



Ministry  
of Defence

de&s

# Director Ships Support & Director Ship Acquisition

Acquisition Safety & Environmental  
Protection Organisation and Arrangements  
Statement

Issue 3 – January 2020



Equipping and Supporting our Armed Forces

Defence Equipment & Support

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## Document Control

Document Name	Director Ships Support & Director Ship Acquisition Acquisition Safety & Environmental Protection Organisation and Arrangements Statement
Document Owner	Director Ships Support & Director Ship Acquisition
Document Manager	DES Ships SPfO-DepHd-Safety
Version Number	Issue 3
Date of Issue	January 2020

## Revisions

Revision No.	Date	Notes
2	June 2017	
2.1	September 2017	
3	January 2020	Key updates as follows: <ul style="list-style-type: none"> <li>• Removal of Management and Governance Arrangements already contained in Ships Domain S&amp;EP Policy;</li> <li>• Updated S&amp;EP document management and maintenance requirement;</li> <li>• New</li> <li>• SEMP management and maintenance requirements including requirement for separate Env Annex / Section;</li> <li>• Confirmed list of S&amp;EP Artefacts;</li> <li>• Diagram updates to reflect changes in Organisational Design;</li> <li>• Implementation of the Acquisition Safety Project taxonomy;</li> <li>• Updated Training Framework and direction.</li> </ul>

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Chief of Materiel (Ships) Ships Domain S&EP Policy	(Direction)
<b>Ships Operating Centres' Acquisition Organisation and Arrangements Statement</b>	<b>(Mandatory)</b>
Ships Domain Occupational Health Safety and Environmental Protection (OHSE) Organisation and Arrangements Statement	(Mandatory)
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# 1SL SAFETY COVENANT



As First Sea Lord, I believe strongly that our focus on fighting effectiveness is entirely complementary with our drive for safety and ensuring that we protect all our people and others from unnecessary harm. Good safety practices are proportionate to the risk and enable effective warfighting. The safety management system I lead has a focus on competence, builds risk-aware attitudes, and promotes empowered leadership based on clear communication of risks up and down the chain of command. This aids effective decision making, enables rapid adaptation, and promotes initiative.

This covenant is my promise that I am committed to these responsibilities to you, to control risks effectively and protect our people from unnecessary harm. I deliver this through a robust and properly resourced safety management system and Improvement plan to continuously enhance our safety resilience across Navy Command.

This is our Navy; and our people. We are responsible for our actions; and we owe it to ourselves and especially the people we lead, to look after each other. Therefore, I ask all of you to match my promise to ensure we follow the policy and organisational arrangements set out in our safety management system and take reasonable care of the health and safety of yourself and others affected by your actions. Together, we must all be:

- **Professional.** Embrace your professional integrity and energy to seek the highest standards in your work. If you are excellent at what you do, you protect yourself and those around you from harm. Be curious; and be prepared to learn and improve every day.
- **Risk aware, but not risk averse.** Many face the risk of harm daily because of the work we are required to do and the environments in which we do it. Be confident in taking sensible risks to be operationally successful. Procedures represent accepted good practice. If you deviate from them - be prudent: understand and control the risks using sound advice when possible, such that the operational benefit justifies the remaining risk.
- **Empowered.** Effective warfighting and safety require all to be engaged and empowered. We need your initiative to win, and you to raise safety issues to protect us. Challenge and you will be heard and respected. Mistakes are an opportunity for us all to learn – be open and you will be treated fairly. All must encourage initiative and feedback, then those responsible must respond decisively so we adapt and improve.

Our collective commitment to this covenant promotes a safety culture that fulfils our duty of care and assures our credentials as a Navy protecting the people of the UK, preventing conflict and ready to fight our enemies.

# 1SL ENVIRONMENTAL PROTECTION STATEMENT



The sea is of vital importance to our nation and I am determined that we will minimise our harm to the oceans and the wider environment whilst enhancing our effectiveness as a fighting force.

To do this we must be aware of the changing natural world and the risks this creates for operational outputs. Our capability requirements must be clearly set to ensure we retain our ability to operate globally and in the face of expanding environmental regulation.

We must strive to support the UK's international undertakings for environmental protection and only rely on Defence exemption from legislation when it is imperative to do so. Senior operators are to be made aware of any such decisions and the associated implications for the future deployment of their capabilities.

More efficient use of energy and resources is a clear way in which we can enhance our capabilities as well as improve our environmental performance. There are other mutual gains to be made across the Naval Service and we should actively seek out and take advantage of scientific and technological advances to achieve them.



*A. Ladd*

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## SHIPS OPERATING CENTRES’ ORGANISATION AND ARRANGEMENTS FOR THE MANAGEMENT OF ACQUISITION SAFETY AND ENVIRONMENTAL PROTECTION



It is our responsibility to enact Chief of Materiel (Ships) Ships Domain S&EP Policy in our respective Operating Centre. This Acquisition Safety & Environmental Protection Organisation and Arrangements Statement (and its counterpart the Ships Domain

Occupational Health Safety and Environmental Protection (OHSE) Organisation and Arrangements Statement) explains how we will implement the Chief of Materiel (Ships) directive and organise ourselves to comply with both Maritime Regulations and DE&S policy requirements.

Responsibility for Safety and Environmental Protection is everybody’s business, whether we are at work or taking part in activities in our private lives. In the Ships Operating Centres, we support Navy Command Headquarters, Joint Force Command and other customers in the provision of some of the world’s most complex and safety critical assets. We are responsible for providing ‘Safe to Operate’ assets to our customers, whilst ensuring that they understand limitations of operation and the consequences of exceeding those limits. In performing our duties and delivering our responsibilities, it is imperative that we all act professionally to the very best of our abilities. This is a commitment we jointly expect from every member of the Operating Centres, that being the standard you should expect from us and one that we demand of ourselves.

Safety and Environmental Protection breaks down into three areas. Firstly, acquisition safety – the design, production and support of fit for purpose and inherently safe ships, systems and equipment, assuring our customers that what we supply is ‘Safe to Operate’. Secondly, providing a safe working environment for our people, ensuring everyone goes home at the end of the day. And finally, the job of managing both of the previous areas whilst minimising our impact on the environment or causing harm to third parties as a consequence of our activities. These three areas are interlocking and mutually supportive and must be considered as a whole and with equal parity by all those making decisions or providing support or assets to our customers. It is widely recognised that SALMO activities, by their very nature, can pose Risk to Life and / or may have a detrimental impact on the environment; this is why SALMO now reports directly to COM (Ships). As an Operating Duty Holder it is SALMO’s responsibility to ensure that any potential impact caused by these activities is fully assessed, understood and mitigated, prior to activities being approved and whilst the SALMO reporting line is to COM (Ships) it continues to be required to comply with the Ships Operating Centres’ Acquisition Safety and Environmental Protection Organisation and Arrangements Statement.

To assist delivery of these responsibilities, we promote a safety culture that enables us to operate within a set of standardised processes which are simple to follow, regularly reviewed and independently audited. In order to support these processes, it is vitally important that we all positively contribute to improving our culture by demonstrating good behaviours and understanding who is accountable and who is responsible for what so that we fulfil our duty of care.

We commend the Ships Operating Centres’ Acquisition Safety and Environmental Protection Organisation and Arrangements Statement (and its partner the Ships Domain Occupational Health Safety and Environmental Protection (OHSE) Organisation and Arrangements Statement). It is important to note that this is not just a document for those staff with a technical responsibility, delivering Safety and Environmental Protection is a team game in which we *all* have a part to play, whatever function you are in or role you perform; we must all act as one.

Mr Russell Brown  
Director Ships Support

Dr Henry Parker  
Director Ship Acquisition

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# 1 INTRODUCTION

## 1.1 POLICY

- 1.1.1 The Defence Policy for Health, Safety and Environmental Protection (S&EP) (DSA01.1) [17] requires that employers describe in writing, their Organisation and Arrangements (O&A) for ensuring the health, safety and welfare of their employees and anyone else affected by their activities. Defence policy extends this legal requirement for describing an organisation and its arrangements to include the protection of the environment. The individuals with this responsibility include the Top Level Budget Holder/ Chief Executive Officer, Commanding Officer or Head of Establishment and each should set out the O&A in a statement that is appropriate to their level of responsibility. The requirement for a Ships Domain level O&A stems directly from Navy Command, via a Letter of Agreement, and the DE&S Acquisition Safety and Environmental Management System [37] requirement on Operating Centre Directors (ASEMS clause 2.1).
- 1.1.2 DSA01.1 is supported by a hierarchy of policy detailed in subordinate documents i.e. DSA02-DMR [18] – Defence Maritime Regulations for Health, S&EP (hereafter called the ‘Shipping Regulations’, Joint Service Publications (JSP) 418 – Management of Environmental Protection in Defence [29] and 375 – Management of Health and Safety in Defence [26], the DE&S S&EP O&A Statement as shown in Figure 1. The Chief of Materiel (Ships) (COM(Ships)) Ships Domain S&EP Policy [33], and this Ships Operating Centres’ (OCs’) Acquisition S&EP O&A Statement are fully compliant with these policies and any apparent conflict or shortfall should be highlighted as set out in Section 3.20. Information on the Ships Domain Occupational Health Safety and Environmental Protection (OHSE) Organisation and Arrangements Statement [55] can be found on the Ships Intranet Home Page.

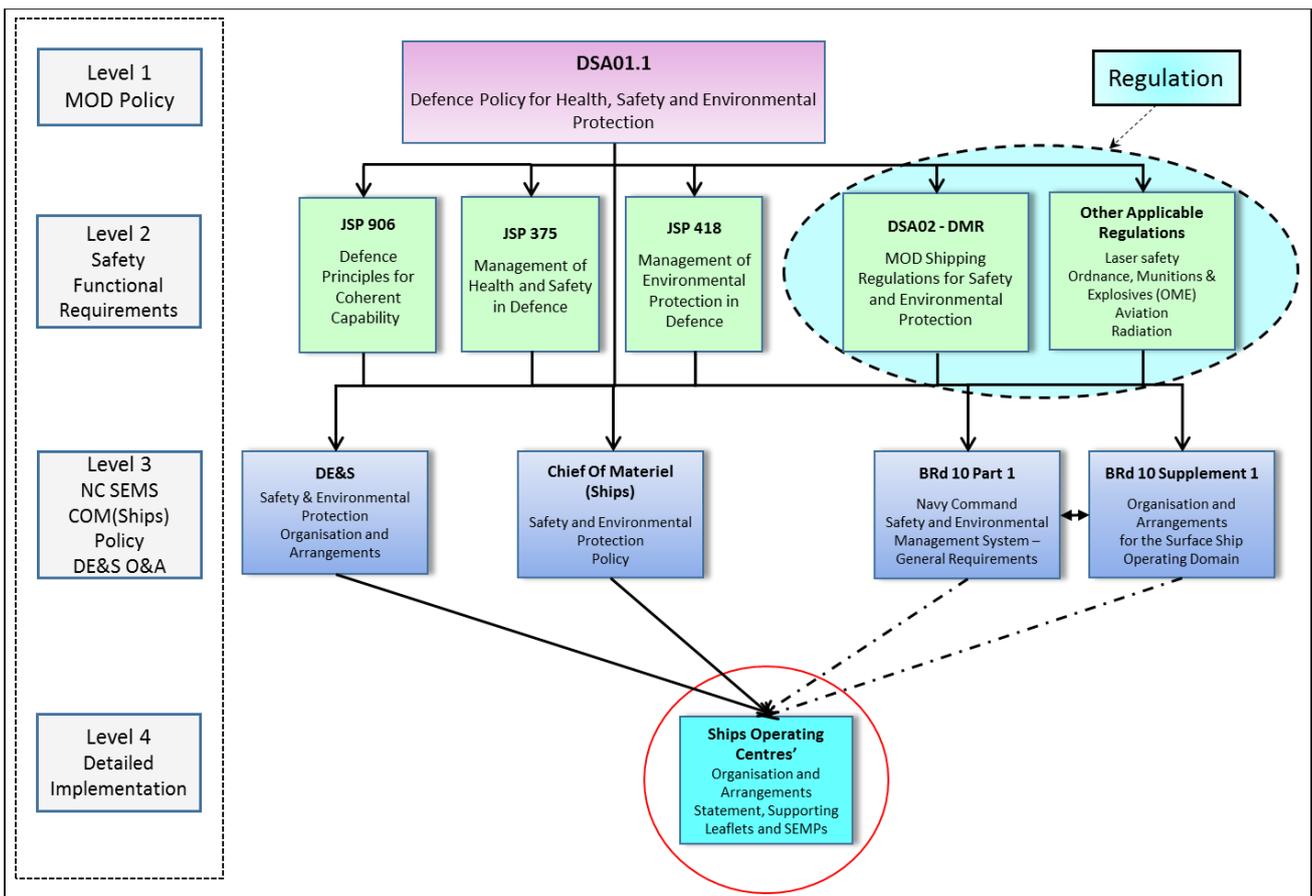
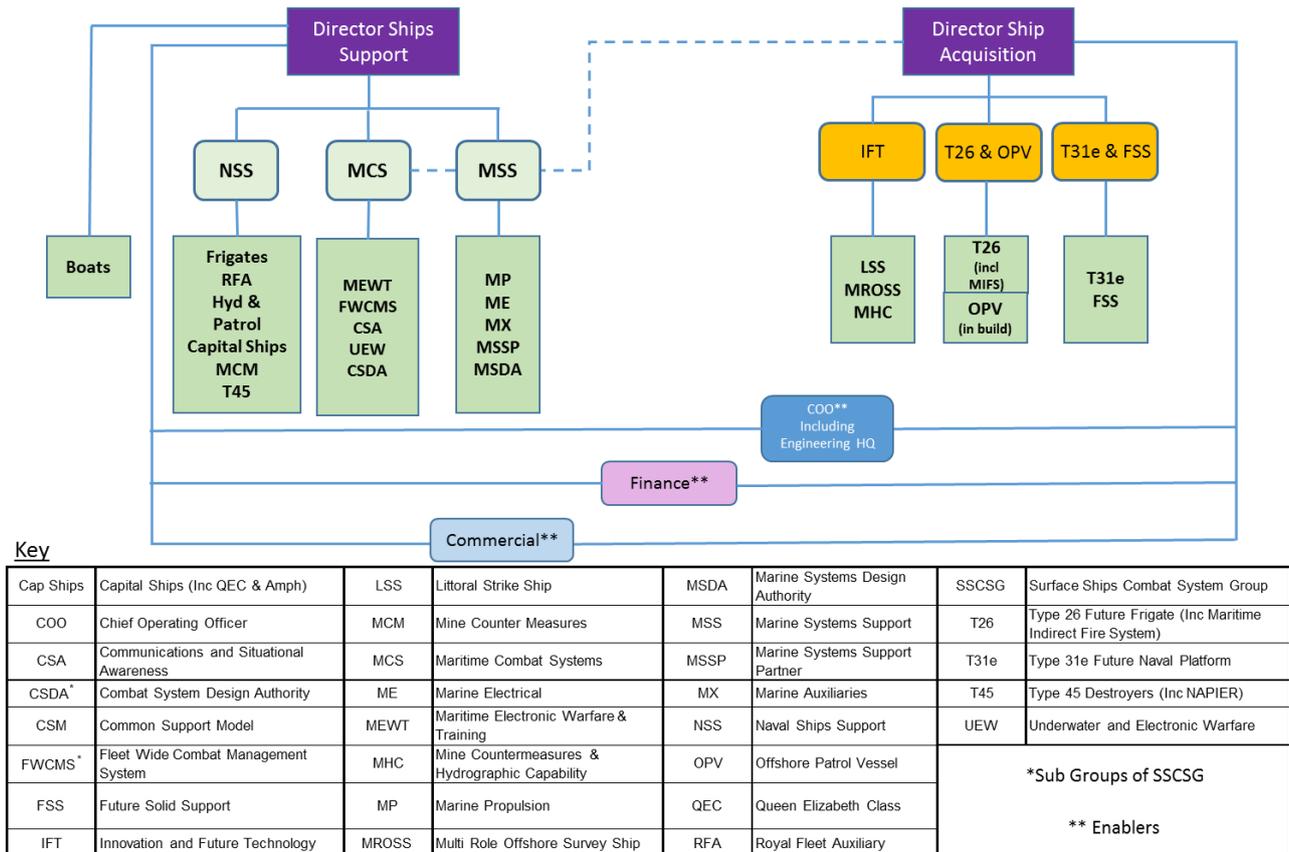


