

Table of Contents

Table of Contents	1
1. ASEMS Supporting Documentation	2
1.1. Introduction	2
1.2. S&E Guides	2
1.2.0.2. An Introduction to Environmental Management in the MOD Acquisition Process - The Green Book	2
1.2.0.3. An Introduction to System Safety Management in the MOD Acquisition Process - The White Book	2
1.2.1. An Introduction to Sustainable Procurement in DE&S Acquisition Processes	2
1.3. S&EP Leaflets	2
1.3.1. Superseded	2
1.4. S&E Bulletins (SEB's)	3
1.4.1. Extant	3
1.4.2. Archived	5
1.5. S&E Methodologies	7
1.5.1. The ALARP Journey	7
1.5.2. An accident model based on Systems Theory	7
1.5.3. Proportionality	7
1.6. Cassandra	7
1.6.1. How to set up a Hazard Log in Cassandra	7
1.7. POEMS Transition Documents	7

1. ASEMS Supporting Documentation

1.1. Introduction

1.1.0.1.

This section details additional material that, although not formally part of the ASEMS, together with some of the tools defined in the [ASEMS Toolkit](#) [1] will help in understanding systems safety and environmental management in general with specific reference to the UK MOD acquisition process.

1.2. S&E Guides

1.2.0.1.

The MOD issues 2 booklets as introductions to environmental and safety management in defence sector acquisition.

Known colloquially as the Green and White books they provide good awareness of the topics and guidance issued as part of the ASEMS.

1.2.0.2. An Introduction to Environmental Management in the MOD Acquisition Process - The Green Book

1.2.0.2.1.

The environmental performance of the Ministry of Defence (MOD) is determined to a significant extent by the nature of the equipment and materiel that it procures. Exercising effective control of equipment specification, design, through-life management and disposal throughout the acquisition process in order to minimise and mitigate any environmental impacts arising from the MOD's activities is therefore fundamental to MOD acquisition activities.

This booklet introduces the concepts, terms and activities of effective environmental management that are mandated within the MOD equipment acquisition process. It is intended to enable Delivery Teams and other MOD staff, especially those in Front Line Command and Operating Centres, to understand the main environmental issues and essential methodologies to control, minimise and mitigate environmental impacts arising from the MOD's procurement decisions and equipment through-life management.

This booklet also introduces and supports the Project Oriented Environmental Management System (POEMS) mandated for use by all Defence Equipment and Support (DE&S) Delivery Teams to establish their EMS and undertake equipment environmental impact assessments.

[An Introduction to Environmental Management in the MOD Acquisition Process](#) [2]

1.2.0.3. An Introduction to System Safety Management in the MOD Acquisition Process - The White Book

1.2.0.3.1.

Many of the tasks which MOD undertakes would be considered inherently dangerous in the non-military environment, with increasingly complex systems employed in sometimes hostile environments. In order to ensure the safety of MOD employees and others affected by its activities, it is essential that safety is robustly managed; there must be a clear understanding of all associated risks, continuous vigilance to identify emergent issues and effective processes to manage the risks in an enduring manner. Through the adoption of such an approach, MOD builds on a history of generally good safety practice, supplemented with good practice from other organisations, to ensure that safety is successfully managed and continuously improved in all areas of its responsibility.

The management of safety applies throughout the life of a project, from Concept through to Disposal. Safety risks must be considered both for peacetime and for conflict, although higher risks may be considered tolerable in times of war

This booklet (in two parts) is an introduction to system safety management concepts, terms and activities. It is intended to allow MOD and contractor personnel to understand quickly how safety issues affect them. The contents of this booklet are intended for information and must therefore not be used as the basis for any contract or instruction to contractors.

[An Introduction to Systems Safety Management in the MOD Part 1](#) [3]

[An Introduction to Systems Safety Management in the MOD Part 2](#) [4]

1.2.1. An Introduction to Sustainable Procurement in DE&S Acquisition Processes

1.2.1.1.

The MOD is committed to improving the UK's security and sustainability as set out in the National Security Strategy. This identifies a range of sustainability risks including secure and affordable supplies of key natural resources including energy as well as the need to address climate resilience.

DE&S needs to work with capability sponsors, to make sure requirements for sustainability can be fed down into procurement contracts and ensure these issues are picked up alongside the requirements for military effect.

Many of the challenges in this area are growing and the need to understand and adapt to them is critical to maintaining long term defence capability. When integrated into each stage of the acquisition cycle from capability planning to delivery and disposal, sustainable procurement offers clear benefits including cost savings, improved performance, reducing supply chain risks while enhancing military capability.

