Defence
Safety Authority

DSA 03.OME Part 4 (JSP 498)- Defence Code of Practice (DCOP) and Guidance Notes – Defence Major Accident Control Regulations (MACR)

Defence OME Safety Regulator

DOSR

DSA VISION

Protecting Defence personnel and operational capability through effective and independent HS&EP regulation, assurance, enforcement and investigation.

PREFACE

AUTHORITY

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STATUS

2. This document:

   a. Is uncontrolled when printed.

   b. Will be updated as part of a continuous improvement programme but at least 12-monthly from the period of document issue date.

REQUESTS FOR CHANGE

3. Proposed changes, recommendations or amendments to DOSR Regulations and Guidance publications can be submitted by anyone using the DOME Request for Change Function (RFC) available for every Dome publication in the DOME library located **here** or by completing the Word version of the Change Proposal Form available from the DOME Library, see figure 1 below for the location.

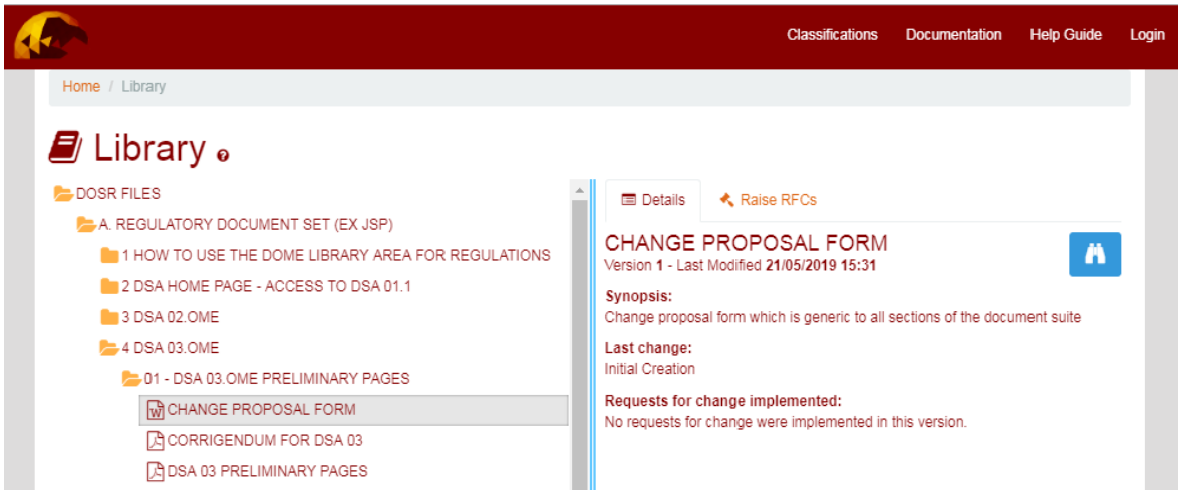

Figure 1. Change Proposal Form (Word version) Location

4. Any post and grammar change proposals can be approved or rejected by the DOSR PRG Authors without involvement of the associated Working Group.

5. Technical change proposals will need to be submitted to the associated Working Group for review and approval or rejection.

6. When incorporating changes care is to be taken to maintain coherence across regulations.

7. Changes effecting Risk to Life will be published immediately.

8. Other changes will be incorporated as part of routine reviews.

REVIEW PROCESS

9. The DOSR PRG team will ensure these OME Regulations remain fit for purpose by conducting reviews through the DOSR Governance Committees, involving all Stakeholders.

FURTHER ADVICE AND FEEDBACK

10. The document owner is the DOSR. For further information about any aspect of this document, or questions not answered within the subsequent sections, or to provide feedback on the content, contact:

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AMENDMENT RECORD

Version 1.0					
No	**Section**	**Para**	**Amendment Summary**	**Agreed**	**Date**

CHAPTER 8
MAPP COMPLETION GUIDANCE

CONTENTS

INTRODUCTION

1. The Major Accident Prevention Policy (MAPP) document is designed to be a user-friendly tool which enables the establishment to produce the necessary reports required by MACR in a straight forward and systematic way.
2. Each Lower Tier MACR establishment will receive a copy of the MAPP that will be partially completed, drawing upon the information already held by the MACR CA SG from notification.
3. The guidance in this chapter provides supporting information to enable a Major Accident Control Regulations (MACR) qualifying establishment at Lower Tier level to complete their MAPP. The format for a MAPP is the same across MoD. Note: Defence Munition sites are developing a Safety

Management tool – Assurance & Safety Case Environment (ASCE) to capture and display a wide range of safety related information. This tool may be used to generate the MAPP as it incorporates all the MACR requirements. The guidance below will still be applicable with respect to the required detail.