Figure 1: Hierarchy of Policy

## 1.2 SHIPS OPERATING CENTRES' ROLE

### 1.2.1

The Ships OCs comprise two 2-Star Director led business units, sitting within the Ships Domain of DE&S; these are the Directorates of Ships Support and Ship Acquisition (DShips Spt and DShip Acq respectively). The Ships OCs are organised as shown at Figure 2. The Ships OCs provide in-service support to Surface Ship platforms, (including embedded systems and equipment) and delivers all Surface Ship platform and equipment acquisition programmes to performance, time and cost targets (agreed in the Navy Command Acquisition Support Plan (CASP)). The work of the Ships OCs extends to supporting Submarine Delivery Agency outputs (particularly in the equipment support area), and to delivering specific programmes funded by Joint Forces Command (for example Special Forces Boats programmes). The OCs also work closely with Navy Command's Maritime Safety Director in delivering Maritime Safety Strategies sponsored by the Fleet Commander.



**Figure 2: Ships Operating Centres' – Organisation**

### 1.2.2

To deliver "Platform Focus" on behalf of Navy Command, where funded and resourced to do so, the Ships OCs manage the integration of applicable outputs of other DE&S OC's, such as Weapons, ISTAR, and Helicopters, and in some cases the outputs from Joint Forces Command's Information Systems and Services (ISS). The role of the Ships OCs is encapsulated in the respective OC Directors' Mission Statements: "To deliver the supportable new warships the Navy wants at the time, cost and quality we committed to" and "Safe, available, sustainable - putting the fleet to sea and keeping it there, fit to fight, now and in the future".

## 1.3 DOCUMENT SCOPE, AUTHORITY & APPLICABILITY

### 1.3.1

This document, the Ships OCs' Acquisition S&EP O&A Statement, including its supporting Leaflets, is the authority that enables the Ships OCs, including SALMO<sup>1</sup>, to operate an effective Safety and Environmental Management Sub-System in support of the Naval Service Safety &

<sup>1</sup> Whilst SALMO is not contained within the Ships OCs' it remains subject to the full requirements of this O&A Statement.

Environmental Management System [34] (SEMS) of which it forms an integral part. In simple terms, this document, its supporting O&A Statement Leaflets and individual Duty Holder and Safety Authority Safety and Environmental Management Plans (SEMPs), defines the 'Why?', 'Who?', 'What?', 'How?' and 'When?' that enables the discharging of safety and environmental responsibilities.

- 1.3.2 COM (Ships) Ships Domain S&EP Policy [33] is an integral element of the Naval Service SEMS and fully supports the 1<sup>st</sup> Sea Lords Safety Argument by putting in place the organisation and arrangements to deliver safe products and services. The Naval Service Duty Holder construct, that we support, is defined and documented in BR 10 and BR10 Supplement 1 [34] and [35].
- 1.3.3 Whilst the Ships OCs' Acquisition S&EP O&A Statement applies to all staff, Accountable Persons including Duty Holders and Safety Authorities act as the key enablers for the delivery of S&EP responsibilities supported by functional staff within the balanced matrix.
- 1.3.4 The organisational arrangements described in this document shall apply therefore without exception across the Ships OCs and shall be an integral part of our business, particularly noting the following:
  - a. Safety Management refers to all aspects of acquisition (platform, system and equipment) safety as well as the occupational health and safety of Ships OCs' employees and its contractors in terms of Duty of Care;
  - b. Environmental Protection refers to the responsibility to protect the environment placed on Delivery Teams by the Secretary of State through DSA01.1 [17] and JSP 418 [29] and Delivery Teams in the Ships OCs are required to manage the environmental aspects of platforms, systems and equipment such that adverse environmental impacts are minimised. This shall be achieved through proportionate implementation of the Project Orientated Environmental Management System (POEMS) [39] and Def Stan 00-051 [41]. Further guidance on this can be found in Ships OCs' Acquisition S&EP O&A Statement Leaflet 6 – Implementation of POEMS [6];
  - c. Safety Management and Environmental Management arrangements shall be afforded equal parity and both SEMP (which shall have a separate specific Annex or Section for environment) and combined Authority - Safety and Environmental Case Reports (A-SECR), produced by Safety Authorities, shall reflect this.
  - d. Proposed changes impacting Organisation and Arrangements shall be assessed before they are implemented in accordance with Ships OCs' Acquisition S&EP O&A Statement Leaflet 10 – Management of Safety Outputs During Change (MSOC) [10]. No change shall be implemented until the MSOC process has demonstrated that safety outputs during change will not be impacted and, by inference, that the change will be either neutral or beneficial for reasons to be documented. All SEMP shall be maintained during any period of change or period of transition (i.e. from build to in service or from one Safety Authority to another) to ensure that individuals and key stakeholders continue to remain aware of their responsibilities and how they are being impacted.
  - e. Use of hazardous materials (HAZMAT) can generate both Risks to Life and/or adverse environmental impacts and are therefore considered to fall within both Safety and Environmental management. Delivery Teams shall be aware of the requirement to minimise the use of HAZMAT and record the justification in a Technical Dossier where use is essential to meet military objectives. They should also be cognisant of the policy requirements relating to safety data sheet management as set out in JSP 375 Chapter 11 [27], JSP 418 Leaflet 5 [30] and JSP 515 [31], as well as specific guidance relating to asbestos management in JSP 375 Chapter 36 [28].

## **1.4 CONFIGURATION CONTROL AND DOCUMENT MANAGEMENT**

- 1.4.1 The Acquisition Safety & Environmental Protection Organisation and Arrangements Statement, its associated Leaflets, Safety and Environmental Management Plans, all Safety Artefacts listed in Table 1, Letters of Safety Delegation and Assignment Specifications shall be subject to configuration control. (NB: This list is not exhaustive and similar discipline shall be afforded to underpinning documents when appropriate, e.g. an eCassandra report or Desk Instruction supporting a Safety Authority's assertions).
- 1.4.2 Notwithstanding any corporate configuration control guidance or requirements, all Accountable Persons shall be responsible for ensuring that local configuration control arrangements are

effective. Such arrangements shall stand up to audit cognisant that all documents shall be subject to at least a biennial review (the exception being an annual review of SEMP, see Section 3.9) by the Accountable Person to ensure that documents are: properly filed within SharePoint, remain immediately available to view on demand and that current issue numbers and dates remain extant.

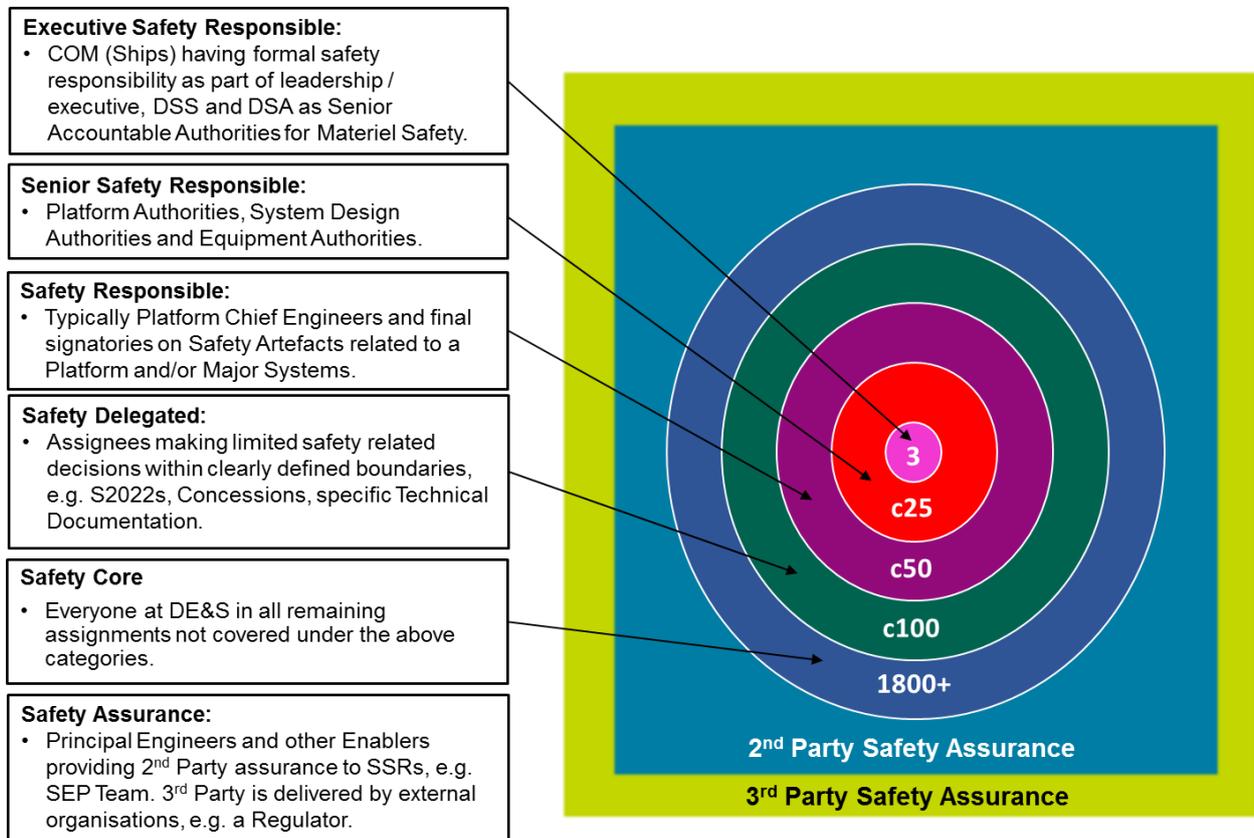
1.4.3

As a minimum, documents shall have Document Control information on the front cover and, or alternatively, in an appropriate 'Document Control' sheet e.g. as per this document. The Accountable Person's signature, or confirmation of ownership, shall normally be appended within the Document Control information. Full direction for managing and maintaining S&EP documentation is detailed in Ships OCs' Acquisition S&EP Statement Leaflet 4 – Management and Maintenance of Safety and Environmental Protection documentation [4].

## 2 ORGANISATION

### 2.1 SHIPS OPERATING CENTRES' ORGANISATION

- 2.1.1 In accordance with the DE&S Acquisition Safety Project, all Ships OCs' assignments are aligned to a safety category; the taxonomy is indicated in Figure 3. Specific assignments are 'tagged' Senior Safety Responsible (SSR), Safety Responsible (SR) or Safety Delegated (SD) depending on the scope of responsibility associated with the assignment. Those responsibilities, together with the training and competence requirements necessary to discharge responsibilities, are defined in an Assignment Specification which will also identify the specific Ships OCs' safety artefacts that are explicitly associated with the assignment. SSRs are to ensure that the agreed laydown of safety assignments for their respective areas of responsibility is documented in the relevant SEMP.
- 2.1.2 The approved list of Ships OCs' safety artefacts is provided at Table 1. Any proposed addition to the artefacts listed must be approved by DES Ships SPfO-DepHd-Safety; this O&A Statement will then be updated to reflect the addition. Local arrangements shall be put in place by the SSR to ensure that artefacts are subject to rigorous configuration control noting they will be subject to audit.



**Figure 3: Ships OCs' ASP Taxonomy Laydown for all Assignments with Illustrative Numbers**

- 2.1.3 Any individual required to fill an SSR, SR or SD assignment is assessed to ensure that they are competent to be solely responsible for the approval to release / signing off the safety artefacts listed in an Assignment Specification. If deemed competent the individual is issued with a Letter of Safety Delegation to enable them to discharge their responsibilities.
- 2.1.4 No individual shall fill an SSR, SR or SD assignment or receive a Letter of Safety Delegation until that individual has been assessed as competent to discharge responsibilities associated with the Ships OCs' list of defined safety and environmental artefacts.

- 2.1.5 Full details and instruction regarding the process of identifying and assessing an individual and how Letters of Safety Delegation and Assignment Specifications are managed, is provided in Ships OCs' Acquisition S&EP O&A Statement Leaflet 14: Defining Safety Responsibilities – Letters of Safety Delegation and Assignment Specifications [14].
- 2.1.6 It is the responsibility of all Managers to ensure that all assignees, regardless of safety category, are and remain informed of their safety responsibilities. Noting that use of 'Terms of Reference' was ceased during DE&S Transformation, Managers shall also ensure that individuals in assignments other than SSR, SR and SD (i.e. without an Assignment Specification), are aware that their DE&S success profile includes a generic safety focussed behaviour.
- 2.1.7 The Head of Engineering and other OC Principal Engineers receive a DE&S sponsored Letter of Responsibility which includes specific reference to Safety Assurance activities. Principal Engineers together with the Ships OCs' Safety and Environmental Protection Team Leader (DES Ships SPfO-DepHd-Safety) are categorised as Safety Assurance (SA) and may also be subject to competence assessment if appropriate.