The Sustainable Procurement tool kit is for high level screening and is designed to make it easier to add sustainability content such as material security and resource efficiency into contract requirements and safety and environmental management plans under the ASEMS. The SP introductory booklet (part 1) and the SP tool kit (part 2) are intended to be read together to inform the new SP risk and opportunity assessment that has been incorporated into the supplementary section on the bottom of the Environmental Features Matrix.

[Part 1 - An Introduction to Sustainable Procurement in DE&S](#) [5]

[Part 2 - Sustainable Procurement Tool](#) [6]

1.3. S&EP Leaflets

1.3.0.1.

ASEMS Part 1 is supported by a series of S&EP Leaflets. The S&EP Leaflets represent a short-term mechanism for quickly promulgating essential policy and guidance updates.

The leaflets collectively make up GMP00 within the General Management Procedures, and are also located on the ASG.

Superseded leaflets are listed below:

1.3.1. Superseded

1.3.1.1.

[SEP Leaflet 01/2010](#): - Superseded by S&EP Leaflet 11/2017

[SEP Leaflet 11/2017](#) [7] - Superseded by SEB003 Version 2

1.3.1.2.

[SEP Leaflet 04/2011](#): - Superseded by S&EP Leaflet 10/2017

1.3.1.3.

[SEP Leaflet 05/2012](#): - Superseded by S&EP Leaflet 09/2015

1.3.1.4.

[SEP Leaflet 09/2015](#): - Superseded by SEP Leaflet 09/2015 Version 2.1 (Dated 07 April 2017)

[SEP Leaflet 09/2015](#): [8] - Superseded by SEP Leaflet 09/2015 Version 2.3 (Dated 07 Aug 2019)

[SEP Leaflet 09/2015](#) [9]: - Superseded by SEP Leaflet 09/2015 Version 2.4 (Dated 23 March 2020)

[SEP Leaflet 09/2015](#): - Superseded by SEP Leaflet 09/2015 Version 2.5 (Dated 22 September 2020)

1.3.1.5.

[SEP Leaflet 10/2017](#) [10]: - Superseded by SEP Leaflet 10/2017 Version 1.1 (Dated April 2020)

1.3.1.6.

[SEP Leaflet 07/2013](#): - Superseded by SEP Leaflet 07/2013 Version 1.3 (Dated May 2020)

1.4. S&E Bulletins (SEB's)

1.4.0.1.

These Bulletins are intended to provide DE&S staff with essential and important updates to Safety and Environment related policy and information. They are produced by the QS&EP team, and endorsed by DES TECH-QSEP SEP-DepHd

1.4.1. Extant

1.4.1.1.

SEB 001 - Introduction of the Safety & Environmental Protection Bulletin System

The DE&S Safety and Environment Bulletin (SEB) system has been established to provide a mechanism for promulgating short term notices throughout the Safety and Environmental Protection function.

SEB/001 announces the introduction of the SEB system and provides a brief description of how it will operate

[SEB001 Introduction of the DES Environmental Protection Bulletin System.pdf](#) [11]

1.4.1.2.

SEB 003 - The Management of Formally-Delegated Safety and Environmental Responsibilities in DE&S

This SEB defines how the ASP taxonomy is to be applied across DE&S and describes how aspects such as competence assessment and safety and environmental delegations shall be managed. This SEB is released at Issue 3 and supersedes all previous Issues. This SEB also supersedes SEP leaflet 11/2017.

[20200527-SEB003_Issue3-O.pdf](#) [12]

1.4.1.3.

SEB 007 - JSP 515 Hazardous Stores Information System (HSIS)

The JSP 515 Hazardous Substances Information System (HSIS) Support Team are not being supplied timely, and/or suitable safety and environmental information for items entering the MOD supply chain for scrutiny and upload to the JSP 515 HSIS database

[SEB007_HSIS.pdf](#) [13]

1.4.1.4.

SEB 009 - Convening of Service Inquiries

On the 1st April 2015, authority for convening all Service Inquiries (SIs) was formally vested in the Defence Safety Authority (DSA). Consequently, with immediate effect, DE&S relinquishes its Convening Authority role. Full details are published in DSA Standard Operating Procedure SOP 1

[SEB009 Convening of Service Inquiries.pdf](#) [14]

1.4.1.5.

SEB 010 - Managing Driver Behaviour in White Fleet Vehicles

On the 21st April 2016, DE&S published QS&EP Group Policy Memo 01/2016 to define the process for addressing inappropriate and dangerous driver behaviour. This Policy applies to all DE&S Users of White Fleet Vehicles in accordance with procedures detailed in 2013DIN04-63.

[SEB010 Managing Driver Behaviour in White Fleet Vehicles.pdf](#) [15]

1.4.1.6.

