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Input paper for the following Committee(s): check as appropriate Purpose of paper:

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**□** ARM **□** ENG **□** PAP **□** Input

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**□** ENAV **□** VTS **□** Information

Agenda item [[2]](#footnote-2) (from agenda) 8

Workplan Task Number / Technical Domain 2 1.2.4/1.2.7

Working Group WG 1…………………………

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Maritime Service Portfolios: Digitising Maritime Services

# Summary

The VTS Committee continues to work on an input on Maritime Services 1, 2 and 3 in response to a request from the e-Navigation Committee and its ongoing task relating to Maritime Service Portfolios.

The International Harbour Masters Association (IHMA) is working separately on Maritime Service 4 (MS4) and has received an updated version of a draft Guideline from the e-Nav correspondence group that offers draft text for MS4.

It is the view of IHMA that significant conflicts with VTS interests are reflected in the updated version of the draft Guideline on MSPs. IHMA believes that the VTS Committee should become more closely engaged with MS4 and also consider the potential conflicts and represent their concerns to the e-Nav Committee.

## Purpose of the document

The purpose of this document is to identify to VTS Committee members the potential conflicts with VTS interests in the developing Guideline on MSPs and suggests a proposed a course of action.

## Related documents

At VTS 44, the VTS Committee considered version 13 of an e-Nav draft Guideline on “Maritime Service Portfolios: Digitising Maritime Services”. IHMA has been copied on an updated version and it is anticipated that this will be posted on the e-Nav section of the IALA website and should be available for download before VTS 45. An extract showing the proposed text being offered to IHMA by e-Nav for MS 4 is copied at Annex A.

# Background

Requests from e-Nav to the VTS Committee for inputs on Maritime Service Portfolios (MSPs) were received in 2012 even before it became a formal task (Task 1.1.4 in the last session) on the VTS Committee in autumn 2015. After 6 years, this task has still not been concluded and it has been transferred into the current session.

Progress on this task has been slow, mainly due to uncertainties over the detail being sought by e-Nav. The current position is that e-Nav have circulated a draft Guideline on MSPs seeking input from the VTS Committee, specifically on the first three Maritime Services, with a view to forwarding a completed proposal to Council for approval. Concurrently, IHMA has been tasked by the IMO Sub-committee on Navigation, Communications and Search and Rescue (NCSR) to provide an input to the joint IMO-IHO Harmonisation Group on Data Modelling (HGDM) on MS 4 - Local Port Service (LPS).

The term Local Port Services was first introduced in the 2008 edition of the IALA VTS Manual and repeated in the 2012 edition. It was however removed from the 2016 edition. A new task has been raised for the current session for the VTS Committee to review Local Port Services with a view to reinstating the concept and formalising this in an IALA Guideline. IHMA has led separately on an input paper offering a draft Guideline in support of this new task.

# Discussion

## Local Port Services

Under the current IMO Resolution A.857(20), the provision of INS, NAS and TOS relate to the provision of information, the management and planning of vessel movements and the provision of assistance in vessel safety - specifically in the navigational context. Looking to the future and the ongoing review of this IMO Resolution, while consideration is being given to presenting these tasks functionally, there is no expectation that these basic principles will be significantly changed. In addition to its responsibilities for navigational safety and efficiency under the Resolution, it is common practice for a VTS to also act as a communications channel for exchanging other information relating to shore services and the general administration of a vessel’s arrival and departure.

The draft guideline on local services currently offered for VTS Committee consideration is based on the principles set out in the VTS Manuals of 2008/12. This identifies that local services may provide navigational information and may also act as a conduit for exchanging other information relating to shore services and the administration of arrivals and departures. It highlights that local services should not be expected to offer traffic organisation or navigational assistance and will not be staffed or equipped to do so. In this draft Guideline on Local Services, the previous title of “Local Port Services” is proposed as one of several options that may be used in referring to such a service.

It is noted, however, that the e-Nav Correspondence Group in its draft Guideline on Maritime Service Portfolios, has adopted the title of “Local Port Services” for Maritime Service 4 but have suggested an interpretation that diverges significantly from the concept that was reflected in the VTS Manuals of 2008/12 and is being carried forward in the current draft Guideline on Local Services that has been proposed to the VTS Committee. Far from reflecting a “local service” that is effectively just the “information” part of a VTS, it suggests the supply of port wide information and administration and yet also includes data provision for navigational information, traffic organisation and navigational asssitance that are already included in MS1, 2 and 3.

The capture of a digital data service that supports the supply of port wide information and administration is entirely valid but giving it a title of “Local Port Services” conflicts with the definition previously given in VTS Manuals 2008/12 and now being proposed in the draft Guideline on Local Services. It also includes the transmission of data that may equally be provided by a VTS. It is, therefore submitted that MS4 should be restricted to “Shore Services” and identified as the provision of data, some of which may be provided by either a VTS or Local Services. To avoid conflict, MS4 needs to be retitled and “Shore Services” is suggested as a more practical alternative.

