

# **Shetland Islands Council**

# Sullom Voe Marine Safety Management System (2019)



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# Shetland Islands Council

## Sullom Voe - Marine Safety Management System

The Shetland Islands Council (SIC) 'Sullom Voe Marine Safety Management System' provides the system by which the Port and Harbour of Sullom Voe complies with the requirements of The Port Marine Safety Code, referred to as 'the Code' within this document. The Code has been released by the Department of Transport (DfT) and is a supplemented by the Code's Guide to Good Practice. This document has been prepared using the latest version of the Code published in November 2016, and the accompanying Guide to Good Practice, published in February 2018.

The Sullom Voe Marine Safety Management System (MSMS) document is supported by a 'SIC MaSMS', which describes how SIC's marine policies are designed and implemented across all SIC Ports and Harbours. SIC also publish an 'SIC Marine Safety Policy' which provides a public statement of the Harbour Authority's policies and confirmation of the Code's adoption

Version	Date	Prepared By	Checked By	Checked by	Revision Approved By Duty Holder
1.0	January 2013	ABPmer: Monty Smedley Project Manager	ABPmer: Claire Brown Project Director	Designated Person: Capt Trevor Auld	Review copy
1.1	September 2013	ABPmer: Monty Smedley Project Manager	P M Morgan Deputy Harbour Master	C Reeves Harbour Master	11 October 2013
2.0	June 2015	S Skinner Port Safety Officer	P M Morgan Acting Harbour Master	M Irvine Pilot	28 August 2015
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# Glossary

ABPmer	ABP Marine Environmental Research Ltd
AIS	Automatic Identification System
ALARP	As Low As Responsibly Practicable
AtoN	Aid to Navigation
CCTV	Closed Circuit Television
CEO	Chief Executive Officer
CHA	Competent Harbour Authority
Code	Port Marine Safety Code
CPD	Continuous Professional Development
DfT	Department for Transport
FSA	Formal Safety Assessment
GLA	General Lighthouse Authority
Guide	Guide to Good Practise on Port Marine Operations
Health Check	
HRO	Intelligence led investigation to test compliance with the Code Harbour Revision Order
IHO	International Hydrographic Office
IMO	International Maritime Organization
Incident	Refers to Accident or Near Miss
INS	VTS Information Service
ISO	International Standards Organization
ISPS	International Ship and Port Facility Security
KPI	Key Performance Indicators
LLA	Local Lighthouse Authority
LOA	Length Overall
LoLo	Lift-on, Lift-off
MAIB	Marine Accident Investigation Branch
Marine Operation	
MarNIC	and approaches of a Harbour Authority
MarNIS	Maritime Navigation and Information Services
MCA	Maritime and Coastguard Agency
MGN	Marine Guidance Note
MSMS	Marine Safety Management System
NLB	Northern Lighthouse Board
NtM	Notice to Mariners
Organisations	CHA, Municipal Port or Harbour Authority, Trust Port or Harbour Authority, Private Port
	or Harbour Authority, and Marine Berths, Terminals or Jetties
PANAR	Ports Aids to Navigation Availability Reporting
PEC	Pilot(age) Exemption Certificate
PMSC	Port Marine Safety Code
POLREP	Pollution Report
QMS	ISO 9001 – Quality Management System
RCO	Risk Control Option
RNLI	Royal National Lifeboat Institution
RoRo	Roll-on, Roll-off
SHA	Statutory Harbour Authority
SIC	Shetland Islands Council
SMS	Safety Management System
SOSREP	Secretary of State's Representative for Maritime Salvage and Intervention





SOTEAG SVA	Shetland Oil Terminal Environmental Advisory Group Sullom Voe Association
SVHA	Sullom Voe Harbour Authority
TOS	VTS Traffic Organisation Service
TWG	Technical Working Group
UK	United Kingdom
UKHO	United Kingdom Hydrographic Office
VTS	Vessel Traffic Services
ZCC	Zetland County Council



## **Cross Reference Table**

PMSC - Section Name Background		PMSC – Subject Heading	PMSC Paragraph Reference	SIC Document Reference	
		Harbour Authority		SIC MSMS & QMS	
	0	Harbour authorities subject to the Code		SIC MSMS & QMS	
		Functions to which the PMSC Applies		SIC MSMS & QMS	
1	Accountability	Accountability	1.0	SIC Marine SMS	
	for Marine	The Duty Holder	1.1 – 1.10	SIC Marine SMS	
	Safety	The Designated Person	1.11-1.12	SIC Marine SMS & Page 6	
		Chief Executive	1.13	SIC Marine SMS	
		Harbour Master	1.14 – 1.15	SIC Marine SMS	
		The Authorities Officers	1.16 – 1.17	SIC Marine SMS	
2	Key Measures	Key Measures	2.0 -2.2	SIC Marine SMS & Page 6	
	Needed for	Review existing powers	2.3 - 2.6	SIC Marine SMS & Page 9	
	Compliance	Use formal risk assessment	2.7 – 2.11	SIC Marine SMS & Page 12	
		Implement a marine safety management system	2.12 -2.17	SIC Marine SMS	
		Competence standards	2.18	SIC Marine SMS	
		Incident investigation	2.19 - 2.23	SIC Marine SMS & Page 12	
		Statutory reporting requirement	2.24	SIC Marine SMS	
		Monitoring performance and auditing	2.25	SIC Marine SMS	
		Enforcement	2.12 -2.17	SIC Marine SMS	
		Publication of plans and reports	2.26 - 2.28	SIC Marine SMS	
		Consensus	2.29	SIC Marine SMS & Page 15	
		Monitoring compliance	2.30 - 2.32	SIC Marine SMS	
3	General	General duties and powers	3.0 - 3.2	Page 6	
·	Duties and	Open port duty	3.3 - 3.4	Page 9	
	Powers	Conservancy duty	3.5	Page 11	
		Environmental duty	3.6 – 3.7	Page 11	
		Civil contingencies duty	3.8	Page 12	
		Harbour authority powers	3.9	SIC Marine SMS	
		Revising duties and powers	3.10 - 3.11	SIC Marine SMS	
4	Specific	Specific Duties and Powers	4.0, 4.1	Page 9	
	Duties and	Appointment of harbour master	4.2	SIC Marine SMS	
	Powers	Bye-laws	4.3 – 4.5	Page 9	
		Direction (special)	4.6 -4.7	Page 11	
		Directions (general)	4.8 - 4.9	Page 11	
		Directions and passage plans		Page 13	
		Incidents threatening pollution and safety		Page 11	
		Dangerous vessels	4.10	Page 12	
		Dangerous substances		Page 12	
		Prevention of pollution		Page 11	
		Vessel traffic monitoring reporting		Page 11	
		requirements		Ũ	
		Drink and drugs		SIC Marine SMS	
		Vessel traffic services		Page 14	
		Pilotage	4.11-4.12	Page 13	
		Pilotage directions	4.11-4.12	Page 13	
		Pilotage exemption certificates	4.15-4.16	Page 13	
		Authorisation of pilots	4.13-4.14	SIC Marine SMS	
		Ship towage		Page 14	
		Collecting dues	4.14-4.17	Page 14	
		The General Lighthouse Authorities	4.21-4.24	SIC Marine SMS	
		Local Lighthouse Authorities	4.21-4.24	SIC Marine SMS	
		Wrecks	4.25-4.32	SIC Marine SMS	



