

11th CHRIS MEETING
IHB, Monaco, 16-18 November 1999

STANDARDIZATION OF NAUTICAL PUBLICATIONS WORKING GROUP (SNPWG)

Summary of Discussions, Inaugural Meeting, IHB, Monaco, 13-14 September 1999

1. President's Opening Remarks

The President IHB RAdm Giuseppe Angrisano welcomed participants and pointed out that work was advancing on the delivery of chart information in electronic form, but that progress on information from other nautical publications was far less advanced. He noted that the Conference set up a digital Sailing Directions working group, but little progress had been made to date. However, this could be seen as an opportunity for this working group since there were no precedents already in place.

2. Election of Office Bearers

RAdm Neil Guy (IHB Director and acting Chairman for the meeting), indicated that there were two nominees for chairman/secretary, but both of these members were not in attendance. He went on to say that as neither nominee were able attended the previous meeting either, there might be some concern that the proposed nominees could progress the work of the WG speedily.

Capt. Roger Lowndes (UK) expressed a wish to see a CV for the nominees for chairman, given that neither candidate was known to the majority of the WG attendees.

After discussion it was determined that in the absence of the nominees, office bearers could not be elected by the meeting. The Chairman proposed that the appointment of office bearers should therefore be declared open once again, and invited MS to again nominate candidates, and said that the election should be conducted by correspondence.

Cdr. Robert Ward (Australia) was appointed as rapporteur for the meeting.

3. Opening discussion

Chairman opened by saying that the WG may need to divide its attention into two aspects – defining what is required in Digital Nautical Publication's (DNP's) and also what technical specifications/standards might need to accompany this. He suggested that there was an opportunity to set in place a new paradigm for digital DNP's.

Cdr. Ward suggested that current paper publications should be the logical starting point for DNP's because of the costs associated with recompilation. SNPWG should define user outcomes, provide guidance and limiting parameters but avoid detailed definition. Thus leaving maximum flexibility in how information can be delivered to users.

Mr. Johannes Melles (Germany) stated that they wished to see a new compilation of digital DNPs.

Mr. Randy White (USA - NIMA) supported the notion of using existing publications as a basis for digital publications. He likened this to the raster chart.

Capt. Lowndes supported both viewpoints, advocating that there was an opportunity for some lateral thinking however also acknowledging the reality that the current texts must be the realistic start point.

4. Summary of Digital Sailing Directions Seminar – Canada

Mr. Michel Huet (IHB) provided a summary of the meeting held in Canada in October 1998, and provided background, papers presented at that meeting, discussions and main outcomes. (See SNPWG/5A, 5B, 5E)

Discussion:

Capt. Lowndes reminded the WG that digital nautical publications (DNP's) currently service two communities: SOLAS and non-SOLAS.

Discussion took place on promoting the free exchange of information for NP's. There was general agreement that exchange was a good thing, but there were some constraints regarding commercial exploitation aspects. It was agreed that these would have to be addressed through bi-lateral arrangements between MS.

5. Summary of German Proposal

Mr. Melles provided a summary of a proposal for DNP's (see SNPWG/5C) that would provide information coherent and integrated with ECDIS and would avoid duplication of information or the provision of inconsistent products.

Discussion:

Capt. Lowndes suggested that the WG should consider what the mariner wants, and what does IMO require? He questioned whether the DSD information would be required throughout a voyage and suggested that it would probably require a common database, but not necessarily one product being equivalent to another. It was agreed that the first priority should be to define the core requirement rather than define how the information should be presented.

Mr. David D' Aquino (Italy) explained the C-Map concept of "port information" using an object orientated database as an extension of S-57. Information could be accessed by querying objects. This he said was easy to update and was proving to be popular.

Mr. Melles recommended that the aim should be for a chart and one nautical publication combining all information from current pubs containing all information not available from the chart.

6. Summary of French Paper

Capt. Norbert Blanluet (France) provided a summary of comments and their experiences on DNPs (see SNPWG/5D). SHOM especially stressed the need for coordination of NPs that overlap geographically.

Discussion:

The need to standardise content was highlighted so as to define the requirement for a single nautical publication.

