

PORT & HARBOUR Marine Safety Code

N E W Z E A L A N D



2016 edition

FINAL

First edition published in 2004

Second edition revised 2016

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Disclaimer:

This document includes general information about legal powers and duties that affect marine safety in ports and harbours; however, it does not create legal duties and is not intended to operate as legal advice. While every effort is made to ensure that the information in this document is current and accurate, all relevant parties should ensure that they have up-to-date information about their legal obligations and comply with these as required by law.

“The two aspects, systems and people, work in tandem; neither is sufficient on its own but the full potential of each relies on the other.”¹¹

¹¹ Bolt, Haslam, Gibb, and Waterson (2012) *Pre-conditioning for Success: Characteristics and factors ensuring a safe build for the Olympic Park* HSE Books, Loughborough University Enterprises Ltd. UK.

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Foreword

New Zealand's port operators, councils² and Maritime New Zealand (Maritime NZ) are pleased to present the 2016 edition of the New Zealand Port and Harbour Marine Safety Code (the Code). This new edition of the Code takes into account the lessons learned from a review of the original 2004 Code over the decade since it was introduced.

Who the Code is for

The Code is intended to assist port operators and councils to manage the safety of marine activities in their ports and harbours by providing a voluntary national standard to support national and local legislation.

It promotes a high level of collaboration between operators of commercial ports, and Maritime NZ and councils (or unitary authorities) as the national and local regulators, to provide a safe operating environment within ports and harbours.

Why the Code is important

Safety in our ports and harbours is of paramount importance to New Zealand's multi-billion dollar export and import industries. The Code covers all activities associated with the movement of ships entering, leaving and navigating within ports and harbours. It provides statements of good practice to assist all parties who are managing marine safety within ports and harbours to meet their obligations and exercise their powers effectively, and in a nationally consistent way. In order to foster continuous improvement, it promotes a systems approach to safety management based on risk.

The Maritime Transport Act (MTA) 1994 was amended in 2013. These long-awaited changes to the MTA bring together all the maritime duties and responsibilities of councils, harbourmasters, port operators and Maritime NZ in respect of ports and harbours. The Code is additional to legislative requirements under the MTA and other legislation, and remains a voluntary standard. It provides guidance where standards are not prescribed in law or where use of legislative powers may be discretionary.

Why the Code has been revised and updated

This new edition is informed by the review of the 2004 Code and a collaborative programme to complete outstanding Safety Management System (SMS) assessments. The review revealed some areas for improvement, and subsequently Maritime NZ has worked with chief executives of port companies and councils, harbourmasters, pilots and managers of port marine operations to address the shortcomings identified.

While the original Code focussed on bringing all ports and harbours up to a consistent standard across the country through conducting baseline risk assessments and developing SMSs, the new edition focuses on how that standard of safety management is sustained and

² 'Councils' refers to Regional Councils and Unitary Authorities

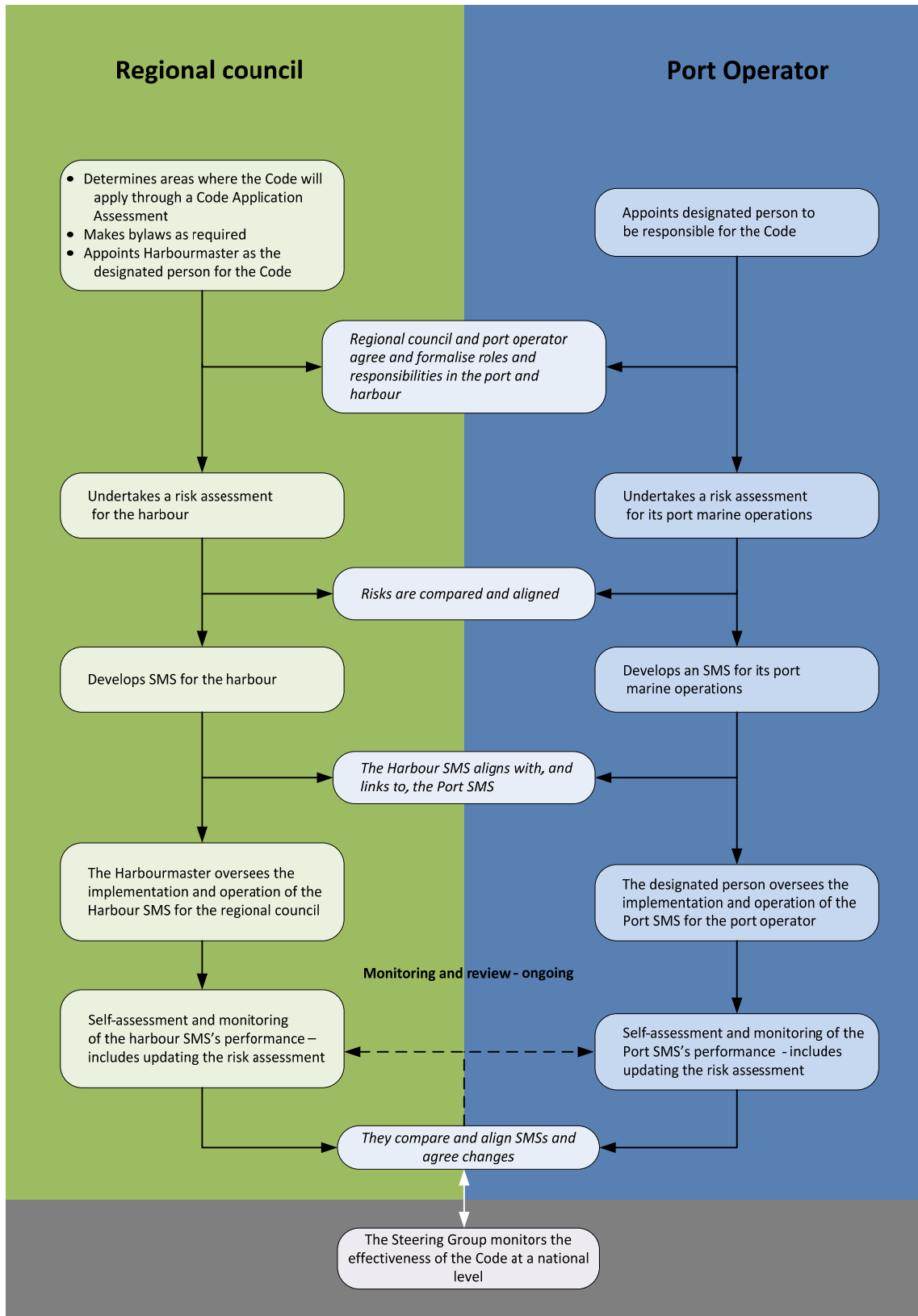
continuously improved over the longer term. The key to this is a high level of collaboration between all parties, recognising the contribution of a number of primary and secondary stakeholders such as coastguard, yachting and rowing clubs. Together we have explored new ways of working to ensure more consistent and effective risk management in New Zealand's ports and harbours.

The result of this collaboration is a greater appreciation of the importance of bringing people and systems together. The approach taken also reflects the fact that all commercial port operators and council partners have chosen to adopt this voluntary Code as the standard of safety management they strive to match. The panel assessment process that we trialled for the completion of SMSs in eight ports and harbours allowed us to align our goals, work together constructively and share expertise to achieve a common purpose and revitalise commitment by all parties. The aim has been to ensure that the Code would emerge from the review process stronger than ever, and in a form that will work best for New Zealand's ports and harbours in 2016 and beyond.

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the bottom, followed by a small dot.

Keith Manch
Chairperson
Code Steering Group

Quick guide to how the Code is applied



Part 1: Understanding the Code



What is the Code?

The Code is a voluntary national standard for the safe management of marine activities in ports and harbours, to support national and local legislation.

Who does the Code apply to?

The Code applies to:

- operators of commercial ports;
- councils, as local regulators of maritime activity within their regional waters; and
- Maritime New Zealand (Maritime NZ), as the national regulator of maritime safety and marine protection.

Each group will manage according to their role.

The objective of the Code

The objective of the Code is to ensure the safe management of ships navigating in New Zealand ports and harbours, including the prevention of:

- injury to people or loss of life; and
- damage to the environment, particularly to the marine environment, but also to property.

What does the Code do?

The Code:

- promotes a systems approach to the management of safety to ensure that risks are identified and managed in a structured and sustainable way that fosters continuous improvement;
- describes the framework for managing marine safety in ports and harbours, and summarises relevant aspects of the current law (see *Part 2: Responsibility for the Code*); and
- provides statements of good practice to assist all parties to manage marine safety within their ports and harbours effectively, and ensure national consistency (see Appendix 1).

Where the Code should be applied

The Code is intended to apply, as a minimum, to any harbour area or commercial port with compulsory pilotage. Councils may also choose to apply the Code to any other enclosed or coastal waters within their regions that they consider to be harbours for the purposes of the Code.