# 1. Sullom Voe - Mission Statement

Sullom Voe Port and Harbour and SIC as Harbour Authority is committed to operating to the standard required in the Port Marine Safety Code and in accordance with the guidance provided in the Guide to Good Practice for Port Marine Operations. The Port provides outstanding port facilities and services, making use of the Port's physical advantages and key location in relation to the North Sea Oil and Gas industry and world trade routes.

In exercising its functions as Harbour Authority, the need for nature conservation and regard for other environmental considerations, including Habitats Directives requirements, will be recognised at all times.

Sullom Voe Port and Harbour and SIC as Harbour Authority fully meet its obligation to prevent damage to the marine environment through the activities of the Port. The Harbour Authority facilitates the safe use of the Harbour by legitimate stakeholders and recognises its duty of care against loss caused by the Authority's negligence.

Furthermore, the Harbour Authority strives to meet its responsibility for ensuring that sufficient resources are provided to enable the effective operation of policies, procedures and systems; recognising that proper discharge of the Authority's duties will otherwise be compromised.



# 2. Introduction to Sullom Voe

The Port's Marine Safety Management System (MSMS) endeavours to reduce the risks arising from the day-to-day operations in the harbour and pilotage areas to a level 'as low as reasonably practicable' (ALARP). In accordance with the requirements of the Code, the Port has undertaken, in consultation with its stakeholders, a Formal Risk Assessment of the hazards in the port, assessed the associated risks, and introduced or verified control measures, to minimise those risks.

To ensure the control measures remain valid, it is essential that all the Port's stakeholders (including Marine staff, Pilots, Tug Masters, agents, fishing community etc) advise the Harbour Authority of 'potential marine hazards' that, in their opinion, could indicate a weakness in a particular control measure or risk assessment. This is an iterative process, and will only be effective if all stakeholders participate. The goal is to achieve an incident free harbour and pilotage area.

SIC, as Harbour Authority, has published a Marine Safety Policy confirming commitment to the Code. In addition, SIC provides a MSMS document setting out how policies are implemented across all SIC Ports and Harbours. Sullom Voe acknowledges the contents of these documents in preparing this local MSMS and should be read in conjunction with the SIC MSMS.

This document sets out the local detail of how the policies are implemented in Sullom Voe. The Sullom Voe MSMS is closely linked with, and is dependent upon, a number of other policies, plans, procedures and documents. Wherever relevant, referenced documents have been cited.

## 2.1. Components of the Sullom Voe MSMS

In addition to this local MSMS document, a range of SIC policies, directives, manuals and legislation form part of the Port's complete MSMS, and are available to SIC Marine Staff, and where relevant, externally to stakeholders. A description of each of these documents is tabulated in Appendix A.

To aid comparison of the MSMS with the requirements of the Code, subject headings are identified with bracketed numbers to indicate the PMSC section(s) addressed by the subsequent text. For example, "Sullom Voe Safety Management System Detail (3.1 - 3.2)" indicates that the text following the subject heading relates to the requirements detailed within section 3.1 to 3.2 of the Code.

## 2.2. Sullom Voe Description

Sullom Voe Port and Harbour provides berthing and handling facilities for a range of commercial operations. Predominantly, the commercial vessels using Sullom Voe is tanker traffic using the four berth Oil Terminal. Sullom Voe accepts vessels up to 365 metres LOA as a matter of routine, with larger vessels being accepted on a case-by-case basis. Tankers can load to a maximum draught of 16.8m at Jetty 1, 22.1m at Jetty 2, 24m at Jetty 3 and 22.6m at Jetty 4. Sullom Voe also has a construction berth, which is used by a range of vessel types up to 120 metres, delivering material for building work, aggregates or machinery and operates as a Lift-on, Lift-off (LoLo) berth and Roll-on, Roll-off (RoRo) berth.

The Port Administration Building, from which all marine operations are monitored and controlled, is located on Sella Ness. From this location, a second port area has been established for service craft which include harbour towage, workboats and pilot boats. All of these craft are owned and operated by SIC as Harbour Authority.





The Zetland County Council (ZCC) 1974 Act (as amended) identifies the Statutory Harbour Area (SHA) boundary in Schedule 1 (as amended by the 1980 HRO):

'The entire area of Yell Sound and Sullom Voe and adjacent inlets within a line commencing at Ell Wick thence in a northerly direction along the line of low water mark on the west side to a point in latitude 60° 38' 18n north, longitude 01° 18' 18''' west on the line of low water mark at the northern extremity of the Point of Fethaland, thence in an easterly direction following a straight line to a point in latitude 60°38'14" north, longitude 01° 11' 08'' west on the line of low water mark at the northern extremity of Fogla Lee on the Island of Yell, thence generally in a southerly and easterly direction along the line of low water mark on the east side to a point in latitude .60° 29' 09'' north, longitude 01° 05' 48'' west on the line of low water mark at the southeastern extremity of the Ness of Copister, thence in a southerly direction to a point in latitude 60° 28' 41'' north, longitude 01° 05' 58'' west on the line of low water mark at the south-eastern extremity of Orfasay thence in a south-westerly direction following a straight line to a point in latitude 60° 27' 44'' north, longitude 01° 08' 22'' west on the line of low water mark at the souther extremity of Samphrey Island, thence in a westerly direction following a straight line to a point in latitude 60° 27' 45'' north, longitude 01° 01° 01' 49'' west at the root of Mossbank Pier and thence generally in a northerly and southerly direction following the line of low water mark' to the point of commencement'.