7. Summary of NIMA Paper

Mr. White outlined current capabilities and plans for publication and maintenance of SD's within NIMA (see SNPWG/5G). He stressed the advantage of making incremental steps – perhaps standardisation of content, replication of current product in the first instance and thence move forward step by step. NIMA currently generate digital SD's in Portable Document Format (PDF), using word search as primary access mechanism. He also indicated that access to the information is restricted primarily to military users. NIMA SD's are seen as primarily a planning tool rather than a voyage monitoring data set.

8. Summary of Remaining Papers

The Chairman summarized the two remaining papers. SNPWG/5G highlights the enhanced capabilities of digital data sets- video playback, audio, etc. SNPWG/5H provides a mariners view of some of the user requirements.

9. The Way Ahead

Based on the discussions and general feelings expressed during the meeting up to this point, the Chairman provided a diagram, emphasising the use of a common data base from which various products/media/formats could be derived. (See Annex A - Figure 1).

Product 1 – current NPs.

Product 2 – digital version of current pubs.

Product 3 – digital Nautical Data (See Annex A - Figure 2).

It was agreed that all three products should be derived from a common database. The products were further defined later during the meeting (See paragraph 10).

The Chairman invited the working group to consider the issue of language. To follow ECDIS chart data base principles, DNPs might be in English and optionally in a local language. However, national interests and non English speakers should not be ignored. It was recognized that this would only occur where there was a demand from users. The question was raised as to what would happen in the instance where an NP was only available in a local language?

Mr. Huet proposed taking IHO resolution (SNPWG\8C) on content of SD's and validate this for current and interim products (Product 1 and 2) (See Annex A), thereafter concentrating on defining Product 3.

After discussion, it was decided that defining the requirements for integrated ECDIS and NP's was a good way of determining the final requirement, and hence what the differences between current NPs and future requirements would be.

Mr. Melles outlined in more detail the German proposal. He said that the BSH had already conducted a study project on integrating NP's into ECDIS (Product 3), and the study concluded that SD content could be divided into 26 thematic groups (See Annex C - List 1). He stated that redundant information should be eliminated by excluding duplicated information appearing both the NP database and on the chart. This would require a complete restructuring of nautical publications in order to allocate information into the thematic layers and get rid of redundant information and verbose language. Some new S-57 object classes would also be required.

Capt. Lowndes outlined a vision of what the user might want in an ECDIS of the future and mentioned that the type and level of detail of information required by the SOLAS class vessel, may differ significantly to that of a smaller non SOLAS class vessel. He

noted that what the mariner wants is often much less than what is currently provided. For example does the navigator of a SOLAS class vessel need port information, (which is handled by the Agent).

Mr. White cautioned that proposals should be tempered by reality. He advocated that the group should consider firstly moving towards an interim electronic product based upon the existing documents (i.e. Product2).

There followed a round table discussion to establish a list of information NOT required for digital NPs (See Annex B). This progressed to illustrate the difference between Product 2 and Product 3.

A short analysis of a typical extract from SD's indicated that much was duplicated and most (if not all) could be usefully incorporated in an ENC. It was therefore questioned whether there is a need for a dedicated SD in ECDIS? General view was probably not.

Mr. Huet suggested that if Products 2 and 3 were common in content then a content specification could be developed by the WG. Thereafter specifications for presentation could be developed for each product.

Capt. Lowndes stressed that the requirement to service raster/paper chart users, should not be forgotten. He added that this might be achieved by keeping information out of the ENC proper, and retained in the nautical information data base.

10. Conclusions

The meeting clarified Products 1,2 and 3, and this resulted in the following descriptions / definitions:

- Product 1: The authorised set of paper nautical publications containing nautical information produced in accordance with applicable IHO specifications.
- Prod 2 The authorised electronic set of all nautical information produced in accordance with applicable IHO specifications, not available on the authorised paper chart/RNC.
- Prod 3 The authorised electronic set of all nautical information produced in accordance with applicable IHO specifications, not available in the present authorised ENC (S57 Edition3.0 Product Specification) and to be used in ECDIS.

