

# CLYDE DOCKYARD PORT MARINE SAFETY & ENVIRONMENTAL MANAGEMENT SYSTEM (CDP MSEMS)



*Revision 5 – March 2023*

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## PORT DUTY HOLDER COMMITMENT STATEMENT

As the Naval Base Commander of His Majesty's Naval Base Clyde (NBC(C)), under the terms of the Defence Maritime Regulations for Health, Safety and Environmental Protection<sup>1</sup>(DSA02-DMR 200 and 700 series) I am the Duty Holder for marine safety and environmental protection for the Dockyard Port of Clyde. I am committed to the regulations of the DSA-02 Maritime Regulations and principles of the Port Marine Safety Code (PMSC)<sup>2</sup>, and compliance thereof, for the safe management of marine operations and environmental compliance throughout the Dockyard Port. I delegate functional authority for ensuring port marine safety and environmental compliance for the Dockyard Port of Clyde to the King's Harbour Master (KHM) Clyde, who is accountable directly to me for all marine safety and environmental matters.

KHM Clyde deals with thousands of movements each year including warships, submarines, commercial vessels, large oil tankers, fishing vessels and leisure craft of all sizes and descriptions; vessels using the CDP routinely operate in close proximity with other units and navigational hazards.

KHM Clyde discharges his duties through the CDP Marine Safety and Environmental Management System (MSEMS). This MSEMS will comply as closely as possible with the Port Marine Safety Code; in the event that this cannot be achieved, an applicable disapplication, exemption or derogation will be required from the Defence Maritime Regulator (DMR). KHM Clyde will report progress in achieving compliance with the PMSC and any problems doing so directly to me.

In particular, I expect that:

- Where applicable, MOD policy and legislative requirements are fully implemented.
- KHM Clyde undertakes and regulates marine operations in a way that safeguards the port, its users, the public and the environment.
- All risks are identified, assessed, recorded and managed to ALARP<sup>3</sup>. Where they cannot be managed, I expect KHM Clyde to elevate risk to an appropriate management level for ownership and control.
- All incidents are reported and investigated in order to identify root causes and ensure that lessons learned are promulgated and implemented to improve controls and prevent reoccurrence.
- An effective safety culture is maintained and continuously improved.
- Emergency and contingency procedures are implemented and continuously improved.
- MSEMS will be reviewed annually.

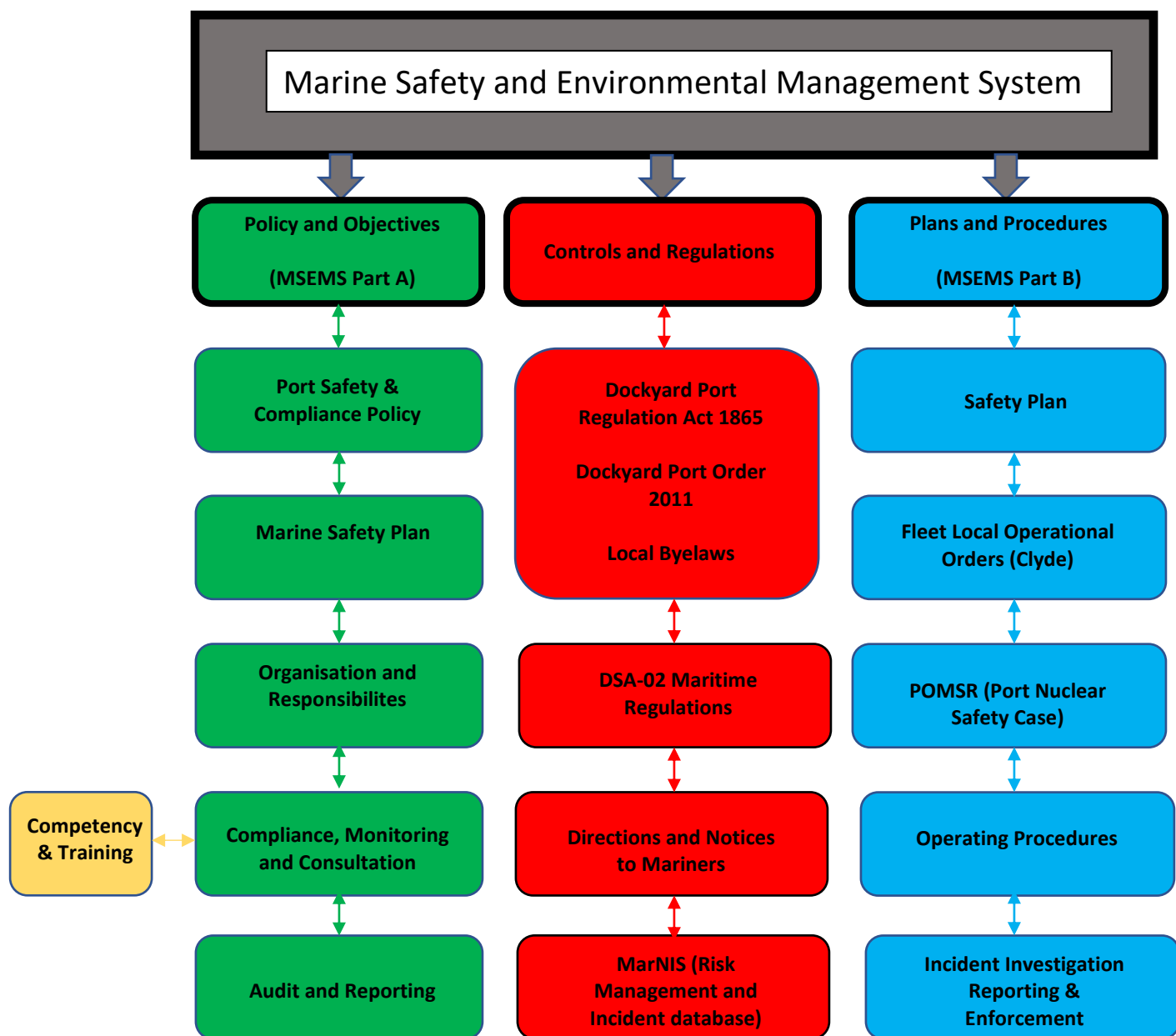
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Commodore  
NBC Clyde

<sup>1</sup> Referred to hereafter as the [DSA-02 Maritime Regulations](#)

<sup>2</sup> [Port Marine Safety Code](#)

<sup>3</sup> As Low As Reasonably Possible

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**Figure 1: THE STRUCTURE AND COMPONENTS OF THE CDP MARINE SAFETY AND ENVIRONMENTAL MANAGEMENT SYSTEM**

## ISSUE & AMENDMENT RECORD

Changes to policy procedures or processes in relation to this SEMS shall be approved by KHM Clyde at an annual management review meeting and incorporated into the system electronically. Any alterations or amendments to the SEMS shall be recorded below:

ISSUE	DATE	DETAILS	SIGNATURE
1.0	Nov 17	Initial Draft	QHM Clyde
2.0	Feb 18	Update on Risk Assessments Periodicity and Emergency Operating Procedures	DQHM Clyde
3.0	Jan 20	DSA02-DMR DMR Regs replaced DMR Port and Harbour Regs. New Operational Duty Holder. Change of title from ACNS(SPT) to DNS. Update on special and general directions.	DQHM Clyde
4.0	Aug 21	Routine update and renaming the document to Marine MSEMS	DQHM Clyde
5.0	Mar 23	Routine update including renaming of QHM to KHM and a new PDH	KHM Clyde

## MSEMS REVIEW & AUDITS RECORD SUMMARY

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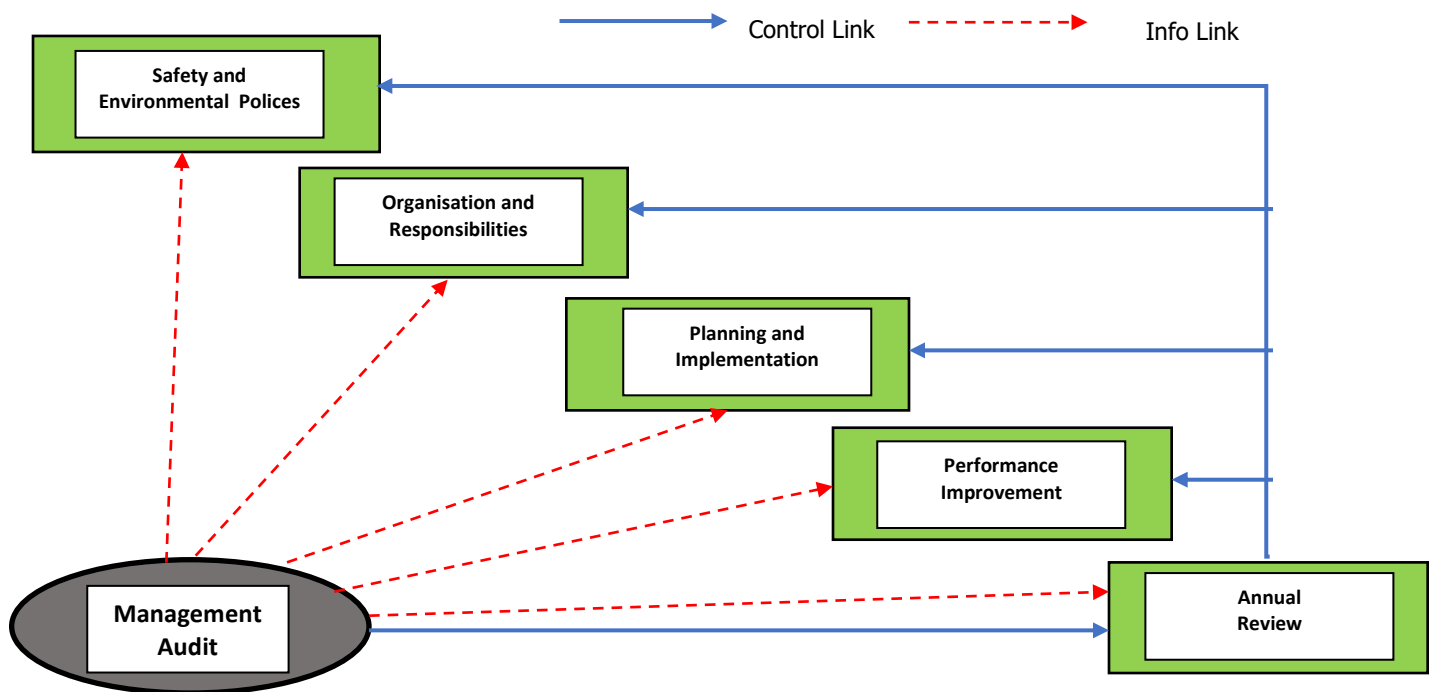
# Clyde Dockyard Port Marine Safety & Environmental Management System (CDP MSEMS)

## PART A

### 0.0 SAFETY AND MANAGEMENT PRINCIPLES

The Safety and Environmental Policies of KHM Clyde define the organisation and arrangements that are planned to monitor, promote and proactively manage the conduct of navigation, environmental compliance and associated marine activities consistent with maintaining the risk presented by this activity as low as reasonably practicable (ALARP<sup>4</sup>).

The Marine Safety and Environmental Management System (MSEMS) is structured into three parts. This manual represents Parts A and B. The processes of harbour regulatory management and control are contained separately as individual documents as show in **Figure 1**. The links between policy, organisational structure and administration of the MSEMS in show below in **Figure 2**.



**FIGURE 2: MARINE SAFETY AND ENVIRONMENTAL MANAGEMENT PRINCIPLES**

<sup>4</sup> A risk can be said to be reduced to a level that is ALARP when the sacrifice of further reduction is “grossly disproportionate” to the decrease in risk that would be achieved; however, the potential impact of societal concern may also need to be considered. This cost may include more than just financial cost and will include the time and trouble involved in taking measures to avoid that risk. Therefore, an ALARP argument must balance the “sacrifice” (in time, money, or trouble) of possible further risk reduction measures with their expected safety benefit (incremental reduction in risk exposure). The balance must be weighted in favour of safety, with a greater “disproportion factor” for higher levels of risk exposure.

## 1.0 INTRODUCTION

The Dockyard Port of Clyde exists to serve the defence interests of the UK. Safe operation of the Dockyard Port is essential to support the operational programme of the Royal Navy but also for the safety of the commercial and recreational users of the Dockyard Port waters.



**Image 1 – Aerial view of the CDP**

For ports, other than Dockyard Ports, the Department for Transport (DfT) [Port Marine Safety Code \(PMSC\)](#) recommends harbour authorities maintain a dedicated Navigational Safety Management System (SMS) for marine operations within the port. Although the PMSC is not binding on the Ministry of Defence (MOD), the MOD recognises it as the authoritative articulation of best practice in port safety, and seeks to reflect the PMSC whilst reflecting the specific risks that exist within a MOD Port and Harbour. However, the legislative background under which Dockyard ports operate is different from that on which the PMSC is based and the powers of the KHM Clyde are not directly analogous to those vested in a Statutory Harbour Authority (SHA). For this reason, as observed by the DfT, the PMSC is not wholly appropriate to a Dockyard Port such as Clyde.

With this in mind, the Defence Maritime Regulator has developed [Regulations for Health, Safety and Environmental Protection \(regulation 211, regulation 407, the 700 Series for MOD Ports and Harbours, regulation 801 and regulation 903\)](#) using the PMSC as a basis and this is also reflected in the MoU between the [MOD and MCA](#)<sup>5</sup>. These regulations detail the policies to be adopted by the MOD Dockyard Ports to achieve standards at least equivalent to those provided for in the PMSC so far as is reasonable and practicable. At all times, Dockyard Port safety policies and plans are to be based upon identification of the hazards, assessment of the risks and implementation of effective control measures to minimise or remove those risks, thus

<sup>5</sup> Issue 5 Dated May 2021

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ensuring the safety of the Dockyard Port and its users. This allows for safe operation of the Dockyard Port and supports PMSC compliance.

This MSEMS is designed to satisfy the requirements of DSA-02 Maritime Regulations and thus the requirements of the PMSC so far as is reasonable and practical and implement, where possible, the 10 measures recommended by the PSMC of which 4,5, and 6 below are considered fundamental:

**1. Duty Holder:** Formally identify and designate the Duty Holder, whose members are individually and collectively accountable for compliance with the Code, and their performance in ensuring safe marine operations in the harbour and its approaches.

**2. Designated Person:** A Designated Person must be appointed to provide independent assurance about the operation of the marine safety management system. The Designated Person must have direct access to the Duty Holder.

**3. Legislation:** The Duty Holder must review and be aware of their existing powers based on local and national legislation, seeking additional powers if required in order to promote safe navigation.

**4. Duties and Powers:** Comply with the duties and powers under existing legislation, as appropriate.

**5. Risk Assessment:** Ensure that marine risks are formally assessed and are eliminated or reduced to the lowest possible level, so far as is reasonably practicable, in accordance with good practice.

**6. Marine Safety Management System:** Operate an effective MSEMS, which has been developed after consultation, is based on formal risk assessment and refers to an appropriate approach to incident investigation.

**7. Review and Audit:** Monitor, review and audit the risk assessment and MSEMS on a regular basis – the independent Designated Person has a key role in providing assurance for the Duty Holder.

**8. Competence:** Use competent people (who are trained, qualified and experienced) in positions of responsibility for managing marine and navigation safety.

**9. Plan:** Publish a safety plan showing how the standards in the Code will be met and produce a report assessing performance against that plan at least every 3 years.

**10. Aids to Navigation:** Comply with directions from the Northern Lighthouse Board (NLB) and supply information & returns as required.

The complexity and diversity of activity within the CDP means that achieving the desired level of safety and environmental compliance for the port requires an integrated and cooperative approach. It is intended that this document will provide a mechanism through which the management efforts of all port stakeholders can be coordinated and aligned. The Safety and Environmental System and complementary Marine Policies define the organisation and arrangements that the King's Harbour Master Clyde (KHM Clyde) has established to monitor, promote and proactively manage the conduct of navigation and other marine activities so that safety is assured.

## 1.1 Marine Safety and Environmental Management System Scope

The MSEMS, as administered and managed by the KHM Clyde, applies to marine operations and activities within the CDP:

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- Vessel operations in the port;
- Marine operations undertaken by any support or service organisation;
- Marine leisure activities<sup>6</sup>.

## 1.2 Background and Legislative Context

The [UK Government \(DfT Maritime and Shipping\)](#) published the latest version of the PMSC in November 2016. The aim of the code is to establish an agreed national standard for port marine safety and a measure by which harbour authorities can be held accountable for their legal powers and duties to run their harbours safely. The code was developed to address perceived gaps in the safety management of ports although it does not in itself introduce ‘new’ legislation, nor is it mandatory; DSA-02 Maritime Regulations, issued in 2019 (revised 2023) uses the PMSC as its basis.

The key to the effective discharge of functions described in DSA-02 Maritime Regulations and the PMSC is the development of a Marine Safety and Environmental Management System for marine operations. This management plan should:

- Ensure there is a proper control of vessel movements by regulating the safe arrival, departure and movement with the port for all vessels;
- protect the general public from dangers arising from marine activities within the harbour;
- allow functions to be carried out with special regard to the possible environmental impact;
- confirm the roles and responsibilities of key personnel at the organisation;
- outline present procedures for marine safety within the port or facility (including port approaches);
- measure performance against targets using a competent database for recording incidents;
- refer to emergency plans that would need to be exercised; and,
- be audited on an annual basis.

The CDP is established under [statute](#) to provide for the proper protection of Her Majesty’s vessels, dockyards, or property, or for the requirements of Her Majesty’s Naval Service. The King’s Harbour Master is appointed by the Secretary of State for Defence to superintend the execution of the 1865 Act and otherwise to protect the port; he is given general and specific powers under said statutes. The geographic boundaries of the CDP are established within the Dockyard Port Order, and powers are defined to enable KHM Clyde to exercise control of the Dockyard Port including the regulation of activities by all vessels within port limits to provide for the safety and operational effectiveness of the Royal Navy. The statutory powers include the provision to close the Dockyard Port to other port users for operational or safety reasons; furthermore, KHM Clyde utilises Crown Common Law powers to otherwise manage, maintain and improve the CDP.

<sup>6</sup> Doesn’t cover leisure diving

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# POLICY

## 1.1 Purpose and Use of This Policy

The primary purpose of this Policy is to provide an overall standard for marine operations throughout the CDP. It also provides a reference point for a variety of operational decisions including the selection of resources and the design and implementation of safe working practices.

This Policy sets out the intentions of the KHM Clyde (in his role as Harbour Authority for CDP) and its commitment to navigational safety and environmental management. It also describes the organisational responsibilities and arrangements established to ensure that the Policy is implemented. The Policy contributes to the operational objectives and stated commitment of the Harbour Authority to fulfil its responsibilities. The fundamental objective of the MSEMS is to demonstrate the consistent application of Policy.