SEB 011 - Withdrawal of HazMat tool from DE&S

The MOD Hazardous Materials Database (HazMat) is an RLI hosted application used to manage an inventory of platforms, equipment and components and to identify hazardous materials such as asbestos, halon and radioactive components that are present in these. This tool also facilitates the reporting of such substances and their elimination from the equipment programme.

[SEB011 Withdrawal of Hazmat.pdf](#) [16]

1.4.1.7.

SEB 012 - Service Inquest into fatalities at Camp Bastion

In July 2014, Defence Fire Risk Management Organisation (DFRMO) published "Regulation 28 Report following the inquest into two service personnel on 14 February 2011 - Camp Bastion" to ensure that Duty Holders are aware of the concerns raised by her Majesty's Coroner following a fire that resulted in the deaths of two Service personnel and the required actions to prevent further fatalities

[20160927-SEB012 Service Inquest into Camp Bastion Fatalities.pdf](#) [17]

1.4.1.8.

SEB 013 - Guidance on the Procurement of Independent Safety Auditor Services

The guidance examines the role of the Independent Safety Auditor and the aspects to be considered in the procurement process:

- How to select Independent Safety Auditors;
- Scoping work for Independent Safety Auditors at different lifecycle phases;
- Assessing proposals for Independent Safety Auditors; and
- Guidance on the production of contracting documents, and factors to be considered when assessing the outputs of the Independent Safety Auditor

[20160705-SEB013 Guidance on the Procurement of Independent Safety Auditor Services.pdf](#)[18]

1.4.1.9.

SEB 014 - Update to S&EP Leaflet 03/2011 – Equipment Safety and Environmental Protection Risk Referral

1. QSEP have recently updated S&EP leaflet 03/2011, Equipment Safety & Environmental Protection Risk Referral also held as [GMP00. S&EP Leaflet 03/2011: Equipment Safety and Environmental Protection \(SEP\) Risk Referral](#) [19]
2. The updated leaflet addresses a number of issues, in particular:
 1. The scope has been expanded to encompass the referral of environmental risks,
 2. Ability to use the referral process for non-Class A risks has been clarified,
 3. Minor updates have been introduced to reflect organisational changes which have occurred since the leaflet was originally issued in 2011.
3. The revised leaflet will shortly be published on the ASG.

[20160810-SEB014 Risk Referral Leaflet Update.pdf](#) [20]

1.4.1.10.

SEB 015 - Update to S&EP Leaflet 09/2015 – DE&S's Contribution to Mitigating Risk to Life Across MOD

1. QSEP have recently updated S&EP leaflet 09/2015, DE&S Contribution to Mitigating Risk to Life Across MOD also held as [GMP00: DE&S Contribution to Mitigating Risks to Life \(RtL\) Across MOD](#) [8]
2. The updated leaflet addresses a number of issues, in particular:
 1. Restatement of the ten MOD-level principles for Duty Holding
 2. Delegation of Duty Holding responsibilities to non-MOD personnel
 3. Clarification of the relationship between Duty Holding and duty of care responsibilities
 4. An update to the list of DE&S Operating and Delivery Duty Holders to reflect changes with the organisation.

[20160805-SEB015 Update to leaflet 092015 Contributing to mitigating risk to life across the MOD.pdf](#) [21]

1.4.1.11.

SEB017 - S&EP Leaflet 11/2017 Acquisition Delegations in DE&S

This SEB announces the publication of S&EP Leaflet 11/2017. The leaflet sets out the principles for delegating acquisition safety authority in a balanced matrix organisation and introduces the concept of a multi-function assignment within the Engineering function.

[20170228 SEB017 Leaflet 0112017 Safety Delegations in DES.PDF](#) [22]

1.4.1.12.

SEB019 - S&EP Leaflet 12/2017 – DE&S Requirements for the Management of Equipment Safety and Environmental Issues and Incidents (Replacing Leaflet 01/2010)

This SEB announces the publication of S&EP Leaflet 12/2017 (DE&S Requirements for the Management of Equipment Safety and Environmental Issues and Incidents) which will replace leaflet 01/2010 with immediate effect. The leaflet sets out the responsibilities of each stakeholder (PT, OC and Pan Domain) for the effective management of accident, incidents and near miss reports.

[20170712-SEB019 SEP leaflet 122017 Managment of Incident and Accidents.pdf](#) [23]

1.4.1.13.

SEB 021 The Introduction of GMP-00 SEP Leaflets

- a. This SEB announces the publication of GMP00 S&EP Leaflets and the reorganisation of the existing GMPs.
- b. It details a new approach to the publication leaflets in ASEMS and the reasons behind the change.

[SEB021 The Introduction of GMP-00 SEP Leaflets .pdf](#) [24]

1.4.1.14.

