8.   ASSURANCE AND AUDIT PROCEDURES

Table 8.1 – POSMS and POEMS Assurance and Audit Procedures

Number	Procedure Type	Procedure Name
AAP01a	Assurance and Audit Procedures	System Audit (Audit Management and Initiation)
AAP01b	Assurance and Audit Procedures	System Audit (Audit Planning)
AAP01c	Assurance and Audit Procedures	System Audit (Audit Conduct)
AAP01d	Assurance and Audit Procedures	System Audit (Audit Reporting and Follow up)
AAP02	Assurance and Audit Procedures	Monitoring and Measurement
AAP03	Assurance and Audit Procedures	Management Review
AAP04	Assurance and Audit Procedures	Non-conformance and Corrective Action

Figure 8.1 The Assurance and Audit Procedures
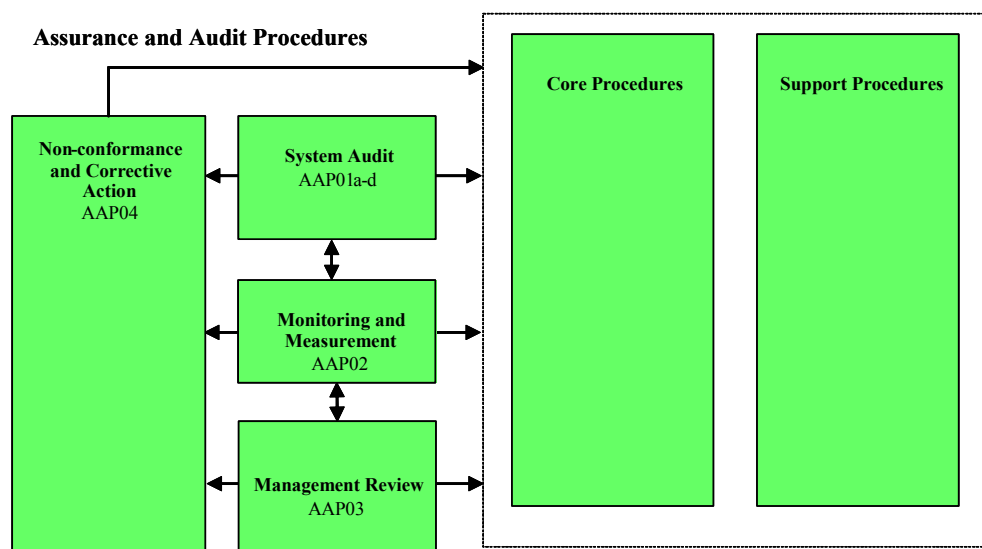
8.1   Procedure Structure

8.1.1   For ease of use, the procedures have the same format and structure. The key sections are:

8.2 Procedure Title

8.2.1 The title and reference code for the procedures are as follows:

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

8.2.2 The assurance and audit procedures are common to both the POEMS and POSMS.

8.3 Showing Conformance

8.3.1 This explains the three ways of showing conformance with the procedure.

8.4 Introduction

8.4.1 This is an overview of the procedure's purpose in the context of the overall management system.

8.5 Procedure Objectives

8.5.1 This section describes what is to be achieved by following and completing the procedures. Normally this section is in the form of a list of the objectives that need to be achieved in order to demonstrate conformance.

8.6 Responsibilities

8.6.1 This section states who will be accountable and responsible for proper completion of the procedure and who will actually carry out the actions within the procedure. In most cases the IPT will be responsible for procedure management while procedure completion could be carried out by a number of different parties as shown in the procedures.

8.7 When

8.7.1 This section indicates when the procedure is to be followed in terms of the SMS or EMS implementation.

8.8 Required Inputs

8.8.1 Most of the procedures require reference to be made to the outputs of previous procedures and information from other sources. This section lists the main reference material that will be needed in order to complete the procedure.

8.9 Required Outputs

8.9.1 This lists the outputs, for example completed forms, compiled information etc. It should be noted, however, that it is acceptable within POSMS and POEMS for an IPT to use alternative methods to those outlined in the procedures providing this is endorsed by ASEG.