**NB: Unless stated otherwise, all subsequent references to 'Harbour Authority' in this document relate to the KHM Clyde.**

## 1.2 General Management Policy

The Harbour Authority will support the activities in the CDP through the safe and efficient regulation of shipping within the port limits. The policy of the Harbour Authority is to work with key stakeholders to:

- Manage the port to be safe, secure and effective;
- The [KHM Battle Rhythm](#) shows the battle rhythm of governance and operational meetings that support the management policy;
- Maintain essential marine safety services to the highest industry standards and,
- Train Port Operations Staff to the appropriate professional standards.

## 2.3 DSA02-DMR-DMR Regulations for Health, Safety and Environmental Protection

The Harbour Authority is committed to conformance with DSA-02 Maritime Regulations. The Harbour Authority will seek to achieve this through compliance with the following regulations:

- Regulation 211 – Port Duty Holder – The CDP will have a nominated Port Duty Holder, who shall operate their ports in line with the PMSC and in line with Defence Rules for Warships in Harbour<sup>7</sup>;
- Regulation 407 – Accident Investigation – Accidents and Incidents shall be investigated so that hazards and impacts are highlighted in a timely manner to facilitate learning from the experience;
- Regulation 701 – Port Marine Safety Code - The nominated Accountable Person for each MOD Port or Marine facility shall develop management arrangements that follow the principles of the UK Department for Transport/Marine and Coastguard Agency

<sup>7</sup> Naval Authority Rules for the Control of the Explosive Risk from MOD Shipping at a Berth

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PMSC, which the MOD formally recognises as the articulation of best port management practice;

- Regulation 702 – Not applicable;
- Regulation 703 – Ports Safety and Environmental Compliance – The nominated Accountable Person shall<sup>8</sup> ensure that suitable and sufficient Compliance Statements and/or Safety and Environmental Protection Arguments are provided for all equipment and facilities with their Area of Responsibility;
- Regulation 704 – Explosives in MOD Ports and Harbours – The Accountable Person shall ensure compliance with the Naval Authority Rules for the control of the explosives risk from MOD Shipping at a Berth;
- Regulation 801 – Defence Diving Code of Practice - The Accountable Person shall ensure that the Defence Diving Code of Practice (JSP 286 - Defence Diving Manual) issued by the Superintendent of Defence Diving (SoDD) is complied with.
- Regulation 903 – Captain Port Operations – Captain Port Operations shall provide assurance to DMR of the safe and environmentally sustainable operation of MOD Ports and Marine Facilities, following the principles of the PMSC and in accordance with their DMR charter.

## 2.4 Policy Development and Communication

The Navigational Safety Policy has been developed by the Harbour Authority in consultation with Port Stakeholders. Furthermore, the Harbour Authority is committed to working closely with port stakeholders to aid the development of the MSEMS, which will enhance compliance with DSA-02 Maritime Regulations and the PMSC. The Policy has been communicated to all the relevant Port Stakeholders.

## 2.5 Commitment Statement

One key purpose of this document is to show a link between:

- This Commitment Statement;
- The policies set by the Harbour Authority, and;
- The management arrangements, controls and provisions that discharge those policies.

## 2.6 Policy Review

In consultation with the key stakeholders, the Harbour Authority will undertake a formal review of all Marine Policy documentation on a 3-yearly basis or more frequently as circumstances dictate.

## 2.7 Further Guidance

The MSEMS is intended to represent a comprehensive statement of policy with regard to navigational safety and environmental management. There will also be a continuing process of briefing and updating information with regard to navigational safety. There are however likely to be occasions that require additional supplementary guidance to provide a more detailed

<sup>8</sup> Note: Where Assurance activity falls outside of the Enforcement authority of DMR, relevant observations will be passed to the Accountable Person.

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framework for specific operations or areas within the CDP. Information will be prepared subsequently, where and when appropriate, for example General and Pilotage Directions or Notices to Mariners reflecting the general principles contained in this MSEMS.

### 3.0 MANAGEMENT OBJECTIVES

As part of its duties and responsibilities, the Harbour Authority annually reviews its Management Objectives. To support those Strategic Objectives, KHM Clyde also sets individual Departmental Objectives, which include the ongoing maintenance and development of the MSEMS through the Deputy Queens Harbour Master (DKHM). These objectives are articulated in the NBC Clyde's annual business plan. Furthermore KHM Clyde will publish a Marine Safety Plan on a 3 yearly basis.

In general the objectives contained in these documents seek to:

- Reduce risks to as low as is reasonably practicable;
- Ensure all reasonably practicable steps are taken to identify the hazards and risks arising from operational activities in the CDP and its approaches;
- Ensure conformance with navigational safety and marine policies, associated operating controls, the nuclear site safety case and applicable port and marine legislation and non-statutory obligations;
- Periodically review data gathered from audits, inspections, incidents and any concerns raised to evaluate and determine where improvements and changes need to be made;
- Implement employee competence training;
- Encourage employees to become more involved and participate in continually improving our overall marine safety performance;
- Facilitate port user involvement in the maintenance of the MSEMS and the overall improvement in the provision of marine safety and environmental compliance;
- Communicate the Harbour Authorities' on-going efforts and achievements in facilitating navigational safety and environmental compliance in the CDP to all stakeholders;
- Review the effectiveness of and continually improve the CDP MSEMS.

### 4.0 ORGANISATION AND RESPONSIBILITIES

#### 4.1 Secretary of State for Defence

As the national regulator for Defence, the Secretary of State for Defence, through the Ministry of Defence, appoints the KHM.

#### 4.2 1st Sea Lord (Senior Duty Holder)

He must have arrangements in place for ensuring activities conducted in Navy Command create and promote a positive safety culture for the protection of all personnel. 1SL is to assure himself that risk is owned and managed to ensure that it is broadly acceptable or tolerable and ALARP. He is to ensure that risk management and compliance in Navy Command adheres to MOD policy and legislation.

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### 4.3 Director Submarines (Operational Duty Holder/Senior Accountable Person)

Director Submarines is the 2\* Accountable Person for the Submarines' Directorate. Dir SM is the Operational Duty Holder and Senior Accountable Person (SAP) for Marine Safety and Environmental Compliance in the CDP. He is responsible for ensuring the development, promulgation and maintenance of effective policies and guidance for Dockyard Port Marine Safety in the CDP and in doing so should maintain a close working relationship with the PDH. He is further responsible for ensuring that adequate resources are allocated to the CDP to allow them to fulfil the policy requirements.

### 4.4 Naval Base Commander (Port Duty Holder/Accountable Person)

The Naval Base Commanders are the Port Duty Holders and Accountable Persons for Marine Safety within their respective Dockyard Ports. Specifically, they are to promulgate a Port policy and ensure the development of plans and procedures for Marine Safety based on a formal assessment of the hazards and risks, and the development of a formal safety management system. In achieving this, they should maintain a close working relationship and thorough understanding of the requirements of Platform and Operational Duty Holders. Safety risks are to be identified and managed, including escalation through the Duty Holder chain where it is not possible to mitigate a risk to ALARP locally. Further, they are responsible for ensuring that adequate resources are allocated from their budgets to meet the policy and safety management system requirements.

### 4.5 Port Operations (Compliance and Assurance)

Port Operations (Compliance and Assurance) (PO(CA)), as a Duly Authorised Organisation, provide assurance to the Senior Accountable Person (SAP) and Defence Maritime Regulator (DMR) of the safe operation of MOD Dockyard Ports and Marine Facilities in accordance with their DMR Charter.

### 4.6 Designated Person

Captain Port Operations is the Designated Person (DP) and will provide independent assurance of the operation of a Port, Harbour or Marine Facility's Marine Safety and Environmental Management System (MSEMS), directly to the Port Duty Holder (PDH). However, within the MoD, the DP may also provide assurance to other levels within the accountability chain and to DMR. Captain Port Operations has been appointed as the Designated Person for Navy Command TLB Ports, Harbours and Marine Facilities by Director Force Generation (Dir FGen). Captain Port Operations provides independent assurance to the CDP under a CSA with DirSM.

### 4.7 The King's Harbour Master Clyde

The Kings's Harbour Masters has significant responsibilities which are assigned by the Delivery Level Duty Holder. The KHM Clyde is responsible for the implementation of the Ports' policies, plans and procedures based on the requirements of their Dockyard Port's Marine Safety and Environmental Management Plan. As an Output Director KHM should ensure that he maintains a thorough understanding of, and works closely with, other Output and Support Directors in the Clyde for other areas which may impact on marine safety.

In respect of navigational safety, the functions of the Harbour Authority, pursuant to the Dockyard Ports Regulation Act 1865 include:

- The protection of the Dockyard Port of Clyde in accordance with the Dockyard Port Regulation Act 1865;

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- The management marine operations and implementation of conservancy measures in accordance with HMNB Clyde policies, as approved by the PDH;
- To direct the operations of the Dockyard Port's Admiralty Pilotage and towage service and maintain appropriate standards;
- To manage and deconflict, where required, activity within the port area in keeping with the Port Operational Management Safety Report, including controlling the risks to and from explosives handling on the waterfront iaw departmental regulations, drawing specialist advice and support from the Explosives Safety Advisor when required;
- Manage, maintain and direct an appropriate VTS and ensure the quality of service remains within the appropriate IALA/MCA standards;
- The investigation of navigational incidents, as required by MOD Policy;
- The recruitment and training of Port Operations Personnel;
- Ensuring the Health and Safety of Port Operations Personnel;
- Co-ordinate and control all salvage and marine incidents within the Dockyard Port of Clyde liaising as required;
- The timely promulgation of navigational and safety information to Port Operations Personnel and to all Port Users;
- To oversee local management of the Marine Services Contracts and deliver supervision of 'affected service' activity as agreed with DMS;
- Any other functions conferred on the KHM Clyde under the Dockyard Ports Regulation Act 1865 or any other Act;
- The Harbour Authority, as prescribed through Order in Council<sup>9</sup> may, with respect to any vessel entering or within The CDP.

#### 4.8 The Deputy King's Harbour Master Clyde

The Deputy King's Harbour Master Clyde (DKHM Clyde) is responsible to the King's Harbour Master Clyde for the daily management of the CDP and to act as KHM Clyde's deputy in his absence, being able to assume his duties and responsibilities. DKHM's first principle role is Port Safety including supervision of the Port Marine Safety and Environmental Management System and be the subject matter expert on the Nuclear Site Authorised Conditions for Port Nuclear Operations and author of the Port Nuclear Site Safety Case. DKHM Clyde will liaise with a wide range of stakeholders, agencies and groups to satisfy the requirements of both safety management systems. The DKHM Clyde's second principle role is overall management and implementation of conservancy within the Dockyard Port ensuring all navigational aids and the Vessel Traffic System and supporting equipment is fully operational.

#### 4.9 The Port Operations Manager

The Port Operations Manager (POM) is responsible to KHM Clyde for the planning and execution of all Port Operations, including movements and harbour operations, ensuring that safety, environmental and commercial guidelines are incorporated in the delivery of the service. The POM will oversee the delivery of Harbour Control (VTMS) and its associated activities, policy and personnel; in addition, the POM will act as the line manager for the Admiralty Pilots and Harbour Planning Manager. The POM will be the lead for all seamanship and local navigation advice as it applies to the port, ensuring that base-ported and visiting port units are briefed as directed and that local navigational acquaints are provided.

<sup>9</sup> The Dockyard Port of Gareloch and Loch Long Order 2011

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#### 4.10 The Marine Services Superintendent

The Marine Services Superintendent (MSS) is to ensure that the contract for marine services meets its defined outputs and deliverables as provided by the Marine Services Contractor (MSC) to the requisite performance standards at Clyde, and that all involved in the delivery of such outputs (Contractors/Stakeholders/Customers) undertake their respective responsibilities such that there is no deviation from, or dilution of, the core elements of the Contract. The MSS will also provide assurance that Marine Services work carried out locally is in accordance with the Contractor and Authority's MSEMS and other safety cases. The MSS also assures that vessels and equipment are compliant with current safety and statutory legislation. The post is responsible for the provision of professional Marine Services advice, and providing intelligent customer support to KHM Clyde and DMS. MSS Clyde is responsible for overseeing that the contractor complies with all relevant maritime legislation and applicable codes and that the contractor provides a quality service with value for money.

#### 4.11 The Assistant King's Harbour Master Clyde

The Assistant Queens Harbour Master Clyde (AKHM) is responsible to the King's Harbour Master Clyde through the Deputy King's Harbour Master Clyde for the daily supervision of operations and activities within the CDP. Their first principle role is the management of the Port's Command and Control systems. They will also manage the Port's Harbour Operations and supporting operational documentation and be the lead for the controlled documentation that supports Port and Harbour Operations. They will liaise with a wide range of stakeholders, agencies and groups to satisfy the requirements of both outputs and the safety management.

#### 4.12 The Port Safety Officer

The Port Safety Officer (PSO) provides KHM Clyde, through DKHM Clyde with assurance that all the elements of the CDP MSEMS are suitable and sufficient in respect of safety of life; pollution prevention / environmental protection; protection of vessels and waterfront infrastructure.

#### 4.13 The Port Conservancy Officer

The Port Conservancy Officer (PCO) provides KHM Clyde through the DKHM Clyde with assurance that the Dockyard Port is safe for navigation including ensuring the Port is surveyed appropriately and mariners warned of anomalies and dangers. The role also involves making sure that navigational aids for the Dockyard Port are serviceable at all times and if not that the relevant authorities are informed and repair action taken. The Port Conservancy Officer liaises with Northern Lighthouse Board ensuring that all returns are met and PCO runs the licensing within CDP waters for moorings, fishing, high speed craft and any other activities which require KHM Clyde's written permission under the DYPO.

#### 4.14 The Base Services Coordination Officer

The BSCO is responsible to the Assistant King's Harbour Master Clyde for the co-ordination of resources required to be supplied to all vessels within the Dockyard Port.

#### 4.15 The Harbour Planning Manager

The Harbour Planning Manager (HPM) is accountable to KHM Clyde through the POM for the planning of all harbour movements and operations. The HPM monitors the KPIs for the waterfront which fall under the remit of KHM Clyde and reporting any findings to the Business Department for the monthly contract Service Delivery Group meeting.

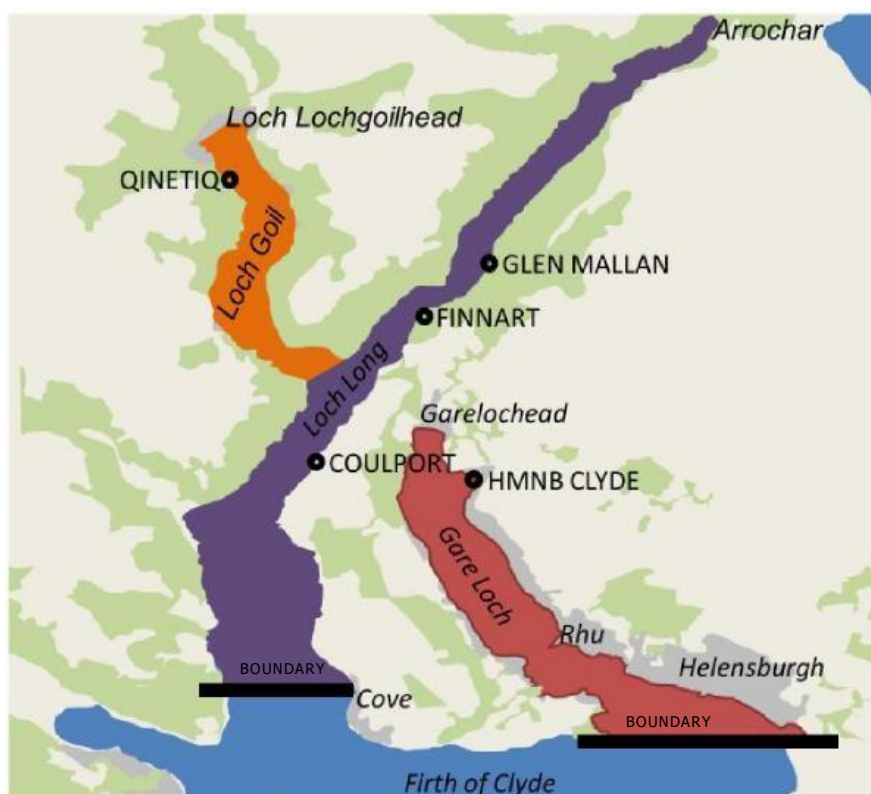
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## 4.16 Base Services Ships Managers

The Base Services Ship's Managers are responsible to the BSCO for the co-ordination of Basewide services for vessels within the Dockyard Port. They provide the primary point of contact for all vessels within the Dockyard Port and deal with the routine organisation and practical support matters concerning the logistical requirements of both Base ported and visiting vessels. The Ships Managers monitor and action LOGREQ signal requirements.

