



PORT MARINE SAFETY PLAN

Port Marine Safety Code

2021 - 2023





The Port of Tyne is a principal northern gateway and key player in the North East region; a dynamic trading hub with five business areas; conventional and bulk cargoes, logistics, car terminals, cruise and ferries and estates.

It is a deep river port with round-the-clock access based in Tyne Dock South Shields, with an International Passenger Terminal based in North Shields. Operating a rail terminal linking directly to the UK's high speed east coast main line, the port's location also offers easy access to the UK national motorway network.

The Port of Tyne has statutory responsibility for navigation on the river with jurisdiction from the tidal stone near Wylam stretching 17 miles downriver and 1 mile past the piers. Within port limits shipping movements are controlled 24 hours a day by Tyne Vessel Traffic Services at North Shields.

The port is accessible at all states of the tide and there are no length or beam restrictions for vessels in the entrance to the port. Channel depth of 10.0m below chart datum is maintained in the lower reaches of the port.

The Port of Tyne supports river use for recreational activity. It is important that those using the river for leisure clearly understand the constraints under which large commercial vessels operate. Conversely, it is equally important that those in working vessels have consideration for the sport and leisure user. The Port of Tyne is committed to informing and educating both sectors in the pursuit of a safe navigational environment.

The Port of Tyne Authority is a trust port, which is an independent statutory body governed by its own unique legislation and controlled by an independent board. There are no shareholders or owners. Any surplus generated is reinvested into the port for the benefit of the stakeholders. The stakeholders are all those using the port, employees



and all those individuals, organisations and groups having an interest in the operation of the port.

Type of vessels handled at the port includes:

- 'Panamax' and handymax bulk carriers
- Car carriers from 100m loa to 230m loa
- Cruise vessels up to 300m loa
- Coastal tankers
- Feeder container Vessels
- Coasters and general cargo vessels
- Offshore vessels
- Visiting naval vessels
- FPSO, Oil rigs and barges

The Port of Tyne Authority is a statutory Harbour Authority established under the Port of Tyne Reorganisation Scheme 1967 and reconstituted by the Port of Tyne Authority (Constitution) Revision Order 1974.

The general duties of the Authority “for the improvement, maintenance and management” of the harbour are detailed within the above named Scheme. This Scheme, which incorporates some sections of the Harbours, Docks and Piers Clauses Act 1847, also defines the powers of the Authority.

The Port of Tyne Act 1989 gave to the Authority new powers to “ensure that the port is efficiently and safely managed”. The Act also refined the powers of the Harbour Master to issue both general and special directions. The Port of Tyne Act 1990 gave further powers to the Authority in respect of the control and licensing of works in the river.

The Port of Tyne Authority is a competent harbour authority (CHA) under the provisions of the Pilotage Act 1987. This Act confers upon a harbour authority the responsibility for pilotage where the authority's harbour falls wholly or partly within an active former pilotage district. The port as CHA has under this Act made pilotage compulsory for particular vessels.

The Statutory Harbour Areas includes the area from a line drawn at a radius of 1 mile seawards from either of the round heads of the North or South Piers. This jurisdiction extends westwards up the River Tyne to a point above Newcastle upon Tyne at Hedwin Streams. Included in this area are “all rivers, streams, havens, creeks, bays and inlets within the flow and re-flow of the tide that discharge into the River Tyne”. Within this area the Port of Tyne General Byelaws 1987 applies.

A Pilotage Direction defines the pilotage limits of the port. These limits are as for the byelaws except that the seaward limit of the port has been extended for compulsory



pilotage to a line drawn at a radius of 3 miles from the round heads of the North and South Piers.

Port of Tyne has committed to comply with the requirements of the Port Marine Safety Code (PMSC), and as required by the Code, the Port of Tyne Authority publishes its Marine Safety Plan for the conduct of marine operations in the Port every three years; this plan covers the period 2021 – 2023.

This safety plan is one component of a comprehensive Marine Safety Management System (MSMS), and serves to support the continuing improvement of all aspects of Port of Tyne's marine safety performance, and ongoing compliance with the PMSC.

The Plan commits the Port to manage and regulate marine operations and in particular, the safety of navigation, in a way that safeguards people, the environment, vessels, and port infrastructure.

The plan is intended to cover a three year period, but will be refreshed and checked for continuing relevance on an annual basis.