Now that Local Services (or LPS) is back on the VTS Committee agenda and the clear link that exists between all of the relevant Maritime Services that are being considered by both the VTS Committee and IHMA , it is considered invidious for IHMA to be taking a separate lead on MS4 while the VTS Committee leads on MS1, 2 and 3. It is considered appropriate for the VTS Committee to take back liaison responsibilities for MS 4 so that a coordinated response can be given for all four of these Maritime Services.

## General MSP Terminology

There is a further principle in e-Nav terminology that confuses the aim. The definition of e-Nav highlights its main purpose as being the harmonisation of the collection, presentation and exchange of data in a digital form. It is fundamentally inappropriate for this process of data capture, presentation and exchange to adopt the same title as the Maritime Service it is supporting such as INS, TOS, NAS, MSI, Pilotage etc. This confusion is very clearly reflected in the conflict identified above for Local Port Services.

The solution is straightforward and that is to identify these services for what they are by describing them as “Digital Data Services” e.g. Pilotage Digital Data Service, Tug Digital data Service etc. Whilst the practical difficulty of making such a change and the probable need to refer this to IMO is recognised, without this change, confusion is likely to continue to the overall detriment of the e-Nav initiative.

# Action requested of the Committee

The Committee is requested to:

1. Consider taking back liaison responsibilities for MS 4 so that a coordinated response can be given for all four Maritime Services, MS1, 2,3 and4.
2. Consider developing a liaison note to go to the e-Nav Committee setting out high level concerns on the draft Guideline on MSPs, specifically those relating to terminology of Maritime Services.

**Annex A**

Extract MS4 of Draft MSP Guidelines as passed by e-Nav Correspondence Group to IHMA on 8 Aug 2018

|  |
| --- |
| IALA Guideline |

Maritime Service Portfolios:  
digitising maritime services

Edition 1.0

Document date

# INTRODUCTION

1. **Governing body, SERVICE PROVIDERS & STAKEHOLDERS**
2. **Defined areas for A PORTOFOLIO OF MS’s**
3. **MARITIME SERVICES**
   1. **MS 1 VTS Information Service (INS)**
   2. **MS 2 Navigational Assistance Service (NAS)**
   3. **MS 3 Traffic Organization Service (TOS)**
   4. **MS 4 Local Port Service (LPS)**

### **4.4.1 Submitting Organisation**

International Harbour Master Association (IHMA)

### **4.4.2 Description of the Maritime Service**

A port authority is a hub from which several types of maritime and terrestrial services are provided. A port is generally not the final destination of goods, it therefore needs to link with other mode of transportation (rail, truck, smaller ships) in order to ensure the fluid movement of goods to market. Port’s infrastructure and facilities are important links in the chain of intermodal transportation and to be capable to offer timely services, a port needs information on a ship’s transit from departure until time of arrival.

The size of a port and its status (local, regional, national or international) will influence the type and amount of services provided. These services include both maritime and shore sectors.

Table X.X - Examples of port services

|  |  |
| --- | --- |
| * **Maritime Services** | * **Shore Services** |
| * Notification/Documentation/Reporting | * Berthage |
| * Navigation (anchorage, pilotage, tug, etc.) | * Cargo Operations |
| * Safety & Security | * Fresh Water/Electricity/Waste/Repairs/Medical facilities/Shipping Agent/etc. |
| * Nautical information | * Bunkering |
| * Communication | * Linesmen |
| * Weather | * Intermodal transportation |

The combined services contribute to safe navigation, protection of the environment and the efficient movement of goods and people.

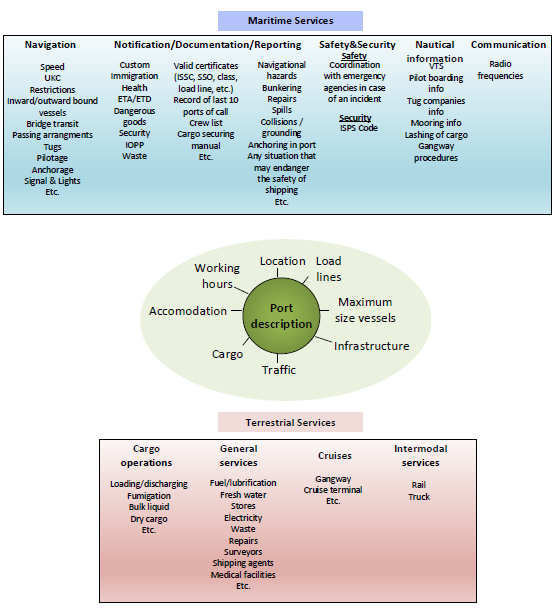


Figure x. Brief summary of services that may be provided by a port.

