointed to exercise responsibility for the safe conduct on a specific range. The RCO / DCO / TCO accepts this responsibility by signing in the MoD Form 906 / 906A / 906B prior to the start of firing. It is the responsibility of the RAU to ensure that the MoD Form 906 / 906A / 906B is signed before any live firing is allowed to take place. Responsibility for range safety remains with the RCO / DCO / TCO of the user unit or organisation until the range is handed back to the representative of the RAU and the clearance column in the MoD Form 906 / 906A / 906B has been completed by the RCO / DCO / TCO.

Range Safety Dispensations

23. **Range Safety Dispensations.** Any Land environment training that does not fully comply with the Safe System of Training (SST) will require consideration in accordance with the appropriate endorsed Duty Holding model. In extremis, this will involve a firing unit's CO as the Delivery Duty Holder (DDH) elevating the issue of SST-compliance shortcomings to his 2* Operating Duty Holder (ODH). The ODH will then decide, based on subject matter expert advice, whether a particular training activity is to take place that is outside of the accepted SST. If he / she does so, they are accepting the risk themselves and is granting a dispensation for that activity to take place, when undertaken by that unit. The following conditions apply to the granting of such a range safety dispensation:

- a. Dispensations may only be granted by the ODH. Exceptionally, the DDH in an Operational Theatre may grant a dispensation for a period not exceeding 28 days whilst his ODH considers the submission detailing the SST-compliance shortcomings³.
- b. Dispensations are not to be granted to ranges which are used exclusively for test, evaluation, research or proofing activities.
- c. A dispensation is only to be authorised for overriding Defence reasons and shall not be applied for administrative convenience.

24. **Dispensation for non-standard design, build criteria or danger area.** Some ranges are of non-standard design, build criteria or danger area. This particularly pertains to overseas ranges that are used on an enduring basis and necessitates a dispensation that is to be authorised by the 2* commanding the region in which the range is situated⁴; he / she is the 2* Regional Commander.

- a. Before a 2* authorises a dispensation for a non-standard design, build criteria or danger area, a risk assessment must be carried out. Within this risk assessment, a case must be made that explains clearly why the dispensation is required, which range(s) it applies to, what it entails, when it will apply and why there is no alternative to the proposed dispensation and a clear statement of the risk.

³ Refer to JSP454 - Regulation 11.

⁴ Presently this only applies to ranges in BFG and consequently it is Comd BFG who signs the dispensation.

- b. If the 2* agrees with the dispensation he / she shall show formal approval by personally signing the MoD Form 904 (Range Authorisation Certificate) on which the detail of the dispensation will be noted in the 'Dispensations Section'. The dispensation will only remain valid for 12 months from date of issue; a copy of the dispensation is to be retained within the range file.
- c. The MoD Form 904, along with a copy of the risk assessment and all other relevant correspondence, will also be sent to the RAU for retention on the range file and promulgation / display as the CO sees fit, for the benefit of range staff, range users and inspectors. This correspondence shall be available for audit on annual and independent inspections.
- d. The RAU should not permit use of the range to which the dispensation refers until the documentation described above has been received.
- e. The RAU shall ensure that a range that carries such a dispensation is only used as authorised by the 2* and that any changes to the structure of the range is referred back to the 2*.
- f. A central record is to be held by the DRSC for all dispensations relating to non-standard design, build criteria or danger area. All 2* HQs are to ensure that they submit any recorded dispensations to the Secretary DRSC, as well as annual renewals if applicable.

25. **Range Safety Inspections.** DSA DOSR Assurance is responsible for implementing the system of inspections covered in Chapter 7 of this Volume, and for establishing the Independent Range Safety Inspectors (IRSI) to conduct the MoD DSA independent inspections of Service and DIO ranges. Inspector Explosives (IE) DE&S within DOSG is responsible for providing the IRSI for MoD specialist ranges controlled or used by the DE&S, Dstl, DSG and DA and for ranges controlled and in majority use by the MDP. For Annual Inspections the Land Training Area and Ranges (LTAR) is responsible for conducting annual management and technical inspections on behalf of the RAO.

26. **Range Accidents / Incidents.** Any un-intended functioning of a weapon system, munition, pyrotechnic or explosive store and any accident on a range, resulting from live firing activity, which involves damage to or loss of a weapon system / platform, munition, explosive store or range infrastructure, or which results in injury or death, is to be reported in accordance with Service / Agency procedures. The appropriate convening authority within the Service / Agency / MoD Centre is to convene a formal inquiry into any accident resulting in damage or injury; the inquiry is to be conducted in accordance with the appropriate Service / MoD Agency regulations and procedures.

Chains of Command

27. The MoD Service / Agency safety chain of command and responsibilities for Service and MoD Agency ranges are at Annex E - to this chapter.

Changes to Range Safety Regulations

28. When it is proposed within a single Service, the DE&S, DIO, MDP, DSG or Dstl to make a change to the content of any of the volumes of JSP403, the proposal is to be staffed through the appropriate Service / Agency or organisation chain of command to the Secretary DRSC. Proposals are not to be passed to the Secretary DRSC until they have been approved by the Service / Agency or organisation chain of command.

29. In the case of amendment to or introduction of a new WDA / HIAT it is to be originated by the responsible DE&S PT, seeking advice as necessary from the DOSG. Where a weapon system or munition is mounted on a platform the PT responsible for the platform has responsibility for the WDA / HIAT. The WDA / HIAT is to be submitted by the PT for approval to the appropriate equipment sponsor before being sent to the Service / Agency focal point for range safety (where one exists) for endorsement. After this approval / endorsement process the PT is to add the WDA / HIAT to the equipment/platform Safety Case and issue a written authorisation for its use to the equipment sponsor. Where a WDA is to be inserted into the JSP the equipment sponsor will present the proposed WDA to the appropriate sub-committee or working party of the DRSC for consideration for inclusion in the next amendment to JSP403.

30. In the case of a change to the design, construction or introduction of a new type of small arms and infantry weapons systems range the TWG must always give approval. Where a proposed change is in accordance with existing DRSC policy the appropriate sub-committee or working party may authorise it and pass it to the Secretary DRSC for promulgation; otherwise, the appropriate sub-committee or working party will make a recommendation to the DRSC which must be formally approved by the DRSC before it can be issued.

Range Safety Policy Letters

31. When it is necessary to issue new or revised range safety policy, regulations or best practice guidance in advance of the next scheduled Change / Edition to this volume of JSP403, a Range Safety Policy Letter (RSPL) is to be prepared by the DRSCWG at the direction of the DRSC. Each RSPL will be allocated a sequential number by the DRSC Secretariat. A RSPL requires the approval of the DRSC before it can be issued. If appropriate, the content of a RSPL is incorporated into JSP403, in the next Change / Edition.

32. Each RSPL will be distributed and notified as below:

a. It is sent on the standard DRSC distribution to the duty holders represented on the committee for immediate cascade, through respective Service / Agency chains of command, to those RAO and RAU affected. In the case of CJO ranges, the DRSC Secretariat will send it direct to PJHQ and to the HQBF in each of the Permanent Joint Operating Bases (PJOB) overseas.

b. It is placed on the Defence Intranet / Internet website in the same location as JSP403.

c. It is dispatched by the Defence Storage and Distribution Centre through the postal system to all holders of JSP403 Volume 1.

d. A Defence Information Notice (DIN) produced by the DRSC Secretariat notifies the distribution of the RSPL, its number and date and the subject matter.

Range Safety Notices

33. When it is necessary to issue new or revised safety criteria or safety parameters for ranges in advance of the next scheduled Change / Edition to the appropriate volume of JSP403, a Range Safety Notice (RSN) is to be prepared by the appropriate working party of the DRSC⁵, approved and

⁵ TWG for small arms, infantry and 40mm weapons ranges; ASSAWP for air-to-surface and surface-to-air firing ranges; DODABSWP for demolitions and EOD training ranges.

signed at working party level (by the chairman) and passed to the DRSC Secretariat for distribution. Prior to issue, each RSN will be given a sequential number by the DRSC Secretariat. Each RSN remains in force until it is either cancelled or the contents have been incorporated into the relevant volume of JSP403, in the next Change / Edition to be issued.

34. Each RSN will be distributed and notified as in paragraph 27 above except that the postal copy will be dispatched to all holders of the appropriate JSP403 Volume 1.

Range Advice Notes

35. Range Advice Notes are issued from time to time to explain and clarify range safety or construction issues that do not directly affect the safety of a range.

Annexes:

- A. Defence Ranges Safety Committee - Terms of Reference and Composition.
- B. Secretary Defence Ranges Safety Committee - Terms of Reference.
- C. Defence Ranges Safety Committee Working Group - Terms of Reference and Composition.
- D. Technical Working Group - Terms of Reference and Composition.
- E. MoD Service / Agency Range Safety Chain of Command and Responsibilities.
- F. Duties and Tasks of the Range Administering Unit.
- G. Responsibility and Duties of the Range Safety Officer.
- H. Duties of Range Wardens.

Chapter 1 Annex A

Defence Ranges Safety Committee

Terms of Reference

The committee acts as the MoD focus for the safety of Ranges, gives direction on the management and maintenance of the safety of MoD Ranges and monitors annual and independent range inspections.

Scope

1. The Defence Ranges Safety Committee (DRSC) responsibilities encompass:
 - a. Providing a platform to agree MoD policy and procedures for the safe management and operation of MoD ranges.
 - b. Setting and maintaining standards for the safety of MoD Ranges.
 - c. Monitoring the safety of MoD Ranges and reporting to the DOSRSC.
 - d. Monitoring the implementation of the MoD Range safety inspection system specified in JSP403.
 - e. Monitoring implementation of the measures specified in JSP403 for management of the environment on MoD ranges.
 - f. Identifying, capturing and promulgating best practice for the safe management and operation of MoD ranges.

Tasks

2. The tasks of the DRSC include:
 - a. Sponsor and oversee the production of Joint Service Publications, forms and other documents which provide the necessary instructions and guidance for all concerned in the safety of MoD Ranges and of other ranges at home and abroad used by MoD personnel.
 - b. Provide design, construction and maintenance criteria for MoD Ranges where such criteria are necessary.
 - c. Advise on the interpretation and implementation of the policy and procedures for the safety of ranges.
 - d. Commission technical studies and trials for the improvement of the safety of ranges.
 - e. Maintain records of range safety technical studies and trials.
 - f. Maintain records of range inspections and range accidents.
 - g. Monitor the conduct and standard of range inspections.

- h. Review MoD range safety inspection reports and provide advice and recommendations as necessary.
- i. Oversee an audit programme of the safety of MoD and other ranges at home and abroad used by MoD personnel.
- j. Provide advice and guidance to range inspectors.
- k. Maintain the competency frameworks for MoD personnel involved in the management and inspection of ranges.
- l. Provide reports on the safety of MoD Ranges.
- m. Monitor and review forthcoming legislation and SHEF regulations for any potential impact on the safety of ranges and their environments.
- n. Provide DOSRSC with Annual Assurance Report.

Membership and Attendance

3. Membership of the committee comprises the representatives of the top level duty holders responsible for the safety and safe use of ranges within their respective Services / MoD Agencies:

- a. RNRSO representing Navy HQ.
- b. CESO (A) Trg Safety representing Army HQ.
- c. HQ Air 38 Gp A4 ES.
- d. DE&S TEST PT representing COO DE&S.
- e. IE Dstl representing CE Dstl.
- f. Head HSEO DSG representing CE DSG.
- g. DIO SD Training SO1 Trg Safety.
- h. Chief Firearms Instructor (CFI) MDP.
- i. SO1 DAAM.

4. Committee meetings are attended by representatives of those organisations providing technical / specialist advice and support to the DRSC, its sub-committees, working parties and working groups. Some of these attend on an as required rather than a regular basis and they are shown below in italics.

- a. OHS AD representing SSD&C.
- b. Chairman Defence Ranges Safety Committee Working Group (DRSCWG).
- c. Chairman Technical Working Group (TWG).
- d. *Chairman Air-to-Surface, Surface-to-Air Working Party (ASSAWP).*

- e. *Chairman Demolitions, Ordnance Disposal and Battle Simulation Working Party (DODABSWP).*
- f. Chief LAIT.
- g. DSA DOSR Chief RSIT.
- h. *CO SASC / SO1 Trg Safety representing DCbt*
- i. TAS Tech Offr.
- j. *IE(RAF) ESIT.*
- k. *HQ 1 Gp SO2 Ranges representing Air Cdre Ops & FD.*
- l. *DES Wpns-DOSG-ST5.*
- m. *DES Wpns-DOSG-WS1r.*
- n. *DES Wpns-DOSG-MLSC (Laser safety).*
- o. *DES Wpns-DOSG-WS1r2.*
- p. *QinetiQ Senior Trials Safety Manager (STSM).*

5. The committee officers are provided by the Defence Safety Authority (DSA) Defence Ordnance Munitions Explosives Safety Regulator (DOSR):

- a. Chairman - DSA-DOSR-TL
- b. Secretary - DSA-DOSR-PRG-1.
- c. Secretary - DRSCWG is in attendance (DSA-DOSR-PRG-1a).

Authority

6. The committee carries the authority of the Secretary of State for Defence for setting the policy on and standards of safety of MoD Ranges.

Reporting Committees

7. The following sub-committee and working parties report directly to the committee:
- a. Defence Safety Committee Working Group (DRSCWG).
 - b. Technical Working Group (TWG).
 - c. Air-to-Surface / Surface-to-Air Working Party (ASSAWP).
 - d. Demolitions, Ordnance Disposal and Battle Simulation Working Party (DODABSWP).

Frequency of Meetings

8. The committee will normally meet twice a year in, April and October, or more frequently if required by the Chairman.

Chapter 1 Annex B

Secretary Defence Ranges Safety Committee

Terms of Reference

1. The DRSC meets regularly, on the instructions of the Chairman and as arranged by the Secretary (DSA-DOSR-PRG-1), to consider on-going and new Range safety business tabled in an agenda produced by the Secretary.

Secretary

2. The Secretary is a permanent DRSC post directly accountable to the Chairman for the management and administration of the committee.

Committee Work

3. The Secretary is required to oversee committee, sub-committee and working party tasks, projects and current activities, to brief the Chairman of the DRSC, and to progress outstanding actions on members of the DRSC. He acts as the DRSC focal point for all matters of policy and authority relating to MoD Range management and safety.

4. The Secretary is the sponsor for JSP403, Handbook of Defence Ranges Safety and JSP390 Military LASER Safety. He is required to arrange the review and updating of the JSP's by the DRSC / DLSC and its working parties, and to organise timely production and distribution. He has particular responsibility for the content of Volume 1 of JSP403, dealing with range safety policy.

5. The Secretary is also required to act as secretary to the Defence LASER Safety Committee (DLSC) Terms of Reference (TORs) are contained within **JSP390**. He sits on the TWG as the DRSC representative.

Range Safety Audit and Assessment

6. The Secretary manages the continuous DRSC audit of the Services and other MoD Range inspection systems. He collates and analyses information from independent inspection reports in order to provide MoD assessments of Range management and safety. As part of this process, he must ensure maintenance of the DRSC Range inventory database and make it available for interrogation when information is requested.

7. The DRSC submits an Annual Assurance report in writing to the DOSRSC summarising activities and assessments. The Secretary is required to co-ordinate preparation on behalf of the Chairman.

Chapter 1 Annex C

Defence Ranges Safety Committee Working Group

Terms of Reference and Composition Purpose

To consider the detailed policy for the safety of MoD Ranges, where appropriate, and provide recommendations to the DRSC. Additionally, it reviews, updates and approves designs and other criteria for the construction and safety of Small Arms (SA) ranges Infantry and 40mm weapon systems ranges and other matters referred to it by the DRSC or generated by TAS Tech Offr, RAO, RAU or contractors using current criteria.

To produce, review and maintain the MoD forms and reports required for the safety of MoD Ranges.

To oversee the MoD Range Safety Framework Competency.

Scope

1. The DRSCWG responsibilities encompass the drafting and updating of the detail of policy issues for the safety of ranges, where appropriate, all aspects of MoD range safety forms and reports. Additionally it also approves non-standard range design and construction criteria, RDA's and WDA's.

Tasks

2. To produce, review and maintain the MoD forms and reports required for the safety of MoD Ranges.

3. To oversee the development and maintenance of the MoD Defence Ranges Framework Competences.

4. To review, update and improve designs and other criteria for the construction and safety of MoD Ranges dealt with in JSP403 Volume 2 and other matters referred to it by the DRSC.

5. Review Volume 1, 2 and 4 of JSP403 for currency and, where necessary, draft changes / amendments or new editions for approval of the DRSC.

6. Draft the detail of policy, where appropriate and submit to the DRSC for approval.

7. Draft amendments to Volumes 1, 2 and 4 as required, and submit to the DRSC.

8. Draft, agree, produce, review and maintain the MoD series of forms covering the authorisation, certification, inspection and use of MoD Ranges.

9. In conjunction with appropriate SME's, produce the policy and principles for the safety of Test, Evaluation, Research and Proof (TERP) ranges for approval of the DRSC.

10. In relation to MoD Ranges:

a. Approve MoD type standards.

b. Advise Range Authorising Officers on the granting of Approved Range Status.

- c. Set up, manage and report on low level range safety trials and studies.
- d. Undertake studies related to safety of MoD Ranges.
- e. Approve the design criteria of MoD Ranges.

11. Prepare Range Safety Notices (RSN) relating to MoD Ranges for release by Chairman DRSCWG prior to the amendment of JSP403 Volume 2.

Membership

12. Membership of the Working Group comprises:

- a. DSA-DOSR-PRG-Asst TL – Chairman.
- b. RNRSO.
- c. Army HQ CESO (A) SO1 Trg Safety.
- d. HQ Air 38 Gp A4 ES.
- e. SSD&C OHS.
- f. DIO SD Trg – SO1 Trg Safety.
- g. TAS Tech Offr.
- h. HQ SASC – SO2 Trg Safety DCbt.
- i. DES Wpns-DOSG-WS1r.
- j. DSA DOSR Ch RSIT.
- k. DAATM - Airspace SO1.
- l. Chief Firearms Instructor (CFI) MDP.
- m. Dstl ESR.
- n. DSA-DOSR-PRG-1a – Secretary.

13. Representatives of MoD Agencies⁶ controlling MoD Ranges are entitled to exercise their right to attend meetings of the Working Group at their discretion.

14. Representatives from other Service and MoD civilian organisations may be invited to attend meetings of the sub-committee, as required.

Authority

15. The Chairman is appointed by Chairman DRSC and is responsible to the latter for ensuring that the Working Group carries out the tasks laid upon it at paragraphs 5-13 above.

⁶ The Agencies are DE&S, Dstl, DIO, DSG and MDP.

Reporting

16. The Chairman of the Working Group reports to the DRSC.
17. The Technical Working Group (TWG) reports to the DRSCWG. Details of the TWG is at Appendix 1.

Frequency of Meetings

18. The Working Group will normally meet twice a year, or more frequently if required, for the conduct of business to complete the tasks placed upon it.

Chapter 1 Annex D

Technical Working Group

Terms of Reference and Composition Purpose

The Technical Working Group (TWG) of the DRSCWG provides a forum for detailed discussion of technical safety issues connected with the operation and maintenance of MoD Ranges.

Tasks

1. The tasks of the TWG include:
 - a. Review proposals for and amendments to JSP403 Volume 2 and make recommendations on changes to be forwarded to the DRSCWG for approval.
 - b. Consider applications for Approved Range Status (ARS) against the safety standards set out in JSP403 Volume 2 taking into account, where applicable, advice from the DOSG based on the Weapon Danger Area Laboratory System (WDALab).
 - c. Review proposals for trials to be conducted on MoD Ranges to ensure maximum data output is achieved and that any safety issues relating to the trials are resolved.
 - d. Resolve any technical issue passed to the TWG by the DRSCWG.

Membership and Attendance

2. Membership of the TWG comprises:
 - a. RNRSO.
 - b. Army HQ, HQ SASC SO1 Trg Safety DCbt – SO2 Trg Safety DCbt.
 - c. RAF (ESIT) – Head.
 - d. DIO SD Trg – SO1 Trg Safety and OC TAS Tech Offr.
 - e. DES Wpns-DOSG-WSr1.
 - f. Ch LAIT.
 - g. CFI MDP.
3. The Secretary of the DRSCWG (DSA-DOSR-PRG-1a) is in attendance for meetings of the working group.
4. Representatives from other Service and MoD organisations will be invited to attend, as necessary.
5. The Chairman is provided by DIO SD Trg (DIO SD Trg – SO1 Trg Safety) and Secretary (TAS Tech Offr).

Frequency of Meetings

6. The TWG meets as directed by the Chairman DRSCWG.

Chapter 1 Annex E

MoD Service / Agency Safety Chain of Command and Responsibilities

Royal Navy Ranges Safety Chain of Command and Responsibilities

Serial	Responsibility	Chain of Command Appointment and Staff	Advisory Staff
(a)	(b)	(c)	(d)
1	Higher policy direction and political clearance on range safety matters for the RN and RM.	Operating Duty Holder	DRSC, RNRSO
2	Execution of MoD policy on RN / RM ranges.	Operating Duty Holder	DRSC, RNRSO, DOSG
3	Authority to accept or reject advice from Boards of Officers on RN / RM training range matters and to issue authorisation to bring training ranges into use or to stop firing on these ranges. Authority to grant dispensations to ranges, if considered necessary.	Nominated RAO (2* Commanders only for dispensations)	DRSC HQ SASC DCbt TAS RNRSO
4	Independent range inspections, annual inspections, inspection programmes, and issue of MoD Form 905.	DSA DOSR RSIT	DRSC
5	Detailed allocation of ranges and supervision of use. Responsibility for presenting the range and maintaining it in a fit state for use. Preparation and promulgation of Range SO.	CO of RAU	Chief Safety Officer (CSO)
6	Authorisation and supervision of RCO.	CO of user unit	CSO
7	Safe conduct of firing practices and maintenance of supervision.	RCO & RSO / Assistants and Coaches	Unit Range Staff
8	Safe handling of weapons in accordance with Range SO.	Firers or the firing detachment under instruction	RCO, Safety Supervisors, unit instructors

Army Ranges Safety Chain of Command and Responsibilities

Serial	Responsibility	Chain of Command Appointment and Staff	Advisory Staff
(a)	(b)	(c)	(d)
1	Higher policy direction and political clearance of range safety matters for the Army.	Operating Duty Holder	DRSC Cap D, DCbt
2	Direction and policy on safety matters concerning Army ranges.	Operating Duty Holder	DE&S, DOSG Cap D, DCbt
3	Execution of MoD policy and the co-ordination of Command / Theatre policy on training ranges for the Army.	Command / Theatre HQ G3 / G7 (Trg) Staff	Cap Dir, Comd RFCA
4	Independent Range Inspections.	DSA DOSR RSIT	DRSC
5	Annual Range Inspections.	RAO / LTAR	RAO's Representative
6	Delegated authority from CLF to accept or reject advice from Boards of Officers and other specialist advice on Command / Theatre range matters and to issue authorisations personally to bring ranges into use or to stop firing on them. Authority to grant Dispensations to ranges, if considered necessary. Inspection programmes to include arrangements for works maintenance inspections by the appropriate works organisation and annual inspections. Approval of Range SO. Allocation of a specific range or ranges and clearance of user weapon systems and practices.	Nominated 2* Commanders Operating Duty Holders	Technical advice on range practices, procedure and safety rules from the Cap D sponsoring the weapon system and the Arm School responsible for training, or its local representative SME DIO SD Trg
7	Production of MoD Forms 1057, 904, 905, 906. Range SO. Responsible for presenting the range and maintaining it in a fit state for use. Monitor Safe Persons and Safe Place routinely in accordance with SST.	CO of RAU, Range Officer and Range Staff	LTAR Staff DSA DOSR RSIT TAS DIO SD Trg
8	Supervision of RCO. Ensuring that they have received the necessary training and experience to conduct	CO of user unit	Unit Training Officers Unit Specialist Weapon

	safely the practices to be fired and that their records show that they are formally qualified to do so.		Training Officer (course trained and qualified at an Arm School or the equivalent).
9	Safe conduct of firing practices and the fire discipline of troops under training.	User unit RCO, Safety Supervisors or Coaches	Advice from Range Officer or Range Warden on the local safety arrangements as set out in Range SO.
10	Safe handling of the weapon system in accordance with training publications, drills and Range SO.	Firers or the firing detachment	RCO / Safety Supervisor / Coach. Unit instructors on the weapon system.

Royal Air Force Ranges Safety Chain of Command and Responsibilities

Serial	Responsibility	Appointment	Advisory Staff
(a)	(b)	(c)	(d)
1	Higher policy direction and political clearance of range safety matters.	HQ AIR 38Gp A4 (<i>Small arms, Inf Weapon Systems AEOD and demolition ranges</i>) HQ 1 Gp Air Cdre Ops & FD (<i>Air delivered weapons ranges</i>). HQ Air Cadets Comdt Air Cadets (<i>Air Cadet ranges, including indoor and air rifle ranges</i>)	DRSC
2	Direction and policy on safety matters concerning RAF Ranges.	HQ AIR 38Gp A4 ES Staff, HQ 1 Gp SO2/4 Ranges (Air to Ground), HQ AC Cmdt Cadets	DRSC DOSG TAS
3	Independent range inspections	DSA DOSR RSIT	DOSR
4	Execution of MoD Policy on RAF Ranges: Delegated authority to bring RAF Ranges into use, to grant dispensations to ranges, if considered necessary, or to stop firing on them. Annual Inspection. Drafting Range Orders in conjunction with the RAU. Approval of Range	Nominated RAO / Comdt Air Cadets, Command HQ's – HQ 1 Gp SO2/3 Ranges (Air Weapons Ranges) HQ AIR 38Gp A4ES Staff, Staff HQ Air Cadets – Logs 2	DRSC DOSG TAS

	Orders.		
5	Responsibility for presenting the range and maintaining it in a fit state for use; including promulgation of Range SO. a. Monitor Safe Persons and Safe Place routinely in accordance with SST. b. Detailed allocation of a specific range.	CO of RAU, Unit Range Specialist Officer	HQ 1 Gp SO2/3 Ranges (Air Weapons Ranges), HQ Air 38Gp A4 ES Staff, HQ Air Cadets Comdt Air Cadets (Air Cadet ranges)
6	Supervision of unit RCO / RSO (ATC). Ensuring they have the necessary training and experience to safely conduct the practices, and their records show they are formally qualified.	Station RAF Regt Officer OC AWR (Air to Ground) OC User Unit HQ AC (TG) 5-ATC Only	HQ AIR SO2 FP HQ 1 Gp SO2/3 Ranges (Fixed wing & helicopter)
7	Safe conduct of firing practices and the range discipline of personnel under training. Supervision of AWR RSO (ATC). Ensuring that they have the necessary training, qualification and experience to control use of the range. Maintenance of records of qualifications and authorisations.	User Unit RCO OC AWR	Station RAF Regt Officer. HQ 1 Gp SO2/3 Ranges
8	Safe handling of the weapons system in accordance with training drills and range orders.	Safety Supervisors and Firers RSO (ATC)	RCO Authorising Officer (<i>Air Delivered weapons</i>)

MoD Police Safety Chain of Command and Responsibilities

Serial	Responsibility	Chain of Command Appointment and Staff	Advisory Staff
(a)	(b)	(c)	(d)
1	Higher policy direction and political clearance of range safety matters for the MDP. 2* Dispensation Issue 904.	Operating Duty Holder	DRSC MDP (Sec)
2	Direction and policy on safety matters concerning MDP ranges.	Duty Holder Chief Firearms Instructor (CFI)	DRSC, DOSG, D Cbt HQ Inf
3	Execution of MoD policy on training ranges for the MDP.	CFI	DLSC
4	Accept or reject advice on MDP controlled Ranges and issue authorisation to bring ranges into use or to stop firing on them. Authority to grant dispensations to	ACC CO ACPO Firearms Lead	DRSC DOSG HQ SASC DCbt

	ranges, if considered necessary.		CFI
5	Independent range inspections.	DOSG IE	DRSC
6	Annual inspections, inspection programmes, and issue of MoD Form 905. Monthly Inspections.	CFI, Deputy , CFI / CFI(DCFI)	DRSC
7	Detailed allocation of ranges and supervision of use. Responsibility for presenting the range and maintaining it in a fit state for use. Preparation and promulgation of Range SO.	CFI	CFI
8	Authorisation and supervision of RCO.	Firearms Training Manager (FTM)	CFI
9	Safe conduct of firing practices and maintenance of supervision.	Range Conducting Officer (RCO) Range Safety Officer (RSO)	CFI
10	Safe handling of the weapon system in accordance with training publications, drills and Range SO.	Authorised Firearms Officers (AFO)	RCO RSO

Dstl Ranges Safety Chain of Command and Responsibilities

Serial	Responsibility	Chain of Command Appointment and Staff	Advisory Staff
(a)	(b)	(c)	(d)
1	Implementation of MoD policy for Dstl ranges. Authority to bring ranges into use, and to stop firing on them.	Operating Duty Holder	DRSC DOSG
2	Giving advice regarding specific range safety problems on request. Inspection of all ranges to ensure that safe systems of work have been set up and are maintained.	IE Dstl	DRSC DOSG
3	The issue of regulations for the safe operation of Dstl ranges. Establishing and maintaining a safe system of work through the issue of standing and other orders. Annually certifying as competent a Range Safety Officer (RSO) who is responsible for approving and maintaining safe systems of work for all trials and proof activities. Annually certifying as competent all TCO who	Director Operations	Dstl Safety Staff (where appropriate) As Above

	carry out firings at his establishment. Approving in principle all firings and trials performed at his establishment. Ensuring that an inspection of the range is carried out annually to verify that the safe systems of work established are operating correctly.		
4	Approving and Assuring safe systems of work for all proof and trials activities. These systems must ensure the safety of people, buildings and equipment both on and off the site.	Range Safety Officer	Dstl Safety Staff
5	The safe preparation for and conduct of the trials and firings carried out under their control.	TCO	As Above