## 4.17 Port Description and Organisation

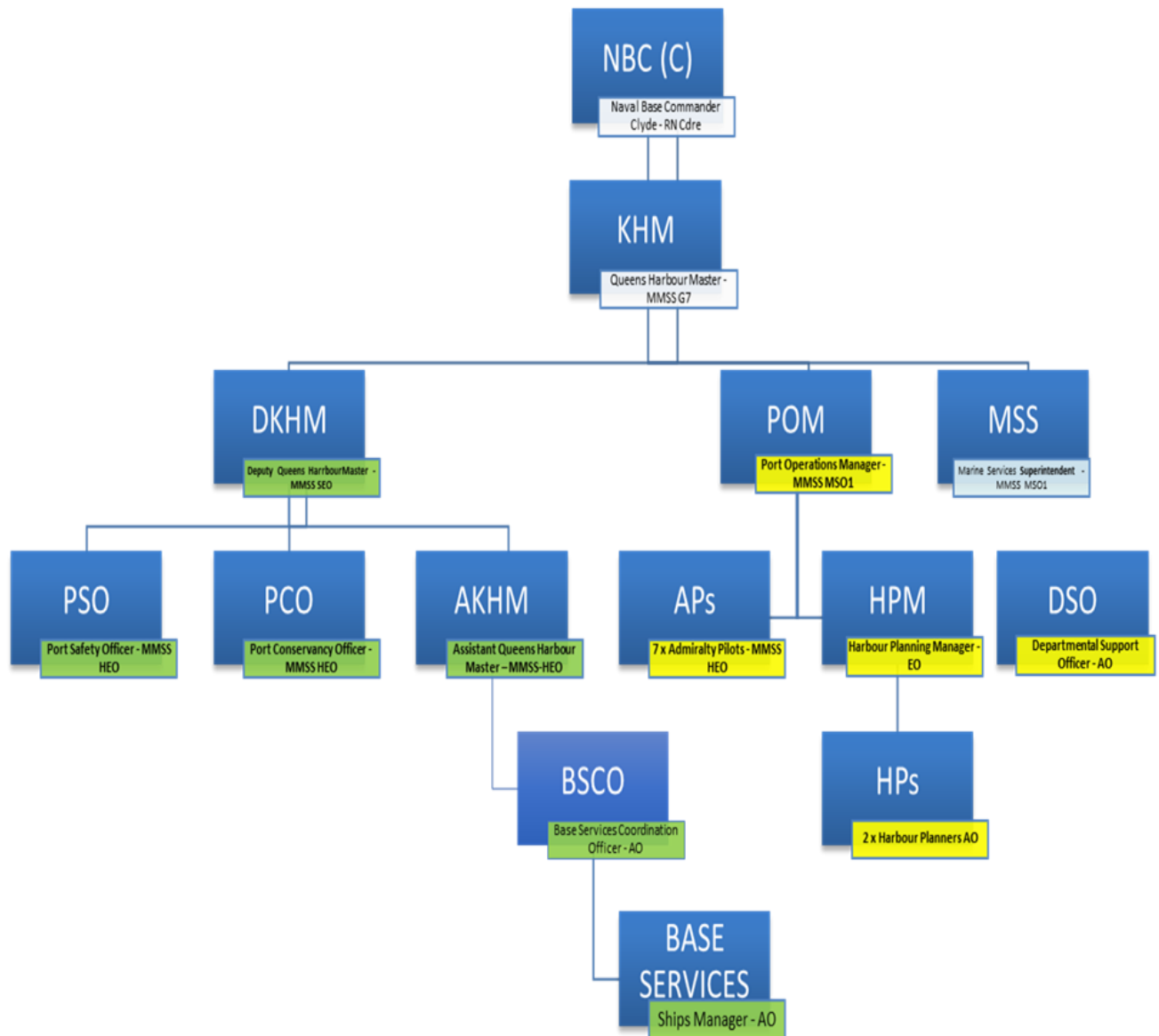
Set on the west coast of Scotland, approximately 25 miles west of Glasgow, the CDP has 65 miles of shoreline and encompasses three Sea Lochs. The port is complex and diverse and features major military and commercial infrastructures including HM Naval Base Clyde, home to the UK Submarine Service and supporting forces. It is also the location of the strategic weapons storage facility at Coulport, the major Oil Terminal at Finnart and Garelochhead and also the MoD Munitions Depot at Glen Mallan. QinetiQ, a MoD business partner, also has facilities within the port that support RN operations. Furthermore, the port has significant recreational, environmental and aesthetic values, with one area of the port area being designated as a [Maritime Protected Area \(MPA\)](#) and another declared a [Site of Special Scientific Interest \(SSSI\)](#). The delivery of effective safety and environmental management is therefore paramount to the long-term protection and enhancement of this Port, for its users, its neighbours, the industries and economies that rely upon it, and the defence of the state. Figure 3 shows the statutory limits of the port as defined through The Clyde Dockyard Port of Gareloch and Loch Long Order 2011. As shown in Figure 3, operationally the CDP can be divided into three parts;



**Figure 3: Dockyard Port of Clyde Area Boundaries and Significant Infrastructure**

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- a. The Gareloch, highlighted in red - primarily military operations with a MoD fuel depot, leisure and some light commercial activity.
- b. Loch Long, highlighted in purple, contains the Finnart Ocean Terminal, Defence Munitions Facility at Glen Mallan, the Strategic Weapons Depot at Coulpport, fishing, commercial and leisure activity
- c. Loch Goil, highlighted in orange, hosts the noise ranging facility operated by QinetiQ, fishing, commercial and leisure activity



**Figure 4: KHM Clyde Organisational Diagram**

#### 4.18 Port Operations Battle Rhythm

To maintain the oversight of safety and the environment, interaction with stakeholders and to fulfil the requirements of DSA-02 Maritime Regulations KHM Clyde has a set battle rhythm of meetings and deliverables. These are captured in a dynamic document hosted on KHM Clyde's SharePoint.

### 5.0 COMPLIANCE, MONITORING AND CONSULTATION

#### 5.1 CDP MSEMS Compliance Aim

As stated in Paragraph 1.0 the CDP MSEMS aim is to comply with the requirements of the PMSC as far as is reasonable and practical as articulated in DSA-02 Maritime Regulations and to develop policies and procedures in order to regulate marine operations in a way that safeguards the CDP, its users and the environment. Furthermore, the CDP have committed itself to ensuring that adequate resources are available to discharge its navigational safety and environmental compliance obligations. The CDP compliance methodology uses risk management, monitoring strategies, consultation and training to achieve its compliance aim.

#### 5.2 RISK MANAGEMENT

##### 5.2.1 Risk Assessment and MSEMS Port Status Report

The report from the CDP's initial PMSC risk assessment, undertaken in February 2010, reviewed and updated in January 2020 provided the recommendations which, together with subsequent recommendations arising from both proactive and reactive reviews of hazards and risk control measures, form the MSEMS Port Status Report (PSR).

The overall purpose of the PSR is to collate all actions from incident investigations that require to be implemented, to identify the person responsible, and to set target completion dates. The report also includes those departmental managers' targets affecting safety and operations which arise from the annual review process.

The MSEMS Port Status Report provides a tool for the continuous monitoring by management of all objectives and recommendations requiring implementation.

In summary, the primary objective of CDP's MSEMS is the implementation of the Policy for Managing the Safety of Navigation and Environmental Compliance. This is achieved by:

- Providing the organisation, arrangements and resources to manage marine activities safely;
- Recognising that people are the Harbour Authority's most important asset; and,
- Ensuring that due importance and priority are accorded to navigational safety.

##### 5.2.2 CDP Hazard Management Database

The Harbour Authority uses a proven Marine Industry Management Information tool ([MarNIS](#)) to create and review Risk Assessments and record port incident data for trend analysis. The Hazard Management database within MarNIS contains comprehensive details of all identified hazards, together with the associated risk control measures employed to mitigate those hazards. All hazards are maintained within the system in ranked order, based on the outcome of the risk assessment process. This ranking structure will change with time as the hazards and risk controls continue to be reviewed, reassessed and rescored. MarNIS also includes a comprehensive audit record, which documents the outcome of the scheduled proactive hazard review process, any incident review,

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and the addition of any new risk and its associated assessment. In each case the outcome of the review is recorded separately and includes:

- The action taken and recommendations made by the Port Safety Officer;
- The names of those involved and their recommendations; and,
- The subsequent decisions by the relevant risk Assessors..

## 5.3 RISK ASSESSMENT STANDARDS

### 5.3.1 Methodology

The general risk assessment process used is based on that adopted by the International Maritime Organisation (IMO). This formal approach involves the following sequential assessment stages, applied in appropriate depth using MarNIS:

- Data gathering and familiarisation;
- Review of the existing management structure, risk control arrangements, policies, procedures and operational functions;
- Hazard Identification;
- Identification of potential hazards and mapping of existing control measures;
- Risk Analysis;
- Consideration of the likelihood of identified hazardous incidents and their associated potential causes and consequences, including prioritising of their risk factors;
- Risk Assessment;
- Comparison of risk factors with effectiveness of existing risk control arrangements, and subsequent determination of additional control measures;
- Risk Control; and,
- Judgement and endorsement of specific control measures to be implemented and managed through the MSEMS.

### 5.3.2 Risk Level Criteria

The resulting risk level from each identified hazard is determined by numerically comparing the potential severity of the consequences (against life, the environment, property and the Port) and the likelihood of that hazard occurring.

Hazards are then ranked according to their numerically scored risk level. It is the principle aim of the on-going hazard review process to actively manage the risk control measures associated with each hazard and attempt to reduce the level of risk, and therefore the ranked score, at each review.

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## 5.4 RISK CONTROL MEASURES

Risk Control Measures fall into two categories:

Documentry	Hardware
<ul style="list-style-type: none"><li>• Regulatory Framework</li><li>• Accurate Navigational Charts and other Navigational Information</li><li>• Operating Manual and Guidelines</li><li>• Operating Procedures</li><li>• Emergency Plans and Procedures</li><li>• Notice to Mariners (Clyde Warning Messages)</li><li>• Formalised Training and Assessment</li></ul>	<ul style="list-style-type: none"><li>• Port Surveillance System (Radar)</li><li>• Port Surveillance System (Visual)</li><li>• VHF Communication</li><li>• Tide Gauge</li><li>• Aids to Navigation</li><li>• Moorings</li><li>• Marine Services Vessels</li></ul>

The generic risk control measures employed by the Harbour Authority can be categorised as follows:

### 5.4.1 Documentary Risk Controls

- Regulatory Framework – Includes the Clyde Dockyard Port of Gareloch and Loch Long Order 2011, Byelaws & KHM Special and General Directions.
- The provision and promulgation of accurate charts, tidal and other navigational information, navigation warnings and weather advice.
- Departmental Operational Manuals & Guidelines including this document
- Process or task specific Operating Procedures
- Emergency Plans and Procedures

### 5.4.2 Hardware Risk Controls<sup>10</sup>

- AIS – Automatic Identification System - A transponder system through which vessel movements are monitored throughout the port. Fitted to warships (except submarines) and all commercial vessels over 300 gt. Some leisure vessels may also be fitted with the system.
- Port Surveillance (Radar) – A comprehensive network of interlinked radars providing effective coverage of tidal waters from the majority of the CDP out to the beginning of the Clyde Channel.
- Port Surveillance (Visual) – A comprehensive network of interlinked cameras providing effective coverage of tidal waters for the majority of the CDP out to the beginning of the Clyde Channel
- VHF Communication – A 3 layer<sup>11</sup> marine radio network covering the majority of the CDP, providing effective port communications for shipping, KHM Harbour Control, CDP and other regulatory craft and all port users.

<sup>10</sup> Project plans are being worked up to extend the coverage of Port Surveillance and Long-Range VHF to cover the totality of the Port

<sup>11</sup> 3 different systems providing short, medium, and long-range coverage

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- VTS System – PC based integrated traffic display system operated at KHM Harbour Control and monitored at HMNB Clyde Incident and Command and Control Centre (ICCC).
- Port Closure Lights – A network of lights used to shut the all the Dockyard Port waters or specific areas to general shipping whilst nuclear or specific vessels moves are being undertaken or for safety.
- Tide Gauge – A tide gauge located in the Gareloch providing live tidal information in support to Harbour Control and Port Users. Variations between predicted and actual tidal levels can be monitored.
- Aids to Navigation – Buoys, marks and lights etc. Maintained by Serco, GSS and Babcock Marine.
- Moorings/Anchorages – Short and long term anchorages and moorings located throughout the port and its approaches.

## 5.5 CDP MSEMS HAZARDS REVIEW PROCESS

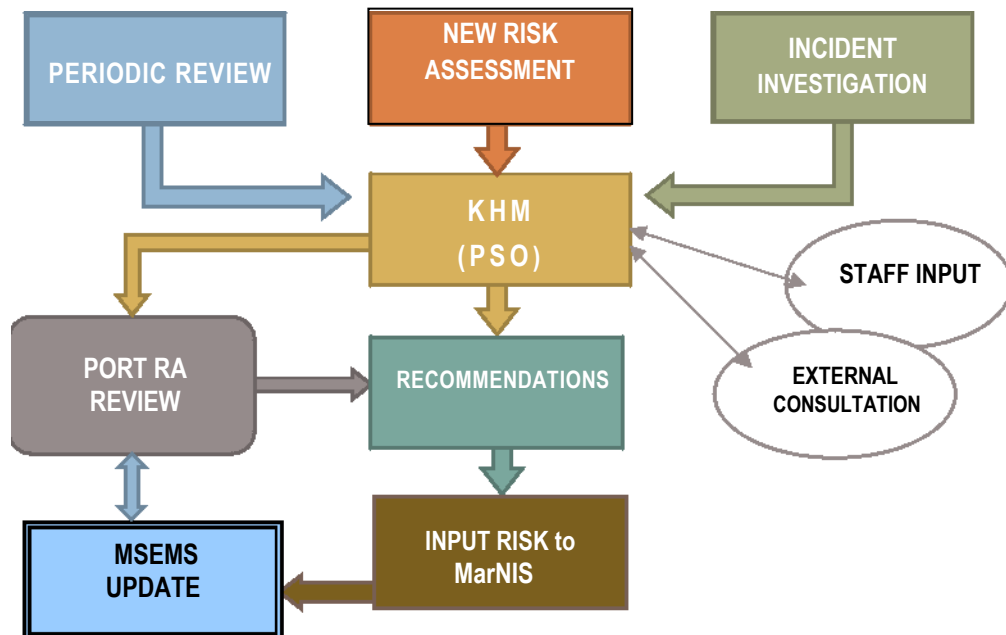
The identification and assessment of navigational hazards is central to the effective maintenance of the MSEM. The Harbour Authority uses a Hazard Management database as the basis for its continuing review of both new and existing hazards and their preventative control measures.

In reviewing identified hazards and risk control measures KHM will involve Port Operations staff and port users as appropriate. The review of hazards and control measures are prompted by three circumstances:

- Planned, periodic, formal reviews of established hazards and risk controls, initiated by the MarNIS software;
- Review of hazards and associated risk controls following an incident; and
- The identification and assessment of any potential hazards arising from changes to circumstances including the introduction of a new or change to a marine operation.

The process used to implement, modify or develop the MSEM is shown in Figure 5 on the following page.

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**Figure 5: The CDP MSEM Risk Development and Review Process**

### 5.5.1 Periodic Reviews - Proactive

Scheduled and un-scheduled risk reviews are undertaken by KHM personnel and relevant Port Users. This risk assessment review methodology ensures that all currently identified hazards are reviewed and the periodicity of review is dependent upon the ranking of the hazard as defined on MarNIS.

- MarNIS Risk Score 5 and above – Annual Review
- MarNIS Risk Score between 3 and 5 – Biennial Review
- MarNIS Risk Score lower than 3 – Triennial Review

The PSO will undertake each review in consultation with staff members and other port users as appropriate.

### 5.5.2 Post-Incident Reviews - Reactive

Following a marine incident, the Port Safety Officer will undertake an initial investigation. For more significant incidents a structured investigation process is in place to identify the contributing causal factors. This will establish whether there has been a failure to comply with CDP regulations, or internal procedures, and whether further regulatory action is warranted. The PSO will also investigate the circumstances of the incident from a MSEM perspective and establish whether there is a need to review the relevant hazard and its associated control measures. This review may involve appropriate staff and relevant port users and, dependent upon the nature and outcome of the incident, the KHM may convene a Learning from Experience event (LFE).

## 5.6 NEW RISK ASSESSMENTS

Whenever circumstances change to introduce activities into the port or to develop existing activities, which are outside the existing scope of the MSEM, the PSO will, in full collaboration with the relevant stakeholders, undertake a risk assessment of the intended operation.

## 5.7 RISK REVIEW RECOMMENDATIONS

Any recommendations arising from the various reviews of risks and hazards will be recorded in MarNIS and any new or revised operational guidance will be put in place, accompanied by training as necessary. Planned implementation will be recorded in the Port Status Report.

## 5.8 DOCUMENTARY CONTROL

The document control procedure will be in accordance with the requirements of HMNB Clyde's Business Management System (BMS).

All documents within the MSEMS are reviewed and approved, as appropriate, by the relevant Manager and the respective Line Manager prior to issue. Prior to approval the aforementioned shall ensure that:

- The correct issues of relevant documentation are available, where needed, by approved personnel.
- Obsolete copies have been removed.
- Changes and amendments to documents are reviewed and approved by the same personnel or department that carried out the original review and approval unless specifically designated otherwise.
- All controlled documents are issued in accordance with the above mentioned document control procedure, including the production of a master list.
- Documents subjected to minor change and amendments are only reissued after a practical number of changes have occurred to avoid unnecessary paperwork.

## 5.9 DEPARTMENTAL RISK CONTROL FUNCTIONS

## 5.10 MARINE CONSERVANCY

The PCO has established an effective hydrographical survey programme for the 3 Sea Lochs to confirm and maintain the depths of channels and fairways, and to inform port users of any shoaling, obstructions and/or new wrecks identified during survey work. A risk assessment is carried out any new or repositioned wrecks, which pose a new or changed hazard.

Tide gauges in the upper Gareloch and the Rhu Channel maintains real time observations for safety of navigation and records on which to base predictions plus variations from predictions/surges.

## 5.11 PILOTAGE

### 5.11.1 Overview

It has been established by risk assessment and mandated under the Port Nuclear Safety Case, that an Admiralty Pilotage Service shall be provided as an essential control measure for the safe movement of nuclear submarines and other vessels as directed by KHM and laid down in the CDP Pilotage Policy (Annex C)

### 5.11.2 Arrangements

Pilotage for the CDP is supplied by:

- The Admiralty Pilotage Service for military ships.

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**For the purposes of this MSEMS, ‘military ships’ means:**

- Ships of war, of any nationality;
- Fleet Auxiliaries, of any nationality;
- Ships operating under demise charter to the MOD<sup>12</sup>,

The Pilotage Act 1987 provides for the establishment of joint arrangements between Harbour Authorities, including a KHM, in order to exercise given functions. Arrangements for the delivery of pilotage pursuant to the Pilotage Act have been established between:

- KHM;
- Peelports Clydeport (COL);
- Finnart Oil Terminal (FOT).

The Harbour Authority will ensure that any pilotage arrangements are formally organised in a manner that provides for associated statutory obligations that accord with the recommended best practice of the DfT noting that statutory responsibility for the determination of pilotage policy pursuant to the Pilotage Act 1987 may only rest with a Competent Harbour Authority<sup>13</sup>.

### 5.11.3 Non-Military Vessel

Pursuant to the Pilotage Act 1987, the policy responsibility for the pilotage of non-military ships operating within the pilotage district of the Clyde lies with the CHA (COL).

In the development of pilotage policy, the Harbour Authority, in conjunction with the adjacent CHA, will keep under consideration whether any, and, if so, what, pilotage services need to be provided to secure the safety of ships navigating in, or near, the approach to CDP. Furthermore, whether in the interests of safety, pilotage should be compulsory for ships navigating in any part of the area defined above and, if so, for which ships and in which circumstances pilotage services need to be provided for those ships.

