

**2<sup>nd</sup> NCWG MEETING**  
**Monaco 26-29 April 2016**

**Paper for Consideration by the Nautical Cartography Working Group (NCWG)**  
**NCWG Input to the IHO Strategic Plan and IHO 3 Year Work Plan**

<b>Submitted by:</b>	NCWG Chair
<b>Executive Summary:</b>	The IHB and HSSC have asked each working group for input into the next IHO Strategic Plan and 3 year Work Plan which will be decided on at the next IHO Conference/Assembly. This paper seeks input on these matters from the NCWG and will be tabled at the HSSC Chair Group Workshop in June 2016.
<b>Related Documents:</b>	IHO Strategic Plan 2009 Decision #3 of the 5th EIHC NCWG Work Plan
<b>Related Projects:</b>	

### Introduction / Background

The XIX International Hydrographic Conference (IHC) is scheduled for April 2017. As part of the advance planning process, the chairs of the various HSSC working groups have been asked to provide input into the next 3 year Work Programme and the IHO Strategic Plan. The chairs of the HSSC working groups have agreed to meet in June 2016 to help prepare the committee's contribution.

At a high level the 2009 Strategic Plan outlines the objectives of the IHO and the strategic directions as agreed to by the Member States. However, since the strategic plan was initially approved in 2009, the comprehensive review of S-4 Part B has been completed, and the Working Group is transitioning towards a greater focus on the principles of nautical cartography as they apply to electronic charting products, particularly ENC. This should be reflected as part of the IHO Strategic Plan.

### Analysis / Discussion

In addition to providing updates to the IHO Strategic Plan, the other focus is to provide input into the next IHO Work Programme cycle. The yearly Work Program is reviewed at HSSC, but the underlying work program is tied to the overall IHO Work Programme which is approved at each Conference (Assembly if the new protocols take affect). As a result of the long period of time between overarching work program reports the most recent EIHC requested that Working Groups prepare a biannual report that informs the IHO MS of the following:

1. Current goals and priorities, and
2. Current or expected gaps and needs

The most recent NCWG report noted the following:

<b>Principal goals or priorities for your group</b>	<b>Current or expected gaps and needs that may prevent completion of tasks on time</b>	<b>Any amplifying comments</b>
(A) Maintain and extend Publication S-4 'Chart Specifications of the IHO & Regulations of the IHO for INT Charts' (IHO Task 2.3.2) and Maintenance of S-4 supplementary publications INT 1, 2 & 3 (IHO Task 2.3.2).	Issue with requirement to conform to IHO Resolution 2/2007 for S-4 and coordination of publication of associated (IHO adopted) national INT1 publications (DE, FR, ES).	Raised at HSSC7 (November 2015). Will be further discussed in association with NCWG detailed procedures at NCWG2 (April 2016) and at the HSSC Chair Group meeting (June 2016).
(B) Consideration of the future of the paper chart (NCWG Work Item A.16)	Likely retirement of the WG Chair may stall discussions.	Top priority work item assigned at HSSC7. Correspondence Group identified but little correspondence to date due to conflicting priorities of WG Chair. Discussion paper to be presented at NCWG2. It is hoped that the succeeding Chair* of the WG will be able to continue to progress this item.

(C) Maintain and extend Publication S-11 Part A, Guidance for the Preparation and Maintenance of INT Chart Schemes (IHO Task 2.3.2).	None.	Revised draft based on decisions and actions from HSSC7 to be presented at NCWG2.
(D) Development of new (and revised) symbology (IHO Task 2.3.2).	Actions HSSC7/18 and HSSC7/20 relate to ECDIS portrayal. The NCWG is in the early stages of transitioning from a focus almost exclusively on symbology for paper charts to providing subject matter expertise related to presentation and portrayal for all nautical charting products. This expertise in regard to ECDIS may take some time to build, and accessibility to S-100 test beds and test data will be required.	To be discussed at NCWG2. Liaison with other HSSC Working Groups such as the S-100WG, ENCWG and NIPWG; and consultation with expert contributors such as OEMs, is considered essential.

However, this report reflects only issues related to the current NCWG Work Plan, and are not a reflection of the future direction of the Working Group, which by necessity will be required to focus more on the requirements of nautical cartography for navigating on ECDIS; and electronic chart (ECDIS) symbology and portrayal. The HSSC has also instructed the NCWG to become involved in resolving issues of portrayal and interoperability with other products that may be displayed in addition to the ENC in ECDIS.

Therefore it would be helpful if the NCWG can help identify what the top five priorities will be of the NCWG program of work over the next 3 years, which can then be provided as input into the IHO Strategic Plan and 3-year Work Programme. The initial views of the Chair of the NCWG is that the following will be priorities for the Working Group (in no particular order) over the coming years:

- The future of the paper chart as a primary navigation tool.
- Transition to development and testing of ECDIS symbols in addition to paper chart symbols.
- Portrayal requirements related to display of other products in ECDIS in addition to ENC (interoperability).
- Changing requirements in nautical cartography for mariners navigating using ECDIS as their primary navigation tool.
- The future direction of S-4.

While these may be the initial views of the NCWG Chair, it is important to note that any input to the 3 year Work Programme and the IHO Strategic Plan by the NCWG must reflect the opinion of the entire Working Group. The NCWG is therefore requested to discuss the possible priorities for the Working Group listed above, and identify any other possible priorities that should be listed.

## Conclusions

HSSC Working Groups have been requested to provide input to the 3 year Work Programme and the IHO Strategic Plan for the XIX International Hydrographic Conference (IHC) to be held in April 2017. In order to best identify the priorities of the Working Group in this regard, the opinion of all members of the Working Group is requested. The results of this discussion will be presented at the HSSC Chair Group meeting in June for consideration.

## Recommendations

It is recommended that the NCWG discuss the future priorities of the Working Group in regard to input to the 3 year Work Programme and the IHO Strategic Plan using the priorities identified above as a starting point.

## Justification and Impacts

This discussion has the potential to have the opinions of the NCWG better reflected in the 3 year Work Programme and the IHO Strategic Plan.

## Action required of NCWG

The NCWG is invited to:

- a. **Note** this report.
- b. **Suggest** other priorities that may be included in the NCWG input to the 3 year Work Programme and the IHO Strategic Plan