DE&S (Contractor Operated) Ranges Safety Chain of Command and Responsibilities

Serial	Responsibility	Chain of Command Appointment and Staff	Advisory Staff
(a)	(b)	(c)	(d)
1	Higher policy direction and political clearance of range safety matters for the DE&S.	Hd of Engr, TEST TL	DRSC, DOSG, TEST Ops Del
2	Direction and policy on safety matters concerning DE&S ranges. Authority to bring DE&S ranges into use and to stop firing on them. Monitor the safe operation of DE&S ranges.	TEST Op Del	DRSC, DOSG, TEST RPO
3	Implementation of MoD policy on DE&S ranges.	TEST Op Del	DRSC, DOSG, TEST RPO
3a	Appointment of TEST Resident Project Officers (RPO).	TEST Op Del	DRSC, DOSG
4	Independent range inspections and inspection programmes. Provision of advice on specific range safety problems.	DOSG IE	DRSC, DOSG, TEST RPO
5	Establishment of safe systems of work through the	Head of Site - TCO	DOSG, TEST RPO

	issue of standing and other orders. Annual certification as competent of the Trials Safety Manager (Contractor) who is responsible for approving and maintaining safe systems of work for all trials and proof activities. Annual certification as competent of all TCO (Contractor) who carry out firings and trials at his establishment.	(Contractor) Hd Trials Safety - TSM	
6	Monitoring of firings and trials.	TSM (Contractor)	TEST RPO
7	Approval and maintenance of safe systems of work for all proof and trials activities. These systems must ensure the safety of people, buildings and equipment both on and off the site.	Trials Safety Manager (TSM) (Contractor)	TEST RPO
8	The safe preparation for and conduct of the trials and firings carried out under their control.	TCO (Contractor)	TSM (Contractor) TEST RPO

DSG Ranges Safety Chain of Command and Responsibilities

Serial	Responsibility	Chain of Command Appointment and Staff	Advisory Staff
(a)	(b)	(c)	(d)
1	Higher policy direction and political clearance of range safety matters for the DSG.	Operating Duty Holder	DRSC, DOSG
2	Direction and policy on safety matters concerning DSG ranges. The issue of regulations for the safe operation of DSG test ranges.	CE DSG	DRSC, DOSG, Hd HSEP DSG
3	Implementation of MoD policy on DSG ranges. Authority to bring ranges into use and to stop firing on them.	Operations Director DSG	DRSC, DOSG, Hd HSEP DSG
4	Independent range inspection and annual inspections.	DOSG IE	DRSC

5	Detailed allocation of range and supervision of use. Responsibility for presenting the range and maintaining it in a fit state for use. Preparation and promulgation of Range SO.	General Manager	Hd HSEP DSG
6	Supervision of RCO. Ensuring that they have received the necessary training and experience to conduct safely the practices to be fired and that their records show that they are formally 'Qualified' or 'Authorised' to do so.	General Manager	Range Officer
7	Safe conduct of firing practices and maintenance of supervision.	User unit RCO	RAU, Range Officer & staff
8	Safe handling of the weapon system in accordance with regulations and/or test procedures, drills and Range SO.	RCO Firer	Range Officer

DIO Ranges Safety Chain of Command and Responsibilities

Serial	Responsibility	Discharged By	Remarks
(a)	(b)	(c)	(d)
1	To ensure organisation and arrangements for safety that will apply at the range are in place.	RAO	Appointment by appropriate Service / agency chain of command.
2	To produce organisation and arrangements for safety of the range.	DIO SD Trg	
3	To have a safe place of work for activities to be performed.	CO / Manager RAU	Including provision and maintenance of all Range equipment and safety features
4	To inspect and issue certificates.	RAO CO / Manager RAU Contractor, LTAR	Annual Monthly Biennial works Infra & Plant Triennial

5	To monitor standards of inspection teams.	DSA DOSR RSIT	DRSC chairman
6	To ensure training is fully compliant with safe system of training.	Ex Director	
7	To ensure that all who have authorised access to the range are fully briefed on the hazards, constraints and freedoms relating to the activities planned.	CO / Manager RAU	
8	To report an incident on the Range.	RCO	RAU when not in use
9	To provide inspection standards.	Hd of Engr, Hd Property	DRSC chairman

Chapter 1 Annex F

Duties and Tasks of the Range Administering Unit

1. An aggregated list of the duties and tasks carried out by or on behalf of the CO / Manager of the RAU is shown below:
 - a. Monitor the maintenance and good order of the range facilities and report any faults or deficiencies that cannot be rectified within the resources of the RAU and ensure any limitations on Safe Practice as a result are clearly briefed to the user.
 - b. Ensure the upkeep of a range file / folder containing copies of all relevant proceedings, certificates, licences, reports, maps, drawings and correspondence relating to authorisation, use and inspections of the range
 - c. Provide a Safe Place in accordance with this JSP.
 - d. Ensure the range log (MoD Form 906 / 906A / 906B) is signed before and after any live firing.
 - e. Produce a written risk assessment from which the Range SO are then derived. Range Orders are to be signed personally by the CO / Manager of the RAU. The CO / Manager of RAU is responsible for making sure the site specific risk assessment and the Range SO remain current and are reviewed and signed at least annually.
 - f. Carry out the daily checks and monthly inspections of range facilities.
 - g. Issue a licence to police and civilian shooting clubs.
 - h. Brief authorised civilians, Service and MoD civilian visitors.
 - i. Approval of a permanent air rifle range for use.
 - j. Arrange training for Range Wardens.
 - k. Where applicable, ensure that the duties of the RO / RSO / RLO / TSO are carried out.
 - l. Ensure that Estate, Works Technical, Infrastructure and Plant inspections are carried out at the required intervals.
 - m. Where applicable, the appointment of a Laser Safety Officer (LSO).

Chapter 1 Annex G

Duties and Tasks of the Range Safety Officer / Training Safety Officer

1. The Range Safety Officer (RSO)⁷ is responsible to the Commanding Officer (CO) / Manager of the Range Administering Unit (RAU) for the provision of safe range facilities.
2. The specific duties of the RSO will be laid down by the CO / Manager of the RAU but will include the following:
 - a. Assist the CO / Manager of RAU with the production and updating of:
 - (1) Site specific risk assessments written in accordance with the relevant Service / Agency format.
 - (2) Site specific Range Orders.
 - b. Where applicable, produce and maintain the Daily Range Detail / Summary.
 - c. Provide the Planning Officer and Range Conducting Officer (RCO) with relevant site specific information on hazards, template restrictions and best practice, enabling efficient and safe use of the facilities. For Live Firing Tactical Training Areas (LFTTA) this must include advising Planning Officers of the appropriate Weapon Danger Area (WDA) template to be used and any template / firing restrictions.
 - d. Advise of hazards, best practice and any limitations on the use of pyrotechnics, blank ammunition and explosive natures on the range.
 - e. For LFTTA's the RSO / TSO or a SQEP nominated person must check, and endorse by signing, the Range Danger Area (RDA) trace submitted by the user ensuring that:
 - (1) The correct type of WDA template has been applied.
 - (2) The correct WDA template scale has been used.
 - (3) The firing information is correct and corresponds with the information shown in the Range Action and Safety Plan (RASP).
 - (4) The RDA trace lies within the area allocated and presents no threat to other range users, range staff, authorised civilians and livestock.
 - f. Ensure that before taking over a facility the RCO receives a safety brief and that a record is kept of those briefed or alternate procedures in accordance with RAU arrangements.
 - g. Co-ordinate and de-conflict any concurrent use of facilities.
 - h. Exercise sufficient control over users to ensure the ranges remains a safe place.
 - i. Ensure the safe access and safety of authorised civilians and livestock from the hazards associated with, or resulting from, military training activities.

⁷ Also known as Range Officer or Range Liaison Officer (RLO) or Training Safety Officer (TSO).

- j. Ensure that all reasonable precautions are taken to safeguard the public both inside and outside the range boundary.
- k. Ensure inspections are conducted in accordance with current policy and initiate repair work as required.
- l. Implement the appropriate after action process to report unauthorised intrusions by Air, Land or Sea into the range.
- m. Initiate regular updates of range maps and overlays.
- n. Initiate NOTAM action when required.
- o. Publish the procedures to be undertaken in the event of an accident or incident, in accordance with the relevant GSTP and Range Orders, such as:
 - (1) Cease fire all range / exercise activities.
 - (2) Advise the unit involved of the most efficient evacuation procedure for the injured personnel.
 - (3) Liaise with the emergency services to provide safe routes to and from the injured personnel / Emergency Evacuation Point.
 - (4) Co-ordinate the reporting of the incident in accordance with current procedures.

3. When involved in LFTT activity Range Control staff are to ensure that they obtain copy of the RASP. This is to be retained in Range control for reference whilst the activity is being conducted and subsequently held on file. Any changes in the pre-planned activity must be confirmed by Range Control. In addition Range Control staff are to check the following five points as a **minimum** to ensure “safe place” prior to the commencement of firing:

- a. The accuracy of the RDA trace - Thus user unit DAs are de-conflicted.
- b. The RASP is to be used to confirm that the user unit acknowledges its obligations in supplying sentries and de-conflicting the movement plan across the range complex. Any changes to the original exercise plan is to be recorded on the RASP and confirmed by Range Control.
- c. The RASP is to be used to confirm that the user unit is fully conversant with the medical emergency procedures and have robust communications.
- d. The RASP is to be used as required by Range Control to confirm aspects of the plan deemed unusual in accordance with the training areas rules e.g. dispensations.
- e. The RASP **MUST** have been countersigned by the Senior Planning Officer - Thus there is assurance that the Planning Officer has been appropriately supervised.

Dstl Range Safety Officers

3. Dstl organisational structure is such that all of the requirements specified for an RSO are undertaken, but not necessarily captured in the RSO profile. Additional positions which undertake the duties specified are Work Place Supervisor and Team Leader Range Delivery.
4. Where staff other than the RSO undertake specific duties they will be deemed competent against the functional competency framework requirements specified.

Chapter 1 Annex H

Duties of Range Wardens

(Not applicable to RAF - See Air Publication 3205 (RAF Ranges - Policy))

Introduction

1. **Aim.** This Annex sets out some of the Range Wardens' duties on MoD Ranges. It is primarily intended for Range Wardens who do not have the benefit of a supporting infrastructure such as Defence Infrastructure Organisation (DIO). The list is not exhaustive and much will depend on the specific range

2. **Employment.** On DIO SD Training UK based ranges, range wardens are employees of an Industry Partner (IP). As such all range warden duties and supervision of these are the responsibility of the IP as defined in the current IP (National Training Estate Prime – (NTEP) Contract. The service provided by IP staff is detailed within the current contract documentation, and the user can expect full support from IP staff. If there is any doubt regarding any aspect of support from IP staff, advice from the local RSO / TSO should be sought. The list at paragraph 4 is a useful guide but not definitive. Range staff on DIO SD Training in Germany, Cyprus and the Rest of the World are RAU employees, and as such have their duties defined by the RAU, as listed below. Careful selection is necessary to fill the post of a Senior Range Warden as a group of ranges involves extended responsibilities for the incumbent, such as the coordination of multiple live firing ranges. If it is not possible for a range warden presence during firing on any MoD Ranges the risk assessment for that range must reflect this and put into place any additional control measures required of the RCO by the RAU. These must be reflected in Range Standing Orders. In the absence of a range warden a reliable system to handover the MoD Form 906 series to the RCO must be put in place by the RAU.

3. **Property and Equipment Management.** In UK DIO SD Training the IP is contracted to maintain and operate Ranges to the standards laid down in JSP403 Volumes 1 – 4. On all other MoD Ranges the RAU will engage with the estate management contractor when repairs or maintenance prove beyond organic staff capability.

Duties – All Ranges

4. **General Duties.** The RAU / DIO SD Training is responsible for ensuring that Range Wardens carry out the following general duties on all ranges:

- a. Care and security of range equipment.
- b. Care and issue of range stores.
- c. Making up and repairing target screens and penetrable targets.
- d. Greasing and non-technical servicing of fitted range equipment.
- e. Maintaining bullet catchers in accordance with RAU instructions.
- f. Maintenance and minor repairs to the range structure, such as target pits and runs, mantlets, firing points and, shelters.
- g. Cleanliness of the range and range buildings. Removing any military debris left in

error by user units. (Litter, including spent cartridge cases should have been removed by the user unit).

h. Management of the range:

- (1) Maintaining the range booking diary and liaising with the RAU regarding the range programme.
- (2) Displaying red flags and red lamps as required by Range Orders.
- (3) Preparing the range to the users' requirements. Instructing the range user about targets, control systems and local range procedures when necessary.
- (4) Briefing the user on special instructions for the range and any restrictions / limitations on movement caused by neighbouring ranges.
- (5) Custody of Range Orders and the Range Log.
- (6) Handing over and taking back the range from the user.
- (7) Recording defects and damage arising from use.
- (8) Security of the range at the end of the day's practice.

i. Knowing and understanding their responsibilities under the Health and Safety at Work etc. Act, and being familiar with the range risk assessment.

5. Range Log. The Range Warden's responsibilities for the Range Log (MoD Form 906 series) are:

- a. Holding and maintaining it in accordance with the notes on its first page.
- b. Handing it with a copy of Range Standing Orders to the RCO taking over the range and ensuring that the RCO has completed it before being given authorisation to commence live activities on the range.
- c. When firing has finished for the day, checking that the RCO has completed the appropriate columns, confirming the accuracy of the entries and initialling the last column. This includes ensuring that any un-located blinds were recorded.
- d. Recording faults, damage and range incidents, and reporting them to the RAU.
- e. Ensuring the following is recorded in red by the examining / inspecting officer:
 - (1) The details of de-leading, deep-cleaning, technical examinations. (e.g. TAS and other maintenance tasks carried out by outside agencies.)
 - (2) Range inspections.

6. **RSO / TSO Instructions.** The Range Warden is to follow the RSO / TSO instructions in such matters as hours of practice, stores, targets and apparatus, within the overall instructions issued by the RAU.

7. **Safety.** If the Range Warden believes that a risk exists, Range Standing Orders are not being followed or unsafe practices are being conducted, he should make his concerns known to the

RCO, who is responsible for range safety. The Range Warden is to report any such occurrences, through his line manager, to the RAU at the earliest opportunity. Range Wardens may not be used as sentries or lookouts without the express permission of the RAU.

Additional Duties – Other Ranges

Electric Target Ranges

8. **Training.** Range Wardens require additional training for the custody and maintenance of electric target equipment. They need to have some knowledge of the principles of electricity and an understanding of circuits, fuses and battery maintenance. It is essential that persons required to operate, handle, service or maintain electrical equipment, winches, compressed air or batteries are properly trained and competent in the safe handling, servicing and storage of the equipment. The appropriate PPE and clothing for the work are to be provided.

9. **Duties.** The additional duties include:

- a. Preparing target veneers, cutting them to shape and fitting hit switch cramps.
- b. Fitting triple bar target arms.
- c. Testing and changing of SARTS mechanisms, and recording servicing.
- d. User checks and maintenance of SARTS mechanisms.
- e. Care of the console building.
- f. Before leaving the range, to secure SART mechanisms and consoles against vandalism.

10 **Specialist Targetry.** When portable cable-operated compressed air, electric or radio-controlled target equipment is used, as in LFTTA or MMTTR, additional duties for which he / she requires training are:

- a. Preparing equipment for use.
- b. Inspecting mechanisms on return for damage, and ensuring that they are properly packed and stored.
- c. Storing and charging batteries and air cylinders.
- d. Examining cable insulation and testing for continuity.
- e. Inspecting and minor servicing of winches, trolleys and tow cables.

Automatic Marking System – Small Arms Ranges Target System

11. The Range Warden is responsible for the care, maintenance and calibration of Automatic Marking System (AMS) / Small Arms Ranges Target System (SARTS), for which he / she requires training. They also may be able to show users how to operate the equipment and, when required by the RCO, to operate AMS / SARTS themselves.

Barrack and NDA Ranges

12. Range Wardens of Barrack and other NDA ranges are required at hand-over and take-over of the range to inspect stop butt walls (where possible), for shot damage above or outside the bullet catcher, and to check that it and its cause have been recorded by the RCO in the Range Log. If not they are to be recorded and reported to the RAU so that the damage is repaired and any appropriate action taken.

Indoor Ranges

13. Range Wardens of indoor ranges are required to:
- a. Be aware of the health risk posed by lead-in-air, lead dust, the risk of fire and explosion posed by un-burnt propellant and to observe safe working practices.
 - b. Operate and maintain installed ventilation equipment and carry out user servicing.
 - c. Use the cleaning methods and equipment detailed in Volume 2 Chapter 30 to prevent lead dust and un-burnt propellant accumulating.
 - d. Only use authorized vacuum cleaners when cleaning the range.

Chapter 2

Use of MoD Ranges

Introduction

32. **General.** This Chapter lays down the policy for the use of MoD Ranges.

33. **Authorisation for Use.** The responsibility for bringing a MoD Range into use on a permanent basis lies with the appropriate RAO from the Service or MoD organisation that has raised the User Requirement Document (URD) and ensures the Findings and Recommendations of the Board of Officers. A copy of the Range SO, the Range Safety Certificate (MoD Form 905) and the Range Log (MoD Form 906 / 906A / 906B) shall be available on the range when it is in use. The issue of the Range Authorisation Certificate (MoD Form 904) authorises the use of the range. Further details on authorisation are in Part 2 Chapter 5.

34. **Range Site Safety Risk Assessment.** The need to conduct a Risk Assessment in accordance with [JSP375 Volume 1, Part 2, Chapter 8](#) and the Safe System of Training (SST) is of paramount importance for every firing activity on ranges. The 'Safe Place' element of the SST, whilst owned by the DIO, still needs to be considered and all the hazards associated with the 'place', reviewed and appropriate controls put in place. The RAU is to produce a written Range Site Safety Risk Assessment utilising the SST and taking into account the live firing activities that will be permitted there, in order to establish what is necessary to make it a safe place for users and anyone else who may be affected by the firing activity. The Range Standing Orders (Range SO) are subsequently derived from the Range Site Safety Risk Assessment and form part of the complete range user's Risk Assessment. The CO / Manager of the RAU is responsible for ensuring that the Range Site Safety Risk Assessment and Range SO remain current and that they are reviewed and signed annually.

35. **Range Standing Orders.** Before issuing a MoD Form 904 for a MoD Range, the RAO is to ensure that Range SO are in place. The questions in Section 2 of the appropriate MoD Form 907B, are an indication of the subject matter that should be included in the orders. Where a contractor is responsible for all or part of the daily range operation the instructions pertaining to this are to be approved by the CO / Manager of the RAU and are to be referenced in the Range SO. The RAO is to approve the Range SO before they are first issued, and is responsible for ensuring that they are signed by the CO / Manager of the RAU. Once issued, the Range SO are binding on all users of the range. The CO / Manager of the RAU is responsible for ensuring that the Range SO remain current and that they are reviewed and signed at least annually. The date of issue and the date of each review of the Range SO together with the name and signature of the reviewing officer are to be recorded on a review sheet kept with the copy of the Range SO that is held on the range. When there is a change of detail or of CO / Manager of the RAU the Range SO shall be revised, dated and as necessary, signed by the CO / Manager of the RAU and re-issued. Any changes affecting safety are to be notified immediately to the RAO.

36. **Safety Certificate.** A copy of the current Range Safety Certificate (MoD Form 905) is always to be available on the range for the RCO to check its currency before firing commences. If the certificate is not current or has been withdrawn by the RAO, RAU or DSA DOSR RSIT the range is not to be used.

37. **Range Log.** The Range Log (MoD Form 906 / 906A / 906B) is always to be available to the RCO / DCO / TCO whenever the range is in use and it is to be completed by the RCO / DCO / TCO before and after firing.

38. **Inspections.** Following the issue of a MoD Form 904 and 905 by the RAO in addition to the RCO / DCO / TCO check before each use, ranges are to be inspected as laid down in Chapter 7.

Use of a Service and DIO Ranges by a Service

39. **Requirements.** Before permission is given for a single Service controlled range to be used by another Service or for a DIO controlled range to be used by a Service, the RAO shall be satisfied that the weapons or devices to be used, their WDA templates / HIATs and the firing exercises to be carried out comply in all respects with the MoD Form 904 and the Range SO. All technical details of the weapon systems and the practices to be fired shall conform to the safety criteria for the specific range allocated to the prospective user. These details are to be checked by the RAU at the time a firm bid is made for use of the range. Once approved, range practices shall be conducted by a properly qualified RCO / DCO.

40. **Doubt or Disagreement.** Where there is any doubt or disagreement over the use of a range which cannot be resolved by those exercising management control over the range, the matter is to be referred to the LTAR or appropriate MoD Staff indicated in the chain of command (Annex E) to Chapter 1.

41. **Procedures.** Instructions and procedures for using a range are laid down by the DIO or Service controlling the range. As a general principle The User Service will follow the DIO or controlling Service Range SO, instructions and procedures. Where there is a difference from normal user Service procedures the safer of the two is to be adopted unless a dispensation is granted by the responsible RAO.

Use of Foreign Design Ranges under MoD Control in the UK and Overseas

42. **Safety Principles.** MoD personnel may have a requirement to conduct live firing on a range in the UK or overseas which is located on MoD controlled property but which has not been built to UK designs, e.g. a United States Air Force range built on a RAF Station in the UK or a German design range inside a British controlled facility in Germany. Any such range on which foreign and / or MoD personnel conduct live firing should as a minimum conform to the safety and licensing requirements laid down in this JSP before it can be authorised for use. Where the foreign design introduces a difference from normal user Service, MoD agency or organisation procedures the foreign range safety control measures should be examined to ensure that they provide at least the same level of safety. If there is any doubt technical advice should be sought before the range is authorised for use.

43. **Authorisation.** Before a foreign design range located on MoD controlled property is first authorised for use by MoD personnel on duty, the prospective RAO should arrange for it to be inspected by a member of his staff competent to do so. Failing that, he should arrange for the range to be independently inspected by DSA DOSR RSIT. If the range is assessed to be at least as safe as the requirements laid down in this JSP, the responsibility for authorising its use lies with the appropriate RAO of the Service, MoD agency or organisation that controls the site. The MoD Form 904, 905, is to be issued to authorise the use of the range by MoD personnel whilst they are on duty.

Use of Host Nation Ranges by MoD Personnel

44. **Safety Principles.** Personnel stationed, visiting or on training overseas may have a requirement to fire on a range which is not on MoD controlled property, has not been built to UK designs and whose use is controlled by the Host Nation. Any such range on which MoD personnel will be live firing should as a minimum conform to the safety requirements laid down in this JSP, and the procedures for conduct should be in accordance with the appropriate Service, MoD agency or organisation regulations for that type of range. Where the safety requirements of the Host Nation differ from those stipulated in this JSP and in the appropriate Service, MoD agency or organisation regulations, the more stringent requirements shall be observed unless dispensation has been agreed with the Host Nation and granted by the responsible 2*.

45. **Permanent Authorisation.** The responsibility for authorising the use of a Host Nation controlled range by MoD personnel on a permanent basis lies with the Exercise Director of the Service, MoD agency or organisation that has the majority of users. In most cases, this will be at 2* level (ODH) who has ordered the live firing to take place. Before the range is first used by MoD personnel on duty the Exercise Director is to arrange for it to be assessed. If the range is assessed to be at least as safe as the requirements laid down in this JSP, it may be authorised within the MOU for use by MoD personnel whilst they are on duty. Where the range is to be used on a temporary exercise basis the provisions of Chapter 5 paragraph 170 are to be applied. There may be instances when MoD personnel are required to be on a Host Nation controlled range in an advisory or supervisory capacity during Host Nation live firing training. Such a requirement shall be detailed in the Memorandum of Understanding (MOU) with the Host Nation. Provided the MoD personnel are not firing as part of the range activity there is no requirement for the range to be authorised for use in accordance with this JSP.

46. **Air-to-Surface Use.** There are some overseas ranges used for air-to-surface firing on an occasional and irregular or opportunity basis by MoD personnel on training. Provided that there is an Agreement or Memorandum of Understanding (MOU) in place and that the safety requirements of the Host Nation are no less stringent than those for an equivalent UK range there will be no need to establish the full authorisation and range documentation, stipulated in Chapter 5, for such occasional use. It will be sufficient for the RAO to issue a MoD Form 904 to cover the occasional use and to review that use whenever there is a change to the Agreement / MOU or safety requirements.

Use of Service and DIO Ranges by DE&S, Dstl, DSG, MDP, Foreign Forces and Northern Ireland Prison Service

47. **Requirements.** Before permission is given for a Service or DIO controlled range to be used by the DE&S, Dstl, DSG, MDP, foreign force or Northern Ireland Prison Service (NIPS), the RAO shall be satisfied that the weapons or devices to be used, their WDA templates / HIATs and the firing exercises to be carried out are within the parameters authorised for the range. All technical details of the weapon systems and the practices to be fired shall meet the safety criteria for the specific range allocated to the prospective user. These details are to be checked by the RAA at the time a firm bid is made for use of the range. Once authorised, all firings and range practices shall be conducted by a Competent Conducting Officer.

48. In cases of doubt or disagreement about safety regulations to be applied the RAU concerned is to consult the Service / DIO focal point for range safety, who may ask the DOSG, when appropriate, for range safety advice. In the case of foreign forces wishing to use a range, the appropriate authority should establish through the chain of command if any special agreement, e.g. a

Memorandum of Understanding, is necessary. Any charges will be set by the DIO in agreement with the RAU.

Use of DE&S, Dstl, DSG, and MDP Controlled Ranges by a Service or by Foreign Forces

49. **Requirements.** Before permission is given for a Service or DIO controlled range to be used by the DE&S, Dstl, DSG, MDP, foreign force or Northern Ireland Prison Service (NIPS), the RAO shall be satisfied that the weapons or devices to be used, their WDA templates / HIATs and the firing exercises to be carried out are within the parameters authorised for the range. All technical details of the weapon systems and the practices to be fired shall meet the safety criteria for the specific range allocated to the prospective user. These details are to be checked by the RAA at the time a firm bid is made for use of the range. Once authorised, all firings and range practices shall be conducted by a Competent Conducting Officer.

50. In cases of doubt or disagreement about safety regulations to be applied the agency or organisation concerned should consult the DOSG, when appropriate, for range safety advice. In the case of use by foreign forces, the Dstl / DSG / MDP appointed appropriate authority, or in the case of the DE&S the TEST PT T&E RM, should establish through the appropriate channel if any special agreement, e.g. a Memorandum of Understanding (MOU) or Internal Business Agreement (IBA), is necessary.

Use of MoD Ranges for Trials and Demonstrations

51. Trials and demonstrations may be carried out on MoD land authorised as a Range where the RAO / RAA is satisfied that the weapon systems or devices to be used, their WDA templates / HIATs and the events to be carried out are within the parameters authorised for the range, and where the sponsor's instructions for range safety conform in all respects to the safety criteria laid down for the range. In cases of doubt or disagreement about safety regulations to be applied the unit, agency or organisation sponsoring the trial or demonstration shall be referred to the DOSG for range safety advice. Any matter of doubt or disagreement which cannot be resolved by the RAO is to be referred through the chain of command to the appropriate MoD Staff as indicated in the Annexes to Chapter 2. Research trials involving equipment or weapons, ammunition natures or explosive stores, knowledge of whose performance is limited, should be subject to particular scrutiny. Where appropriate, legal and financial aspects such as the licence to use the range and indemnities will be in accordance with the guidance laid down in [JSP 362⁸](#), [JSP 332⁹](#) and [JSP 368¹⁰](#).

52. Low level development work and trials on new or improved materials intended for general MoD use on fixed structure training ranges may be carried out on a range provided the RAO / RAA is satisfied that events can be kept within the safety criteria laid down in this JSP and in other relevant Service / MoD Agency publications. In cases of doubt or where such trials cannot be kept within current safety criteria they are to be referred to the DRSCWG before commencement; in all instances a specific risk assessment, safety case and trials plan is always required before approval can be considered.

⁸ JSP362 Defence Lands Handbook.

⁹ JSP332 Low Value Purchasing Manual.

¹⁰ JSP368 The MoD Guide to Repayment.

Use of MoD Ranges by Civil Police Forces for Marksmanship and Tactical Training

53. **General.** The paragraphs in this section should be read in conjunction with the Director of Operations 'Instructions on Training and Logistic Assistance to the Police'. The term 'Police Forces' refers to civil police officers carrying out official marksmanship or tactical training during a tour of duty. Police Forces does not refer to police rifle or pistol clubs, which are subject to exactly the same conditions as other civilian clubs. The following definitions are applied to Police Force training activities on MoD Ranges:

a. **Tactical Shooting.** Practices on an appropriate LFTTA range where free movement can take place and targets can be engaged within an allocated arc of fire. Such practices are not permitted on NDA and LDA ranges (e.g. Barrack and Gallery) unless the ranges have been specifically designed, constructed and authorised for tactical shooting.