Under an MOU the Port Authorities will review the provision of pilotage services for non-military ships:

- On each occasion that the use of either port changes, where it affects the other, in such a way so as to affect the requirements of the service provided, which may include amongst other things:
- Developments in ship design and operation in fulfilment of International, European and National standards; and,
- Alterations to the physical characteristics of the port including the built environment;
- As required to implement amendments to national legislation and / or policy;
- To address any relevant recommendations of the MAIB or the Harbour Authority as an outcome of investigations either party may undertake; and,
- Notwithstanding the above, after a period not exceeding three years.

<sup>12</sup> The charterer takes full control of the vessel along with the legal and financial responsibility for it. Where this condition is not met, i.e., the MoD does not accept full legal and financial responsibility for the ship under hire, the ship is considered to be ‘non-military’.

<sup>13</sup> The Pilotage Act 1987 precludes the KHM from being a Competent Harbour Authority

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The Harbour Authority will:

- Ensure that the MCA is informed whenever reports are received from a pilot that a vessel has deficiencies, which may prejudice the safe navigation of that vessel, or may pose a threat of harm to the environment;
- Will provide, on request from COL, a suitably qualified person to advise on the PEC board for any vessels whose master and/or mate have applied for a COL PEC and who intend to operate within the waters of the CDP.
- Review conformance to its Pilotage Directions and take appropriate action should any breach be identified;
- Provide, in the most appropriate format, up-to-date passage guidance applicable to the port; and,
- With reference to the geographical limit of the CDP Pilotage Directions, identify safe boarding and disembarkation areas. The location of boarding and disembarkation areas will be published as a Notice to Mariners and notified to the UK Hydrographic Office.

The Port Authorities will:

- Determine through a process of formal risk assessment any circumstances in which more than one pilot would be needed to conduct the navigation of a non-military ship or floating structure safely to any berth within the CDP; and,
- Ensure that suitable arrangements are in place to assist in securing access to non-military ship passage plans and VTS records in the event that they may be needed for incident investigation purposes.

#### 5.11.4 Military Vessels

The KHM has responsibility for the pilotage of military ships operating within the limits of the CDP and for Government Ships<sup>14</sup> proceeding to designated MOD facilities (OPA Jetties) under MoU arrangements.. In the development of pilotage policy for the above, the KHM will keep under consideration whether any, and, if so, what, pilotage services need to be provided to secure the safety of military ships navigating in, or near, the approach to the CDP. Furthermore, whether pilotage should be compulsory for military ships and, if so, for which ships and in which circumstances pilotage services need to be provided for those ships.

The KHM will ensure that proper arrangements are in place for assessing the competence of Admiralty pilots, maintaining the currency of their local knowledge and conformance to the required standards of fitness. Details of these arrangements will be documented and made available to all Admiralty pilots. The KHM will ensure that all Admiralty pilots are trained and qualified to conduct the vessels to which they are likely to be allocated. The KHM will ensure, where applicable, that arrangements are in place for pilots to be allocated to vessels with sufficient time and information available to prepare a pilot passage plan.

DMS will ensure that vessels used as pilot launches and workboats to serve military ships will, where applicable, conform to the [Merchant Shipping \(Small Workboats and Pilot Boats\) Regulations 1998<sup>15</sup>](#) and the associated MCA Safety of [Small Workboat and Pilot Boat Code of Practice](#).

<sup>14</sup> Ships not forming part of Her Majesty's Navy which belong to Her Majesty or are held by any person on behalf of or for the benefit of the Crown (and for that reason cannot be registered under Part II [of the MSA]).

<sup>15</sup> At this review the new Merchant Shipping (Small Workboats and Pilot Boats) Regulations and COP 2023 were out for consultation

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The KHM will utilise and promote the use of appropriately detailed passage plans within the port.

The KHM will provide, in the most appropriate format for military ships, up-to-date passage guidance applicable to the CDP.

## 5.12 Port Guidance

The Harbour Authority will ensure that appropriate advice and guidance is developed and published, in suitable formats for port users, to facilitate the safe and efficient operation of shipping within the CDP. This information will address, amongst other things:

- Channels, berths and anchorages;
- The Harbour Authorities process for movements and harbour operations;
- Tidal and other environmental information;
- Minimum under keel clearance for operations within the CDP;
- The use of tugs and support vessels;
- VTS communications and procedures;
- Safety and environmental requirements for vessels in port waters;
- Emergency management procedures and port security;
- Port services details and contacts; and,
- Recreational activity, including fishing and diving.

### 5.12.1 KHM Clyde Directions

KHM Clyde's Directions' may take 2 forms: General or Special. It is the duty of KHM Clyde in exercising these powers to consider the interests of all shipping and users in the port.

**General Directions.** A General Direction (GD) is a legal direction to be observed and complied with by port users and vessels when operating in the Clyde Dockyard Port (CDP). Issued only by KHM under the authority conferred from Statutory Instrument 2011 no. 1680 (The Clyde Dockyard Port of Gareloch and Loch Long Order 2011), they can be discrete to vessel type or area, or applicable to all. Failure to comply with a GD is enforceable by law and can result in prosecution. GDs are reviewed, and new GDs discussed at monthly KHM HODS. GDs are re-issued annually in January.

**Special Directions.** Special Directions are verbal directions delivered over VHF radio or in person and are issued by personnel authorised to do so by KHM<sup>16</sup>. As with General Directions, they are legally enforceable and failure to comply can result in prosecution.

**Local Notice to Mariners.** Local Notices to Mariners (LNTMs) are used to rapidly disseminate navigational safety information, particularly about defective or out of position Aids to Navigation (AtoN); unexpected wrecks or obstructions, or uncharted shoal depths; underwater operations which may create temporary obstructions shallower than charted depth; any other item that is at variance to charted information. They are also used to disseminate information regarding activities, events, or general information pertinent to individuals or vessels operating in the CDP area. Examples include dredging; bathymetric surveys; open water swims; large regattas; air displays or pertinent safety advice. Published on the website, they are also sent by formatted signal to RN warships and RFAs. This information can remain in force for extended periods, usually until the item is rectified or the details are accurately recorded and distributed on the

<sup>16</sup> Within Individual TORs, by specific letter of delegation or by persons acting with KHM's authority.

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relevant Admiralty Charts. Individuals or organisations may make application for an LNTM to be published, although the decision to do so ultimately remains at KHM's discretion. LNTMs will either be designated as a Direction or Information in the opening paragraph. All LNTMs are to be approved by KHM Clyde before issue. The procedure for the issue of LNTMs is contained in the Port Conservancy Manual (para 3.9) and on the Business Management System as a process map (HO(C)-PM-012).

### 5.13 Vessel Traffic Services – Local Port Service

Vessel Traffic Services (VTS) in the form of a LPS is provided throughout the CDP port limits. The LPS is operated by a Harbour Controller situated in Port Operations 7 days a week during working hours and during any major<sup>17</sup> move. It is monitored in the Naval Base Incident Command and Control Centre (ICCC) at all other times.

### 5.14 Vessel Operational Standards

The PMSC requires the CDP to manage marine operations and regulate navigation within the port so as to reduce the risk of marine accidents and incidents to a level where the risks are as low as reasonably practicable (ALARP). There are many component parts to this process, including the risk assessment process itself, which identifies active risk control measures such as the provision of Pilots, VTS services and up to date hydrographic information. An important component part of this system is that vessels navigating the port, whether subject to pilotage or not, are maintained to appropriate standards, and operated in a competent manner commensurate with the relevant national and international legislation.

#### 5.14.1 Nuclear Powered Warships

UK Nuclear Powered Warships (NPW) are routinely allocated an active escort tow for transitting the Rhu Restricted Channel and the entry/exit channel for Loch Goil. Other nation's NPWs are not mandated to but are recommended to adopt this towage configuration. UK NPWs are also mandated to conduct a dynamic risk assessment (DRA) prior to entering or leaving the port to confirm that:

For moves from Sea to the CDP. Consider the cumulative impact of defects, propulsion line up, and any changes planned are to be considered carefully, and mitigation worked through to decide whether the pilotage can be conducted safely. Factors are to include: the risk to propulsion and control surfaces, the effect of environmental conditions, and the configuration of systems achievable before commencing River Routine, and not to plan on being able to achieve potentially improved status later in the transit of enclosed waters – plan on the worst case. The outcome of the DRA is to be signalled to NBC Clyde at the earliest opportunity (but, ideally 24 hours before the planned move), in order to allow KHM Clyde to plan for additional mitigation measures. The findings of the DRA are to be reviewed with the pilot during the CO/Pilot exchange.

For moves from the CDP to sea. The DRA is to consider: engineering status, environmental conditions, training status (crew SQEP), and time alongside, as key factors in the risk to platform. The CDP to sea DRA should be reviewed with the Admiralty Pilot at the leaving harbour brief to determine an agreed assessment of the conduct of the move

All vessels should also ensure that:

- Charts and Navigational publications up to date;
- A Port Passage Plan has been prepared;
- The vessel is compliant with ISM code or, no deficiencies/defects in respect of crew, navigational equipment, propulsion and manoeuvring machinery;

<sup>17</sup> NPW and other vessels as directed by KHM Clyde

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- Arrangements have been made to provide appropriate mooring assistance at the intended berth.
- Effective bridge resource management and appropriate support for the embarked pilot.
- Compliance with relevant port security requirements (in conjunction with individual port facilities).

This vessel compliance initiative is integral to and supports the CDP's Enforcement and Prosecution Policy. The measures adopted are subject to regular review and revision in the light of experience.

### 5.15 Harbour Patrols

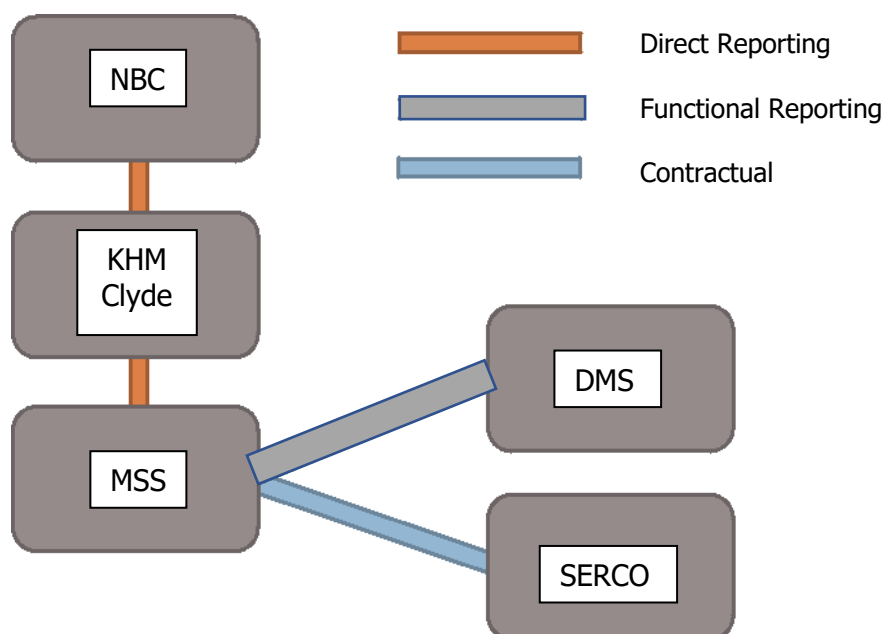
The CDP is constantly patrolled by vessels from the Clyde Marine Unit Ministry of Defence Police (CMU) with supporting administrative and regulatory functions, to assist in the effective regulation and enforcement of the Policy for Managing the Safety of Navigation. See Annex D for the enforcement Policy for the CDP.

### 5.16 Marine Services Provision

Marine services within the CDP are provided by SERCO through the Continued Provision of Marine Services (CPMS) contract. The contract includes provision for towage, pilot vessels, passenger transfer, stores, removal of waste, oil pollution response and support to training exercises. The MSS has responsibility for the oversight of this contract within the CDP

The relationship of the MSS to the Harbour Authority and the NBC is shown in figure 7. The MSS reports to the KHM to ensure local Intelligent Customer capability for the range of Marine Services. The MSS also has a functional line to Defence Marine Services (DMS) Team Leader.

The MSS provides assurance to KHM Clyde and DMS that the contractor is fulfilling their contractual obligations locally in terms of commercial performance and regulatory compliance.



**Figure 6: The MSS reporting relationships**

### 5.17 Emergency Preparedness and Response

The Harbour Authority will establish emergency response plans and procedures to address marine emergency incidents. The purpose of this plan is, in the event of an emergency affecting the CDP, to specify the means for raising the alarm, alerting persons liable to be affected,

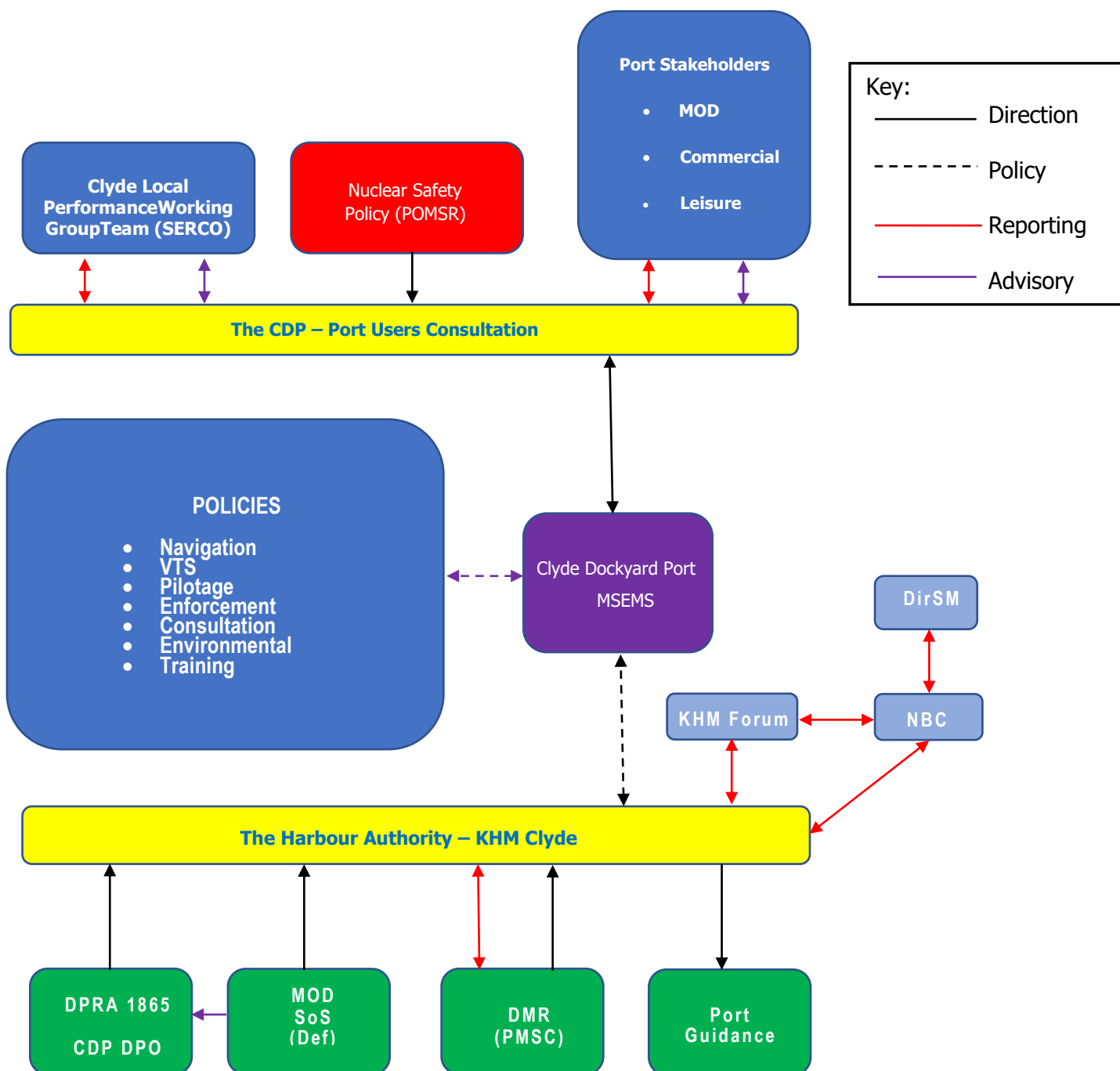
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summoning assistance and establishing the role of the organisations involved in order to coordinate the activities necessary in safeguarding life, property and the environment, allowing the mitigation of the effects of any such event. For this plan to operate effectively it must achieve compatibility with the plans of Argyll & Bute Emergency Coordination Group. It is based on the doctrine of Integrated Emergency Management (IEM). The aim of IEM is to develop flexible and adaptable arrangements for dealing with emergencies, whether foreseen or unforeseen. It is based on a multi-agency approach and the effective co-ordination of those agencies. It involves Category 1 and Category 2 responders and also the voluntary sector, commerce and a wide range of communities.

## 5.18 Consultation and Communication

Feedback from both Port Operations personnel and other Port Users is a vital MSEMS component. All Port Users are actively encouraged to be involved in the management of marine safety and environmental compliance. This includes input into the development and implementation of the MSEMS and its operational risk management controls.

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**Figure 7: Functional Structure for the Management of Marine Safety and Environmental Compliance**

### 5.18.1 Overview

The Harbour Authority consults with all port users, including the adjacent CHA through various committees as shown in **figure 7**. This assists KHM Clyde with all matters related to the management of safety and environment compliance within port waters; it is the consultation process that brings together port stakeholders to promote the delivery of integrated safety and environmental management for the CDP.

This consultation process will:

- Assist the Harbour Authority to develop and maintain the MSEMS and related policies consistent with the PMSC, the general safety policy for the port, the environmental policy for the port and the nuclear facility safety cases in place;
- Establish safety performance measures for the port;
- Review the effectiveness of the MSEMS against safety performance measures, including:
  - Incidents since last meeting;
  - Updates on investigations / recommendations;
  - Review of navigational safety barriers;
- Appoint members to, and establish the work programme for, Sub-Groups as may be convened to address specific issues;
- Promote the involvement of all relevant stakeholders in the consultation underpinning the development of navigational safety policy for the CDP.

### 5.18.2 Port Risk Assessments

Port Risk Assessments are conducted using relevant port stakeholders and KHM Clyde personnel and meetings are chaired by the PSO. The aim of the review meetings is to identify and agree on Port hazards and review current risks to ensure they are ALARP. This meeting convenes as required and reports its output to DKHM.