SEB022 - Introduction of The Sustainable Procurement Tool & Guide

As part of the recent development of ASEMS, QSEP has been investigating embedding Sustainable Procurement (SP) principles more effectively within DE&S procurement activities. This has resulted in the introduction of a new SP Toolkit for Delivery Teams together with supporting guidance. The tool kit is intended to provide a proportionate and relevant approach for Delivery Teams to manage SP during the acquisition lifecycle.

[20180621 SEB022 - SP Tool .pdf](#) [25]

[20180627 Sustainable Procurement Toolkit Quick Start Guide.pdf](#) [26]

1.4.1.15.

SEB023 - Introduction of SEP Leaflet 14/2019 - System Safety Risk Management

This SEB announces the publication of SEP Leaflet 14/2019 - System Safety Risk Management. This SEP Leaflet provides guidance on hazard and risk tools and techniques.

[20190521 - SEB023 - SEP Leaflet 14-2019.pdf](#) [27]

1.4.1.16.

SEB024 - Introduction of SEP Leaflet 15/2019 - Safety and Environmental Management Plan Review

This SEB announces the publication of SEP Leaflet 15/2019 - Safety and Environmental Management Plan (SEMP) Review. This SEP Leaflet introduces the requirement for SEMP reviews.

[20190521 - SEB024 - SEP Leaflet 15-2019.pdf](#) [28]

1.4.1.17.

SEB025 - Update of POSMS to version 4.0

This SEB announces the release of POSMS at version 4.0. Updates include re-formatting of layout and an extended introduction. No guidance has been removed or added.

[20190814 - SEB025 - POSMS V4.0.pdf](#) [29]

1.4.1.18.

SEB028 - S&EP Leaflet 10/2017 v1.1 - System Safety and Environmental Protection Competence Mapping

This SEB announces the update of an S&EP Leaflet S&EP 10/2017 - System Safety and Environmental Protection competence mapping. This leaflet has now been updated to version 1.1. The changes are limited to an updated list of Competence Maps to align with the ASP Taxonomy. The leaflet supersedes SEP Leaflet 10/2017 v1.

[20200320 - SEB028 - SEP Leaflet 10 2017 v1.1.pdf](#) [30]

1.4.1.19.

SEB029 - S&EP Leaflet 07/2013 v1.3 - Management of Hazardous Substances and Restricted Materials.

This SEB announces the update of S&EP Leaflet 07/2013 - Management of Hazardous Substances and Restricted Materials. This leaflet has now been updated to version 1.3. The update takes into account recent changes in terminology and updated URLs which link to the improved guidance and DE&S published processes along with the introduction of a new annex which formalises the requirement to capture unique uses of Lead (Pb).

[SEB 029 - SEP Leaflet 07 2013 update v1.3.pdf](#) [31]

1.4.1.20.

SEB030 - S&EP Leaflet 09/2015 v2.5 - DE&S Contribution to Mitigating Risk to Life across MOD

S&EP Leaflet 09/2015 - DE&S contribution to Mitigating Risk to Life across MOD. This leaflet has now been updated to version 2.5. The changes are limited to an update to a change of name from Director Ship Acquisition to T26 Offshore Patrol Vessels Team Leader within the list of Operating Duty Holders. The leaflet supersedes S&EP Leaflet 09/2015 v2.4.

[SEB 030 Leaflet 092015 v2.5 DE&S Contribution to Mitigating Risk to Life across MOD.pdf](#) [32]

1.4.1.21.

SEB031 - POEMS Environmental Management Procedure (EMP) 04 and 05 v3.3 update to EMP04 v4.0

This SEB announces the publication of POEMS EMP 04 - 'Environmental Impact Screening and Scoping' at version 4.0. EMP 04 has undergone substantial updates to improve environmental impact prioritisation, enabling greater resolution of priorities by weighing environmental significance against other key legislative and practical considerations. The SEB explains the changes and transitional arrangements, and is supported by an updated POEMS Transition Document, found in the ASEMS Supporting Documents area.

[20201113-SEB031 POEMS EMP04 V4.0-O.pdf](#) [33]

1.4.2. Archived

1.4.2.1.

The below SEB is no longer extant. The archived version is kept below for information

SEB 002 - DE&S Special Bonus Scheme - Payment for Personal & Professional Activity in Safety and Environmental Protection

The Special Bonus Scheme (SBS) exists to reward exceptional performance by eligible civilian staff in an extraordinary task or exercise. MOD Personnel Instruction 124/99 announced the extension of the Scheme to allow for the recognition of significant personal development achievement such as the attainment of a professional or educational qualification of national standing.

Following the release of version 2 of Engineering Instruction No.3 detailing the Special Bonus Scheme (SBS) for personal and professional development in Acquisition Safety, SEB002 will now detail Acquisition Environmental Protection SBS, only. The figure for achieving Environmental Practitioner status has been updated, and is now £400, in alignment with the System Safety Practitioner.