No.	Artefact
1	Naval Authority submissions
2	Certificates of Clearance for Use
3	Safety Case Report/ Environmental Impact Screening and Scoping (EISS) Report/Environmental Case Report
4	Command Safety and Environmental Summary
5	Combat Safety Summary
6	Safety Concessions (Maintenance and / or Material as defined in the Assignment Specification)
7	Safety Priority S2022s/2022As
8	Stability Information Booklet
9	RADHAZ/SHIPHAZ drawing
10	Marine Systems Certificate
11	Combat System Certificate
12	Certificate of Safe Integration (Combat System)
13	Certificate of Safe Integration (Marine System)
14	Design Change Management Form (DCMF)
15	Change Impact Assessment (for trials and permanent equipment embodiment)
16	SQEP Panel ALARP declaration to Duty Holders to inform formal risk acceptance
17	Critical Design Review
18	Job Information Cards (JICs)
19	BRs (as defined in the Assignment Specification)
20	DEF STANs (as defined in the Assignment Specification)
21	Test Forms
22	Certificate of Seaworthiness
23	Statement of Technical Requirements (i.e. Platform, System or Equipment)

**Table 1: Ships OCs' Defined Safety and Environmental Artefacts**

## 2.2 SHIPS OPERATING CENTRES' DUTY HOLDERS, ACCOUNTABLE PERSONS AND AUTHORITIES

- 2.2.1 DSA01.1 [17] identifies DE&S as a 'Duty Holder-Facing Organisation, i.e. an organisation that has a responsibility to provide safe platforms, systems and equipment or other support required by the Duty Holder in mitigating risk to life. However, as shown in Figure 4, for certain activities in their area of responsibility, the Ships OCs' have added Operating Duty Holder (ODH) and Delivery Duty Holder (DDH) responsibilities.

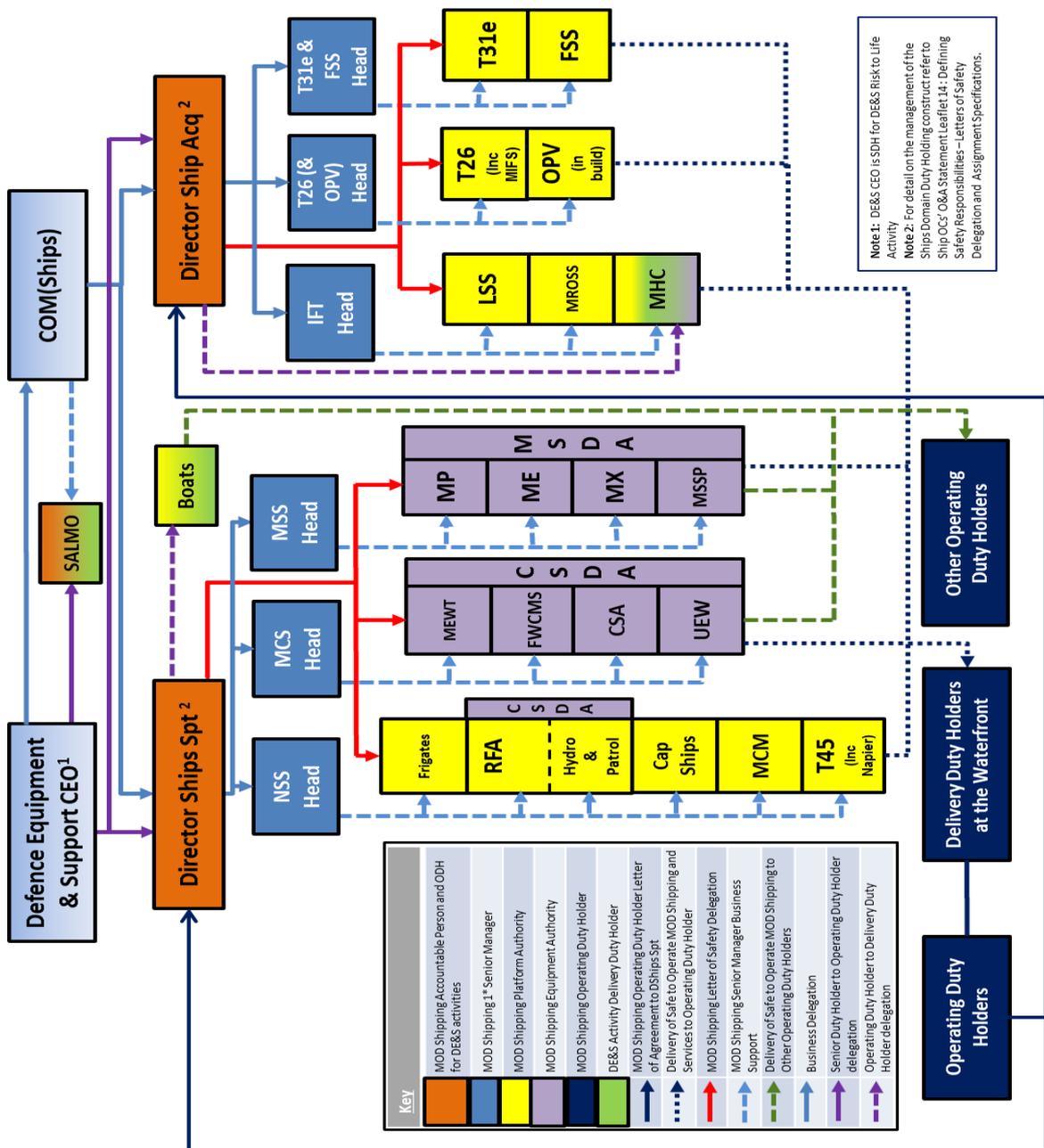


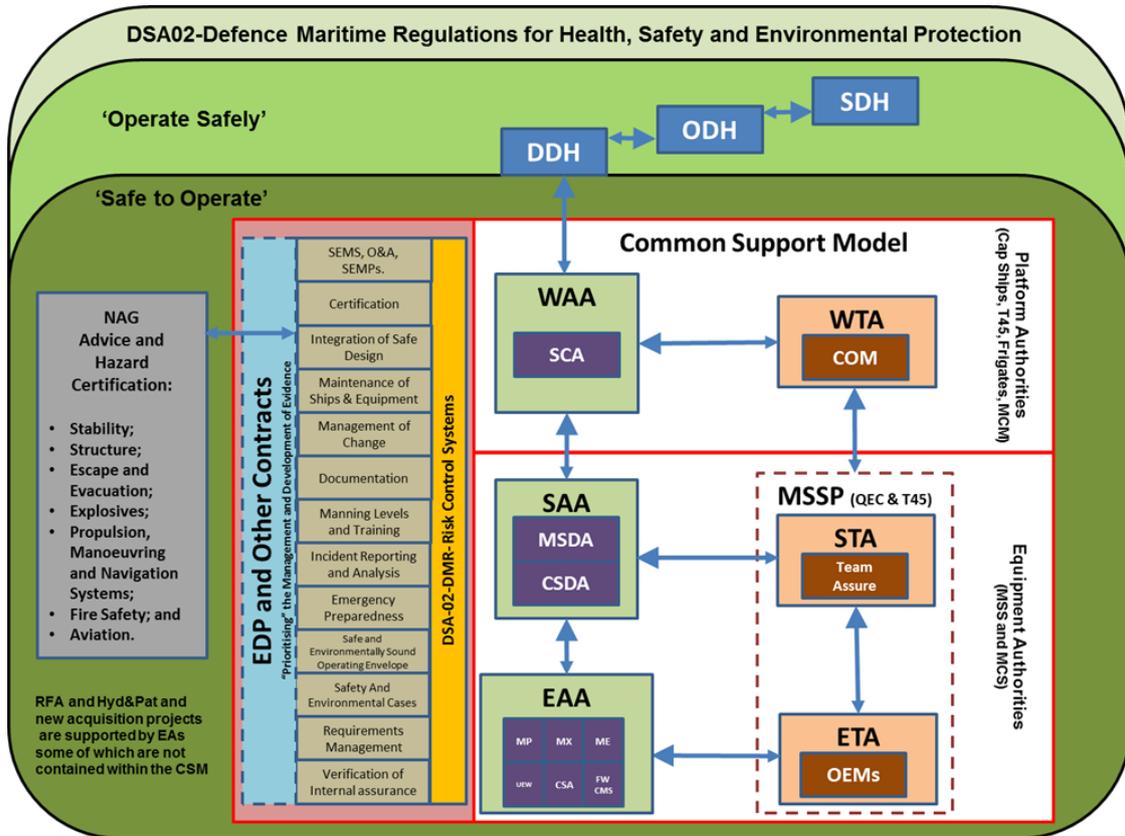
Figure 4: Ships Operating Centres' - Safety and Environmental Protection Responsibilities

2.2.2 As referenced in the 'Shipping Regulations' (Regulation 201) [18], the Secretary of State delegates the Service Chiefs' authority to identify and authorise Accountable Persons for defined 'areas of responsibility'. The term Accountable Person may be used particularly where a Duty of Care is the primary requirement and the requirement for actual Duty Holding is either not required or is not appropriate. In the Ships OCs the term Accountable Person may for example include any Senior Accountable Authority, Duty Holder, Senior Manager, or Safety Authority.

2.2.3 All Accountable Persons have a responsibility to ensure that suitable arrangements are made to safeguard continuity when formally handing over responsibilities to another individual. This is to ensure that the scope of responsibility, together with all associated caveats / issues, is clearly documented to ensure there is no ambiguity in understanding of what is required as and when transfer is effected. This is particularly important when there is no opportunity for any face to face discussion ahead of the implementation of transfer.

## 2.3 SHIP OPERATING CENTRES' DIRECTORS

- 2.3.1 Each of the Ships OCs' Directors is categorised as Executive Safety Responsible and they are responsible for issuing Letters of Safety Delegation to Platform and Equipment Authorities (including Design Authorities acting as Equipment Authorities) across the Ships OCs on behalf of Navy Command ODHs and other Accountable Persons (e.g. for Platforms and Equipment supplied to the LAND environment).
- 2.3.2 As described in DE&S S&EP Leaflet 09/2015 - DE&S's Contribution to Mitigating RtL across MOD [49]), each of the OC Directors are considered to be an ODH for hazardous activities undertaken by Ships OCs' personnel within their area of responsibility. In addition to their wider management roles, OC Directors are accountable to COM (Ships) for fulfilling their responsibilities in accordance with the 'Shipping Regulations'.
- 2.3.3 Full definition of OC Director responsibilities is detailed in COM (Ships) Ships Domain S&EP Policy [33]. Whilst the Ships OCs' DSA01.1 primary S&EP responsibilities are illustrated in Figure 4 above, Figure 5 illustrates the interaction of the Common Support Model (CSM) for Naval Ships Support, on the wider system, by which the Regulatory requirement is met.



**Figure 5: Common Support Model Interaction with S&EP Management**

COM	Class Output Management
CSA	Command Situational Awareness
CSDA	Combat Systems Design Authority
CSM	Common Support Model
DDH	Delivery Duty Holder
DMR	Defence Maritime Regulator
DSA	Defence Safety Authority
EAA	Equipment Approval Authority
EDP	Engineering Delivery Partner
ETA	Equipment Technical Authority
FWCMS	Fleet Wide Combat Management Systems
MCS	Maritime Combat Systems
ME	Marine Electrical
MP	Marine Propulsion
MSDA	Marine Systems Design Authority

MSS	Marine Systems Support
MSSP	Marine Systems Support Partner
MX	Marine Auxiliaries
NAG	Naval Authority Group
O&A	Organisation and Arrangements
ODH	Operating Duty Holder
OEM	Original Equipment Manufacturer
SAA	Systems Approval Authority
SCA	Strategic Class Authority
SDH	Senior Duty Holder
SEMP	Safety & Environmental Management Plan
SEMS	Safety & Environmental Management System
STA	Systems Technical Authority
UEW	Underwater Electronic Warfare
WAA	Warship Approval Authority
WTA	Warship Technical Authority

2.3.4 DShips Spt and DShip Acq attend the Ships Domain Business Review (SDBR) each month. Full details can be found in Chief of Materiel (Ships) Ships Domain S&EP Policy [33]. Jointly, OC Directors chair a tri-annual Ships Safety and Environmental Forum. This Forum is attended by Safety Authorities, the S&EP Team Leader and other key stakeholders as appropriate. This is a regular opportunity for all parties to discuss issues in the round. Whilst there is deliberately no set agenda, outcomes are formally summarised, and actions monitored.

2.3.5 Definitive management arrangements for each of the Authorities within the Ships OCs' shall be defined in their respective SEMP(s).

## **2.4 SENIOR MANAGERS**

2.4.1 Accountable Persons, as outlined in the 'Shipping Regulations' (Regulation 202) [18] include Senior Managers in this context. In Ships OCs these are typically either 2\* or 1\* assignment holders and, as illustrated in Figure 4, they are accountable for the provision of necessary resources and responsible for creating and managing an environment which enables Safety Authorities to discharge their responsibilities as detailed in the Shipping Regulations and their individual 'Letters of Safety Delegation'. Exceptionally, a Senior Manager may act as a Duty Holder or an Authority, but this scenario would be subject to the normal Ships OCs' competence assessment process as detailed in Ships OCs' Acquisition S&EP O&A Statement Leaflet 14: Defining Safety Responsibilities – Letters of Safety Delegation and Assignment Specifications [14].

2.4.2 Senior Manager responsibilities for S&EP are outlined in the 'Shipping Regulations' and their individual Business Delegations. In addition to fulfilling these responsibilities, Senior Managers shall:

- a. Support Safety Authorities in assessing and mitigating risks to the achievement of their responsibilities;
- b. Ensure consistent application of Ships OCs' S&EP management processes across their Area of Responsibility;
- c. Provide assurance on the adequacy of the safety management environment within their Area of Responsibility;
- d. Ensure the competence of, and monitor training and development requirements for individuals occupying an SSR, SR or SD assignment within their Area of Responsibility;
- e. Support their OC Directors in the delivery of their responsibilities as detailed in their respective Letters of Business Delegation; and
- f. Ensure that Delivery Managers discharge their responsibility to ensure that all staff training, and competencies are recorded and updated in DE&S tools (e.g. QuEST, ASSERT and HRMS) as appropriate to inform the Ships OCs' S&EP Organisational Baseline.

## **2.5 SHIPS OPERATING CENTRES' – SAFETY AND ENVIRONMENTAL LEAD**

2.5.1 Endorsed by the OC Directors the Ships OCs' Safety and Environmental (S&E) Lead, the Head of Engineering, acts as the Principal Engineer for all S&E matters. The S&E Lead, in conjunction with the Engineering Function, exercises cross-cutting responsibility for ensuring the OCs' have the appropriate processes, tools, skills and competences to deliver responsibilities for End-to-End, through-life safety and engineering.

2.5.2 The Head of Engineering sponsors Ships OCs' Acquisition S&EP O&A Statement Leaflet 14: Defining Safety Responsibilities – Letters of Safety Delegation and Assignment Specifications [14] and will provide recommendations to the OC Directors following competence assessments conducted for potential SSR and SR assignees. The responsibility for assessing SD competence lies with the relevant SSR.

## **2.6 SAFETY AND ENVIRONMENTAL PROTECTION TEAM LEADER**

2.6.1 DES Ships SPfO-DepHd-Safety is accountable to the Ships OCs' Safety Lead for:

- a. Supporting the development of the OCs' objectives and targets;
- b. Managing pan OC S&EP improvement programmes;
- c. Providing Subject Matter Expertise advice and guidance;
- d. Providing internal assurance within the Ships OCs;

- e. Monitoring and reporting S&EP performance;
- f. Promoting and improving S&EP culture; and
- g. Liaising with DE&S and third party S&EP leads.