The Sullom Voe SHA boundary, Competent Harbour Authority (CHA) and Vessel Traffic Services (VTS) boundary are identical. These are shown on Figure 1 (Sullom Voe Port and South East Approach) and Figure 2 (Sullom Voe Harbour area and North Approach).

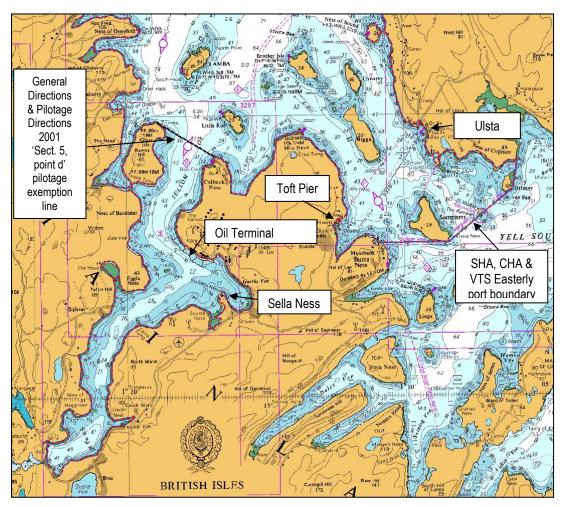


Figure 1. Sullom Voe Port and South East Approach

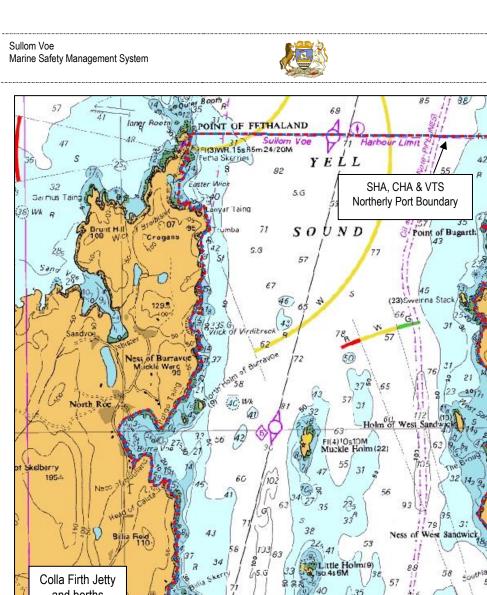




Figure 2. Sullom Voe Harbour area and North Approach

The Sullom Voe Harbour boundary includes all of Yell Sound, but excludes direct traffic control over vessels passing through (transitory vessels). This is specified in the extension of Sullom Voe's Harbour boundary in the Section 63 of the ZCC 1974 Act (as amended), see Table 1 for more details. Other port locations within the Sullom Voe Harbour area include the Pier at Colla Firth which is owned and operated by SIC providing berths for small day fishing boats, leisure craft and one berth for a larger vessel, which is usually used by aquaculture vessels. Two further Piers are located within the harbour boundary for the Toft to Ulsta ferry (see Figure 1). Additionally, there is a defined anchorage within Colla Firth which is available to commercial non-tanker traffic by prior notification and arrangement with VTS.

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## 2.3. Sullom Voe Harbour Act and Amendments

SIC is the Harbour Authority for the Sullom Voe as identified through the ZCC Act 1974 and subsequent Acts, Orders and Statutory Instruments which have amended the original Act. The enabling ZCC Act references other established Acts of Parliament which provide overarching legislation, including the 'Harbours Docks and Piers (Clauses) Act 1847' and the 'Harbours Act 1964'. Subsequently, the 'Pilotage Act 1987', and the 'Docks Regulations 1988' also provide key duties and powers to Harbour Authorities. The Acts shown in Table 1 are of key importance in relation to the SIC's duties and powers as Harbour Authority in respect of Sullom Voe.

Act Year	Act Name	Description of Powers
1974	Zetland County Council Act (ZCC)	Established the Sullom Voe and Baltasound Harbour Areas, and provision regarding Harbour Authority duties and powers. This is the establishing (Special) Act creating the Statutory Harbour Authority area.
1980	Sullom Voe Harbour Revision Order (HRO)	Extended the Statutory Harbour Area of Sullom Voe within which the SIC exercise jurisdiction as harbour authority and within which the powers of the Harbour Master shall be exercised, to include the entirety of Yell Sound, Sullom Voe and adjacent inlets and amends Schedule 1 of the ZCC 1974 Act. However, it should be noted that Section 63 of the ZCC Act (as amended) states that: 'This Act shall not extend to [subject any person to liability for charges] in respect of vessels which merely pass through the limits of a harbour area without making use of any facilities provided by the Council or by a licensee'.
1987	The Sullom Voe, Shetland, Pilotage (Amendment) Order	This order came into force on 3rd June 1987; established a two part Pilotage District, in which pilotage is compulsory in Part 1 (Yell Sound/Sullom Voe). Part 2 is the area of Yell Sound to the east of a line drawn between North Western extremity of the Ness of Sound to the Northern extremity of Uynarey Isle. Note: not considered to have any legal effect; see explanation in text in report Section 2.3.1.
1994	The Shetland Islands Council Harbour Revision Order (HRO)	Repeal (removal) of Clause 68 from the ZCC Act which stipulated the formation of a 'Harbour Advisory Committee'.