54. **Indemnity and Licence.** Police forces wishing to use a MoD Range to carry out official marksmanship or tactical training should apply to the Service, DE&S, DIO, MDP, Dstl or Reserve Forces and Cadets Associations (RFCA) RAA. The MoD and RFCA shall be fully indemnified against all damage to the premises and claims from third parties for personal injury or death resulting from the Police Forces use of a range. If the application to use a range is approved, a duly authorised official on behalf of the Police Forces shall complete the licence DIO Form 5665 the MoD Form of indemnity. Specific insurance to support the indemnity will not be required. Police Forces are to apply annually for renewal of licences, and, if granted by the RAU, are to be copied to the regional DIO office for information, if appropriate.

55. **Restrictions.** Use of Non-Service Light Pattern Weapon (NSLPW) and ammunition which are inappropriate to the design of a range could lead to shot falling outside the Range Danger Area (RDA), thereby endangering the public. Police Forces weapons and ammunition shall not be used on MoD Ranges (indoor and outdoor) unless they are within the performance limits laid down in Volume 2 of this JSP.

56. **Conditions of Use.** It is essential that Police Forces observe the safety regulations and procedures which are required by the Range SO for use of the range, including the adoption of any 'clear RDA procedure'. In particular the following points are to be noted:

- a. Police Forces may use a range for a non-standard practice or item provided that:
- (1) There is a Training Imperative to meet an essential police Operational Requirement which cannot be met by any other practicable means.
 - (2) The police write an activity based site risk assessment covering the particular firing practices / items to be used to identify the controls necessary to ensure all rounds will be contained within the RDA.
 - (3) The Chief Firearms Instructor signs the risk assessment and having assured themselves that the Training Imperative exists and that all practicable steps have been taken to ensure that any hazard generated reduces the risk to the ALARP condition and all rounds will be contained with the RDA.
 - (4) If non-standard practices or items are required on the range, the Chief Constable personally signs the necessary authorisation. The format to be used is at [Annex D](#).

- b. If a range is covered by Military Byelaws, members of a Police Force, as constables, are able to make an arrest under the byelaws in accordance with the powers set out in Section 24 of The Police and Criminal Evidence Act 1984 and therefore can remove members of the public who trespass into the Range Danger Area.
- c. When MoD users and a Police Force on marksmanship training are firing on adjacent Gallery ranges the 200 mils reduction in safety angle may be applied where the criteria is met in full.

57. **Range Documentation.** It is the responsibility of the RAU or RFCA controlling the range, or, in the case of DE&S (contractor operated) ranges, the TSM to ensure that the MoD Form 906 / 906A is correctly completed by Police Forces RCO before and after firing.

Use of MoD Ranges by Civilian Clubs

58. The policy and process of recognition of sporting activities and associated NGBs of sport is overseen by the four Sports Councils (Sport England, Sport Northern Ireland, Sport Scotland and Sport Wales) and UK Sport. NGBs of sport are typically private organisations, which provide a single lead NGB structure at UK, GB, or Home Country level that satisfies published criteria on governance related issues and structures. In respect of competitive target shooting, NGBs govern a particular discipline through the common consent of the sport itself and they provide a range of training courses on safe conduct and safe supervision of range practices within their respective sporting disciplines. Recognition as an NGB is an acknowledgement of this situation and does not in itself confer additional authority or rights; however, the MoD acknowledges that each of them have a nationally recognized status as being the centre of excellence for each of their respective disciplines. The principal NGBs recognised by the MoD are:

- a. The National Rifle Association (NRA), which is the NGB for all forms of target shooting other than the specific forms controlled by the other NGBs listed below. The NRA controls, recognises or acknowledges more than 20 types of target shooting (disciplines) and its members use modern full-bore rifles, historic arms, shotguns with slug and birdshot, small-bore rifles and all forms of pistols that remain legal within the UK.
- b. The National Small-Bore Rifle Association (NSRA) which is the NGB for all Small-bore Rifle and Pistol Target Shooting in the United Kingdom, including Airgun and Match Crossbow Shooting. The weapons used in small-bore competitions are typically of .22 calibre or less.
- c. The Clay Pigeon Shooting Association of Great Britain (CPSA) is the NGB shooting moving clay targets with shotguns.
- d. The Muzzle Loaders Association of Great Britain (MLAGB) which is the NGB for black powder and muzzle loading firearms, for target shooting.
- e. The Northern Ireland Practical Shooting Confederation (NIPSC) which is the NGB in relation to the sport of ISPC shooting in Northern Ireland, including full bore target pistol shooting.
- f. The United Kingdom Practical Shooting Association (UKPSA) which is the NGB in relation to the sport of International Practical Shooting Confederation (IPSC) shooting in Great Britain.

59. The conditions under which those Non Military Organisations (NMO) which are formally approved civilian clubs, affiliated to their appropriate NGB, may use Service, DE&S, Dstl, MDP, DIO SD Training or RFCA controlled ranges (collectively referred to in this section as MoD Ranges) in the UK are set out in this section.

60. **Eligibility.** To be eligible to use a MoD Range, a civilian club shall apply for a MoD Licence - **DIO Form 5665**. Additionally, the club shall:

- a. Be approved by the Home Office for the calibre of firearms (less shotguns of all types) they intend to use on MoD Ranges and shall be able to produce written confirmation from the Home Office to that effect. (Application for the Secretary of State or Scottish Ministers' approval is made on Form 124, which is available from any of the principal NGBs). Approval is granted in a Letter of Approval, which is sent to the applicant and copied to the Chief Officer of Police.
- b. Be affiliated to the appropriate NGB at paragraph 58 and shall be able to produce written confirmation that its affiliation fees are paid.
- c. Provide evidence of valid insurance cover.
- d. Be able to provide a NGB qualified Range Conducting Officer (RCO) for each range to be used who is Competent in the specific discipline and proposed activity to be conducted. The RAU is to hold a list of current RCO's together with their expiry date and a list of weapons, or groups of weapons by discipline for which they are qualified to conduct practices.
- e. Ensure that Full Members possess and are able to produce valid documentation confirming their membership and their Club Chairman's certification of their competence on their individual weapon type. This is managed at Club level but is validated, assured and supervised by the NGB who define the processes to be used to issue the Certificates of Competence.
- f. Ensure that any Probationary Members are supervised one-to-one at all times by either a Full Member of the club who is authorised by the Chairman of the club or by a NGB trained and certified instructor or coach.
- g. Adhere to the agreement for access to ranges between the MoD and the NGB under whose auspices the club is operating.

61. **Licence to use MoD Range – DIO Form 5665.** NMOs wishing to use a MoD Range should apply to the appropriate RAU for a Licence for the range(s) they wish to use. Application for a MoD Licence is made on the **DIO Form 5665**. The RAU should be consulted regarding any special requirements that may need to be included in the Licence. The RAU is to ensure that any Licences they issue are copied to their regional office.

62. **Indemnity and Insurance.** The MoD shall be fully indemnified against all damage to the premises and claims from third parties for personal injury or death resulting from the licensee's use of a Range. In addition to the signed indemnity contained in the licence, **DIO Form 5665**, it is necessary that the NMO provides evidence of insurance cover to support the indemnity. The insurance cover required to meet third party claims will be a minimum of £5M per incident and be unlimited as to the total number of incidents it covers.

63. **Payment.** NMOs will be required to pay for the use of MoD Ranges. Charges will be set by the MoD in agreement with the RAU.
64. **Weapon Restrictions.** Use of Non-Service Pattern Weapons and ammunition which are not within the parameters laid down in the relevant range MoD Form 904 will not be permitted. Civilian clubs are not permitted to use any automatic weapon system on MoD Ranges.
65. **Ammunition Restrictions.** All Civilian clubs that use hand loaded ammunition are to obtain confirmation and be prepared to demonstrate that it falls within the parameters for use on MoD Ranges.
66. **Priority.** At all times the use of MoD Ranges by civilian clubs is to be subject to the requirements of the Services (which includes, MDP, Reserve Forces and Cadets on duty) and Police Forces on official marksmanship or tactical training, all of which take priority.
67. **Conditions of Use.** It is essential that NMOs observe the safety regulations and procedures, which are required by the Range SO for use of the range, including the adoption of any 'clear RDA procedure'. In particular, the following points are to be noted:
- a. **Byelaws.** If a MoD Range is covered by Military Byelaws, NMOs using the range cannot enforce the byelaws by means of either arrest or removal if an individual enters the danger area either inadvertently or deliberately.
 - b. **200 mils Reduction.** When firing on either Gallery Ranges (GR) or Converted Gallery Ranges (CGR) NMOs and Cadet Forces¹¹ may not apply the 200 mils reduction safety angle when there is concurrent use of an adjacent range.
 - c. **Young People.** Since the civil law permits use of firearms by young people within a club environment and lays down no age limits for such activity, RAUs should apply age limits, through Range SOs, only if there is some particular feature of a range that makes it necessary to do so.
68. **Dispensation Range.** NMOs are permitted to use a MoD Range which operates under a 2* dispensation provided the 2* who granted the initial dispensation because of a Service / Agency need is satisfied, as a result of a risk assessment and any subsequent controls put in place, that the level of risk from the NMO use is no greater than on a Compliant Range. Where there are controls and limitations or restrictions to be applied to the NMO these shall be detailed on the schedule of the MoD Form 904 for the range and included in the Range SOs. They are likely to include, inter alia, the standard of marksmanship required, the level of safety supervision required, distances and lanes, which can be used, number of firers and the maximum calibre, muzzle velocity and muzzle energy permitted. The fact that one named club is authorised to use a certain Dispensation Range does not mean that other clubs automatically have the same permission. Each case is to be assessed individually and only named clubs that hold a valid MoD Licence (**DIO Form 5665**) are to be authorised.
69. **Shared ranges.** Only bids to use a range from a single organisation will be permitted by the RAU i.e. Cadets may not share ranges with civilian gun clubs except when shooting in competitions on duty using service pattern weapons.
70. **Club Agreement and Order Form.** The civilian club is to liaise with the RAU to ensure that the Club Agreement and Order Form are completed correctly.

¹¹ This includes all Service and Private Cadet Forces.

71. **Actions on an incident / preserving evidence.** Range Standing Orders are to authorise specific Crown / Civil Servants to take possession of, where appropriate, any weapon involved in an accident or incident. The RAU is to ensure that the Range Standing Orders contain sufficient detail to advise Crown / Civil Servants on the procedure to be followed if such an action is considered appropriate.

72. **Cooperation with any investigation.** RAU's are to ensure that the Range SO contain direction on the procedure to be adopted in the event of an incident or accident to initiate collection of relevant material immediately following an incident and the appropriate NGB is to have in place a formal agreement that their affiliated civilian club will agree to and support the MoD with closest cooperation in any investigation where they are involved with a range accident.

73. **Range Documentation.** Whenever a police or civilian club uses a MoD Range it is the responsibility of the RAU controlling the range, or, in the case of DE&S (contractor operated) ranges, the TSM, to ensure that the MoD Form 906 / 906A / 906B is correctly completed before and after firing.

74. **Civil police marksmanship and tactical training certification.** The Association of Chief Police Officers (ACPO) of England, Wales and Northern Ireland has agreed that members of their Police Forces nominated to conduct live firing on a MoD Range will hold a certificate, issued by the Chief Constable in charge of one of the Firearms Training Centres licensed to deliver the National Firearms Instructors Course (NFIC). The certificate will state that the named police officer has successfully completed a course to qualify him to conduct the appropriate range practices. Similar arrangements apply to civil Police Forces covered by ACPO for Scotland. A Police Force using a MoD Range is required to provide the RAU with a list of officers qualified to conduct the appropriate range practices.

75. **Civilian RCO – Civilian rifle clubs.** To ensure safe conduct of live fire practices by the membership of a civilian club, the Chairman is to appoint a current RCO who has been formally qualified by the NGB to conduct the practices and to exercise the Chairman's responsibility for ensuring safe conduct of the practice by the membership. The procedure and qualification requirements for civilians to exercise the full responsibilities of a civilian club RCO on MoD Ranges are as follows:

- a. Club Chairmen wishing members of their club to use a MoD Range will nominate to the appropriate NGB members who are competent to be RCOs by way of any previous qualification with particular consideration to Currency.
- b. Upon the recommendation of the Club Chairman, the appropriate NGB will, if satisfied, issue to the club a certificate listing by name those members which they accept as being competent to conduct the standard firing practices listed in the rules of the appropriate NGB together with an NGB RCO card giving the details of the practices the RCO is eligible to conduct. On receipt of the certificate, the secretary of the club concerned will forward a copy, signed by each authorised RCO, to the RAU.
- c. The RCO must be in possession of an in date NGB RCO card identifying the individual by name and their qualification to conduct firing practices.
- d. RCOs are deemed qualified if they have demonstrated a satisfactory standard on the appropriate NGB course and has been awarded the appropriate NGB RCO qualification.

76. **High Muzzle Energy Weapons.** There are additional RCO requirements for supervision of HME weapons. [See Annex A.](#)

77. **MoD Ranges - shotgun shooting.** Military Shotgun Shooting as specified in writing by the Service Competent Authority may be carried out on any suitable range using Service issue shotguns and ammunition providing this has been authorised by the RAO

78. **NMO who wish to conduct Clay Pigeon, Clay Target and Practical Shotgun Shooting.** MoD, Service, and civilian clubs may use MoD Ranges and training areas for this type of shooting with privately owned shotguns and ammunition provided that:

- a. **RCO.** Clubs provide an RCO who is certified by the Chairman of the club as having qualified on the appropriate course, the Services Clay Target Shooting Association (SCTSA), the British Association for Shooting and Conservation (BASC) or the UK Practical Shooting Association (UKPSA) / International Practical Shooting Confederation (IPSC) Range Officers Seminar.
- b. **RCO Certificate of Authorisation.** A certificate for each authorised RCO is lodged by the club with the RAU and the certificate is signed by the Chairman of the club. The club is to notify the RAU of the RCO's name on each occasion before the club fires and the RAU is also to check the RCO's credentials.
- c. **Conduct.** The conduct of shooting practices is in accordance with the appropriate Associations regulations, which may be modified as necessary by a Service Association for its use.

79. **Individuals.** MoD personnel and civilians, as individuals, may use privately owned shotguns or firearm for game and vermin shooting on MoD Ranges and training areas with the permission of the CO / Manager of the RAU. MoD personnel may also carry out vermin shooting as a duty using Service issue shotguns and ammunition. In all cases, the CO / Manager of the RAU is responsible for ensuring that the activity is conducted safely and that each person using a privately owned shotgun or firearm is in possession of a current shotgun or firearm certificate and has adequate third party insurance.

80. **Licensing.** Game shooting on MoD Ranges and training areas is to be licensed by the regional RAU office in accordance with [JSP362](#) – Defence Lands Handbook, Chapter 15 - Public Use of MoD Property for Social, Recreational or Commercial Purposes. Club members and individuals must be in possession of a valid shotgun certificate. These requirements do not apply for military shotgun shooting or for vermin shooting carried out as a duty using Service issue weapons and ammunition.

Use of MoD Ranges by Civilian Contractors

81. **General.** There will be occasions when civilian contractors are specifically required by their contract to fire weapons or explosive stores on a MoD Range. To be eligible to use a MoD Range a civilian contractor or company shall have a written authority from the HQ of the RAO.

82. **Requirements.** Before firing takes place the following should be verified by the HQ of the RAO:

- a. A Home Office licence shall be held by the company and shall cover the individual(s) from that company who will have possession of the weapon(s) and ammunition or explosive stores. A company with a contract to provide the armourer function should obtain a 'dealer' licence for a named individual in the company which can then be used to cover other

specified employees having possession of the appropriate weapons and ammunition. If an 'individual' licence is held for each civilian armourer any change in personnel will require the acquisition of a new licence.

(1) Where a 'dealer' licence is held by a named individual in the company fulfilling the armourer contract he / she is responsible for maintaining a list of those employees permitted to handle and test fire weapons and for certifying that each is competent to do so. The Competency of each of the named employees is to be verified and Certified annually by the licence holder and a statement of Compliance to JSP403 with an updated list of Competent personnel is to be passed to the RAO.

(2) The CO / Manager of the RAU is responsible for checking at least annually that the list of certified employees held by the contractor accurately reflects the armourer(s) in post.

b. The MoD and RFCA are fully indemnified against all damage to the premises and personal injury or death resulting from the civilian contractor's use of a range.

c. There is adequate insurance cover to support the indemnity.

d. Any civilian RCO / TCO appointed to control firing on a range has the appropriate qualification for the type of range and practice.

83. **Duty of Care.** Where a contractor, with or without any sub-contractors, operates a range on behalf of the MoD, the MoD still retains over-arching duty of care owed to employees and the general public. While the contractor, and any sub-contractors, may also have a duty of care under these circumstances, this will not exonerate the MoD from exercising its responsibilities. It is unlikely that the presence of MoD observers at the activities of a contractor or sub-contractor will give rise to any additional duty of care on the part of the MoD, provided the observers have no involvement in any of the activities constituting operation or use of the range by the contractor or sub-contractor.

84. **Conditions of Use.** It is essential that civilian contractors observe the safety regulations and procedures which are required by the Range SO for use of the range, including the adoption of any 'clear RDA procedure'. However, if a range is covered by Military Byelaws, non-MoD civilians using the range cannot enforce the byelaws by means of either arrest or removal if an individual enters the danger area either inadvertently or deliberately.

85. **Restrictions.** Use of weapon systems, ammunition and explosive stores which are inappropriate to the design and capacity of a range could endanger the general public. Weapon systems, ammunition and explosives stores which are not in-Service shall not be used by civilian contractors on MoD Ranges unless they are within the performance limits laid down for each range on the MoD Form 904. The RAO shall need to seek DOSG advice, through the appropriate Service / Agency chain of command, before authorising the use of a non-Service pattern weapon or explosive store on a MoD Range.

Use of Civilian Ranges by MoD Personnel on Duty

86. **General.** Before a civilian range (this includes a civil police range) is first used by MoD personnel on duty, it is to be inspected with the agreement of the civilian owner(s) and occupier(s) by a Board of Officers as arranged by the prospective RAO. The acceptance criteria are to be no less stringent than those applicable to an equivalent MoD controlled range. Further information is contained in Part 2, Chapter 8 of this JSP.

87. **Authorisation.** If the design, maintenance and control of the civilian range meets the current criteria for MoD Ranges, the responsibility for authorising its use by MoD personnel lies with the appropriate RAO of the Service, MoD agency or organisation that has the majority of users. A copy of the Range SO, the Range Authorisation Certificate (MoD Form 904) and Range Safety Certificate (**MoD Form 905**) must be retained with the Range Log (**MoD Form 906**). The issue of the MoD Form 904 only authorises the use of the range by MoD personnel whilst they are on duty.

88. **Range Standing Orders.** Before issuing a MoD Form 904 for the MoD use of a civilian range, the RAO shall appoint a RAU and ensure that the Range SO produced by the RAU are no less comprehensive than those required for a similar MoD controlled range. The RAO shall approve the Range SO before they are issued by the RAU. Whenever there is a conflict between the RAU Range SO and the civilian range orders, the RAU Range SO are to be followed by the Service / MoD Agency RCO. Prior agreement shall be reached with the officials of the civilian range for the RAU Range SO to be implemented whenever the range is being used by MoD personnel on duty. Without such agreement the range is not to be used.

89. **Restriction.** When MoD and civilian users are firing on adjacent Gallery ranges the 200 mils reduction in safety angle may not be applied.

90. **Inspections.** Following the issue of a MoD Form 904 and 905 by the RAO, in addition to the RCO mandatory check before each use, civilian ranges are to be inspected with the agreement of the owner(s) and occupier(s) as specified in Chapter 7. However, a monthly range inspection need only be carried out immediately prior to those months when MoD users fire on the range.

91. If during an inspection the range fails to match MoD safety criteria, the owner(s) / occupier(s) must be informed, the MoD Form 905 is to be withdrawn and all MoD personnel are to be prohibited from using the range until a satisfactory inspection has been completed.

Use of MoD Ranges for Shotgun Shooting

92. **Military Shotgun Shooting.** Training as specified in writing by the Service Competent Authority may be carried out on any suitable range using Service issue shotguns and ammunition providing this has been authorised by the RAO.

93. **Clay Pigeon, Clay Target and Practical Shotgun Shooting.** MoD, Service, and civilian clubs may use MoD Ranges and training areas for this type of shooting with privately owned shotguns and ammunition provided that:

a. **RCO.** Clubs provide an RCO who is certified by the officer in charge of the club as having qualified on the appropriate course, the Services Clay Target Shooting Association (SCTSA), the British Association for Shooting and Conservation (BASC) or the UK Practical Shooting Association (UKPSA) Safety Officer's Course.

b. **RCO Certificate of Authorisation.** A certificate for each authorised RCO is lodged by the club with the RAU and the certificate is signed by the CO / Manager of the RAU. The club is to notify the RAU of the RCO's name on each occasion before the club fires and the RAU is also to check the RCO's credentials.

c. **Conduct.** The conduct of shooting practices is in accordance with the appropriate Associations regulations which may be modified as necessary by a Service Association for its use.

94. **Duty Status.** MoD and Service clubs shall publish their activities as official in appropriate routine orders to give 'on duty' status to MoD personnel taking part.

95. **Individuals.** MoD personnel and civilians, as individuals, may use privately owned shotguns for game and vermin shooting on MoD Ranges and training areas with the permission of the CO / Manager of the RAU. Vermin shooting may also be carried out by MoD personnel as a duty using Service issue shotguns and ammunition. In all cases the CO / Manager of the RAU is responsible for ensuring that the activity is conducted safely and that each person using a privately owned shotgun is in possession of a current shotgun certificate and has adequate 3rd party insurance cover as advised by DIO ODC LMS.

96. **Licensing.** Game shooting on MoD Ranges and training areas is to be licensed by the regional DIO office in accordance with [JSP362¹² Chapter 15](#). Club members and individuals must be in possession of a valid shotgun certificate. These requirements do not apply for military shotgun shooting or for vermin shooting carried out as a duty using Service issue weapons and ammunition.

Deer Management on the Defence Estate

97. The MoD as the owner of the Defence Estate, is required¹³ to manage the wild deer population present in accordance with legislation. As part of the sustainable management of the population it is necessary to conduct an annual cull.

98. The Home Office National Recognised Body for deer management is the British Deer Society (BDS) and deer management of the Defence Estate is conducted by the Defence Deer Management (DDM) in accordance with the practices and procedures endorsed by the BDS and under the MoD Policy set out in [JSP362 Volume 3 Leaflet 5](#) and controlled by DDM Procedures issued by DIO.

99. DDM authorised personnel are approved users of MoD Ranges and are subject to JSP403 when using Ranges for DDM purposes. Deer management can only be conducted by DDM members who have achieved the specified level of competence.

100. All DDM personnel charged with the planning and conduct of DDM range practices are to be properly Competent to discharge their duties as the Range Conducting Officer on MoD Ranges.

Use of MoD Ranges to Generate Income

101. Government departments are encouraged to generate additional income through the best use of available assets. Within the MoD this extends to range facilities being made available to paying customers for private venture activities which might include weapons, munitions and explosives research and development or the training of non-governmental organisations and individuals in the use of firearms and explosives, e.g. bodyguards and security operatives.

102. The important principle in any income generating initiative involving live firing and explosive events on MoD Ranges is that the MoD and individuals within it shall not be exposed to avoidable risks in the course of carrying out a non-core activity or by permitting a non-core activity to take place. Before entering into any form of agreement with a customer a full written risk assessment of the proposed activity is to be made. This will require a sufficiently detailed proposal to be submitted by the potential customer so that the assessment can be conducted. Approval for private venture use of a range shall be given in writing by the 1* RAO. It is the responsibility of the RAO to specify controls

¹² JSP362 Defence Lands Handbook.

¹³ DEFRA Action Plan for Sustainable Management of Wild Deer Populations in England Dec 2004.

that are necessary to eliminate risk to people not directly participating in a range event conducted by the paying customer. The RAU has a duty to provide appropriate information to the paying customer dependent upon the nature of the activities on the range and the potential risks to which they might be exposed. Failure to do any of these could constitute vicarious liability. Before approval is given the 1* RAO shall be satisfied that a safe system is in place and the details written into the contract with the customer. If the 1* RAO is not satisfied that a safe system is in place the proposal should be rejected or, in exceptional circumstances, referred to the appropriate 2* level or above. Non-MoD civilians using a range cannot enforce military byelaws by means of either arrest or removal if an individual enters the danger area either inadvertently or deliberately.

103. The provisions of paragraph 58 are to apply when a range event is to be conducted by a civilian company as part of a defence requirement and the event is therefore at the direction of a MoD sponsor. An example of this would be a trial in connection with the procurement of a new munition or weapon system conducted on a Service or DIO range by a civilian company at the direction of a MoD DE&S Project Team (PT).

104. On ranges where business customers undertaking private venture work are permitted to use facilities on a regular basis, i.e. more than once a year and / or every year, the parameters and description of the use are to be included on the MoD Form 904 Range Authorisation Certificate.

Annexes:

- A High Muzzle Energy Procedures.
- B Club Agreement and Order Form.
- C. Civilian RCO Qualifications Required for MoD Ranges.
- D. Civil Police Force Range Practice Authorisation.

Chapter 2 Annex A

High Muzzle Energy Procedures

1. The National Rifle Association (NRA) and MoD approved procedures below must be used on MoD Ranges when civilians are shooting on constructed ranges with firearm / ammunition combinations where muzzle energy (ME) exceeds 4500 Joules. Note that:
 - a. Firearms with a muzzle energy exceeding 7000J may not be used on a constructed MoD Range.
 - b. HME procedures do not apply on No Danger Area (NDA) ranges, but the range limitations must be checked to ensure that the developed MV and ME lie within permitted values.
 - c. The zeroing procedures below must be carried out: on an NDA range or a range with a stop butt that is immediately behind the target which meets Gallery Range criteria; exceptionally, for large calibre historic or hunting rifles being used at distances of 200 metres or less only, into the zeroing butt at 100yd on the British Sporting Rifle Club layout at Bisley.
2. The Chairman of the appropriate Club must give authorisation in writing before a shooter may use a firearm / ammunition combination generating over 4500J muzzle energy. Such authorisation will normally be given through the certification process.
3. The shooter is to check zero using the procedure described below under the supervision of an RCO who holds the NRA RCO (HME) qualification (except when checking zero on the Zero Range at Bisley, which is a NDA Range and on which supervision by an RCO (HME) is not required), as the first activity of any range session. If HME fire will be carried out from distances in excess of 200 metres, then the full procedure below is to be carried out. If HME fire will take place only from 200 metres or less, then only paras a, c, d, e and f apply:
 - a. The RCO (HME) is to record in the MoD Form 906, Range Log, when a firearm / ammunition combination is being used which generates muzzle energy greater than 4500J.
 - b. Before shooting at any distance greater than 200 metres, the shooter is to demonstrate that the firearm is correctly zeroed by firing a 3-shot group which must fall within the box of the issued NRA/MoD approved target at 200 metres or, at Bisley only, within the box of the appropriate HME zero card used on the Zero Range. The RCO is to confirm that the zeroing target being used is correct for the firearm / ammunition combination and for the planned subsequent activity.
 - c. The target is to be attached such that the target centre line is set on the target screen centre line both vertically and horizontally.
 - d. The shooter is to clarify to the RCO (HME) the rifle type and technique to be used to ensure a hit with the first shot.
 - e. Because of the increased risk of splash-back with high energy bullets the butt marker is to wear safety glasses in addition to hearing protection.
 - f. The RCO will appoint a person to observe the initial fall of shot until the initial strike on screen is identified:

(1) If a strike off the target screen is clearly identified the shooter may adjust and fire again.

(2) If no strike is identified the shooter is to cease fire until the weapon has been re-collimated or bore-sighted to the RCO (HME)'s satisfaction.

g. Rounds on target may be adjusted but only the 3 final rounds are to be counted for the group, one of which may include the final adjusting round.

h. All 3 rounds of the final group must be within the box before the shooter may move to a different distance.

i. The butt marker is to identify clearly and mark those shots which were used as sighting shots and which are not to be included in the qualifying group.

j. After qualification the target is to be completed and signed by the shooter and the RCO (HME) and retained by the Club for 12 months.

4. Direction is provided on the NRA / MoD approved target for sight adjustment for different distances subject to achieving a successful group.

5. The zeroing procedure is to be carried out on each day the shooter wishes to shoot unless the zeroing is for an official competition or training course where firing is carried out on consecutive days, when the procedure may be considered valid for the duration of the competition or course.

6. Once zeroed using the procedure in paragraph 3 above, the shooter may shoot under the direction of a qualified NRA RCO who need not have the HME qualification. If, in any practice, the first shot from an HME firearm misses the intended target, the firer may only continue if one of the following applies (derived from a reduced version of the exemptions in NRA rules for such an occurrence in competition – as at 31 Mar 14, NRA rule 277):

a. The shot was seen to strike the stop butt, or was registered by an electronic scoring system.

b. The firer identifies and rectifies a fault or error (e.g. left instead of right wind allowance) that would reasonably account for the miss.

c. There is reasonable evidence (e.g. an unexplained shot on the next target) that the firer has cross-fired.

d. There is reasonable evidence (e.g. based on the advice of other firers) that the wind allowance applied was such as to account for the miss.

Chapter 2 Annex B

Club Agreement and Order Form

The agreement below is valid for 12 months from date of signing. The agreement, and any subordinate document originating from its terms, remains valid notwithstanding a change of Club Chairman provided that the Club has retained Home Office Approval (if applicable) and NGB affiliation throughout the period of validity.