2.6.2 Additionally, Ships SPfO-DepHd-Safety is responsible for ensuring and managing consistency and coherency within the Ships OCs' for all aspects of the DE&S Acquisition Safety Project including Letters of Safety Delegation, Ships OCs' Acquisition S&EP O&A Statement, Supporting Leaflets and all other documentation that supports the system that manages S&EP compliance. All proposed updates to any of these documents shall be reviewed by the Ships OCs' S&EP Team, prior to them being approved for issue.

## **2.7 OPERATING AND DELIVERY DUTY HOLDERS FOR DE&S ACTIVITIES**

- 2.7.1 DSA01.1 [17] defines the fundamental elements of 'Duty Holding' management arrangements as the provision of three descending levels of responsibility from the Senior Duty Holder (e.g. Top Level Budget Holder/ Chief Executive Officer), to the ODH and on to the DDH and that any risk to life is mitigated to Broadly Acceptable or Tolerable and As Low As Reasonably Practicable (ALARP). DSA02-DMR [18] and DE&S S&EP Leaflet 09/2015 - DE&S's Contribution to Mitigating RtL across MOD [49] expand on this principle.
- 2.7.2 Only where activities which present a justified, credible and reasonably foreseeable risk to life, and where the Duty of Care and other statutory arrangements are shown to be inadequate for owning, assuring or escalating the risk, have Duty Holders been identified, see Figure 4. If any individual considers that there are activities being conducted/controlled by SHIPS Domain staff, which meet the principles/criteria for Duty Holding, that are not covered in Figure 4, they should bring this to the attention of Ships SPfO-DepHd-Safety.
- 2.7.3 Full details on the management of safety delegations (including absences of Accountable Persons) are contained in the Ships OCs' Acquisition S&EP O&A Statement Leaflet 14: Defining Safety Responsibilities – Letters of Safety Delegation and Assignment Specifications [14].
- 2.7.4 An ODH owns the overarching safety case for their defence activity and must be personally satisfied that Risks to Life have been mitigated to ALARP and to a level that is tolerable for both those involved in the activity and anyone affected by it (including the public). By virtue of the position in the command / management hierarchy and their proximity, the DDH provides for the supervision of the defence activity being conducted and is accountable to the ODH.
- 2.7.5 DE&S DDHs receive Letters of Safety Delegation from the appropriate ODH covering, but not limited to, the following:
- a. Conducting activities and operations in a way that meets the Secretary of State's S&EP Policy (promulgated in DSA01.1 [17]), and exercising a duty of care to staff, contractors, all others involved in the activity or operation, third parties that could be affected by it, and the environment;
  - b. Ensuring that systems and procedures are not modified in such a way as to prejudice safety or environmental protection;
  - c. Ensuring that all accidents, incidents, near misses and hazards are reported, analysed, investigated and acted upon;
  - d. Ensuring emergency arrangements are in place, followed, understood and tested;
  - e. Ensuring that shortfalls in the safety or environmental performance of the equipment's design, material state, operating instructions or procedures are notified to the appropriate authority in a reasonable timescale; and
  - f. Ensuring that the ODH is fully informed, understands and is fully aware of the risk to which their team is exposed.
- 2.7.6 Navy Command ODH and DDH responsibilities are described in DSA02-DMR the 'Shipping Regulations', (Regulations 204 and 205) [18].

## 2.8 PLATFORM AUTHORITIES

- 2.8.1 Ships OCs' Platform Authorities (PAs) as identified in Figure 4 are responsible for the 'Safe to Operate' aspects of the platform and the integration of systems and equipment. The scope of these responsibilities is outlined in the 'Shipping Regulations' (Regulation 208) [18] and the 'Diving Regulations' (Regulation 800 Series) [19] and are also recorded in the relevant Operating Centre Director's Letter of Safety Delegation issued to each PA. Under the Common Support Model (CSM), the Regulatory requirement for a PA is fulfilled by the roles of Warship Approval Authority (WAA), supported by the MSDA/CSDA at Abbey Wood and the Warship Technical Authority (WTA) normally based at the waterfront. The activities undertaken by these groups are defined within the CSM; however, the regulatory definitions in the 'Shipping Regulations' take primacy and are applicable to all PAs.
- 2.8.2 PAs are subsequently responsible to each DDH and ODH for ensuring effective risk control to the acquisition cycle for all Ships in their 'Area of Responsibility' by actively managing the argument and objective evidence necessary to support the Safety and/or Environmental Cases demonstrating that the ship is 'Safe to Operate'.
- 2.8.3 Each PA is required to identify and record details of key individuals and associated key S&EP responsibilities and interfaces within their respective SEMP(s) - (see Section 3.9).
- 2.8.4 Additionally, a PA is responsible for:
- a. Assuring that the design of the platform, systems and equipment for which they are the Design Authority (DA) are, as far as reasonably practicable, 'Safe to Operate' for those who operate and maintain them, and that the risk to personnel (and 3rd parties) is mitigated to ALARP and tolerable, and any potential adverse environmental impact is minimised;
  - b. Escalating requirements to their Senior Manager for the provision of resources to enable them to fulfil their S&EP responsibilities;
  - c. The production and timely update of documentation for provision of Operating Instructions for safe and environmentally sound operation of the platform and its systems and equipment for which they are the DA, including the oversight and co-ordination of equipment teams whose equipment is installed directly into a platform;
  - d. Ensuring compliance with Ships OCs' Acquisition S&EP O&A Statement Leaflet 15 [15]: Management of Diving Projects.
  - e. Ensuring where Design Authority activity is outsourced, that procedures enabling underwater engineering activities to be conducted safely whilst minimising adverse impacts upon the environment are developed;
  - f. Jointly Chair with the DDH, (where the DH to PA interface is maturing) their respective Project Safety and Environmental Committees (PSEC). Where the interface is recorded as mature, the PSEC is chaired by the Duty Holder with PA attendance and support; and
  - g. Ensuring, where their platform(s) are supported by the CSM, that activity is conducted within the defined requirements of, and in accordance with, CSM Work Breakdown Structure (WBS) [54].
- 2.8.5 When contractor support is required to achieve business and/or safety and environmental outputs the PA shall refer to the Acquisition System Guidance (ASG) Commercial Tool Kit – Safety in Contracts [40]. This web based guidance reinforces MOD's overall safety policy and addresses generic procurement issues in relation to safety. It also covers issues raised by the Nimrod Enquiry conducted by Haddon-Cave and briefly explains what Safety in Contracts is; provides direction to policy and guidance on the subject; identifies the main legal regulations impacting on Safety in Contracts (the Legal Framework); and outlines the general principles underpinning Safety in Contracts. It also explains what is mandated, identifies sources of advice, sets out relevant commercial training and provides a list of further reading. In adhering to the 'Safety in Contracts' process, the PA shall additionally ensure that:
- a. S&EP requirements for the work being contracted is clearly specified and the interfaces and dependencies are identified, clearly articulated and understood;
  - b. The Regulatory regime, relevant to the contract, is clearly specified and any MOD

regulatory requirements are appropriately considered;

- c. The selected contractors are professionally competent to undertake the work;
- d. The required safety objectives of the 'Shipping Regulations' [18] and Defence Standard 00-056 [43] are reflected in the contract, including the mandated development and maintenance of a SEMP and a hazard log developed in accordance with DE&S policy noting that all new projects must utilise eCassandra at the outset;
- e. The required Environmental Protection objectives of the 'Shipping Regulations', and the requirements of POEMS [39] are articulated in the contract using Defence Standard 00-051 [41], tailored as appropriate. This should include the mandated development, maintenance and handover of an Environmental Management Plan (EMP<sup>2</sup>). Tailoring should ensure that the content of Ships OCs' Acquisition S&EP O&A Statement Leaflet 6: Implementation of POEMS [6] is incorporated;
- f. The contractor supplied S&EP data is provided in MOD approved format, that is auditable and acceptable;
- g. Suitable S&EP instructions (e.g. Integrated Trials, Evaluation and Acceptance (ITEA) plans) are issued and understood, particularly prior to sailing for trials;
- h. The contractor acknowledges and facilitates the requirement to provide access to MOD S&EP authorities, or their authorised representative to facilitate execution of their duties for the purpose of audit (i.e. an Independent Safety and Environmental Auditor); and
- i. GFX is clearly defined and contractors are given access to all data and documentation appropriate to the contract.

2.8.6 Recognising the principle of 'Platform Focus', PAs shall identify all System and Equipment Authorities (EAs) who support them and be proactive in establishing effective S&EP interface arrangements; these shall be formally documented as detailed in Section 3.6.

## **2.9 EQUIPMENT AUTHORITIES**

2.9.1 Ships OCs' EAs are identified in Figure 4 and the interfacing arrangements between EAs and PAs are defined in Ships OCs' Acquisition S&EP O&A Statement Leaflet 1: Platform Authority and Equipment Authority Interface [1].

2.9.2 Regulation 209 in the 'Shipping Regulations' [18] articulates the accountability and responsibilities of EAs to PAs for systems and equipment within their area of responsibility throughout the acquisition cycle. EAs shall take the lead on supporting integration of equipment and systems into a platform and shall provide evidence to PAs that the equipment or system is 'Safe to Operate' through a proportionate safety and environmental case.

2.9.3 For Warships managed under the CSM, EAs are supported in fulfilling their regulatory responsibilities through various layers. These are Systems Approval Authorities (SAAs), who are themselves supported by Systems Technical Authorities (STAs) and Equipment Approval Authorities (EAAs). EAAs are further supported by Equipment Technical Authorities (ETAs), these are normally associated with the support provided by Original Equipment Manufacturers. The activities undertaken by these groups are defined within the CSM; however, the definitions in the 'Shipping Regulations' take primacy.

2.9.4 EAs shall maintain and make available, proportionate Authority Safety Case Report (A-SCRs)/ Authority Environmental Case Report (A-ECRs) for all master equipment (or systems where appropriate) fitted to a platform for which they are responsible. In some instances, EAs may be responsible for direct supply of equipment to operators and are therefore directly responsible to and accountability to Front Line Command ODHs.

2.9.5 Each EA is required to identify and record details of key individuals and associated key S&EP responsibilities and interfaces within their respective SEMP(s) - (see Section 3.9).

2.9.6 Where an EAs equipment is fitted to a platform, EAs are required to support the Design Authority in the development and maintenance of procedures that enable underwater

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<sup>2</sup> Only where a decision is taken to manage Environmental aspects separately, otherwise a combined SEMP with a specific environmental Annex or Section (as appropriate) is used.

engineering activities to be conducted safely whilst minimising adverse impacts upon the environment.

2.9.7 EA responsibilities are further outlined in their Letter of Safety Delegation with additional clarity provided in the following Ships OCs' Acquisition S&EP O&A Statement Leaflets:

- Leaflet 1: Platform Authority and Equipment Authority Interface [1];
- Leaflet 3: Combat Systems Design Authority [3]; and
- Leaflet 13: Marine System Support Approving Authorities [13].

## **2.10 MARINE SYSTEMS DESIGN AUTHORITY**

2.10.1 The Marine Systems Design Authority (MSDA) role within MSS is to deliver coherent engineering outputs from MSS that are fit for purpose and Safe to Operate. This is provided by a single team performing the role of the Systems Approval Authority (SAA) for Complex Surface Warships and which, through the application of rigorous design management processes, ensures design changes that cross system boundaries remain safe and fit for purpose. Ships OCs' Acquisition S&EP O&A Statement Leaflet 13 [13] defines the role of the MSDA and provides the guidance and direction to the role.

2.10.2 The MSDA is led by a Safety Authority responsible for managing:

- a. Engineering Systems Owners (ESOs) who act as the SAA for managing design change processes within MSS and managing the safety and design intent at System of Systems level; and
- b. The System Technical Authority (STA) which co-ordinates the system design activity, developing the required evidence set confirming that design changes have been holistically integrated into relevant systems in order to sustain safe, capable and available systems of systems.

2.10.3 To fulfil this role the MSDA is empowered to liaise with the Combat Systems Design Authority (CSDA) and other EAs on behalf of a PA to ensure safe Platform and Marine System Support equipment integration.

2.10.4 MSDA is required to identify and record details of key individuals and associated key S&EP responsibilities and interfaces within its respective SEMP (see Section 3.9).

2.10.5 Where an MSDA system is fitted to a platform, MSDA is required to support the Design Authority in the development and maintenance of procedures that enable underwater engineering activities to be conducted safely whilst minimising adverse impacts upon the environment.

## **2.11 COMBAT SYSTEMS DESIGN AUTHORITY**

2.11.1 The CSDA role is discharged by the Combat Management System (CMS) Safety Authority within Maritime Combat Systems (MCS). The CSDA is one controlling mind responsible for ensuring safe integration of capable Combat Systems into Platforms on behalf of PAs. This responsibility is enabled by common Combat System safety governance processes as outlined in Ships OCs' Acquisition S&EP O&A Statement Leaflet 3, Combat System Design Authority [3]. To fulfil this role the CSDA is empowered to liaise with the MSDA and other EAs on behalf of a PA to ensure safe Platform and Combat System equipment integration.

2.11.2 CSDA is required to identify and record details of key individuals and associated key S&EP responsibilities and interfaces within its respective SEMP (see Section 3.9).

2.11.3 Where an CSDA equipment/systems are fitted to a platform, CSDA is required to support the Design Authority in the development and maintenance of procedures that enable underwater engineering activities to be conducted safely whilst minimising adverse impacts upon the environment.

## **2.12 MANAGEMENT OF AVIATION AND SHIP AIR INTEGRATION**

2.12.1 Provision of adequate aircraft facilities to fully integrate a range of aircraft on to any platform is a complex issue. This applies equally to the integration of new or legacy aircraft on new or legacy platforms. The Aviation Systems Group within Naval Ships Support is responsible for engineering aspects of the aviation permissioning process (currently not including CSS). The

group examines the Ship / Air interface for integration of individual aircraft to provide evidence that ship facilities and material state are compliant with regulatory requirements.

2.12.2 Aviation Systems Group responsibilities, including the support provided to PAs and EAs are set out in the Ships OCs' Acquisition S&EP O&A Statement Leaflet 2: Management of Aviation and Ship Air Integration [2]. Management arrangements for Authorities not supported by Aviation Systems Group shall be defined in their respective SEMP (see Section 3.9).