HARBOUR MASTER'S STATEMENT

Port of Tyne is committed to informing and educating everyone who uses the River Tyne for work and pleasure to ensure, as is reasonably practicable, the safety of navigation for the river users and the protection of the environment for all. Embracing the Port Marine Safety Code is inextricably linked to the Port of Tyne's mission to create a vibrant and sustainable Port of Tyne, contributing to the growth of the economy and to hand on the port in a better condition to future generations.

Safety is of paramount importance and in managing marine operations Port of Tyne will always prioritise the safety of life, environmental protection and safety of vessels. We will maintain effective processes and procedures for safe and efficient operations within our jurisdiction, maintaining and, where appropriate, exceeding our compliance obligations, seeking best practise and looking for continuous improvements in our operations.

Protection of the marine environment remains one of our key priorities. We will make positive environmental choices where we can, having due regard to commercial and competitive sustainability, and have set ourselves ambitious goals for the 2021 to 2023 period and beyond with the aim of minimising our environmental impact.

In addition to commercial and leisure / boating and fishing industry activity, the River Tyne is also enjoyed by a great number of people from the shore, such as walkers and anglers. Whilst the PMSC does not directly deal with them, their safety and enjoyment of the River Tyne is recognised as being important.

Steven Clapperton
Maritime Director
Harbour Master



PORT MARINE SAFETY CODE

The Port Marine Safety Code (PMSC) was introduced in 2000, updated in 2008, 2012 and 2016, with the supporting document “ PMSC Guide to Good Practice” updated in July 2013, 2017 and 2018. It has been developed with help from a wide range of interested parties in the ports and shipping industries and the Port of Tyne are a member of the PMSC Steering Group.

This Code establishes the principle of a national standard for every aspect of port marine safety and aims to enhance safety for those who use or work in ports, their ships, passengers and the environment. It applies the well-established principles of risk assessment and safety management to port marine operations. It provides a measure by which harbour authorities can be accountable for the legal powers and duties which they have to run their harbours safely and help to discharge their obligations effectively.

Every harbour authority is accountable for managing the marine operations within its port safely and efficiently. The aim of the Port Marine Safety Code is that all ports in the United Kingdom should, within their jurisdiction, apply nationally agreed standards for the safety of marine operations.

This aim should be achieved through the implementation of a safety management system based on risk assessment. The purpose of this assessment is to ensure that all risks within the marine operation are identified and reduced to a level that is tolerable and as low as reasonably practicable.

As required by the Port Marine Safety Code (PMSC) Port of Tyne publishes a marine safety plan every three years. The plan details how Port of Tyne conducts marine operations within the statutory Harbour Area.

ROLES AND RESPONSIBILITIES

The Board of the Port of Tyne Authority is collectively known as the ‘Duty Holder’ and as defined in the Port Marine Safety Code, is directly accountable for the safety of marine operations within the Statutory Harbour Limits of the port and the Compulsory Pilotage District.

The Board of the Port of Tyne is dedicated to the continued development of a modern and highly efficient port facility that seeks to provide value to all of its stakeholders.

In fulfilling this aim the Board is committed to the maintenance of the appropriate levels of safety and environmental protection in all areas of its operation.



POLICIES AND PROCEDURES

It is the belief of the Board that this commitment to marine safety is best achieved through the implementation of the risk assessment and the development of the safety management system for marine operations. The risk assessment and the marine safety management system are developed in consultation with river users.

On this basis the Port of Tyne Port Marine Safety Code Policy has been published.

The Port of Tyne marine safety management system has been formulated in such a way as to embrace all of the concepts and standards of both the Port Marine Safety Code and the Guide to Good Practice. It is to be used solely for the safe management of marine operations as described in the PMSC. The system is based upon a risk assessment which ensures that all risks are either eliminated, or reduced to as low as reasonably practicable (ALARP).

OBJECTIVES

The Board of the Port of Tyne is committed to:

- The continued development of a culture of safety within all areas of operation of the Port of Tyne.
- The provision of adequate resources to enable the effective operation of the safety management system policies and procedures.
- The provision of adequate resources to allow the marine services department to manage commercial pressures and to carry out their duties effectively and safely.
- The provision of high quality training programmes.
- The promotion of safety as one of the most important responsibilities of all employees.

The safety management system is subject to regular internal and external audits and the findings are reported to the Duty Holder.