### 5.18.3 The Port Users Group

The aim of the Port Users' Group (PUG) is to provide a biannual forum where marine safety and environmental issues, including pollution prevention and control, can be discussed, considered and resolved by MOD and internal Naval Base Stakeholders. The group has three objectives:

- To promote co-operation between KHM Clyde management and other HMNB Clyde and CDP key marine stakeholders in the pursuit of legislative compliance and too continually improve Port Safety culture;
- To provide a method for consulting with the key marine stakeholders on marine port safety and environmental arrangements and issues that could affect them;
- To monitor and review Port Safety performance against the relevant elements of the the CDP MSEMS and also the PUG Action Grid

### 5.18.4 The Dockyard Port External Liaison Committee

The aim of the Port External Liaison Committee (DPELC) is to provide a annual forum where representatives from the Port Authority and representatives from key external stakeholders can discuss, consider and resolve port safety and environmental issues. The committee has 3 objectives:

- To promote co-operation between KHM Clyde and non-MoD marine stakeholders, in the pursuit of legislative compliance and to continually improve Port Safety culture;

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- To provide a method for consulting with the key external marine stakeholders on port safety and environmental arrangements and issues that could affect them;
- To monitor and review Port Safety performance against the relevant elements of The CDP MSEMS and also the DPELC Action Grid.

### 5.18.5 Other Marine Stakeholders Forums and Responsibilities

Other Marine Stakeholder forums provide input about specific issues to KHM. They will be convened at specific intervals, the following being considered appropriate at this time:

- Pilot and Tug Master Liaison Group
  - All aspects of towage and common working practices.
- Finnart Liaison Group
  - The management of interaction and safety involving Port Operations and Finnart Operations
- Clydeport Security Group
  - The management of marine security in the Clyde.
- Clyde Moorings Committee
  - The Management of moorings and interaction with other mooring committees in the Clyde
- Diving Safety Committee
  - The management of diving safety within the Dockyard Port for Military and Commercial diving only
- Clydeport BILAT
  - Management meeting between KHM Clyde and Peelports Clydeport to ensure each other is aware of operations and issues.
- Clyde Forum
  - Safety and environmental management in the Clyde
- Clyde Local Performance Working Group
  - Two monthly management meeting between KHM Clyde and SERCO to review the performance of the Marine Services Contract, discuss health and safety, vessel performance and any issues that require elevating to the Executive Partnering Team (EPT)
- Site Safety Case Working Group
  - Three monthly meeting to review and progress the Port Site Nuclear Safety Case and prepare the POMSR Annual Review for the Clyde Nuclear Safety Committee (CNSC)
- Oil Spill Contingency Plan
  - Consultation between KHM Clyde and all stakeholders that is adjacent to the CDP from both a land and marine perspective.
- Small Vessels Working Group<sup>18</sup>
  - Consultation between KHM Clyde and all stakeholders with an interest small vessel operators.

The configuration of these groups may change from time to time, dependant on the harbour user experience most able to contribute to the issue under consideration. A harbour user group may be formed by individual invitation or it may be formed from an existing Harbour Interest group, depending on the issue being considered.

<sup>18</sup> New group to start Apr 23

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## 5.19 Performance Monitoring

The CDP performance-monitoring process is designed and driven by the DP to progressively monitor and improve marine safety and environmental compliance. By measuring key indicators, which reflect both the performance of the CDP and that of port users, appropriate measures can be adopted and introduced which further improves marine safety.

### 5.19.1 Performance Measures

The following measures are used to monitor marine safety and CDP performance:

- Facilitating the safety of navigation and environmental compliance within the CDP
- Number of controlled moves within the Dockyard Port
- Number of Maritime Safety Incidents relative to the number of vessel moves
- Availability of CDP navigation lights and buoys.
- Babcock – berthing tasks
- Serco – provision of marine services
- Diving safety incidents and near misses
- Total number of reported pollution incidents.
- Number of prosecutions initiated.

The CDP Annual Report reviews all CDP performance measures on an annual basis; Reported monthly to the PDH (NBC Clyde) and at NBC Directors Performance Review.

### 5.19.2 Monitoring

The day-to-day monitoring of marine safety management and environmental compliance is conducted by Harbour Control and regular port users especially the waterborne security forces. Evaluation of the level of compliance is achieved through:

- Proactive systems that monitor performance in relation to objectives and operating standards; and
- Reactive systems which investigate incidents.

### 5.19.3 Proactive Monitoring

The responsibility for conducting compliance monitoring lies primarily with the PSO. However the PSO must ensure that all levels of management are involved in the monitoring regime.

### 5.19.4 Reactive Monitoring

The CDP aims to create an environment within which all marine incidents are reported. The Dockyard Port Order requires that a Commanding Officer or Master provides a report to KHM Clyde should his vessel be involved in an incident. However, all Port Users are encouraged to report other incidents, for only by understanding the causes and avoidance measures adopted in all such circumstances can lessons be learned and incidents be avoided in the future.

## 5.20 Performance Reporting

### 5.20.1 Port Duty Hoder (NBC Clyde)

A monthly briefing is given to the PDH. This briefing provides a snapshot of port performance over the previous month, together with any trends of incidents reported. Headline issues and risks are discussed and appropriate responses agreed.

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### 5.20.2 Naval Base Board

KHM Clyde, as the Port Director attends the monthly Naval Base Board which is made up of all Naval Base MOD Directors. The Naval Base Board is the primary governance vehicle for HMNB(C) reporting to the 2\* DirSM. Ensuring accountable and visible governance of HMNB(C) in delivering its business plan and strategy, and meeting the needs of its primary customers, through Safety, Security and Effectiveness.

In the port governance structure, this meeting acts as the Harbour Board where KHM reports on his performance metrics as well as highlighting specific issues to the other Directors, particularly where there is an impact on wider Naval Base business.

### 5.20.3 The KHM Forum

Held every six months (nominally Jan and Jul), the purpose of the KHM Forum is to bring together the KHM's from the three Dockyard Ports to discuss pertinent port operations and safety matters, with a view to achieving consensus and commonality of practice. The KHM Forum was born from the defunct Dockyard Ports Advisory Board, with a view to feeding cross-cutting issues into the Naval Base Management Board. Chaired by Capt Port Ops and organised by SO2 Port Ops, the KHM Forum can be held either remotely or in-person, depending on other activity. The agenda for each Forum is agreed in advance, with KHMs invited to suggest agenda items that they believe are relevant. Specific agenda items or specialist input may require the attendance of individuals from other organisations, such as AFSUP, DMR, Navy Safety Centre or the civilian marine sector.

Any issues requiring attention at 1\* level are taken forward by Capt Port Ops for higher level engagement.

### 5.20.4 The CDP Annual Report

The CDP produces an annual report to the following stakeholders

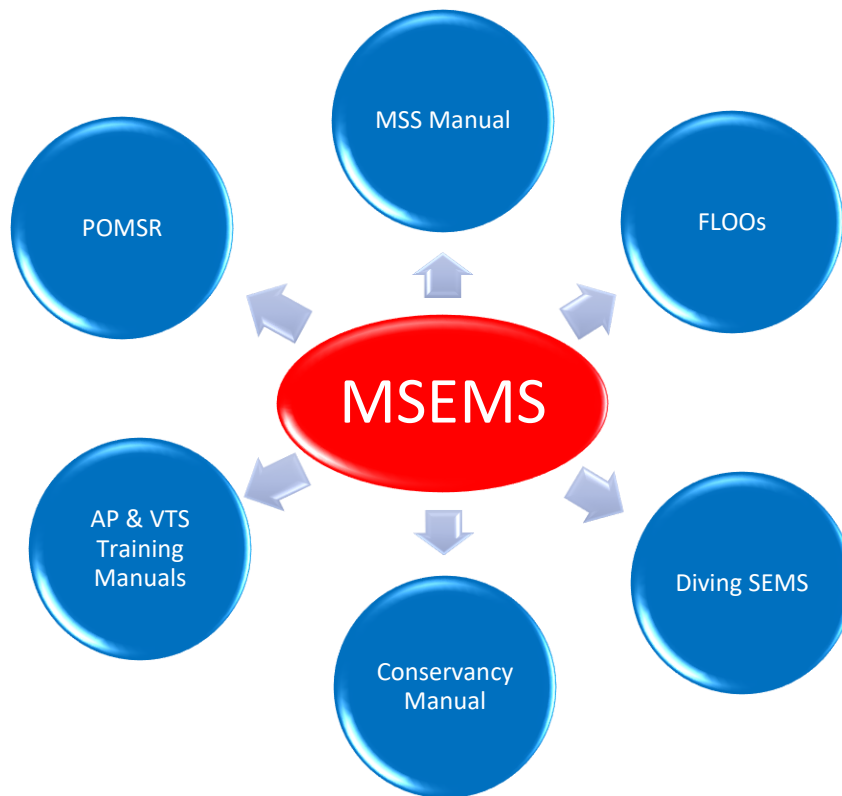
- NBC Clyde
- COMFASFL0T
- Captain Port Operations
- SERCO
- Other relevant Stakeholders

## 5.21 Manuals, Procedures and Operational Guidance

The foundation of the CDP's MSEMS are the knowledge, skills and competence, underpinned by appropriate training, of individuals within the system. Operating controls in the form of operating manuals, procedures and orders reinforce this. Departmental manuals provide directions and guidance on the core functions of the department.

Operational guidance is contained in Part B of CDP MSEMS

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**Figure 8: MSEM Manuals**

## 5.22 Environmental Compliance and Management

The CDP maintains effective procedures and control measures designed to ensure that the potential impact on the environment is fully considered when planning or approving military, commercial and recreational activities within the port. The CDP will also consider the guidance for environmental duties as stated in the Harbour Act 1964<sup>19</sup> (and updated by the Harbours (Scotland) Act 2015)<sup>20</sup> which requires a Harbour Authority, in formulating or considering any proposals relating to its functions under any enactment, to have regard to various environmental matters, including conservation, freedom of public access to places of natural beauty and the availability of facilities. Marine Scotland regularly conducts patrol of the CDP area and in particular Loch Goil (MPA).

### 5.22.1 Flora, Fauna and Marine Life

From the three sea lochs that make up the CDP to the waters of the Firth of Clyde there is an abundance of flora, fauna and marine life which are valued by local communities for recreation and tourism, as well as for fishing and aquaculture.

Key Clyde features include:

- 17 seabird species breed in the Firth of Clyde
- Major shellfish fishing and cultivation industries
- Grey and common seals, dolphins, whales, porpoises, basking sharks

<sup>19</sup> [https://www.legislation.gov.uk/ukpga/1964/40/pdfs/ukpga\\_19640040\\_en.pdf](https://www.legislation.gov.uk/ukpga/1964/40/pdfs/ukpga_19640040_en.pdf)

<sup>20</sup> <https://www.legislation.gov.uk/asp/2015/13/2015-12-03>

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### 5.22.2 Incidents involving Flora, Fauna or Marine Life

Any incident involving flora, fauna or marine life should be reported to KHM who will inform the necessary authorities.

## 5.23 Environmentally Sensitive Areas in the CDP

### 5.23.1 RAMSAR Area

The qualifying interest at this site (Gareloch) is the non-breeding Redshank.

### 5.23.2 Site of Special Scientific Interest (SSSI)

The Inner Clyde Site of Special Scientific Interest (SSSI) contains the intertidal zone of the Clyde estuary from Clydebank in the east to a line between Helensburgh on the north shore and Greenock on the south shore. The seaward boundary of the site extends as far as Mean Low Water Springs. The site is the most northerly of Britain's large west coast estuaries used by migrating birds, and is of national importance for its populations of wintering wildfowl and waders and of European importance for its wintering population of redshank. The site also supports a variety of typical estuarine plant communities with good examples of transitions from saltmarshes to brackish swamps and grassland periodically inundated with sea water. The Inner Clyde regularly supports nationally important wintering populations of several species of waterfowl, including redshank, red-throated diver, cormorant, eider, goldeneye, red-breasted merganser and oystercatcher. Principal roosting site is at Ardmore.

### 5.23.3 Special Protected Areas (SPA)

The Inner Clyde is a long, narrow, heavily industrialised estuary on the west coast of Scotland. The Inner Clyde SPA extends 20km westward from Newshot Island to Craigendoran Pier on the north shore and to Newark Castle on the south shore. It contains extensive intertidal flats which support large numbers of wintering waterfowl. The boundary of the Inner Clyde SPA is coincident with that of the Inner Clyde SSSI. The Inner Clyde SPA qualifies under Article 4.2 by regularly supporting an internationally important wintering population of redshank.

### 5.23.4 Marine Protected Area (MPA)<sup>21</sup>

The sea lochs of the Clyde are long and narrow. The differences in water movement and salinity from the entrance to the head of the lochs results in a range of habitats where an amazing diversity of plants and animals thrive. Protected features in this area include: Burrowed mud; flame shell beds; horse mussel beds; ocean quahog aggregations; sub littoral mud and specific mixed sediment communities.

All diving project plans must consider the environmental aspects of the diving tasks both on the diving team and on the local environment and this should be captured in the appropriate risk assessment and method statement.

### 5.23.5 Environmental Considerations

Port Users should consider the following when operating in the CDP to ensure environmental compliance:

<sup>21</sup> There are no forecasted HMPAs planned for the CDP

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- Assessment of wind, wave and tidal conditions
- Assessment of the risk of hypothermia
- Assessment of the local marine life (stings, scratches and bites)
- The use of fuels and lubricants
- Exhaust fumes from machinery
- Running machinery (decibel levels)
- High pressure air and water machinery (debris)
- Protocols when operating near protected species
- Protocols when operating in marine sensitive areas
- Waste management

### 5.23.6 Environmental Impact Assessment

The greatest potential risk to the environment from harbour operations is contamination by oil spill. This is not to ignore nuclear safety but this issue is dealt with by the wider Nuclear Emergency Response Organisation (NERO) which operates at national level. Environmental impact is implicit within the NERO strategy although it follows after saving life. At the harbour level, Oil Spill Contingency is the highest environmental priority. The Dockyard Port of Clyde Oil Spill Contingency Plan (OSCP) deals with the risk of oil spill and how it is dealt with as well as outlining the training which supports the response. It also contains the Environmental Impact Assessment.

### 5.23.7 MARPOL Risks

1. Bunkering in the CDP
2. Land spill to CDP
3. Light Oils spill
4. SD OILMAN loss of containment
5. Fuel Operations at OFD Garelochhead
6. Fuel Operations at INEOS Ocean Terminal Finnart
7. Collision / Grounding

### 5.23.8 Oil Spill Response

The most likely MARPOL event is a diesel (F76) or hydraulic oil (OX30) spill, the most common types of fuel carried by Port Users. Heavy Oil and Crude are found within the Dockyard Port although under different agencies. In the case of crude oil the Finnart Terminal, there are robust containment measures operated by the competent teams at Finnart. If a MARPOL event is declared within the CDP or CHA area the Duty KHM will set up an initial incident base in Harbour Control and follow the emergency operating procedure as referred to in the OSCP and in Part B of the MSEMS.

### 5.23.9 In Water Hull Cleaning

The introduction and distribution of invasive non-native species (INNS)<sup>22</sup> is an issue that has risen in prominence as the impacts of unintentionally transporting species through shipping become better understood. It is an environmental, social, and economic problem. Marine non-native species can be introduced to the UK through the transportation of organisms

- 
- <sup>22</sup> **Invasive Non-Native Species:** Are species which have been introduced into areas outside their natural range through human actions and are posing a threat to native wildlife, making them invasive.
  - **Non-Native Species:** Are species which have been introduced into areas outside their natural range through human actions but *do not* pose a threat to native wildlife, making them non-invasive.
  - **Native species:** are species that have become part of an ecosystem through natural processes.


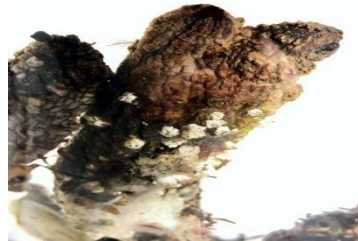

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attached to, and contained within, any space on a submarine or surface vessel that is exposed to seawater movement. This includes the hull, ballast spaces, flooding grilles and water inlets. Due to the environmental threat posed by hull cleaning it is necessary to permission hull cleaning activities in the CDP on a case by case basis as part of KHM's Marine Biosecurity plan ( para 12.3.3). KHM will use the current guidance issued by CESO<sup>23</sup> RN in consultation with the vessel and other relevant stakeholders before permissioning any in water hull cleaning task that may or may not include diving.

#### 5.23.10 Marine Bio-Security – Invasive Non Native Species


Invasive Non-native species (INNS)<sup>24</sup> are those that have been moved to a location out-with their native range by human action, whether intentionally or not. As well as posing a threat to biodiversity, INNS can disrupt a number of marine economic activities by fouling or smothering of shellfish and fish farms, marinas and mooring pontoons, or in extreme cases, fouling of waterway. It has proven to be costly to manage these impacts and to date, there has been no wholly successful eradication of a marine INNS.

High impact INNS in the Clyde area are;

Type	Impact	Image
Carpet Sea Squirt	Smothering of soil for common seed plants. Smothering of coral, seaweed and mussels.	
Leathery Sea Squirt	Fouling of solid surfaces in shallow waters, blocking outfalls and colonising local common sea squirts.	
Common Cord-Grass	Smothering of natural eco-systems and preventing birds from feeding.	

<sup>23</sup> [CESO Guidance](#)

<sup>24</sup> <https://www.gov.scot/publications/non-native-species-code-practice/>

Wireweed	Fouling of aquaculture installations.	
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### 5.23.11 Protected Species

Compliance with the requirements of the [Marine Management Organisation](#) (MMO) and [Nature Scotland](#) in respect to obtaining licences and avoiding the disturbance of protected species is the responsibility of the diving contractor in conjunction with KHM. These additional protocols have been implemented to ensure best practice when protected species are encountered during any diving activities in The Dockyard Port of Clyde.

- If a protected species, for example Seahorses, are encountered during diving activities it **should not** be touched, chased or disturbed as it is an offence to disturb them.
- If a protected species is encountered by chance, it is requested to record the position (coordinate grid reference,) and when reasonably practicable take a maximum of three photographs (**without flash**,) then move on.
- If the species swims away do not chase it as this is disturbance and is against the law.
- When recording observations of smaller species such as seahorses, do not hover over the protected species, keep your distance and calmly make your observations. At all times spend no more than 5 minutes around the species to avoid them getting stressed.
- If there are a number of divers do not surround the species, so it can move away if it wants to.
- Sightings of unusual nature shall be **reported to the diving supervisor** and manager accordingly who will inform KHM Clyde. KHM Clyde will inform all the relevant authorities of the sighting to ensure the correct record is submitted.
- The following shall be recorded and reported to KHM and Marine Scotland:
  - What was seen
  - Where and when was it observed
  - How many individuals were observed
  - What was their activity during the sighting e.g. was it attached to an object, floating in the water column, swimming, feeding etc.
  - Who recorded the sighting

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- Coordinate grid reference and if possible photographs (maximum of 3 pictures without flash)

### 5.23.12 Committal of Ashes in the CDP

KHM Clyde is requested on occasion to permit and facilitate a committal of ashes inside the waters of the CDP. To comply with Marine Scotland and the Department of the Environment, Fisheries and Rural Affairs (DEFRA) regulations and ensure rapid assimilation into the marine ecosystem, the materials used to construct a casket should not be synthetic, nor be of a species of timber, such as oak or elm, nor should it contain lead, zinc, copper, brass or any other metal harmful to the environment.