## 2.13 ACQUISITION SAFETY TRAINING<sup>3</sup>

### Primacy of DE&S Training

2.13.1 The DE&S System Safety and Environmental Protection (S&EP) suite of training represents the core SQEP1 training requirement for DE&S. The suite is currently provided free at source. The Safety and Environmental Management Training (SEMT) and Maritime Environmental Management Training (MEMT) courses currently address the Maritime Domain specific SQEP2 requirements for Acquisition S&EP. These courses are currently delivered at cost by a contractor and sponsorship will be transferred from the Defence Maritime Regulator (DMR) to the Head of Maritime Engineering during 2020. Completion of SQEP1 training is a pre-requisite for attending SQEP2 training and individuals will not normally be able to attend SQEP2 courses without having first achieved the SQEP1 requirement relevant to their assignment. Any individual requiring to cancel attendance on pre-booked training shall seek SSR approval before any cancellation action is taken noting that individuals may be liable for cancellation costs.

2.13.2 The S&EP Competence Maps<sup>4</sup> are still utilised in DE&S to identify the relevant SQEP1 training requirement for seven specific individual S&EP related roles. These groupings were used to inform the first issue of the Ships Domain S&EP Training Framework at Figure 6. Following implementation of the DE&S Acquisition Safety Project (ASP) taxonomy, the continued use of these descriptions is now being reviewed by DE&S; until they are removed or updated, they will continue to be used as the key reference for SQEP1 S&EP training and competence requirements.

2.13.3 The application of S&EP Competence Maps in the Ships OCs is primarily dictated by the scope of safety responsibilities associated with each assignment. The role descriptions are described in ASEMS [37] but, importantly, it should be noted that they do not mirror the Acquisition Safety Project taxonomy now in use and they are not representative of 'functional' role profiles.

2.13.4 For reference purposes the DE&S Competence Maps have been grouped under the appropriate Acquisition Safety Project taxonomy to reflect how the descriptions are subsumed in a training context within the Ships OCs as shown in Table 2.

ASP Safety Tag	Legacy DE&S S&EP Competence Map	Typical Assignments/Responsibilities
<b>Executive Safety Responsible</b>	Executive	Chief of Materiel, Director or Senior Manager with responsibilities for delivery and support of military systems, having formal safety and environmental responsibility as part of leadership / executive role. DSS and DSA as Senior Accountable Authorities for Materiel Safety.
<b>Senior Safety Responsible</b>	Project Team Leader	Platform Authorities, System Design Authorities and Equipment Authorities responsible for delivery and support of military systems.
<b>Safety Responsible</b>	Advisor/Regulator	Typically Platform/System/Equipment Chief Engineers and final signatories on Safety Artefacts related to a Platform, Major System or Complex Multi-platform Equipment.
<b>Safety Delegated</b>	Stakeholder	Typically Project Engineers making limited safety-related decisions within clearly defined boundaries, acting as the final signatory on specific safety artefacts from the list at Table 1, e.g. S2022s, Concessions and technical documentation such as BRs and JICs.

<sup>3</sup> For information on "Occupational Health Safety and Environment (OHSE) training contact the Ships OCs' Safety and Environmental Protection Team - (DES Ships SPFO-Safety3).

<sup>4</sup> DE&S S&EP Leaflet 10/2017 – System Safety & Environmental Protection Competence Mapping

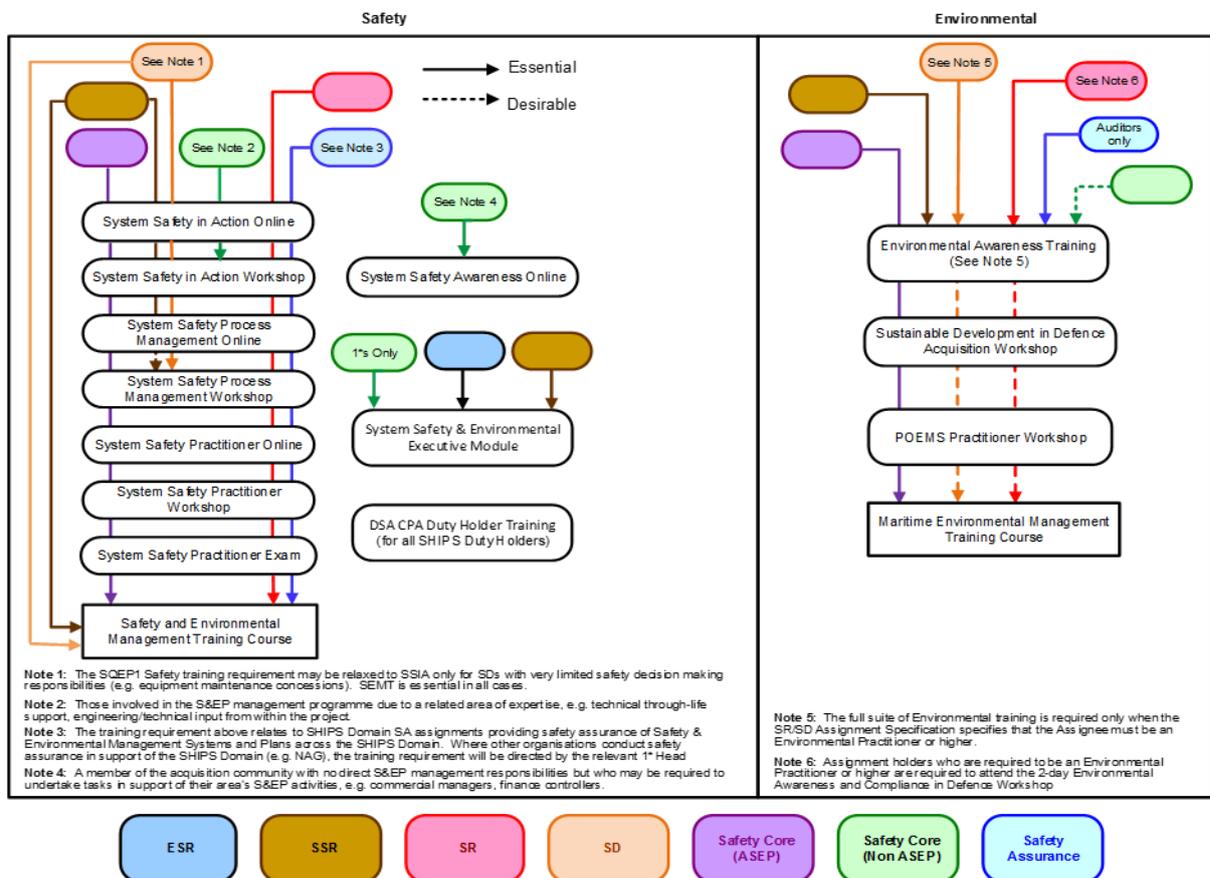
ASP Safety Tag	Legacy DE&S S&EP Competence Map	Typical Assignments/Responsibilities
Safety Core (ASEP)	Safety and/or Environmental Manager	Responsible for developing, managing and maintaining the Safety and Environmental Management System. Likely to be the sole or primary activity of an individual in this role. NB: Some Safety or Environmental Manager assignments may require incumbents to be assessed as Safety Delegated if they are required to make limited safety related decisions within clearly defined boundaries and sign specific safety artefacts.
	Safety and/or Environmental Officer	Responsible for undertaking S&EP management activities governed through an established SEMS or undertaking day to day work in a larger project, working to achieve the Systems S&EP Programme in support of the roles above.
Safety Core (Other)	Support	A member of the acquisition community with no direct S&EP management responsibilities but who may be required to undertake tasks in support of their area's S&EP activities (e.g. commercial managers, financial controllers), i.e. everyone at DE&S in all remaining assignments not covered under the above categories.
Safety Assurance	N/a	This Acquisition Safety Project term is not associated with any legacy System Safety & Environmental Competence Map role description. The term is applicable to Principal Engineers and other Enablers providing 2nd Party assurance to Executive Safety Responsible and / or Senior Safety Responsible, e.g. QA and SEP Teams.

**Table 2: ASP Taxonomy Grouped to Competence Maps**

**Development Needs**

2.13.5

S&EP competence requirements are related to the S&EP activities associated with an assignment. Priority activity is to be taken by all Managers to ensure that competence requirements for each assignment are defined so that an individual can be developed to achieve these requirements and, where appropriate, be supervised until the required standard is reached. The Ships Domain S&EP training framework is illustrated at Figure 6. Managers should consider allowing individuals time to complete essential S&EP training *prior* to taking up an assignment or during any handover period. This will encourage S&EP competence development from the outset. This is particularly relevant to military personnel ahead of a posting to the Ships OCs.



**Figure 6: Ships Domain System Safety and Environmental Training Framework**

## **Environmental Management Training**

- 2.13.6 Due to the amount of training associated with full completion of both the safety and environmental management suites, and the specialised nature of environmental management, it may be appropriate for 1\* areas to focus on training and developing a small number of environmental managers to support multiple Delivery Teams. Noting that this may impact the tagging (see Section 2.1) of specific assignments, approval to proceed on this basis should be sought from DES Ships SPfO-DepHd-Safety.

## **Equivalency of Historic Training and Other Qualifications**

- 2.13.7 Examples of historic safety and environmental courses that may be considered to be equivalent to current courses include historic POSMS and POEMS training and the SSMO Course (if within five years). Other qualifications such as NEBOSH Certificate/Diploma or a relevant BSc/MSc may also be considered equivalent.
- 2.13.8 Requests to bypass any elements of this framework based on experience or equivalency should be directed to Director Engineering and Safety – QSEP for SQEP1 and Head of Engineering for SQEP2. Individuals who consider that, through legacy training, they are fully safety competent can elect to sit the System Safety Practitioner Examination without completing the suite of training, subject to QSEP agreement.

## **2.14 INDEPENDENT SAFETY AND ENVIRONMENTAL AUDITOR (ISEA)**

- 2.14.1 As outlined in the 'Shipping Regulations' [18], Accountable Persons shall commission Independent Safety Auditors (ISA) and Independent Environmental Auditors (IEA) to confirm, proportionate to the risk, that the safety and environmental management regime has been implemented in accordance with the 'Shipping Regulations' and that Safety and Environmental documentation is suitable and sufficient.
- 2.14.2 The requirement for an ISA, IEA (or ISEA if combined) may be waived when the Accountable Person considers that the system or equipment is sufficiently low in complexity proportionate to the risk. ISEAs are to be employed as Auditors, not Advisors; their independence is to be respected and maintained.
- 2.14.3 An ISEA will normally be appointed by and be accountable to a Safety Authority. However the ISEA may also be appointed by the Authority or other Accountable Person (e.g. ODH/DDH) depending on agreed contracting mechanisms and the scope of the services required. The ISEA will hold no executive authority such that the Authority or Accountable Person retains overall responsibility for their S&EP matters. An ISEA's recommendations may be overruled but, in such cases, a robust justification for the decision should be recorded. Where an Authority intends to contract for ISEA services the Front Line Command shall be approached at the outset.
- 2.14.4 When contracting ISEAs, Safety Authorities must, in the first instance, approach Director Engineering and Safety to determine the availability or otherwise of competent ISEA resource within the Internal Technical Services (ITS) Group. The use of external technical support shall only be used where ITS confirms that it is unable to satisfy a demand.
- 2.14.5 Any proposed ISEA contract must include provision of contract break clauses so that provision can cease if ISEAs do not provide an adequate service, or if their competence is subsequently called into question, or where an Authority's requirements change. Contracts must be cognisant of and use the following documents:
- The Use of ISEAs in DE&S – Guidance, Best Practice and FAQs [44]; and
  - Guidance on the Procurement of Independent Safety Auditor Services [45].
- 2.14.6 Further, before any contract is placed to engage an ISEA (or ISEA Team) a competence assessment shall be conducted. This aligns with the Acquisition Safety Project requirement for competence assessment of DE&S 2nd party assurers. The ISEA or lead auditor should be interviewed by the Safety Authority's Safety Committee to ensure their acceptability before engagement. Each Safety Committee shall also include an agenda item confirming the continuing acceptability of the ISEA each year.
- 2.14.7 The ISEA in using their expert, professional judgement plays an important part in guiding the Authority and any associated contractors on the framework of applicable standards and good

practice. The ISEA may also assist the Authority in discharging its responsibilities for monitoring effective safety and environmental management by Contractors through the provision of recommendations on the generic aspects of safety management.

2.14.8 In addition, the ISEA will be expected to conduct the following activities on behalf of the Authority:

- a. Review and audit the systems that manage safety and environmental protection outputs;
- b. Audit the SEMP (see Section 3.9), associated safety processes, Platform/System/Equipment safety case evidence and Authority SCRs and ECRs and Command Safety and Environmental Summary (CSES) as scheduled;
- c. Provide independent assurance that an Authority is conducting their safety and environmental protection business in accordance with their approved SEMP;
- d. Attend Safety and/or Environmental Committees and Hazard Review Committees (specific committees are to be identified in contractual arrangements and recorded in the SEMP); and
- e. Audit an Authority's Assurance return every six months in accordance with Ships OCs' Acquisition S&EP O&A Statement Leaflet 16 [16] – Safety and Environmental Assurance Process.

## 2.15 EMERGENCY RESPONSE ORGANISATION

2.15.1 Support arrangements for platforms in an emergency scenario are incorporated into the Ships OCs' Emergency Response Plan (ERP), Ships OCs' Acquisition S&EP O&A Statement Leaflet 8 [8]. In accordance with commercially accepted good practice, the ERP is normally exercised *unannounced* annually.

## 2.16 KEY STAKEHOLDERS

2.16.1 Table 3 below lists the key organisations that have specific S&EP responsibilities and roles in support of the Ships OCs' Duty Holders and Safety Authorities. Organisations that interface with the Ships OCs' are referenced in Section 3.

Organisation	Safety and Environmental Protection Role
Defence Safety Authority (DSA) Defence Maritime Regulator (DMR)	The Ships OCs' activities are subject to regulation by the DSA, elements of which are: <ul style="list-style-type: none"> <li>• MOD Shipping Regulations for Safety and Environmental Protection (the 'Shipping Regulations' [18]) – Sponsored by DMR;</li> <li>• Regulations and Guidance covering the Safety and Environment Management of OME over the Equipment Acquisition Cycle (JSP 520 [32]);</li> <li>• Military Aviation Authority (MAA Regulatory Publications [22]);</li> <li>• Health and Safety Executive (HSE) Health and Safety at Work etc. Act 1974 [23];</li> <li>• Maritime and Coastguard Agency (MCA) Merchant Shipping Act [24];</li> <li>• Environment Agency and Scottish Environment Protection Agency (Environment Act 1995 [25]).</li> </ul>
Delivery Duty Holder	Based in Faslane, Portsmouth and Devonport, responsible to ODH for ensuring compliance with the 'Shipping Regulations' for one or more ship type or mission system.
Disposal and Reserve Ships Organisation (DRSO)	Responsible for care and protection of ships in the disposal process.
Flag Officer Sea Training (FOST)	Delivery of the Royal Navy's through life operational training across all platforms and all disciplines. FOST training prepares platforms for peace time, peace support, transition to war and war fighting operations. Training is provided primarily from the FOST HQ in HM Naval Base Devonport and projects worldwide to deployed ships.

