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2 Description of the POEMS

2.1 Overview

2.1.1 The POEMS is designed to assist with the management of the environmental performance and environmental liabilities of equipment and services throughout the acquisition process. It will assist IPTs and others, such as contractors, suppliers and advisors to:

- Identify adverse environmental impacts;
- Apply appropriate mitigation measures to reduce adverse environmental impacts to tolerable levels;
- Identify and manage any residual impacts; and
- Enhance potentially positive environmental impacts of acquisition projects.

2.1.2 The POEMS is based on a series of procedures which together create a conventional 'Plan-Do-Check-Act' approach to the management of environmental impacts.

2.2 POEMS Scope

2.2.1 The scope of the POEMS is limited to the work of IPTs in acquisition projects for equipment and services. The POEMS does not seek to directly manage operational use of equipment as this is the responsibility of the relevant service and is outside of the responsibility of IPTs. However, the output of the POEMS should assist the operational community in managing the environmental impacts arising from equipment use, and any operational mitigation determined by the IPT should be implemented.

2.2.2 The scope excludes procurements made outside the Defence Equipment & Support and its Agencies. The POEMS applies to all stages of the equipment or service life cycle, including any development or trials.

2.2.3 The POEMS is intended to deal with the potential environmental impacts of equipment irrespective of location, as most equipment has the potential to be deployed and used in many locations, although it can be used to deal with site or location specific assessments if necessary. The Customer, or other stakeholders can request the IPT to carry out additional site specific assessments. If such assessments are agreed the agreement should also cover how the assessment tasks will be resourced. However, if the IPT has not specifically been requested to carry out such assessments, these will be assumed to be the responsibility of other equipment system stakeholders, such as Defence Estates, although these may use data and information supplied by the IPT. An exception to this general principle is where the acquisition project is to include testing and trials as part of the Assessment or

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Demonstration Stages or where this will have a significant and direct impact upon the Defence Estate (ie procurement of land or construction or modification of accommodation or facilities).

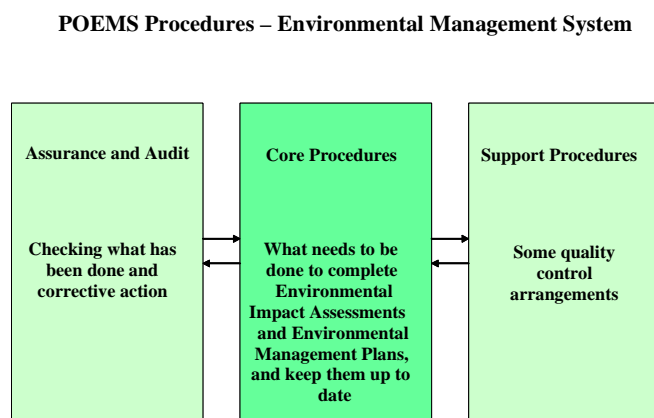
- 2.2.4 The main elements of the POEMS have been developed for a conventional development project employing CADMID. However, there are minor variations on how the POEMS is applied depending on the procurement strategy adopted.
- 2.2.5 The POEMS is designed to encourage a proportional response to the size and complexity and environmental challenge of projects. It follows the rationale of CADMID and is aligned with existing health and safety management practices and procedures, where practicable. The assessment elements of the POEMS have also been developed to be consistent with current process and procedures operated elsewhere within MOD, and to recognise the particular challenges that exist in environmental management.
- 2.2.6 The POEMS procedures are designed to be applied to each acquisition project. Where projects involve the procurement of systems within systems, the IPT or contractors/suppliers/advisors employed on their behalf to manage the project, should apply the procedures to each system or group of systems as appropriate. This will enable environmental issues to be more clearly identified and managed. Where an IPT or contractor employed on their behalf, is managing multiple projects with a high degree of commonality between them it is possible to implement the POEMS at an IPT level rather than a project level.

2.3 POEMS Structure

- 2.3.1 The procedures contained within the POEMS fall conveniently into three blocks, these are:

- The Core Procedures;
- The Support Procedures;
- The Assurance and Audit Procedures.