Club Name	Club affiliation (NGB and NGB number)
Club agreement for the use of MoD Ranges	
<p>As Chairman of the club named above, I agree that:</p> <p>The club will follow the NGB Safe Shooting System.</p> <p>I will certify all members who request to be certified and who I judge to be safe and competent.</p> <p>I accept responsibility for ensuring that NGB RCOs acting for the club are qualified, competent and experienced to do so.</p> <p>The club will ensure that anyone shooting with the Club holds a valid certificate of competence from a club affiliated to the NGB except for Probationary members and guests within the meaning of the Criteria for Home Office Approval.</p> <p>Any new members to the club will complete an NGB-approved probationary training course (either run by the NGB or by ourselves) or produce evidence that they have previously completed such a course or been exempted from the requirement to do so within the constraints of the Home Office Approval scheme for rifle clubs.</p> <p>The club will maintain adequate records of our training and certification systems for audit by the NGB or MoD.</p> <p>The club will obtain confirmation that hand loaded ammunition used under the Club's supervision on MoD Ranges falls within the limits for the range.</p> <p>The club will take part in any investigation conducted jointly by the NGB and the MoD following an incident on a MoD Range and will require our members to assist fully in any such investigation, including surrender of firearms and ammunition for evidential purposes if required.</p>	
Signature:	
Name:	Date:

Chapter 2 Annex C

Civilian RCO Qualification Required on MoD Ranges

Introduction

1. This Annex details the qualifications that the MoD accepts as being the minimum to be held by civilians (police, civilian contractors or members of civilian shooting clubs), before they may be permitted to act as a RCO on MoD Ranges. In addition to their qualification, the employment as an RCO of a person with such a qualification is subject to confirmation by the Chief Constable or Club Chairman the person is Competent to conduct the practice by virtue of his / her experience, currency, qualification and maturity.

Civil Police Marksmanship and Tactical Training

2. Police officers conducting live firing on MoD Ranges must have successfully completed the National Police Firearms Instructors Course, and have within the last 12 months been certified by the Chief Firearms Instructor as qualified, competent and current to conduct the appropriate range practices.

3. The Chief Firearms Instructor for a police force or law enforcement using a MoD Range is required to provide the RAU with a list of officers Competent to conduct the appropriate range practices.

Civilian Contractors

4. Once a formal written authority to use a MoD range has been given by the HQ of the RAO, a civilian contractor is responsible, in accordance with that authority, for the safe conduct of firing practices.

5. Before a civilian contractor takes responsibility for the safe conduct of Firing practices on a range he / she must be, or must provide, a person who is competent to act as the RCO. The criteria for qualification is:

- a. Achieving a satisfactory standard on the appropriate Service or MoD agency course.

6. In either case, proof of qualification and competency must be provided by the company to the RAU prior to use of the range.

Civilian Rifle Clubs

7. Only those civilian rifle clubs which are affiliated to the NRA, NSRA or MLAGB CPSA, UKPSA or NIPSC may be permitted to use MoD ranges in the UK under terms of formal licence agreement – **DIO Form 5665** or the equivalent RFCA licence issued in respect of RFCA controlled ranges. Clubs are responsible under these licences for the safe conduct of their firing practices; consequently, each club appoints its own RCO for each period it uses a MoD or RFCA range facility.

8. Chairmen wishing members of their club to use a MoD Range will nominate to the appropriate national association members who are qualified by experience and training to act as an RCO; the criteria for training that is agreed between these associations and the MoD is:

- a. Achieving a satisfactory standard on the appropriate national association course.

9. Upon the recommendation of the Club Chairman the appropriate NGB will, if satisfied, issue to the club concerned a confirmatory certificate listing by name the members and officials of that club which they accept as being competent to conduct the standard firing practices listed in the rules of the appropriate association. On receipt of the certificate, the secretary of the club concerned will forward a copy, signed by each authorised person, to the RAU.

RCO Card

10. As soon as is reasonably practicable, each civilian RCO should be issued with a card by the appropriate police force or NGB. This card should identify the individual by name and his / her qualification to conduct firing practices.

Appendix

1. Clay and Practical Shotgun Shooting on MoD Ranges - RCO Certificate of Authorisation.

Chapter 2 Annex C Appendix 1

Clay and Practical Shotgun Shooting on MoD Ranges RCO Certificate of Authorisation

The person named below has demonstrated, to the undersigned, proficiency in supervising firing on a shotgun facility and is therefore authorised to act as Range Conducting Officer (RCO) at the stated facility.

Name of Facility:

Particulars of RCO:

Rank / Title.....

Name (in Block Capitals).....

Training undertaken: CPSA Safety Officers Course / UKPSA Safety Officers Course / NRA RCO Target Shotgun Endorsement.

Licence No.....

Date completed:

Certifying Officer:

Rank / Title.....

Name

Officer in Charge of

Shooting Club

Signature.....

Date

Authorising Officer:

Rank / Title

Name

Officer Commanding

Signature

Date (Unit Stamp)

Note: These are **non-functional** examples. For forms to use follow:-

<http://defenceintranet.diif.r.mil.uk/Organisations/Orgs/HOCS/Organisations/Orgs/DSEA/Pages/RangeForms.aspx>

Chapter 2 Annex D

Civil Police Force Range Practice Authorisation

AUTHORISATION FOR < insert force > POLICE FIREARMS TRAINING DEPARTMENT TO CONDUCT NON-STANDARD LIVE FIRING TRAINING ON MINISTRY OF DEFENCE RANGES

References:

- A. Infantry Training Vol IV Ranges, Pamphlet No 21.
 - B. National Police Firearms Training Curriculum.
 - C. JSP403 Handbook of Defence Ranges Safety Vol 1, Part 1 and 2.
1. I, < insert rank and name >, Chief Constable of < insert force/constabulary >, subject to final approval of the appropriate Ministry of Defence (MoD) Range Authorising Officer(s) (RAO) authorise members of my Force/Constabulary to conduct the non-standard live firing practice(s) detailed on the attachment(s) to this document, on < insert range name(s) >, in order to meet the requirements of the < insert force/constabulary > Threat and Risk Assessment.
 2. The practice(s) specified on the attachment(s) is/are essential for the operational firearms training of selected members of < insert force/constabulary >.
 3. The police officers planning, conducting, supervising and firing the specified practice(s) are fully qualified and current to do so and are at the requisite stage of training.
 4. All Range Conducting Officers have the appropriate authorisation for the type of ranges and practices to be used from one of the police National Firearms Training Centres.
 5. All live firing practices will be conducted in accordance with References A, B and C.
 6. Written range and practice specific risk assessments have been conducted to ensure that all practicable steps have been taken to mitigate any risk generated by the practice(s) to ALARP condition and to confine the risk to the range(s) used; i.e. there will be no additional risk of hazard to MoD or civilian personnel using any adjacent range(s) or to any member of the general public outside the Range Danger Area(s).
 7. All conditions, limitations and requirements stipulated on the Range Authorisation Certificate(s) (MoD Form 904) and in the Range Standing Orders will be applied on the range(s) except where the conduct of the practice(s) specified on the attachment(s) to this document necessitates variation.
 8. This authorisation is valid for a period of twelve months from the date of signature below. I confirm that it will be updated and re-issued if it is necessary to extend the period of validity, at any other time that the circumstances and / or requirements of the practice(s) or range(s) change, and on any change of signatory in the appointment below.

< signature >

< insert name >

< insert rank, appointment and force/constabulary >

< insert date >

Note: These are **non-functional** examples. For forms to use follow:-

<http://defenceintranet.diif.r.mil.uk/Organisations/Orgs/HOCS/Organisations/Orgs/DSEA/Pages/RangeForms.aspx>

Chapter 3

Responsibilities for Authorised Civilian Personnel and Service / MoD Civilian Visitors on MoD Ranges

The aim of this Chapter is to give guidance to those responsible for the control and management of ranges on their duty to safeguard, as far as is reasonably practicable, civilian personnel and Service / MoD civilian visitors who are authorised to enter MoD Ranges.

Introduction

105. The HSW Act requires the MoD to conduct its operations in a way which ensures, so far as is reasonably practicable, that its own employees and persons not in MoD employment who may be affected by MoD activities are not exposed to risks to their health and safety. The full protection, rights and responsibilities of the Act apply to all MoD civilian employees and Service personnel in the same way as to any other person. However, the HSE recognises that judgements of reasonable practicability of actions by employers must consider the societal benefits from the overall purpose of the organisation. Thus in determining the steps MoD should take to ensure the health and safety of employees and others, the requirements of defence as well as cost must be considered. In this regard, the HSE monitoring and inspection of MoD activities considers both the safety legislation and the defence imperatives.

Categories Authorised Civilians

106. In the context of authorised civilian personnel, consideration is given to three categories of civilian:

- a. **Category 1.** Civilians employed on MoD Ranges either as direct MoD employees, as employees of range support contractors under long term contract to the MoD or as government department employees and contractor's staffs who constantly or regularly and frequently enter a Range Danger Area in the course of their official or contractual duties. This group will not be escorted.
- b. **Category 2.** Civilians and government department employees who regularly require to enter specific areas over which the MoD has firing or access rights. This group is unlikely to be escorted.
- c. **Category 3.** Civilians and government department employees requiring occasional limited and site specific access, such as MoD conservation groups. These individuals or groups are likely to require escort unless very detailed briefings and training are given. This must be recorded and individuals are required to confirm attendance and comprehension.

Briefing to Specified Categories of Authorised Civilians

107. The type and depth of information given to authorised civilians is a matter for the CO / Manager of the RAU / Head of the facility to decide depending on the nature of the duties conducted by civilians and the potential risks to which they might be exposed. As a general guide:

- a. **Category 1.** Civilian employees in this category are to be trained to be aware of the hazards present on the ranges at which they work and to comply with the necessary resultant controls, e.g. Range SO as they affect their deployment and operation. A record of specific information, instruction, training and supervision provided and confirmation of competence together with a signed acknowledgement of receipt of the information, instruction and training is to be retained in the employees' personal file.
- b. **Category 2.** This category has limited, controlled access authorised by the CO / Manager of the RAU / Head of the facility who will specify the terms and conditions under which access will be permitted. A record of the briefing, its content and a signed acknowledgement by the recipient is to be retained within the RAU/facility. Any necessary information, instruction, training and supervision given to civilians in this category is also to be recorded together with a signed acknowledgement by the recipient confirming comprehension.
- c. **Category 3.** This category should usually be escorted and the briefing should be restricted to the hazards and controls which affect their immediate safety. A record of the briefing together with a signed acknowledgement of this briefing confirming comprehension should be retained for the period of the visit. Where any in this group require either unescorted or more regular visits consideration should be given to changing their status to Category 2.

Service and MoD Civilian Visitors

108. Service personnel and MoD civilian personnel visiting a MoD Range require to be briefed on the hazards and controls which affect their immediate safety and may need to be escorted when moving within the range boundary. In this respect they should be treated in the same way as Category 3 authorised civilians above.

Chapter 4

General Public Access

This chapter amplifies the policy, outlined in Chapter 1 for controlling access to MoD Ranges by the public and for warning them of the dangers of entry. This meets the duties imposed by the HSW Act and the Occupier's Liability Acts.

Introduction

109. The primary aim of this Chapter is to define the measures which must be taken to ensure the safety of the public where they may have access to MoD Ranges.

110. The hazards which may arise during training include:

a. **Active Hazards.** Active hazards include those caused by weapons or fragments thereof, noise, smoke, volatile chemicals and radiation from non-ionising sources. Typical non-ionising sources include electromagnetic devices such as lasers and radars.

b. **Residual Hazards.** Residual hazards are those which may remain after firing has been completed. Examples of residual hazards include blinds, old ordnance, non-volatile chemicals, or the wire from wire guided missiles.

111. The public must be protected from these hazards by all means which are reasonably practicable. The cycle to ensure this protection is:

a. Identification of the area where a hazard will exist. Usually this will be a Range Danger Area (RDA) or Range Danger Zone (RDZ). For a given practice the RDA / Z must contain the Weapon Danger Area (WDA) and Weapon Danger Zone (WDZ) for the weapon system in use. The abbreviation RDA is used in the rest of this Chapter.

b. Warning the public that a hazard exists.

c. Clearing the active RDA of the public.

d. Ensuring the RDA remains clear of intruders or making provision for the timely cessation of the hazardous activity before the activity poses a risk to the intruder.

e. Permitting the practice to take place.

f. At the end of the practice ensuring as far as is reasonably practicable that the RDA or appropriate part of the RDA is no longer hazardous. Once this has been ensured the measures in sub-para d above may cease and the public may be admitted.

g. Permitting limited or general public access.

h. When it is not possible to ensure the RDA or requisite part of it is no longer hazardous then one of the following measures must be taken:

(1) The RDA must be treated as a Closed Impact Area. Access, other than for authorised EOC / EOD operations, must be prevented as far as is reasonably practicable.

(2) The RDA must be treated as a Controlled Impact Area. A Controlled Impact Area is one which is known or believed to contain a residual hazard but, due to rights of way or for other reasons, public access cannot be fully prevented at times when there is no firing in progress. After firing has finished and before public access is permitted to a controlled impact area, designated routes through the area must be cleared. MoD personnel and others who have good reason to enter the area must be fully briefed on the specific dangers in the area. Control of access to areas containing a residual hazard must be provided by easily visible warning signs and notices and, where necessary, way-marking or fences to direct people away from areas of hazard.

112. The definition of Clear Range Procedure can be found in JSP403 Part 1, Annex D, Page D-2.

113. If a part of a WDA falls outside the delineated sea danger area of a training range it may be possible to mitigate the hazard through Clear Range Procedure. This requires surveillance to be maintained over the whole danger area, i.e. the sea danger area plus that part of the WDA not contained within it, for the period that firing is in progress. Measures must be in place that permit firing to be stopped as soon as any incursion is imminent.

Marking

114. The purpose of marking is to make it improbable that unauthorised persons or authorised but unprotected persons could stray into a RDA without having been warned that they were about to do so and of the hazards which exist. The markings also assist range staffs by defining the area which must be cleared and controlled before firing can commence.

115. Measures which assist in warning against or controlling access include fencing, flags, lights and signs. If any of these measures are mentioned in or required by local byelaws they must be applied by the RAU.

Controlling Access

116. The methods used to control access include sentries, fences or intruder proof perimeters. The RDA may be kept under observation by sentries, radar, closed circuit television (CCTV) or other surveillance devices. Where access to a RDA is by any road, track or path which is a public right of way and which cannot be effectively closed throughout the time that the hazard exists, sentries must be posted or access points kept under surveillance. Means must be available to ensure that firing can be stopped promptly when it is known that there has been unauthorised entry into the RDA. These measures must be laid down in Range SO. The duties and responsibilities of sentries and operators of surveillance devices must also be laid down in Range SO.

117. On completion of firing the RDA must be cleared of any residual hazard before the RDA is opened to unprotected / un-warned persons.

Fencing

118. In the context of marking, fences can be a useful way of delineating boundaries. They may help to control access by dissuading unauthorised persons from straying into hazardous areas and

authorised persons from straying out of designated areas. Where a fence is used for this purpose it must be marked with appropriate signs and, at points where inadvertent intrusion is most likely, notices which explain the nature of the hazard.

119. The RDA boundary must have signs to discourage unauthorised access and notices warning of the hazard when firing is in progress. A boundary fence may be an appropriate place to do this. One of the advantages of placing a demarcation fence on the range boundary rather than around the RDA is that it provides a buffer zone between the two allowing more time for the detection of intruders.

120. Where authorised but unaccompanied civilians have access to the land between the range boundary and the RDA then a risk assessment must be carried out to determine whether both boundaries should be fenced and signed.

121. Where the RDA extends into the sea it is normally impractical to mark an entire sea boundary with buoys. However, buoys can play a useful role where there are busy shipping lanes and can provide reference markers to identify when an incursion of the range boundary is about to take place.

122. Closed Impact Areas must be enclosed with fencing suitable for preventing access. The fence must be marked with appropriate signs forbidding entry and notices explaining the hazard.

123. Additional information concerning fences is given in JSP403 Volume 2 Chapter 2.

Flags and Lights

124. Red flags, or by night red lights, should be displayed as a warning of live firing so that at least one flag or light can easily be seen from any point on the range boundary. They should be displayed at least half an hour before firing and for the duration that any hazard exists. Through warning notices and signs it must be made clear to the general public that a hazard exists whilst the flags or lights are displayed. Flags and lights should not remain displayed after firing and when residual hazards have been removed unless byelaws or special circumstances require it. Where distances and / or terrain make it impracticable to display red flags or lights only for those periods when live firing is in progress they may be permanently displayed provided they are accompanied by warning signs and by notices explaining the circumstances.

125. The use of red flags / lights with accompanying signs and notices is the accepted method of warning of a hazardous area. Where visibility is impaired consideration should be given to supplementing this warning with fencing and appropriate signs and notices. In extreme cases, such as in jungle or heavily forested terrain, where neither flags / lights nor fencing is a practicable option the most effective method of warning must be determined by a local risk assessment.

126. Where the whole of the RDA is fenced and signed as a Closed Impact Area there will be no need to provide warning in the form of red flags or lights at times when live firing is taking place inside the RDA. In the case of a Closed Impact Area which is only a part of the RDA flags or red lights need not be displayed around the RDA once firing has ceased and the Closed Impact Area has been secured.

Signs and Notices

127. Where there is assessed to be a risk of unauthorised intrusion into the RDA the range boundary and all access points must be marked with permanent signs and warning notices and signs must be fixed to fences, barriers, gates and posts. This is particularly important where public

footpaths or roads border the range boundary. Signs and warning notices must be positioned where they can easily be seen and read, away from potential obstructions such as growing foliage or gates which could obscure them. Signs and warning notices should be inter-visible.

128. Public warning signs to be used on MoD Ranges are regulated by the HSW Act and the Health and Safety (Safety Signs and Signals) Regulations. These incorporate the requirements of the European Safety Signs Directive, which provides the standard, and the Statutory Instrument (SI). Examples of signs are shown in Volume 2 Chapter 2. The appropriate British Standards are to be used for their detailed manufacture. Outside the UK, MoD policy is to comply with the local or host nation's procedures on signs and sign posting; however, if the resulting level of safety is less than that which would be provided in the UK, additional signs may be necessary to warn British military personnel of any danger.

129. All signs that do not meet requirements laid down in JSP403 should be replaced as soon as practicable. To avoid confusion all old pattern signs on a range should be replaced at the same time. The local press and organisations which need to know the meaning of the signs are to be notified by the RAU, through Public Information / Public Relations / Media Operations outlets if appropriate, at the time of change.

130. Local Byelaws which restrict access to the range on a public right of way must be displayed on notice boards at all public access points.

131. The definition of public rights of way is the responsibility of the local Highways Authority who will also hold the records and master map showing those rights of way that have been formally designated for public use. On MoD freehold land it is a MoD responsibility to way-mark public rights of way. Advice on way-marking requirements can be obtained from DIO.

Maps

132. For each range or range complex an estate map showing the extent of MoD freehold and leasehold land, overshooting rights and the location of range boundaries is to be maintained by the DIO and made available to the RAU and the RAO when required.

133. Care is to be taken to ensure that overprinted information on any RAU range and training area maps, such as range boundaries, danger areas, flags, barriers and signs, indicates their position on the ground.

134. Close liaison must be maintained between the RAO / RAU / LTAR, DIO and Local Authority so that any changes to rights of way, access points and routes impinging on a RDA are reflected in the master and any overprinted maps without undue delay. The RAU is responsible for informing the Authorising HQ so that the MoD Form 904 and its attached documentation can be amended.

Maintenance

135. All fences, barriers, flagpoles and signs should be inspected at least once a month by the RAU to ensure that they are in place and are being kept in an acceptable condition to satisfactorily control access and provide adequate warning to the general public. Further detail on maintenance is at Chapter 6.

Chapter 5

Range Procurement, Refurbishment, Authorisation and Closure

Introduction

This chapter lays down the procedures concerning the procurement, refurbishment, acceptance, authorisation, transfer and closure of a permanent Range in the UK or overseas.

136. The same principles covered in this chapter for permanent ranges apply to the establishment, authorisation and use of land on a temporary basis for live firing, and the appropriate RAO is responsible for giving direction in such cases. Non-permanent types of range are known as Operational Theatre Ranges (OTR) and Temporary Exercise Ranges (TER). The responsibility and authority for opening and operating an OTR or TER always remains with the appropriate RAO and is not to be delegated below this level.

137. Host Nation air-to-surface ranges used on an occasional and irregular basis by visiting aircraft are also classed as TER and as such their use is to be authorised by the appropriate RAO.

138. Aspects of permanent Ranges and the establishment of OTR and TER are covered in this chapter.

Statement of Requirement

139. **Initiation.** The procedure to create or refurbish a range begins with the initiation of a User Requirement Document (URD) which should be approved in accordance with single Service and MoD Agency procedures. To justify the provision of a new range the URD should establish:

- a. Purpose and use of the proposed range.
- b. Size and location of units and organisations that will be served by the range.
- c. Location, suitability and surplus capacity of other ranges.
- d. Status of the land and any planning or development restrictions which should be investigated through DIO. DIO should be involved early to avoid nugatory work.

140. **Processing.** Each Service / MoD organisation will proceed as follows:

- a. **CJO PJOB Ranges.** The HQ or unit most concerned with the requirement for a Range is to place a URD before the HQ BF J3/7 Staff.
- b. **RN / RM Ranges.** Commanding Officers in whose jurisdiction the MoD Range is to be located will, after a full investment appraisal, place the URD before Navy Command HQ.
- c. **Army Ranges.** The Firm Base HQ or the School most concerned with the requirement, is to place a URD for a MoD Range before the Divisional G3/7 Training Staff or the Land Warfare Centre, as appropriate.
- d. **RAF Ranges.** The unit most concerned with the requirement is to place a URD for a ground defence range to the HQ Air 38 Gp A4 ES staff, or HQ AC Logs 2 staff for Air Training Corps (ATC) ranges. In the case of air-to-surface (Air Weapons) ranges the URD is to be

staffed through HQ 1 Gp Ranges staff. HQ Air / HQ 1 Gp will evaluate the requirement, seeking specialist advice on ground defence practices when appropriate from SO2 FP Trg.

e. **RFCA Ranges.** The Reserve or Cadet HQ or unit most concerned with the requirement for a MoD Range is to place a URD before its parent RFCA HQ.

f. **DIO Ranges.** DIO Ops is to draw up a URD and place it before the DIO Management Board.

g. **MoD Agency Ranges.** A MoD agency with a requirement for a Range is to draw up a URD and place it before the agency's Management Board (or equivalent body).

h. **DE&S Ranges.** When a new site is required the TEST PT is to draw up a URD and place it before the DE&S Management Board.

Siting Board

Membership and Duties

141. **General.** If the URD is accepted in principle, and suitable land is available, the HQ of the appropriate RAO will convene a Siting Board. A Siting Board is mandatory whenever a permanent range is envisaged, re-sited or needs significant safety modifications. The Siting Board will consist of:

a. **President.** An officer of at least Lt Cdr / Maj / Sqn Ldr rank or equivalent grade selected for his relevant knowledge of training and the specified weapon systems to be fired on the range.

b. **Members.** The Siting Board membership is to consist of:

(1) The LTAR or equivalent from the HQ of the RAO.

(2) An officer from the department responsible for project funding.

(3) Officers directly concerned with the construction of the range, including the Project Officer, if appointed.

Note: Where there are specific topographical considerations a full ground survey should be commissioned.

c. **Specialist Advice.** Where appropriate, advice is to be obtained from:

(1) DOSG.

(2) A specialist from TAS and /or the appropriate DIO specialist.

(3) Fire Officer.

(4) Environmental Health Team (EHT).

(5) DIO Operations.

(6) Danger Area Airspace Manager (DAAM).

Note: Additional specialist advice may be sought depending on the circumstances, e.g. SASC advice when the range being sited involves the use of Infantry Weapons.

142. **Duties.** The duties of the Siting Board are to:

- a. Make a detailed study of the proposed site.
- b. Take account of the requirements of the environmental impact assessment. Further detail on environmental impact assessment is given in **JSP418**¹⁴. Advice is also available from DIO.
- c. Examine in detail the ground proposed for the site of the range and the RDA to ensure that the weapon systems identified under the URD can operate safely.
- d. Examine in detail the potential impact on airspace users including military and civil air traffic.
- e. Recommend the location and orientation of the range, taking into account current and projected population distribution behind and to the flanks of the proposed range.
- f. Recommend precise location of firing points, targets and boundaries of the RDA.
- g. Review potential damage (including acoustic effects) to the environment and other local issues:
 - (1) Proximity to recreational sites.
 - (2) Sites of significant national importance.
 - (3) Populated areas.
 - (4) Matters which may undermine the image of the MoD.
- h. Through consultation with the DIO, identify national and local statutory or other bodies to be consulted.

Considerations

143. In the UK, the requirement for a DA should be notified through the Service / Agency chain of command to the DAATM, via the DA Airspace Manager (DAAM) who is a member of the UK DA Airspace Steering Group. The DAAM will then negotiate the introduction of the DA with the CAA. All DAs are promulgated in a UK Aeronautical Information Publication known as the Air Pilot. When an ADH does not exceed 500 ft AGL, a Small Arms Range would be established. However, all ranges, regardless of their ADH, are listed in the Air Pilot as hazards to airspace users under the heading "Other Activities of a Dangerous Nature".

144. If a temporary DA is required for a hazardous activity, a request should be sent 28 days (not less than 14 days) in advance to Airspace Regulation, CAA House, London. The Low Flying Book Cell (LFBC) should also be kept informed.

¹⁴ JSP418 MoD Corporate Environmental Protection Manual

- a. **Airspace Regulation.**
 - (1) Tel: 0207 453 6599.
 - (2) Email: ausops@caa.co.uk.
- b. **LFBC.**
 - (1) Email: CAS-ASLFOSOPSLF@mod.uk.
 - (2) Fax: Mil. 95351 x 6206 Civ: 0800 3892225.
 - (3) Tel: Mil 95351 x 6208.

145. Airspace Regulation will assess the requirement and, if approved, will then issue a Temporary Navigation Warning in the form of a Notice to Airmen (NOTAM). Outside the UK countries will normally have an equivalent set of procedures which will lay down the local requirements DAs. Host nation procedures are to be used and advice should be sought from the UK Mil Rep in the host country or region.

146. **Construction Advice.** A construction expert from TAS and / or DIO SD should ensure that each new range is designed to conform with a Service / Agency approved range design. Technical drawings and / or Type Standards are the basis for the development or modification of a MoD Range and for small arms and infantry weapon systems ranges TAS should be consulted.

147. **Pollution.** Consideration should be given to all types of pollution, including noise that may be caused by the presence of, or activities on, a proposed range, whether indoor or outdoor. Measures for the control of lead pollution in indoor training ranges are laid down in Chapter 30 of Volume 2.

Proceedings

148. **Report.** The Siting Board is to report its findings and recommendations on a range proposal / inspection report to the HQ of the RAO. Templates of the report formats for MoD Ranges, the MoD Form 1057 series. The report must include a Site Plan and a suitable scale map, marked or overlaid with the range boundary, RDA and, when appropriate, impact area.

149. **Retention.** Copies of the report are to be held as follows:

- a. **RN.** RNRSO and RAU.
- b. **Army.** HQ of the RAO controlling the range and the RAU.
- c. **RAF.** HQ of the RAO and the RAU.
- d. **Dstl.** IE Dstl, DSA RSIT, IRSI and the appropriate site / establishment RSO.
- e. **DE&S.** HQ of the RAO, DSA DOSR RSIT and the RAU.
- f. **DSG.** Hd HSEP, DSA DOSR RSIT and the RAU.
- g. **MDP.** HQ MDP and the detachment (RAU).
- h. **DIO SD Training.** DIO Ops (DIO), RAO and the RAU.

Range Acceptance Board

150. **Acceptance of Range.** Following the Siting Board and on completion of a new or rebuilt range, a Board of Officers is to be convened to inspect the range and the proposed Range SO and recommend to the RAO whether or not it should be accepted. The Board is to check that the newly constructed facilities have been completed in accordance with the requirements and specifications of the Siting Board, that they meet user requirements and that they conform to current range safety criteria. For this purpose the Board should include a range construction specialist. The original **MoD Form 1057** used by the Siting Board to report its findings and recommendations is to be completed in the appropriate places by the Board to form a full record of the range specifications for submission to the RAO. Thereafter, retention is to be as in paragraph 149.

Range Authorisation

151. **Authority for Use.** Irrespective of its design, construction, location and control arrangements, any range on which weapon systems, munitions or explosive stores are to be used by Service personnel or MoD civilian employees shall first be authorised for such use. The appropriate RAO is responsible for personally certifying on the MoD Form 904 the weapon systems, munitions and explosive stores which can be used on the range. Separate arrangements apply to ranges on which compressed air weapons are used.

152. **Categories of Range.** For authorisation purposes, MoD Ranges are to be placed in one of the following design categories by the appropriate 2* RAO:

- a. **Compliant Range.** A range which meets the design and build criteria specified for its type in JSP403 or the appropriate Single Service publication.
- b. **Approved Range.** A range which varies from the design and build criteria specified for its type in JSP403 or the appropriate Single Service publication. However, the resultant risk is assessed not to exceed the level for a Compliant Range of the same type.
- c. **Dispensation Range.** A range which varies from the design and build criteria specified for its type in JSP403 or the appropriate Single Service publication, and results in a level of risk which exceeds that currently accepted for a Compliant or Approved Range of the same type.

153. **Approved and Dispensation Range Process.** For a range which varies from Compliant it should be normal practice for the RAO to seek range safety advice from the appropriate subject matter expert(s) before deciding if the range is to be placed in the Approved or Dispensation category. A flow chart showing the processes to be followed is at Annex D. When a range has been given Approved status the supporting documentation, or a copy of it, shall be included in the range file and shall be referenced on the MoD Form 904.

