16th Standardization of Nautical Publications Working Group (SNPWG) Meeting
3 - 7 June 2013 – Silver Spring, MD

Annex A: List of Action items
Annex B: Agenda
Annex C: List of Attendees
Annex D: Updated SNPWG Work Plan

Item

1. Opening and administrative arrangements

1.1 Opening remarks
Jens SCHRÖDER-FÜRSTENBERG opened SNPWG16 by welcoming new and returning Members along with thanking the Members from both NOAA and NGA for hosting this year's meeting. Jens followed by stressing the importance of our working group as it pertains to navigation safety by developing a common structure for publications information as a complement to ENCs and other electronic devices.

1.2 Opening address on behalf of NGA
Karen BESECKY, NGA Branch Chief for Nautical Publications, welcomed the Members of the group and remarked that the work taking place within SNPWG will impact the entire maritime community globally making it easier to share data in a common structure.

Mike KUSHLA welcomed the Members and discussed meeting logistics.

2.1 NGA response to the grounding of the USS Guardian
Captain Raymond CHARTIER, US Navy (Chief, Maritime Safety Office at the National Geospatial-Intelligence Agency) presented to the group NGA's response to the grounding of the USS Guardian in the Philippines. The Captain started his presentation by giving a brief overview of NGA's Digital Nautical Charts (DNC) structure and the global footprint. He followed up with a description of how and why the error occurred to DNC, which accounted for a portion of the reason why USS Guardian grounded, and what course of action NGA took to rectify the discrepancy.

The Captain said the error, which appeared as a 7 mile difference compared to the hard copy chart, was caused by inaccurate commercial LANDSAT imagery that was improperly geo-referenced. The imagery used was only limited to one coastal library (the general library was accurate) and during the creation of the library the error was missed by the analyst. After the discrepancy was brought to the attention of NGA the Maritime Safety Office reviewed all DNC library holdings that were created using LANDSAT imagery and validated them for accuracy. The only other discrepancies NGA came across in their review occurred in Chile. The Captain then explained how the DNC was updated. A letter was sent to the Secretary of the Navy assuring the accuracy of DNC and that the problem was an isolated incident.

The Captain concluded his presentation with an overview of NGA's Nautical Publication Program and their intention of developing a one feature, one time database that will incorporate the standards created by SNPWG. This function will be valuable for the timely sharing of information.

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2. Approval of Agenda

The Members agreed and adopted the Agenda without any changes.

3. Adoption SNPWG 15 Minutes

The Final Minutes of SNPWG 15 were approved as circulated.

3.1 Corrections

No corrections were proposed for the Minutes of SNPWG 15.

3.2 Review of Action Items from SNPWG 15

Action Item 14/10 – Tony to complete MPA Product Specification for circulation to HOs. **Ongoing**

Action Item 14/11 – SNPWG to circulate inside HOs and obtain comment. **Ongoing**

Action Item 15/1 – Jens will contact **Raphael** to provide images of the MPA test areas and provide supplementary text to help explain the MPA progress to date and how it was a difficult but helpful exercise. **Completed**

Action Item 15/2 – Eivind and **James** will forward to TSMAD for consideration to change date information by values and text. **Ongoing**

Action Item 15/3 – Richard will investigate other NP sources beside the five listed in the model. Richard will also be the contact person for other sources for the rest of the SNPWG. Report to be given by next meeting. **Completed**

Action Item 15/4 – Jens will add the complex attribute to replace S-57 SORIND (Source Indication) to the Wiki for deliberation and validation by the members. **Completed**

Action Item 15/5 – SNPWG Chair. Since there was very little contact over the past 2-1/2 years. The SNPWG Chair will act as the point of contact between SNPWG and other IHO bodies. This needs to be included in the liaison paper to TSMAD. **Completed**

Action Item 15/6 – SNPWG Chair. For SNPWG work to proceed, it needs several important items from TSMAD to include the following items in the liaison paper to TSMAD. They are registry sandbox, portrayal – S-100, feature catalogue builder, changes to GFM and the product specification template. SNPWG also requests a written status report from TSMAD before the start of SNPWG16. **Completed**

Action Item 15/7 – Jens. Postponed to SNPWG 16. **Ongoing**

Action Item 15/8 – Jens will develop a paper to TSMAD stating that the SNPWG Wiki contains more detailed information about communications. **Completed**