What the Code covers

The Code covers all activities associated with the safe movement of ships entering, leaving and navigating within ports and harbours, including:

- the berthing and securing of ships;
- the safety of ships alongside a berth, on a mooring or at anchor;
- infrastructure, operating systems and practices that support these activities;
- the management of waterways in ports and harbours;
- protection of the marine environment; and
- the safe conduct of commercial maritime transport operations by port operators and councils within a port or harbour.

The main focus of the Code is on the safe movement of ships within commercial port and harbour areas, but it also covers the interactions of all ships using those waterways. Although primarily concerned with the safe navigation of ships, some aspects also touch on broader maritime safety matters.

The term **port and harbour marine safety** is therefore a broad concept intended to encompass all the above activities.

What the Code does not cover

The Code does not cover:

- port operations on land;
- cargo handling on board a ship at a berth or at anchor, unless it affects the stability or safety of the ship, or safe navigation in the port or harbour; or
- port and ship security.

Relationship to legislative requirements

The Code is additional to legislative requirements. It is intended to support parties in meeting their existing legal obligations under:

- the Maritime Transport Act (MTA);
- Maritime and Marine Protection Rules;
- the Port Companies Act;
- the Radiocommunications Act;
- the Health and Safety at Work Act³; and
- the Local Government Act.

The Code is not mandatory, nor is it referenced in legislation. It provides guidance where standards are not prescribed in law, or where the use of legislative powers may be discretionary.

³ The Health and Safety at Work Act 2015 came into force on 4 April 2016, replacing the Health and Safety in Employment Act 1992.

Implementing the Code

Parties implement the Code by:

- ensuring they comply with all legislation as it applies to them;
- identifying the areas where they should apply the standards in the Code, taking into account the risks to navigation safety, and keeping this under review as necessary; and
- developing and operating a safety management system (SMS) for those areas which is supported by a formal risk assessment.

Key terms and concepts

Some key terms and concepts are defined here to provide context for the Code. Additional definitions are included in Appendix 2.

Harbour, in the context of the Code, refers generally to an area of enclosed or coastal waters where ships can shelter, and includes natural and artificial harbours. Councils use their bylaws to define harbour areas within their regional waters for the purposes of regulating maritime activity.

Port refers to an area of land or water (often within a larger harbour area) used for berthing and servicing of ships, and for the loading and unloading of goods or passengers. This includes mooring buoys and associated facilities.

A **commercial port** is a port operated by a port company or that services commercial ships. Not all harbours have commercial ports.

A **port operator** is an organisation that operates a commercial port. A port operator may also be a port company under the [Port Companies Act 1988](#). A port operator's area of marine operations extends beyond the immediate land-based facilities. It may encompass all or part of a harbour area under the jurisdiction of a council – the distinction between ports and harbours is not always clear cut.

Navigation safety refers to the safe movement and navigation of ships. It includes matters such as collision prevention, management of waterways and their use by ships, aids to navigation, communications and the use of navigation tools and equipment.

Maritime safety is the term used in the MTA to refer to the safe conduct of activities related to all aspects of the operation of ships. It is a broader term than navigation safety and includes:

- matters relating to the safe navigation and operation of ships, including crewing;
- training and certification of seafarers including medical standards and fitness for duty; and
- matters concerning the ship itself, including its design, equipment, cargo and passengers.

Port and harbour marine safety covers all activities associated with the safe movement of ships entering, leaving and navigating within ports and harbours.

Public authority means a Minister of the Crown, a government department, a statutory body, a local authority or an iwi authority.

Council for the purposes of the Code means a regional council or unitary authority as defined under the [Local Government Act 2002](#). It also includes any territorial authority, public authority, port operator or other organisation that has a function with regard to navigation safety (either prescribed, delegated or transferred).

How the Code is governed

Steering Group

A joint Steering Group comprised of representatives from port operators, councils and Maritime NZ retains governance and oversight of the application and updating of the Code.

The Steering Group is responsible for communication with the sector, which is managed in the following ways:

- They appoint a Secretariat to advise, manage and administer the Code on their behalf.
- They appoint a Working Group comprising representatives from port operators, councils and Maritime NZ to monitor performance against the Code standard.
- They agree the overall annual Code work programme, including a programme of SMS reviews and site visits compiled by the Working Group.
- Members of the Steering Group meet regularly to update port operator and council chief executives about the implementation of the Code.
- They hold a national meeting (to be held at routine intervals) to report to the sector on performance against the Code standard.
- Facilitated by the Secretariat, they assess the need for guidance on good practice, which is developed in collaboration with port operators and councils.

How the Code is managed

Secretariat

The Secretariat leads engagement with sector and industry stakeholders to monitor implementation of, and compliance with the Code. The Secretariat is located within Maritime NZ and supported by the organisation's technical staff.

The Secretariat works closely with harbourmasters, relevant port and Maritime NZ staff to:

- gather evidence of the Code's implementation;
- monitor compliance by coordinating a programme of site visits and SMS panel reviews;
- clarify matters in the Code, in cooperation with technical advisors from the port operators, councils, and Maritime NZ;
- facilitate the development of guidelines where necessary;
- manage the national meeting; and
- update the text of the Code as necessary.

Working Group

The Working Group appointed by the Steering Group has an on-going role in monitoring performance against the Code standard.

The Working Group, with the support of the Secretariat, prepares the annual programme of SMS reviews and site visits, which will cover all ports and harbours subject to the Code on a three to five year cycle⁴. Once the programme has been agreed by the Steering Group, the Working Group identifies and assigns a panel for each review/visit. The Working Group considers and makes decisions on recommendations made by review panels, and in turn makes a recommendation to the Steering Group in regard to on-going consistency of a port and harbour SMS with the Code standard.

The Working Group also provides support and advice to the Secretariat, in relation to the overall Code work programme, including advice on the collection and analysis of data, key communications, preparation of an annual report and the agenda for the national meeting.

Review Panels

The reviews and site visits are carried out by panels comprising a qualified port-operations staff member or pilot, a harbourmaster and a Maritime NZ representative. The panels are drawn from a pool of relevant persons nominated by council and port operator chief executives.

Panel membership will change according to availability and further nominations. Membership is expected to be refreshed as the need arises.

Regulation is a separate function

The Code's emphasis is on the voluntary adoption of a mutually-agreed performance standard which results in safe practice and compliance with legislation. This is consistent with the themes of regulation for ports and harbours.

In addition to their roles under the Code, both councils and the Director of Maritime NZ also have regulatory roles under the MTA and the Health and Safety at Work Act giving them the powers of intervention in respect of matters related to safety in ports and harbours.

It is possible that, in the course of its national monitoring, or in particular following feedback from SMS reviews and site visits, it may become apparent to the Steering Group that risks are not being managed appropriately by a port operator or a council. As a first step, all parties would work together to address the issues in a collaborative manner, where possible and appropriate to do so, influenced and supported by their wider peers to adopt good practice.

However, as previously stated, nothing in the Code restrains the powers or functions that councils and the Director of Maritime NZ have to carry out their own monitoring or enforcement activity. For example, where the Director has significant safety concerns about

⁴ Timing will vary according to the scale and nature of any changes at the port or in the harbour, as well as when the last review occurred.

the operation of a port operator, he/she can initiate an audit using powers under Section 33T of the MTA, or impose conditions where necessary. Similarly this does not restrict councils in enforcing their bylaws or harbourmaster directions.

Part 2: Responsibility for the Code



The Code is a standard

The Code sets down a national standard for marine safety and the prevention of marine pollution in the operation of ports and harbours in New Zealand. The statutory powers in the [Maritime Transport Act 1994](#) (MTA) and other relevant legislation are the foundation for the roles, relationships and activities that are integral to achieving that standard.

Effective implementation of the Code reduces the risk of maritime incidents occurring in the waters of ports and harbours.

Marine safety roles in ports and harbours

The following parties have a role in marine safety under the Code:

- port operators;
- councils and unitary authorities;
- harbourmasters;
- Maritime New Zealand (Maritime NZ) and its Director; and
- the Minister of Transport.

Port operators

Port operators have a duty to operate, maintain and service their ports so there is no unnecessary risk or danger to people, the environment, or property on ships or at sea. Port operators that are port companies also have a statutory objective in the [Port Companies Act 1988](#) to operate as successful businesses.

Accountability of the port operator

Each port operator is accountable for the safety of the port's marine operations.

Councils

Councils have a statutory function to ensure maritime safety⁵ within their regions, and may regulate ports, harbours, waters and maritime-related activities in those regions.

The elected chair and councillors of the council are accountable for this function. In respect of the Code, the Council's focus is on port and harbour marine safety, which covers all activities associated with the safe movement of ships entering, leaving and navigating within ports and harbours, and includes navigation safety.

The council:

- ensures it is fully and regularly informed about the safe management of the region's harbours;

⁵ The term "maritime safety" is used here as that is the term used in Section 33C of the Maritime Transport Act in relation to the functions of regional councils.