#### Table 1.Sullom Voe Related Harbour Acts

#### 2.3.1. The Sullom Voe, Shetland, Pilotage (Amendment) Order

Under powers granted pursuant to the Pilotage Act 1983, pilotage districts 1 and 2 (First Part and Second Part) were established by 'The Sullom Voe, Shetland, Pilotage (Amendment) Order' 1987, and used the same Northern boundary for the harbour area, with an extended eastern boundary. In 1987 the Pilotage Act 1983 was repealed in full. It does not automatically follow that Orders made pursuant to an Act are also repealed. However, the effect of the Pilotage Act 1987 (which repealed the Pilotage Act 1983) was to replace the 'former pilotage districts' (pilotage districts within the meaning of the Pilotage Act 1983) with a new mechanism for determining the areas for which pilotage services should be provided.

Through Section 1(1) of the Pilotage Act 1987, SIC fulfils the requirements of sub-sections (a) and (b) to be considered a CHA within its SHA. Section 2 of the Pilotage Act 1987 imposes general duties on the CHA to consider whether any and, if so, what pilotage services need to be provided to secure the safety of ships navigating 'in or near the approaches to its harbour', whether any services should be compulsory, and to provide such pilotage services as it considers need to be provided. The CHA can therefore impose pilotage services over the area of the harbour and in the approaches to the harbour. It was this latter provision which allowed SIC to extend the CHA beyond the usual limits of the SHA jurisdiction. Legally, the 'former pilotage district' is no longer valid and so neither is the 'The Sullom Voe, Shetland, Pilotage (Amendment) Order' 1987.



# 3. Sullom Voe Safety Management System Detail (1.1-1.10)

SIC is the Statutory Harbour Authority for the Sullom Voe and its approaches as identified through the ZCC 1974 Acts (as amended). SIC is also the Local Lighthouse Authority within the meaning of the Merchant Shipping Act 1995, and by virtue of the Pilotage Act 1987, is the CHA responsible for the provision of pilotage services. In all three capacities it is governed by Acts of Parliament, and answerable to Parliament should it exceed its powers or fail in its duty. It is subject (as a Statutory Authority), to the full range of review procedures.

The Harbour Authority has developed policies and plans in accordance with the standards set out in the Code. The policies and plans are based upon a full assessment of the hazards that have to be managed to ensure the safety of the port. Sullom Voe has adopted all the policies published by SIC in the Marine Safety Policy Document (which should be read in conjunction with this document).

This section describes the Marine Safety Management System (MSMS) for Sullom Voe, and considers the marine safety policies, plans and arrangements specific to the Port. Throughout this MSMS document the subject headings are identified with bracketed numbers to indicate the Code section addressed by the subsequent text, this provides an auditable cross-reference to the Code. For example, 'General Management Policy (3.3-3.4)' indicates that the text following the subject heading relates to the requirements detailed within Section 3.3-3.4 of the Code.

## 3.1. General Management Policy (3.3-3.4)

The Harbour Authority will support the commercial activities of Sullom Voe through the safe and efficient provision of pilotage and conservancy services and the regulation of shipping within harbour limits. The policy of the Harbour Board (the Duty Holder) and the SIC, as the Harbour Authority, in adherence to the Code is to:

- Take reasonable care, so long as the harbour is open for the public use, that all who may choose to navigate in it may do so without danger to their lives or property;
- Conserve and promote the safe use of the harbour, and prevent loss or injury caused by the authority's negligence;
- Have regard to efficiently, economy and safety of operation as respects the services and facilities provided; and
- Take such action that is necessary or desirable for the maintenance, operation, improvement or conservancy of the harbour.

SIC undertake to ensure that enough resources are available to discharge their marine safety obligations and set the level of [port] dues accordingly.

#### 3.1.1. Designated Person (1.11 – 1.12)

SIC has appointed a 'Designated Person' to provide independent assurance directly to the Duty Holder that the MSMS, for which the Duty Holder is responsible, is working effectively. The Designated Person has direct access to the Harbour Board, and is responsible for determining, through assessment and audit, the effectiveness of the MSMS system and compliance with the Code. The Duty Holder has appointed a Designated Person for Sullom Voe. The inter-relationship between the SIC Duty Holder, Designated Person and Port/Marine staff within SIC is shown in Figure 3.



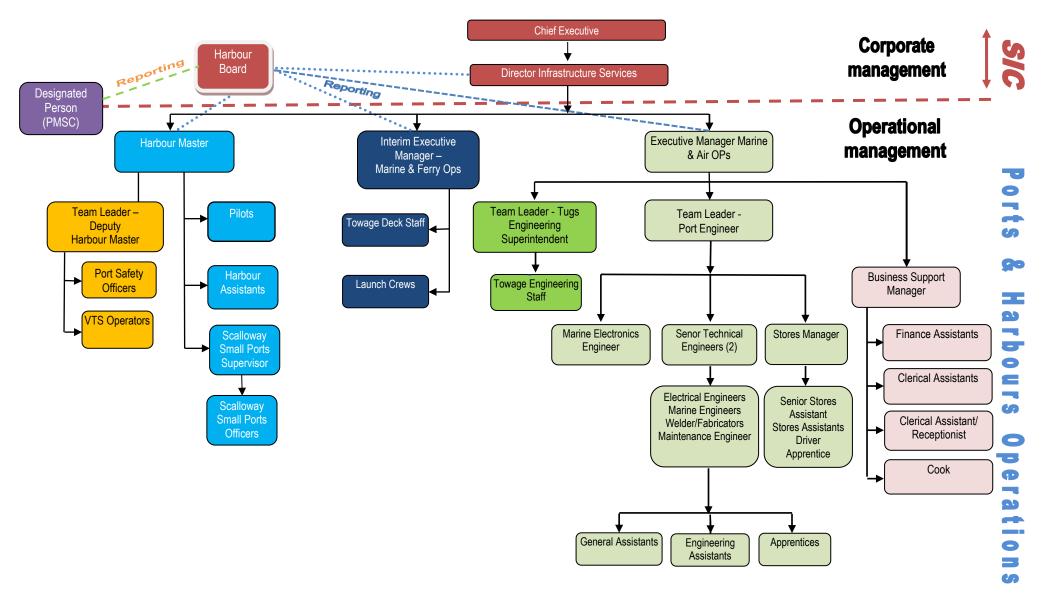


The Designated Person's contact information is:

