#### Hydrographic Services and Standards Committee

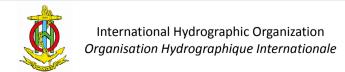
# IMO activities affecting HSSC Agenda item 7.2 HSSC11

### Maritime Services Descriptions

- NCSR6 agreed on a draft MSC circular on Initial descriptions of maritime services in the context of e-navigation. The circular includes what is intended to be the first draft of Maritime Service descriptions and is an initial contribution for the harmonization of their format and structure.
- The Initial descriptions are expected to be periodically updated, taking into account developments and related work on harmonization.
- Following a request by a number of delegations for a more active participation of IMO in the process of harmonization of maritime services, exercising its leading role, the Sub-Committee agreed that IMO should work in collaboration with Member States, and in partnership with other international organizations, in the further development and harmonization work related to the definition and structure of maritime services in the context of

## Maritime Autonomous Surface Ships (MASS).

- MSC approved the framework and methodology for the regulatory scoping exercise on MASS.
- The degrees of autonomy identified for the purpose of the scoping exercise are:
  - Degree 1: Ship with automated processes and decision support: Seafarers are on board to operate and control shipboard systems and functions. Some operations may be automated and at times be unsupervised but with seafarers on board ready to take control;
  - Degree 2: Remotely controlled ship with seafarers on board: The ship is controlled and operated from another location. Seafarers are available on board to take control and to operate the shipboard systems and functions;
  - Degree 3: Remotely controlled ship without seafarers on board: The ship is controlled and operated from another location. There are no seafarers on board; and
  - Degree 4: Fully autonomous ship: The operating system of the ship is able to make decisions and determine actions by itself.
- Circular Letter No.3945 Invitation to participate in Intersessional Working Group on Maritime Autonomous Surface Ships (MASS) (2 to 6 September 2019)



#### Comments on ECDIS

At the IMO-NCSR6 the UK Marine Accident Investigation Branch (MAIB) and the Danish Maritime Accident Investigation Board (DMAIB) presented a safety study into the use of ECDIS on board ships. The investigators embarked on 29 ECDIS-fitted vessels of various types: dredgers, buoy layers, general cargo ships, container ships, tankers and cruise ships.

Compilation of views of the interviewed deck officers in consideration of future ECDIS improvements:

- fewer alarms;
- bigger screens and more touch-screen and tablet technology;
- simpler systems (less complex menu structures);
- standardized interfaces such as keyboards;
- more integration (radar/digital publications/NAVTEX);
- increased contour density;
- the display of height of tide data;
- the display of MARPOL limits;
- better font/symbol size and colour;
- better palettes/contrast in all time of day modes; and
- faster internet.



- The HSSC is invited to:
- Note this report;
- note, the expectation that the description of Maritime Services, in the context of e-navigation, be periodically updated taking into account developments and related work on harmonization;
- consider how the IHO should be involved in the development of MASS concepts (for instance, supporting organization identified in the IMO MASS work plan, in particular to raise the importance of data quality factors for autonomous navigation, etc.).
- Take any other actions considered necessary.