- assigns executive and operational responsibilities for marine safety in its ports and harbours, including the appointment of the Harbourmaster; and
- arranges for the Harbourmaster to have direct access to the highest tier of management within the Council – this means the Harbourmaster can raise concerns about exceptional issues to do with harbour marine safety when necessary.

The regulatory powers of councils

There are four main powers available to a council to regulate ship movements:

1. appointing harbourmasters;
2. making and enforcing bylaws;
3. carrying out harbour works; and
4. removing wrecks, navigational hazards and abandoned ships.

How councils use their regulatory powers

In using their regulatory powers, councils (and their officers, including harbourmasters) should be guided by the following principles:

- Bylaws, and other regulation of ship movements in the waters of their regions focus on managing local conditions rather than matters already regulated at a national level.
- The exercise of regulatory powers is supported by clear policies and procedures in the Harbour Safety Management System (SMS) and has its basis in the Harbour Risk Assessment.
- There are clear policies on the enforcement of bylaws, regulations and rules.

Delegation and transfer of duties and powers by the council

Councils have the power to transfer some of their navigation safety functions and powers to council-controlled organisations or port operators, but they cannot transfer the power to appoint harbourmasters or make bylaws.

Councils can also transfer any of their powers noted above to another public authority, such as a Minister, a government department, a statutory authority or iwi authority, or another local authority. However those powers cannot then be transferred to another party. Where powers are transferred, the transferee becomes responsible.

Delegation and transfer of duties and powers by the public authority

A public authority may delegate transferred powers to a port operator, but cannot delegate the power to make rules and/or bylaws. Where powers are delegated, the public authority remains accountable for the use of those powers. A public authority can delegate the power to appoint a harbourmaster to a port operator, but ultimately retains the power to withdraw the delegation or override any appointment.

Appointment of harbourmasters by councils or public authorities

Only councils and public authorities can appoint harbourmasters in their own right. Port operators can only appoint harbourmasters under delegation. In all cases, the council (or

public authority under transfer) retains responsibility for the appointment and effective performance of the statutory functions of the Harbourmaster.

Because harbourmasters have significant powers of direction, councils need to be satisfied that they have appointed a suitably qualified, competent and medically fit person for the role.

Managing conflicts of interest

Where a harbourmaster is employed by a port operator, the Council (or public authority) should identify potential conflicts of interest that could impact on safe marine operations. They should decide how these potential conflicts would be managed to ensure the independence of the Harbourmaster. For example, a pilot should not exercise the powers or functions of a harbourmaster while they are engaged on pilotage duties.

Councils and other public authorities with statutory powers in relation to port and harbour safety also ensure that any other potential conflicts of interest are identified and managed – for example where the Council is a shareholder of the port operator, and may appoint councillors or council executives as board members.

Any possible conflicts of interest will also be considered when assigning panel members to a review panel. This matter will also be discussed with panel members when panels are set up.

Harbourmasters

Harbourmasters are appointed by the council to manage maritime safety⁶ in their harbour.

Harbourmasters have:

- functions and duties to be exercised for the purpose of ensuring maritime safety in relation to ports, harbours and the wider waters of their region; and
- operational powers with respect to the safety of marine activities in those areas.

Harbourmasters may direct:

- when and how ships enter, depart or move within their waters;
- the position, mooring and placement of ships – including the use of tugs and other forms of assistance;
- how ships receive or discharge cargo;
- how cargo is secured if there is a risk of it being lost overboard and becoming a navigational hazard.

They may also regulate and control navigation whenever there is unusual or extraordinary maritime traffic.

To perform these functions effectively, the council ensures that an appropriately qualified harbourmaster is contactable at all times, so that the Harbourmaster can respond to exceptional circumstances or emergency situations, identify any risks and take necessary action in response to such situations.

⁶ The term “maritime safety” is used here as that is the term used in Section 33E of the Maritime Transport Act in relation to the functions of harbourmasters.

Additional delegated powers

Under the MTA, the Director of Maritime NZ (the Director) can delegate powers to harbourmasters so they can:

- direct the Master of a ship to take a pilot, irrespective of any requirement for compulsory pilotage, or whether they hold a pilotage exemption certificate (PEC); and
- approve the management of aids to navigation

Maritime NZ

Maritime NZ has a statutory function to promote maritime safety and security, and protect the marine environment, both in New Zealand and in accordance with New Zealand's international obligations. Maritime NZ's functions include the provision of information and advice about maritime transport and marine protection, and the licensing of ships, their operations and crews. Maritime NZ also has oversight of all aids to navigation in New Zealand.

Maritime NZ's other legal responsibilities

Maritime NZ also administers other Acts with regard to ports and ships, including:

- the [Maritime Security Act 2004](#) for ports and ships;
- the [Health and Safety at Work Act 2015](#)⁷ on New Zealand ships; and
- the [Hazardous Substances and New Organisms \(HSNO\) Act 1996](#) on board ships.

The Director of Maritime NZ

The Director (who is also the Chief Executive) has an independent statutory function to administer and enforce the MTA, and has various powers to enable this. These include enforcing obligations in the MTA and in maritime and marine protection rules relating to the operation of ships and commercial ports, including:

- licensing pilots and issuing PECs
- approving aids to navigation;
- directing that a pilot must be used;
- requiring councils to remove or deal with wrecks; and
- issuing directions with regard to hazardous ships.

The Director can also inspect and audit commercial port operations, and apply prohibitions or conditions.

The Minister of Transport

Under the MTA, the Minister can make rules setting mandatory national standards for the purposes of maritime safety and marine protection, and implement international maritime conventions.

⁷ The Health and Safety at Work Act 2015 came into force on 4 April 2016, replacing the Health and Safety in Employment Act.

The Minister can make rules relating to, amongst other things:

- pilotage;
- navigation safety;
- standards for the safe management of commercial shipping;
- carriage of dangerous goods;
- preparedness and response for marine oil spills;
- standards for port and harbour safety;
- standards for traffic separation and management schemes; and
- the implementation of international conventions.

The Minister can also require a council to appoint a harbourmaster if it does not do so.

The Code standard

Port operators

Port operators:

- ensure that the port is in a fit condition for use by the ships that it serves, including the provision of adequate channels and berths;
- provide port users and the Harbourmaster with adequate information about the port facilities and operating limitations; and
- provide aids to navigation for the port.

In line with their assessment of any risks, they:

- mark, monitor and maintain the navigable channels necessary for the safe operation of the port;
- take reasonable care to ensure that stated water depths are maintained; and
- provide any necessary marine services such as pilotage and towage.

Not all ports and harbours will have a commercial port or an obvious port operator. In this case the regional council works directly with ship operator, marine services providers and other relevant agencies such as owners of wharf facilities, to manage marine activity. The Council may carry out some of the above port operator functions itself⁸.

Councils

Councils:

- use their statutory powers to manage and maintain their harbours so they are fit for their intended uses;

⁸ Examples include the Bay of Islands, Milford Sound and Akaroa.

- provide adequate information about the condition of their harbours including prevailing environmental conditions, so users can determine whether they are safe;
- consider the safe and efficient operation of services and amenities provided in the harbour;
- make sufficient resources available to discharge their maritime safety⁹ obligations under the MTA; and
- ensure that commercial considerations do not interfere with the effective discharge of their public interest, marine and navigation safety duties.

Specifically, they:

- keep hydrographic and hydrological records, taking reasonable care to ensure that stated depths are correct; and
- provide this information to the public and harbour users, including appropriate warnings if hydrographic and hydrological information is not current.

In line with their assessment of any risks, they:

- monitor and mark the navigable channels in the harbour in conjunction with the port operator; and
- exercise powers to remove wrecks and obstructions to allow safe navigation.

Navigation bylaws

Bylaws are made to provide a general framework for the rules of navigation that apply to all ships in specific harbour areas as well as in wider regional waters. Navigation bylaws can specify the boundaries of any port, harbour or waters they apply to.

Bylaws should generally be limited to local navigation matters that are not already addressed by maritime rules. For example, collision prevention ([Part 22](#)) and navigation safety rules ([Part 91](#)) apply to all ships in New Zealand waters. When making navigation bylaws, councils should ensure they are not inconsistent with maritime rules. In practical terms this means that bylaws:

- may be made in respect of something or for a purpose that is not covered by a maritime rule, but;
- should not permit what a maritime rule expressly forbids, or forbid what a rule expressly permits; and
- should not create a situation where the bylaw and the maritime rule cannot operate side-by-side.

Enforcing navigation bylaws and directions

The harbour Safety Management System (SMS) should have a clear policy for how the bylaws and directions that manage navigation risks are enforced.

Councils can give enforcement officers, police and authorised council officers some of the same powers as harbourmasters.

⁹ The term “maritime safety” is used here as that is the term used in Section 33C of the Maritime Transport Act in relation to the functions of regional councils.