4. The word format has been developed as a “form” to enable the use of drop down boxes. Each form has to be protected in order to activate the drop down boxes. If any establishment identifies a requirement to alter the format the form will need to be un-protected. Please contact the MACR CA SG to discuss the issue. Note Section 10 is not protected to allow easy updates for the synopses which will be provided by the MACR CA SG. Any areas of concern or uncertainty should be brought to the attention of the MACR CA SG so that a decision can be made and the form or supporting information amended if necessary. Each box which requires the entry of information has either a drop down menu or a data entry field. To move to the next box press the Tab key.

Section 2

Table 2.1 - Establishment Address Information

Establishment Name - Insert establishment name e.g. RAF Nonsuch.
Budget Holder - Select top level budget holder from drop down list.
Service - Insert relevant Service.
MACR Contact Number – insert telephone number, this will normally be the telephone number for the MACR Co-ordinator for the establishment utilising the MoD dialling code.
Establishment Activity - Insert description of main activity at establishment – a brief description only is required e.g. for RAF station “Military Airfield”, for OFD “Bulk Fuel Installation”.
Fax Number - Insert Fax number for MACR Co-ordinator.
Establishment Address - Insert establishment address utilising the 7 boxes as required (note Country is selected via drop down box).
MACR Civilian Number - Insert telephone number using civilian code, this will normally be the MACR Co-ordinators number.
E-mail Address - Insert e-mail address – this could be MACR Co-ordinators e-mail unless a more generic e-mail address for the establishment is considered more appropriate.
Emergency Contact - Insert emergency contact name and telephone number – this will normally be contact number for Establishment Main Controller in **Emergency Control Centre**. This is intended for use during an emergency situation.
Local Authority - Insert name(s) of Local Authority which covers the establishment. For overseas establishments this could be the local government eg Sovereign Base Area for the MACR establishments in Cyprus.
Date Updated - Insert date at which last changes have been made to the MAPP or date which MAPP was last reviewed. Please note that MAPP should be reviewed on regular basis (at least annually) or at any significant change (see DSA 03.OME (JSP 498) chapter 2).

Section 3

Table 3.1 – Holdings of Dangerous Substances

Select the appropriate dangerous substance from the drop down box. Against each dangerous substance selected insert the maximum anticipated quantity. This is the best estimate of the maximum quantity it is anticipated could be held, looking forward over the next 5 years. It is NOT, the actual holdings at any one moment in time, or the average holdings, or necessarily the licensed limits. It could be the authorised limit from an explosives licence if holdings are anticipated to be up to the authorised limit within a 5 year period. For bulk fuel tanks the quantity will often be the licensed capacity of the tank even though the holdings may be at this level for short periods only. For explosives facilities a degree of judgement is required particularly where a facility may have differing quantities of explosives allowed dependant upon the aggregation rules. Note: explosives Hazard Divisions 1.1, 1.2 and 1.3 are aggregated together and have the same threshold level. Hazard Division 1.4 is shown separately.

Section 3

Table 3.2 Holdings of Named Substances

The table indicates if the named substances are present on the establishment. All that is required is a cross entered in the adjacent box. Clicking in the box will automatically insert a cross (a further click will deselect and therefore remove the cross).

Section 4

Table 4.1 Establishment Organisation

The first 4 lines of this table are already started. The posts shown are the minimum requirements. Each establishment should consider what posts undertake a significant role in the emergency response and additional lines should be completed for each position. Anyone who requires specific training to undertake their role in the emergency response is likely to be regarded as playing a significant role. Under the document reference column insert details of which document shows the responsibilities for each position.
All positions with a significant role to play should be subject to a competence assessment to determine what competencies are required in order to adequately discharge the required role. A training needs analysis should then be undertaken to determine what training is required for each position. The last column should show what the training needs are. These training needs may vary from particular training courses, participation in live exercises, participation in control post or table top exercises to simple briefing sheets.