154. **Level of Authorisation.** Where a MoD Range to be used by MoD personnel is classified as Compliant or Approved (see Part 2 Chapter 5 paragraph 152) it shall be authorised for such use by an officer filling an appointment at 1* level or above, or the MoD equivalent. If a Range requires dispensation (see Part 2 Chapter 1 paragraph 20) to allow it to be used it shall be authorised by an officer filling an appointment at no lower than 2* level, or the MoD equivalent. The rank or grade of the person filling the RAO appointment at the time that a range is to be authorised for use, or that a MoD Form 904 is to be re-issued, may be lower than that for a 1* RAO or 2* appointment, provided the person has been formally appointed to fill the post for a specified period of time. An OTR shall be

authorised by the appropriate operational theatre commander at no lower than 1* RAO level who shall also appoint a RAU.

155. **MoD Form 904.** The taking into use of a MoD Range will be authorised by the RAO personally signing the MoD Form 904. Prior to this, a unique range serial number shall be obtained from the DRSC Secretariat and entered on the certificate. The certificate will be valid as long as the range to which it refers is not modified, the authorised firing conditions (including restrictions on those conditions) are not changed, the Service / Agency responsible for the range is unchanged and provided that the facility is maintained in a safe condition. Except in the case of TERP ranges, the Schedule on the certificate shall clearly describe by type, category and / or class, the firearms, weapon systems, ammunition and explosive stores which may be fired on the range and, if appropriate, any specific additional restrictions and / or limitations. Any range safety dispensation granted to the range by the appropriate 2* shall be recorded on the certificate.

Range Safety Certificate

156. **MoD Form 905.** Following the issue of the MoD Form 904, the RAO staff shall verify, before issuing the MoD Range Safety Certificate (MoD Form 905), that the range is safe and suitable for use as prescribed on the MoD Form 904 and referenced documentation, and in particular that the range orders adequately govern the management and the use of the range facility. If a range fails at any time to meet the minimum standard it should be temporarily closed and the safety certificate withdrawn from the range. Once remedial action has been completed the MoD Form 905 should be re-issued to the range.

157. **Re-issue of MoD Form 905.** The initial issue of MoD Form 905 will be valid for a maximum of 3 years. Each MoD Form 905 is to be re-issued by the LTAR in accordance with the procedure at paragraph 156 above. Further information on the MoD Form 905 is at Annex B to this chapter.

158. **Modification of the Range.** If the design or use of the range is modified, the MoD Form 904 and 905 will become invalid and will need to be re-issued according to the procedures at paragraph 156, 157 above.

Note: All changes to the physical detail of a range must be recorded in the 'As Built' or Record drawing.

Range Log

159. The Range Log (MoD Form 906 / 906A / 906B) is the official record of usage and management of a range. It records formal range inspections, repairs, de-leading and other significant events and is used to monitor activity. Every range issued with a MoD Form 905 must have an accompanying MoD Form 906 / 906A / 906B. A blind is to be regarded as a significant incident on a range and full details are to be recorded in the MoD Form 906 / 906A / 906B. All completed MoD Form 906 / 906A / 906B in respect of a range are to be retained by the RAU until such time as the range is permanently closed or until their destruction is approved by the HQ of the RAO. As a minimum, each logbook should be retained for a minimum of ten years after its completion. There are three versions of logbook available, each applicable to particular types of range:

- a. **MoD Form 906.** For use on fixed structure ranges where only one calibre of ammunition is fired, e.g. indoor rimfire ranges.
- b. **MoD Form 906A.** For use on LFTTAs and other ranges where exploding munitions and / or a variety of natures of ammunition or explosives are authorised.

- c. **MoD Form 906B.** For use on TERP ranges.

160. In the case of dedicated Air Weapons Ranges it is not necessary to use the MoD Form 906 / 906A for details of range practice activity as this information is recorded separately using a central data recording system. The MoD Form 906 / 906A is, however, to be used on dedicated Air Weapons Ranges to record all other details concerning the management of the range.

Works Procurement

161. **General.** The policies and procedures for authorising and procuring works services or for the closure of facilities within the defence estate, which includes ranges, are prescribed in JSP434¹⁵. These may be amplified by Service or department instructions. Successful range procurement or closure action requires co-ordination between the appropriate authorities for the weapon system, equipment procurement, safety and the DIO.

162. **Key Appointments.** The key appointments involved in procurement of a works project are the Project Sponsor, the Project Manager (PM) and the Prime Contractor Construction Contractor. The key appointments for Property Management works are the Property Manager (PROM), the Establishment Works Consultant (EWC) and the Works Service Manager (WSM). The key appointments for facilities management are the Site Establishment Representative (SER), Facilities Manager (FM), and the Prime Contractor. The duties and responsibilities of each appointment are set out in JSP 434.

163. **Works Procurement Advice.** Project Managers and Facilities Managers Sponsors and PROMs for MoD Ranges should seek works procurement advice as follows:

- a. **DOSG.** Function and ballistics.
- b. **TAS.** Range Layout, dimensional requirements, ballistic functionality including bullet capture, ricochet, backsplash interception / prevention and hidden attrition ([see DIO Policy Instruction 26 / 04](#)). Also design review, prior to work commencing, for all new ranges.
- c. **DIO.** Design, project management, contractual, construction and maintenance works matters.
- d. **LTAR.** 905 withdrawal. Informing DRSC of temporary closure and focal point during project.

Operational Theatres and Temporary Ranges in Operational Theatres

164. **General.** The setting up of operational theatre ranges (OTR) will be at the direction of the deployed operational theatre commander provided he is at 1* RAO level or above (or, if not, as directed by his operational commander at the appropriate level, see paragraph 155). Apart from the appointment of a RAU, there is no requirement when a range is first established for the full authorisation and closure process detailed in this chapter to be followed; nor is there a need to maintain the normal range documentation apart from records required in accordance with paragraph 170 below. However, the deployed operational HQ and the RAU may find it helpful to use the authorisation process as a guide and checklist when initially establishing and operating the range. Any decision to the siting of any operational range should:

¹⁵ JSP 434 Defence Construction in the Built Environment.

- a. Take full account of any threat to friendly troops posed by hostile elements. This should be by means of a structured assessment of threat and risk: for which the operational J2 cell should have primary responsibility in consultation with, Counter- IED and Force Protection specialist.
- b. Recognises, in any counter-insurgency environment that risk levels are dynamic and the pattern-setting nature of range work will be identified as a potential weakness and targeted, so that ranges will be exposed to a high level of risk regardless of whether the general risk is at an acceptable level.
- c. Where any part of the range to which UK force elements has access lies outside the perimeter of any base secured by UK forces:
 - (1) Be renewed at intervals of not more than 6 months or sooner where there has been any adverse change either in threat / risk level or in the force protection measures available to mitigate any risk.
 - (2) Be approved at inception and upon renewal of the decision as to the location, by the overall UK operational commander, or his deputy of not less than two star rank.
- d. Where UK Forces or contractors are required to operate to other nation ranges whilst those ranges are in use a specific risk assessment is to be produced to ensure it is safe to be in close proximity to such a range while it is in use. Where there is any doubt, such activity should only be carried out when the other nation range is not in use.

165. **Classification of OTR.** As the top level duty holder for the safety of ranges in operational theatres, Chief Joint Operations (CJO) will decide, in conjunction with the theatre commander, when registration and management procedures for ranges are to be put in place and to what extent. This recognises that the status of operational theatres can fluctuate dependent upon the threat and prevailing operational conditions. For the purpose of registration and management of ranges, operational theatres will be classified as either 'emerging' or 'enduring'. The classification will be set and adjusted as necessary by PJHQ. The level of flexibility required in 'emerging' operational theatres is greater than that required in 'enduring' theatres.

166. **'Emerging' Operational Theatres.** For ranges in an 'emerging' operational theatre the provisions of paragraph 165 above will apply, i.e. no requirement for formal registration and management of a range, although approval for use will be required at 1* RAO level or above.

167. **'Enduring' Operational Theatres.** For ranges in an 'enduring' operational theatre the following provisions will apply:

- a. The range will be registered, via PJHQ, with the DRSC Secretariat will be given a unique DRSC Range Serial Number and will be added to the MoD inventory of ranges.
- b. The theatre commander or a subordinate deployed commander will be responsible for applying a safe system of training, and the advice of appropriate subject matter experts should be sought at the earliest opportunity.
- c. A Range Log (MoD Form 906A) will be kept for the range.
- d. When the theatre is judged by PJHQ to be sufficiently stable to allow a peacetime management system the range will introduce the full requirements of this JSP. This may be adjusted at any time in accordance with the prevailing threat and operational conditions.

168. **HM Ships operating in Enduring Operational Theatres.** HM Ships, stationed in, or transiting to operational theatres may with 1* RAO approval use ranges under the provisions of paragraph 167. HM Ships are to forward the details required in a MoD Form 906A to PJHQ, who are to maintain a separate MoD Form 906A for each range used.

169. **Record of use.** An accurate record of ammunition natures fired and of any blinds or other hazardous material left on the OTR must be kept so that subsequent clearance can be properly affected. A MoD Form 906A is to be used to aid the maintenance of this record.

Temporary Exercise Ranges

170. **Temporary Exercise Range.** A Temporary Exercise Range (TER) may be established at the direction of the Exercise Director provided he is at 1* RAO level or above (or, if not, as directed by the commander at the appropriate level, who has ordered the training). The same provisions as for an 'emerging' operational theatre apply except that the maintenance of a MoD Form 906A is mandatory unless the range is used exclusively for air-to-surface firing as specified in paragraph 46. To enable a record to be maintained of each TER that is established and used by British Forces, both in the UK and overseas, details in the format at Annex E are to be passed to the DRSC Secretariat by the Exercise Director who orders the training to take place. The setting up of all or any part of an area as a TER within the same range complex or training area boundary for a live firing exercise more than three times a year or more than once a year in three consecutive years will require that the range complex / training area is classified as a permanent range for the period that it continues to be used for live firing at the same or increased frequency. When the frequency of use dictates that TER status is no longer applicable, the area is to be authorised and inspected in accordance with the requirements in this volume for permanent ranges until such time as it may revert to TER status or the use of the range is terminated.

Civil Police Ranges

171. **General.** Civil Police Forces in the UK are eligible to be given free initial advice on a planned new range or rebuild of an existing one. The MoD is concerned with matters of safety only so far as they affect the structure of the range and any access to points where there is a hazard as a result of shooting on the range. The MoD has no responsibility for the design, safe construction or use of a civil police range; this responsibility lies with the owner / operator of the range.

172. **Request and Approval.** A Police Force wishing to construct a range or substantially alter an existing range may forward details of its proposal to the Army Firm Base in whose area the range is situated. Subject to approval in principle, the Firm Base HQ should appoint a sponsoring officer to see the proposal through to completion. Acceptance of the task is dependent on:

- a. Military resources being available.
- b. Approval of the Local Government Planning Authority.
- c. Consent of the owner or tenants of all land within the RDA boundary.

173. **Advice and Assistance.** The general procedure to be followed by the sponsoring officer is similar to that used for creating a MoD Range, and MoD Form 1057 may be used as guidance. The sponsoring officer should consult DIO Ops SD TAS as required. Following the initial advice, further advice and assistance may be given if requested by the Police Force who should contact The College of Policing Police Firearms Range Certification and Licensing Manager. Full costs may be charged for additional advice or assistance.

Air Rifle Ranges

174. **General.** Within the MoD, Service air rifles are provided for use, primarily by Cadets and by Training and Display Teams on duty, on both permanent and temporary range facilities. The limitation on ME is given in Volume 2 Chapter 26. There are five types of ranges used for Service air rifle shooting:

- a. Indoor Rimfire Ranges which can be converted for air rifle shooting.
- b. Temporary Indoor Air Rifle Ranges set up inside a building or tent with portable or removable equipment.
- c. Permanent Indoor Air Rifle Ranges set up inside a building.
- d. Mobile Air Rifle Ranges mounted in the back of vehicles for use at recruiting displays, open days, show-grounds, etc.
- e. Temporary Open (Outdoor) Air Rifle Ranges with an appropriate danger area.

175. **Use.** It is not mandatory for an air rifle range to be authorised for use. However, as a minimum, each air rifle range must be formally approved for use by:

- a. The CO / OC of the RAU, for permanent indoor ranges.
- b. The Unit CO / OC, for temporary ranges, whether in a building, a tent, in the open or mounted on a vehicle.

176. **Conditions of Use.** Approval for use is to be renewed annually and recorded by the Unit CO / OC or CO / OC of the RAU in the dedicated range file. Design, construction, setting up and maintenance are to be as specified in Volume 2 Chapter 26 for the various types of air rifle range. The conditions and procedures for use are to be stated in the Range SO or in supplementary instructions referred to by the Range SO. A MoD Range Log (MoD Form 906) is to be maintained for each permanent indoor air rifle range (this includes Mobile Air Rifle Ranges).

177. **Check and Inspection.** Air rifle ranges are subject to the following as a minimum:

- a. Check before firing by the RCO.
- b. Annual inspection by a competent officer appointed by the CO / OC of the RAU or the Unit CO / OC.
- c. Inspection by LTAR / DIO or the appointed contractor if the range has permanently constructed features, infrastructure or plant.

Range Transfer

178. **General.** Organisational change can make it necessary to transfer responsibility/accountability for a range from one duty holder to another. This may involve transferring:

- a. RAO responsibility within the same Service / Agency.
- b. RAO responsibility from one Service / Agency to another.
- c. Management control of a range from one Service / Agency to another.

179. For the purpose of maintaining the MoD Range inventory and in particular for the upkeep of inspection records, the DRSC Secretariat is always to be informed of any potential transfer.

180. **Transfer Process.** Where the relinquishing RAO and the receiving RAO are from a different Service / Agency the transfer is to be arranged by the headquarters of the two RAO directly involved, with each taking the steps shown below.

	Receiving RAO	Relinquishing RAO
1	Before the transfer carry out an environmental assessment of the range.	
2	Before the transfer obtain a Range Serial Number from the DRSC Secretariat.	Issue a closure notice (Chapter 6 Annex C).
3	If the range is temporarily closed arrange inspection before it is re-opened.	Withdraw the old MoD Form 904 and 905 from the range.
4	Raise a new MoD Form 1057 for the range if required, otherwise an amendment to Section A paragraph 2 of the existing form will suffice. A TAS survey may be required before a new form is completed.	Pass copies of the written Range Safety Risk Assessment and Range SO to the new RAU, for information, if there is a change of RAU.
5	Issue a new MoD Form 904 and 905 for the range subsequent to production of an updated range safety risk assessment and Range SO.	Archive the Range File/Pack, ensuring it contains drawing maps and technical correspondence relating to the range. Ensure the upkeep of the range file/folders containing as a minimum copies of the MoD Forms 904, 905, 906/906A / 906B, 907A, 1057) works and any environmental inspections / reports, drawings, maps and other relevant technical proceedings or reports relating to the safe use of the range. Retain for ten years.
6	Ensure a new MoD Form 906/906A/906B is opened for the range with the first entry (in red) recording the transfer. Any balances from the previous Range Log are to be carried forward. The most recent annual/triennial, works technical and plant inspection dates are to be recorded.	

Range Closure

181. **General.** No indoor or open (outdoor) range may be permanently closed unless such closure has been ordered or approved by the RAO and the budget holder for the range. Temporary closure of a range can be ordered by the RAO or by the CO / Manager of the RAU; if the latter, the HQ is to be informed immediately.

182. **Permanent Closure.** The permanent closure of a MoD Range can be ordered either for the re-appropriation of the facility or the building containing it for another use, or for the intended disposal of the land, facility or building by the MoD or RFCA, or because further use of the range is not required. In all cases the staff of the Service / Agency HQ which controls the budget for the range are responsible for ensuring that arrangements are made, either directly or through delegation, for de-leading, deep cleaning where necessary and the disposal of polluted waste. In the case of enclosed ranges there is also a duty of care to inform any new owners / users of the site of its previous use and of the possibility of residual contamination by lead dust and unburned propellant.

183. **Temporary Closure.** If a range is assessed as not meeting the minimum criteria prescribed for it, usually after a monthly, annual or independent (triennial) inspection, it is to be closed until the necessary remedial action or work has been completed to the satisfaction of the RAO and DSA DOSR RSIT. When a range is temporarily closed the MoD Form 905 is to be withdrawn from the range and the closure is to be recorded, together with the reason, in the Range Log (MoD Form 906 / 906A / 906B). Before a temporarily closed range as a result of an issued Prohibition Notice (PN) is re-opened it must be inspected by DSA DOSR RSIT and certified as safe for use. On re-opening, the MoD Form 905 is to be returned to the range or a new one issued, and the appropriate entry is to be made in the Range Log. If a MoD Range has been Temporary Closed for a period of 3 years or more the RAU is to instigate formal closure action.

184. **Disposal.** For a range where it is intended to hand back or dispose of MoD land, facilities or structures the HQ of the RAO is to consult DIO LMS about making the appropriate disposal arrangements in accordance with [JSP362](#). Following this, a date for permanent range closure will be agreed.

185. **Range Documentation.** On permanent closure of a range the RAO is to arrange for the MoD Form 904 and the MoD Form 905 to be withdrawn from the range and cancelled. An entry is to be made in the Range Log MoD Form 906 / 906A / 906B to the effect that the range is permanently closed and all extant MoD Form 906 / 906A / 906B logbooks are to be returned by the RAU to the HQ of the RAO.

186. **Notification of Closure.** As soon as a range has been permanently closed the RAO, or the appropriate RFCA if applicable, is to issue a Notification of Permanent Closure in the format given at [Annex C](#) a copy of which must be sent to DRSC.

Annexes:

- A. MoD Form 904 – Range Authorisation Certificate.
- B. MoD Form 905 – Range Safety Certificate.
- C. Notification of Permanent Closure of a Range.
- D. Approved and Dispensation Range Processes.
- E. Notification of Setting Up a Temporary Exercise Range.

Chapter 5 Annex A

MoD Form 904 – Range Authorisation Certificate

1. The taking into use of Service and DIO Ranges, RFCA ranges, Dstl TERP ranges, DSG test ranges, DE&S TERP ranges, and ranges owned or used by cadet forces and the MDP is to be authorised on [MoD Form 904](#).
2. The latest version of the form is to be used for a new range and for any other range at the time when changes to its specification, structure, use or responsible Service / Agency require existing documentation to be replaced. Otherwise, the introduction of the latest MoD Form 904 is to be achieved as early as practicable. Where an older style MoD Form 904 contains a dispensation and must therefore be renewed on change of the RAO, the latest MoD Form 904 should be taken into use on the appropriate date.
3. Prior to completion of a MoD Form 904 for a range, the staff of the RAO is to request the DRSC Secretariat to allocate a unique range serial number for the range. This number is to be used for all subsequent identification of the range and is to be entered in the appropriate box on the MoD Form 904. The number will identify the range in the DRSC range inspections database, on range files and documentation, and on inspection reports. The DRSC Secretariat is to ensure that the number is passed to the DSA DOSR RSIT.
4. The MoD Form 904 is the only form for authorising the live firing of one or more weapon systems, ammunition natures and explosive stores. For Small Arms Ranges, care must be taken to state on the Schedule the firearms and ammunition which may be used, including relevant performance details, e.g. "centrefire pistol, rifle and carbine firing ball ammunition only, max MV: 520 m/s max ME: 645 j". Where necessary, the Schedule must also include any relevant limitations, such as:
 - a. Restricting the use of particular firing points and / or lanes.
 - b. Limiting the use of automatic fire.
 - c. Restricting fire within specific arcs.
 - d. Prohibiting the firing of particular types of ammunition such as tracer or armour piercing
 - e. Maximum height.
5. For other ranges where a wide variety of weapon systems and explosive stores are to be authorised, e.g. Live Firing Tactical Training Areas, the maximum permissible performance should be stated on the Schedule by type, category and / or class, listing specifically all restrictions and / or exclusions which must be applied. Permitted trials, testing and evaluation of weapon systems, ammunition natures and explosive stores which are not in-service are also to be shown on the Schedule together with any limitations, restrictions or exclusions.
6. Due to the nature of weapon systems, munitions and explosive stores fired or functioned on DE&S and some Dstl TERP ranges, these ranges are to be defined by the RDA associated with the range (i.e. byelaw area / ADA) as well as by any specific MV, ME or NEQ. In all cases the MoD Form 904 is to be signed personally by the RAO.

7. When responsibility for and control of a range is passed from one Service / Agency to another the new RAO must issue a replacement MoD Form 904 at the time of the transfer. The opportunity should be taken to introduce the most recent revise of the form.

8. The signed original of the MoD Form 904, together with the originals of any documentation referenced on the form, are to be retained by the HQ / establishment which issued them and are to be made available for range inspectors if requested. A copy of the originals should be held by the RAU. A copy of the signed certificate (MoD Form 904) is to be sent to Secretary DRSC for central records whenever a range is opened, transferred or re-opened.

Chapter 5 Annex B

MoD Form 905 – Range Safety Certificate

1. A MoD Range Safety Certificate (**MoD Form 905**) is required for each Service and DIO Range, RFCA range, Dstl TERP range, DE&S test range and DE&S TERP range, and for each range owned or used by Cadet Forces and the MDP. It is to be completed and signed by the RAO or by an officer / manager delegated to do so on his behalf.
2. MoD Form 905 is issued to certify that at the time of issue the range is safe to use provided it is correctly maintained and used strictly in accordance with this JSP, Range SO and any additional special instructions or dispensations specific to the range and / or type of practice.
3. A signed copy of the MoD Form 905 is to be displayed or held at each range along with the Range SO. If it cannot be permanently displayed the most suitable place for it to be held is inside the front cover of the MoD Range Log (MoD Form 906 / 906A / 906B) in a clear plastic document envelope, where it can be easily seen by the RCO when signing for the range.
4. The MoD Form 905 is to be issued when a range is first authorised. The certificate is to be re-issued thereafter at intervals not exceeding three years provided the range remains safe for use. The re-issue should be made after the inspection of the range in that year, using the latest version of the form, provided the inspection report indicates that the range remains safe for use.
5. If a MoD Range is deemed to be unsafe and is temporarily closed the MoD Form 905 is to be withdrawn from the range by the HQ of the RAO or the RAU or DSA DOSR RSIT and its withdrawal noted in red in the MoD Range Log (MoD Form 906 / 906A / 906B). The certificate will be restored when the inspecting authority is satisfied that the range is safe for use and the date of restoration is to be noted in red in the Range Log (MoD Form 906 / 906A / 906B).

Chapter 5 Annex C

Notification of Permanent Closure of a Range

1. DRSC Range Serial No.....
2. Range Name.....Location.....
3. Name and Address of RAU

.....

Telephone: Fax:

4. Authorising Headquarters.....
5. RFCA (if applicable).....
6. This range was permanently closed on (date).....
7. Reason for Closure.....

(Signature).....

Name.....

Rank/Grade.....

Appointment..... Date.....

Distribution:

RN / RM	ARMY	RAF	DE&S	Dstl
RN Flag Officer*	Division*	Parent Command HQ	TEST PT	IE Dstl
HQ Royal Marines*	Firm Base*	HQ AIR 38Gp A4 ES	Head of Site*	Head of Site*
RNRSO	RFCA*	RAF ESIT	DOSG	DOSG
DRSC	DOSR RSIT	DRSC	DRSC	DRSC
DIO*	DRSC	DIO*		
	DIO*			
MDP	DSG			
CFI MDP	Hd HSEP			
Head of Site*	Head of Site*			
DOSG	DOSG			
DRSC	DRSC			

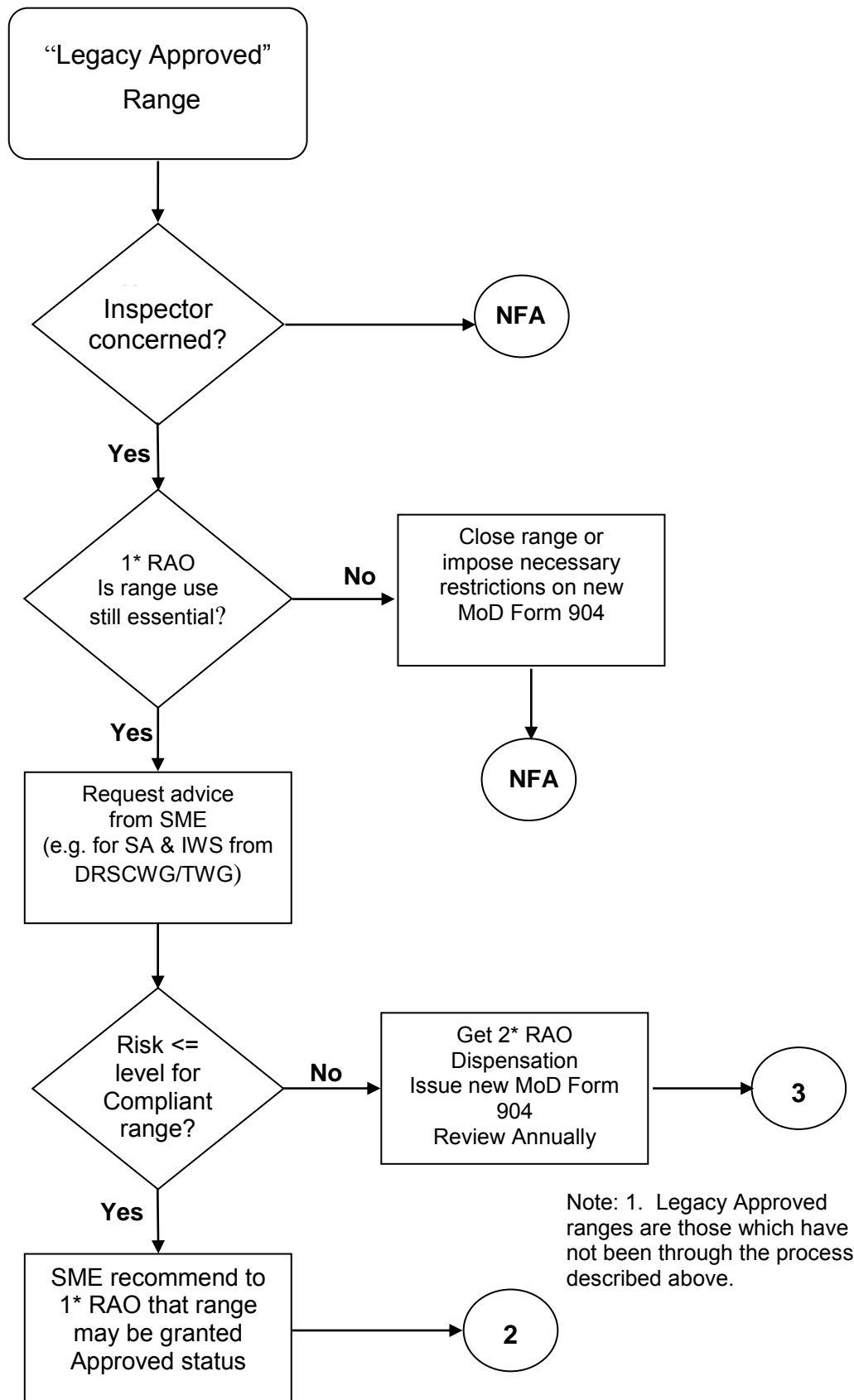
* Where applicable

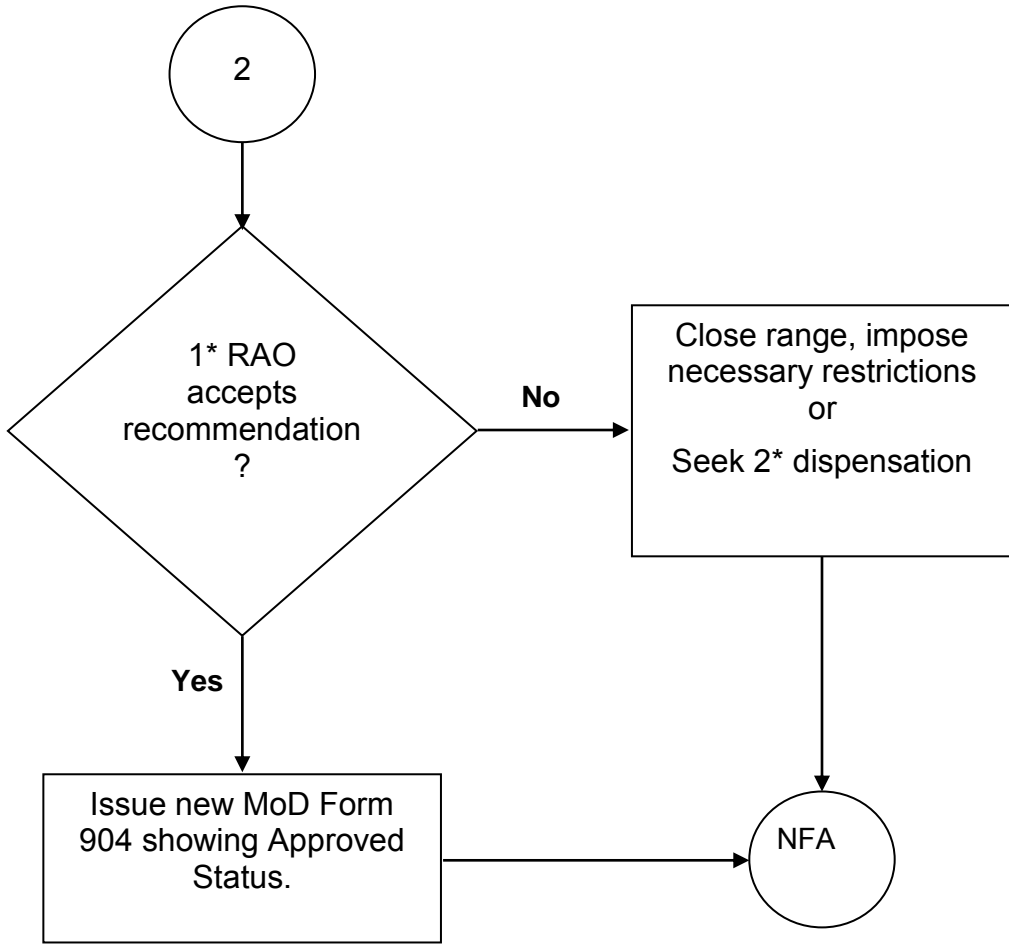
Note: These are **non-functional** examples. For forms to use follow:-