Removing navigation hazards

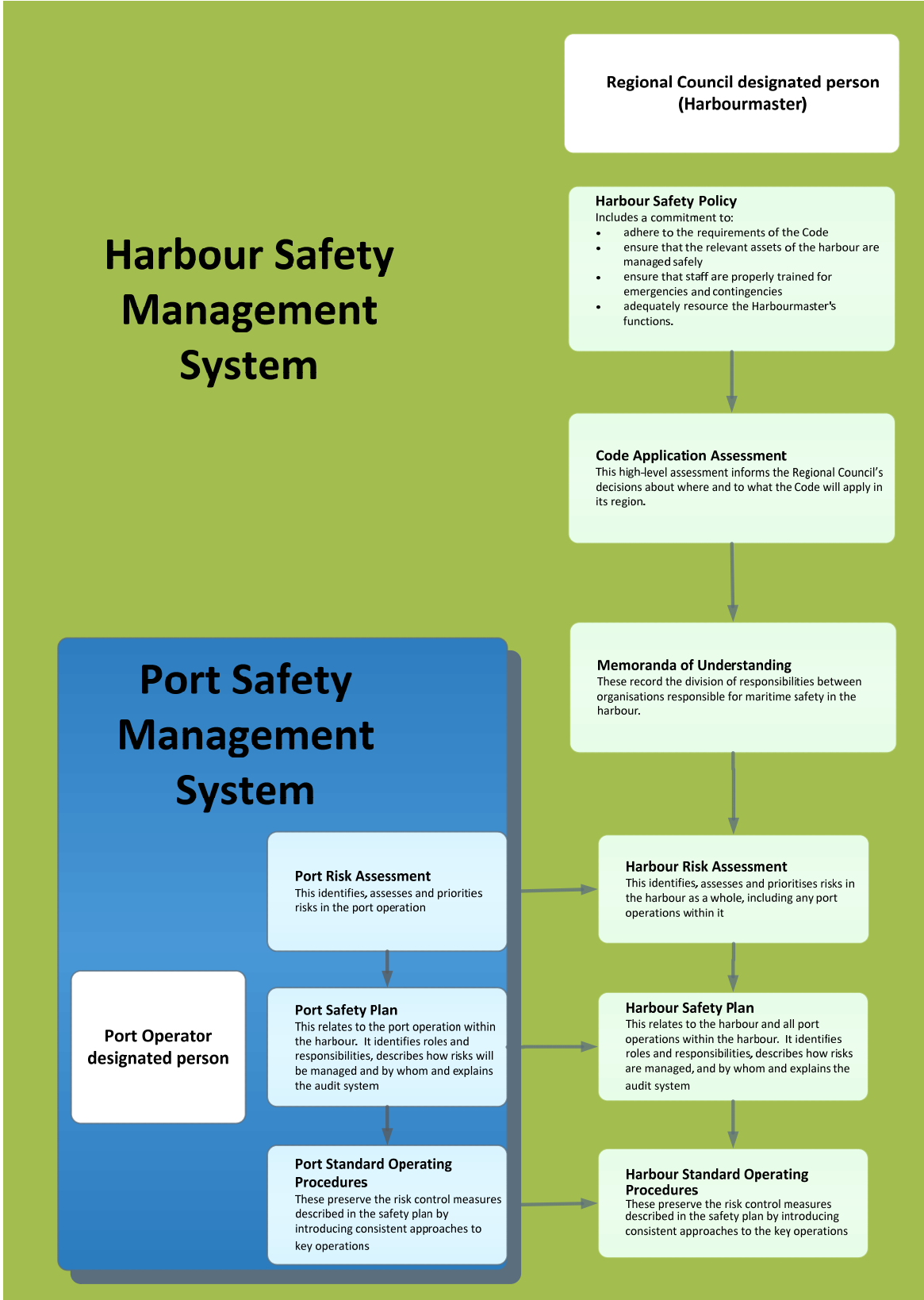
Councils may:

- direct that floating, submerged or stranded objects that could obstruct or impede navigation must be removed;
- take steps to remove wrecks where they could be a hazard to navigation; and
- remove abandoned ships.

Part 3: Developing and operating a port and harbour Safety Management System (SMS)



The development of a port and harbour SMS: overview



Roles and responsibilities in developing and maintaining an SMS

When developing the SMS for the port and harbour, the Harbourmaster, council staff, port operational personnel and management work closely together to clearly understand their respective roles and responsibilities. A pragmatic approach should be taken when developing an SMS, where possible building on existing procedures and practice, then integrating these with other management systems.

Effective implementation of the Code relies on a collaborative relationship between the Harbourmaster and their counterpart at the port. These two people have a responsibility to champion the SMS as a living system, and to regularly engage with other key staff, contractors and stakeholders. The key to collaboration is strong and regular communication. Successful collaboration is built on trust, reliability and commitment.

Memoranda of understanding (MOUs)

Clear assignment of responsibilities is essential for effective safety management. Formal agreements such as MOUs are often used to document the division of responsibilities between the Council, port operators, the Harbourmaster, marine service providers and other relevant organisations.

Key features of an effective SMS

The following activities work together to make an SMS effective:

- regular collegial communication between the Harbourmaster and the port equivalent position to develop and maintain the SMS;
- involvement of key stakeholders in developing and maintaining the system;
- effective safety policies setting a clear direction for the organisation to follow;
- an effective management structure that has arrangements in place for delivering the policies;
- a planned and systematic approach to implementing the policies through the SMS;
- measurement of performance against agreed and documented standards to reveal when and where improvement is needed;
- regular reporting to the management of the Council and port operator so that there is effective information-sharing; and
- learning from relevant experience and applying agreed changes.

Together these elements create a cycle aimed at ensuring the achievement of safety goals, the relevance of the SMS and a continuous improvement in safety performance. Appendix 3 contains further information.

To achieve the Code standard it is essential that systems and associated records are rigorously maintained so, in the event of an incident, the council or port operators can demonstrate continuous compliance with good practice.

Council's role

Councils:

- exercise their powers and perform their duties in relation to ports, harbours, waters and maritime-related activities in their region;
- determine which harbour areas within their region the Code should apply to, usually through a Code Application Assessment;
- appoint suitably qualified harbourmaster(s) and enforcement officers;
- provide the resources necessary to implement the Code in their harbours; and
- work closely and constructively with the local port operator(s) to ensure the roles and responsibilities of all parties are clearly delineated and understood.

This allows the Council to:

- develop and document an effective SMS for the harbour area based on a formal risk assessment;
- ensure there is a designated person (usually the Harbourmaster) responsible for that SMS; and
- prepare a comprehensive safety plan, along with a regular assessment demonstrating their performance against that plan.

Harbourmaster's role

Harbourmasters ensure that the harbour SMS is functioning effectively and independently of commercial interests by working collaboratively with relevant port personnel. The Harbourmaster coordinates the integration of the port operator's SMS into the wider harbour SMS.

Port operator's role

Port operators:

- discharge their existing duties as port operators; and
- work closely and constructively with the Council and the Harbourmaster to ensure the roles and responsibilities of both parties are clearly delineated and understood.

This allows the port operator to:

- develop an effective SMS for areas and activities covered by their port marine operations, based on a formal risk assessment;
- ensure there is a designated person who is responsible for the port's SMS; and
- prepare a comprehensive safety plan, along with a regular assessment demonstrating their performance against that plan.

Designated person role: Port Operations

The port operator's Designated Person, usually the Marine Operations Manager:

- conducts a port risk assessment;
- ensures that the port's SMS is complete and functioning effectively; and

- works co-operatively with the Harbourmaster.

The designated person reports to the port operator's Chief Executive about the implementation of the SMS and promotes compliance with the Code.

Councils: elements of an SMS

A council's harbour SMS should include the following:

- a Code Application Assessment that determines where the Code will be applied within the region – this should be documented in a simple statement outlining where the Code is to be applied and describing the process by which this was decided;
- the harbour risk assessment, which identifies, assesses and prioritises risks;
- a harbour safety policy;
- a harbour safety plan, including port safety plans where applicable – this identifies:
 - roles and responsibilities,
 - describes how the risks will be managed and by whom, and
 - explains the review and audit system;
- a statement of the duties and powers of councils, and the duties of port companies with regard to establishing a standard for safe marine operations;
- memoranda of understanding with port operators, marine service providers and other relevant organisations as required;
- external and internal delegations;
- how bylaws and directions will be enforced, and confirmation that adequate resources are available to carry out this work;
- standard operating procedures to:
 - ensure that risk control measures are established and maintained;
 - regulate the safe arrival, berthing, departure and movement within the harbour of all ships;
 - protect the general public from dangers arising from marine activities within the harbour;
 - enable the Council to carry out all its functions with special regard to their possible environmental impact;
 - prevent acts or omissions that may cause personal injury to employees or others, or damage to the environment; and
- emergency response plans.

Where there is no commercial port or port operator, the Council's SMS should also cover the management of any marine services, and other functions it may perform directly to ensure marine safety in the harbour.

Harbour safety policy

For any harbour, the Council's documented SMS should include a statement of harbour safety policy. The policy outlines how the Council will undertake and regulate marine operations in a way that safeguards the harbour, its users, the public and the environment.