Figure 2.1 The three blocks of Procedures



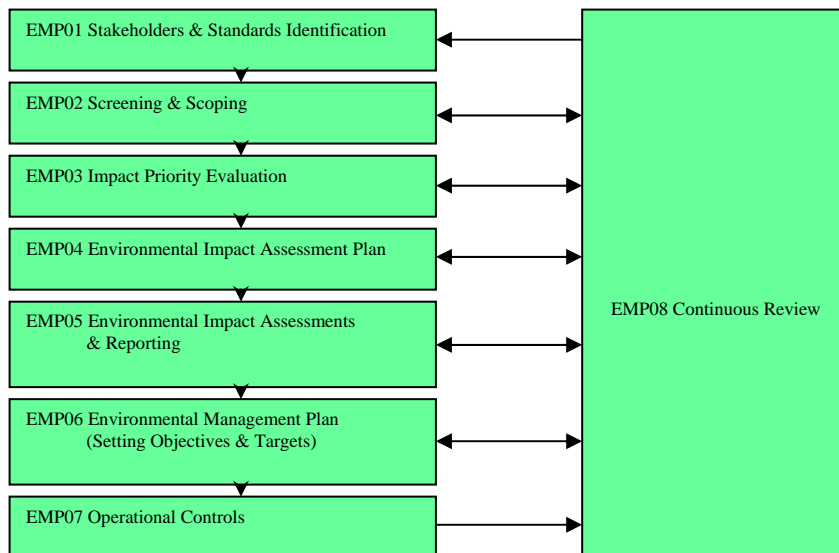
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2.3.2 The Core Procedures (see Figure 2.2 and Section 6) cover the main tasks and activities required by the POEMS and comprise eight separate procedures. In outline:

- Procedures EMP01, EMP02 and EMP03 broadly cover collection, collation and evaluation of relevant information;
- Procedures EMP04 and EMP05 deal with planning, undertaking and reporting environmental impact assessments;
- Procedures EMP06 and EMP07 cover the development of Environmental Management Plans;
- Procedure EMP08 covers review and continuous improvement of EMS outputs at specific trigger points.

Figure 2.2 The Core Procedures



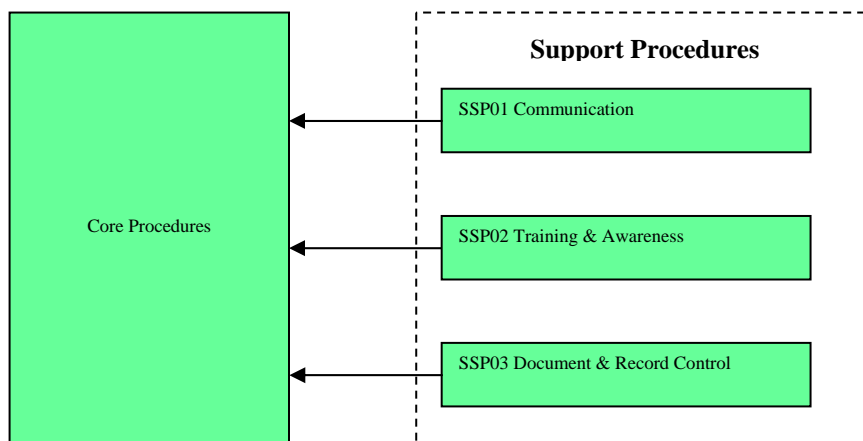
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2.3.3 The Support Procedures (See Figure 2.3 and Section 7) apply management control to a number of basic project functions that are required by the POEMS and POSMS. The functions or activities dealt with by the support procedures are:

- Procedure SSP01 – Communications;
- Procedure SSP02 - Training and Awareness;
- Procedure SSP03 - Document and Record Control;