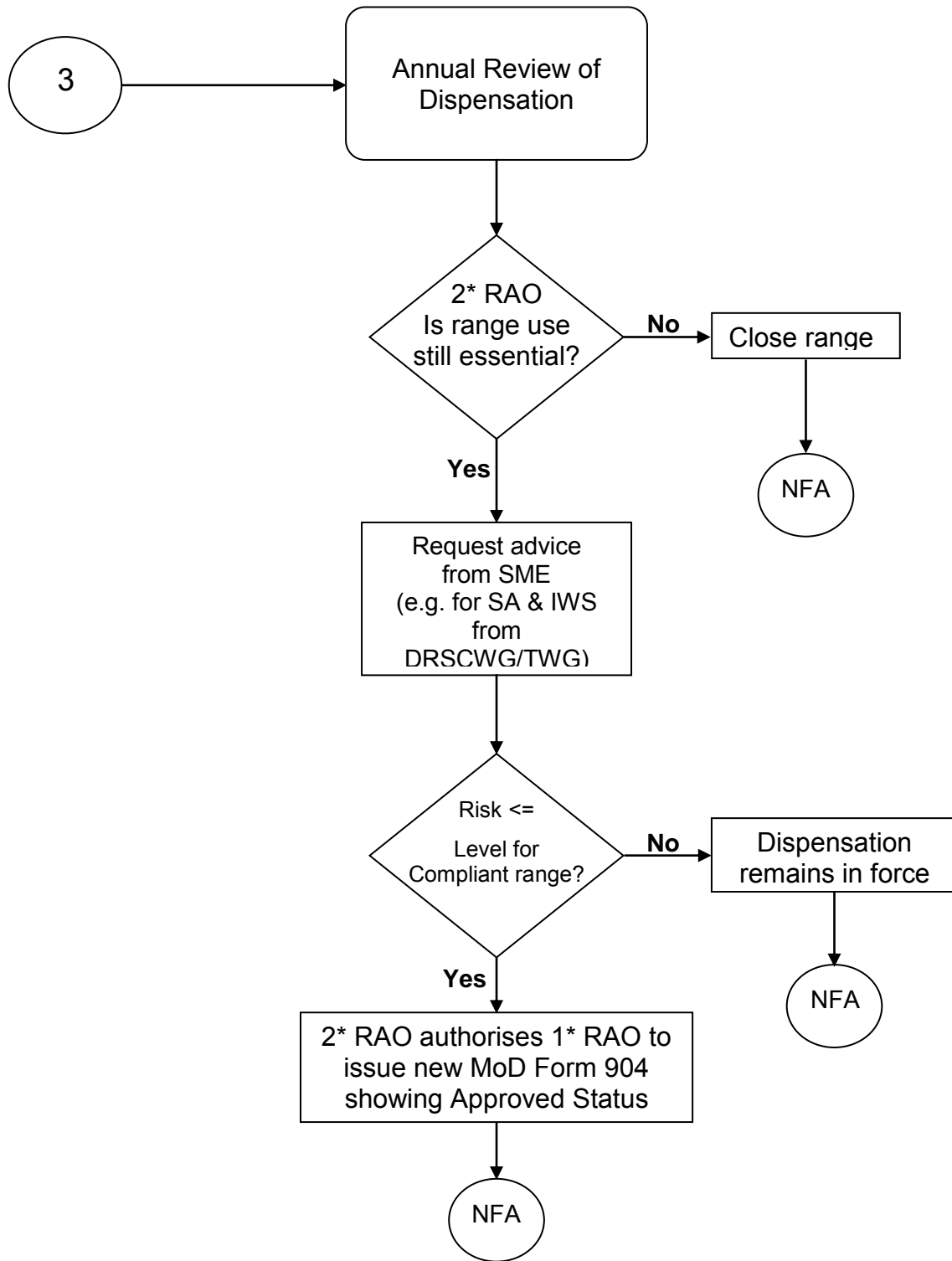
<http://defenceintranet.diif.r.mil.uk/Organisations/Orgs/HOCS/Organisations/Orgs/DSEA/Pages/RangeForms.aspx>

Chapter 5 Annex D

Approved and Dispensation Range Process







Chapter 5 Annex E

Notification of Establishing a Temporary Exercise Range

1. HQ of Exercise Director

Contact Telephone:

2. Exercise Name:

3. Range / Training Area Name:

4. Country:

5. Map Sheet: Grid Ref (centre of range):

6. Date(s)/Period of Use (start and closure):

7. Type of Range (e.g. LFTTA, Grenade, Mortar, Anti-Tank, Arty, GBAD):

8. Main User(s):

E-mail to: DSA-DOSR-PRG-1a1@mod.uk Fax to: 9679-35343 (Mil) or 030 679 35343 Queries to: 9679-35343 (Mil) or 030 679 35343
--

Note: These are **non-functional** examples. For forms to use follow:-

<http://defenceintranet.diif.r.mil.uk/Organisations/Orgs/HOCS/Organisations/Orgs/DSEA/Pages/RangeForms.aspx>

Chapter 6

Range Maintenance

Introduction

The proper maintenance of all MoD Ranges is an essential requirement, both to ensure the maximum benefit for training as well as to ensure that the safety features of the range design are kept up to the standards set by the MoD. A methodical system of regular planned maintenance and regular inspections is required, along with an emergency repair system to cover abnormal wear caused by intensive training or adverse weather conditions.

The aim of this chapter is to set out the MoD policy for the maintenance of Ranges. This forms the basis of more detailed instructions that will be issued by the DIO Staff, MoD appointed contractors / partners and the RAUs who are responsible for providing safe range facilities.

Policy

187. The appointed RAU will be responsible for monitoring the maintenance work specified in the appropriate contract for the range or ranges under its control and for reporting any failings or deficiencies through the chain of command. It is the duty of the RAU to keep the structure, equipment, stores, facilities, and the general area of the range for which it is responsible in a good and safe working condition. It is the duty of the RAO / LTAR to monitor and advise on the provision of safe range facilities.

188. Maintenance requirements will vary from range to range, but in all cases sufficient time must be made available by the RAU to permit essential and preventative maintenance.

189. The system of inspections to ensure that ranges are safe includes a requirement to ensure that they are properly maintained. The inspections which form part of the maintenance cycle are outlined in Chapter 7.

190. The structure of the range, its fabric and its ancillary facilities are to be kept up to the requirements set out in the appropriate 'As Built' or 'Record' drawing. Detailed guidance and aspects requiring particular attention on SA and infantry weapon ranges are given in the relevant chapters of Volume 2 of this JSP.

191. Some range equipment, such as electric targets and their control mechanisms as well as the communication systems, is maintained and repaired or replaced under contract arrangements made by the DIO. It is the duty of the RAU to maintain such equipment in accordance with the instructions issued by or on behalf of the equipment sponsor and to ensure that contract repair and maintenance is carried out properly and at the correct intervals.

192. The RAU is also responsible for ensuring that other items, such as boundary and Byelaw notices, which are essential for the safety of the range, are correctly maintained and regularly inspected. Most of these items are funded through DIO with the actual work being carried out by the appointed contractors / partners or the range staff. See Chapter 4 for further details on items required for warning of hazard and for controlling access.

193. Other instructions, such as Defence Information Notices (DIN), concerning maintenance of ranges and range facilities are issued from time to time. The RAU is to pay particular attention to

these instructions and is to make sure that the range staff comply with those that are relevant to their range.

194. Typically, those holding Range Warden appointments have responsibilities for some range maintenance and for reporting defects. The CO / Manager of a RAU which has one or more Range Wardens on establishment must ensure that they are competent persons in accordance with the provisions of **JSP375**¹⁶, that duties are adequately explained in job descriptions and relevant orders, and that training is provided where necessary.

195. The MoD Range Log (MoD Form 906 / 906A / 906B) is to be used by the RCO / DCO / TCO to draw attention to any defects found in the range structure, equipment and stores. The RAU and range staff are to record in the MoD Form 906 / 906A / 906B all maintenance, repair and inspections carried out. Particular care must be taken to ensure that a complete record of unexploded blinds is maintained.

196. Advice on the maintenance of ranges can be sought from the staff of the appropriate Service / organisation detailed in Chapter 1.

Pollution and Control Measures

197. Pollution control measures form part of the essential maintenance of MoD Ranges to keep them up to the standards of safety required by the MoD. De-leading of sand filled bullet catchers is to be carried out and the waste sand disposed of in accordance with current regulations for contaminated waste. Measures relating to lead fumes, dust and particles in indoor training ranges and indoor training theatres are covered in detail in Chapter 30 of Volume 2 and are to be meticulously followed. Methods of cleaning should not create a risk from lead or unburned propellant to the cleaners or any other persons in the area, nor should they allow the spread of any contamination.

¹⁶ JSP 375 MoD Health and Safety Handbook

Chapter 7

Range Safety Inspections and Audit

Introduction

This chapter lays down the MoD policy on Range safety inspections and audit.

198. **Policy.** The policy for range inspection and audit is based on the principle that every permanent MoD Range will be held on the accommodation charge of a RAU. Within a range boundary each area that relies on construction or natural features to contain ballistic or explosive effects is to be inspected and reported on as a separate range. The safety of all MoD Ranges is to be checked through a regular and comprehensive inspection process. Other ranges used by MoD personnel are also to be regularly inspected to ensure they meet the same standards. TER are only to be subject to the annual and independent inspections specified in this chapter if they remain in regular use by MoD personnel for more than three times a year or more than once a year in three consecutive years. Upon reaching this frequency of use they become subject to an annual inspection, and if still in regular use, to an independent inspection in the third year.

199. **Inspection Criteria.** Range safety inspections of UK design ranges are to be conducted against the criteria given in this JSP and in appropriate Single Service publications. Foreign design ranges, whether in the UK or overseas, which are controlled or used by MoD employees should be assessed on the basis that they must be at least as safe as an equivalent UK design; the range drawings and any other design criteria used to inspect them should be those provided by the country of origin.

Inspection and Audit System

200. **Annual.** The inspection and audit system comprises an annual cycle and an independent triennial cycle of range safety inspections and a continuous audit. All annual inspections of Ranges authorised by the RN and RM are carried out by the RNRSO on the staff of 2SL / CNH. The annual inspection regime for Army, RAF and DIO ranges is the responsibility of the RAO, although the actual inspections may be carried out at a lower level. On ranges authorised by CCMDP annual inspections are the responsibility of the CFI MDP. At DE&S, DSG and Dstl sites the RAO is responsible for ensuring that an inspection of all ranges is carried out by a competent person, at least annually, to verify that the established safe systems of work are operating correctly. At the invitation of the RAO an inspector from another Service or Agency could assist on any inspection.

201. **Independent.** To enable range safety standards to be monitored across the MoD an independent MoD level inspection is carried out once in every three years. It replaces the annual inspection for that year. The independent inspection is part of the continuous audit process operated by the DRSC.

Components of the Annual Cycle

202. **Daily Check.** When a range is in use a daily check is to be carried out, where practicable, by the Range Officer / Range Warden or a representative of the RAU before firing takes place to ensure that the range is being presented in good order for user units and is in all respects fit for use. On

completion of firing the MoD Form 906 / 906A / 906B should be checked to ensure correct completion by the RCO / DCO / TCO.

203. **Monthly Inspection.** A monthly inspection of the range is to be arranged by the CO, Officer Commanding (OC) or Manager of the RAU to ensure that the Range Officer / Range Warden and / or other range staff are maintaining the range to an acceptable standard of cleanliness and good order and that any maintenance work required is identified promptly and is followed up until completed. The MoD Form 907 ([see Annex A](#)) is the approved format for monthly inspections and should be used unless a locally produced alternative, to the same standard, is substituted. The inspecting officer is to enter in red the date of his inspection in the MoD Form 906 / 906A / 906B. He / she is to sign the entry and put his name, rank and appointment. In the RAF, the Unit Ranges Specialist Officer (URSO) is to personally inspect the unit range(s) monthly. When inspecting RAF recreational ranges, the URSO is to be accompanied by the OIC of the range. MoD Forms 907, or the locally produced alternatives, are to be retained by the RAU until the next annual or independent inspection, whichever is the sooner, has been completed.

204. **Annual Inspection.** An annual inspection is to be carried out, using a MoD Form 907A, on behalf of the RAO. This inspection will determine if the RAU is maintaining the range to an acceptable standard and that any restrictions or limitations stipulated by the RAO are being followed. The annual inspection should also review the following:

- a. Byelaws, if applicable, and their relation to physical warning signs on the land.
- b. Range maps and WDA templates for weapon systems authorised for use on the range by the MoD Form 904.
- c. A check that ADA, ADH and SDA shown in current publications or on maps or charts are correct when compared with the current templates for weapons authorised for use on the range.
- d. Public use and / or access to check protective measures remain adequate.

205. A copy of the written report, on MoD Form 907A, is to be sent to the HQ of the RAO, the RFCA (if applicable) and the RAU, indicating the result of the inspection and detailing any maintenance / remedial action required. It should also indicate whether or not the range on charge to the unit is fit for use in accordance with the MoD Form 904 and the Range SO. The inspecting officer is to make an entry in red showing the date of his / her inspection in the MoD Form 906 / 906A / 906B. He / she is to sign the entry and insert his / her name and appointment.

Independent Range Safety Inspection and Audit




206. **Periodic MoD Independent Inspection.** Independent MoD inspections are to be conducted by DSA DOSR RSIT or IE (DE&S) ESIT inspectors once in three years for all ranges as part of the triennial audit of each range by the DRSC. If a range is temporarily closed when it becomes due for inspection and audit, the relevant DSA DOSR RSIT or IE (DE&S) ESIT should consider delaying the inspection until the range is re-opened for use, provided the delay is no more than 3 months. If any remaining period of temporary closure is likely to exceed 3 months DSA DOSR RSIT or IE (DE&S) ESIT should report this to the DRSC and re-schedule the inspection when informed by the HQ of the RAO that the range has re-opened.

207. **Conduct.** At the invitation of the lead IRSI, any inspection can be assisted by an IRSI from elsewhere, if so required. All DSA DOSR RSIT or IE (DE&S) ESIT inspectors may seek advice from and refer problems to the DRSC. Inspection and audit results are reported using MoD Form 907A,

including the distribution of sections of the completed report. The independent range safety inspection will replace the usual annual inspection for that year. The date of the independent inspection will be entered in red on the MoD Form 906 / 906A / 906B by the inspector(s).

208. **Assessment.** The independent inspection reports are used by the DRSC to maintain a continuous oversight of range safety and to compile safety assessments and gradings for all MoD Ranges. Performance indicators and records are maintained by the DRSC Secretariat.

209. **Range Safety Grading.** The following grading system is based on both JSP815 and International Standard ISO 18001:

 <p style="text-align: center;">Full Assurance</p>	<p>The range meets all the criteria specified in JSP403.</p>
 <p style="text-align: center;">Substantial Assurance</p>	<p>The range does not fully meet the criteria specified in JSP403 but its continued use does not present an unacceptable risk provided remedial action is taken as soon as reasonably practicable.</p>
 <p style="text-align: center;">No Assurance</p>	<p>The range does not meet the essential safety criteria specified in JSP403. Its continued use presents an unacceptable risk. Before further use, the identified failings shall be rectified.</p>

210. **Follow up Actions.** The Head of the RAU or his nominated representative is to provide a formal response within 30 days of receipt of the inspectors report (by completing and returning Section 4 of MoD Form 907B) to the Non-Compliances and Recommendations and detailed in the report. Included should be the course of action taken if any, and anticipated timescales for any remedial action. The inspection team reserves the right to request progress reports on outstanding actions pending a satisfactory completion.

211. **Defence Regulators.** Defence Regulators (DSA DOSR RSIT or IE (DE&S) ESIT) have enforcement powers granted by charter or delegations which depend for their application on the corporate discipline of the Department deriving from the Policy Statement; they do not have powers of prosecution. A Defence Regulator's powers can be broadly considered in two categories:

- a. Serving an Improvement Notice.
- b. Serving a Prohibition Notice or withholding or withdrawing a license, permission, permit or approval (either fully or in part) where an activity is (or is to be) licensed, permissioned, permitted or approved.

212. In the event of a dispute between a Defence Regulator and anyone in Defence subject to an enforcement action, the issue will be escalated for resolution through the respective command / management and regulatory hierarchy, up to and including SofS if necessary.

Monitoring of Inspection and Reports

213. **Monitoring Standards.** DSA DOSR RSIT will monitor the independent range inspections to provide assurance that range safety and inspection standards are being maintained across the MoD. Monitoring will be carried out in two ways:

a. DSA DOSR RSIT will attend a number of annual and independent range inspections with inspectors in order to assess standards and competency.

b. DRSC officers will scrutinise all independent inspection reports (MoD Form 907B), comment as necessary, agree the range safety grading and provide statistics and assessment to the committee. Major issues identified in reports will be addressed by the committee.

214. **Inspection Programmes.** DSA DOSR Ch RSIT will arrange with each Service / MoD Agency and DE&S to receive details of annual and independent inspection programmes as required for monitoring purposes.

215. **Annual Inspections.** When an annual inspection is monitored by DSA DOSR RSIT the RAO is to ensure that a copy of the completed MoD Form 907A is sent to the Secretary DRSC.

Range Safety Inspection Competency

216. **Key Elements.** Monthly, annual and independent inspectors of ranges are required to be competent in assessing the following key elements of range safety as appropriate to their areas of responsibility:

- a. Range documentation.
- b. Range administration.
- c. Range control.
- d. Range structure and maintenance.

217. **Framework.** A competency framework based on the key elements above and giving the performance criteria relevant to the monthly, annual and DSA DOSR RSIT is made available and maintained by the DRSC. A copy of the Defence Ranges Framework Competences (DRFC) can be found in Chapter 9.

218. **Training.** Each Service / MoD Agency is responsible for providing any training necessary to achieve the required competency.

219. **Assessment and Verification.** The DRFC sets the uniform standard across the MoD and provides the measure against which the compliance of individual inspectors is assessed and verified.

Estate and Technical Inspections

220. **General.** Wherever possible, estate and works technical inspections should be programmed to take place concurrently with an annual inspection of a range. The RAU should ensure that a copy of each inspection report is placed in the dedicated range file.

221. **Estate Inspection.** The Land Management Services (LMS) within DIO regional office in conjunction with the HQ of the RAO (or, if applicable, the subordinate HQ with delegated responsibility for inspecting) and the RAU will arrange for biennial inspection of the estate containing open (outdoor) ranges to check that signing and boundary demarcation are correctly located and DIO mapping is being maintained accordingly. The RAU will ensure that this inspection is recorded in red ink on the MoD Form 906 / 906A / 906B.

222. **Works Technical Inspection.** In accordance with DIO Instructions, the Prime Contractors, Maintenance Management Organisation (or the equivalent in RFCA) appointed contractors are required to carry out an inspection once every two years to assess the condition of each range for which their Property Manager is responsible. A copy of the works technical inspection report is to be forwarded to the RAU. The date of the inspection is to be recorded in red ink on the MoD Form 906 / 906A / 906B together with the signature, name, appointment and organisation of the person carrying out the inspection. Privately owned Schools CCF Ranges are to be inspected by RFCA inspectors in accordance with Reserve Forces and Cadet Instructions.

223. **Infrastructure and Plant Inspection.** Inspections are also to be carried out of the infrastructure of buildings and any plant (including ventilation equipment) on a range in accordance with and at the frequency stated in the DIO publication, DIO Specification 0005 and in any relevant legislation and associated regulations. With regard to structures essential for the safety of personnel when the range is in use (e.g. bunkers), as a record of their inspection, the date and detail is to be entered in red ink on the MoD Form 906 / 906A / 906B together with the signature, name, appointment and organisation of the person carrying out the inspection.

Summary of Inspection and Audit

224. The regular checks and inspections to be carried out on MoD Ranges are:

- a. Daily check by range staff, where practicable, before firing takes place, on the days that the range is to be used.
- b. Check by the RCO / DCO / TCO before and after firing has taken place, prior to completion of the MoD Form 906 / 906A / 906B.
- c. Monthly inspection, using MoD Form 907 or locally produced alternative, by an officer nominated by the CO / Manager of the RAU.
- d. Annual inspection using MoD Form 907A, on behalf of the RAO.
- e. Estate inspection as arranged by DIO or RFCA, as appropriate.
- f. Biennial works technical inspection by the contractor appointed by DIO or by the partner.
- g. Infrastructure, plant and ventilation systems inspections by the contractor appointed by DIO or by the partner.
- h. MoD independent inspection and audit once in three years for all ranges, using MoD Form 907A.
- i. Annual Inspection of indoor range ventilation systems by appropriate agency or contractor.

225. Civilian ranges authorised as TERP Ranges for use by MoD personnel on duty are to receive daily and monthly inspections when in use, and annual and independent inspections and a DRSC audit on the same basis as MoD Ranges.

Annexes:

- A. Formal Notice of Improvement.
- B. Enforcement Management Model.

Chapter 7 Annex A

Notice of Improvement



**Defence
Safety
Authority**

Chairman Defence Ranges Safety
Committee (DRSC)
Defence OME Safety Regulator
Defence Safety Authority
Hazel #H019
MoD Abbey Wood North, Bristol, BS34 8QW
Military Network: 96 79 35575
Telephone: 030 679 35575
Email: DSA-DOSR-TL@mod.uk

Reference:

Addressee

Date:

FORMAL NOTICE OF IMPROVEMENT – DRSC RANGE No

References:

- A. Independent Range Safety Inspection Report MoD Form 907 (insert series) dated.
- B. JSP 403 - Handbook of Defence Ranges Safety, Volume 1 – Range Management.
- C. JSP 403 - Volume 2 - Design, Construction, and Maintenance of Small Arms, Infantry Weapon Systems and 40mm weapons systems ranges.

1. The recent Independent Range Safety Inspection conducted on my behalf by DSA DOSR RSIT/IE (DE&S) ESIT has revealed a number of non-compliances. The inspection report at Reference A advised that, as a consequence of these non-compliances, I would be issuing this Formal Notice of Improvement.

2. The specific areas of concern are listed in Reference A. It outlines what is required to bring the affected range back to compliance with References B and C. The withdrawal of MoD Form 905 Range Safety Certificate will remain extant until the concerns listed are satisfactorily resolved.

Copies to:

- DSA - Chairman DRSC
- Sec DRSC
- Ch RSIT

RAO

LTAR

RPO

RAU

Note: These are **non-functional** examples. For forms to use follow:-

<http://defenceintranet.diif.r.mil.uk/Organisations/Orgs/HOCS/Organisations/Orgs/DSEA/Pages/RangeForms.aspx>

Chapter 7 Annex B

DOSR DRSC Enforcement Model

Introduction

1. Defence activities in the UK are fully subject to HS&EP legislation. These activities are governed by Statutory Regulators i.e. HSE. Their regimes for licensing or permitting these activities depend on legislation to empower them. Should there be a failure, the activities with the highest consequences attract the greatest intervention from the Regulators.

Statutory Regulators

2. Statutory Regulators have Enforcement Powers granted to them by legislation and can be considered in two general categories:

- a. Serving an Improvement Notice.
- b. Serving a Prohibition Notice or withholding or withdrawing a license, permission or permit (either fully or in part) where an activity is (or is to be) licensed, 'permissioned' or permitted.

Defence Regulators

3. Defence Regulators provide regulation of HS&EP for defence activities within specific domains of the MoD, i.e. MoD Ranges Safety. They are empowered by the SofS, by a Charter, from PUS to D DSA in the case of MoD Ranges Safety.

4. Defence Regulators operate regimes that are aligned, where reasonably practicable, to the statutory equivalents in order to produce outcomes that are, so far as practicable, at least as good as those required by UK legislation.

5. The DOSR Regulator has Enforcement Powers granted by Delegation and depends for its application on the Corporate Discipline of the Department issuing the Policy Statement. For range safety, this is contained in JSPs 815 and 403. The DOSR Regulator does not have powers of prosecution. The powers can be broadly considered in two categories:

- a. Serving an Improvement Notice.
- b. Serving a Prohibition Notice or withholding or withdrawing a license, permission, permit or approval (either fully or in part) where an activity is (or is to be) licensed, 'permissioned', permitted or approved.

6. In the event of a dispute between a DOSR Regulator and anyone in Defence subject to an Enforcement Action, the issue will be escalated for resolution through the respective command / management and regulatory hierarchy, up to and including SofS if necessary.

The Purpose of Method of Enforcement

7. The purpose of the enforcing authorities is to ensure that duty holders manage and control their risks effectively, thus preventing harm. The purpose of enforcement is to:

- a. Ensure that duty holders take action to deal immediately with serious risks.
- b. Promote and achieve sustained compliance which is contained within this JSP.

8. The enforcing authorities have a set of tools at their disposal to secure compliance with the regulations. Inspectors may offer duty holders information and advice, both face to face and in writing. This may include warning the duty holder that in the opinion of the Inspector, they are failing to comply with the regulations. Where appropriate, the DOSR Regulator may then serve Improvement or Prohibition Notices, withdraw approvals, vary licence conditions or exemptions or issue simple cautions.

9. Giving information and advice, issuing Improvement Notices, and withdrawal or variation of licences or other authorisations are the main means by which inspectors and regulators will achieve their aims of dealing with risks and securing compliance with health and safety law. In serious cases, a Prohibition Notice will stop work in order to prevent serious personal injury.

DOSR Regulators Code

10.
 - a. The Regulating Officers should carry out their activities in a way that encourages those they regulate to comply and continually improve.
 - b. The Regulating Officers should base their regulatory activities on risk.
 - c. The Regulating Officers should consider risk at every stage of their decision-making processes, including choosing the most appropriate type of intervention or way of working with those regulated, targeting checks on compliance, and when taking enforcement action.
 - d. The Regulating Officers should be fair and consistent. This gives confidence to and will promote compliance amongst those regulated.
 - e. The Regulating Officers should choose proportionate approaches to those they regulate.
 - f. The Regulating Officers should avoid imposing unnecessary regulatory burdens.
 - g. The Regulating Officers should clearly explain what the non-compliant item or activity is, the advice being given, actions required or decisions taken, and the reasons for these.
 - h. The Regulating Officers should provide an opportunity for dialogue in relation to the advice, requirements or decisions given. This will demonstrate that the Regulators are acting in a way that is proportionate and consistent¹⁷.
 - i. The DOSR should provide an impartial and clear explained route to appeal against a regulatory decision. Individual officers of the Regulator who took the decision or action against which the appeal is being made should not be involved in considering the appeal.

¹⁷ This paragraph does not apply where the DOSR can demonstrate that immediate enforcement action is required to prevent or respond to a serious breach or where providing such an opportunity would be likely to defeat the purpose of the proposed enforcement action.

- j. The Regulator should ensure that his officers have the necessary knowledge and skills to support those they regulate.

Enforcement Management Model

11. The Enforcement Management Model (EMM) is a logical system that helps inspectors to make enforcement decisions in line with The Policy Statement by the Secretary of State (SofS) for Defence for Health, Safety and Environmental Protection (HS&EP) in Defence. The Policy Statement sets out the principles inspectors should apply when determining what enforcement action to take in response to breaches of health and safety legislation. Fundamental to this is the principle that enforcement action should be proportional to the health and safety risks and the seriousness of the breach.

12. The EMM provides inspectors with a framework for making consistent enforcement decisions:

- a. Helps managers monitor the fairness and consistency of inspectors' enforcement decisions in line with DOSR policy; and assists less experienced inspectors in making enforcement decisions.
- b. It can also assist others (e.g. those directly affected) in their understanding of the principles inspectors follow when deciding on a particular course of action.