The harbour safety policy makes a commitment to:

- use the Code and its supporting guidelines as a standard against which the council will measure itself and be measured by others;
- ensure that the relevant assets of the harbour are managed safely;
- enforce bylaws and harbourmaster directions appropriately;
- ensure that staff are properly trained for emergencies and contingencies;
- identifies measures to address conflicts of interest;
- adequately resource the management of port and harbour navigation safety.

The policy is published, both to demonstrate the Council's commitment to it, and also to ensure the involvement of harbour and port users.

A council's safety policy should promote a positive safety culture, fostered by the visible and active leadership of senior management. Its aim should include the motivation and empowerment of staff to work safely – not just to avoid accidents. The policy and the procedures relating to it are underpinned by effective staff involvement and participation, and sustained by effective communication and training.

Port operators: elements of an SMS

A port operator's SMS should complement the harbour SMS. It should contain:

- a port safety policy committing the operator to undertake marine operations according to the operator's legal obligations and the Code;
- the port risk assessment, if this is not part of the wider harbour risk assessment;
- a port safety plan, which identifies roles and responsibilities, describes how risks will be managed and by whom, and explains the review and audit system; and
- standard operating procedures to:
 - ensure that risk control measures are established and maintained;
 - ensure the safe arrival, berthing, departure and movement within the harbour of all ships;
 - protect the general public from dangers arising from marine activities within the harbour;
 - enable the port operator to carry out all its functions with special regard to their possible environmental impact;
 - prevent acts or omissions that may cause personal injury to employees or others, or damage the environment.
- Emergency response plans.

Risk assessment

The first step in developing an SMS is to formally identify hazards, and make an assessment of risks relating to marine-related activities and navigation for both the harbour as a whole, and for all ports within the harbour. The risk assessment forms an integral part of the SMS, and informs its development and ongoing use.

A positive, analytical approach is needed in undertaking the harbour risk assessment. Not only should past events and accidents be considered, but also potential dangers, and means of avoiding or managing them, need to be investigated.

Gathering information for the risk assessment

The Council, with the assistance of the port operators, undertakes the assessment. Port operators may contribute much of the information, particularly in terms of the risks relating to port marine activities, harbour management and maintenance obligations.

Applying the international standard

The general principles and terminology in AS/NZS ISO 31000:2009 [Risk Management – Principles and Guidelines](#) should be followed in undertaking a risk assessment. Maritime NZ guidance on risk assessments provides information about applying this in a port and harbour context.¹⁰

Aligning with existing risk assessment processes

Ideally there will be a common and consistent picture of the marine-related risks in the port and harbour, and how they are managed by both the Council and the port operator. Both organisations will have their own internal processes for risk management which may need to be adapted to take account of the marine safety context. The Harbourmaster should coordinate the integration of the port risks with the wider harbour risks.

Harbour safety plans

Port and harbour safety plans describes how risks are identified and managed at both council and port operator level. The respective plans of both organisations should describe:

- roles and responsibilities of all parties – where functions are delegated or contracted out, there should be confirmed arrangements in place for this;
- how the risk assessment is reviewed and kept up to date, including any triggers for review – there should be evidence of this process working in practice and it should be clear who is responsible for maintaining the risk assessment;
- how performance is monitored and reported – for example, how the Harbourmaster reports to the council, or marine service providers report to port operator management;
- how and when the SMS will be reviewed and updated, and any arrangements for ongoing auditing;
- the system for recording accidents, incidents and occurrences – how these are followed up, and how this feeds back into the risk assessment, as well as into policies, procedures and operating practices;
- a list of matters that standard operating procedures apply to, both at the council level and at the port operational level – this provides assurance that comprehensive risk management provisions are in place and that the scope of those provisions is clear;
- how training needs are identified, what is provided, how this is undertaken and documented;

¹⁰ Maritime NZ's existing guidance on risk assessment will be reviewed in consultation with Code users as part of the future Code work programme.

- a clear process for change management, including the use of new technology and/or equipment – how the risks from new operations or changed conditions will be assessed and those new risks managed, possibly as part of the ongoing risk assessment process;
- a programme of future work, if applicable, identifying actions to be undertaken in response to risks identified or changes to operations;
- the provisions made in relation to the following items, where applicable:
 - hydrography,
 - prevailing conditions,
 - aids to navigation,
 - anchorages,
 - wrecks,
 - works in harbours,
 - traffic management and Vessel Traffic Services,
 - passage planning and guidance,
 - pilotage and pilotage exemptions,
 - marine services,
 - tugs,
 - berthing,
 - dangerous goods and harmful substances,
 - emergency responses, and
 - marine pollution and ships in distress.

Appendix 1 contains further information about good practice in relation to these activities and how they could be addressed in the SMS.

Monitoring performance against the Code

Monitoring performance against the Code happens at a port and regional level, as well as at a national level.

Monitoring at a port and regional level

Each SMS has its own monitoring, audit and review mechanisms as an integral part of the system. This should involve internal, as well as external, assessments and/or independent assessments. Port operators and councils are likely to have their own processes and guidelines for carrying out such audits and reviews, but for monitoring the specific requirements of the Code, the assessment template provided by Maritime NZ may be helpful.

In addition, an annual self-assessment of their respective SMSs is carried out by the Harbourmaster and the port operator. This assessment should include a review of:

- any changes made to the risk assessment and SMS over the year; and
- the actual operation of the system against intentions set down in the plan.

This annual self-assessment should be a collaborative exercise between the port operator and the Harbourmaster. A report on the outcome should be provided to the Council and its Chief Executive, to the Chief Executive and board of the port operator, and to the Secretariat for the purposes of national monitoring and reporting to the Code Steering Group.

Assessment template

A template has been developed to assist in documenting reviews or assessments of SMS. The template is intended to:

- ensure a consistent approach to how the adequacy and performance of an SMS is assessed;
- guide the assessors during their assessment;
- guide port companies and councils in developing an SMS and documenting it; and
- to ensure transparency by linking the assessment criteria to the specific requirements in the Code, as well as providing a record of the judgements made and the basis for those judgements.

Monitoring at a national level

At a national level, Maritime NZ has an obligation to assure the Minister of Transport that New Zealand has a consistently high standard of safety management in its ports and harbours. To achieve this objective Maritime NZ uses a range of strategies in collaboration with port operators and councils, which also have an interest in national performance against the Code standard¹¹.

1. Maritime NZ works with port and harbour stakeholders to identify and collect data against nationally agreed safety performance measures linked to the implementation of the Code.
2. The Code Steering Group appoints a Code Working Group to oversee the collection and analysis of the data, and reports this to the sector annually.
3. The Steering Group also oversees a programme of SMS reviews and site visits covering all ports and harbours on a three to five year cycle. Reviews are carried out by panels comprising a qualified port-operations staff member or pilot, a harbourmaster and a Maritime NZ representative.
4. The panels report their findings to the Working Group which uses the reviews and data to prepare an annual report on the effectiveness of the Code which is disseminated to the stakeholders.

Measures of SMS performance

When an SMS functions effectively:

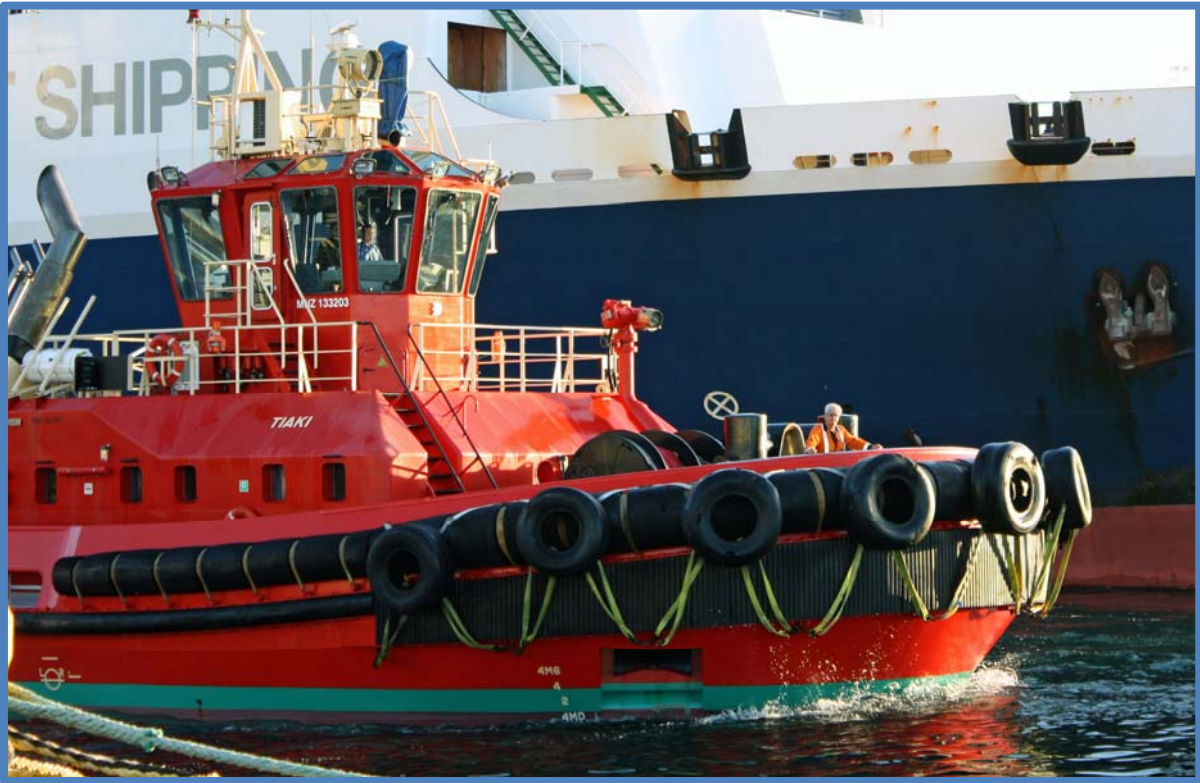
- there is clear evidence of ownership of the SMS at the top level of both the Council and port operator;