[SEB002_Application_of_the_Special_Bonus_Scheme.pdf](#) [34]

1.4.2.2.

This SEBs is no longer extant as the have been superseded by Issue 3. The archive versions are kept below for information.

SEB 003 - Safety Critical and Safety Enabling Post Definitions

Within DE&S, the terms Safety Critical (SC) and Safety Enabling (SE) have been adopted, which highlight the responsibilities of System Safety Management posts. In broad terms, staff in Safety Critical posts are responsible for undertaking key safety-related functions, functions which would cease if the posts are not filled. Safety enablers are the deep subject matter experts who provide essential support, allowing those decisions to be made efficiently, effectively and competently. The importance of ensuring these posts are filled by competent individuals is recognised at the most senior level. A target of reducing the number of vacant Safety Critical posts across the whole of DE&S to no more than 50 has been set by CDM, with progress reports being provided on a regular basis.

[SEB003 DE&S Safety Critical and Safety Enabling Post Definitions.pdf](#) [35]

[20200109-SEB003 Issue2.pdf](#) [36]

1.4.2.3.

The SEB below is no longer extant. The archived version is kept below for information

SEB 004 - Revision of S&EP Policy Leaflet 04/2011

S&EP Leaflet 04/2011 (System Safety & Environmental Role Profiles) defines a series of seven generic safety and environmental roles against which any member of the DE&S acquisition community can be mapped. The process initially requires users to identify which role is most appropriate for a nominated post. This will identify acquisition safety and environmental protection related competence requirements, in the form of training and experience, that the post-holder must demonstrate. The second part of the mapping process is to record how the post-holder satisfies these requirements and, if necessary, how any shortcomings will be managed.

[SEB004_System_Saf_and_Env_Protection_Role_Profiles.pdf](#) [37]

1.4.2.4.

The below SEB is no longer extant. The archived version is kept below for information

[SEB 005 - DE&S ASSERT OHSE Reporting, replacing the manual DE&S Incident Notification Cell \(DINC\) process](#)

Within DE&S, ASSERT is being promoted as the preferred corporate tool for reporting on Safety and Environmental management by the QSEP team. It allows analysis and reports to be automatically generated for the various management levels up to and including CDM. As part of the expansion of the ASSERT system it was identified that there was an organisation requirement to develop an on-line reporting tool which would allow individuals at all levels to report incidents relating to OHSE and for Operating Centres (OC's) to view and report on incidents within their areas of responsibility.

[SEB 005_DES_ASSERT_DINC_Final-U.pdf](#) [38]

1.4.2.5.

The below SEB is no longer extant. The archived version is kept below for information

[SEB 006 - DE&S's Contribution to Mitigating Risks to Life \(RtL\) across MOD \(replacing Leaflet 05/2012\)](#)

It is Departmental policy that those responsible and accountable for activities that have the potential to pose RtL be identified as Duty Holders and appointed formally as such through Letters of Delegation (LoD). Across MOD, Duty Holders are responsible and accountable for the safe operation of systems, facilities and activities in their areas of responsibility. By controlling RtL and reducing them to Broadly Acceptable or Tolerable & As Low As Reasonably Practicable (ALARP), MOD Duty Holders ensure that all persons to whom MOD owes a common law and statutory duty of care are protected

[SEB006 -Leaflet 092015 Mitigating Risks RtL across MOD - replacing leaflet 052012.pdf](#) [39]

1.4.2.6.

The below SEB is no longer extant. The archived version is kept below for information

[SEB 008 - Defence Standards 00-56, 00-55, and 00-27](#)

This SEB has been produced to keep staff informed of the changes to S&E Defence Standards and contains information on the review and publication of:

- Def Stan 00-56 Part 1 Issue 6, Safety Management Requirements for Defence Systems.
- Def Stan 00-55 Part 1 Interim Issue 3, Requirements for Safety of Programmable Elements in Defence Systems.
- Def Stan 00-27 Issue 3, Measurement of Impulse Noise from Military Weapons, Explosives and Pyrotechnics (MWEP) and Selection of Hearing Protection.

[SEB008 Defence Standards.pdf](#) [40]

1.4.2.7.

The below SEB is no longer extant. The archived version is kept below for information

[SEB 016 - S&EP Leaflet 10/2017 System Safety & Engineering Protection Competence Mapping](#)

1. This SEB announces the publication of S&EP Leaflet 10/2017 - Competence Mapping. The leaflets contains a series of Competence Maps, each of which defines levels of generic (SQEP 1) System Safety and Environmental Protection competence that apply to staff with responsibilities in those two areas. The leaflet supersedes S&EP Leaflet 04/2011 (Role Profiles). The Competence Maps are designed to complement the Role Profiles published by the Engineering Function and provide an additional level of detail to help in their consistent application.