Figure 2.3 The Support Procedures



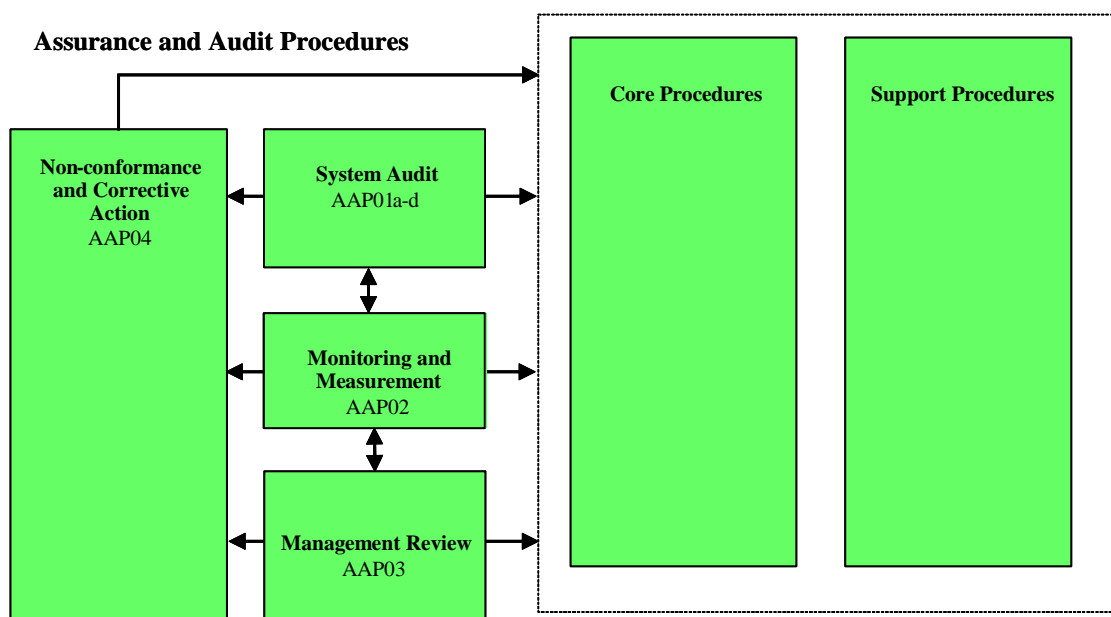
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2.3.4 The Assurance and Audit Procedures (See Figure 2.4 and Section 8) apply an assurance regime, on the IPT's POEMS and POSMS activities and outputs. The functions or activities dealt with by the assurance and audit procedures are:

- Procedure AAP01 - System Audit;
- Procedure AAP02 - Management Review;
- Procedure AAP03 - Non-conformance and Corrective Action.
- Procedure AAP04 - Monitoring and Measurement

Figure 2.4 The Assurance and Audit Procedures



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Figure 2.5 The Procedures

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2.3.5 A summary of the responsibilities, timing, inputs and outputs associated with each core procedure is in Table 6.2, Section 6. SSPs in Table 7.1, Section 7, AAPs in Table 8.1, Section 8.

2.4 POEMS Alignment

2.4.1 POEMS implements the requirements of both the MOD EMS and the Acquisition Environmental Management Policy (D/DSES/120/7/6 and DPA/D/DOSG/D/3/7 (March 2004), which are binding on all IPTs. The implementation of the POEMS has now been mandated by the letter dated 8 July 2005 'Introduction of Joint DPA and DLO Business Process for Safety and Environmental Management' (DPA ref D/DCE/112/28 and DLO ref DCDL/PO/12/1 (229/04)) jointly issued by the Deputy Chief Executive of DPA and the Deputy Chief of Defence Logistics.

2.4.2 Any IPT wishing to adopt a solution other than POEMS must obtain the specific agreement of ASEG before any planning or implementation action is undertaken.

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2.5 Similarities between the POSMS and POEMS

- 2.5.1 A number of the elements of the Project Oriented Safety Management System (POSMS) have equivalent or comparable elements in the POEMS. The main ones are shown in the table below.