MANAGEMENT OF MARINE OPERATIONS AND RISK

All marine operations are closely managed by the marine services leadership team and this safety plan commits Port of Tyne, within the boundaries of its powers and authority, to properly manage and regulate marine operations on the River Tyne.

Safety is paramount and in managing marine navigation and marine operations Port of Tyne will prioritise safety of life, environmental protection and safety and security of assets.

Managing Commercial Pressure

Commercial pressures are a recognised as a consideration of any business and the structure of the Port and the marine safety management system allows for commercial pressure to be managed without undermining the safe provision of services and the efficient discharge of duties. The marine risk assessment and safety management system are structured so as to ensure compliance with all international and national standards, current legislation and best practice in order that risk is reduced to as low as is reasonably practicable (ALARP).

Marine Policies

Port of Tyne has produced marine policies in support of the management of marine operations. The Port Marine Safety Code Policy Statement is approved and signed by the Chief Executive Officer of Port of Tyne on behalf of the Board as Duty Holder.

In addition Port of Tyne publish:

- Marine Safety Policy Statement
- Marine Enforcement Policy Statement

All policies are reviewed on a regular basis.

Marine Procedures and Guidelines

Marine safety management system documentation and risk assessments are developed for navigation and operations on the River Tyne, and are produced in consultation with river users and reviewed and approved by the marine services leadership team. These are reviewed regularly, following any changes to operations, or following post incident investigation.

Marine Management

To ensure that all risks are reduced to ALARP, our statutory obligations are met, and that compliance to the requirements of the PMSC is maintained, a number of activities are undertaken. These include, but are not limited to the following:

- Monthly management review of the SMS including document/procedure review schedule, near miss and incident reporting, training and progress on tasks/projects.



- Bi-weekly informal marine Leadership Team meeting.
- Comprehensive marine near miss and incident reporting and investigation system.
- Detailed navigation risk assessment
- Detailed pollution risk assessment
- Regular liaison meetings with stakeholders including terminal operators, agents, tugs, boatmen and pilots.
- Internal audit programme.
- Annual internal and external PMSC audit
- Annual internal and external independent ISPO audit
- Emergency response plans and procedures with regular response exercises and training.
- Recruitment of trained, experienced and competent personnel with continual professional development.

International Standards for Pilotage Operations code (ISPO)

The marine safety management system is also written with reference to the International Standards for Pilotage Operations code.

- The scope of the code is:
- To ensure that the activities of the maritime pilot organisation are administered, so as to provide a quality service with due regard to the safety of human life and the avoidance of damage to environment and property;
- To encompass existing good practice and
- To provide a recognisable system for international application that can be audited

The management objectives of the ISPO are:

- To ensure safe practice;
- To establish safeguards against all risks identified;
- To continuously improve safety management practices within the maritime pilot organisation;
- To provide an organisational structure, procedures, processes and resources needed to administer the activities of the maritime pilot organisation;
- To continuously improve quality management practices, by keeping records to verify that
- the procedures are being followed;
- To continuously improve the quality of the service;
- To determine and implement effective arrangements for communication with customers



MARINE SERVICES DEPARTMENT

The duties undertaken by the marine services department are as below:

- Conservancy; Hydrographic services, surveying and dredging
- Vessel Traffic Services (VTS)
- Pilotage and pilot exemption certificates – training, authorisation and CPD
- Operation of pilot cutters, workboats and harbour craft

Principal processes and activities.

Traffic on the River Tyne is monitored 24 hours a day from the VTS Centre at North Shields. Assistant Harbour Masters providing this service do so with the delegated authority of the Harbour Master, to advise and direct vessels. They are responsible for the regulation of all traffic and the safety of navigation within harbour limits.

Other functions of the Marine Services department include:

Authorisation of Pilots and PEC holders; the Pilotage Act (1987) requires that the CHA provide a pilotage service. Management and day to day running of this service is the responsibility of the Harbour Master.

Hydrographic service; conservation of the hydrographic regime of the port is achieved through a programme of surveying and harbour maintenance dredging. This is carried out in accordance with guidance from the UK Hydrographic Office and in line with the International Hydrographic Organisation Standards for Hydrographic Surveys.

The formulation and implementation of emergency plans and procedures; emergency plans have been formulated after consultation with stakeholders, following a process of risk assessment. The validity of these plans are tested through a programme of exercises and a reviews. The port also liaises with the emergency planning units of a number of other organisations in the preparation and testing of the emergency plans.