- Captain Trevor Auld
- Email contact: <u>shetland@abpmer.co.uk</u>
- Phone number: 023 8071 1840 (request a member of the 'Shetland' team)



#### Figure 3. SIC Duty Holder and Designated Person Structure





## 3.2. Statutory Duties (3.0-3.2, 4.0-4.1)

Sullom Voe has statutory duties of both a general and specific nature in respect of:

- (a) The observation of Section 33 of the Harbours, Docks and Piers Clauses Act 1847 in respect of maintaining Open Port Duty;
- (b) Regulating the activities of other persons using its Ports and Harbours, in particular, regulating the movement and berthing of vessels by means of directions and Bye-laws;
- (c) The conservancy of the SHA areas including marking navigation channels, the removal of wrecks and other obstructions and maintenance dredging of navigational channels;
- (d) The provision and maintenance of harbour facilities, including; quays, wharves, piers, etc;
- (e) The provision of a pilotage service. The general duties for the provision of pilotage services are contained in Section 2 of the Pilotage Act 1987;
- (f) The prevention of pollution and the nature conservation its Ports and Harbours and adjacent coastline;
- (g) Ensuring as far as reasonably practicable, the safety at work of its employees and other persons who may be affected by its activity; and
- (h) Local measures for compliance with the Code detailed within this MSMS.

## 3.3. Existing Powers, Duties and Responsibilities (3.10-3.11)

The Code requires Harbour Authorities to review their powers to ensure they discharge their duties correctly, and do not exceed their powers. SIC, as Harbour Authority, has reviewed its powers and duties, and these are detailed within the SIC MSMS in Section 3.1 and subsequent sub-section. The following headings are addressed in the SIC MSMS and apply directly to Sullom Voe:

- Statutory Harbour Authority Powers [Section 4.1](3.3 3.4);
- Review of Harbour Authority Powers [Section 3.1] (2.3 2.6);
- Appointment of Harbour Master and Existing Powers [Section 2.1.5] (1.1 1.15);
- Competent Harbour Authority Powers [Section 4.6] (3.10 3.11);
- Detention of Vessels [Section 5.13];
- Local Lighthouse Authority Responsibilities [Section 5.11] (4.21 4.24); and
- Powers to Remove Wrecks [Section 5.12] (4.25).

#### 3.3.1. Sullom Voe Bye-Laws 2002 (4.3-4.5)

A Harbour Authority has a number of powers designed to regulate areas of marine activity, some of these powers will be supported through Bye-laws. The ZCC Act 1974 (as amended) provides Bye-law powers in Sections 44, 45 and 46. Section 44 'General Bye-laws.' states that:

(1) The Council may from time to time by byelaws make provision for any matter falling within their duties under section 5 (General duties) of this Act and in particular, but without prejudice to the generality of the foregoing, for any of the following purposes:

- (a) for securing the conservation and improvement of any harbour area as a navigable waterway and for promoting the ease and convenience of navigation;
- (b) for the regulation of vessels in a harbour area and their entry into and departure from the area and, without prejudice to the generality of the foregoing, for prescribing rules for



navigation and the lights and signals to be exhibited or made by or for the benefit of vessels navigating in a harbour area;

- (c) for regulating the use and for preventing the misuse of services and facilities provided by the Council at port premises;
- (d) for promoting the safety of persons and vessels at port premises;
- (e) for regulating the conduct of persons using a harbour area or its banks or shores whether for business, recreation, training or any other purpose;
- (f) for the prevention of nuisances in or beside a harbour area.

(2) Different byelaws may be made under this section in relation to different classes of vessels.

(3) Byelaws made under this section may provide for imposing upon persons offending against them fines not exceeding two hundred pounds and a daily fine of fifty pounds.

Section 45 'Bye-laws as to dangerous goods' states:

(1) The Council may make byelaws as to the loading and discharging by vessels within a harbour area of dangerous goods and generally as to the precautions to be observed with respect to vessels carrying dangerous goods while in a harbour area and such byelaws may in particular provide:

- (a) for regulating places at which vessels are to load and discharge dangerous goods and the time and mode of, and the precautions to be taken on, such loading and discharging;
- (b) for regulating the places at which vessels carrying dangerous goods are to be moored.

(2) If a person is charged with an offence against a byelaw in force under this section it shall be a defence for him to prove that the offence was not caused or facilitated by any act or neglect on his part, or on the part of any person engaged or employed by him and, if the person so charged is the owner or master of a vessel, that all reasonable steps were taken by the master to prevent the commission of the offence.

(3) Byelaws made under subsection (1) of this section may provide for imposing on persons offending against them fines not exceeding one hundred pounds.

(4) This section does not apply to dangerous goods to which byelaws made by the Council under the Explosives Act 1875 or the Petroleum (Consolidation) Act 1928 for the time being apply.

No Bye-laws made by SIC, as Harbour Authority, shall come into force until confirmed by the Secretary of State. Section 46 'Confirming authority for Bye-laws' states:

For byelaws made by the Council under this Part of this Act the confirming authority for the purposes of section 301 of the Local Government (Scotland) Act 1947 shall be the Secretary of State.

The current Sullom Voe Harbour General Bye-laws 2002 are divided into various parts, namely:

- Part 1 Preliminary;
- Part 2 Navigation;
- Part 3 Berthing and Mooring;
- Part 4 Goods and Road Traffic; and
- Part 5 General (Schedule of Harbour Area and Map).



#### 3.3.2. Direction (Special Directions) (4.6-4.7)

The Harbour Master is empowered to give Special Directions under Section 52 of the Harbours, Docks and Pier Clauses Act 1847 and Section 39 'Special directions to vessels' of the ZCC Act 1974 (as amended). The SIC SMS provides more detail in Section 5.3

The power to give Special Directions is also exercised by the Harbour Master's appointed deputies, the Deputy Harbour Master and the Team Leader Port and Marine Operations.