Table 2.1 – Major similarities between POSMS and POEMS

| POSMS Element | POEMS Element |
|------------------------------------|---|
| Safety Committee | Environmental Committee |
| Hazard Identification and Analysis | Environmental Feature Matrix (un-scored) |
| Risk and ALARP Evaluation | Environmental Feature Matrix (scored) |
| Risk Estimation | Environmental Impact Assessment |
| Hazard Log | Environmental Feature Matrix |
| Safety Case | Environmental Case |
| Safety Case Reports | Output from POEMS Procedures |
| Safety Auditing | System and Equipment Performance Auditing |

- 2.5.2 In recent years many IPTs have carried out safety and environmental tasks together. Sometimes environmental issues are considered as a sub-set of safety, and IPTs produce an Environmental and Safety Case. For instance, at the Concept stage the IPT leader may elect to establish a combined Safety and Environmental Committee. It may also be possible to carry out combined safety and environmental auditing although this is dependent on the competencies of the auditors. However, if the degree of environmental challenge presented by the project is clearly understood and acknowledged, it may be prudent to address the environment and safety issues in discrete forums to ensure that each is fully and properly addressed.
- 2.5.3 The degree of ‘integration’ between safety and environment should be determined and reviewed by the IPT, in consultation with its stakeholders. If a combined Environmental and Safety Case is prepared, the environmental documentation should take the form of a separate Annex in the Case to allow easy extraction of environmental data in the future. The key point is that safety and environmental management can and should be aligned where there are demonstrable benefits to the project.

2.6 ISO 14001

- 2.6.1 Table 2.3 shows the main requirements of the International System Standard for Environmental Management, ISO 14001, and where elements of the MOD POEMS cover these requirements.

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Table 2.2 - Cross reference between ISO 14001:2004 requirements and MOD POEMS

| ISO 14001 Requirements | POEMS Element |
|---|---|
| Environmental policy (Clause 4.2) | MOD Safety and Environment Policy (The Management of Safety, Health and Environmental Protection in the Ministry of Defence – A Policy Statement by the Secretary of State for Defence (December 2006)) |
| Environmental aspects (Clause 4.3.1) | EMP02 - Screening and Scoping EMP03 - Impact Priority Evaluation EMP04 - Environmental Impact Assessment Plan EMP05 - Environmental Impact Assessment and Reporting |
| Legal and other requirements (Clause 4.3.2) | EMP01 - Stakeholders and Standards Identification JSP 418 (And other JSPs dealing with specific environmental requirements) |
| Objectives, targets and programme(s) (Clause 4.3.3) | EMP06 - Environmental Management Plan (Setting Objectives and Targets) |
| Resources, roles, responsibility and authority (Clause 4.4.1) | EMP01 - Stakeholders and Standards Identification |
| Competence, training and awareness (Clause 4.4.2) | SSP02 - Training and Awareness |
| Communication (Clause 4.4.3) | SSP01 - Communications |
| Documentation (Clause 4.4.4) | Environmental Case |
| Control of documents (Clause 4.4.5) | SSP03 - Document & Record Control EMP08 - Continuous Review |
| Operational control (Clause 4.4.6) | EMP07 - Operational Controls |
| Emergency preparedness and response (Clause 4.4.7) | EMP02 - Screening and Scoping EMP03 - Impact Priority Evaluation EMP04 - Environmental Impact Assessment Plan EMP05 - Environmental Impact Assessment and Reporting EMP07 - Operational Controls AAP02 - Monitoring and Measurement AAP04 - Non-conformance and Corrective Action |
| Monitoring and measurement (Clause 4.5.1) | AAP01 - System Audit AAP02 - Monitoring and Measurement |
| Evaluation of compliance (Clause 4.5.2) | AAP01 - System Audit AAP02 - Monitoring and Measurement |
| Nonconformity, corrective action and preventive action (Clause 4.5.3) | AAP04 - Non-conformance and Corrective Action |
| Control of records (Clause 4.5.4) | SSP03 - Document and Record Control |
| Internal audit (Clause 4.5.5) | AAP01 - System Audit AAP04 - Non-conformance and Corrective Action |
| Management review (Clause 4.6) | AAP03 - Management Review |

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