¹¹ Nothing in the Code restrains the powers or functions that councils and Maritime NZ have to carry out their own monitoring or enforcement activity. For example, where the Director has significant safety concerns about the operation of a port, he/she can initiate an audit using powers under [Section 33T](#) of the MTA.

- delineation of navigation safety responsibilities within the organisations and between them is clear;
- relevant staff within each organisation are familiar with the SMS and their roles in it;
- staff are qualified and competent to do their jobs;
- there is a functioning harbour safety plan and/or manual that is regularly reviewed and updated;
- regular and effective communication between the Harbourmaster and port operators takes place;
- their working relationships are documented in the manual and function well; and
- there is evidence that incidents involving ships in the waters of their jurisdiction are reviewed and any risks reassessed.

When carrying out their review, panels may also look for other evidence of commitment from the council and the port operator to the management of navigation safety, and to the Code. A council's long-term community plan or annual plan, and the port operator's annual reports or website are likely places where commitment to the Code would be publicly visible.

Appendices



Appendix 1: Statements of good practice for local maritime regulation and safe operational activity

This appendix provides statements of good practice about the following maritime activities:

- hydrography,
- prevailing conditions,
- aids to navigation,
- anchorages,
- wrecks,
- works in harbours,
- vessel traffic services,
- passage planning and guidance,
- pilotage and pilotage exemptions,
- marine services,
- tugs,
- berthing,
- dangerous goods and harmful substances,
- emergency response; and
- marine pollution and ships in distress.

The Safety Management System (SMS) include arrangements for how these practices are implemented.

Hydrography

Accurate hydrographic information is essential to allow safe navigation within the port and harbour areas identified using the Code Application Assessment.

There should be a clear policy on hydrography covering the following:

- the extent and frequency of survey – this should be determined from the risk assessment for the port and harbour, and kept under review;
- the maintenance of channels and depths, as applicable, and any dredging programme to achieve that;
- distribution of hydrographic information through local Notices to Mariners , including the publishing of warnings on reductions in depth or navigation hazards;
- the provision of hydrographic information to Land Information New Zealand (LINZ), the New Zealand Hydrographic Authority, to update official nautical charts and publications through Notices to Mariners; and

- criteria for determining when resurveying may be required – if for example, harbour operations change, such as:
 - the use of berths or larger ships,
 - significant increases in harbour traffic, which may require additional passing places and anchorages, or
 - in the event of a significant earthquake or flood which may affect the seabed.

The Harbourmaster works with the port operator to ensure that the hydrographic policy is developed and followed, and that relevant hydrographic information for the port and harbour area is readily available, accurate and up-to-date.

The SMS should include the hydrographic policy and supporting procedures to give effect to it. Where there is an agreed division of responsibilities for survey and dredging between the Council and the port company, such arrangements should be documented in a Memorandum of Understanding or other formal agreement.

Prevailing and forecast conditions

Reliable and timely information about prevailing and forecast conditions in the port and harbour is critical to ensure that ships can navigate safely, and ships operations can be conducted without incident.

The SMS should include arrangements for determining what information is required and ensuring it is provided.

The extent of the information that should be provided will be determined and agreed as part of the risk assessment for the port and harbour. The information should cover general conditions and include:

- wind;
- tide;
- wave height;
- current; and
- any other factors that could be affected by the weather or the way the harbour is used.

This information should be accessible to harbour users in a timely and systematic way.

Aids to navigation

Aids to navigation are provided to facilitate the safe movement of shipping within the port and harbour, as determined by the risk assessment.

Port operators and other operators of maritime facilities provide aids to navigation for that port or facility, and are responsible for them. Councils may also install aids to navigation within their harbours for the purposes of ensuring maritime safety.

Responsibility for aids to navigation in the port and harbour should be clearly defined. Where the provision, ownership and maintenance of aids to navigation are split between different parties, this is formally agreed.

The characteristics and availability of all aids to navigation must comply with internationally agreed standards (IALA)¹². The erection, alteration or removal of any aid to navigation must be approved by the Director of Maritime NZ (the Director). Prior to submitting applications to Maritime NZ, they are reviewed by the Harbourmaster.

Councils and port operators should ensure that there is a schedule of all aids to navigation in the port and harbour area. A category is assigned to each according to how critical it is. Aids to navigation are maintained by their owners and their performance is monitored. There should be systems for:

- reporting and recording of outages;
- ensuring that they are fixed within agreed timeframes and in accordance with IALA performance standards; and
- that harbour users are notified accordingly.

Anchorage

Information on safe anchorages in the port and harbour, or its approaches should be made available to shipping.

The Harbourmaster identifies safe anchorages taking into account:

- the size and type of ships likely to need them;
- the needs of other shipping, including passing shipping; and
- the local conditions.

Where it is necessary to protect seabed infrastructure or to avoid impeding traffic, areas where no anchoring is allowed will be identified. Places where no safe anchorages are available will also be noted.

The harbourmaster ensures this information is available to all users of the harbour and that it is distributed to all shipping as appropriate – for example, through the *New Zealand Pilot* or the port operator's website.

Wrecks and abandoned ships

Wrecks in harbours or near the approaches may create a navigation hazard.

Councils undertake a risk assessment of any wreck that may be a hazard to navigation to determine what course of action should be taken to ensure that the risk is at a level that is as low as reasonably practicable.

Under [Section 33I](#) of the Maritime Transport Act (MTA), councils may take steps to remove or deal with such wrecks and may also remove other obstructions and impediments to navigation. Councils may also remove abandoned ships, which may include ships that are moored or anchored. The Director may also direct a council to remove a wreck or take steps to remove it directly.

¹² International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA)

Works in harbours

Works in harbours such as dredging or berth construction may interfere with navigation. The wake from ships in the harbour may also create a hazard for people undertaking such works, for example if they are working on a floating platform or under wharves. The movement of ships in the area may need to be controlled when such works are underway.

The harbour SMS will include appropriate provision for management of such works potentially affecting safety in harbours. A special assessment should be made in each case where new hazards are likely to arise. The harbour SMS should also provide for the regulation of dredges and other craft associated with the works.

Harbour communications and traffic management

Various methods are used to monitor and communicate with ships using the harbour. Arrangements should be in place to allow relevant information to be passed between the Harbourmaster or port operator, and ships in the harbour. The level of service required will be guided by the harbour risk assessment.

Where appropriate, the Harbourmaster in conjunction with the port operator, should establish a radio service and traffic monitoring system.

The scope of any traffic service provided should be clearly defined according to IALA guidelines. It could be:

- a Local Port Service (LPS); or
- a Vessel Traffic Service (VTS).

The scoping should include information such as:

- the level of the service provided – whether it is an LPS or a VTS (including the type of VTS);
- hours of operation, level monitoring and radio channels used;
- how appropriate information, advice and directions will be passed between the harbourmaster or port operator, and ships in the harbour;
- how the service operates according to the [Radiocommunications Act 1989](#), and to internationally agreed guidelines;
- reporting requirements for movements of ships in the harbour – usually defined in local bylaws;
- staff training and qualifications should be commensurate with the level of service being provided; and
- how the service is resourced to ensure there is a minimal risk of errors caused by fatigue.

The SMS should include arrangements for determining the appropriate level of service and ensuring it operates according to the relevant standards. Where a harbour radio service is provided by a port operator on behalf of the Council, this should be formalised in an agreement, with the level of service specified above.

Port passage planning and guidance

The purpose of port passage planning and guidance is to ensure that everyone involved in the movement of ships in the harbour:

- has a clear, shared understanding of potential hazards, margins of safety, and the ship's characteristics;
- has agreed on the intentions and required actions for the conduct of the port passage, including the use of tugs and their availability, and any significant deviation should it become necessary;
- knows relevant details of any particular port passage in advance.