**4.4.3 Purpose**

The Local Port Service aims facilitating the exchange of information and coordination among key stakeholders during each phase of a ship transit. To promote an optimal coordination and efficient operations all along the transportation chain, the exchange of information must be done in a timely manner. This allows all actors involved in LPS to take specific actions at the right moment either to respond or to adapt to new situations, such as delay, premature departure/arrival, incident, etc.

All actors involved in a ship transit will benefit of a common information platform. Access to timely information at each phase of a transit will improve:

* Just in time arrival and departure
* Reduction in waiting time for berthing (anchorage)
* Reduction of fuel consumption and greenhouse gases
* Predictability for delivery of cargo to market
* Work schedules of services

A common communication platform will facilitate the fluid movement of cargo and persons, and contribute to a better and more transparent decision making process.

**4.4.4 Operational Approach**

An efficient LPS must allow all key stakeholders to access information they need during a ship transit. Sharing a common operational picture will optimize the decision-making process of each actor and facilitate adjustment whenever a situation is changing. A basic operational approach for LPS would be the development and utilization of a common electronic information platform.

This platform will require each actor to enter its own relevant data in a timely manner for the benefit of other actors (see Figure xx). For sensitive and/or confidential data, restrictions can be set to provide access only to actors that are requiring it.

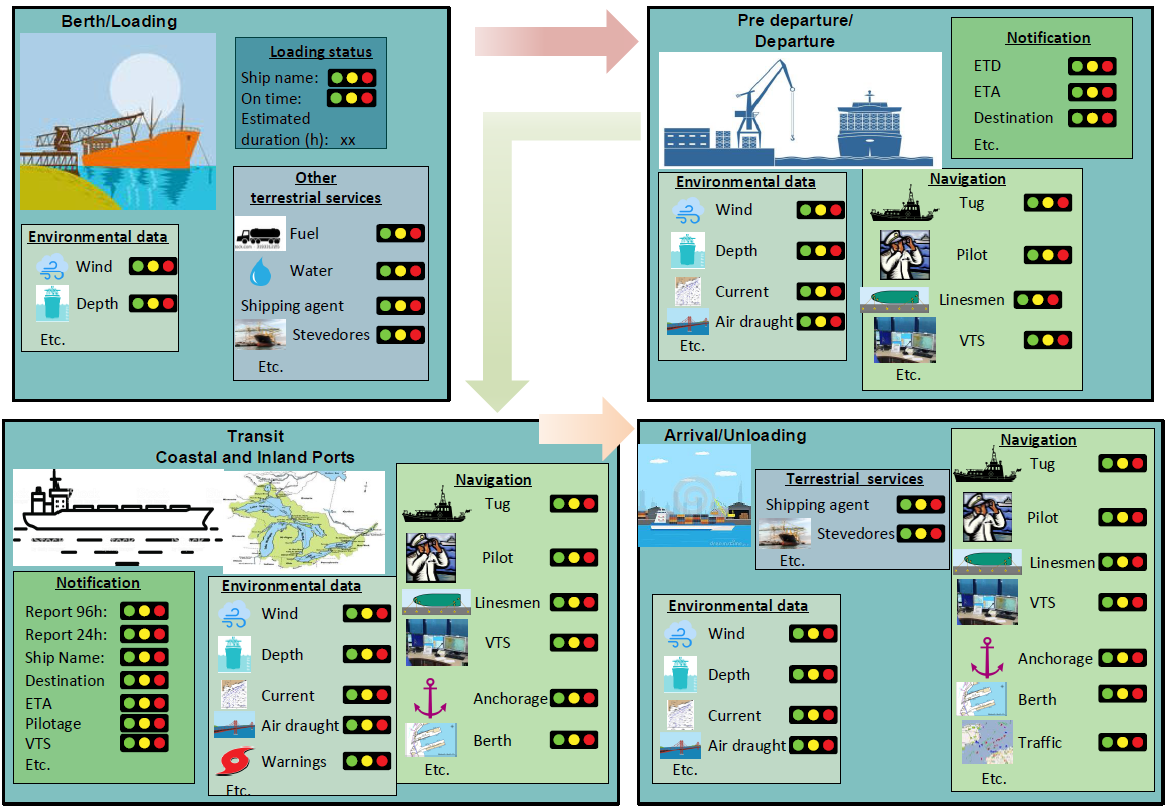
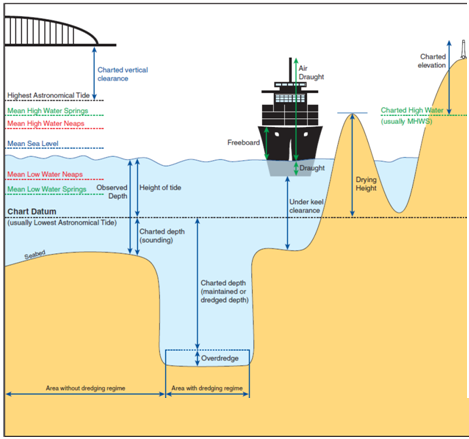


Figure xx. Examples of actors and data exchange that can contribute to a common LPS platform. Status of actions taken by each actor is illustrated by the lights (green, yellow and red).