8.10   Records and Project Documentation

8.10.1   This includes advice on where outputs of the procedures should be kept and recorded (usually in the Safety or Environmental Case, Case Reports, or related registers and logs) and where other project documentation may need to include some or all of the output information.

8.11   Description

8.11.1   This section makes up the bulk of the procedure and describes the steps and stages involved in completing the procedure. It includes advice and guidance on how to complete the procedure and when to use each of the associated forms or tools. It should be remembered that this part of the procedure is for guidance only so it is not mandatory for an IPT to follow it to the letter where they have made suitable and equivalent alternative arrangements. The key point is to achieve the required objectives, outputs and outcomes, and to ensure that alternative approaches are clearly documented and agreed.

8.12   Recommended Tools and Forms

8.12.1   Many of the procedures include tools or forms to assist IPTs to undertake the procedure or to record information produced. This section lists the forms that may be useful in completing the procedure. This can sometimes include forms associated with other procedures. Note that the use of the forms is not mandatory (see Required Outputs above) and that any alternative approaches used should be clearly documented and agreed.

8.13   Guidance

8.13.1   This final section provides guidance on other sources of advice. Also included here are some general comments on potential project risk that may arise if the procedure is not completed in an appropriate way or at an appropriate time.

8.14   Procedure Use

8.14.1   The IPT is responsible for managing the completion of the requirements of the Assurance and Audit procedures. The IPT is also likely to have a significant involvement in the practical application of the procedures. A number of other parties may also have significant roles in meeting the requirements of the procedures, these are detailed within the relevant procedures.

8.14.2   All procedures provide recommended guidance and/or forms to help the user to produce the desired output(s). The use of this guidance is not mandatory, as long as suitable alternative methodologies are used which achieve the desired objectives, as defined in the procedure and that are deemed by ASEG to be equivalent. Therefore three options exist when following the procedures, to demonstrate conformance:

- Follow the defined system procedure using the recommended guidance and tools, including allowed variations and options.

- Use an equivalent process and tool set generated elsewhere and document evidence of procedural equivalence.

- Use an equivalent bespoke process and tool set for the project and document evidence of procedural equivalence.

8.14.3   This is in contrast with the core procedures which have four options for showing conformance including one where the procedure is considered not relevant. However, the assurance and audit procedures will always be relevant and therefore need to be applied.

8.14.4   Table 8.2 overleaf shows a summary of the responsibilities, timing, inputs and outputs associated with each assurance and audit procedure.

8.15   Use of Assurance and Audit procedures outside POSMS and POEMS

8.15.1   The assurance and audit procedures have primarily been developed for use within POSMS and POEMS but may be used for other system audits if desired. To this end, the following sections have been designed so they may be used together as a stand-alone Assurance and Audit Manual:

- Section 8 of POSMS and POEMS – Assurance and Audit Procedures

- AAP01a-d

- AAP02

- AAP03

- AAP04

- Section 9 – Glossary

Table 8.2 – Summary of POSMS and POEMS Assurance and Audit Procedures

Procedure	When*	Input	Output **	Responsibility ***
AAP01a - System Audit (Audit Management and Initiation)	Concept	Environmental and Safety Case(s) including: • Results of previous audits (**Form AAP01d/F/01**); • Record Management Reviews (**Form AAP03/F/01**); • Record of Monitoring and Measurement (**Form AAP02/F/02**); • Environmental Management Plans (**Form EMP06/F/03**); • Safety Plans (outputs from SMP03) • Non-Conformance and Corrective Actions (**Form AAP04/F/01**); • Register of Stakeholder Requirements (**Form EMP01/F/01** and **SMP01/F/02**) • Register of Standards (**Form EMP01/F/02** and **SMP01/F03**) • List of operational controls (**Form EMP07/F/01** and outputs from SMP08) • Other POSMS outputs. Audit schedules produced by other parties where these cover auditing all or some of the elements of the SMS and EMS.	• **AAP01a/F/01** - Audit Schedule • **AAP01a/F/02** - Audit Details, Team Composition and Competence Record • **AAP01a/F/03** – Notification of Audit Letter	IPT, ASEG, supplier, or contractor.
AAP01b - System Audit (Audit Planning)	Concept	• Audit Question Toolset (available from ASEG); • **Form AAP01a/F/01** - Audit Schedule; • **Form AAP01a/F/02** - Audit Details, Team Composition and Competence Record Form; • Other documents relevant to the scope and objective of the audit (i.e. POEMS, POSMS); • IPT safety and environmental management system documents; and • **Form AAP01d/F/01** - Previous audit reports	• **Form AAP01b/F/01** - Audit Plan • **Form AAP01b/F/02** - Audit Pro-forma (partly complete)	IPT, ASEG, supplier, or contractor.