The Harbourmaster will promote the use of port passage planning and ensure guidance is available. As a minimum, passage planning should apply to all ships that take a pilot or are under the conduct of a Pilot Exemption Certificate (PEC) holder. Where a ship takes a pilot, the passage plan will be used in conjunction with the master/pilot exchange.

The risk assessment for the port and harbour may indicate that passage plans are not needed for all ships, for example recreational craft. However, if it is necessary or practicable, passage planning can still be required for such craft.

Passage plan guidance is usually developed by the port operator in consultation with the Harbourmaster and pilotage provider. Guidance should focus on critical port movements and cover matters such as:

- entry to the port;
- entry to specific berths – for example the movement of deep draught ships to a particular berth;
- ship sizes and cargoes;
- prevailing conditions and tidal constraints;
- tug allocation;
- holding areas; and
- recommended tracks, as appropriate.

Up-to-date passage plans and guidance should be published, and be available to harbour users and the masters of visiting ships.

Plans adopted for particular passages are recorded. The pilot and the master of the ship keep records of their port passage plans in case they are needed for an accident investigation.

Port passage plans may change if a pilot needs to react to unforeseen circumstances. Any changes must first be discussed with the master of the ship and, if relevant, with the harbour radio service. The reasons for any change will be recorded.

Pilotage and pilotage exemptions

Purpose and principles

The purpose of pilotage in harbours and ports is provide masters of visiting ships with advice and information on local conditions, passages, marine services and berths, and how to navigate safely within the port and harbour area.

Requirements for pilotage, including the establishment of compulsory pilotage areas, the issue of pilot licences and pilotage exemption certificates, and training are prescribed in maritime rules.

The following general principles apply to pilotage.

- The decision to establish compulsory pilotage will take into account the port and harbour risk assessments.
- The need for pilotage services is reviewed regularly based on the assessment of risk.
- In order to protect the assets of the port, a port operator may specify pilotage in the contracts it has with ships using their facilities.
- The SMS of a pilotage service provider will be fully integrated with those of other port marine safety services.
- The training, examination and certification of pilots and holders of PECs is regulated by Maritime NZ in consultation with councils, port operators and providers of pilotage services.

Providing pilotage services

Pilotage services may be provided by any service provider. Pilots employed or contracted by a pilotage service provider must meet the requirements of [Part 90](#) of the maritime rules. All pilotage providers must have a proficiency plan approved by Maritime NZ.

A pilotage provider:

- works with the Harbourmaster and port operator to ensure pilotage services are fully integrated into the port and harbour SMSs;
- aligns their operating procedures with any other pilotage providers working in the port or harbour to ensure consistency;
- makes sure the service is properly managed and operates safely; and
- ensures that the potential for fatigue is actively monitored and managed – staff rosters should be planned and resourced accordingly.

Pilot training and proficiency

It is the responsibility of pilotage service providers to ensure all pilots are:

- licensed and trained in accordance with [Part 90](#);
- have current qualifications; and

- are competent to pilot the ships they work on.

Any organisation that trains pilots must have a training programme approved by Maritime NZ. Pilots maintain their proficiency and competence by regular exercise of their licence, ongoing peer review and continued professional education. Pilotage providers are required to consult with the Harbourmaster and the port operator when preparing their training programmes and proficiency plans.

Boarding and disembarkation procedures for pilots

Pilotage operating procedures must meet the requirements of [Part 53](#) of the maritime rules.

The risk assessment and SMS should identify, where practicable, safe boarding and disembarkation areas for pilots. Pilotage providers ensure that pilots board or disembark from ships in line with these requirements.

Boarding and disembarkation, and the operation of pilot boats should be addressed in the pilot boat operator's Maritime Transport Operator Plan, required under [Part 19](#) of the maritime rules. Pilot boats comply with specific requirements in [Part 40C](#).

Allocating Pilots

A provider of pilotage services ensures that:

- pilots have enough time to prepare port passage plans;
- they provide pilots with relevant information in a systematic way;
- the service operates effectively; and
- pilot workload and fatigue is managed.

Pilotage Exemption Certificates (PECs)

Under [Part 90](#), Maritime NZ issues PECs. Holders of PECs:

- comply with the conditions of their PEC as prescribed by the Director when the PEC is issued; and
- are responsible for their actions under the MTA.

SMS requirements for pilotage

The port and harbour SMS should include a clear pilotage policy and procedures for the conduct of pilotage in the port or harbour.

If the Director's power to conduct examinations for pilot licences and PECs has been delegated to harbourmasters, the harbour SMS should cover:

- arrangements for such examinations; and
- the Harbourmaster's responsibility to monitor the currency of pilot licences and PECs.

The SMS should also say whether the power to direct that a pilot be taken has also been delegated.

Marine services

Marine services in a port or harbour may be provided by a port operator directly or a third party. They include:

- the use of harbour craft such as tugs, pilot ships and workboats; and
- procedures for safe mooring and berthing.

Operators of commercial harbour craft are subject to the requirements of [Part 19](#) of the maritime rules. Their harbour operations should be conducted in accordance with their approved Maritime Transport Operator Plan.

General principles for marine services

The following general principles apply to marine services.

- The SMS covers the use of harbour craft and berthing procedures.
- The risk assessment should identify the need for, and potential benefits of the safe management of harbour craft.
- Providers of marine services align their operations with the port operator's SMS.
- Marine service employers and employees (including pilotage services) meet their obligations under the Health and Safety at Work Act, which include the management of fatigue and stress.

Tugs

The risk assessment and SMS should address how tugs are used as a means of reducing risk. For example, they may:

- escort ships – either actively or passively – to navigate in the harbour; or
- work together to reduce risks in berthing or navigation.

The risk assessment should also consider:

- the capacity of available tugs to berth ships safely;
- how to assist the navigation of ships within the harbour; and
- the experience of tug crews in the prevailing conditions.

Standard operating procedures for tugs

During the risk assessment and development of an SMS, the port operator should develop operational policies and standard operating procedures for the use of tugs. The procedures will be developed with safety in mind, and in consultation with the Harbourmaster, relevant users and pilots. They will take account of the physical environmental conditions of the harbour and the ports within it, and the types of ships using it.

The Master of the ship, in consultation with a pilot if one is being used, makes decisions about use of tugs for berthing, unberthing or as an escort.

Berthing

Following consultation with relevant parties, port operators develop standard berthing plans, which are submitted to the Harbourmaster to become part of the harbour SMS. Consultation should include the Harbourmaster, who has powers to regulate the berthing of ships in the harbour.

The plans should contain minimum agreed requirements, align with good industry practice and identify:

- limits on the depth and length of each berth;
- how the port operator will ensure that all wharves, including structures, decking, berthing facilities and bollards are suitable for the ships that use them;
- how wharves are properly inspected and maintained;
- configurations of mooring lines;
- procedures for handling mooring lines;
- provision of shore lines where appropriate;
- if they are provided by the port operator, the procedures for procurement, maintenance, testing and replacement of mooring lines;
- how lines crews are trained and supervised to ensure they meet industry competence standards; and
- any other relevant limitations.

The port operator, as owner of the wharf, is able to refuse a ship the right to berth if it seems unsafe to do so. For example, they may refuse if the Master of a ship is unwilling to use a tug, even when advised to do so by a pilot.

This right of refusal, which should be described in standard operating procedures, is used prudently and in consultation with the Harbourmaster.

Dangerous goods and harmful substances

Overview

The harbour and port SMSs address the safe handling and notifications of dangerous goods and harmful substances on board ships in the harbour and at the berth. This includes dangerous goods and hazardous substances that may be in transit to other locations but are not being loaded or unloaded.

Port operators and councils ensure that risks associated with dangerous goods and harmful substances carried aboard ships in their ports and harbours are managed effectively and that requirements in maritime and marine protection rules are complied with.

Dangerous goods are defined in [Part 24A](#) of the maritime rules as substances, materials and articles, in packaged form or in bulk, listed in the International Maritime Dangerous Goods Code and carried as cargo. Harmful substances are defined in [Section 225](#) of the MTA and the [Resource Management \(Marine Pollution\) Regulations 1998](#). They include:

- oil;
- noxious liquid substances in bulk;
- harmful substances in packaged form; and
- garbage and sewage as defined in the marine protection rules.

Dangerous goods: notification requirements

Under [Part 24A](#) of the maritime rules, the master of a ship carrying dangerous goods must give advance notice to the Harbourmaster of the ship's arrival at a port:

- at least 48 hours beforehand if on an international voyage; and
- as soon as practicable for a ship on a coastal voyage, but it must be before entering the harbour.

Harbourmasters may decide that they only wish to be notified for certain classes of dangerous goods (such as explosives or radioactive materials), or that the notifications can be made to another party instead, such as the port operator. Such decisions should be based on a careful consideration of the risks and in the context of the wider harbour safety obligations of councils.