Organisation	Safety and Environmental Protection Role
Lloyd's Register (LR)	Assess the material state of ships through life identifying deficiencies. Provide assurance, through Classification Certificates, that in-service ships meet the agreed standards for design, safety construction and maintenance. Not every ship is in-class for Hull & Machinery, PAs shall define this detail within their respective SEMP.
Machinery Trials and Acceptance Unit (MTAU)	Independent 'Responsible Organisation' for Propulsion and Manoeuvring and on behalf of MSS assessed commissioning trials of machinery for each ship at the end of non-fleet time Upkeep Periods to provide assurance the machinery systems are fit for purpose.
Submarine Delivery Agency (SDA)	The SDA has its own Acquisition S&EP O&A Statement. However, elements within the Ships Support OC provide direct EA support to the SDA for both submarine specific systems and equipment and items that are common between surface ships and submarines.
Marine Services Team	Provide Marine Services for RN Ships in and out-of-port, including provision of tugs, fuel lighters and other support facilities under contract. Responsible for providing range safety and aircrew training for the Royal Navy, RAF, and the Army. These services are provided through existing support contracts such as Serco-Denholm on a 'contractor owned contractor operated' basis.
Maritime Commissioning, Trials and Assessment (MCTA) - part of DE&S and has waterfront staff at every Naval Base	Provide Independent assessment of: <ul style="list-style-type: none"> <li>Ships magazines inspections, to ensure they are maintained, and remain configured, in accordance with the requirements of explosives S&amp;EP documentation;</li> <li>The ship's Combat System to ensure the systems and equipment remain configured, or are upgraded, in accordance with the Design Authority requirements;</li> <li>The Material State Verification Inspections (MSVI) in support of the issue of Certificates of Safety – Fire (CSF).</li> </ul>
Naval Authority Group (NAG)	The Naval Authority provides assurance to COM(Ships) and DMR that defined hazard areas are safe and certifies sections of the overall safety and environmental case evidence through the issue of Certificates of Safety.
Naval Design Partnering (NDP)	Translate capability requirements into concept designs; Designs complex warships at the platform and combat system architecture levels.
RN Training Establishments	The RN establishments at HMS Sultan, HMS Raleigh and HMS Collingwood, provide shore training for the operation, maintenance and support of platforms, their sub-systems and equipment.
Salvage and Moorings Organisation (SALMO)	Reporting directly to COM(Ships) SALMO provides specialist engineering and project management for salvage, mooring, towing and heavy lift requests. In the event of a maritime emergency, the SALMO Team provide worldwide assistance to recover from that emergency and repatriate assets.
Surface Ship ODH (ACNS (Ships))	Responsible for ensuring the maintained platform CONUSE is available to the PA. Responsible for the safe operation and deployment of platforms, equipment and sub-systems.
Surface Ship Operating Safety Group (SS OSG)	Responsible to the ODH for the ODH Surface Ship Safety and Environmental Management Plan and the management of Surface Ship Operating Safety Risks, Issues, Assurance, Lessons and Continuous Improvement.

**Table 3: Organisations with S&EP Roles**

## 3 ARRANGEMENTS

### 3.1 MANAGEMENT AND GOVERNANCE ARRANGEMENTS

- 3.1.1 The Safety and Environmental Protection arrangements described below outline the everyday processes of Safety Management and Environmental Management that provides an integral part to the sustainment, promotion and improvement of Ships OCs' S&EP cultural behaviours and attitudes. The arrangements provided meet or exceed the requirements of the MOD Acquisition safety and Environmental Management System (ASEMS) policy guidelines [37].
- 3.1.2 ASEMS is the mandated DE&S process for the conduct of acquisition Safety and environmental and management. Through compliance with this O&A Statement, ASEMS, regulation, instructions and guidance, DE&S projects will satisfy their legal obligation to ensure that safety and environmental impacts associated with their products, systems and services are properly assessed, managed and controlled. ASEMS is a fully-interactive DE&S web-based tool that is fully accessible from workstations, tablets and phones at the following web address:
- [www.asems.mod.uk](http://www.asems.mod.uk)
- 3.1.3 Governance arrangements for Senior Committees and Forums in the Ships Domain are defined in COM(Ships) Ships Domain S&EP Policy [33], they are not duplicated in this O&A Statement.

### 3.2 ASSIGNMENT AND LETTERS OF SAFETY DELEGATION

- 3.2.1 Individuals assigned to tagged assignments, i.e. SSR, SR and SD, will be provided with a Letter of Safety Delegation. Whilst an Assignment Specification will set out the requirements for the assignment the Letter of Safety Delegation is personal, and it provides confirmation of the scope of the delegation and information on how that delegation shall be managed. All SSR Letters of Safety Delegation are issued by an ESR. SR and SD Letters of Safety Delegation are issued by the relevant SSR. DES Ships SPfO-DepHd-Safety is responsible for managing and maintaining the process for ensuring that Letters of Safety Delegation are in place, duly acknowledged and accepted. All Letters of Safety Delegation<sup>5</sup> shall be managed in accordance with the guidance provided in Ships OCs' Acquisition S&EP O&A Statement Leaflet 14: Defining Safety Responsibilities – Letters of Safety Delegation and Assignment Specifications [14].
- 3.2.2 It is an SSR's responsibility to ensure that risks to achievement of delegated responsibilities are assessed, managed and escalated where appropriate.

### 3.3 IDENTIFICATION AND MANAGEMENT OF INTERFACES

- 3.3.1 The 'Shipping Regulations' [18] mandate that processes shall exist to manage S&EP across all interfaces and over the whole regulatory regime in an integrated and coherent way. The overall effectiveness of the interface arrangements shall be subject to audit.
- 3.3.2 The principal focus for S&EP in the Ships OCs' is the end to end risk interface process between the EA, PA, DDH and the ODH. In general, the ODH exercises primacy in S&EP matters.
- 3.3.3 S&EP processes define the communication mechanisms between PA, DDH and ODH staff but additional means by which such communication is achieved include:
- Availability Working Groups;
  - Surface Ship Operator Safety Working Group (SSOSWG);
  - Use of the S2022 process; and
  - Navy Lessons and Incidents Management System (NLIMS).
- 3.3.4 ODHs shall exercise leadership in seeking agreement on Duty Holder safety interface arrangements and, where appropriate, detail shall be included in the Letter of Agreement (LoA) between Navy Command ODHs and Ships OCs' Directors.

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<sup>5</sup> All SSR letters of S&EP delegation will be managed via, the Safety and Environmental Protection Team Leader.

### 3.4 INTERFACES MANAGED BY SHIPS OCs' DIRECTORS

#### Interface with the Operating Duty Holder

- 3.4.1 As the Senior Accountable Authorities for material safety within their respective OCs, DShips Spt and DShip Acq have received a letter from the Navy Command ODH<sup>6</sup> requesting that they implement and maintain a framework of Platform<sup>7</sup>, System, Equipment and Design Authorities to support them in their roles. This document formalises the organisation and arrangements in place to manage that interface.

#### Interface with other Operating Centre Directors

- 3.4.2 Safety Interface Agreements (SIA) at ESR level have been drafted for Ships OCDs with SDA, Hels, LDOC, LAND, ISTAR and Weapons. These define high level agreements, are generic in nature and succinctly set out the broad expectations of what an OC can expect of the other in terms of acquisition safety. In basic terms they are the reference point, in governance terms, from which Team to Team detailed acquisition safety agreements, if required, would be developed. Such detailed agreements might be contained in the form of a process, an internal business agreement (IBA), or they might be managed in some other form. SIAs are available to view at Ships OCs' Acquisition S&EP O&A Statement Leaflet 12 [12]; it should be noted that SIAs continue to be matured. The requirement for further SIAs may continue to evolve.
- 3.4.3 Whilst the Weapons SIA is high level, the OCDs and Director Weapons Internal Business Agreement (IBA) [51] describes the boundaries, responsibilities and dependencies of each of the signatories with respect to the supply and support of weapon systems and Ordnance, Munitions and Explosives (OME). Weapon Delivery Teams within the Weapons OC (WOC) provide OME to be integrated into Warships and carried on board RFAs. A small number of OME Delivery Teams within the Ships OCs are supported by DOSG Safety Advisors, and their safety is assured through the OSRP Process. Defence Munitions, also part of WOC, provide custody and maintenance of OME when it is not embarked in ships and this aspect has to be planned by all OME projects. WOC also provides emergency support and runs the Munitions Incidents Database. The SIA describes the scope of the safety interface more fully, signposts responsibilities and sets mutual expectations between OCs. Where appropriate, additional detail is agreed and recorded in project-specific SEMP.
- 3.4.4 Merlin, Wildcat, Chinook, Apache and other helicopters are all embarked on and operated with and from various classes of HM Ships and RFAs. Safety of both aircraft and ships depend on mutual understanding, timely exchange of safety related information, and careful change control. The interface between the aircraft and the ship covers not only flight deck, handling, fuelling and hangar/maintenance facilities, but also includes (among a wider list of interfaces) air wake, control of electromagnetic (EM) spectrum (including lighting), communications, and emergency arrangements. Again, whilst the Helicopters SIA is high level it also describes the scope of the safety interface more fully and signposts responsibilities setting mutual expectations between OCs. Individual Platform Authorities are able to include additional detail of interface arrangements with Air System Type Airworthiness Authorities as Annexes to this particular SIA if required and agreed as appropriate.

### 3.5 INTERFACE WITH DIRECTOR ENGINEERING AND SAFETY

- 3.5.1 The QSEP team reporting to Director Engineering and Safety provides the overall safety policy lead for the DE&S and also exercises key DE&S-wide safety leadership functions under delegation from MOD Centre. QSEP sponsor ASEMS [37], DE&S S&EP systems Project Orientated Safety Management System (POSMS) [38] and Project Orientated Environmental Management System (POEMS) [39]), Defence Standards 00-051 [41], 00-055 [42] and 00-056 [43], safety training and a series of DE&S S&EP policy leaflets. QSEP also administer safety reporting and assurance arrangements for the Chief Executive Officer and his DE&S Safety, Health and Environment Committee. Within the Ships OCs, the SEP Team normally act as the liaison with QSEP but QSEP specialist advice is also available direct to teams.

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<sup>6</sup> SSOSG/ODHDel/10/15, dated 16 Dec 15.

<sup>7</sup> Reflects the replacement of the legacy JSP 430 term *Platform Duty Holder* with *Platform Authority* in DSA02-DMR.

### **3.6 INTERFACES MANAGED BY SHIPS OCs' SAFETY AUTHORITIES**

- 3.6.1 PAs will normally take the lead in identifying where the delivery of S&EP by their Area of Responsibility has inter-dependencies with other organisations. Where no LoA, IBA, internal DE&S, or Ships OCs' business process exists to manage inter-dependencies then mutually agreed and documented arrangements shall be put in place to formalise these relationships using OC SIAs for reference. These arrangements shall specifically detail how each interface is managed, and include information regarding responsibilities, assumptions and dependencies, the frequency of interaction, S&EP targets and plans, and how processes will be integrated and aligned. The assumptions and dependencies shall also be recorded in the Project MDAL or ADaM database as appropriate.
- 3.6.2 PAs shall exercise leadership in seeking agreement on safety interface arrangements by:
- a. Ensuring, (where equipment, support or logistics includes air systems – aircraft, helicopters, unmanned air vehicles and/or guided weapons) that the specific Safety duties associated with airworthiness are transferred to and undertaken by the most appropriate of the Air Operating Centres Directors;
  - b. Ensuring that Director Weapons advice is sought for instructions on safe acquisition, integration, storage and transportation of explosive components of weapons, missiles and munitions;
  - c. Ensuring that Director ISTAR advice is sought for instructions on safe acquisition, integration, storage and transportation of equipment supplied by their teams;
  - d. Ensuring that Director Land Equipment advice is sought for instructions on safe acquisition, integration, storage and transportation of equipment (i.e. Vehicles transported in Amphibious Shipping, Mechanical Handling Equipment, Hand Tools, etc.) supplied by their teams; and
  - e. Ensuring that EA (MSS, MCS, MSDA, CSDA etc.), advice is sought for instructions on safe acquisition, integration, of their systems and equipment onto platforms in accordance with the requirements defined in relevant Ships OCs' Acquisition S&EP O&A Statement Leaflets.
- 3.6.3 PAs receive a Letter of Air Safety Notification from COM(Air) [53], that defines the boundaries, responsibilities and dependencies on them with respect to the support required to embark fixed wing aircraft, including their associated air systems and platform interface arrangements.
- 3.6.4 All Safety Authorities shall ensure that interfaces and interface agreements are comprehensively documented within their SEMP's thus obviating the need to generate additional documentation. SEMP's shall define the arrangements for the intercommunication of S&EP requirements, S&EP risks / impacts and for monitoring and assurance of safe systems, equipment, and supporting documentation. Senior Managers shall exercise leadership in seeking commitment to fulfilment of the interface arrangements between the Platform, System, Equipment and Design Authorities. Full details with respect to this are defined in relevant Ships OCs' Acquisition S&EP O&A Statement Leaflets.
- ### **3.7 INTERFACE WITH INDUSTRY/SUPPORT PARTICIPANTS, PORTS, DOCKYARDS AND SHIPYARDS**
- 3.7.1 Industry participants play an important role in supporting the wider Ships Enterprise and in ensuring platform S&EP is properly managed. ASG Commercial Tool Kit – Safety in Contracts [40] is aimed at ensuring that suitable provision is made for placing S&EP requirements, monitoring performance and ensuring SQEP is appropriate.
- 3.7.2 Emphasis shall be given to good communication with Naval Bases in order to enable early planning of work and to assure the overall effectiveness of the interface arrangements.
- 3.7.3 Naval Bases and civilian dockyards and shipyards face dual responsibilities in connection with work necessary to support the maintenance of the safe material state of ships. They are responsible to PAs for undertaking work to the required standard to meet Ships OCs' S&EP requirements, and they are also responsible for the suitable scheduling and control of work to minimise risk to the workforce and other occupants and neighbours of the Naval Base; as such they have lead responsibility for S&EP 'on the day'.

3.7.4 In order for Naval Base Authorities to maintain the Warship in Harbour Safety Case, PA's are to ensure that Naval Base Duty Holders are informed of the outcome of Class Explosives Safety Cases in accordance with Warship in Harbour Methodology Suite [47].

3.7.5 In addition, all opportunities should be taken to ensure sharing of appropriate information with Industry Participants in order to strengthen S&EP culture.

### **3.8 INTERFACE WITH THE NAVAL AUTHORITY AND RECOGNISED ORGANISATIONS**

3.8.1 The Naval Authority issues Naval Authority Certificates in accordance with the Naval Authority Rules for Certification (DSA03/DMR/DCOP05) [20]. These Rules have been developed and are maintained by the Naval Authority, who relies upon feedback from users. The maintenance of this interface is important with respect to influencing the review and update of Rules and their associated Codes of Practice.