The specific area where the committal will take place is subject to a discussion between the family and KHM Clyde.

## 6.0 INCIDENT MANAGEMENT

### 6.1.1 Introduction

This policy<sup>25</sup> sets out the reporting and investigation process of all waterborne accidents, incidents and near misses within the CDP.

### 6.1.2 Aim

The aim of this policy is to provide a MOD compliant framework<sup>26</sup> for KHM Clyde to meet the regulatory requirement to record and investigate all incidents involving sea going vessels or other vessels, within the CDP area of responsibility, to:

- learn from an incident and prevent reoccurrence; and,
- determine whether or not enforcement action is appropriate.

### 6.1.3 Background

MOD ports are complex regulatory environments. However, the principle that the KHM is responsible for the safe operation of the port remains constant, wherever its location. The relevant civilian and military regulations that shape this policy is summarised below fall into two parts those that apply to:

#### a. MOD Ports in the UK and overseas:

(1) **DSA-02 Maritime Regulations.** The regulatory framework for the operation of Dockyard Ports requiring each Port to conduct and record a robust risk assessment of its activities and produce a MSEMS to govern its safe and compliant operation. Reg 407 details the accident investigation policy. It is based on industry best practise as articulated by the [Port Marine Safety Code](#) and its [Guide to Good Practice](#).

#### a. MOD Ports in the UK and EU:

- (1) **The Merchant Shipping (Accident Reporting and Investigation Regulations 2012).** This transposes an EU directive<sup>27</sup> on the subject, into UK law. These regulations set out the reporting criteria for accidents that occur on any UK ship (subject to size exceptions) or that occur on any ship within the

<sup>25</sup> Endorsed at the DPB Dec 16

<sup>26</sup> [Complies with JSP 375 Vol.1. Chapter 16.](#)

<sup>27</sup> [Directive 2009/18/EC](#)

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UK or UK waters within the jurisdiction of a harbour master/KHM<sup>28</sup>. The duty for reporting an accident is the master of the vessel and, “in the case of an accident within or adjacent to the limits of any harbour, the harbour authority for that harbour”<sup>29</sup>. Notification is made to the ‘Chief Inspector’. In the UK this is the Chief meaning the Chief Inspector of Marine Accidents appointed by the Secretary of State.

- (2) [The Defence Accident Investigation Branch \(DAIB\)](#) provides Defence with an independent, multi-modal accident and incident investigation capability. Able to deploy worldwide, the DAIB is on standby 24/7 to conduct impartial and expert no-blame safety investigations across the air, land, and maritime domains. The DAIB will be informed and consulted for any marine accident that causes entire or partial disablement of a ship or submarine for service, e.g. collision, grounding, explosion, serious fire or serious flood. Any accident where a maritime system has failed and has compromised safety to personnel or the general public.

#### **b. MOD Ports in the UK only:**

(1) **Chief Inspector of the Marine Accidents Investigation Board (MAIB).** The MAIB is an independent organisation within the Department for Transport who is responsible for investigating marine accidents involving UK vessels worldwide and all vessels in UK territorial waters. The MAIB have issued a Marine Guidance Note<sup>30</sup> to mariners, transposing the requirements of the 2012 Regulations.

(2) **A Memorandum of Understanding has been signed between the RN and the MCA.**<sup>31</sup> This defines the Principles of Co-operation between the RN and the MCA for

- i. Operation and coordination of the safety management of Ministry of Defence Shipping on non-commercial service.
- ii. Cooperation regarding the management of the Defence Shipping Register and maritime autonomy.
- iii. Cooperation regarding MOD application of the Port Marine Safety Code and Vessel Traffic Services.
- iv. The MAIB will be informed of every accident (within the meaning of the Merchant Shipping (Accident Reporting and Investigation) Regulations) involving a MOD ship, other than a ship of Her Majesty’s Navy, on non-commercial service. For MOD ships that are registered, this requirement is mandatory under merchant shipping legislation. At Version 5 of this MoU the MAIB was removed, with the intention to develop a separate and more appropriate MoU with the MOD to cover the specifics of Marine Accident Investigation, particularly the relationship with the Defence Accident Investigation Branch (DAIB).

#### **6.1.4 Incident reporting principles.**

The principles to report, classify, inform, investigate, evaluate and, if appropriate, enforce are shown below in Figure and are cognisant of NBC Clyde’s single event report methodology as detailed in BMS

<sup>28</sup> [The Merchant Shipping Accident Reporting and Investigation Regulations 2012, Reg \(4\)\(b\)](#)

<sup>29</sup> [The Merchant Shipping Accident Reporting and Investigation Regulations 2012, Reg 6](#)

<sup>30</sup> [MGN 564 \(M+F\) Am 1 Published March 2019.](#)

<sup>31</sup> [MoU between the MOD and MCA issue 5 dated May 2021](#)

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**a. Report.** For the purposes of this policy; it is the obligation placed on KHM Clyde to accurately capture and record all incidents that occur within or close to the CDP that have a direct bearing on the Port's MSEM. As Figure 5 illustrates, these reports can be received by a variety of routes: Naval Lessons Identified Management System (NLIMS) for Naval Service vessels<sup>32</sup>; reports via port staff such as pilots and VTS personnel; reports from other port users such as SERCO, Tug Operators, via 'Assure'; or via the port's website.

**b. Record.** KHM Clyde will then ensure that one of their team, normally the Port Safety Officer, records the details of the incident, as described at Annex A, in The Navigational Incident database, MarNIS. MarNIS holds the details of all reported marine safety incidents and other occurrences having significance to the maintenance of navigational safety and environmental compliance. Incidents are also recorded on NLIMS and on the Naval Base's single event reporting database, AIRSWEB. The day to day administration of MarNIS is the responsibility of the Port Safety Officer. In particular, the PSO:

- Maintains, administers and interprets MarNIS to ensure effective support to Port Operations;
- Maintains, administers and interprets MarNIS to ensure the effective recording, availability and archiving of marine incident information; and,
- Constructs and presents MarNIS information in reports as required and in an effective and appropriate format, such that the overall navigational safety performance of the port may be reviewed and assessed.

For incidents once a record has been initiated, additional information is included in respect of the outcome of KHM's initial regulatory investigation, and subsequently details any follow-up disciplinary action and/or prosecution. KHM's findings and recommendations (if any) of his navigational safety investigation are also recorded in respect of the incident's impact on the MSEM.

Navigational Incident records also allow effective cross-referencing to the Hazard Management database, thereby prompting and recording an assessment of the hazard(s) and associated risk control measures relevant to a particular incident.

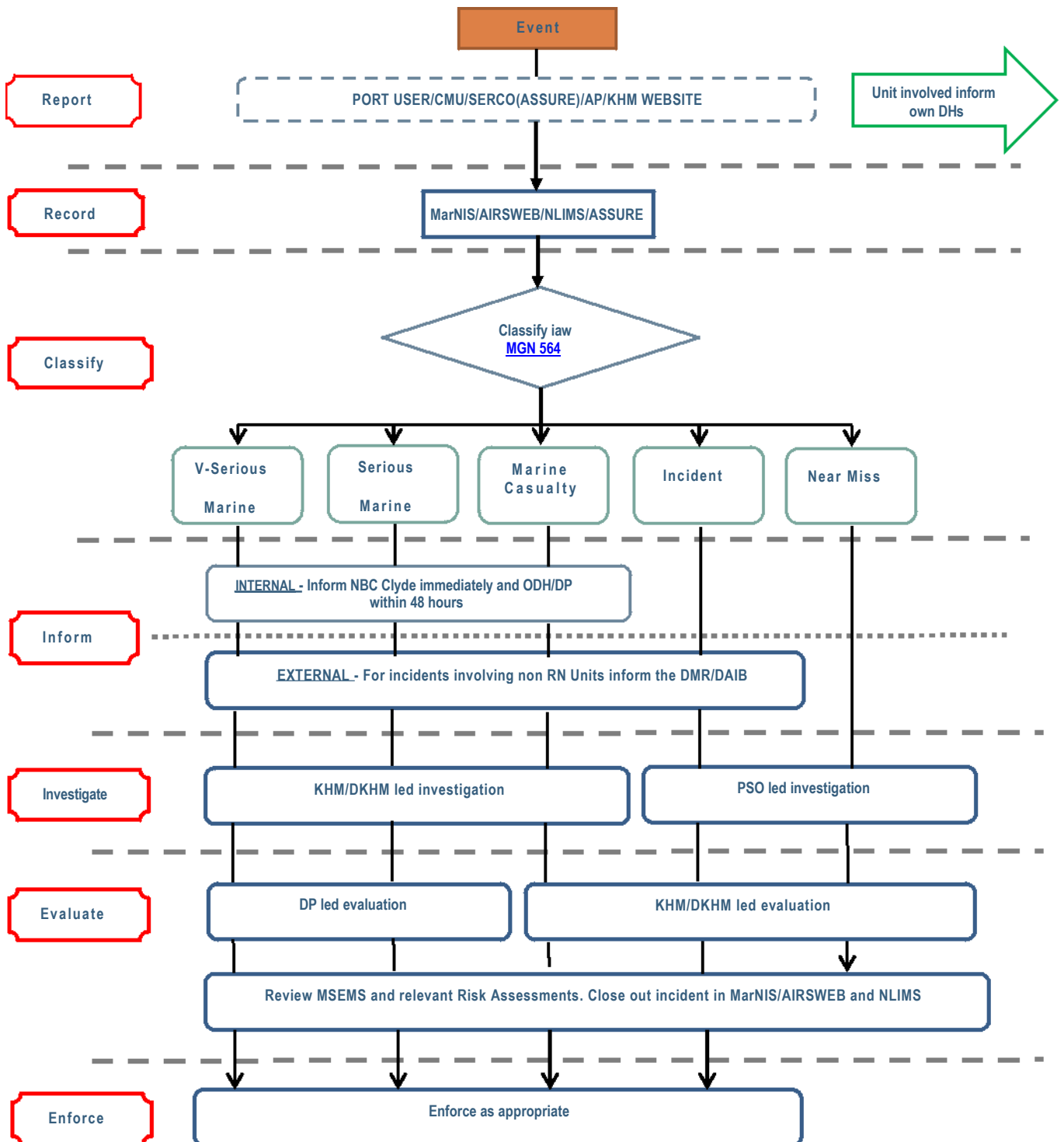
- c. Classify.** The Dockyard Ports Board in Sep 15 decided that Dockyard Ports are to adopt and follow the reporting and investigation requirements of the 2012 Regulations and for ease, should adhere to the detail stated in MGN 564, for all waterborne incidents and near misses. These classifications are detailed below and reproduced in detail at Annex A. Accidents are classified as '*marine casualties*' or '*marine incidents*'.

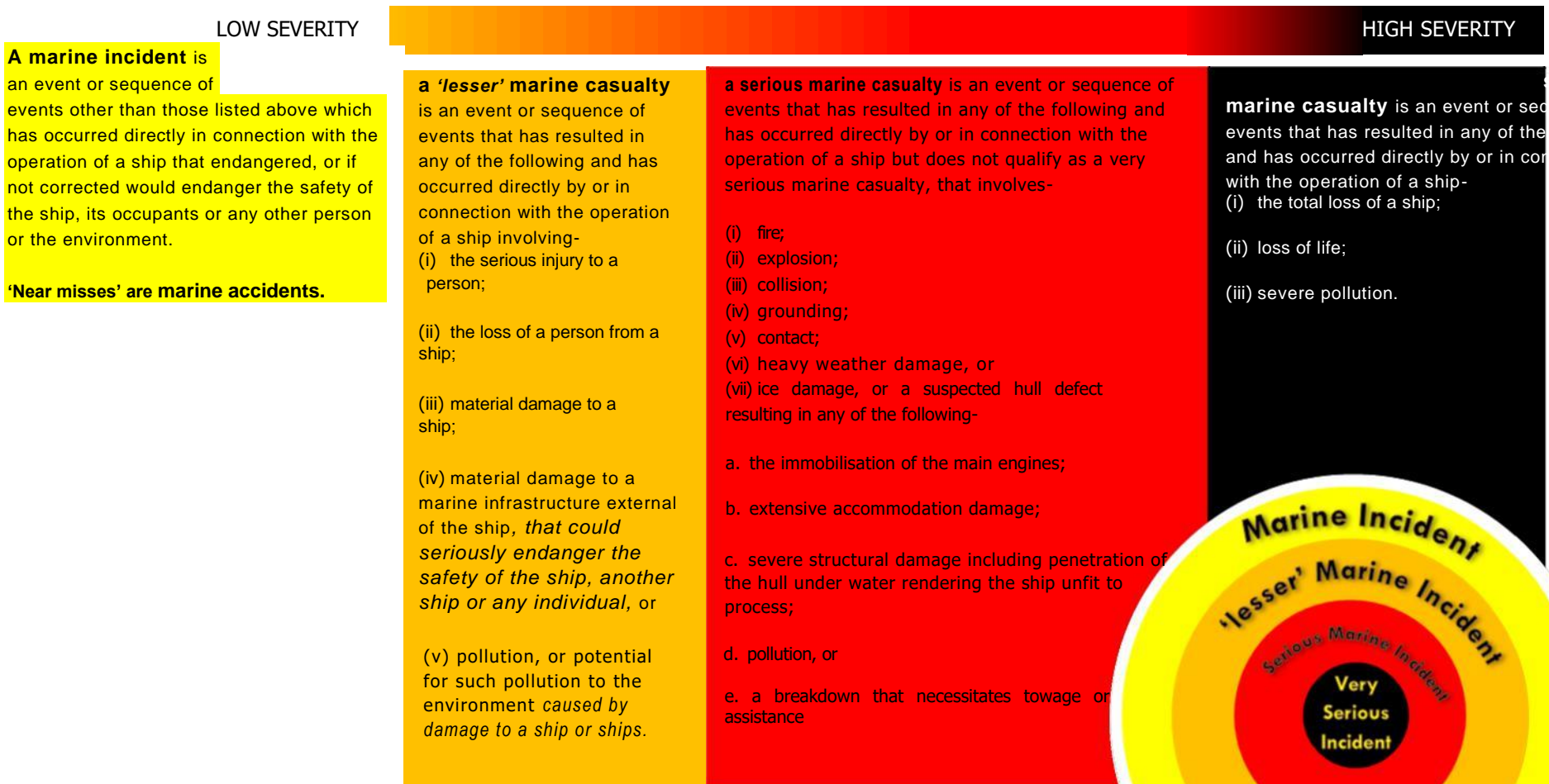
<sup>32</sup> Naval service vessels include: RN vessels & watercraft; RM boats/landing craft; and RFAs.

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## CDP INCIDENT REPORTING METHODOLOGY

**Figure 9 – MOD port incident reporting**





**Figure 10 – Accident Classifications**

Further sub-classifications, also detailed at annex A, include: serious injury and severe pollution as well as pleasure vessels/recreational craft.

d. **Inform.** KHM Clyde should inform:

(1) **Internal to the MOD port** - the port duty holder chain and regulator as follows or in any additional circumstance that KHM Clyde considers necessary:

Classification	KHM to inform:
Very serious marine casualty	NBC – within 12 hours.
	DirSM, DP, DMR & DAIB – within 24 hours.
Serious marine casualty	NBC – within 24 hours
	DirSM, DP, DMR & DAIB – within 48 hours
Lesser marine casualty	NBC – within 48 hours
	DirSM, DP & DMR – as deemed appropriate by NBC
Incident	NBC- monthly.
	DirSM, DP & DMR – as deemed appropriate by NBC

**Figure 11 – post incident inform timeline**

(1) **External** to the port if the incident involves:

(a) **RN vessels only. KHM Clyde should inform the unit's Flotilla**<sup>33</sup> (unit DDH) of all incidents, including near misses, classified as marine casualty and above. There is no requirement for KHM Clyde to notify MAIB or MCA as RN ships do not come within the meaning of "any United Kingdom ship"<sup>34</sup>.

(b) **RN and another, non-RN, vessel.** In the case of an incident between an RN and non-RN vessel in addition to reporting the incident to the unit's Flotilla (DDH), the RN-MCA MoU applies<sup>35</sup>. The agreement for the RN reporting accidents involving an RN ship, aircraft or personnel to the MCA is if an occurrence results in:

- Loss of life, serious injury, loss overboard of personnel **on another vessel.**
- Material damage to (by whatever cause), disablement, abandonment, grounding **of another vessel.** Significant environmental damage as a result of damage **to another vessel.**

<sup>33</sup> Flotilla SXOs.

<sup>34</sup> The Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, Reg 4

<sup>35</sup> [MoU](#) between the MOD and MCA issue 5 dated May 2021

(c) If the incident or accident involves an RN ship and another non RN vessel, in a DyP, and meets the criteria above, the MAIB should receive an initial notification about it from Naval Safety Incident Notification Cell (NSINC) (under the Principles of Co-operation<sup>36</sup>), KHM<sup>37</sup> and from the master of the other vessel<sup>38</sup>.

(d) **Non-RN Warship.** Should an incident occur within a DyP that involves a foreign warship that is undergoing FOST training, the PSO will inform the FOST liaison officer. If the foreign warship is not attached to FOST, then liaison will occur through the nominated Flotilla Ship's Visit Officer.

(e) **Non-RN vessels in DyPs.** Irrespective of whether the incident meets the threshold for reporting to the MCA/DAIB/MAIB, if the incident involves a contracted provider of port services (e.g. Serco) then the PSO, when aware of an incident, should inform the contractor's safety officer. If the PSO is aware of an incident that involves one or more other commercial port users, and he has been notified by one of the parties, he should also inform the other ships involved that he has had such a notification. If the incident is MAIB reportable<sup>39</sup> then the PSO must notify the MAIB as soon as possible.

### 6.1.5 Investigations

Having recorded and classified the information the next stage of the process is to conduct an investigation<sup>40</sup> and decide at what level it should be at and who should conduct it.