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AAP01c - System Audit (Audit Conduct)	Concept	• **Form AAP01b/F/01** - Audit Plan • **Form AAP01b/F/02** - Audit Pro-forma (partly complete) • Relevant IPT documentation; • **Form AAP04/F/01** – Non-conformance, Corrective and Preventive Action Form (If required). • **Form AAP01c/F/01** – Record of Audit Meeting.	• **AAP04/F/01** – Non-conformance and Corrective Action Form • **AAP01b/F/02** - Audit Pro-forma(s) – (Fully complete) • **Form AAP01c/F/01** – Record of Audit Meeting (completed for Opening Meeting); • **Form AAP01c/F/01** – Record of Audit Meeting (completed for Audit Team Meeting(s)); and • **Form AAP01c/F/01** – Record of Audit Meeting (completed for Closing Meeting).	IPT, ASEG, supplier, or contractor.
AAP01d - System Audit (Audit Reporting and Follow up)	Concept	• **Form AAP01b/F/01** - Audit Plan; • **Form AAP01b/F/02** - Audit Pro-forma(s); • **Form AAP04/F/01** - Non-conformance and Corrective Action Form(s), if relevant (partly complete). • IPT documentation relevant to the audit; • **Form AAP01c/F/01** - Audit meeting records	• **AAP01d/F/01** - Audit Report Template • **AAP01d/F/02** – Audit Report Summary • **AAP04/F/01** - Non-conformance and Corrective Action Record, if relevant – (fully complete)	IPT, ASEG, supplier, or contractor.
AAP02 – Monitoring and Measurement	Concept	• **Form EMP06/F/02, Form EMP06/F/03** - Environmental Management Plans and outputs from SMP03); • Operational controls (**Form EMP07/F/01** and outputs from SMP07); • **Form AAP03/F/01** - Non-conformance and corrective action records; • **Form AAP03/F/01** - Management Review Records; and • Performance data on equipment system and supporting activities.	• **AAP02/F/01** – Monitoring Schedule. • **AAP02/F/02** – Monitoring Data - Assessment Record.	IPT and supplier/contractor.

Procedure	When*	Input	Output **	Responsibility ***
AAP03 – Management Review	Concept	• EMS documents and records (Outputs of EMP01-EMP08). • SMS documents and records (Outputs of SMP01 – SMP13). • Results of internal and external SMS and EMS audits (AAP01). • Internal and external communications regarding the IPTs' SMS and EMS including suggestions for improvement (SSP01). • Internal and external communications regarding the equipment's safety and environmental performance including complaints (SSP01). • **Form AAP04/F/01** - Any non-conformance and corrective action reports raised • **Form AAP02/F/02** - Record of Monitoring Reviews • **Form AAP02/F/01** - **Previous** management review meeting minutes	• **AAP03/F/01** – Record of Management Review	IPT and supplier/contractor
AAP04 – Non-conformance and Corrective Action	Concept	• Results of internal and external audits • Internal and external communications regarding the IPT's safety and environmental management(s), including suggestions for improvement. (See SSP01) • Internal and external communications regarding the equipment's safety and environmental performance, including complaints. (See SSP01) • **AAP02/F/02** – Record of Monitoring Review; and • **Form AAP03/F/01**- Management Review Records.	• **AAP04/F/01** – Non-Conformance and Corrective Action Record	IPT, ASEG, supplier, or contractor.