13. Figure 1 provides an overview of the EMM and refers to a detailed explanation of each element.

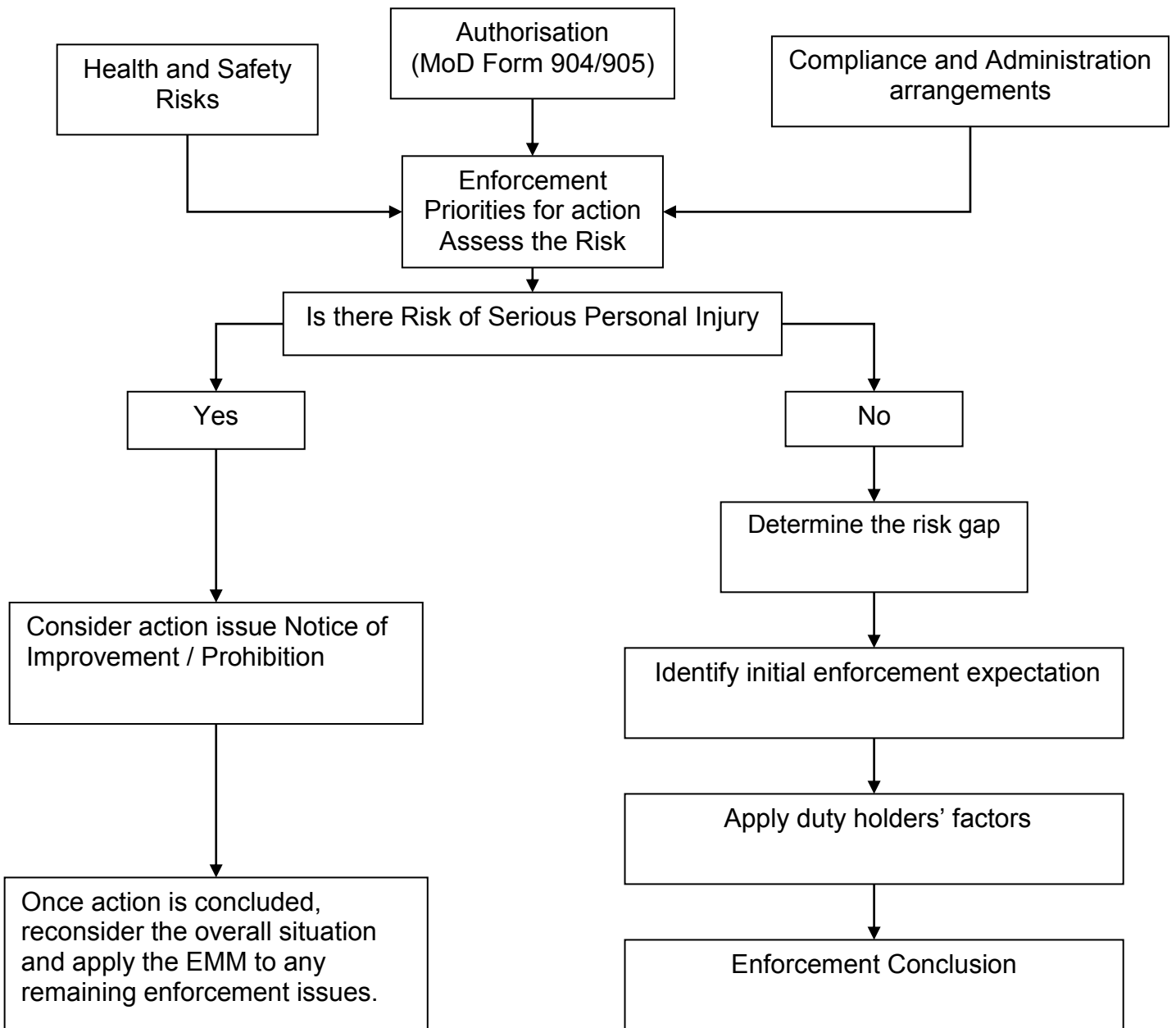


Figure 1

Enforcement Priorities

14. The priorities for action may involve a single issue or several issues when applying the EMM to a particular case, it is important to bear in mind all issues that make up the priority for action to ensure the right ones are assessed at the risk gap stage and the correct standards are used.

Non Risk-based Compliance and Administrative Arrangements

15. Some regulation duties do not directly result in control of risk, e.g. the requirements to assess risks and report incidents but still demand compliance by the duty holder. These are referred to here as compliance and administrative arrangements and are considered separately in the EMM from risk-based issues.

16. However, there is often a strong relationship between the control of risk and failure to address compliance issues. In cases where both risk and compliance issues exist, inspectors should decide on action principally in relation to the control of risk.

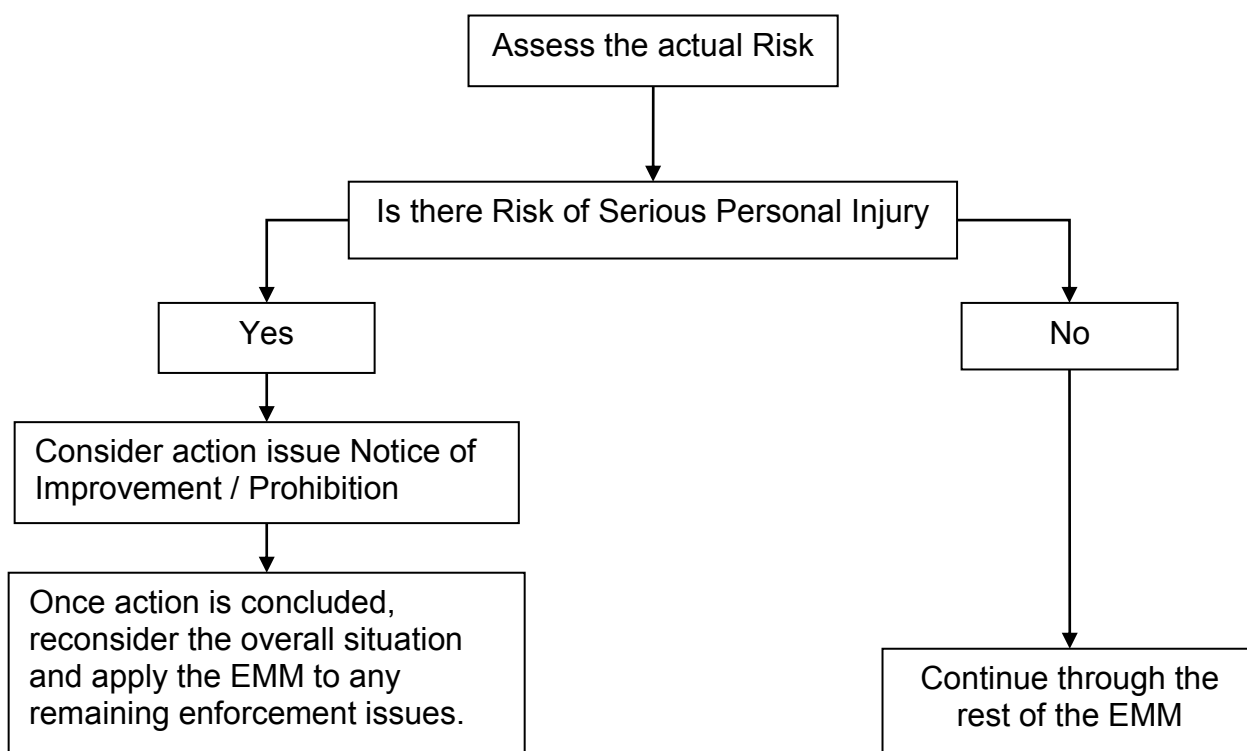
Risk of Serious Injury

Assess the actual Risk of Serious Personal Injury

17. Inspectors should always deal first with matters that give rise to risk of serious personal injury. They have the power to either prohibit the range activity.

Dealing with Serious Risk

18. The basic process of exercising these powers is shown below.



Enforcement Conclusion

19. The Enforcement Conclusion is used to check the level and focus of enforcement is appropriate. While this is not part of the framework of the EMM, it is a necessary part of any enforcement action; it ensures that the action is targeted.

20. The following principles should be addressed in relation to the priorities for action:

- a. Does the enforcement action deal with the most serious risks in order of priority, and in appropriate timescales?
- b. Has the cause of the risk been addressed?
- c. Have immediate failures to control risk or comply with the regulations been dealt with?
- d. Are the underlying problems addressed?

Chapter 8

MoD TEST, Evaluation, Research and Proof Ranges

Introduction

The MoD operates a number of specialist Ranges to provide the ability to carry out research, acquisition and through life test, evaluation and proof of weapon systems, ordnance, munitions and explosives. These Ranges are controlled by MoD agencies / organisations and are operated by either MoD personnel or contractors. These Ranges are known collectively as Test, Evaluation, Research and Proof (TERP) Ranges.

226. The following MoD agencies / organisations have TERP Ranges under their control:
- a. DE&S - Contractor operated (QinetiQ) Ranges.
 - b. Dstl - Both MoD and contractor operated (QinetiQ) Ranges.
 - c. Defence Academy (DA) - Contractor operated (Cranfield) Ranges.
 - d. DSG - Small arms (SA) test Ranges.

Safety Management

227. The relevant appointed 1* will act as the Range Authorising Officer (RAO) and appoint one or more competent members of his staff to exercise responsibility as the Range Administering Unit (RAU) for the safety of the range.

228. For MoD operated TERP Ranges the Range Administering Unit (RAU), Head of Establishment or Head of Site or equivalent may appoint a Range Safety Officer (RSO) (and, if necessary, a deputy) for each site who is to be responsible for approving and maintaining safe systems of work for all test, research and trials activities. Competency of the RSO is to be reviewed annually. DE&S Ranges appoint Trial Safety Managers (TSM) to assume the duties of RSO.

229. For contractor operated TERP Ranges the RAU is to be satisfied with the competence of the contractor operating the range and confirm that such mechanisms as are required to ensure the safe operation of the range are established and maintained.

230. The competence of the RSO / TSM / TM / TCO or RCO is to be commensurate with the requirements of the specialist range and activity undertaken. A background of training as specified in Chapter 9 DLFC is acceptable with the addition of appropriate training specific to the range in use and activity undertaken.

231. To meet the legal obligations of MoD and those operating TERP Ranges, it is the responsibility of the tasking authority to ensure that all relevant safety and environmental data is made available to the range operators in order that full risk assessments for the TERP activities can be undertaken. The validity of all data provided must be certified and authorised for release by a competent authority.

Approval and Compliance Monitoring

232. On contractor operated Ranges the requirement for trials approval or monitoring compliance with MoD instructions will be as specified in the relevant license, contract or partnering agreement. However, to aid those determining what activities require a level of MoD monitoring to be applied (trials approval or compliance monitoring) the guide below can be used:

- a. The proposed activity will require byelaws established by the Secretary of State for Defence to be invoked.
- b. An established Air Danger Area (ADA) will be activated by the proposed range for the range activity.
- c. The proposed activity may result in the placement of substances in UK waters which are not fully removed immediately upon termination of the testing activity.
- d. UK Services or government employed personnel will be involved or may be affected by the activity.
- e. Significant MoD or other government assets will be involved or may be affected by the activity.
- f. Personnel from foreign governments will be involved or may be affected by the activity.
- g. Significant Assets from Foreign Governments will be involved or may be affected by the activity.
- h. Assurance of health, safety and environmental matters at a range.

233. The MoD RAU has the right to access all range areas operated by a contractor to monitor and observe the preparation of weapons and equipment prior to and during a trial in order to assure itself that the contractor is complying with all relevant documentation. The MoD RAU will have access to and will monitor range logs and other records to ensure that they are maintained in accordance with stipulated requirements. If there are concerns about the safety of a trial the MoD RAU has the authority to stop the conduct of the trial immediately.

234. A contractor operating a TERP range will ensure that any activity undertaken on a range is within the scope of that authorised on the MoD Range Authorisation Certificate (MoD Form 904) and has a valid Range Safety Certificate (MoD Form 905). The Contractor will have available in all cases, as a minimum, the following trial / activity specific documentation:

- a. A safe system of work for the trial / activity.
- b. A suitable and sufficient risk assessment for the trial / activity.
- c. A suitable and sufficient environmental impact assessment for the trial / activity.
- d. A record of personnel competencies and annual certification of those personnel associated with the trial / activity.

Trial Organisation

235. **Suitability of Facilities.** A trial will be conducted only on or in a facility that has been designed and located for the purpose, or, alternatively, has been modified or otherwise made safe and suitable for the purpose. The selection of the trial site must take account particularly of the effects of fragments, blast, fire, shock and other hazards upon personnel and property both at the facility and outside it.

TERP Ranges used for Military Training

236. In all cases the training is to be controlled, and supervised where necessary, by competent personnel appointed by the Service unit involved although the range activity is to be monitored by a competent person provided by the RAU or contractor operating the range.

Use of Civilian Range Facilities by Personnel

237. **General.** Before a Civilian TERP Range is contracted to undertake TERP trials the relevant MoD TLB / Agency is to satisfy itself that the Range Owner / Operator has sufficient competency, expertise and suitable facilities to undertake the TERP activity. This assurance is to be gained by a formal Audit / Inspection of the capability (with the agreement of the civilian owner(s) / operators) by suitable competent staff from the contracting organisation.

238. **Range Safety Management System.** The range Audit / Inspection is to include a comprehensive review of the Range Safety Management System including mandatory legislation, procedures and Range Orders, to ensure the safety of all Range users and those who may be affected by its activities.

239. **Authorisation.** If the Range is suitable and meets the contractual requirements of the MoD TLB / Agency then the Range may be authorised for used for TERP activities. While there is no requirement to authorise the Range the MoD TLB / Agency should record the findings of the Inspection and detail the extent of authorised activities for future reference and audit.

240. **Audit / Review.** Following Authorisation for Use being issued by the MoD TLB / Agency, the Range Safety Management System is to be audited and reviewed annually with the agreement of the owner(s) / operator(s) to ensure the continuing safety of the Range for contracted activities. The findings of the Audit / Inspection are to be recorded for future reference.

Unmanned Aircraft Systems

241. **Civilian.** Where a civilian Unmanned Aircraft System (UAS) is flown on a MoD Range without the involvement of any Service or MoD personnel the operation is to be in accordance with the appropriate Civil Aviation Authority (CAA) regulation or MAA Regulatory Publications (MRP) (if applicable).

242. **Contractorisation.** At present there are two types of contractorisation:

- a. When the MoD owns the aircraft and equipment but has a recognised contractor to operate the equipment in order to provide a specific service.

- b. When the contractor provides both the equipment and the service. This is how the Combined Aerial Targets Service (CATS) operates.

243. In both cases the aircraft will appear on the UK military aircraft register and be subject to military regulation under MRP for UAS undergoing development, test and evaluation for in-service UAS used in training

244. Further information can be found in JSP403 Volume 3 Chapter 6.

Environmental Hazards Assessment

245. Ranges are to have an environmental management system in accordance with **JSP418**¹⁸, or in the case of contractor operated Ranges a company policy which supports a structure with which environmental management, sustainable development, legislative compliance and continual improvement can be managed.

246. The policy driver for undertaking Sustainability Appraisals (SA) on MoD plans, programmes and projects re-confirms the MoD commitment to adhering to relevant legislation which specifies sustainability or environmental appraisals. This guidance and the mandate are applicable across MoD, including Contractors, Partners, Trading Funds and Agencies. Current policy is to carry out sustainability appraisals and environmental assessments, as appropriate, for new or revised policies, programmes (including acquisition programmes), office relocations, new projects and training activities.

Audit and Inspections

247. TERP Ranges are to receive the range safety, estate and works technical inspections specified in Chapter 7 of this volume, supplemented by additional inspections as required by the RAU to assure appropriate levels of safety, control and assurance are maintained.

248. **Estate Inspection.** The RAU will ensure that during the annual inspection, signing and boundary demarcation are correctly located and maintained in accordance with Byelaws and DIO mapping. This inspection is recorded in red ink on the MoD Form 906 / 906A / 906B under the auspices of the annual inspection.

249. **Works Technical Inspection.** On Contractor operated TERP Ranges the Contractor will maintain, centrally controlled, records of biennial technical inspections. The inspections are to be conducted in accordance with current MoD specifications. Additionally a Professional Appraisal is to be conducted periodically in accordance with ESTC Standard 6.

250. **Infrastructure and Plant Inspection.** On Contractor operated TERP Ranges the Contractor will maintain statutory inspection records in accordance with current legislation and associated regulations.

¹⁸ JSP418 MoD Corporate Environmental Protection Manual

Chapter 9

Defence Ranges Framework Competences

Introduction

251. This Defence Ranges Framework Competence (DRFC) replaces the Functional Competency Framework previously shown in JSP 403 Volume 1. In addition to evolution and safety the main drivers for the need to change the way in which we articulate, develop and use functional competences include:

- a. Functional Competence Review Report (May 2007) - led by Director Corporate Personnel (DCP) in particular the need to remove duplications across Functional Skills Frameworks, reduce the number of individual functional competences and better reflect the skills required by all those involved in MoD Ranges.
- b. Defence Skills Framework – a major project to bring the key skills used by the MoD civilian and service populations together in a single, cohesive format to allow the application and recording of skills in a consistent manner across Defence.
- c. Government Skills Agenda - to underpin all roles with reference to external standards and / or qualifications where possible so that they will be portable across Government Departments and the wider labour market.
- d. Where relevant, the competence of those working in DRFC shall be demonstrated against the standards of best practice set by the sector: these are the National Occupational Standards (NOS) for Explosives Substances and Articles (ESA).

252. Line Management are responsible for:

- a. Where relevant, ensuring competence can be demonstrated to at least that required in the ESA NOS.
- b. Where skill gaps exist ensure that positive action is taken to resolve them.
- c. Ensure appropriate records of competence are maintained.
- d. Provide reports to the DRSC on the progress of implementation of the DRFC and NOS.

253. This Framework is intended to cover the entire Defence Ranges Function. In addition it is recognised that there are specialists who sit outside the DRFC for the purposes of functional competences within the Framework, but who are closely associated with it and may wish to make use of the competences within this Framework.

254. DRFC Version 1 interfaces with the MoD Single Skills Framework, launched in December 2005; it is one of the functional competence frameworks that compliment the core competences. Functional competences are used along- side the core competences to support HR processes. In particular, they underpin training and development programmes, career planning and post filling in the various functional areas. Competences are the way in which we draw together the various elements of effective performance, knowledge, attitudes, skills and experience.

Single Skills Framework

Defence Ranges Framework Competences

2015



Brendan O'Callaghan
Sec DRSC
030 679 35339

Assessment Levels

Below are the definitions to be applied for the assessment levels within the Defence Ranges Framework Competences:

Development	Has been identified as a competence you do not currently have, but need to develop.
Awareness	<p>You are able to understand the key issues and their implications for the customer. You are able to ask relevant and constructive questions on the subject, is learning the skill and when facing something new or unusual has to refer to procedures, manuals, other team members for guidance.</p> <p>You display an understanding of what effective performance looks like and demonstrates some practical application at work.</p> <p>You may stay at this level for some time, training and other development activities will help, but it is experience of applying new skills that will develop your proficiency level.</p>
Practitioner	<p>You can cope with standard problems and common situations; you are competent at day-to-day application of the skill, and able to present concepts, information and solutions. You display a detailed knowledge of the subject and are capable of providing guidance and advice to others.</p> <p>At this level you can deal with most standard problems and will only need to refer to an expert for non-standard issues and problems. You will still be using a variety of development activities to increase your experience and proficiency (e.g. training courses, reading regulatory and reference material).</p>
Expert	<p>You can cope with unusual and non-standard problems and issues, are aware of alternative options and approaches to situations, can guide or advise others in this skill and are able to look ahead and anticipate. You display extensive practical experience and applied knowledge of the subject in a wide range of work situations.</p> <p>You are seen as a role model for others and people will seek your advice. You may be involved in coaching or mentoring activities related to this skill.</p> <p>Experience in the job, as well as using the skill and other development activities will develop your proficiency level.</p>

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DEFENCE RANGES FRAMEWORK COMPETENCE - COMPOSITION

The DRFC is made up of the following competences:

- **Competence 1 – Development and application of appropriate regulation through JSP403**

This competence covers knowledge and understanding of the wider perspective of Policy Legislation.

- **Competence 2 – Range Maintenance**

This competence covers the skills needed in Range Maintenance.

- **Competence 3 – Range Inspection**

This competence covers the skills needed by Range Inspectors.

- **Competence 4 – Range Compliance and Assurance**

This competence covers the regulatory framework in range design.

LEVELS OF COMPETENCE

Each competence comprises:

➤ **A competence title**

e.g. 'Works safely and effectively within a Safe System of Work'

➤ **The competence requirements – I need to:**

e.g. 'Produce a site specific risk assessment'

➤ **Indicator(s) of effective performance – I demonstrate effective performance by:**

e.g. 'Producing an effective risk assessment, identifying any associated risk and implementing adequate control measures'

➤ **Knowledge and understanding – I have to know and understand:**

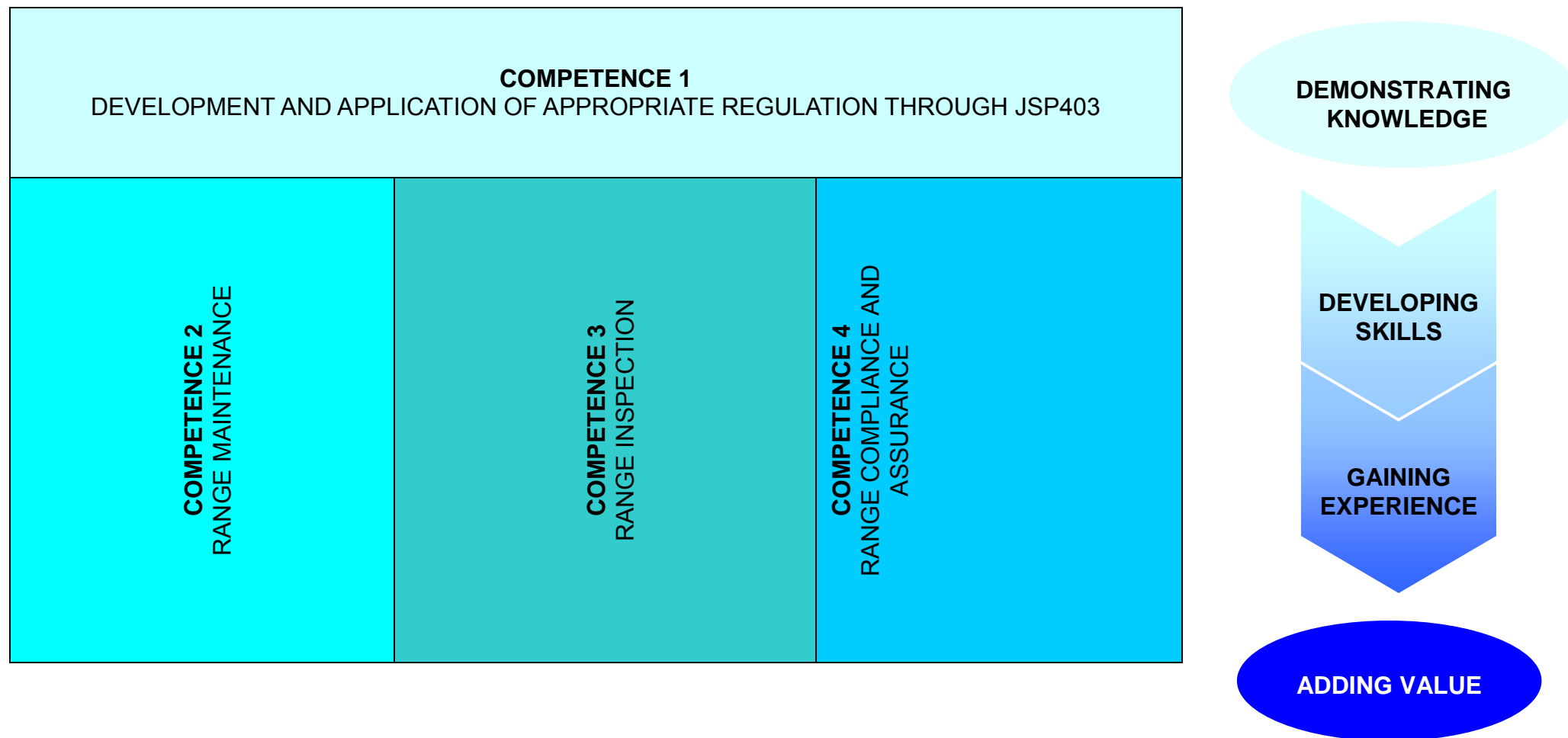
e.g. 'How to produce a site specific risk assessment identifying hazards, existing controls any acceptable risk and further additional controls'

➤ **Related policy and guidance**

e.g. JSPs etc

DEFENCE RANGES FRAMEWORK COMPETENCE MODEL

The way in which the competences relate to each other can be seen in the competence model below:



COMPETENCE 1

DEVELOPMENT AND APPLICATION OF APPROPRIATE REGULATION THROUGH JSP403

[Related ESA-NOS 2.1, 2.3, 2.3A, 2.4, 2.4A, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11, 9.2, 13.4, 13.9, 13.10, 13.16,]

WHAT DO I NEED TO KNOW?

I need to know:	I demonstrate effective performance by:	I have to know and understand:	Knowledge	Experience
(a)	(b)	(c)	(d)	(e)
<p>1.1 Works safely and effectively within a Safe System of Work for range staff and within the SST for Units or Service equivalent .</p>	<p>a. Production of a site specific risk assessment b. Produce site specific Range Standing Orders (Range SO) from the written risk assessment. c. Establish safe systems of work through the issue of standing and other orders. d. Identify when a specific risk assessment is needed. e. Identify when a specific risk assessment needs to be re-visited. f. Identify when and where Range SO require updating and direct the re-write. g. Works safely and effectively within the Range Management System and Safe System of Training.</p>	<ul style="list-style-type: none"> • Proven and demonstrated knowledge and experience of All Arms Live Firing activities within the Safe System of Training (SST). • How to produce a site specific risk assessment identifying hazards, existing controls (any acceptable risk) and further additional controls. • Understand the Safe Systems of work and how to implement them on Defence Ranges. • How to monitor the upkeep of a range file / folder containing copies of all relevant proceedings, certificates, licenses and reports relating to authorisation, use and inspections of the range. 		
<p>1.2 Demonstrates a knowledge and understanding of the principles of the safe operation of ranges.</p>	<p>a. Monitor the maintenance and good order of range facilities. b. Draw the attention of the appropriate organisation/individual to any faults or deficiencies that cannot be rectified within the resources of the Range Administering Unit (RAU).</p>	<ul style="list-style-type: none"> • How to keep a range presentable and maintaining it in a fit state for use. • Monitor use compliance of SST on the use of ranges. Monitor inspection programmes including the arrangements for works maintenance inspections by the appropriate works organisation and annual inspections. 		

<p>1.3 Demonstrates a thorough knowledge of hazards applicable to ranges and the controls required.</p>	<p>a. Demonstrate the ability to brief authorised personnel on the safe use of range facilities. b. Demonstrate the ability to brief visitors on safety related matter to their visit. c. Demonstrate the ability to advise potential users on the types of activities and facilities best suited to their training requirements. d. Demonstrate the ability to check that a Danger Area (DA) trace is correct, accurate and is contained within the area allocated to the user. e. Demonstrates knowledge of the hazards arising from operation and use of ranges and of their effects. f. Produce the measure necessary to mitigate risks on ranges As Low as Reasonably Practicable.</p>	<ul style="list-style-type: none"> • How to recognize potential safety hazards. • How to construct a Weapon Danger Area Template. • How to apply a Weapon Danger Area Template. • How to construct a Range Danger Area Trace. • How environmental issues, particularly pollution and waste management can affect control and management of ranges. • How to give authorised civilians a brief depending on the nature of the duties to be conducted and the potential risks to which they might be exposed. 		
<p>1.4 Ensures compliance with legislation, regulation, MoD policy and best practice.</p>	<p>a. Demonstrate an understanding of Byelaws that apply on a range. b. Demonstrate the ability to generate/activate a Notice to Airman (NOTAM) and an Airspace Coordination Notice (ACN). c. Demonstrate the ability to apply the appropriate access control measures for activities and events authorised to take place on a range. d. Demonstrate an awareness of the measures necessary to maintain surveillance of the Range Danger Area (RDA) including all points of access.</p>	<ul style="list-style-type: none"> • How Byelaws affect access to site specific range. • How to take reasonable and affordable precautions to safeguard the public. • How to produce and distribute a NOTAM. • How to produce and distribute a CAN. • How to comply with current Legislation, Regulations and MoD Policy. 		
<p>1.5 Contributes to effective regulation or legislation.</p>	<p>a. Demonstrates an understanding of compliance with Health & Safety at Work Act 1974. b. Produce Range Safety Policy Letters (RSPL) to include changes of regulation or legislation. Demonstrate and understanding MoD Range Safe System of Training. Issue</p>	<ul style="list-style-type: none"> • Understand how Health & Safety affect specific range facilities and operation. • How to implement MoD Safe System of work for the safe operation of MoD Ranges. 		

	higher policy direction and clearance of range safety matters.			
Total score for knowledge and experience				
		÷ 4	÷ 4	
Overall knowledge and experience ratings				
Total score (K + E)				
Level of Competence				
RELATED POLICY AND GUIDANCE				
JSP403 Vol 1 Handbook of Defence Range Safety, JSP375 MOD Health and Safety Handbook, JSP418 MoD Environmental Handbook Occupiers Liability Acts (OLA), Military Lands Acts (MLA), Armed Forces Act (AFA), Countryside Rights of Way Act (CROW), Land Reform (Scotland) Act (LR(S)A), Management of Health and Safety at Work Regulations. Control of Lead at Work Regulations. Infantry Training Vol IV, Ranges, Pamphlet No 21, Training Regulations for Armoured Fighting Vehicles, Infantry Weapon Systems and Pyrotechnics. JSP 898. Pamphlet 21c Regulations for the Planning, Conduct and Supervision of Firing and Training Cadets. Range Safety Notices (RSN), Range Advice Note (RAN).				

COMPETENCE 2

RANGE MAINTENANCE

[Related ESA-NOS 2.5A, 2.7, 2.8A, 2.9A, 2.10, 2.12A, 3.13, 3.20, 9.2, 12.10, 13.1, 13.4, 13.8, 13.9, 13.15]

WHAT DO I NEED TO KNOW?