[20170202-SEB016 New leaflet 102017 Competence Mapping.pdf](#) [41]

1.4.2.8.

The below SEB is no longer extant. The archived version is kept below for information

[SEB 018 - Update to S&EP Leaflet 09/2015 - DE&S's Contribution to Mitigating Risk to Life Across MOD](#)

This SEB announces the publication of an update to S&EP Leaflet 09/2015 (DE&S's Contribution to Mitigating Risk to Life Across MOD).

[20170407-SEB018 Update to leaflet 092015 Contributing to mitigating risk to life across the MOD.pdf](#) [42]

1.4.2.9.

The below SEB is no longer extant. The archived version is kept below for information

[SEB020 - S&EP Leaflet 09/2015 - DE&S's Contribution to mitigating risks to life across MOD Version 2.2](#)

1. This SEB announces the publication of an update to S&EP Leaflet 09/2015 (DE&S's Contribution to Mitigating Risk to Life Across MOD).
2. Version 2.2 of the leaflet dated October 2017 incorporates a minor update to DE&S Operating and Delivery Duty Holders at Annex C. The Operating Duty Holder for Submarine Delivery Agency (SDA) is the CEO of SDA, replacing CoM Submarines and Head In-Service Submarines PT.

[20171031-SEB020 Update to leaflet 092015 Contributing to mitigating risk to life across the MOD.pdf](#) [43]

1.4.2.10.

The below SEB is no longer extant. The archived version is kept below for information

[SEB026 - Update of SEP Leaflet 09/2015](#)

This SEB announces the update of SEP Leaflet 09/2015 to version 2.3. The update includes changes to the list of DE&S Duty Holders.

[20190814 - SEB026 - SEP Leaflet 09 2015 Update.pdf](#) [44]

1.4.2.11.

The below SEB is no longer extant. The archived version is kept below for information

[SEB027 - S&EP Leaflet 09/2015 v2.4 - DE&S Contribution to Mitigating Risk to Life across MOD](#)

This SEB announces the update of an S&EP Leaflet 09/2015 - DE&S Contribution to Mitigating Risk to Life across MOD. This leaflet has now been updated to version 2.4. The changes are limited to an updated list of Duty Holders and the inclusion of the DE&S Duty Holder competence assessment. The leaflet supersedes SEP Leaflet 09/2015 v2.3.

[20200320 - SEB027 - SEP Leaflet 09 2015 v2.4.pdf](#) [45]

1.5. S&E Methodologies

1.5.1. The ALARP Journey

1.5.1.1.

An Adobe pdf presentation on ALARP. This discusses in general terms the journey to declaring a risk ALARP from initial hazard identification, discussion of risk management and the legal definition and requirements for ALARP with practical guidance.

[20190221-ALARPJourney.pdf](#) [46]

1.5.2. An accident model based on Systems Theory

1.5.2.1.

The hypothesis underlying the new model, called STAMP (Systems-Theoretic Accident Model and Processes) is that system theory is a useful way to analyze accidents, particularly system accidents. In this conception of safety, accidents occur when external disturbances, component failures, or dysfunctional interactions among system components are not adequately handled by the control system, that is, they result from inadequate control or enforcement of safety-related constraints on the development, design, and operation of the system.

Safety then can be viewed as a control problem, and safety is managed by a control structure embedded in an adaptive socio-technical system. The goal of the control structure is to enforce constraints on system development (including both the development process itself and the resulting system design) and on system operation that result in safe behavior. In this framework, understanding why an accident occurred requires determining why the control structure was ineffective. Preventing future accidents requires designing a control structure that will enforce the necessary constraints.

[A New Accident Model for Engineering Safer Systems](#) [47]¹ authored by Aeronautics and Astronautics Professor Nancy Leveson at Massachusetts Institute of Technology details what is becoming an important method for viewing accidents that moves away from the standard event driven view. Further details and case studies may be found at their home page: <http://sunnyday.mit.edu/> [48]

1. [This paper appeared in Safety Science, Vol. 42, No. 4, April 2004, pp. 237-270.]

1.5.3. Proportionality

1.5.3.1.

Throughout ASEMS the reader is encouraged to apply a proportionate approach to the procedures followed. It does not necessarily mean omitting content but rather provides the user a degree of flexibility in the degree a procedure is applied (is an ISA required for this project, does this require a simple statement for evidence rather than a complete document? for example).

The [linked Proportionality document](#) [49] has been created as a starting point for further development and incorporation of detailed guidance on utilising a proportional approach. Whilst this is a work in progress you may find it informative.