Those persons authorised by the Port Authority to act as Vessel Traffic Service Operator, in circumstances where Masters of vessels are required to follow directions for matters specific only to the Sullom Voe Harbour Area, can exercise the delegated authority of the Harbour Master to give Directions (Special Directions) for the purposes of navigational safety or traffic regulation. These powers are given to cover situations which may occur at any time when immediate action may be required.

#### 3.3.3. Direction (General Directions) (4.8-4.9)

SIC, as Harbour Authority, may issue General Directions under Section 38 of the ZCC Act 1974 (as amended). The SIC MSMS provides more detail in Section 5.4 In respect of Sullom Voe, SIC has issued the 'Sullom Voe General Directions and Pilotage Directions 2001'. The issuing of General Directions is subject to prior consultation with Harbour users.

#### 3.3.4. Conservancy Duty (3.6-3.7)

SIC outsources hydrographic survey service as required; which, in addition to the dredging programme and maintenance for aids to navigation are overseen by the Port Engineer and detailed in Section 4.3 of the SIC MSMS document. Also see Appendix A which refers to relevant plans for survey and dredging.

Small scale surveys including depth checks at berths are routinely carried out by SIC personnel and equipment. Any changes to charted depths noted are advised to the UK Hydrographic Office for amendment and to mariners by Notices to Mariners.

#### 3.3.5. Environmental Duty (3.8)

The SIC Marine Safety Policy document sets out and acknowledges SIC's duty to exercise its functions as a Harbour Authority with due regard to nature conservation and environmental best practice. This statement takes into account SIC's duties in relation to National, European and International requirements as a statutory undertaker, including the requirements of the Nature Conservation (Scotland) Act 2004 which places the duty on every public body and office holder in Scotland to further the conservation of biodiversity. These measures, as applied by SIC across all its Ports and Harbours, are detailed within Section 4.3 and 4.4 of the SIC MSMS document.

To enforce and monitor SIC's policy on Environmental Duties, Sullom Voe uses a range of measures which include active monitoring by VTS using CCTV and the vigilance of Marine Staff who are trained to report pollution within the Harbour. Any pollution or other events likely to affect the port environment are reported as necessary, and the Harbour Authority will take action according to its responsibilities as described in the following two plans:

- Shetland Islands Council Marine Pollution Contingency Plan; and
- Sullom Voe Harbour Oil Contingency Spill Plan.



The Sullom Voe website (<u>http://www.shetland.gov.uk/ports/contingencyplans</u>) contains contact information, and provides details of how to contact the Harbour Authority for routine and emergency matters. Reportable oil spills, following the Sullom Voe Oil Spill Contingency Plan, are reported using the POLREP form and sent to the MCA. Advice on environmental issues is also available from the Shetland Oil Terminal Environmental Advisory Group (SOTEAG).

Sullom Voe also recognises the requirement to give sanctuary to vessels, under the direction of the Secretary of State's Representative for Maritime Salvage and Intervention (SOSREP), where there is a risk to safety or pollution by hazardous substances. This power is exercised by the Secretary of State, through the office of SOSREP. The Secretary of State also has wide powers to take action, or authorise others to take action, where it is considered that issuing directions alone would be insufficient.

#### 3.3.6. Civil Contingencies, Dangerous Vessels & Substances (3.9, 4.10)

SIC, as Harbour Authority, addresses Civil Contingencies as a centralised function, and has prepared contingency plans as laid out in the "Major Emergency Plan", with Appendix E-9 and 10 'Action List' detailing the expected response by the Team Leader - Harbour Master and His Deputy under the Civil Contingencies Act (as amended). See Section 4.5 and 5.6 of the SIC Marine SMS for detail on Harbour Master powers for Dangerous Vessels and Substances.

## 3.4. Formal Risk Assessment (2.7-2.11)

Sullom Voe formally assesses risks and carries out reviews as described in the SIC MSMS. Responsibility for the maintenance of up-to-date risk assessments is the responsibility of the Deputy Harbour Master, as a delegated function of the Harbour Master, who ensures that all necessary competent staff and stakeholders are involved at all stages of assessment and review.

## 3.5. Incident Investigation (2.19-2.23)

Following an incident involving a collision, grounding, close-quarter (potential incident) or any other reportable incident within the Sullom Voe Harbour area, an Incident/Accident/Near Miss Form (SMSF-P-1001) contained within the SIC MSMS Procedures Manual) is raised and submitted together with any supporting evidence to the Harbour Master. The process followed by the Harbour Master for accident and incident investigation is described in the SIC MSMS Section 3.5 and following sub-sections. Where relevant, links will be made with risk assessments to ensure the process of incident investigation is reflective. In the event of an incident which could call into question the capability of a pilot under Section 3(5) of the Pilotage Act 1987, the Harbour Master will, on a formal basis, investigate the circumstances, collect reports, statements and other evidence, and report the facts with a recommendation to the Harbour Authority.

Accidents and incidents are now required to be reported to the MAIB. Additionally where appropriate Harbour Authorities must, so far as is reasonably practical, ensure that the circumstances of every accident are examined. The findings of such an examination, stating the measures taken or proposed to prevent a recurrence, must be provided to the Chief Inspector as soon as is practicable, irrespective of any investigation that may be conducted by the MAIB.



## 3.6. Pilotage (4.11-4.12)

 SIC is the CHA for the provision of pilotage services in Sullom Voe under the provisions of the <u>Pilotage Act 1987</u>, and covers the same area as defined for the SHA area (see Figure 1 and 2). Details of pilotage are given in Section 5.7 of the SIC MSMS.

#### 3.6.1. Pilotage Directions (4.11-4.12)

Sullom Voe Pilotage Directions are contained within the 'Sullom Voe General Directions and Pilotage Directions 2001'. Pilotage is compulsory for all ships navigating within the Sullom Voe Harbour area except those specified in Section 7(3) of the Pilotage Act 1987 and section 5 of the Direction 'Sullom Voe General Directions and Pilotage Directions 2001'.

'Sullom Voe General Directions and Pilotage Directions 2001', Section 5 states.