1) **PSO led Investigation.** The majority of incidents will be resolved by an independent PSO<sup>41</sup> led investigation and analysis of the incident. This will require the PSO to gather the data necessary from Harbour Control in order to complete MarNIS. Where necessary the additional information should be requested from units involved establishing the causes. The essential facts recorded in MarNIS or the port's database should include the following information:

1. Incident type and generic information.
2. Ship information (information of all vessels involved)
3. Accident specifics (weather, casualty details, pilot/PEC details, damage/pollution, geographical position etc.)
4. Accident/incident narrative (free text)
5. Analysis of the cause and consequence, or in the case of a near miss, potential consequence.
6. Action required & DAIB reporting

<sup>36</sup> Where the RN initiates its Accident and Crisis Organisation (ACRO) the Duty Fleet controller will initiate a predetermined cascade which includes the DAIB and MCA. It is likely that in any event the MAIB would also be notified by any merchant or fishing vessels involved in or witnessing the accident. When the ACRO is not initiated and the criteria in 4.g(2)(a) above is met, the Naval Service Incident Notification Cell (NSINC) [NAVY-NSINCMAILBOX \(MULTIUSER\) <NAVY-NSINCMAILBOX@mod.gov.uk>](mailto:NAVY-NSINCMAILBOX@mod.gov.uk) within Navy Command Headquarters (NCHQ) will notify the MAIB.

<sup>37</sup> The Merchant Shipping (Accident Reporting and Investigation Regulations 2012, Reg 6(2)(a).

<sup>38</sup> The Merchant Shipping (Accident Reporting and Investigation Regulations 2012, Reg 6(1)(a).

<sup>39</sup> The Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, r6(2)(a).

<sup>40</sup> DSA-02 Maritime Regulations – Reg 407

<sup>41</sup> All PSOs should have completed a 3-day accident investigation course.

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In the majority of incidents the details above will be sufficient to allow the PSO to conduct the necessary analysis to determine the primary and secondary cause and the recommended action required. However, even so where the potential consequence of an incident could have resulted in a marine casualty KHM may decide that a more formal, KHM or DKHM led investigation may be appropriate.

- 2) **A KHM or DKHM led Investigation.** A KHM or DKHM led investigation may be appropriate where a more comprehensive investigation and analysis is required in order to establish and analyse the facts reach conclusions as to the cause and the necessary actions that need to be taken. Action should also be taken to preserve and gather evidence (recordings, logs, charts VTS recordings, orders or other appropriate paperwork and photographs). They may also be required to interview witnesses. Further guidance on compiling the report can be found in BRd 172 Chapter 6.<sup>42</sup>
- 3) **Police Investigations.** There will be occasions, particularly those involving a death, when the local Police may commence a formal criminal inquiry into a particular incident. In this case, whilst the port should do everything to support such as such an investigation, by providing the supporting evidence, the fact that the police investigation is underway does not relieve the port of the need to investigate the incident to establish if any action is required by the Port to amend its safety management system or operating procedure to prevent a re-occurrence.
- 4) **DAIB Investigation.** The Defence Accident Investigation Branch (DAIB) provides Defence with an independent, multi-modal accident and incident investigation capability. Able to deploy worldwide, the DAIB is on standby 24/7 to conduct impartial and expert no-blame safety investigations across the air, land, and maritime domains. The DAIB also provide unified tracking of all DSA safety investigation recommendations through to closure. Following rationalisation of its sites the DAIB is now established at a single location within MOD Boscombe Down. The DAIB will investigate any accident that causes entire or partial disablement of a ship or submarine for service, e.g. collision, grounding, explosion, serious fire or serious flood. Any accident where a maritime system has failed and has compromised safety to personnel or the general public.
- 5) **MAIB Notification/Investigation.** The MAIB, through the DAIB will be informed of every accident (within the meaning of the Merchant Shipping (Accident Reporting and Investigation) Regulations) involving a MOD ship, other than a ship of Her Majesty's Navy, on non-commercial service. For MOD ships that are registered, this requirement is mandatory under merchant shipping legislation. In the case of an accident involving an RFA, PMS or RSACT vessels, in addition to any investigation or preliminary assessment the Accountable Person will commission an appropriate level investigation if the incident occurs when no other vessel other than a warship or MOD ship is involved. The report will be made available to the MAIB, edited as appropriate to remove any items
- 6) **Competent Harbour Authority/Other Marine Service Provider.** In some cases it may be most appropriate for an adjacent Competent Harbour Authority or Marine Service Provider to undertake a local investigation for subsequent evaluation by KHM staff.
- 7) **Investigation Process.** The detailed investigation process is covered in Part B of the MSEM

## 7.0 COMPETENCY AND TRAINING

Training and the competency of Port Personnel is a key element within the MSEM and the CDP Training Policy is at Annex H. In summary the policy is designed to ensure that personnel are properly trained to operate a safe and compliant port. The principles of job analysis and training design are followed & training requirements are reflected in personnel TORRS.

<sup>42</sup> [BRd 172 Chapter 6 The Report \(Learning Account\)](#)

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- Identify operational and safety training needs;
- Establish a skills matrix of competency levels required for key tasks (Annex H);
- Plan how training requirements are to be met and when;
- Establish a process to appraise the effectiveness of training; and
- Is underpinned by a broad programme of mandated training within HMNB Clyde.

## 7.1 Training of Admiralty Pilots

Responsibility for the development, provision and maintenance of the training of Admiralty Pilots and Pilot Exemption Certificate Holders has been delegated by KHM Clyde to the Port Operations Manager (POM). This training is conducted iaw the Admiralty Pilot Handbook. Annual check trips for remote locations will be arranged by the POM to ensure all APs maintain currency for berths infrequently visited.

## 7.2 Induction Training

KHM Clyde's induction training methodology and directive is at Annex I. This method ensures all new Port Operations personnel are inducted into the safe and compliant way the CDP operates and covers the following subjects:

- Individual Role and Responsibilities;
- Departmental Organisation;
- Building and Naval Base Health and Safety Organisation and Security Organisation;
- Training;
- The Documentary Business Management System;
- MSEMS, DSA-02 Maritime Regulations and The Port Marine Safety Code;
- The Nuclear Site Safety Case;
- FLOOs;
- General Directions.

## 7.3 Training and Competence Records

All training and instruction provided to employees will be reported to Line Managers and recorded in MyHR, [KHM Clyde's Port Status Report](#) and in the [KHM Training Matrix](#)

## 8.0 ASSURANCE AUDITS AND REPORTING

The assurance process of the MSEMS requires an assessment of continuous development and improvement and its responsiveness to events and changing circumstances. In order to comply with the requirements of the PMSC and DSA-02 Maritime Regulations for HS&EP, the CDP will ensure appropriate internal and external assurance checks of the MSEMS are undertaken at appropriate periods. This will include audits or reviews undertaken by the appointed 'Designated Person'.

### 8.1 Assurance

#### 8.1.1 Objectives

Assurance is a system of checking against a standard to give confidence that activities meet the requirement. It is not restricted to audits and includes activity such as:

- Compliance with legislation, regulation and policy
- Risk Management
- Performance management

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- Occurrence reporting and analysis
- Workplace inspections
- Peer Reviews, benchmarking and Independent Safety and Environmental Audits (ISEAs)
- Monitoring competencies

### 8.1.2 Independent Assurance Audits/Reviews by the Designated Person

The 'Designated Person' shall undertake second party assurance (2PA) of the MSEM for the purpose of assessing the following as stated in paragraph 2.3:

- The continued provision of an appropriate and effective MSEM; and,
- The CDP's on-going, overall compliance with the requirements of the Port Marine Safety Code and DSA-02 Maritime Regulations.

### 8.1.3 On-going Internal Reviews

First party assurance of the MSEM performance is carried out Port Operations Personnel at intervals, normally monthly, stated on the KTM for that year to ensure the continuing maturity of the MSEM and ensure agreed compliance measures for the PMSC and DSA02 Maritime Regulations are being maintained.

### 8.1.4 Review of relevant external information

The CDP receives copies of each published MAIB Safety Digest. DKHM Clyde and the POM review each issue to identify any reported incidents, which impact or have the potential to impact upon the CDP's MSEM. All such incident summaries are then circulated to all relevant marine stakeholders for information/action, and where appropriate, considered formally by KHM with a view to taking any necessary action, including the promulgation of any lessons learned or identifying any new hazard.

## 8.2 Assurance Audit Process

### 8.2.1 Assurance levels

#### First Party Assurance (1PA)

- 1PA is an internal self-check conducted quarterly by KHM Personnel. 1PA reports are to be completed within 10 working days by the nominated auditor and passed to DKHM Clyde prior to being recorded on SharePoint. Nominations for internal monthly audits and monthly risk review meetings will be sent out by a [KTM](#) at the beginning of the calendar year after agreement all stakeholders.

#### Second Party Assurance (2PA)

- 2PA is conducted annually by the DP, Captain Port Operations.

#### Third Party Assurance (3PA)

- 3PA is fully independent of the chain of command/accountability. It can be provided internally by Defence Regulators or externally by statutory regulators, classification societies or certification bodies.

Each audit will look at all or parts of the CDP MSEM to ensure compliance with the relevant DSA documentation, the PMSC and the GTGP. The relevant section of Captain Port Operations Assurance Question Bank should be used for guidance in areas to be covered.

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Previous audits should also be checked to ensure any areas of concern from previous audits have been resolved.

The outcome from all 2PA or 3PA will be communicated by NBC Clyde to DirSM. How this is achieved will depend on the seriousness and severity of any non-conformances identified. Any relevant safety risks and associated response plans should be reviewed, updated and briefed accordingly.

### 8.3 Assurance Audit methodology

Audit methodology differs between external and internal authorities and table 1 shows the different descriptors. KHM Clyde follows the process in BMS for audit findings for both internal and external audits. Audit findings are also recorded in the Port Status Report. Progress and completion is reported at the Vessel Output Board, MOD Board and to the Duty Holder.

Internal Audit (HMNB Clyde)	
Descriptor	Definition
<b>A</b>	Where there is a demonstrated total absence of implementation of a necessary control arrangement or a major breach of occupational safety/environmental legislative requirement, which presents a risk of such magnitude that either the non-compliance must be rectified immediately or the activity stopped  <i>or</i>  Where the number of failures of a particular control arrangement in different areas of activity clearly indicate a failure of the appropriate management system(s).
<b>B</b>	Where there is a demonstrated absence of implementation of a necessary control arrangement in one area of activity, or occupational safety/environmental legislative requirement, which shall lead to an unacceptable risk if continued longer than a specified period.  <i>or</i>  Where the particular control arrangements were absent or demonstrably inadequate to meet statutory, regulatory or MoD requirements  <i>or</i>  Where a number of minor deficiencies of a particular feature, when considered in total, are judged to constitute an unacceptable risk to the business.
<b>C</b>	System lapses of a minor nature with the potential to reduce safety margins or compliance with control arrangements, which shall be rectified in an agreed period.

<b>D</b>	Any observations or recommendations from any assessment. (Preventive Action).
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<b>External Audit (Port Operations (Compliance and Assurance))</b>	
<b>Gradings</b>	
<b>Grading</b>	<b>Definition</b>
Full Assurance	An established system of internal control that is operating effectively resulting in full compliance with the PMSC and DMRegs.
Substantial Assurance	An established system of internal control that is operating effectively with some minor areas of non-compliance with the PMSC and DMRegs.
Limited Assurance	A system of internal control is operating effectively except for areas where major non-compliance with the PMSC and DMRegs have been identified.
No Assurance	A system of internal control has been poorly developed or non-existent, or systemic and multiple areas of major non-compliance have been identified.
<b>External Audit (Port Operations (Compliance and Assurance))</b>	
<b>Degrees of Non-Compliance</b>	
Observation (Obs)	A statement of fact made during an audit and substantiated by objective evidence. It may also be a statement made by the auditor referring to a weakness or potential deficiency in the SEMS which, if not corrected, may lead to a nonconformity in the future.
Non-Conformance (NC)	An observed situation where objective evidence indicates the non-fulfilment of a specified requirement of the DMRegs, PMSC or accompanying GtGP.
Major Non-Conformance (MNC)	An identifiable deviation that poses a serious threat to the safety of personnel, the port, marine facility, or its users (including relevant stakeholders) or a serious risk to the environment that requires immediate corrective action and includes the lack of effective and systematic implementation of a requirement of the DMRegs, PMSC or accompanying GtGP.

# Clyde Dockyard Port Marine Marine Safety & Environmental Management System (CDP MSEMS)

## ANNEXES

### SUPPORTING POLICIES, PROCESSES AND INSTRUCTIONS

**ANNEX A – Navigational Safety Policy**

**ANNEX B – VTS Policy**

**ANNEX C – Pilotage Policy**

**ANNEX D – Enforcement Policy**

**ANNEX E – Consultation Policy**

**ANNEX F – Environmental Policy**

**ANNEX G – Definition of Marine Accident, Serious Injury and Severe Pollution**

**ANNEX H – Glossary of Abbreviations and Terms**

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## Annex A

### NAVIGATIONAL SAFETY POLICY

The Ministry of Defence has a primary responsibility to facilitate the safety of navigation within the Dockyard Port of Clyde.

To this end, it is Ministry of Defence policy for the Harbour Authority (KHM Clyde) to:

1. Establish, fund and maintain an effective Navigational Safety Management System, based on a continuing, formalised assessment and mitigation of risk in consultation with navigational users.
2. Review regularly<sup>43</sup> the effectiveness of, and if necessary seek amendments to, its legal powers, Orders in Council and Directions in respect of navigational safety.
3. Maintain a formal Policy towards the provision of Vessel Traffic Services, its interface with port harbour traffic, and periodically review management of the navigation of vessels within the port jurisdiction.
4. Regularly review towage capability to determine that it remains appropriate to the levels of service required in the port.
5. Facilitate, with the Clyde Marine Unit, an appropriate patrol service for the Clyde Dockyard Port proportionate to navigational use.
6. Maintain, and regularly review, a formal Policy towards Enforcement.
7. Conserve the Clyde Dockyard Port so that it is fit for use as a port, and in a fit condition for a vessel to resort to it including:
  - a. Provide such aids to navigation as are necessary for safe and efficient navigation within port limits;
  - b. Maintain close liaison with the owners of other aids to navigation for which the Harbour Authority does not have maintenance responsibility;
  - c. Undertake or require such Hydrographic surveys as are necessary for safe and efficient navigation within port limits;
  - d. Maintain oversight of any changes in hydrology affecting the depth of water within channels;
  - e. Maintain records of all Hydrographic and hydrological reports;
  - f. Supply the UK Hydrographic Office with information that may be needed for publication on official charts;
  - g. Provide regular returns and other information in relation to aids to navigation as the General Lighthouse Authority may require.

<sup>43</sup> Regularly means no more than three years between reviews

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8. Assess and where necessary require removal of sunken or derelict or abandoned vessels and other obstructions that are, or may become, an impediment to safe navigation.
9. Make available relevant navigational information to all harbour users.
10. Maintain liaison with harbour stakeholders and seek input as required on matters influencing navigational safety.
11. Provide professional advice in the planning process for any form of development affecting navigational safety within the Clyde Dockyard Port jurisdiction.
12. Be empowered to:
  - a. Regulate the time and manner of ships' entry to, departure from and movements within the Clyde Dockyard Port;
  - b. Require the owner or master of a ship to provide information about the vessel, cargo and its passage.
13. Delegate powers of direction to the Deputy King's Harbourmaster or any other person designated for the purpose.

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## Annex B

### VTS POLICY

In order to provide for safe navigation in The Clyde Dockyard Port, the Harbour Authority, in implementing the risk control measures outlined in the Risk Assessment, has a commitment to provide a Local Port Service (LPS)<sup>44</sup> and, where required, a Traffic Organisation Service (TOS) by the VTS. The provision of a Navigational Assistance Service (NAS) is not available. The service is not formally declared to the MCA.

To this end it is Ministry of Defence policy that the Harbour Authority (KHM Clyde) intends to:

1. Operate a partial VTS to support its published Navigational Safety Policy.
2. Monitor all commercial movements and maintain VHF communications with such vessels.
3. Ensure that the VTS is appropriately equipped to allow a continuation of essential services in the event of failure of either hardware or software;
4. Immediately inform all users of any temporary reduction in service and/or coverage.
5. Regularly review the performance of the system and seek improvements through technical enhancement, staff development, training and effective management as necessary.
6. Provide timely navigational information and advice as required.
7. Assist Category 1 responders (Emergency Services and local councils) in respect of the harbour response to emergency incidents within the harbour jurisdiction.
8. Adopt a local training programme and facilitate Continued Professional Development.
9. Formally authorise all personnel serving in the VTS.
10. Record all relevant radar and VHF communications as an aid to enforcement and incident reconstruction and investigation.
11. Maintain a narrative of vessel movements, harbour operations and any incidents within the Port limits.

<sup>44</sup> The IALA Standards for Training and Certification of Vessel Traffic Service (VTS) personnel (IMO MSC Circa 952).

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## Annex C

### PILOTAGE POLICY

The Competent Harbour Authority<sup>45</sup> is responsible for the pilotage of non-military ships within the Clyde Pilotage District (which includes the Clyde Dockyard Port) whereas the Harbour Authority<sup>46</sup> is responsible for the pilotage of Government Ships<sup>47</sup> within the Clyde Dockyard Port. The Competent Harbour Authority and the Harbour Authority policy in respect of pilotage is to:

1. Ensure that the operation of the pilotage service is compliant with national regulations and guidelines.
2. Monitor to ensure there is an appropriate level and competence of the pilotage service in accordance with the Pilotage Act 1987.
3. Develop and keep under review Pilotage Directions to ensure that the particular risks associated with the Clyde Dockyard Port are managed in accordance with the needs of the MSEMS;
4. Develop and maintain a formal interface between Harbour Control and both the COL Pilotage Service and Admiralty Pilotage Service.
5. Administer the Pilotage Exemption Certificate monitoring system to ensure that all Pilotage Exemption Certificate applicants and holders fully meet the requirements laid down in the Pilotage Directions.
6. Ensure close liaison between the COL Pilotage Service and the Admiralty Pilotage Service to ensure that the Pilotage Policies and practice of the two organisations are mutually supportive.
7. Ensure that a Memorandum of Understanding or contract is in place to cover the relationship between the Competent Harbour Authority and the Harbour Authority, within the CHA area of jurisdiction for the delivery of pilotage services to the Clyde Dockyard Port.

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<sup>45</sup> Peel Ports, Clydeport

<sup>46</sup> KHM Clyde

<sup>47</sup> Ships not forming part of Her Majesty's Navy which belong to Her Majesty or are held by any person on behalf of or for the benefit of the Crown (and for that reason cannot be registered under Part II [of the MSA]).

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## Annex D

### ENFORCEMENT POLICY

**KHM CLYDE, THE HARBOUR AUTHORITY, IS EMPOWERED TO INVESTIGATE AND PROSECUTE OFFENDERS FOR BREACHES OF ORDERS IN COUNCIL OR DIRECTIONS MADE UNDER THE DOCKYARD PORTS REGULATION ACT 1865 OR THE CLYDE DOCKYARD PORT OF GARELOCH AND LOCH LONG ORDER 2011.**

This document sets out what port users and others being regulated by the Harbour Authority can expect from enforcement officers. It commits us to good enforcement policies and procedures. It may be supplemented by additional statements of enforcement policy.