Section 5

Table 5.1 Installations and Risk Assessments

Background - The start point for this section is the Hazard Survey which should have been completed to meet JSP 375. That should enable each establishment to identify all facilities / buildings on the establishment which hold (or are anticipated to hold) dangerous substances. Each facility / building can be considered as a hazardous installation. Whilst it is acceptable for each installation to be considered separately the workload for the establishment can be reduced by grouping facilities / building together where the hazard and the controls are the same. For instance an explosives storage area consisting of 12 buildings within a compound can be regarded as a single installation. Most controls relevant to that type of facility are contained within DSA03.OME (JSP 482). A group of bulk fuel tanks within an Oil Fuel Depot can be grouped, particularly if they share a common bunded area.

Name – insert into column the name of the single facility or the grouped facilities e.g. Northern ESA or Fuel Tanks 1 to 4.
Function – insert simple descriptor e.g. explosives storage, explosives processing, bulk fuel storage.
Location – Provide adequate information to determine the location on the establishment. This could be by using a grid system or OS map designators. If your hazardous installations map is colour coded this could be orange area on Hazardous Installations map. The intention is to describe the boundaries of the installation by whatever method is feasible at the establishment.
Hazard Description – provide description of the hazard(s) present (or anticipated will be present) at the installation as identified in the hazard survey.
Existing Controls – describe what controls are relevant to the installation. This can be generically such as reference to JSP's/ DSA publications or more specific such as reference to work instructions or individual elements of the DSA publications, or work instructions e.g. use of explosives licences.
Assessment Number – Insert relevant assessment number – this is probably the appropriate section from the Site Risk Assessment although could be an individual Risk Assessment following the standard JSP 375 format. Further more detailed information on the risk assessments relevant to each installation are shown in the next table. Provision has been made for up to 30 installations in the table which is expected to be sufficient for most establishments. If additional installations need to be catered for please contact the MACR CA SG to discuss options.

Section 5

Table 5.2 Installations and Risk Assessments (cont)

Installation – insert name of installation – this will link to any grouping shown in previous table.
Risk Assessment Number – insert risk assessment number – this could be a single risk assessment (particularly if MACR specific assessments have been carried out) or a number of assessments which collectively cover the hazards at each installation. Many establishments have made use of a suite of risk assessments which have been carried out to meet the requirements of JSP 375, either methodology is acceptable.
Identified Risks – List the risks identified as present at the installation i.e. those risks which the control measures are intended to mitigate.
Residual Risks – List those residual risks left after control measures have been applied. It is not feasible to reduce all risks to zero without removing the dangerous substances from the establishment. The risk can be reduced to an acceptable level. Because we are dealing with Major Accidents the consequence rating on the risk assessment proforma should be 3 or 4 utilising the JSP 375 criteria. This would normally result in a review of existing controls. It is accepted that from a MACR perspective there may be residual risks which are at an acceptable level and improving control measures may not be feasible without undue cost or restrictive practices which prejudice operational capability. Such situations should always be adequately documented.
Numbers of personnel at risk – numbers of people who could be immediately affected by the consequences of a Major Accident need to be identified. The criteria are the same for both top and lower tier establishments. For upper tier establishments this process identifies the Public Information Zone (PIZ) – see chapter 3 Annex A. For lower tier establishments the zone needs to be identified but is not declared to the local population under MACR. The zone broadly equates to the Purple Line (2 X IBD) for explosives facilities and 1000 metres from bulk fuel tanks. The numbers of people within those zones should be broken down into 3 categories; Service personnel – MoD employed civilians – other, which includes contractors and any members of the public. This information is valuable in assessing the potential size of an incident (deaths / casualties). The assessment information used to arrive at these figures should be recorded and be available during the MACR Assessment.