11. Work Program (See Annex C)

Capt. Lowndes presented the UKHO submission SNPWG/8B which included a proposed work program.

Topic 15a.- Proposed the revalidation of SOLAS and non SOLAS shipping for nautical publications. WG members are to revalidate the requirements (as promulgated in SNPWG/8G) by consulting relevant national authorities and focus groups as required.

Topic 15b.- Proposed that the existing IHO Technical Resolutions should be reviewed. After discussion it was agreed that previous conference resolution should be reviewed and revised in the light of Products 2 and 3 definitions and descriptions. This was considered for action by correspondence.

Topic 15e.- Not to be pursued

Topic 15f.- To determine technical formats for publication databases and output formats. It was agreed that the discussion of product formats could be conducted by liaison with the appropriate WG's and committees (e.g. TSMAD, Tidal Committee, MOI group, IEC/TC80, CSC, C&SMWG).

Topics 15c and g. – dealt with exchange of nautical publication information. It was agreed that the transfer format issue would be passed to TSMAD for consideration of defining/selecting a transfer format in S-57.

As a result of the work topics listed above, the meeting agreed on a program of work to be completed before the next SNPWG meeting (See Appendix C - List 2).

12. Further Discussion

Mr. Huet suggested that WEND principles should apply to geographical coverage and language. Additionally, consideration should be given to applying the language principles to Product 2, notwithstanding the cost and production implications.

The issue of whether, INT chart coordination and production principles apply to NP's was also raised. There was general agreement that WEND principles must apply to Product 3, but would be constraining if applied to Product 2.

It was agreed that any guidance documentation produced by the SNPWG should clearly identify the uses of the various products in combination with paper, RNC and ENC.

Mr. Melles indicated that he would provide electronic version of thematic groups breakdown. Mr. White and Capt. Lowndes agreed to forward similar schema to IHB for further dissemination by the WG.

13. Chairman and Vice Chairman

After discussion, it was agreed that the IHB would act as temporary office bearers until next meeting. Meanwhile, IHB will call for fresh nominations for Chairman and Secretary for the working group.

14. Next Meeting

It was agreed that the next meeting should be planned to take place in 2000 in tandem with an MOI Workshop, or TSMAD meeting if possible. (IHB to contact relevant groups and inform SNPWG members).

15. Amended TORs

It was agreed that revised SNPWG TOR's would be prepared by the IHB and will be considered by the next CHRIS (11) meeting (IHB, November 1999).

There being no further points to be discussed, the meeting adjourned at 15:30 on 14 September 1999.

