Paper for consideration by NIPWG1

Overview of the IMO e-Navigation items relevant to NIPWG work

Submitted by:	SNPWG Chair group
Executive Summary:	The IMO e-Navigation strategy and the relevant items for NIPWG
Related Documents:	NCSR 1/28, Annex 7
	IMO MSC 94/18/8
	MSC 94/18/10
Related Projects:	S-100, S-12x

Introduction / Background

The IMO e-Navigation concept bases on initiatives originated by the IMO and supported by many other maritime organisations such as the IHO, the IALA and BIMCO. The overall aim is to improve the safety at sea by providing needed information, in electronic format, to a ship's bridge team to enhance the safety and efficiency of the marine navigation.

As one necessary precondition, the improvement of the information exchange between the various stakeholders has been identified.

Consequently, the IMO developed a High Level Action Plan for the coordination of the e-Navigation work.
At the 94th session the Maritime Safety Committee (MSC94) approved the e-Navigation Strategy Implementation Plan (SIP) as the basis for the e-Navigation work.

Analysis/Discussion

MSC 95 endorsed **six** expected SIP outputs related to the development and implementation of e-Navigation. Those are:
1. guidelines on standardized modes of operation (S-mode);
2. an update to the revised performance standards for Integrated Navigation Systems (INS) (resolution MSC.252(83)) relating to the harmonization of bridge design and **display of information**;
3. a revision of the Guidelines and criteria for ship reporting systems (resolution MSC.43(64), as amended) relating to standardised and harmonized electronic ship reporting and automated collection of onboard data for reporting;
4. amendments to the General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids (resolution A.694(17)) relating to Built In Integrity Testing (BIIT) for navigation equipment;
5. guidelines on **harmonized display of navigation information** received via communications equipment; and
6. consideration of reports on development and implementation of **Maritime Service Portfolios** (MSPs) (and other e-navigation reports) by Member States and other international organizations.

The IHO identifies that SIP items 1, 2, 4, 5 and 6 may have impacts on the IHO work program. The items to be considered by the NIPWG are highlighted in bold in the list above.

Taking the above mentioned SIP item 6 into account, the following Marine Service Portfolios (MSP) should be considered by the NIPWG and should be one base of the future work related to e-Navigation:
1. (MSP 4) Local Port Service (LPS);
2. (MSP5) Maritime Safety Information Service (MSI);
3. (MSP 6) pilotage service;
4. (MSP 7) tugs service;
5. (MSP 8) vessel shore reporting;
6. (MSP 10) Maritime Assistance Service (MAS);
7. (MSP 11) nautical chart service;
8. (MSP 12) nautical publications service;
9. (MSP15) real time hydrographic and environmental information service.

"MSPs should consider operations in the following areas:
1. port areas and approaches;
2. coastal waters and confined or restricted areas;
3. open sea and ocean areas;
4. areas with offshore and/or infrastructure developments
5. polar areas; and
6. other remote areas.

"With respect to the above-mentioned areas, and with reference to communications requirements, it would be necessary to be aware of the existence of the GMDSS sea areas and any changes that could be made to these areas in the future."[1]

Conclusions

Some of the MSPs, such as MSP 11, 12 and 15 are directly related tom the HOs and their core services. Contrary to MSP 11, 12, and 15, some of the above mentioned MSPs may not be hydrographic services, although the HOs may provide information on them.

Although the IMO has identified responsible service provider for the remaining MSPs, appropriate Product Specifications developed by the NIPWG can be helpful to build up the basis and to establish proper services.[2]

Recommendations

Taking particularly tasks G and H of the new work plan endorsed by the HSSC6 in account, the NIPW should compare those with the IMO SIP item 6, relevant MSPs and discuss whether an extension or modification of the currently developed or planned NIPWG Product Specifications is proportionate.

Justification and Impacts

Action required of NIPWG1

The NIPWG1 is invited to:

a. note this paper,

b. specify new working items if appropriate.

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[1] http://www.iho.int/mtg_docs/com_wg/CPRNW/S100_NWG/2014/IMO%20BACKGROUND%20 RELATED%20TO%20THE%20DEVELOPMENT%20OF%20E-NAVIGATION.htm
[2] http://www.kystverket.no/Documents/e-navigation/Doc%201%20SIP.pdf