Section 6

Table 6.1 Major Accident Scenario's

For each installation insert details of the reasonably foreseeable Major Accident scenarios relevant to the installation. Sufficient detail is required in order to understand the feasible scenarios and the implications and therefore consequences of such an event occurring. See Chapter 2 Annex A for information on what needs to be covered by the scenario information. Note: A single entry may be made for a number of identical installations if the Major Accident scenarios and consequences are the same.

Section 7

Table 7.1 Emergency Plan Information

Insert into the table details of the On-Site plan. This could be single coherent plan or could be a series of plans covering different aspects e.g. Fire, Oil Spill Response, LOX incident etc.
Insert details of the Off-Site plan – this plan will be complied by the Local Authority. Although the requirement to have a bespoke Off-Site plan is normally related to a Upper Tier Establishment it is feasible that a Lower Tier Establishment may be covered either because the establishment has previously been a Upper Tier Establishment and the Local Authority decided to maintain the plan or the establishment will have been included within a generic Off-Site Plan which has been generated under the requirements of the Civil Contingencies Act.

Section 7

Table 7.2 – Exercise Information

Forward Exercise Plan Location – insert details of where the Forward Exercise Plan or plans are held. This could be in an appropriate file or on an Establishments Intranet.
Date of Last Exercise – insert date on which the last live exercise held in conjunction with the Local Authority and the Emergency Services was undertaken.
Post Exercise Reports – insert location where post exercise reports are stored (records need to be kept for a minimum of 3 years).

Section 8

Table 8.1 Environmental Information

Background - This section aims to capture environmental information about the establishment. All of the required information will be contained in the Environmental Risk Assessment (ERA) undertaken in line with Chapter 2.

ERA Reference – insert details of the ERA, this would normally be a single document but could include supporting documents such as land quality assessments or review sheets.
The environment description box should contain information on the main environmental factors relevant to the establishment particularly noting those aspects which show vulnerabilities to a Major Accident e.g. the presence of a significant aquifer under the establishment.
A range of types of protected habitats are shown, under the numbers column the quantity of each protected habitat should be shown. The intention is to highlight any particularly vulnerable areas with more details being provided within the ERA.

Section 9

Table 9.1 Management of Change

Management of Change arrangements – this table should provide guidance on where the systems are documented to control changes in the 3 categories shown.
Changes to Installations – this is mainly works actions where physical alterations are to be made to the infrastructure of buildings. Normally these are covered in JSP 434 or Defence Infrastructure Organisation RPC Instructions. They are often supplemented by specialist guidance e.g. Explosives facilities – DSA03.OME (JSP 482), Bulk Fuel Installations – JSP 317, JSP 375 Volume 3.
Changes to processes – this relates to changes in the work processes. These are normally governed by Safe Systems of Work (process documentation). Specialist JSP's or individual process instructions will usually cover how changes to the process are to be agreed and implemented: e.g. for explosives – DSA03.OME (JSP 482) / TIADS / MECPS / Approval to Process, Fuel processing – JSP 317, LOX – JSP 319.
Changes to Storage – Changes to storage methodologies will often be covered in centrally mandated documents e.g. Explosives – DSA03.OME (JSP 482) / Approval to Store and Handle Explosives, Fuels – JSP 317, LOX – JSP 319.

Section 9

Table 9.2

Monitoring Performance:
SMS - insert details of the documents explaining how SMS performance is monitored – may include general principles laid down in JSP 375. This will normally be the establishment's internal monitoring system e.g. 6 monthly Supervisory Inspections, H&S Advisor Inspections.
EMS – insert details of the documents explaining how the EMS performance is monitored – may include general principles laid down in JSP 418. Again this is likely to be the establishment's internal monitoring systems and will include the Environmental Protection Officers inspection system.

Audit & Review:
SMS – insert details of where SMS auditing can be found – principles are laid down in JSP 375 – this will normally be copies of audits carried out on an establishment by agencies outside of the establishment e.g. audits by CESO(RAF) on RAF Stations to 3 yearly programme.
EMS – insert details of where EMS auditing can be found – principles are laid down in JSP 418 – this will normally be copies of audits carried out on an establishment by agencies outside of the establishment e.g. audits by CESO(RAF) on RAF Stations to 3 yearly programme.