Incident investigation; every near miss or incident relating to marine operations will be the subject of a formal investigation process carried out by the Harbour Master or his delegated representative. The aim of this process is identify lessons learned and to prevent recurrence.

Operation of a cutter service; the primary roles of the cutter service are the boarding and landing of pilots, maintaining harbour safety and compliance patrols and carrying out hydrographic surveys.

Enforcement of the Authority's byelaws. The Port of Tyne cutter service is responsible for monitoring river users' compliance with the byelaws.



Operation of the plough dredger; the manning and operation of the ports' plough dredger is the responsibility of the Harbour Master.

Promulgation of navigation information; the marine services department is responsible for the timely issuing of Navigational Notices and Notices to Mariners to all river users.

Planning for major events; the Harbour Master must review and approve all major events within the statutory harbour area.

Management of the port security service; the Harbour Master is responsible for the provision and management of the security service required by the ISPS code for the dock estate.

River Works Licensing; the port is responsible for licensing all works, structures and dredging on the riverbed or overhanging the river. All applications for such works are reviewed to ensure they do not adversely affect the river regime or the safety of navigation.

Small craft registration scheme; it is a requirement of the byelaws that all small vessels are registered with the Harbour Master. This includes all small craft engaged in commercial activity.



KEY MARINE METRICS

Vessel Statistics

	2018	2019	2020
Movements Total	3012	2433	1920
GRT Arrivals Total (excluding dredgers) ('000)	30,354	27,442	18,260

Incident Statistics

	2018	2019	2020
Injuries – Port of Tyne	1	1	1
Injuries – 3 rd Party	0	3	0
Damage	8	9	4
Environmental	27	12	17
Near Miss	373	355	247
Total	409	380	269
Near Miss Ratio	98%	96%	98%

Regulatory Breaches	2018	2019	2020
Bylaws	84	60	64
Merchant Shipping Legislation	70	75	43
Shore / Health and Safety Legislations	0	8	5
Collision Regulations	3	2	2
General Directions	2	0	0
Total	159	145	114



MARINE SAFETY OBJECTIVES 2018 - 2021

Objective	Measure	Status
Maintain OHSAS 18001 and International Standards for Pilotage Operations (ISPO) accreditations.	External audit.	Completed
Maintain Marine Services Safety Management System and compliance with Port Marine Safety Code and associated legislation.	Port Marine Safety Code Statement of Compliance issued by the Port of Tyne Duty Holder.	Completed
Review Navigational Risk Assessment, including Stakeholder input.	Navigation Risk Assessment published.	Completed
Develop standards of Vessel Traffic Service (VTS) and Pilotage through adoption of new technology, collaboration and ensure ability to respond to changing business priorities.	Staff Performance Development Review (PDR's) and Annual Appraisals.	Completed
	Further development of VTS and Pilotage staff Continued Professional Development system.	Part completed

The proposed objectives were achieved with the exception of the implementation of a VTSO CPD system. This will be addressed in 2021.



MARINE SAFETY OBJECTIVES 2021-2023

Objective	Measure	Target
Maintain compliance with Port Marine Safety Code and associated legislation.	Port Marine Safety Code Statement of Compliance issued by the Port of Tyne Duty Holder.	2021
Ensure powers available are appropriate to execute duties.	Through review of the available powers to ensure fit for purpose.	2021
Develop standards of Vessel Traffic Service (VTS) and Pilotage through adoption of new technology, collaboration and ensure ability to respond to changing business priorities.	Port Passage Plan reviewed and updated.	2021
	Towage guidance, reviewed and updated.	2021
	Use of Portable Pilot Units to be implemented.	2022
	Develop procurement strategy for an appropriate date management system (GIS) for Conservancy and Hydrographic data.	2023
Develop environmental solutions and implement improvements for the benefit of all stakeholders.	Baseline document reviewed, updated and accepted by stakeholders and regulator.	2021
	Long term sediment management plan to be developed in consultation with relevant stakeholders, including beneficial reuse options.	2023
Review annual incidents & identify any increase in types of vessels or groups of port users which have been involved in near misses.	Analysis and engagement with current and future subject user groups – e.g. fishing, leisure.	2021
Improve stakeholder compliance with regulations and navigational safety.	Review publications available to these groups. Consolidate NTMs to ensure relevance.	2022
Develop Aids to Navigation to enhance safety of navigation.	Development of AtoN strategy identifying use current and future technologies	2023