The effectiveness of legislation in protecting the port and its users depends crucially on the compliance of those regulated. The Harbour Authority recognises that most port users wish to comply with the law and will therefore, take care to help port users meet their legal obligations without unnecessary expense, while taking firm action, including prosecution where appropriate, against those who flout the law or act irresponsibly. All port users will reap the benefits of this policy through better information, choice, and safety.

The Harbour Authority believes that prevention is better than cure and that our role therefore involves actively working with port users, especially small vessel operators to advise on and assist with compliance. A courteous and efficient service will be provided and harbour staff will identify themselves by name. The Authority will provide a contact point which is available on the KHM website <https://www.royalnavy.mod.uk/KHM/clyde> for further dealings with the harbour and will encourage port users to seek advice/information. Applications for approval of events, diving etc., within CDP will be dealt with efficiently and promptly. The Authority will ensure that, wherever practicable, the enforcement services are effectively co-ordinated to minimise unnecessary overlaps and time delays.

The Harbour Authority will take particular care to work with small businesses and voluntary and community organisations so that they can meet their legal obligations without unnecessary expense, where practicable.

Furthermore, it is Ministry of Defence policy that the KHM shall:

1. Develop and maintain effective enforcement based on a continuing review of relevant legislation.
2. Ensure all staff directly involved in enforcement is appropriately trained in and fulfil the requirements of, amongst others, the Scottish Legal System.
3. Facilitate a harbour patrol service for Dockyard Port of Clyde.

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4. Maintain an effective surveillance regime in conformance with the Regulation of Investigatory Powers Act 2000.
5. Monitor compliance with, and detect breaches of Orders in Council and Directions.
6. Investigate all alleged breaches of Orders in Council and Directions.
7. Maintain records of all investigations in conformance with relevant Harbour requirements.
8. Where appropriate, work with and inform other relevant Authorities of investigations.
9. Respond to breaches of Orders in Council and Directions, as justified by the evidence and other circumstances, by the use of formal warnings, infringement notices and prosecution.
10. Breaches of port regulations will in the first case, and if appropriate, follow the broad guidelines below:
  - a. First instance of a breach – verbal warning;
  - b. Second instance of a breach – formal written warning;
  - c. Third instance of a breach – prosecution using the most appropriate legal tool available

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## Annex E

### CONSULTATION POLICY

The Port Marine Safety Code emphasises the importance of effective consultation by all navigational stakeholders. This includes all those who work in the environs of the Clyde Dockyard Port or use the waterway in some form, as well as those that represent them.

The Harbour Authority will provide information and advice in plain language on the rules that they apply and will disseminate this as widely as possible. The Harbour Authority will be open about how they set about their work, including any charges that are set, consulting relevant authorities, business, voluntary organisations, charities, consumers and workforce representatives. The Harbour Authority will discuss general issues, specific compliance failures or problems with anyone experiencing difficulties.

In particular, the Harbour Authority shall:

1. Consult as early as is practicable with stakeholders when changes to Orders in Council and / or Policy are being considered.
2. Maintain an effective consultation mechanism with appropriate stakeholders on navigational safety and other operational issues.
3. Include appropriate Clyde Dockyard Port stakeholders in the on-going work to identify navigational hazards, assess the risk of such hazards and recommend appropriate control and mitigation measures.
4. Promulgate an Annual Port Report.

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## Annex F

### ENVIRONMENTAL POLICY

KHM Clyde recognises that the Clyde Dockyard Port plays an important part in the economic, environmental and social life of surrounding communities.

The combination of these three elements allows the Harbour Authority to exercise responsibility by promoting sustainable development for the benefit of the business and of the people linked with its Port.

KHM Clyde is committed to develop and implement management and control methods which prevent, or minimise environment damage. These methods will be regularly reviewed in order to ensure that the Harbour Authority continuously improves its environmental performance.

KHM Clyde recognises the value of communicating these objectives to employees, partners and other people linked to its Port, and is committed to a programme of regular discussions about its approach to securing a high standard of environmental management.

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## Annex G

### DEFINITION OF MARINE ACCIDENT, SERIOUS INJURY AND SEVERE POLLUTION

1. The DyPs are to adhere to the detail and classifications detailed within MGN 564 for all waterborne incidents and near misses that occur within the DyPs. Accidents are classified as 'marine casualties' or 'marine incidents'. Accidents may be classified (in order of severity) as follows: very serious marine casualties, serious marine casualties and marine incidents

a. A **marine casualty** is an event or sequence of events that has resulted in any of the following and has occurred directly by or in connection with the operation of a ship involving-

- (1) the death of, or serious injury to, a person;
- (2) the loss of a person from a ship;
- (3) the loss, presumed loss or abandonment of a ship;
- (4) material damage to a ship<sup>48</sup>;
- (5) the stranding or disabling of a ship, or the involvement of a ship in a collision;
- (6) material damage to marine infrastructure external of a ship, that could seriously endanger the safety of the ship, another ship or any individual, or
- (7) pollution, or the potential for such pollution to the environment caused by damage to a ship or ships.

b. A **serious marine casualty** is an event or sequence of events that has resulted in any of the

following and has occurred directly by or in connection with the operation of a ship but does not qualify as a very serious marine casualty that involves:

- (1) fire;
- (2) explosion;
- (3) collision;
- (4) grounding;
- (5) contact;
- (6) heavy weather damage, or

<sup>48</sup> It was decided at the Port Safety Officer's meeting on 15 Oct 15, that material damage to a ship a financial threshold of £1000 of damage to trigger the reporting threshold.

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(7) ice damage, or a suspected hull defect.

resulting in any of the following-

- (1) the immobilisation of the main engines;
- (2) extensive accommodation damage;
- (3) severe structural damage including penetration of the hull under water rendering the ship unfit to process;
- (4) pollution, or
- (5) a breakdown that necessitates towage or shore assistance.

c. A **very serious marine casualty** is an event or sequence of events that has resulted in any of the following and has occurred directly by or in connection with the operation of a ship-

- (1) the total loss of a ship
- (2) loss of life
- (3) severe pollution

d. A **marine incident** is an event or sequence of events other than those listed above which has occurred directly in connection with the operation of a ship that endangered, or if not corrected would endanger the safety of a ship, its occupants or any other person or the environment. 'Near misses' are marine incidents.

e. The definition of a **serious injury** is:

- (1) any fracture, other than to a finger, thumb or toe;
- (2) any loss of a limb or part of a limb;
- (3) dislocation of the shoulder, hip, knee or spine;
- (4) loss of sight, whether temporary or permanent;  
penetrating injury to the eye;
- (5) any injury to a person employed or carried in a ship which occurs on board or during access which results in incapacitation for more than three consecutive days excluding the day of the accident, or any other injury leading to hypothermia, unconsciousness, requires resuscitation or requiring admittance to a hospital or other medical facility as an in-patient for more than 24 hours.

f. The definition of **severe pollution** is a case of pollution which, as evaluated by the coastal State(s) affected or the flag State, as appropriate, produces a major deleterious effect upon the environment, or which would have produced such an effect without preventative action.

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g. **Pleasure vessels/recreational craft:** Accidents and incidents on pleasure vessels, recreational craft hired on a bareboat basis or a craft other than one carrying passengers which is in commercial use and is less than 8 metres in length **do not need to be reported to the MAIB unless** the accident involves one or more of the issues listed below:

- (a) explosion.
- (b) Fire
- (c) Death
- (d) Serious injury
- (e) Capsize of a power driven craft or boat
- (f) Severe pollution.

h. Accidents as defined by sub paragraphs a to d above, involving or occurring on board any United Kingdom ship must be reported to the MAIB under the Regulations. The MAIB, is required, by law, to carry out investigations for vessels involved in a 'very serious marine casualty'.

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## Annex H

### GLOSSARY OF ABBREVIATIONS AND TERMS

Term	Definition
ABP	Associated British Ports
Accident	An unintended event or sequence of events
Accountable Person	The individual held accountable by a Statutory or Defence Regulator for reducing risk of harm. The person who is in a position of authority, responsibility and competence to conduct activity and carry out improvement within an organisation.
Admiralty Pilotage Service	The body established to maintain the supply of suitably qualified pilots for largely military operations
ALARP	As Low As Reasonably Practicable - A risk can be said to be reduced to a level that is ALARP when the sacrifice of further reduction is “grossly disproportionate” to the decrease in risk that would be achieved; however, the potential impact of societal concern may also need to be considered. This cost may include more than just financial cost and will include the time and trouble involved in taking measures to avoid that risk. Therefore, an ALARP argument must balance the “sacrifice” (in time, money or trouble) of possible further risk reduction measures with their expected safety benefit (incremental reduction in risk exposure). The balance must be weighted in favour of safety, with a greater “disproportion factor” for higher levels of risk exposure.
ALRS	Admiralty List of Radio Signals
APHCSH	Admiralty Pilotage and Harbour Control Service Handbook

Assurance	<p>Adequate confidence and evidence, through due process, that safety requirements have been met.</p> <ul style="list-style-type: none"> <li>• 1st Party (Internal) Assurance: Assurance conducted wholly within the same organisation</li> <li>• 2nd Party (External) Assurance: Assurance conducted by an organization that is separated from the activities being assured but where a vested 'customer-supplier' interest remains</li> <li>• 3rd Party (Independent) Assurance: Assurance conducted by an organisation that is separated from and maintains no vested interest in (so far as practicable), the activity or output being assured.</li> </ul>
Category 1 Responder	A Category 1 responder is anybody in the UK that has specific duties as determined under the Civil Contingencies Act (2004)
Category 2 Responder	Category 2 responders are those who have a role in supporting Category 1 responders in their duties under the Civil Contingencies Act (2004)
CHA	Competent Harbour Authority
Competence	Competent assumes assessment of current level of knowledge; proficiency; required supervision; planned continuous professional development, experience and qualifications.
Delivery Duty Holder (DDH)	<p>Within the <i>Duty Holding</i> construct, the Delivery Duty Holder (DDH) is appointed and empowered by the <i>Senior Duty Holder</i> (SDH) through a letter of delegation.</p> <p>The person charged by an ODH with the integration of risk assurance across DLODs, to enable the safe administration and operation of MOD Regulated Shipping, Ports, Harbours or Diving. The DDH provides assurance of the effective implementation of the Operating Duty Holder's overarching Health, Safety and Environmental management system(s).</p>
DAIB	Defence Accident Investigation Branch
Declared Asset	A specific asset forming part of the declared facilities whose availability is secured through (e.g.) an appropriate agreement with the owner / operator
Declared Facilities	The facilities declared to be available for emergency management in a port

Designated Person	A person nominated by the Port Duty Holder to provide independent assurance regarding the operation of the MOD Port's Safety and Environmental Management System
DfT	Department for Transport
DMR	Defence Maritime Regulator is part of the Defence Safety Authority (DSA) and is the Defence Regulator responsible for the regulation of HS&EP in the defence maritime domain.
DMS	Defence Marine Services
Dockyard	A geographical area of a naval harbour with a gate or caisson under control of an accountable person vested powers or duties for improving, maintaining or managing a harbour, as a statutory harbour authority or under the 1865 Dockyard Ports Regulation Act or Bill of a UK dependency.
Duly Authorised Person (DAP) or Organisation (DAO)	A person or organisation, internal to the Ministry of Defence that demonstrates competence, accredited to provide second party assurance of the conduct of an activity to a Duty Holder and considered by the Regulator to significantly affect the safety or environmental protection of MOD Shipping activities, as responsibilities go beyond their normal managerial duties or across line responsibilities (e.g. being charged with audit, overseeing, accepting test and trials, conducting surveys and inspections to certify).
DPRA 1865	1865 Dockyard Ports Regulation Act
DKHM	Deputy King's Harbourmaster
Duty Holder	In accordance with DSA01.1, a key person appointed by the Secretary of State to discharge a duty of care for complex Maritime Capability such that others do not suffer unreasonable harm or loss from Defence activity. The Duty Holder will be an accountable person (AP) with sufficient control to supervise operations significantly affecting the safety or environmental protection of MOD Shipping activities with responsibility and accountability beyond normal managerial duties that cross line management responsibilities, e.g. DLODs

Duty Holding	A Harbourmaster is an official responsible for enforcing the regulations of a particular harbour or port, in order to ensure the safety of navigation, the security of the harbour and the correct operation of the port facilities.
FLOOs	Fleet Operating Orders
FOST	Flag Officer Sea Training
FOT	Finnart Ocean Terminal
General Direction	A direction (regulation) issued by an authorised Harbour Authority in relation to port operations applicable to all persons operating within the Port Limits
Harbour	Except where used with reference to a local lighthouse authority, means any harbour, whether natural or artificial, and any port, haven, estuary, tidal or other river or inland waterway navigated by sea-going ships, and includes a dock, and a wharf.
Harbour Authority	Means any person in whom are vested powers or duties of improving, maintaining or managing a harbour.
Harbourmaster	Statutory authority (normally a person) with overall responsibility for navigational safety in port limits
Harm	Death, physical injury or damage to the health of people, or damage to property or the environment
Hazard	Potential to cause harm e.g. A physical situation or state of a system, often following from some initiating event that may lead to an accident.
HAZID	Hazard Identification

HAZMAT	Hazardous Materials
IALA	International Association of Lighthouse Authorities
IMO	International Maritime Organization
Incident	The occurrence of a hazard that might have progressed to an accident but did not.
Investigation	Activity carried out by an independent, impartial, professional and credible safety investigation organisation or team to prevent reoccurrence following an accident or incident. It includes the collection and analysis of evidence, the identification of causal factors and the making of observations and safety recommendations as necessary. See Assurance.
Incident	The occurrence of a hazard that might have progressed to an accident but did not.
Investigation	Activity carried out by an independent, impartial, professional and credible safety investigation organisation or team to prevent reoccurrence following an accident or incident. It includes the collection and analysis of evidence, the identification of causal factors and the making of observations and safety recommendations as necessary. See Assurance.
Jetty	A landing stage or small pier at which a vessel can dock or be moored to load or unload.
KHM	King's Harbour Master
MAIB	Marine Accident Investigation Branch

Marina	A specially designed harbour with moorings for pleasure craft and other vessels.
MCA	Maritime and Coastguard Agency
MGN	Marine Guidance Note
Military Ship	<p>'Military ship' means:</p> <ul style="list-style-type: none"> <li>• A ship of war, of any nationality ;</li> <li>• A fleet auxiliary, of any nationality;</li> </ul> <p>A ship operating under a demise charter to the MoD ; and, A ship operating to or from, or a ship under MoD contract operating in the waters surrounding, any docks or any wharves, piers, jetties or moorings belonging to the MoD.</p>
MOD Port Duty Holder	Accountable Person, appointed by Letter of Authority (LOA) with responsibility for the safe and environmentally sound operation of the MOD Port, and of all conduct within the MOD Port.
MOD Ports and Harbours	<p>A MoD Port or Harbour described in The Dockyard and Ports Regulation Act 1865 and the UK Dockyard Ports and the associated UK or Overseas territory Port Orders or Statute.</p> <p>Also, a Maritime base operated by or on behalf of the MOD as one of Her Majesty's Naval Bases (HMNB); Mounting Centres; Permanent Joint Operating Bases (PJOB). A base harbour is a place on the coast where ships may moor in shelter, with protection from rough water by artificial structures. A base port is within a harbour offering access to navigable water where ships load or unload using piers, jetties, and other artificial structures. A base dockyard is a port with maintenance facilities. A base shipyard is a port with facilities permitting the construction of new vessels.</p>
MoU	Memorandum of Understanding
MSN	Merchant Shipping Notice
MSS	Marine Services Superintendent
NAS	Navigational Assistance Service
NATO	North Atlantic Treaty Organization

NBC	Naval Base Commander
Near Miss/Misses	An unplanned event that has the potential to cause, but does not actually result in human injury, environmental or equipment damage, or an interruption to normal operations
Operating Duty Holder (ODH)	<p>Within the <i>Duty Holding</i> construct, the Operating Duty Holder (ODH) is appointed and empowered by the <i>Senior Duty Holder</i> (SDH) through a letter of delegation.</p> <p>The ODH is the person charged with the overall safe administration and employment of complex Maritime Capability at the operational level such that it is operated safely and is environmentally sound. The ODH sits in the middle of the Duty Holder management arrangements identified in Top Level MOD safety policy.</p>
Pilotage Exemption Certificate	Certificate issued to the master or mate of a ship to demonstrate that that person has equivalent competence to that of a harbour pilot. Normally restricted to operations on a particular ship, to a particular berth, and limits in relation to the environment.
Pilotage Direction	A direction (regulation) issued by a Harbour Authority detailing the pilotage requirements for operations within its pilotage limits
Pilotage Limit	The extent of the jurisdiction of a Harbour Authority, as may be extended by Order
Port	A maritime facility consisting of multiple wharves, quays or jetties for the loading and unloading of vessels.
Port Authority	An Agency with powers to maintain and control a port
Regulation	A rule or directive made and maintained by an authority

Regulator	An agency that ensures compliance with laws, regulations and established rules. (May be MOD or civilian). Regulation, assurance and enforcement are the activities conducted by all regulators. Defence is required to comply with UK HS&EP statutory requirements and is regulated by statutory bodies such as HSE, EA etc. However, where Defence benefits from dis-applications, exemptions and derogations (DEDs) from statutory HS&EP requirements, DSA is required to have in place Defence Regulators to provide regulation, assurance and enforcement in order to comply with the SofS's Policy Statement.
Risk	A combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.
Risk Management	The process whereby decisions are made to accept a known or assessed risk and/or the implementation of actions to reduce the consequences or probability of occurrence.
Safe	Risk has been demonstrated to have been reduced to a level that is broadly acceptable or tolerable and ALARP, and relevant prescriptive Safety Requirements have been met, for a system in a given application in a given operating environment
Safety Management	The application of organisational and management principles in order to achieve safety with high confidence
Safety Management System	The organisational structure, processes, procedures and methodologies that enable the direction and control of the activities necessary to meet safety policy objectives and environmental compliance.
Safety Requirement	A requirement that, once met, contributes to the safety of the system or the evidence of the safety of the system
SHA	Statutory Harbour Authority
SOLAS	The International Convention for the Safety of Life at Sea

SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UKHO	United Kingdom Hydrographic Office
VHF	Very High Frequency
VHF Communication	Voice communications utilising the internationally designed maritime mobile VHF channels
VTs	Vessel Traffic Service