* The outputs from all the procedure require periodic review and update through out the lifecycle of the project.
** Or equivalent actions and documentation that ASEG are satisfied achieves the same objectives.
*** The IPT or ASEG is responsible for managing the procedure completion. The column relates to who is or may be responsible for completing the procedure.

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8.16 System Audit Procedures AAP01

System Audit Structure

8.16.1 There are four System Audit procedures as follows:

- AAP01a - Audit Management and Initiation

- AAP01b - Audit Planning

- AAP01c - Audit Conduct

- AAP01d - Audit Reporting and Follow up

8.16.2 The System Audit procedures can be applied to the SMS or EMS at any time during its implementation, it is not necessary for the full system to be in place before planning and carrying out audits.

8.16.3 An IPT would be expected to have produced an audit schedule and audited each element of the SMS and EMS before Main Gate. Auditing will then continue throughout the life of the project(s).

8.16.4 These procedures have been based on the requirements of ISO 19011, ISO 14001, OHSAS 18001 standards and have been developed in line with other POEMS and POSMS procedures, and the various JSPs which cover system auditing.

8.16.5 The System Audit procedures are not intended to replace the audit sections of JSPs but to align with their requirements.

8.16.6 ASEG should be contacted if further advice or assistance is required on complying with these procedures.

8.16.7 If an IPT already has a project management system or procedures (eg ISO 9000) that cover system auditing these may be used in place of these POSMS and POEMS procedures so long as ASEG is satisfied they meet the same objectives.

8.16.8 Figure 8.2 below provides further details on each procedure's structure.

System Audit Purpose

8.16.9 The system audit procedures have been produced to ensure that the IPT's SMS and EMS are audited throughout the life of the project(s). The System Audit procedures specify how system audits should be completed, and how combined safety and environmental management system audits can be completed. The procedures should not be used in lieu of auditor training and therefore do not cover auditing techniques in detail.

System Audit Objectives

8.16.10 The objectives of undertaking system audits are to:

- Assess whether the IPT's SMS and EMS are operating as designed;

- Assess compliance of the SMS and EMS with the requirements of POSMS and POEMS;

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- Identify opportunities to improve the SMS and EMS;

- Identify opportunities to improve safety and environmental performance;

- Identify opportunities to raise awareness, training and competency of safety and environmental issues;

- Provide assurance of compliance with applicable safety and environmental legal and non-legal standards;

- Comply with Functional Safety Boards' Policy requirement for audits;

- Recognise good practice;

- Inform the Management Review process;

- Inform policy development; and

- Identify opportunities to improve POEMS/POSMS Manuals (applies to ASEG only).

System Audit Scope

8.16.11 At the present time POEMS and POSMS are to be used to establish project level EMSs and SMSs by acquisition IPTs within DE&S. All activities that are undertaken or managed by the IPT, and which have a bearing on safety and environmental performance of the capability being acquired, have the potential to come within the scope of the audit procedures.

8.16.12 Activities undertaken by parties other than the IPT, and which are not undertaken under the management responsibility of the IPT are currently outside the scope of these audit procedures, although the may come under other audit regimes.

8.16.13 However information from other audit regimes, focussed on issues such as equipment performance, will be of use to the IPT and should be logged through the POEMS and POSMS communications procedures; and may depending on their nature give rise to non-conformance and corrective action reports within POEMS and POSMS. In addition non-conformance and corrective action identified under the audit regime established by POEMS and POSMS may be need to be communicated to other parties, although the IPT may have no method of formally requiring the corrective action.