1.6. Cassandra

1.6.1. How to set up a Hazard Log in Cassandra

1.6.1.1.

A user guide written by MOD staff describing the process for setting up a hazard log in the eCassandra and desktop Cassandra tools.

[Cassandra Guide - How to set up a Hazard Log and its Components.pdf](#) [50]

1.7. POEMS Transition Documents

1.7.0.1.

POEMS has undergone a major revision. This is described in the transition document below:

[POEMS Transition Document](#) [51].

1.7.0.2.

POEMS EMP04 & EMP05 v3.3 have been reviewed, combined and updated to EMP04 v4.0

[POEMS EMP04 Transition Document](#) [52]

Source URL: <https://www.asems.mod.uk/asems-supporting-documentation>

Links

[1] <https://www.asems.mod.uk/toolkit>

[2]

<https://www.asems.mod.uk/sites/default/files/documents/White%20and%20Green%20Book/QSEP%20Greenbook%20Issue%204%20FINAL%20Lighter%20green%20cover.pdf?t=1528808484>

[3] <https://www.asems.mod.uk/sites/default/files/documents/White%20and%20Green%20Book/SSM%20Whitebook%20PART%201%202020%20update.pdf?t=1589874441>

[4] <https://www.asems.mod.uk/sites/default/files/documents/White%20and%20Green%20Book/SSM%20Whitebook%20PART%20II%20v5.pdf?t=1528808182>

[5] <https://www.asems.mod.uk/sites/default/files/documents/EMP/Sustainable%20Procurement%20V2%20Intro%20Guide.pdf?t=1537793247>

[6] <https://www.asems.mod.uk/toolkit/sustainable-procurement-tool>

[7] https://www.asems.mod.uk/sites/default/files/documents/SEP%20Leaflets/GMP00/20170224-SEP_Leaflet_11_2017_Delegation.pdf?t=1528272842

[8] https://www.asems.mod.uk/sites/default/files/documents/SEP%20Leaflets/GMP00/20170113-DH_Leaflet_092015_v-2_2.pdf?t=1528272842

[9] <https://www.asems.mod.uk/sites/default/files/documents/SEP%20Leaflets/GMP00/20190807-DH%20Leaflet%2009%202015.pdf?t=1565768281>

[10] https://www.asems.mod.uk/sites/default/files/documents/SEP%20Leaflets/GMP00/20170203-SEP_Leaflet_10_2017_Competece_Maps.pdf?t=1528272842

[11] <https://www.asems.mod.uk/sites/default/files/documents/SEB001%20Introduction%20of%20the%20DES%20Environmenta%20Protection%20Bulletin%20Systeml.pdf>

[12] https://www.asems.mod.uk/sites/default/files/documents/20200527-SEB003_Issue3-0.pdf

[13] https://www.asems.mod.uk/sites/default/files/documents/SEB007_HSIS.pdf

[14] <https://www.asems.mod.uk/sites/default/files/documents/SEB009%20Convening%20of%20Service%20Inquiries.pdf>

[15] <https://www.asems.mod.uk/sites/default/files/documents/SEB010%20Managing%20Driver%20Behaviour%20in%20White%20Fleet%20Vehicles.pdf>

[16] <https://www.asems.mod.uk/sites/default/files/documents/SEB011%20Withdrawal%20of%20Hazmat.pdf>

[17] <https://www.asems.mod.uk/sites/default/files/documents/20160927-SEB012%20Service%20Inquest%20into%20Camp%20Bastion%20Fatalities.pdf>

[18] <https://www.asems.mod.uk/sites/default/files/documents/20160705-SEB013%20Guidance%20on%20the%20Procurement%20of%20Independent%20Safety%20Auditor%20Services.pdf>

[19] https://www.asems.mod.uk/sites/default/files/documents/SEP%20Leaflets/GMP00/20160809-SEP_Leaflet_032011%20Risk%20Referral.pdf?t=1528272842

[20] <https://www.asems.mod.uk/sites/default/files/documents/20160810-SEB014%20Risk%20Referral%20Leaflet%20Update.pdf>

[21] https://www.asems.mod.uk/sites/default/files/documents/20160805-SEB015%20Update%20to%20Leaflet%20092015%20Contributing%20to%20mitigating%20Risk%20to%20life%20across%20the%20MOD_0.pdf

[22] https://www.asems.mod.uk/sites/default/files/documents/20170228%20%20SEB017%20Leaflet%200112017%20Safety%20Delegations%20in%20DES_0.PDF

[23] <https://www.asems.mod.uk/sites/default/files/documents/20170712-SEB019%20SEP%20Leaflet%20122017%20Management%20of%20Incident%20and%20Accidents.pdf>