Standardisation of Nautical Publications Working Group IHB Monaco September 1999

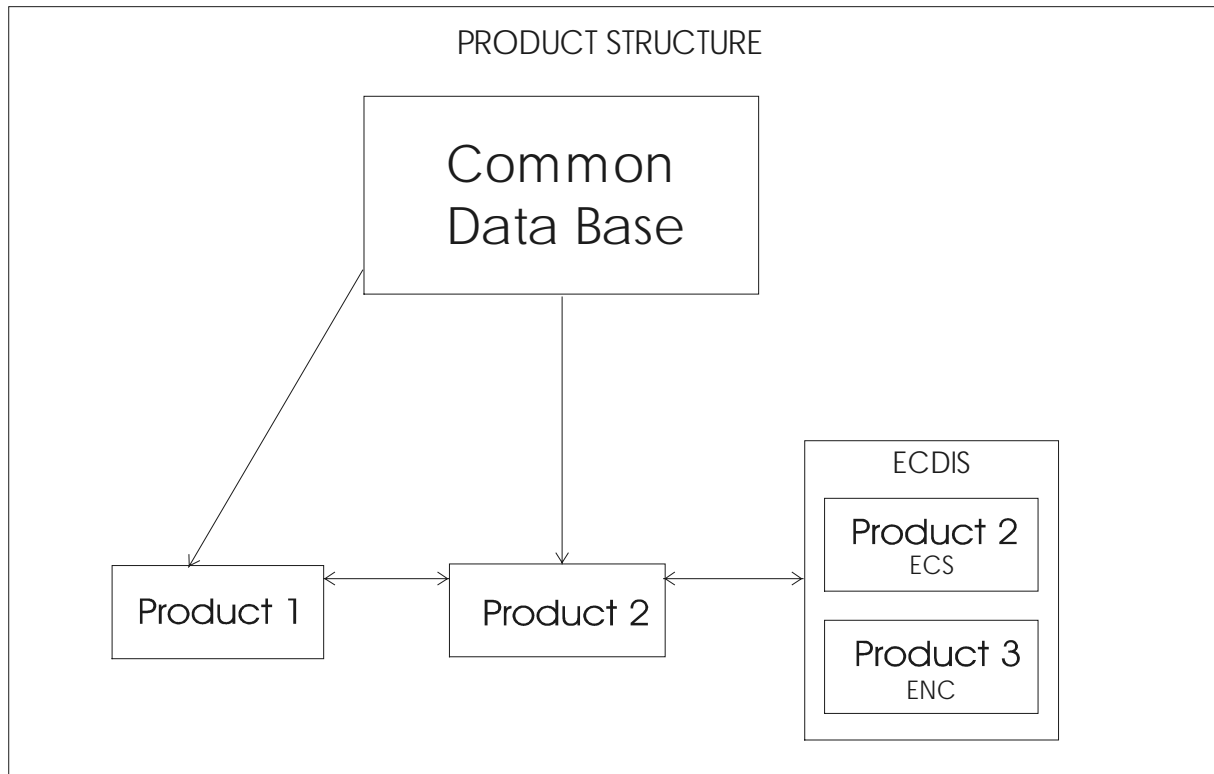


Figure 1

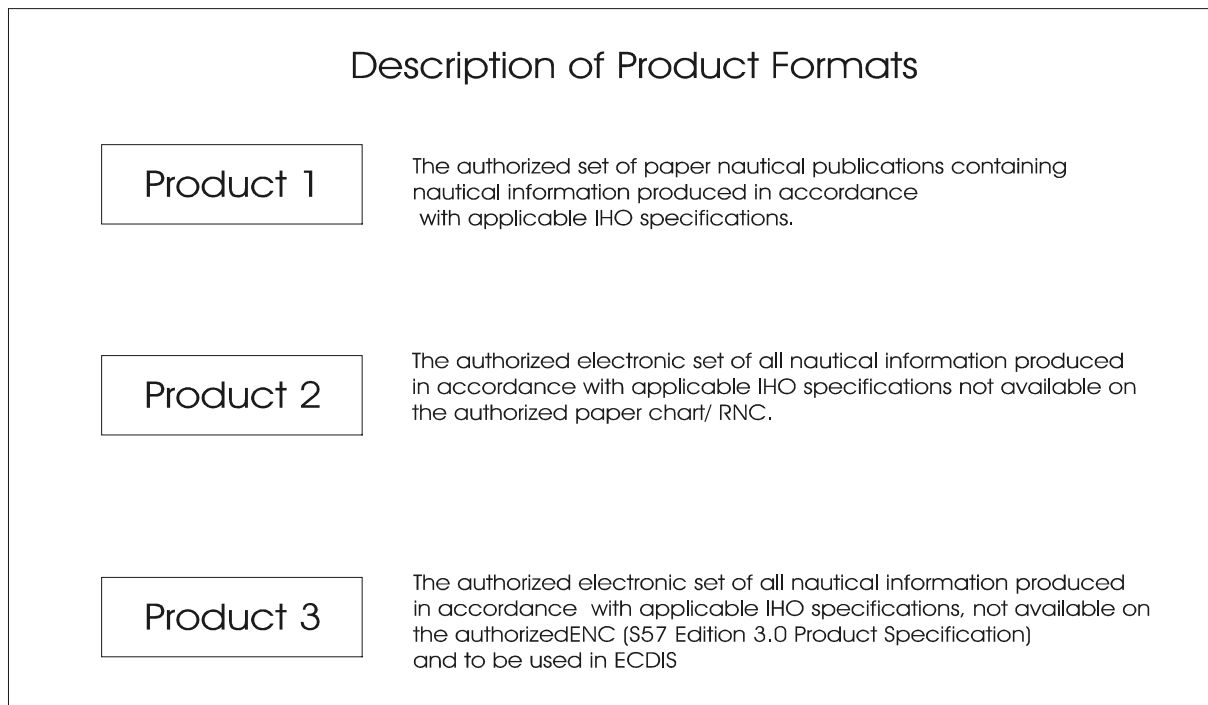


Figure 2

**Standardisation of Nautical Publications Working Group
IHB Monaco September 1999**

Product 1

Paper Publications.

