



Hydrographic Services and Standards Committee

HSSC-5

Agenda item 7.1

E-navigation developments affecting HSSC

IHB

# Background (1/2)

- ✦ 2006: MSC81 includes in the work programmes of NAV and COMSAR a high priority item on “Development of an e-navigation strategy” - target completion date: 2008
  - ↳ NAV establishes a correspondence group (chaired by UK)
- ✦ 2008: MSC 85 approves the strategy for the development and implementation of e-navigation (Annex 20 to MSC 85/26/Add.1) and the framework for the implementation of the strategy
- ✦ 2009: MSC 86 approves a joint plan of work for COMSAR, NAV and HTW for the period 2009-2012
  - ↳ NAV re-establishes the CG (chaired by Norway)



# Background (2/2)

- ✦ 2012: MSC 90 approves the outcome of NAV 57
  - overarching e-navigation architecture,
  - development of a Common Maritime Data Structure (CMDS)
  - use of the IHO's S-100 standard as the baseline for creating a framework for data access and services under the scope of SOLAS
  - establishment of an IMO/IHO Harmonization Group on data modelling
  - revision of a joint plan of work for COMSAR, NAV & STW; arget completion date for the work programme item "Development of an e-navigation strategy implementation plan" extended to 2014 (NCSR 1)
  - re-establishment of the CG under the coordination of Norway
- ✦ 2006: CHRIS agrees to monitor e-navigation developments "to ensure that work items of CHRIS and its WGs support e-navigation to the maximum extent possible".



# Status of e-navigation issues relevant to HSSC (1/2)

- ✦ Prioritized solutions and risk control options
- ✦ Detailed ship and shore architecture
- ✦ Maritime Service Portfolios
- ✦ Development of related guidelines
- ✦ Development of a strategy implementation plan (SIP)

↪ *See paper for details*



# Status of e-navigation issues relevant to HSSC (2/2)

## Main orientations:

- ✦ Architecture based on systems already in place
- ✦ Development of potential future carriage requirements should be strictly limited
- ✦ Focus on better integration of navigation information
- ✦ Further developments (including test-beds) based on S-100



# Impact on HSSC

- ✦ Secure the completion of S-100
- ✦ Consolidate and publicize the use of the S-100 Geospatial Information Registry
- ✦ Consider the need to further develop guidance documents for non-IHO users of S-100
  - ↳ activate the IMO/IHO Harmonization Group on Data Modelling, established by MSC 90 if/when required
- ✦ Specify and develop an S-101 based ENC environment for test-beds



# Impact on HSSC

- ✦ Specify and develop S-100 based MSI integration for test-beds
- ✦ Investigate further the integration of nautical charts and nautical publications in an S-100 based e-navigation environment and develop the relevant strategy including the specification and implementation of test-beds
- ✦ Assist the specification and development of S-100 based additional services for test-beds



# Impact on HSSC

- ✦ Introduce the revision of the relevant IMO Performance Standards and other instruments required to implement S-100 based products and services in ECDIS and other systems as a component of the e-navigation strategy implementation plan (see HSSC5-05.1D)
- ✦ [...]



# Impact on HSSC

- ✦ Consider ways and means to improve coordination with IMO and IALA such as:
  - establishing a sub-group on hydrographic matters/themes within the e-navigation CG to facilitate coordination on IHO issues
  - designating an IHO focal point to liaise with the IALA e-nav Committee



# Action required of HSSC

- ✦ Reflect the impact of e-navigation development:
  - In the structure of HSSC Working Groups
  - In the HSSC Work Plan