Without prejudice to the generality of the foregoing, the following ships shall be exempt from compulsory pilotage within the Sullom Voe Harbour Area unless as may otherwise be directed by the Harbour Master:

- (a) All ships of not more than 300 GT which do not have on board dangerous substances to which the provisions of the Dangerous Goods in Harbour Areas Regulations 2016, as amended, apply.
- (b) All fishing vessels.
- (c) All tugboats operating as such exclusively within Sullom Voe Harbour Area.
- (d) All ships in transit through the Sullom Voe Harbour Area that do not pass south of a line joining the most northerly point of Gluss Isle and the most northerly point of Cal back Ness.
- (e) All ships engaged in hydrographic survey work, pipe laying, trenching, inspection or similar operations unless specifically required to take a Pilot by the Harbour Master.
- (f) All ships belonging to Her Majesty.
- (g) Ferries operated by the Shetland Islands Council.
- (h) Lights buoy tenders operated by the Lighthouse Authority.

Note: for 'Pilot Exemption Line' (point d from the above list) see Figure 1.

Pilotage Act 1987, Section 7 (3) states:

'A pilotage direction shall not apply to ships of less than 20 metres in length or to fishing boats of which the registered length is less than 47.5 metres.'

#### 3.6.2. Passage Plan

Passage planning is a primary risk control for regulating the movement of vessels within harbour waters. Passage planning for the Sullom Voe is carried out on SMSF-P-1001 & 1001(a) contained within the Sullom Voe Harbour Procedures Manual (see Appendix A for reference). For all vessel moves with an embarked Pilot, a Passage Plan is provided in advance, which addresses the specific transit. The Pilot to Master exchange is recorded on the Passage Plan and Pilotage chit with Pilot and Master retaining a copy each on completion of the act of pilotage. The Pilot files their copy of the signed passage plan in the VTS upon their return.



## 3.7. Towage

Towage is mandatory for all crude oil tankers upto and including 200m Length Overall (LOA) when entering or departing the Harbour. In addition, two extra tugs are mandatory for crude oil tankers exceeding 200m LOA, during any berthing operation. Details of towage arrangements are provided in SV-SMSP 2006 contained within the Sullom Voe Harbour Procedures Manual (see Appendix A for reference). The safe operation of harbour towage is detailed within the separate Sullom Voe Harbour Towage SMS (see Appendix A for reference).

For vessel types not detailed above, the need for towage will be identified in the passage plan, and agreed in advance with the Pilot and Harbour Master's department. The Harbour Master, in the instance of controlling marine risk, may direct a vessel to take towage through powers of Special Direction.

## 3.8. Vessel Traffic Services

Harbour Authorities have the power to establish Vessel Traffic Services (VTS) to mitigate risk, enhance vessel safety and to protect the environment. To be recognised as a VTS, the service must conform to IMO and National standards, and be operated by personnel trained to the appropriate standard. In considering the need to establish VTS, guidance is available from the MCA as issued in the MCA's Marine Guidance Note (MGN 401) 'Navigation: Vessel Traffic Services (VTS) and Local Port Services (LPS) in the United Kingdom'. SIC currently run a VTS for the Sullom Voe Harbour area which is identified as a Traffic Organisation Service (TOS) and Information Service (INS) within the boundaries identified in Figures 1 and 2. The type and level of harbour information, monitoring and control is reviewed by SIC on a regular basis through the TWG, to ensure the service provided meets the needs of the harbour.

## 3.9. Collection of Dues (4.17-4.20)

SIC have the power through the Harbours Act 1964 to collect dues from users of the Harbour. The collection of dues forms an important aspect of safety management, by providing the necessary resources to discharge Harbour Authority duties in respect of the Code. SIC's power to levy and collect dues also extends to any vessel using pilotage services through the Pilotage Act 1987. SIC's power to levy dues and pilotage charges are subject to the statutory right of objection to the relevant Scottish Minister.

## 3.10. Fishing and Recreational Navigation

Good management, use of appropriate powers and stakeholder consultation are all needed to strike a balance between the recreational and commercial use of the port. Recreational navigation in the Sullom Voe is limited; however pleasure boats do use pier and jetty facilities at Colla Firth and Ulsta. The predominant traffic is small day-fishing boats, with yachting and small craft (kayaks) in the summer months. The Sullom Voe Bye-laws provide the main formal statutory mechanism for managing recreational navigation.

Potential conflicts between commercial, fishing and recreational users have been identified through the risk assessment process, Control measures are in place to minimise conflicts. These include regular consultation with user groups and a number of formal marine traffic controls:

- Buoys and lights mark the principal channels;
- Sullom Voe VTS provides 24-hour monitoring; and
- Website information for Port and Harbour users.



Recreational event organisers should consult with the Harbour Master at the earliest opportunity. Moreover, formal approval will generally only be given in the light of a proper risk assessment to be conducted by the event organiser. Before approving the event the Harbour Master satisfies himself that any risk to navigation or other port users has been effectively mitigated and reduced to levels which are ALARP. Any requirement for additional Harbour Authority resources (for example, additional navigational marks, escort craft, marine event officers etc) would normally be made available at the expense of the event organiser. Having conducted a risk assessment and following any advice or requirement of the Harbour Master, the event organiser is required to promulgate clear details of the event, including where appropriate:

- Names and contact details of event organisers and officials;
- Timetable and programme of events;
- Arrangements for controlling the event, including any special communication;
- Any navigational constraints being imposed, such as restricted areas, or partial port closures;
- Emergency arrangements;
- Media arrangements; and
- Appropriate insurance.

In order that the co-operation of recreational users is best assured, the Harbour Authority regularly consults with them through liaison meetings and participation in working groups and committees. Details of established consultation groups are provided in Section 3.11 'Consensus'.

## 3.11. Consensus (2.29)

The Harbour Master carries out a range of consultation on behalf of Sullom Voe Port and Harbour. This consultation includes port operatives, port users and stakeholders. A schematic layout of the public facing consultation and SIC internal meetings with stakeholders is provided in Figure 4. These meetings include the TWG, Tug and Pilot boat Meetings and liaison group meetings with Fishing, Leisure, Major Port Users, Environment and Emergency Response. All meetings are minuted and recorded.