1. CONTENT (SOLAS V)
2. FORMAT
3. UPDATE
4. INTERFACE
5. COMBINATION

WORKING GROUP

Establish need
Recommend content
Recommend update procedure
Consider combined format
Requirement for nautical
publication standards IHO/IMO

Product 2

Digital Version of Paper Product

1. CONTENT (as per paper product)
2. FORMAT
3. UPDATES
4. INTERFACE

WORKING GROUP

Recommend on transformation
from paper products.
Consider format improvements
Advise on updates
Advise on interfacing with digital
charting

Product 3

Digital Nautical Data

1. CONTENT
2. FORMAT
3. UPDATES
4. INTERFACE

WORKING GROUP

Establish required content
Recommend format and display
(presentation).
Liaise with other working groups
(Tidal, TSMAD)
Consider recommendations for
amendment or additions to
IMO/IHO regulations.
Integration as part of ECDIS.

Standardisation of Nautical Publications Working Group IHB Monaco September 1999

LIST OF THEMATIC GROUPS

Anchoring
 Special vessels and Installations
 Bridges and Locks
 Astronomical Ephemerides
 Radionavigation
 Tides, Currents, Water-levels
 Harbours
 Hydrography
 Facts about countries
 Pilot services
 Certification of Nautical Installations and Instruments
 Route Planning
 Shipping Authorities
 Limitation to shipping
 Shipping Regulations
 Shipping Routes
 Navigational Aids
 Charts and Nautical Publications
 Signals
 Search and Rescue
 Telecommunications
 Vessel Traffic Systems
 Chart Annotations
 Warning and Nautical Information Services
 Weather
 Maintenance of Nautical Publications

List 1

PROGRAM OF WORK

1. IHB to circulate revised TOR's and resolve WG Chairman and Vice-Chairman issue by 31 October 1999.
2. SNPWG members to revalidate the requirements of SOLAS and non SOLAS class vessels with regard to the content of nautical publications.. WG to reply by 15 December 1999.
3. IHB to collate and responses to 2. above, and circulate. by 31 January 2000.
4. Consider present TR's and possible new TR's by 15 February 2000.
5. Principles and procedures for exchange of data to be considered (with TSMAD) To avoid delay this will be attempted by correspondence.
6. Interface Workshops with Tidal Committee, MIO WG and CSC thereafter with TSMAD and C&S WG. Finally with IEC (TC 80). IHB to arrange.
7. Obtain "User comment". Deadline to be set after completion of Item 6.
8. Draft Guidance Document(s). Deadline to be set after Item 7.
9. IHB to promulgate TR's and Guidance Documents. As soon as they are available.
10. Interface with IMO in regard to SOLAS Implications. IHB to monitor development during drafting of Chapter V of SOLAS.

List 2

**STANDARDIZATION OF NAUTICAL PUBLICATIONS WORKING GROUP MEETING
(SNPWG)**

IHB, Monaco, 13-15 September 1999

DRAFT AGENDA

1. Opening and Administrative Arrangements.
 2. Acceptance of a Director of the IHB as Interim Chairman.
 3. Adoption of the Agenda.
 4. Election of a Chairman and Secretary.
 5. Presentations (IHB, Member States, Industry,).
 6. Revision of existing Terms of Reference (TOR) and drafting of new TOR.
 7. Issues for consideration.
 8. Program of Work.
 9. Any other Business.
 10. Date and Place of next Meeting.
 11. Closure.
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**STANDARDIZATION OF NAUTICAL PUBLICATIONS WORKING GROUP MEETING
(SNPWG)****IHB, Monaco, 13-15 September 1999****LIST OF PARTICIPANTS**

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