Oil or noxious liquid substances in bulk: notification requirements

Under [Section 229](#) of the MTA and marine protection rules [Part 103](#), the master or owner of a ship must notify the Director or the council:

- 12 hours before their estimated time of arrival in a port or harbour if they are carrying oil or any noxious liquid substances in bulk; or
- not less than three hours and not more than 96 hours before their estimated time of arrival if they intend to transfer oil to or from their ship.

Requirements under other legislation

Some dangerous goods cargo may also be subject to other legislation:

- Approval is required from the Environmental Protection Authority (EPA) under [Section 51](#) of the Hazardous Substances and New Organisms (HSNO) Act for the transshipment¹³ of any hazardous substance that is not already covered by a HSNO approval or import certificate, or where the conditions of the approval cannot be met. The EPA consults port operators, harbourmasters and Maritime NZ when considering applications for approval. This process is additional to any requirements under Part 24A.
- Shipments of radioactive substances (Class 7) through New Zealand ports are subject to approval from the Ministry of Health Office of Radiation Safety.

¹³ "Transshipment" refers to hazardous substances arriving in New Zealand that will be subsequently exported within 20 working days. They may remain on the ship, or be unloaded and then reloaded again.

Other hazardous substances

Maritime NZ is responsible for the enforcement of both the HSNO Act and Health and Safety at Work Act on board ships but not on land within ports.

Hazardous substances that form part of a ship's stores and equipment such as refrigerants in refrigeration systems, paints, cleaning agents, compressed gases and hydraulic fluids are not treated as cargo, and so not covered by Part 24A. However, they are still subject to the HSNO Act.

Under the Health and Safety at Work Act, operators of ships must identify and manage hazards on board their ships (that is, in the workplace). This includes managing hazardous substances their crews may come into contact with.

On board a ship, hazardous substances should be managed through the ship operator's SMS:

- for foreign ships and New Zealand SOLAS ships, the International Safety Management (ISM) Code;
- for other New Zealand commercial ships, the Marine Operator Safety System (MOSS).

Hazardous substances in ports should be managed through the port operator's health and safety management system.

Emergency response

As part of their respective harbour SMSs, port operators and councils ensure that they have plans in place to deal with marine emergencies in their ports and harbours, and that those plans are regularly reviewed and exercised. This includes:

- dealing with fires on board a ship;
- emergencies caused by hazardous substances;
- a civil emergency, such as an earthquake or tsunami.

These plans may be part of a wider emergency response plan and likely to be integrated and co-ordinated with the plans of other agencies, such as the New Zealand Fire Service, New Zealand Police and Ministry of Civil Defence and Emergency Management.

Where port operators and councils operate commercial ships under the Marine Operator Safety System (MOSS), the emergency plans in their Marine Transport Operator Plan for the operation of their ships form part of their wider marine emergency plans. Councils also operate and exercise regional Tier 2 oil-spill response plans, which align with port and harbour marine emergency plans.

Marine pollution and ships in distress

Councils ensure that the powers available to harbourmasters in a marine emergency, which could result in marine pollution, are clearly understood and are appropriately exercised.

Oil spills

All oil spills must be reported by the Master of a ship to the Director or the council. Enforcement officers from Maritime NZ, harbourmasters and other council enforcement officers have powers to board ships to investigate possible offences.

Maritime NZ may detain a ship if they believe an offence has been committed such as discharging oil or a mixture containing oil. Such offences are in breach of either the MTA or the Resource Management Act 1991.

On-scene commanders appointed under the MTA can direct New Zealand ships to take appropriate action to reduce the harm caused by an oil spill.

The *New Zealand Marine Oil Spill Response Strategy* and marine protection rules describe the roles of ship and oil transfer-site owners, councils and Maritime NZ when responding to oil spills.

Wrecked, stranded or distressed ships

If a ship is wrecked, stranded or distressed, the Director can direct the master to take actions to preserve the ship, its crew and passengers, or its cargo ([Section 100](#) of the MTA). The Director can also direct the masters of nearby ships or other people in the vicinity to help.

Where the ship is within the jurisdiction of a council, directions given by a harbourmaster override the Director's orders under Section 100.

Harmful substances discharged into the sea

Where, as a result of an incident, a ship may cause a hazard by discharging harmful substances into the sea, the Director can declare that ship a 'hazardous ship' and issue directions to the Master, owner, agent or salvor of the ship ([Section 248](#) of the MTA). They can be directed to move the ship, deal with oil or cargo aboard, or take other salvage measures. The Director can also direct the masters of nearby ships to assist the hazardous ship.

Under [Section 254](#), the Director of Maritime NZ's instructions given under Sections 248 or [249](#) override conflicting instructions given by the Harbourmaster (or any other person) under [Part 3A](#) of the MTA or under any navigation bylaws.

Appendix 2: Glossary

Refer also to key terms and concepts in Part 1.

Aid to navigation means a device or system external to ships that is designed and operated to enhance the safe and efficient navigation of ships or other traffic in the harbour or port.

Code means the *New Zealand Port and Harbour Marine Safety Code*.

Code Application Assessment means a high-level risk assessment to determine where, and to what, operations and activities the Code will apply.

Director means the person who is for the time being the Director of Maritime New Zealand under [Section 439](#) of the Maritime Transport Act 1994 (MTA) and includes anyone acting under delegation.

IALA means the International Association of Marine Aids to Navigation and Lighthouse Authorities.

Incident means any occurrence, other than an accident, that is associated with the operation of a ship and affects or could affect the safety of operation. The terms **incident**, **accident** and **mishap** are defined in [Section 2](#) of the Maritime Transport Act (MTA) and have specific meanings.

International Safety Management (ISM) Code means the International Safety Management Code for the Safe Operation of Ships and Pollution Prevention which is mandatory under Chapter IX of the International Convention on the Safety of Life at Sea (SOLAS).

Marine operations are those operations and activities which facilitate the safe use of a harbour by ships. They include, for example, pilotage, use of tugs, communication between ships and the shore, the maintenance of aids to navigation and dredging within the harbour.

Marine Transport Operator Plan (MTOP) means a plan prepared by an operator of a New Zealand commercial ship required by [Part 19](#) of the Maritime Rules.

Maritime Operator Transport Certificate (MTOC) is a certificate required to be held by the ship operator.

Maritime Operator Safety System (MOSS) is the safety management regime for New Zealand commercial ships (generally less than 45 metres in length). The operators of these ships must hold an MTOC and have an approved MTOP.

Port company means a port company established under the Port Companies Act 1988.

Standard operating procedures document established procedures for a common operation or situation.

Ship means every boat or craft used in navigation, whether or not it has a means of propulsion, including:

- barge, lighter, or other light ship;
- hovercraft or similar craft; and
- a submarine or other submersible.

In this Code, ship has the same meaning as vessel.

Appendix 3: About Safety Management Systems

Under the Code, every harbour and port applying the Code develops and maintains its own Safety Management System (SMS).

A management system is the framework of structure, responsibilities, processes and procedures within an organisation that promotes effective working to achieve its objectives. Management systems provide for systematic setting of goals, planning and measurement of performance. A management system aims to enhance the operation of an organisation by standardising practices and fostering a culture of continuous improvement.

What makes an SMS **a system** is the deliberate linking and sequencing of processes to create a repeatable and identifiable way of managing safety. Corrective actions and system improvements flow from a cycle of monitoring, audit and review.

What makes an SMS **a management system** is the allocation of accountabilities, responsibilities and resources so effective decisions can be made on safety matters.

What an SMS is and what it is not

An SMS:

- is a system for managing safety in a sustainable way and fosters continuous improvement;
- includes managing the protection of people, property and the environment;
- is a planned, documented and verifiable method of managing hazards and associated risks;
- comprises a number of elements which work together as a whole;
- can be simple or complex, highly documented or sparingly described – it can be developed from scratch or based on an available model;
- should continue to evolve over time as the operating environment changes and to support continuous improvement in safety performance;
- guides the culture of work in ports and harbours and has a direct impact on how people do their jobs.

An SMS is not just a manual, a database or a reporting process – rather, these are all tools used in the SMS.

Documenting an SMS

Port companies and councils should determine how best to document and present their SMS.

There are no fixed rules about how an SMS should be documented. SMSs may be documented in different ways, reflecting that harbours and port operations are all different, and that port operators and councils manage their regulatory functions and business operations differently. The complexity of the SMS will reflect the complexity of the operations and activities it manages.

One approach to documenting an SMS is to prepare an “exposition” or high-level overarching document, which describes the system in overview, identifying all the different aspects of the system and how they all fit together.

The various elements of an SMS may be documented in different places and link into wider systems, such as the health and safety system, the financial system, operational management systems, and quality or environmental management systems.

The SMS should be kept as simple as possible so that it can be easily understood by all employees.

Relationship to Quality Management Systems (QMS)

While a quality management system may contain many elements of an SMS, a QMS typically does not include hazard identification and risk management, safety training and investigation, safety performance, monitoring or emergency response planning. An SMS can however be built on an existing QMS.