Apart from the sensitive information, all other data should be accessible to all participants involved in the transportation chain in order to create the common operational picture. Given that an input from one actor might be critical for others’ decision and influence their inputs, a management process would need to keep the platform updated in real-time and to inform actors of status or give notification if required data is omitted. The port authority or another organization could assume the responsibility of monitoring the platform and the status of data entries.



* Figure 6 Terms for Vertical Measurement of vessels, depths and elevations. Identified in the IHMA and UKHO port information project.

**4.4.5 User Needs**

Provision of LPS is designed to improve coordination and exchange of information among stakeholders involved in a ship transit. The nature of this information is variable and has several purposes, for example safety, efficiency, protection of environment, fluidity of goods to market, etc. As such, user needs cover both maritime and shore information from departure to the time of arrival.

Table X.X – Examples of types of information provision that LPS can cover

|  |  |
| --- | --- |
| * **Information related to:** | * **Examples** |
| * Arrival and Berthing | * Examples of Arrival and Berthing information: * Port allocation * ETA / ATA * Time slot, with slot management to allocate ships in a time window; * Mooring information * Draft and limitations * Safety and limitations of traffic concerning vessel dimensions in comparison to fairway restrictions * Local warnings and restrictions |
| * Port information | * Examples of port information: * ISPS information * Water supply * Crane and other cargo handling arrangement * Waste handling * Fuel arrangement * Immigration * Custom clearance * Pilot information * VTS information * Reporting formalities |
| * Anchorage | * Examples of anchorage situations: * organizing the movements to/from an anchorage position/area; * assignment of an anchorage position; * assisting vessels into anchorage position. |
| * Enforcement | * Examples of enforcement: * speed limits; * adherence to rules regarding traffic routeing measures; * pilotage requirements; * other traffic regulations and possibly local by‐laws |

**4.4.6 Information to be Provided**

See Annex 4, MS 4 Local Port Service template

**4.4.7 Associated Technical Services**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| * **Name** | * **ID (MRN)** | * **Description** | * **Architect(s)** | * **Standardisation Body** |
|  |  |  |  |  |
|  |  |  |  |  |

**4.4.8 Relation to other Maritime Services**

This may be different depending on the coastal state arrangements.

|  |  |
| --- | --- |
| **Description** | **Examples of data that could be used in MS 4** |
| * MS 1 VTS IS | * VTS area, Type of VTS service, Contact to VTS, Information from sensors, radar, AIS, met, CCTV |
| * MS2 VTS NAS | * Information about vessel undertaking NAS |
| * MS3 VTS TOS | * Information about timeslots / ETA, route advisories |
| * MS 5 Maritime Safety Information | * All Safety related information |
| * MS 6 Pilotage Service | * Local Pilot boarding place and stations, Pilot regulations * Information from pilot booking system |
| * MS 7 Tug Service | * Tug operation, Available tug capacity |
| * MS 8 Vessel Shore reporting | * ETA/ATA, Cargo information, Incidents reports, Dangerous gods, Waste, Number of persons onboard |
| * MS 9 Telemedical | * Local address of medical centre and communication and Capacity |
| * MS 10 Maritime Assistance Service | * Information about vessels requesting relevant MAS * Incidents * Notifications, places of refuge |
| * MS 11 Nautical Chart Service | * Chart update information * Hinge resolution charts for the port * Notice to Mariners * Accuracy coverage characteristics * Contour line |
| * MS 12. Nautical Publications Service | * Local descriptions and publications. |
| * MS 13 Ice Navigation Service | * Ice forecast, Ice charts, Icebreaker services |
| * MS 14 Meteorological Service | * All meteorological information |
| * MS 15 Real Time Hydro and Information Service | * Sea state, Current, Wave, Moving sandbanks |
| * MS 16 Search and Rescue Service | * SAR situations and operations in local areas * Search and rescue capacity * SAR communication capability |

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Input papers should be assigned to a work task as listed in the Committee work plan which is available in input papers. Leave open if uncertain but consider how the paper is to be processed if not relevant to a work task [↑](#footnote-ref-2)