[24] <https://www.asems.mod.uk/sites/default/files/documents/SEB021%20The%20Introduction%20of%20GMP-00%20SEP%20Leaflets%20.pdf>

[25] <https://www.asems.mod.uk/sites/default/files/documents/20180621%20SEB022%20-%20SOP%20Tool%20.pdf>

[26] <https://www.asems.mod.uk/sites/default/files/documents/20180627%20Sustainable%20Procurement%20Toolkit%20Quick%20Start%20Guide.pdf>

[27] https://www.asems.mod.uk/sites/default/files/documents/20190521%20-%20SEB023%20-%20SEP%20Leaflet%2014-2019_0.pdf

[28] https://www.asems.mod.uk/sites/default/files/documents/20190521%20-%20SEB024%20-%20SEP%20Leaflet%2015-2019_0.pdf

[29] https://www.asems.mod.uk/sites/default/files/documents/20190814%20-%20SEB025%20-%20POSMS%20V4.0_0.pdf

[30] https://www.asems.mod.uk/sites/default/files/documents/20200320%20-%20SEB028%20-%20SEP%20Leaflet%2010%202017%20v1.1_0.pdf

- [31] <https://www.asems.mod.uk/sites/default/files/documents/SEB%20029%20-%20SEP%20Leaflet%2007%202013%20update%20v1.3.pdf>
- [32] <https://www.asems.mod.uk/sites/default/files/documents/SEB%20030%20Leaflet%20092015%20v2.5%20DE%26S%20Contribution%20to%20Mitigating%20Risk%20to%20Life%20>
- [33] https://www.asems.mod.uk/sites/default/files/documents/20201113-SEB031%20POEMS%20EMP04%20V4.0-O_0.pdf
- [34] https://www.asems.mod.uk/sites/default/files/documents/SEB002_Application_of_the_Special_Bonus_Scheme.pdf
- [35] <https://www.asems.mod.uk/sites/default/files/documents/SEB003%20DE%26S%20Safety%20Critical%20and%20Safety%20Enabling%20Post%20Definitions.pdf>
- [36] <https://www.asems.mod.uk/sites/default/files/documents/20200109-SEB003%20Issue2.pdf>
- [37] https://www.asems.mod.uk/sites/default/files/documents/SEB004_System_Saf_and_Env_Protection_Role_Profiles.pdf
- [38] https://www.asems.mod.uk/sites/default/files/documents/SEB%20005_DES_ASSERT_DINC%20Final-U.pdf
- [39] <https://www.asems.mod.uk/sites/default/files/documents/SEB006%20-Leaflet%20092015%20%20Mitigating%20Risks%20RtL%20across%20MOD%20-%20replacing%20leaflet%20052012.pdf>
- [40] <https://www.asems.mod.uk/sites/default/files/documents/SEB008%20Defence%20Standards.pdf>
- [41] <https://www.asems.mod.uk/sites/default/files/documents/20170202-SEB016%20New%20leaflet%20102017%20Competence%20Mapping.pdf>
- [42] https://www.asems.mod.uk/sites/default/files/documents/20170407-SEB018%20Update%20to%20leaflet%20092015%20Contributing%20to%20mitigating%20risk%20to%20life%20across%20the%20MOD_0.pdf
- [43] <https://www.asems.mod.uk/sites/default/files/documents/20171031-SEB020%20Update%20to%20leaflet%20092015%20Contributing%20to%20mitigating%20risk%20to%20life%20across%20the%20MOD.pdf>
- [44] https://www.asems.mod.uk/sites/default/files/documents/20190814%20-%20SEB026%20-%20SEP%20Leaflet%2009%202015%20Update_0.pdf
- [45] https://www.asems.mod.uk/sites/default/files/documents/20200320%20-%20SEB027%20-%20SEP%20Leaflet%2009%202015%20v2.4_0.pdf
- [46] <https://www.asems.mod.uk/sites/default/files/documents/20190221-ALARPJourney.pdf>
- [47] <http://sunnyday.mit.edu/accidents/safetyscience-single.pdf>
- [48] <http://sunnyday.mit.edu/>
- [49] <https://www.asems.mod.uk/proportionality>
- [50] https://www.asems.mod.uk/sites/default/files/documents/Cassandra%20Guide%20-%20How%20to%20set%20up%20a%20Hazard%20Log%20and%20its%20Components_0.pdf
- [51] <https://www.asems.mod.uk/sites/default/files/documents/POEMS%20Transition%20Document%20for%20ASEMS%20Web.docx>
- [52] https://www.asems.mod.uk/sites/default/files/documents/POEMS%20EMP04%20Transition%20Document%20for%20ASEMS%20Web.pdf?_t=1608208786