3.8.2 Recognised Organisations play an important role in S&EP by independently ensuring and assuring that standards are met. Effective engagement shall take place with all relevant organisations and care shall be taken to ensure clarity and understanding of the level and boundaries of risk control and assurance provided by their services.

### **3.9 SAFETY AND ENVIRONMENTAL MANAGEMENT PLANS**

3.9.1 Safety Authorities shall ensure that suitable and sufficient through-life SEMP's are developed and maintained to set out the definitive management arrangements, the strategy, key activities and timelines for the achievement and demonstration of S&EP for platforms, systems and equipment for which Authorities are responsible for. The SEMP should be the document of reference that allows any individual or auditor to understand local S&EP arrangements and to determine the currency and scope of S&EP outputs and timescales associated with any particular Project. A SEMP shall have a separate environmental Annex or Section (as appropriate) to give the required prominence to how the environmental aspects are to be managed in accordance with POEMS.

3.9.2 Generic SEMP requirements are formally documented in DSA01.1 [17], in the Shipping Regulations [18] and in ASEMS [37]. Importantly, new Ships Domain SEMPS or SEMPS that require updating shall also:

- a. Reference, but not repeat information in this document or other appropriate references;
- b. Comprehensively document all S&EP interfaces with all key stakeholders ensuring unique roles and responsibilities are clarified. This should also include clear direction on how safety *and* environmental risks (impacts) are to be formally escalated to the Front Line Command when risk analyses identify non ALARP situations;
- c. Comprehensively document how responsibilities shall be discharged and interfaces managed, whilst transitioning from Ship Acquisition to In Service Support or where passing from one Authority to another;
- d. Include the agreed formal laydown of SSR, SR and SD assignments for the SSR's respective area of responsibility;
- e. Include a 'Safety and Environmental Schedule' that is 'live' and outlines key Safety *and* Environmental Management activity, outputs and milestones. For example this shall include certification strategies, A-SECR development, issuing of Environmental Impact Scoping Studies (EISS) etc.
- f. Direct individuals to the Processes, Leaflets and Desk Instructions that are to be followed to enable the fulfilment of their S&EP responsibilities;
- g. Detail local Oversight and Governance arrangements and confirm audit arrangements;
- h. Be subject to rigorous configuration control and be maintained, including during any period of change or period of transition (e.g. an approved MSOC activity or Authority transfer), to ensure that individuals and key stakeholders continue to remain aware of their responsibilities and how they are being impacted.

- 3.9.3 To comply with DE&S and regulatory policy requirements to maintain Safety and/or Environmental Case Reports, Authorities are required to ensure that SEMP, when updated, reflect the following requirement for the production/review/update of Authority Reports:
- a. Following production, A-SCRs/A-ECRs/A-SECRs shall be reviewed and updated at specified future events aligned with the platform/system/equipment Through Life Management Plan (e.g. next major support period or CADMID stage);
  - b. Beyond pre-programmed reviews/updates, A-SCRs/A-ECRs/A-SECRs must be reviewed and, as necessary, be updated in response to key triggers (e.g. accidents/incidents, changes in equipment/platform status, etc);
  - c. Alternative review periods may be considered appropriate but if this is the case then the relevant A-SCRs/A-ECRs/A-SECRs will remain extant and 'signed off' by the Platform, System, Equipment and Design Authorities as appropriate until such time that a conscious decision is taken to formally withdraw it at which time the recipient Accountable Person is to be formally informed.
- 3.9.4 SEMP, form a key part of the Ships OCs' governance regime and they are subject to audit by the Head of Engineering or delegated representative in accordance with DE&S policy. DE&S SEP Leaflet 15/2019 (SEMP Review) [56] requires a SEMP to be subjected to an annual appraisal by the appropriate SSR (i.e. Safety Authority) to include SSR completion of an annual SEMP 'commitment review'. The review is to be countersigned by the OCs' Head of Engineering. The review is in the form of a list of questions contained within the Leaflet for which a Yes/No answer is required. The questions relate to aspects of work that should already be being done as normal business.
- 3.9.5 Outside of standard maintenance activity, SEMP, must also be reviewed when the SSR (or SR where appropriate) responsible for them changes, when there is significant project change or when MSOC activity is in place.
- 3.9.6 In simple terms, a SEMP should provide assurance that S&EP is being effectively managed by providing suitable directions to answering audit questions posed in Regulations or ASEMS [48].
- 3.10 SHIPS OCs' BUSINESS PROCESSES AND LOCAL DESK INSTRUCTIONS**
- 3.10.1 The \*Ships Safety and Environmental Portal\*, located within the Domain Headquarters page on the intranet, provides the single Corporate source of reference for key safety outputs, e.g. COM (Ships) Ships Domain S&EP Policy, this Statement and its associated Leaflets and S&EP Technical Notes when issued. The Portal will in due course support key OHSE outputs.
- 3.10.2 Compliance with Ships OCs' business processes, including those operated within the Common Support Model, is also a key part of the overall SEMS that the OCs' operate. Desk Instructions are used locally to define bespoke or unique instruction e.g. 'Mooring Operations' – used only within the SALMO Delivery Team. Where a Desk Instruction is shown to have impact across the wider OCs' it is to be transposed in to a Ships OCs' Acquisition S&EP O&A Statement Leaflet through the DES Ships SPfO-DepHd-Safety noting that the Leaflet shall be sponsored by the appropriate SQEP.
- 3.10.3 All documentation will continue to be rationalised to conform to the key Ships OCs' requirements as follows:
- a. All processes shall comply with the requirements of the Ships OCs' Quality Management System (QMS) and use of OCs' approved processes is a mandatory requirement; and
  - b. Proposals for additional Ships OCs' Acquisition S&EP O&A Statement Leaflets or changes to them, or any need for additional processes, should be raised with DES Ships SPfO-DepHd-Safety in the first instance.
- 3.11 AUDIT, ASSURANCE AND S&EP PERFORMANCE REPORTING**
- 3.11.1 Audits will be conducted under the authority of the Ships Safety and Environmental Committee on behalf of COM(Ships) to provide a demonstration that an effective safety and environmental management system has been implemented and to ensure compliance with the requirements of the 'Shipping Regulations'. The Ships OCs' Acquisition S&EP O&A Statement Leaflet 11 [11] is designed to facilitate the internal or second party audit requirement for Platform, System, Equipment and Design Authorities against the Risk Control Systems stated in DSA02-DMR [18]. The scope will assess compliance and effectiveness of the acquisition S&EP management

system whilst complementing the OC's twice yearly Risk / Assurance reporting. The audit programme is led by Ships OCs' SEP team supported by a delivery team representative, wherever possible, in accordance with the requirements of Ships OCs' Acquisition S&EP O&A Statement Leaflet 11 [11]. Wherever possible audits will include consideration of OHSE requirements. Upon completion of an audit, actions and Learning from Experience is documented and used to support the sharing of lessons learned and to improve consistency across the Ships OCs'.

3.11.2 Ships OCs' Acquisition S&EP O&A Statement Leaflet 16 [16] is a mandated requirement within Ships OCs' for the assessment and reporting of S&EP performance by Safety Authorities. Reports are developed using the ASSERT software tool by Platform, System, Equipment and Design Authorities on a six monthly basis (as per Table 4), and together with the standard corporate reporting metrics KPI 6 and KPI 1.5.4, are used to meet the S&EP reporting requirements of the OCDs, COM(Ships) and DE&S corporate. The process also supports the Front Line Command Duty Holder by assuring the "safe to operate" input to the holistic operator safety case.

Reporting Requirement Title	Frequency for EAs	Frequency for PAs	For
Ships OCs' S&EP Assurance	Twice Yearly Feb & Aug	Twice Yearly Mar & Sep	COM(Ships) Ships Safety and Environmental Committee (SSEC)

**Table 4: Ships OCs' S&EP Assurance Reporting Requirements for PAs and EAs**

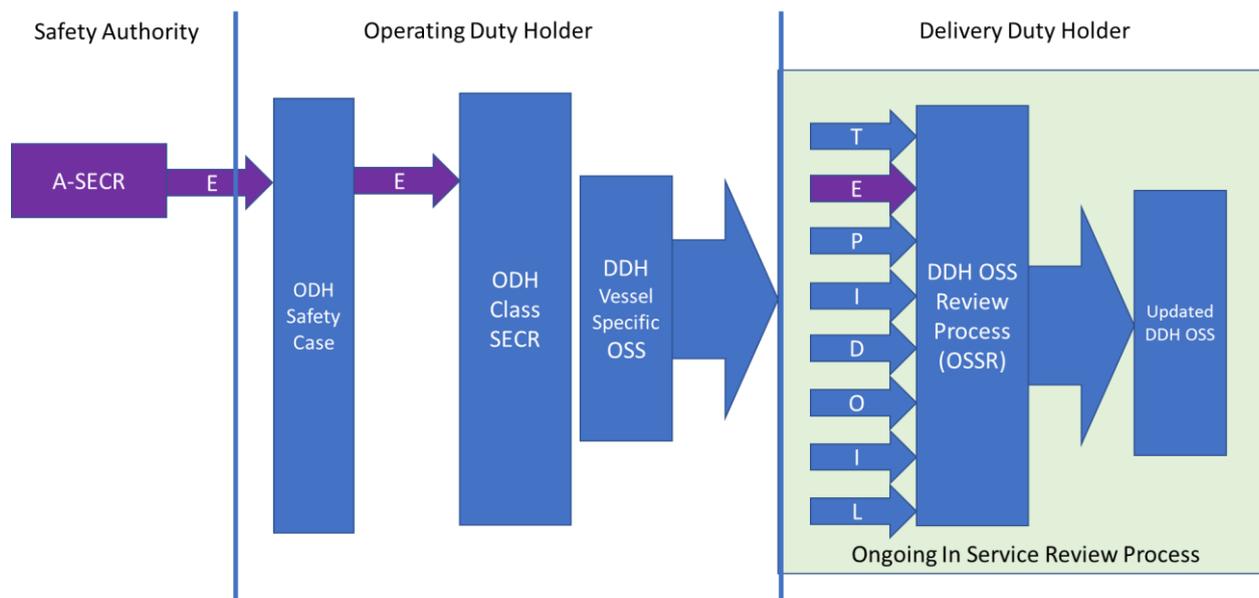
3.11.3 The assurance assessments are used to monitor the health of S&EP management arrangements and support the setting of safety performance improvement targets within the CASP that is agreed annually between DE&S and Navy Command Headquarters.

### 3.12 SAFETY AND ENVIRONMENTAL CASES

3.12.1 For each vessel the Delivery Duty Holder (DDH) (or other Accountable Person), is responsible for managing and maintaining the Operating Safety Statement (OSS). As the Equipment DLoD a Safety Authority will provide an A-SCR and/or an E-ECR/EISS report (see Section 3.13) to inform development and maintenance of both the ODH SECR (which may be Class based) and the individual vessel OSS. This is illustrated in Figure 7 below.

3.12.2 As required by ASEMS Part 1 clauses 4.1 and 4.2 [37], Safety Authorities across the Ships OCs' shall establish and maintain through-life Safety Cases and Environmental Cases that provide proportionate, compelling, comprehensible and valid arguments:

- a. that a Product, System or Service that is provided to the Accountable Person (e.g. Operating Duty Holder) is '**Safe to Operate**' for a given application in a given operating environment; and/or
- b. that the adverse environmental impacts of a Product, System or Service are reduced or minimised as far as is reasonably practicable.
- c. Any 'Safe to Operate' Safety Case or Environmental Case must be proportionate to levels of risks or environmental impacts.



**Figure 7: A-SECR Input to Operating Safety Statement**

3.12.3 Arguments and associated evidence for any 'Safe to Operate' Safety Case or Environmental Case shall be derived through a suite of safety documents developed through implementation of POSMS [38] and POEMS [39]. Further guidance can be found in Def Stans 00-051 [41] and 00-056 [43]. Reference should also be made to Ships OCs' Acquisition S&EP O&A Statement Leaflet 9 [9] - Proportionality and Management of 'Safe to Operate' Safety and/or Environmental Cases which provides a generic maritime context that complements POSMS guidance. Ships OCs' Acquisition S&EP O&A Statement Leaflet 9 [9] provides instruction to ensure a consistent approach is achieved across the Ships OCs' that can be used equally for the production of Authority Safety and/or Environmental Reports.

**3.13 AUTHORITY SAFETY AND / OR ENVIRONMENTAL CASE REPORTS**

3.13.1 A safety case is to be demonstrated in the form of an A-SCR. The environmental case is to be demonstrated in the form of an A-ECR<sup>8</sup> and EISS reports. Importantly, whilst ASEMS continues to refer explicitly to the requirement for the production of both EISS reports and ECRs the primary output should be the EISS report, which informs stakeholders of the prioritised environmental impacts for a specific platform, system or equipment as appropriate. These can be supplemented by Environmental Impact Statements (EIS). Details of how these are to be developed can be found in Ships OCs' Acquisition S&EP O&A Statement Leaflet 6 [6].

3.13.2 The Environmental Aspects and Impacts associated with Ships OCs' products are identified, prioritised and managed through the implementation of MOD POEMS [39]. This reflects the principles of ISO14001 [57] and enables Safety Authorities to discharge their delegated responsibilities and satisfy the requirements defined in regulation, legislation and Departmental policy.

3.13.3 See Ships OCs' Acquisition S&EP O&A Statement Leaflet 9 [9] – Proportionality and Management of Authority - Safety and/or Environmental Case Reports.

3.13.4 A Safety Authority shall develop and maintain an A-SCR or A-ECR and EISS reports to document the residual 'Safe to Operate' risk or adverse environmental impact in order to inform the OSS, see Section 3.13. Where combined, the document shall be known as an A-SECR.

3.13.5 Authority Reports must be suitably tailored and shall, where appropriate, cover multiple/similar platforms and equipment. They shall be accessible to all, easy to understand, succinct and

<sup>8</sup> Usually known as an A-SECR when or if safety and environmental reports are combined.

'document-light'. Where an A-SECR is directly impacted through interaction with equipment or systems supplied by other domains, it shall take account of other domain S&EP requirements.

- 3.13.6 Any A-SCRs/A-ECRs/A-SECRs shall be signed off by the Safety Authority and formally communicated to the Accountable Person (ODH or otherwise). Authority authorised A-SCRs/A-ECRs/A-SECRs is a DE&S KPI and is reported at the DE&S Safety Health and Environmental Committee. The Safety Authority shall, in all cases, seek a formal acknowledgment of the document from the recipient Accountable Person.

### **3.14 ASSUMPTION AND DEPENDENCY MANAGEMENT**

- 3.14.1 It is a mandatory requirement for Assumptions and Dependencies, upon which a Duty Holder or an Authority Safety and / or Environmental Case relies, to be effectively recorded and managed.

- 3.14.2 An Assumption is a statement that is taken as being true for the purposes of planning or other decision making, but that is not yet an established fact. Assumptions are vital to supporting safety and environmental arguments in Safety and Environmental Cases where critical information is not yet an established fact.