System Audit Responsibilities

8.16.14 Although the procedures have been produced primarily for use by IPTs they may also be used by ASEG to carry out audits on the SMS and EMS. In addition, other parties may also use these procedures for auditing all or parts of an IPTs SMS and EMS such as:

- Functional Safety Board Secretariats;

- DS&C;

- Third Parties invited by CDM;

- Independent Safety Auditors;

- MOD and TLB Internal Audit Functions;

- Equipment system contractor;

- Personnel seconded from another IPT;

- Equipment User;

- SME;

- Environmental and Safety Consultants.

8.16.15 Any third party using these procedures should note that they have primarily been written for use by IPTs and therefore may use terminology specific to IPTs. However, this should not preclude a third party from using the procedures.

8.16.16 Throughout the procedures the term 'Audit Client' has been used to describe the group, organisation or individual commissioning an audit as this may be distinct from the party carrying out the audit.

System Audit Reporting

8.16.17 The IPT should refer to its stakeholder forms (EMP01/F/01 and SMP01/F/02) to identify which stakeholders should receive a copy of the Audit Report. The following identifies some of the authorities or organisations that the IPT may decide to forward a copy of Audit Report:
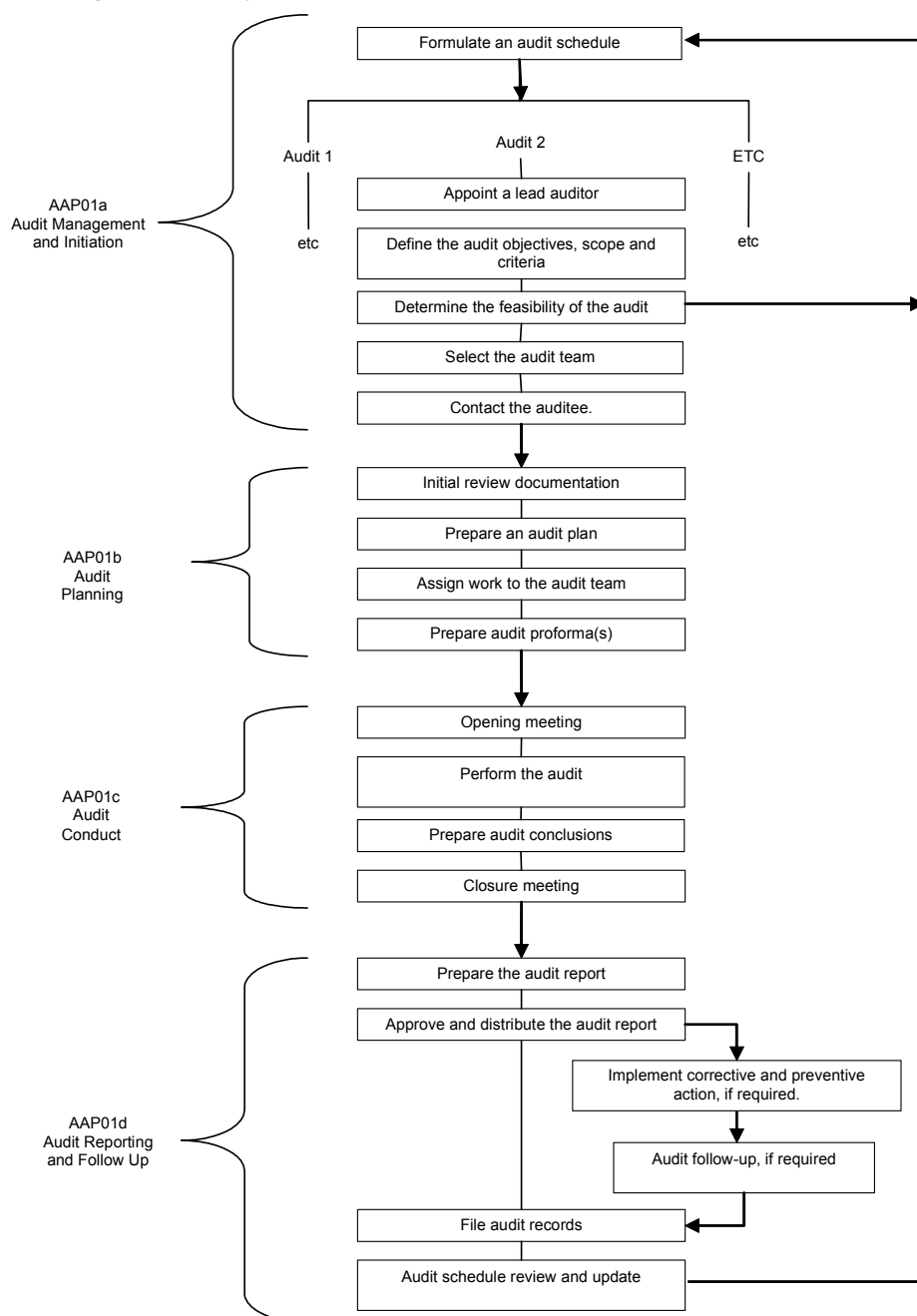
- The delegation chain PM, IPTL, CDM, SofS (via DESB) and DG Clusters;