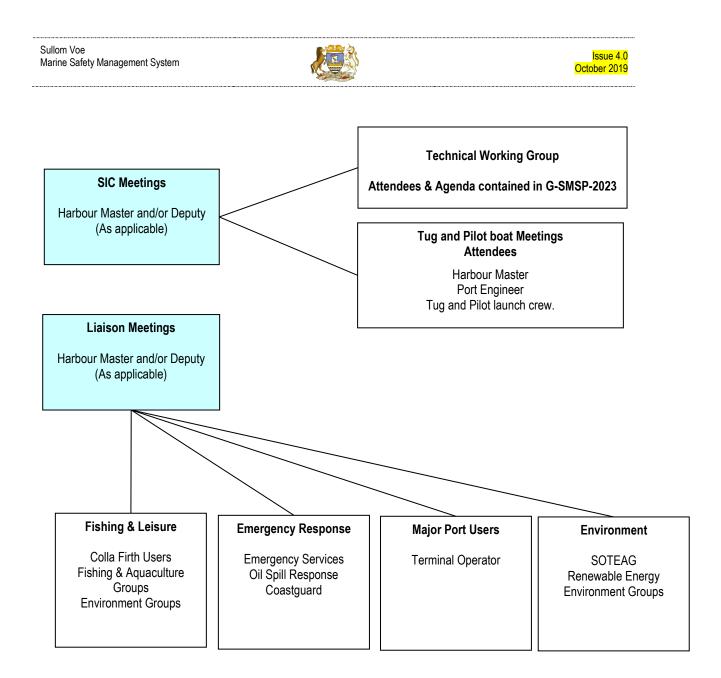


Figure 4. Sullom Voe MSMS - Committee, Meetings and Liaison Groups



# 4. References

Department for Transport. Port Marine Safety Code. Department for Transport, November 2016

Department for Transport. A Guide to Good Practice on Port Marine Operation - Prepared in Conjunction with the Port Marine Safety Code. Department for Transport, February 2018.

Her Majesty's Government, 1847. 'Harbours, Docks and Piers Clauses Act 1847'

Her Majesty's Government, 1928. Petroleum (Consolidation) Act 1928

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Her Majesty's Government, 1987. 'Pilotage Act 1987'

Her Majesty's Government, 1995. 'Merchant Shipping Act 1995'

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Her Majesty's Government, 1974. 'Zetland County Council Act' (ZCC) Act 1974 (as amended) <u>http://www.legislation.gov.uk/ukla/1974/8/pdfs/ukla\_19740008\_en.pdf</u>

Her Majesty's Government 2003. Marine Safety Act 2003

Her Majesty's Government 2012. 'The Merchant Shipping (Accident Reporting and Investigation) Regulations 2012'. <u>http://www.legislation.gov.uk/uksi/2012/1743/pdfs/uksi\_20121743\_en.pdf</u>

Her Majesty's Government 2013. Marine Navigation Act 2013

International Maritime Organization (IMO), 2002. 'Guidelines For Formal Safety Assessment (FSA)'. International Maritime Organization, 2002.

International Maritime Organization (IMO), 2008. 'Adoption Of The Code Of The International Standards And Recommended Practices For A Safety Investigation Into A Marine Casualty Or Marine Incident (Casualty Investigation Code)'. May 2008 Resolution MSC.255(84)

International Hydrographic Office (IHO), 2008. Standards for Hydrographic Surveys (SP44), February 2008

Maritime and Coastguard Agency (MCA), 2009. Navigation: Vessel Traffic Services (VTS) and Local Port Services (LPS) in the United Kingdom. Marine Guidance Note - MGN 401 (M+F). Maritime and Coastguard Agency, September 2009.

Shetland Islands Council (SIC), 2001. 'General Directions and Pilotage Directions'. Sullom Voe Harbour Area.



# Appendix A. Sullom Voe - Marine Safety Management System Document Reference List

Shetland Islands Council (SIC) Documents, Plans and Procedures	
<ul> <li>SIC Quality Policy</li> </ul>	Issue 4 Ver 0 October 2019
SIC Marine Safety Policy	Issue 4 Ver 0 October 2019
<ul> <li>SIC Marine Safety Management System</li> </ul>	Issue 4 Ver 0 October 2019
<ul> <li>SIC Staff Training Matrices</li> </ul>	Constantly updated
<ul> <li>Port Engineering – Hydrographic Survey Schedule</li> </ul>	being created (Sept 2013)
Port Engineering – Procedures Manual	February 2014 Constantly updated
Emergency Plans	
<ul> <li>Shetland Islands Council – Emergency and Resilience Plan</li> </ul>	Under Review
<ul> <li>Shetland Islands Council – Marine Pollution Contingency Plan</li> </ul>	Issue 4, April 2015
Sullom Voe Harbour Oil Spill Plan	Issue 6 Ver 1, August 2018
Sullom Voe Documents	
<ul> <li>Sullom Voe – Harbour Procedures Manual (SIC staff only)</li> </ul>	February 2014 Constantly updated
<ul> <li>Sullom Voe – Towage Safety Management System</li> </ul>	Version 2, December 2010
<ul> <li>Sullom Voe – General Directions and Pilotage Directions</li> </ul>	6 April 2001
<ul> <li>Sullom Voe – Waste Management Plan</li> </ul>	under review (Nov 2019)
<ul> <li>Sullom Voe – Navigational Risk Assessments (MarNIS database)</li> </ul>	Ongoing
Sullom Voe – Accident/Incident Database (Port Information System database)	Ongoing
Legal / External Documents	
<ul> <li>Zetland County Council Act 1974 (as amended)</li> </ul>	1980
Sullom Voe General Bye-laws	05 August 2002
Port Marine Safety Code	November 2016
<u>A Guide To Good Practice On Port Marine Operations Prepared In</u> <u>Conjunction With The Port Marine Safety Code</u>	February 2018
Additional Published Information Includes:	
The latest versions of these documents, or any relevant current information is	
available on http://www.shetland.gov.uk/ports/sullomvoe/	
Local Notice To Mariners Note 1	Ongoing and as required
Note 1 - Latest information available on Sullom Voe Website: http://www.shetland.gov.uk/ports/sullom	voe/