- 3.14.3 A Dependency is subsequently identified as a result of an Assumption being created that is outside of the control of the person making the Assumption (P3M-AM-002 refers) [52].

- 3.14.4 Where Assumptions or Dependencies exist that have a potential to impact upon other Defence Lines of Development (DLoD), these should be captured in the Assumptions and Dependencies Management (ADaM) tool. Accountable persons are responsible for ensuring that owners understand the implications of eroding, removing or changing the scope of an original Assumption or Dependency. An example of this is:

- *A platform has been cleared to operate specific types of aircraft, this is a Dependency that the ODH has been made aware of and that they have acknowledged and understood. A request is subsequently received from the ODH to embark an aircraft type that is not covered under the current Dependency. The original Authority 'safe to operate' safety case did not make allowance for this aircraft type; therefore additional effort will be required to gain the appropriate approvals. To enable this, the PA will require uplift in resources to assess the requirement, update relevant documentation and submit an application for a new Naval Authority Certificate, all of which had not previously been considered or allowed for.*

- 3.14.5 S&EP assumptions and/or dependencies are also likely to be recorded against Platform, System and Equipment requirements and managed by the relevant Platform Requirements Manager.

### **3.15 SAFETY RISK AND ENVIRONMENTAL IMPACT MANAGEMENT**

- 3.15.1 In order to aid the OCs' Duty Holders and Authorities to comply with ASEMS and demonstrate that end to end risk management is addressed and that ALARP judgements are robust, the Ships OCs' are provided with instruction / guidance through Ships OCs' Acquisition S&EP O&A Statement Leaflet 5 [5]: End to End Safety Risk Management Process.

- 3.15.2 Ships OCs' Acquisition S&EP O&A Statement Leaflet 5 [5] focuses on the adoption of a consistent and proportionate approach when conducting risk management and reviewing Safety Risks and shall be applied when undertaking Safety Risk Reviews within the OCs'. The Leaflet comprises distinct steps and uses a series of key questions to guide Duty Holders and Authorities through the risk review process in a structured manner. It is designed to be used in conjunction with the key policy documents identified within the Leaflet.

- 3.15.3 Instruction / guidance on assessing environmental impacts is provided in Ships OCs' Acquisition S&EP O&A Statement Leaflet 6 [6]: Implementation of Project Oriented Environmental Management System.

### **3.16 IDENTIFICATION OF LEGISLATION AND DEMONSTRATION OF LEGISLATIVE COMPLIANCE**

3.16.1 The Maritime Legislation Database (MLD) handbook [21] provided by the DMR outlines the scope and use of the MLD, supplementing the information and guidance within the MLD. Additional guidance will be provided on request by the DMR.

### **3.17 HAZARD IDENTIFICATION ANALYSIS AND RECORDING**

3.17.1 Hazard identification, analysis and recording is the on-going process of identifying credible hazards, accidents and accident sequences throughout a project life cycle. Hazard Identification and Hazard Analysis are parts of the Project Oriented Safety Management System (POSMS) [38] which describes the processes and procedures designed to assist with the identification and management of the safety risks of equipment and services. In doing so POSMS seeks to assist Projects to eliminate or reduce safety risks to levels which are tolerable and ALARP. POSMS provides the foundation for all safety activities on the project and its use will assist in ultimately determining the acceptability of an equipment or system. Ships OCs' Acquisition S&EP O&A Statement Leaflet 5 [5] provides the Ships OCs' with guidance regarding POSMS application.

3.17.2 Hazard Log management is dependent upon the 'Software tool' used and the functionality provided. DE&S mandates the eCassandra software tool in accordance with DE&S policy. Development of any new log and maintenance of existing logs shall be conducted using the Ships OCs' functional hazard log model in Ships OCs' Acquisition S&EP O&A Statement Leaflet 5 [5].

### **3.18 OCCUPATIONAL HEALTH, SAFETY AND ENVIRONMENT**

3.18.1 In addition to ensuring platform, system and equipment safety, the safety and health of Ships OCs' personnel in the course of their duties is paramount. Line managers shall be aware of their responsibilities under legislation and their Duty of Care to staff. They shall pay particular attention to ensuring that risks arising from travelling on duty, visits to shipyards, Naval Bases and other industrial sites are identified and managed. This is particularly important where DE&S activities may include risks to life e.g. the conduct of trials. In turn, each member of staff has a responsibility to understand and conduct risk assessments, where appropriate, and to act in a safe and professional way at all times whilst on duty. Further guidance for all staff is detailed in the following documents or locations:

- COM (Ships) OHSE Statement [55]
- JSP 375: Management of Health & Safety in Defence [26].
- MOD Abbey Wood SHEF Guidance [50].
- Ship and Submarine Visit Safety Guide [46].
- BR 167 - Safety, Health and Environmental Manual for HM Ships and Submarines [36].
- Landlord / Lodger Arrangements for Ships OCs' staff based in Industry Participants premises.

### **3.19 ARRANGEMENTS FOR THE REPORTING AND ESCALATION OF S&EP CONCERNS**

3.19.1 OHSE issues are subject to DE&S Incident Notification Cell (DINC) reporting. For acquisition safety all accidents, incidents, near misses and environmental incidents are to be reported using the Navy Lessons Identified Management System (NLIMS). Links to the system procedures and forms are available on the Defence Intranet and are available for use by all Ships OCs' staff as well as RN personnel.

3.19.2 Where S&EP risks / impacts from equipment are assessed as very high, and beyond the level at which DE&S has authority to decide action, communication in terms of escalation to the relevant Duty Holder in the Front Line Command (including PJHQ where appropriate) shall be undertaken in accordance with DE&S S&EP Leaflet 03/2011 - Equipment Safety and Environmental Protection Risk Referral [58].

3.19.3 Any member of the Ships OCs' who believes that there is a safety or environmental lesson to be learnt from a recent experience, who sees that a previous lesson appears not to have been learnt and mistakes are at risk of being repeated, or has any other concern regarding S&EP

which is not covered by normal S&EP management arrangements, is encouraged to pursue the following steps:

- a. Raise the issue directly with the Manager concerned;
- b. If the Manager is not known, raising the matter is not possible, or in the reporter's view the concerns is not taken seriously, then raise the matter in person, by e-mail or letter with the appropriate Delivery Team Safety Manager or Team Leader. Such reports will be formally logged and investigated. (Anonymous reports may also be made, but inability to clarify information may limit the effectiveness of such an approach);
- c. If raising the matter with the Delivery Team Safety Manager or Team Leader is not felt appropriate, or in the opinion of the person who raised the concern the concern remains, then raise the issue directly with the DES Ships SPfO-DepHd-Safety;
- d. If raising the matter with the DES Ships SPfO-DepHd-Safety is not felt appropriate, or in the opinion of the person who raised the concern the concern remains, then raise the issue directly with the respective Senior Manager or OC 1\* Safety Lead;
- e. In the event that reporting the matter to the Senior Manager or OC 1\* Safety Lead, does not generate a satisfactory result, raise the matter with the appropriate OC Director; and
- f. Finally, if the matter remains unresolved, report the matter to the DMR and/or COM(Ships).

NB. The above escalation procedure has been written in relation to platform and equipment safety risks and environmental impacts but can equally apply to Ships OCs' staff Occupational Health and Safety. In this circumstance the use of DINC should be the first consideration.

3.19.4 Whilst individuals are encouraged to resolve concerns with respect to S&EP through their line management chain, depending on severity or potential consequences, they may wish to notify DMR at any time.

### **3.20 ADVICE, REVIEW AND UPDATE OF THIS DOCUMENT AND ASSOCIATED LEAFLETS**

3.20.1 The requirements for the management and configuration control of the Ships O&A Statement and its associated Leaflets together with the requirements for Safety Authority's own safety and environmental related documentation (including electronic and hard copy records) are detailed in Ships O&A Statement Leaflet 4 [4]: Management and Maintenance of Safety and Environmental Protection Documentation. The rest of this Section relates to the review and update of the Ships O&A Statement and its associated Leaflets.

3.20.2 This document, the O&A Statement itself, is managed by DES Ships SPfO-DepHd-Safety on behalf of the Ships OCs' Directors and shall be reviewed and updated at least every 2 years (biennially) or sooner if a major change occurs that requires to be reflected (e.g. Ships Domain re-organisation, LFE from a significant safety incident, outcome of an MSOC initiative, third party audit interventions, Improvement Notices, etc).

3.20.3 Updated O&A Statement drafts will be provided to OCDs for approval to publish following a SEP Team workshop, ahead of any work commencing, and a SEP Team and 1\* Engineering Head review of the updated draft.

3.20.4 Leaflets associated with the Ships OCs' Acquisition S&EP O&A Statement are sponsored by Subject Matter Experts mostly within the Delivery Teams that have the responsibility to manage the content to which a Leaflet refers.

3.20.5 It is the responsibility of each Sponsor to have their Leaflets reviewed and updated at least every 2 years (biennially) or sooner if a major change occurs that requires to be reflected as per para 3.20.2 above.

3.20.6 Leaflets are to be written in the same format as O&A Statement Leaflet 4 [4] and maintained to the following minimum standards:

- a. Authored by competent personnel in the Delivery Team sponsoring the Leaflet.
- b. Reviewed by stakeholders and senior managers.
- c. Passed to Ships SPfO-DepHd-Safety for coherence checking and verification.
- d. Formal publication by Ships SPfO-DepHd-Safety once author has resolved coherence/verification shortfalls.

3.20.7 Outside of normal update periods, any suggestions for changes to the Ships OCs' Acquisition S&EP O&A Statement or its associated Leaflets are to be forwarded to DES Ships SPfO-DepHd-Safety for agreement in order to maintain consistency across the OCs. Only when this peer review has been undertaken will an amendment be published by DES Ships SPfO-DepHd-Safety on the Ships Domain Headquarters Page within the Ships Intranet Home Page.

3.20.8 The point of contact for advice, queries, proposed amendments or corrections regarding this document is:

DES Ships SPfO-DepHd-Safety  
Birch 2a, #3132  
Abbey Wood  
T: 030 679 33188  
E: [Bob.Goodall159@mod.gov.uk](mailto:Bob.Goodall159@mod.gov.uk)

## 4 SHIPS OPERATING CENTRES' - SHIPS ACQUISITION S&EP O&A STATEMENT LEAFLETS

- [1] Leaflet 1: Platform Authority and Equipment Authority Interface.
- [2] Leaflet 2: Management of Aviation and Ship Air Integration.
- [3] Leaflet 3: Combat Systems Design Authority.
- [4] Leaflet 4: Management and Maintenance of Safety and Environmental Protection Documentation.
- [5] Leaflet 5: End-to-End Safety Risk Management Process.
- [6] Leaflet 6: Implementation of Project Orientated Environmental Management System.
- [7] Leaflet 7: Management of Combat Systems on Ships and Boats supported by Commercially Supported Shipping.
- [8] Leaflet 8: Emergency Response Plan.
- [9] Leaflet 9: Proportionality and Management of Authority - Safety and/or Environmental Cases.
- [10] Leaflet 10: Management of Safety Outputs during Change (Organisational Safety Assessment).
- [11] Leaflet 11: Audit Arrangements Instruction.
- [12] Leaflet 12: Operating Centre Safety Interface Agreements.
- [13] Leaflet 13: Marine System Support Approving Authorities.
- [14] Leaflet 14: Defining Safety Responsibilities – Letters of Safety Delegation and Assignment Specifications.
- [15] Leaflet 15: Management of Diving Projects.
- [16] Leaflet 16: Safety and Environmental Assurance Process.

## 5 REFERENCES

- [17] DSA01.1: Defence Policy for Health, Safety and Environmental Protection
- [18] DSA02-DMR: MOD Shipping Regulations for Safety and Environmental Protection.
- [19] DSA02-DMR-Defence Diving Regulations.
- [20] DSA03.DCOP05: Naval Authority Rules for Certification.
- [21] Maritime Legislation Database Handbook.
- [22] Military Aviation Authority Regulatory Publications (MRP).
- [23] Health & Safety at Work etc. Act 1974.
- [24] Merchant Shipping Act 1995.
- [25] Environment Act 1995.
- [26] JSP 375: Management of Health & Safety in Defence.
- [27] JSP 375 Chapter 11: Hazardous Materials.
- [28] JSP 375 Chapter 36: Asbestos.
- [29] JSP 418: Management of Environmental Protection in Defence.
- [30] JSP 418 Leaflet 5: Through life management of hazardous materials.
- [31] JSP 515: Hazardous Substances Information System.
- [32] JSP 520: Regulations and Guidance covering the Safety and Environment Management of OME over the Equipment Acquisition Cycle.
- [33] Chief of Materiel Ships Safety & Environmental Protection Policy.
- [34] BR 10: Navy Command Safety and Environment Management System, General Requirements.
- [35] BR 10 Supplement 1: Navy Command Safety and Environment Management System, Operating Duty Holder Organisation and Arrangements.
- [36] BR 167 - Safety, Health & Environment Manual for HM Ships and Submarines.
- [37] Acquisition Safety and Environmental Management System (ASEMS).
- [38] Project Orientated Safety Management System (POSMS).
- [39] Project Orientated Environmental Management System (POEMS).
- [40] [ASG Commercial Tool Kit – Safety in Contracts](#).
- [41] Defence Standard 00-051 – Environmental Management Requirements for Defence Systems.
- [42] Defence Standard 00-055 – Requirements for Safety of Programmable Elements (PE) in Defence Systems.
- [43] Defence Standard 00-056 – Safety Management Requirements for Defence Systems.
- [44] The Use of ISEAs in DE&S – Guidance, Best Practice and FAQs, S&EP Publication SEP/ASE/ISA/3/1/1.
- [45] Guidance on the Procurement of Independent Safety Auditor Services; DES TECH-QSEP.
- [46] Ship and Submarine Visit Safety Guide.
- [47] Warship In Harbour Methodology Suite.
- [48] Audit questions posed in the ASEMS [guidelines](#).
- [49] DE&S S&EP Leaflet 09/2015 - DE&S's Contribution to Mitigating Risks to Life (RtL) Across MOD.
- [50] [MOD Abbey Wood Safety, Health, Environmental and Fire Intranet Page](#).
- [51] Internal Business Agreement between DE&S Director Ships and DE&S Director Weapons.
- [52] Ships Operating Centres: [Assumptions Management Guidance](#), P3M-AM-002.
- [53] COM(Air) Letter of Notification to Carry Out Duties of Airworthiness Significance in the Delivery of Materiel or Services to Airworthiness Authorities.
- [54] Common Support Model Work Breakdown Structure.
- [55] COM Ships [OHSE Policy Statement](#).
- [56] DES SEP Leaflet 15/2019 - Safety and Environmental Management Plan Reviews.
- [57] ISO 14001 – Environmental Management.
- [58] DE&S S&EP Leaflet 03/2011- Equipment Safety and Environmental Protection Risk Referral.