I need to know:	I demonstrate effective performance by:	I have to know and understand:	Knowledge	Experience
(a)	(b)	(c)	(d)	(e)
2.1 How to provide the maintenance and good order of range facilities.	<p>a. Providing care and security of range equipment.</p> <p>b. Maintaining care and issuing of range stores.</p> <p>c. Correctly making up and repairing target screens and penetrable targets.</p> <p>d. Maintaining the bullet catcher in accordance with RAU instructions.</p> <p>e. Maintaining and minor repairs to the range structure, such as target pits and runs, firing points and shelters.</p> <p>f. Cleanliness of the range and range buildings.</p>	<ul style="list-style-type: none"> • Fire awareness. • COSHH awareness. • How to use Hythe Target Frames. • Maintenance of Targets. • General Safety Procedures. • Range Ground Maintenance. • Risk Assessment awareness. • Use PPE. • Working at Height Awareness. • Use of Petrol Strimmer. • Waste Management. • Safe use of Pesticides. • Use of Chain Saw. • Use of Basic Tools/Plant Equipment. 		
2.2 Management of Ranges.	<p>a. Maintaining the range booking diary and liaison with RAU regarding the range programme.</p> <p>b. Displaying red flags and red lamps as required by Range Orders.</p> <p>c. Preparing the range users' requirements.</p> <p>d. Instructing the range user on targets, control systems and local range procedures.</p> <p>e. Briefing the user on any special instructions for the range and any restrictions / limitations on movement caused by neighbouring ranges.</p> <p>f. Custody of Range Orders and the Range Log.</p>	<ul style="list-style-type: none"> • Range Standing Orders. • Use of the Occurrence Log. • Range Byelaws. • Range Details. • How to hand over a range to a RCO. • Take back the range from a RCO. • Manual Handling. 		

	<p>g. Handing over and taking back the range from the user.</p> <p>h. Maintain security at the end of the day's practice.</p>			
<p>2.3 Maintenance of the MOD Form 906 / 906A Range Log.</p>	<p>a. Holding and maintaining MoD Form 906/906A in accordance with the notes on page 1.</p> <p>b. Issue a copy of the log and Range Orders to the RCO taking over the range, ensuring that the RCO has completed it correctly before firing commences.</p> <p>c. On completion of firing, checking the RCO has completed the appropriate columns.</p> <p>d. Recording all faults, damages and range incidents and reporting them to the RAU.</p> <p>e. Ensuring the following is recorded in red by the examining/inspecting officer:</p> <p style="padding-left: 40px;">(1) The details of de-leading, deep cleaning, technical examinations and other maintenance task carried out by other agencies.</p> <p style="padding-left: 40px;">(2) Range Inspections.</p> <p>f. Recording all incidents involving safety, and the running or management of the range.</p>	<ul style="list-style-type: none"> • Use of MoD Form 906 / 906A. • Use of Air Incursions Report. <p>Holding and maintaining the Log with the notes on its first page.</p>		
<p>2.4 Additional Duties – Other Ranges.</p>	<p>a. ETR Ranges. Custody, upkeep and functionality of electric target equipment.</p> <p>b. Operate, handle and check the function of electrical equipment, winches, compressed air or batteries.</p> <p>c. Preparing target veneers.</p> <p>d. Testing and changing FET mechanisms, and recording servicing.</p> <p>e. User checks and maintenance of FET mechanisms.</p>	<ul style="list-style-type: none"> • Use of ETR Console. • How to change Fixed Electronic Targetry. • How to fit Target Extension Bars. • Use of Seebach Vacuum. • Greasing and non-technical servicing of fitted range equipment. 		

	<p>f. Care of the console building.</p> <p>g. Indoor Ranges. Show awareness of health risk posed by lead-in-air, lead dust, the risk of fire and explosion posed by un-burnt propellant and observe safe working practices.</p> <p>h. Operate installed ventilation equipment and carry out user servicing.</p> <p>i. Use cleaning methods and equipment detailed in JSP 403 Vol 2 Chapter 30 to prevent lead dust and unburnt propellant accumulating.</p>			
2.5 Operate and maintain Automatic Marking System / SARTS.	<p>a. Operate Automatic Marking System(AMS) / SART Procedures.</p> <p>b. Care, functionality and Calibration of AMS / SART.</p> <p>c. Show range users how to operate AMS / SART equipment.</p>	<ul style="list-style-type: none"> • How to use Individual Lane Monitor. TUF Box. • How to use Central Computer in Console. • When required, operate AMS / SART equipment. 		
2.6 Operate Specialist Targetry.	<p>a. Operate portable, cable-operated compressed air, electrical or radio controlled target equipment.</p> <p>b. Inspecting mechanisms on return for damage.</p> <p>c. Storing and charging batteries and air cylinders.</p> <p>d. Examining cable insulation and testing for continuity.</p> <p>e. Visual inspection and minor non-intrusive functional checks of winches, trolleys and tow cables.</p>	<ul style="list-style-type: none"> • Use of a generator. • Preparing equipment for use. 		
Total score for knowledge and experience				
			÷ 4	÷ 4
Overall knowledge and experience ratings				
Total score (K + E)				
Level of Competence				

RELATED POLICY AND GUIDANCE

JSP403 Volume 1 Handbook of Defence Ranges Safety, Control of Lead at Work Regulations. BS 7671 Requirements for Electrical Installations. JSP375 Volume 3

COMPETENCE 3

RANGE INSPECTION

[Related ESA-NOS 2.3A, 2.4, 2.4A, 2.5A, 2.7, 2.8, 2.8A, 2.10, 2.12A, 2.13, 2.14, 4.14, 7.14, 9.2, 9.3, 13.4, 13.8, 13.9]

WHAT DO I NEED TO KNOW?

I need to know:	I demonstrate effective performance by:	I have to know and understand:	Knowledge	Experience
(a)	(b)	(c)	(d)	(e)
<p>3.1 Demonstrates knowledge of JSP403, MoD training publications and single service documentation associated with ranges.</p>	<p>a. Know the procedure for siting, constructing and accepting a range b. Able to locate the criteria and specifications applicable to design and construct the range. c. Know the national and international procedures for the notification and promulgation of air and sea danger areas. d. Able to check that the written risk assessment process exists in respect of the range. e. Explain current MoD policy regarding range authorisation and use. f. Know the functions and responsibilities of range works organisation in respect of mandatory inspections of the range.</p>	<ul style="list-style-type: none"> • Application of all direct and indirect fire weapon systems in a military environment based on previous teeth-arm service. • JSP403 Vols 1-4. • Pamphlet 21. • Other Arms and Services' equivalents of Pamphlet 21. • Aeronautical Information Distribution Unit (AIDU) procedures and arrangements for notifying Range Air Danger areas. • Currently used risk assessment formats in JSP375 and Pamphlet 21. • For Inspectors of overseas ranges. <p>Understanding of international diplomatic and International Civil Aviation Organisation (ICAO) procedures, roles of Embassies, High Commissions, Defence Attaches and Advisers and FCO / MoD International branches.</p>		
<p>3.2 Able to identify, understand and explain the documentation associated with Ranges.</p>	<p>a. Check the application, use and management of Range Orders. b. Check the Proceedings of a Board of Officers for the range(s). c. Know the methodology for initiating and applying the MoD Form 904 – Range Authorisation Certificate. d. Know the methodology for initiating and applying the MoD Form 905 – Range Safety Certificate. e. Explain the reasons for displaying a valid MoD Form 905 at a range.</p>	<ul style="list-style-type: none"> • Correct use of all MoD forms associated with ranges and their management / retention in accordance with JSP403. • Required contents of Range Administering Units' (RAUs') range files. • What constitutes sensible content of range orders for a given range. • Scope and content of DIO SOIs and DIO Range management. • Scope and role of DIO in Range management • Full understanding of Reserve Forces and Cadets (RFCA) Association, command structure, 		

	<p>f. Know the purpose and use of MoD Forms 906, 906A & 906B Range Log.</p> <p>g. Apply and use MoD Form 907A annual inspection.</p> <p>h. Apply and use the MoD Form 907A independent inspection forms on a range.</p> <p>i. Explain the purpose of and procedure for using and retaining the MoD Form 907 – Monthly Inspection Form (or the locally produced alternative).</p> <p>j. Explain range dispensation and approved status methodology and application.</p> <p>k. Locate and interpret the regulations that allow other services, MoD Agencies, Civil Police, Civilian clubs, etc to use the range.</p>	<p>procedures and regulations.</p> <ul style="list-style-type: none"> • System for, Role and application of ByeLaws. 		
<p>3.3 Know the requirements and responsibilities for administering MoD Ranges.</p>	<p>a. Know the responsibilities of the RAU and DIO in respect of MoD Ranges.</p> <p>b. Conduct a review of Range Orders.</p> <p>c. Check that procedures are in place for Range Orders to be made available to all RCO's on the range.</p> <p>d. Able to identify that Range Orders include all aspects of range management required by JSP403 and outlined in the MoD Form 907A series.</p> <p>e. Identify the communications requirements, internal and external, necessary to maintain the safety of the range.</p> <p>f. Know the responsibilities of Range Wardens.</p> <p>g. Able to assess whether or not the range complies with pollution control measures in JSP403.</p> <p>h. Know the requirements for accident reporting and investigation.</p>	<ul style="list-style-type: none"> • JSP403 Vols 1-4. • Pamphlet 21 and other arms and services equivalents. • JSP 375 – Pollution Control Measures. • DIO SOIs • DIO Range Inspection Guide. • LFSO 3216. • LFSO 3207. 		

<p>3.4 Locate, interpret and verify compliance with MoD policy and procedures for effective control of ranges and access onto them.</p>	<p>a. Know the principles for planning and controlling Live Firing Tactical Training (LFTT). b. Verify the procedure that ensures only authorised or qualified personnel are handed control of the range. c. Explain how MoD Form 906, 906A and 906B is used to control the range. d. Know the purpose and scope of the MoD range safety inspection system. e. Know the purpose and scope of monthly inspections. f. Know the purpose and scope of annual inspections. g. Know the purpose and scope of independent inspections. h. Locate and interpret MoD policy for controlling access to MoD Ranges. i. Locate and interpret MoD policy, standards and best practice guidance on signs, notices, fencing, flags, lights and access points. j. Determine and verify the requirements for signs, notices, fencing, flags, lights and access points on the range. k. Explain the safety information required on range maps.</p>	<ul style="list-style-type: none"> • See 4.3 Column (c) below. • System for, Role and application of ByeLaws. 		
<p>3.5 Able to locate, interpret and verify design and construction requirements and determine the need for and adequacy of maintenance.</p>	<p>a. Able to check that constructed components conform to approved design. b. Know the responsibilities for maintenance work, its frequency and standards. c. Know where to find design, construction and maintenance criteria for the range. d. Know how to measure compliance with criteria for NDA and LDA ranges. e. Able to check that maintenance work is timely and satisfactory. f. Know the pollution control measures required for the range and how they should be applied.</p>	<ul style="list-style-type: none"> • JSP403 Vol 2. • Pamphlet 21 and other arms and services equivalents. • DIO SOIs. • DIO works Inspection Guide. • JSP 375 – Pollution Control measures. 		

Total score for knowledge and experience		
	÷ 4	÷ 4
Overall knowledge and experience ratings		
Total score (K + E)		
Level of Competence		
RELATED POLICY AND GUIDANCE		
JSP403 Vol 2, Pamphlet No 21, DIO SOI, DIO Works Inspection Guide, JSP375- Pollution Control Measures		

COMPETENCE 4

RANGE COMPLIANCE AND ASSURANCE

[Related ESA-NOS 1.3, 1.4, 1.5, 1.10, 1.11, 1.13, 2.1, 2.3, 2.23A, 2.4, 2.4A, 2.6,2.7, 2.8, 2.9, 2.9A, 9.1, 9.3, 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.8, 13.8.1, 13.9.2, 13.9, 13.10, 13.10.2]

WHAT DO I NEED TO KNOW?

I need to know:	I demonstrate effective performance by:	I have to know and understand:	Knowledge	Experience
(a)	(b)	(c)	(d)	(e)
4.1 Key references relating to ranges.	a. Knowledge of JS 403 Vol 2 and Pam 21, OSP, Pam 4, Pam 19 Range Orders.	<ul style="list-style-type: none"> How and why ranges are designed and constructed the way they are. 		
4.2 Key references relating to ranges and UK legislation in all aspects of SST & SSW.	a. Describing how each reference influences range safety. b. Provide comment on the development of JSP403 Vol 2 in terms of accuracy.	<ul style="list-style-type: none"> Detailed understanding of JSP403 Vol 2 and how other references influence range safety. Impact of Construction (Design & Management) Regulations CDM. 		
4.3 UK and International range safety policies.	a. Production of UK range safety standards including international range safety best practices where applicable.	<ul style="list-style-type: none"> UK standards for all aspects of range design in terms of structure, environmental and ballistic performance. STANAG 2401, ARSP 1 Vol 1 & 2. 		
4.4 The basic Safe System for Ranges or Service equivalent.	a. Describe in outline: <ol style="list-style-type: none"> (1) Safe Place (2) Safe People (3) Safe Practice (4) Safe Equipment 	<ul style="list-style-type: none"> The influence each has on range safety and safe ranges. 		

4.5 Responsibilities within the MoD for the delivery of the Safe System.	a. Describing where responsibilities lies across the MoD TLBs.	<ul style="list-style-type: none"> • DEC, PT, SME, Lead Arm, Lead Service. 		
4.6 Safe Place- Assessing Risk and advising RAO & RAU.	a. Understanding the implications of non compliance and describing implications.	<ul style="list-style-type: none"> • MoD Policy on what makes and fit for purpose, deterministic and probabilistic risk, societal risk. • Relevant building, structure and infrastructure standards. 		
4.7 Safe Place – interpreting compliance data and advising RAO & RAU.	a. Producing compliance data against range design use and providing clear technical reports on solutions to non compliance	<ul style="list-style-type: none"> • Primary compliance factors for each range type. 		
4.8 Role of organisations that effect range safety.	a. Be aware of: <ol style="list-style-type: none"> (1) Ministerial responsibilities (2) DSA (3) DEC (4) DE&S (PT) 	<ul style="list-style-type: none"> • Understand how these bodies impact ranges. 		
4.9 Role of other organisations that effect range safety.	a. DRSC b. DRSCWG c. TWG d. DSA e. RSIT f. RAO g. RAU h. CESO i. SMO	<ul style="list-style-type: none"> • Explain the function of each. 		

4.10 Role of other Government and National bodies that affect ranges.	a. Legislation. b. HSE. c. Environmental Agency.. d. Byelaws	<ul style="list-style-type: none"> • Understand the implications and how they influence ranges. 		
4.11 Ballistic Principles that affect the safety of a range.	a. Demonstrate a clear understanding of: (1) ME / MV. (2) Trajectory. (3) Line of Fire. (4) Cone of Fire. (5) Penetration. (6) Ricochet. (7) Backsplash	<ul style="list-style-type: none"> • How each element can influence the safety of a range and how to resolve compliance issues. 		
4.12 Types of ranges and how they are used and compliance.	a. Identify and determine compliance of: (1) Indoor Types (2) Tube (3) Barrack (4) NDA (5) LDA (6) ETR (7) IBSR (8) MMTR (9) Grenade/Grenade Launcher (10) FIBUA (11) LFTTA (12) Shoot Houses	<ul style="list-style-type: none"> • Understand how and why each range type is fit for purpose. 		
4.13 Survey Techniques Total Station and GPS.	a. Use each type of survey equipment with confidence.	<ul style="list-style-type: none"> • Understand the principles and the importance of demonstrating confidence in data collected. 		
4.14 Collect and store range survey data.	a. Undertake detailed survey of each range type, store data accurately for retrieval.	<ul style="list-style-type: none"> • Know for each type of survey what data is needed. • Compliance requirements. • Templating. • WDALab. 		

4.15 Convert and prepare data for AutoCAD.	a. Use specialist survey software. b. To convert survey data for use in AUTOCAD.	<ul style="list-style-type: none"> Understand how data is collected. Converted and used. 		
4.16 Map overlay production and development.	a. Prepare and develop map overlay information.	<ul style="list-style-type: none"> Understand how paper and digital mapping is developed and produced. Know what information is required to be over-layed and why. 		
4.17 Liaison with map agencies.	a. Maintain clear links with land. Sea and air agencies.	<ul style="list-style-type: none"> Understand how other agencies impact on MoD mapping. 		
4.18 Use paper and digital mapping.	a. Read and interpret paper and digital mapping products, add into AutoCAD using geo-referencing process.	<ul style="list-style-type: none"> Know and understand grid references. Longitude and Latitude. Map projection systems. 		
4.19 CAD Software user.	a. Use AutoCAD to produce accurate technical drawings using survey data and geo-referencing mapping to it.	<ul style="list-style-type: none"> Know and understand AutoCAD products. 		
4.20 CAD Advance user.	a. Develop unit capability with data handling and CAD capability.	<ul style="list-style-type: none"> Current versions and capability of CAD software. 		
Total score for knowledge and experience				
			÷ 4	÷ 4
Overall knowledge and experience ratings				
Total score (K + E)				
Level of Competence				

RELATED POLICY AND GUIDANCE

JSP403 Vol 1 Handbook of Defence Range Safety, JSP 403 Vol 2, JSP375 MoD Health and Safety Handbook, JSP 418 MoD Environmental Handbook Occupiers Liability Acts (OLA), Military Lands Acts (MLA), Armed Forces Act (AFA), Countryside Rights of Way Act (CROW), Land Reform (Scotland) Act (LR(S)A), Management of Health and Safety at Work Regulations. Control of Lead at Work Regulations. Infantry Training Vol IV, Ranges, Pamphlet No 21, Regulations for Training with Armoured Fighting Vehicles, Infantry Weapon Systems and Pyrotechnics. JSP898. Construction (Design and Management) Regulations.

USING THE DEFENCE RANGES FRAMEWORK COMPETENCE

The DRFC has been designed to help you identify which skills you already possess, where you need to develop skills and at which level in order to progress.

The Core Competences have four levels of assessment. These enable you to record the level of proficiency that you have and enable line managers to specify the required level of proficiency for a post. The four levels are:

Level 0	Has been identified as a competence you do not currently have, but need to develop.
Level I	Displays understanding of what effective performance looks like. Demonstrates some practical application at work.
Level II	Displays detailed knowledge and understanding and is capable of providing advice/guidance to others. Demonstrates practical application in a range of work situations.
Level III	Displays extensive knowledge and understanding and is seen as a role model for others. Demonstrates consistent practical application in a wide range of work situations.

THE KNOWLEDGE AND EXPERIENCE SELF-ASSESSMENT MATRIX

The Knowledge and Experience Self-Assessment Matrix has been developed to enable you to assess your level of proficiency against the functional competences articulated in the **Defence Ranges Framework Competence**. It introduces an element of objectivity into what can be a very subjective process; by measuring your current skills against a set of pre-determined criteria you will be better placed to identify where your functional development needs lie.

USING THE KNOWLEDGE AND EXPERIENCE SELF-ASSESSMENT MATRIX

You can use the Knowledge and Experience Self-Assessment Matrix to assess your level of proficiency against all of the functional competences articulated in the **Defence Ranges Framework Competence** or against those specified by your Line Manager in your Post Profile.

The self-assessment can be undertaken at any time however, **as a minimum** you should undertake the self-assessment at the following times:

- At the beginning of the reporting year;
- To support the Development Review at the half-year point;
- When applying for a new post.

THE KNOWLEDGE AND EXPERIENCE SELF-ASSESSMENT MATRIX - COMPETENCE INDICATOR SCORING MATRIX

The degree of proficiency is defined by general descriptions of knowledge and experience evaluated against a **scale of 0 – 6**.

SCORE	KNOWLEDGE
0	None.
1	Has an awareness of the competence.
2	Has a basic understanding of the competence.
3	Has a satisfactory understanding of the competence.
4	Has a broad understanding of the competence and can explain it to others.
5	Has a good understanding of the competence and can supervise others in its application.
6	Has a comprehensive understanding of all aspects of the competence and is recognised as the 'go to' person in this area.

SCORE	EXPERIENCE
0	None.
1	Has used the competence under guidance.
2	Has used the competence independently in routine situations.
3	Has used the competence independently in a range of situations and is starting to advise and guide others.
4	Has used the competence independently in a range of situations and routinely advises and guides others.
5	Has guided and facilitated others in practising this competence in a wide range of situations.
6	Has guided and facilitated others in all aspects of this competence in a number of highly complex situations and is recognised as the 'go to' person in this area.

A defined range of scores for each competence, based on the assessment of knowledge and experience against this scale, for each **Level of Competence**, 0-I-II-III, has been determined and is shown in the table below:

SCORING RANGES FOR LEVELS OF COMPETENCE

K 0 With E 0	Overall Score (K+E) 0	Level 0 Has been identified as a competence you do not currently have, but need to develop.
K 1-3 with E 0-2	Overall Score (K+E) 1 - 5	Level I Displays understanding of what effective performance looks like. Demonstrates some practical application at work.
K 3-5 with E 2-5	Overall Score (K+E) 5 - 10	Level II Displays detailed knowledge and understanding and is capable of providing advice/guidance to others. Demonstrates practical application in a range of work situations.
K 5-6 with E 5-6	Overall Score (K+E) 10 - 12	Level III Displays extensive knowledge and understanding and is seen as role model for others. Demonstrates consistent practical application in a wide range of work situations.

Knowledge and experience requirements become deeper (from knowing the facts to developing the ability to apply them in the workplace) and broader (in terms of complexity of the situation or across a range of posts in different business units) as you progress from Level 0 to Level III.

The table below shows the relationship between the scores required in a particular competence and the **Level of Competence** used within the **Defence Ranges Safety Framework Competence**.

OVERALL SCORE												
0	1	2	3	4	5	6	7	8	9	10	11	12
Level 0												
	Level I											
					Level II							
										Level III		

COMPLETING THE KNOWLEDGE AND EXPERIENCE SELF-ASSESSMENT MATRIX

Each competence is comprised of one or more broad elements referred to as ‘**Requirements**’; these are designated 1.1, 1.2, etc.

1. Familiarise yourself with the competences as detailed in the **Defence Ranges Framework Competence**.
2. Familiarise yourself with the scoring criteria as detailed in the Competence Indicator Scoring Matrix.
3. Go to the first competence to be assessed.
4. For each requirement of the competence (2.1, 2.2 etc), assess yourself for both knowledge and experience on a scale of 0 – 6, using the Competence Indicator Scoring Matrix. Record your score in the appropriate column (K and E).
5. Once you have assessed all competence elements, you should add up the scores in each column and enter the totals in the appropriate column (K and E).
6. Calculate your **overall knowledge and experience ratings** by dividing the total scores by the number of competence elements (see worked example overleaf). Your results may not always be a whole number – if this is the case they must be **rounded down** - e.g. **3.4** is rounded down to **3** and **7.9** is rounded down to **7**. Enter these scores in the appropriate box.
7. Referring to the **Scoring Ranges for Levels of Competence** table, determine the Level of Competence to which your score equates. If your score falls within cross-over areas between Levels of Competence, your Line Manger should exercise their discretion in deciding which Level best reflects your status.
8. Repeat this process for each competence area to be assessed.

Once you have completed the assessment, you will have a clear picture of your score (in terms of knowledge and experience), and your overall proficiency rating for each competence in terms of the DRFC.

In order to identify where further development is required, you will be able to drill down into the detail for each competence, looking at your score for each separate requirement, thus making it possible to identify the gaps in your knowledge and experience for each competence. This will provide useful information for discussion with your Line Manager at personal development reviews for agreeing challenging opportunities in the workplace, training requirements or continuing professional development

WORKED EXAMPLE FOR COMPETENCE 4 – RANGE DESIGN COMPLIANCE AND ASSURANCE

COMPETENCE 4			
RANGE COMPLIANCE AND ASSURANCE			
[Related ESA-NOS 1.3, 1.4, 1.5, 1.10, 1.11, 1.13, 2.1, 2.3, 2.3A, 2.4, 2.4A, 2.6, 2.7, 2.8, 2.9A, 9.1, 9.3, 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.8, 13.8.1, 13.9.2, 13.9, 13.10, 13.10.1, 13.10.02]			
WHAT DO I NEED TO KNOW?			
Competence elements		K	E
4.1	Key references relating to ranges.	3	3
4.2	Key references relating to ranges and UK legislation in all aspects of SST & SSW	3	3
4.3	UK International ranges safety policies.	4	3
4.4	The basic Safe System for Ranges or Service equivalent	3	3
Total score for knowledge and experience		13	12
		÷4	÷4
Overall knowledge and experience ratings		3.25	3
Total score (K + E)		6.25	
Level of Competence		Level II	

FRAMEWORK COMPETENCE ALIGNMENT TABLE

The Functional Alignment table below provides an easy summary of the Defence Ranges Framework Competence Levels of Competence. It also provides an indication of the type of training and experience which may be relevant to each Level of Competence and details of the external vocational and professional qualifications that you might like to consider in terms of your development. None of the detail in the table is mandatory, however, staff are encouraged to avail themselves of the training necessary to close any identified skills gaps and to consider whether opting to pursue external qualifications will enable them to meet their longer term career or personal development needs.

Level	Meaning	Method of Assessment	Experience and training which may provide an indicator of competence		Qualifications
			Training	Experience	
0	Has been identified as a competence you do not currently have, but need to develop.				
I	Displays understanding of what effective performance looks like. Demonstrates some practical application at work.	Defence Ranges Framework Competence		<p>Has used the competence under guidance.</p> <p>Has used the competence independently in routine situations.</p>	
II	Displays detailed knowledge and understanding and is capable of providing advice/guidance to others. Demonstrates practical application in a	Defence Ranges Safety Competence Framework		<p>Has used the competence independently in routine situations.</p> <p>Has used the competence independently in a range of situations and is starting to advise and guide others.</p> <p>Has used the competence independently in a range of situations and routinely advises and guides others.</p>	

	range of work situations.			Has guided and facilitated others in practising this competence in a wide range of situations.	
III	Displays extensive knowledge and understanding and is seen as a role model for others. Demonstrates consistent practical application in a wide range of work situations.	Defence Ranges Safety Competence Framework		Has guided and facilitated others in practising this competence in a wide range of situations. Has guided and facilitated others in all aspects of this competence in a number of highly complex situations and is recognised as the 'go to' person in this area.	

ESA EVIDENCE COMMON PROCEDURES

SCOPE OF THIS GUIDANCE

The guidance that follows in this document is intended to amplify the requirements described by the National Occupational Standards in Explosive Substances and Articles (ESA) by explaining what types of evidence may be used to prove competence. This guidance is not intended to be prescriptive – candidates may be able to provide alternate forms of evidence that attest to their competence other than those listed. Evidence of competence in achieving the criteria provided by replication is only acceptable by exception and may be used only where indicated.

The contexts should normally be evidenced through the performance of the candidates work. Knowledge evidence is acceptable only where indicated. This booklet describes the evidence requirements that are common to all standards in the suite of Explosive Substances and Articles National Occupational Standards.

SAFETY MANAGEMENT AND RISK MANAGEMENT SYSTEMS

Many standards contain the terminology *safety management systems and risk management systems*. These terms are intended to be applied as follows:

- *Safety management systems* refer to the ongoing management of activities. It relates to the internal factors ie the organisation's safe system of work.
- *Risk management systems* refers to the planning of an activity. It relates to external and internal factors and the wider aspects of risk.

WIDELY APPLICABLE GENERIC EVIDENCE

Candidates working at each level are likely to hold a particular level of authority that should not be exceeded. The definitions of the candidates authority are likely to be described in documents such as job or role descriptions and licences to practise. Other useful documents such as induction and training records, extracts of appraisals reports and certificates of competence may also contribute to the evidence that attest to the candidates competence.

ABBREVIATIONS USED IN THE DRFC

ACOP	Approved Code of Practice	MLAGB	Muzzle Loaders Association Great Britain
ALARP	As Low As Reasonably Practicable	MoD	Ministry of Defence
ARA	Army Rifle Association	NDA	No Danger Area
AMS	Automatic Marking System	NOS	National Occupational Standard
CO	Commanding Officer	NOTAM	Notice to Airman
COSHH	Control of Substances Hazardous to Health	NRA	National Rifle Association
CPSA	Clay Pigeon Shooting Association	OIC	Officer in Charge
DIO	Defence Infrastructure Organisation	OTR	Operational Training Theatre
DRSC	Defence Range Safety Committee	PPE	Personal Protective Equipment
DRFC	Defence Range Framework Competences	PROM	Property Manager
DSA	Defence Safety Authority	PUS	Permanent Under Secretary
DIO	Defence Infrastructure Organisation	RAA	Range Allocating Authority
ESA	Explosives Substances & Articles	RAF	Royal Air Force
ETR	Electronic Target Range	RAU	Range Administering Unit
FDA	Full Danger Area	RAO	Range Authorising Officer
HIAT	Hazard Impact Area Trace	RCO	Range Conducting Officer
HQ LAND	Head Quarters Land Command	RO	Range Officer
HQ	Headquarters	RSIT	Range Safety Inspection Team
HSE	Health and Safety Executive	RSO	Range Safety Officer
HSW	Health and Safety at Work	SOR	Statement of Requirement
H & S	Health and Safety	SST	Safe System of Training
IRSI	Independent Range Safety Inspectors	SSW	Safe System of Work
ITT	Indoor Training Theatre	TCO	Trials Conducting Officer
ISW	Infantry Support Weapon	TERP	Test Evaluation, Research and Proof
LFMT	Live Firing Marksmanship Training	TSM	Trial Safety Manager
LTAR	Land Training Areas & Ranges	WDA	Weapon Danger Area
LUMAT	Limitations in the Use of Missiles and Ammunition at Training	WS	Weapon System