- Other TLBs through Annual Report to DESB;

- 2* Directors and 1* Deputy Directors;

- Functional Safety Boards and Secretariats;

- Directorate of Performance and Analysis and Defence Audit Committee (through Functional Safety Boards);

- DS&C;

- Stakeholders (Equipment Capability Customer and Equipment User, DE, CESOs etc.) through Safety Committees;

- Other Government Departments (HSC, DEFRA, DTI etc.) through MOUs;

- Environment Agency for England and Wales;

- Scottish Environmental Protection Agency;

- Environment and Heritage Service for NI;

- General Public;

- ISAs and other Auditors;

- International Partners.

Figure 8.2 The System Audit Process

8.17   Monitoring and Measurement Procedure - AAP02

8.17.1   The monitoring and measurement procedure is structured around the completion of the following steps:

- Step 1: Identify elements to be monitored and reviewed

- Step 2: Produce a Monitoring Schedule

- Step 3: Produce measurement and calibration protocols

- Step 4: Collect monitoring data

- Step 5: Assess monitoring date

8.17.2   The purpose of the monitoring and measurement is to track safety and environmental performance. During the early stages of CADMID an IPT will concentrate on tracking progress in the implementation of EMS and SMS, and then as the EMS and SMS are implemented, and objectives, targets and operational controls are developed, an IPT will turn its attention to tracking the performance of these as well as other performance measurements. Monitoring and measurement will identify areas for improvement in addition to changes to keep the management systems on track.

8.17.3   The results of monitoring and measurement would feed into the management review procedure.

8.18   Management Review Procedure - AAP03

8.18.1   The management review procedure is structured around the completion of the following steps:

- Step 1: Assemble Management Review Team

- Step 2: Agree Frequency of Management Review

- Step 3: Gather Documents and Evidence for the Review

- Step 4: Perform and Record the Review

8.18.2   The purpose of the management review is to ensure that the SMS and EMS continue to be suitable, adequate and effective for the project they seek to manage. This review should be undertaken by senior managers and should not get involved in the details but rather, it should look at the 'big picture'. The review should identify areas for improvement in addition to changes to keep the systems on track.

8.18.3   The management review should cover all elements of the SMS and EMS. The IPT can choose whether to undertake the management review of the SMS and EMS separately or together. For example, if the IPT has a combined SMS and EMS it may be more efficient to combine the management review.

8.19 Non-Conformance and Corrective Action Procedure - AAP04

8.19.1 The management review procedure is structured around the completion of the following steps:

- Step 1: Identify non-conformance or observation

- Step 2: Investigate non-conformance or observation

- Step 3: Recommended corrective, preventive or improvement action

- Step 4: Decide action to be taken

- Step 5: Review and update or documentation

8.19.2 The purpose of the non-conformance and corrective action procedure is to provide a system for the identification, investigation and recording of non-conformances and observations and for the identification and implementation of appropriate corrective and preventive action. This is important as it allows the systems to be continually improved as a result of experience and past performance.

8.19.3 This procedure applies to all the elements of the SMS and EMS regardless of whether these are the responsibility of the IPT or a contractor.