Action Item 15/9 – Eivind Postponed to SNPWG 17. Await the next joint TSMAD/DIPWG meeting in June 2013 and the outcome of DIPWG portrayal work. **Ongoing**

Action Item 15/10 – Jens and Tony will include in the liaison paper to TSMAD the proposal concerning international light numbers and the creation of an international registry. **Completed**

Action Item 15/11 – Tony, James, and Tom will investigate the possibility of taking the MPA work completed to date and creating a web service as an interim solution. **Ongoing**

Action Item 15/12 – SNPWG Chair will add an item in the TSMAD liaison paper regarding Lights and Navigation Aids concerning the overlaps between the work of SNPWG and TSMAD. **Completed**

Action Item 15/13 – SNPWG review the current Jussland Radio Signal example and add information as appropriate. **Completed**

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Action Item 15/14 – Tony will develop the letter. **Completed**

4. SNPWG status of work overview

The Chairman gave a presentation detailing the main objectives and the current status of the work to date. The presentation touched on the challenges of moving from NP-1/2 to NP-3 (e.g. the difficulties in source interpretation from original to English international products).

Since SNPWG 1, the group has developed a scope of nautical publication content and a data model based on S-57 was developed. In 2010, TSMAD started to develop a new IHO Universal Hydrographic Data Model designated S-100. S-100 has had significant impacts on the SNPWG data model because it allows the option to extend the set of features using information objects and complex attributes. The new types offer greater flexibility of the model.

The IHO also introduced an S-100 registry in 2010. Although the SNPWG data model is very stable, the SNPWG objects and attributes are not sufficiently populated in the IHO Registry due to some missing functionality. SNPWG has stored the data model, relevant objects and attributes on the SNPWG Wiki (http://www.fuerstenberg-dhg.de/mediawiki/index.php/SNPWG). The SNPWG Wiki has no formal IHO status.

SNPWG anticipates the IHO Geospatial Information Registry (GI Registry) will be improved to provide a better handling mechanisms, such as sandbox function and bulk loading functions. Portrayal of the MPA model will be handled by other IHO working groups and SNPWG needs to re-focus on its other responsibilities. SNPWG must define the product specification intended for the nautical data model.

4.1 Nordic Hydrographic Commission update

Jan NYHOLM addressed the group regarding the intentions of the Nordic Hydrographic Commision (NHC) creating their own work products. Jan said the NHC would like SNPWG to support and accept products created by other countries and subgroups. Jan also recommended that SNPWG should discuss what other countries are working on to ensure there are no overlapping efforts.

Action Item 16/1 - The Nordic Group will give a presentation at SNPWG 17 outlining current developments along with giving a greater interpretation of their plans.

5. TSMAD 25 Report

Julia POWELL (Vice Chair TSMAD) reported that TSMAD is still waiting for the portrayal component of S-100 but the model is mostly complete. TSMAD will discuss several proposals next week to enhance interoperability between products. Julia also mentioned that TSMAD was still working on a GML profile.

Most of S-101 is nearing completion but it is still waiting for S-100 portrayal. The S-101 impact study was completed. The Data Capture and Encoding Guide (DCEG) will be stabilized this week which will be the foundation for the S-101 feature catalogue. An S-101 risk study was completed and an S-100/101 test bed was created. Julia showed a draft timeline which included portrayal data from SNPWG. TSMAD established an S-101 Risk Register to monitor progress of each of the S-101 components and created a draft test strategy and test plan for the S-100/101 test beds.

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One remaining question is why are we switching to S-100? Julia's response was so we could join the mainstream GIS community and maximize COTS software and development.

S-100 supports a wide variety of products. The products can easily accommodate present and future requirements such as ECDIS, e-Navigation, Inland ENC's (IENC) and publications. S-100 has 12 parts. The user requirements for an ENC are clear. A survey will help in determining the requirements for further products and the results will be used for further S-100 product specification and developing requirements.

Eivind mentioned that the mariner only updates their ECDIS when the old system's life span has been exceeded. Thus, it is most likely that S-100 based ECDIS will replace the existing on board ECDIS after this time.

Julia replied that current ECDIS have to be supported and therefore, a version of the current standards S-57 and S-52 has to remain available and be supported for many years to come.

Jens questioned – will a new product specification need to be created for each version of standardization and how will the ECDIS handle new versions?

6. DIPWG 4 Report

Colby HARMON (Chair DIPWG) gave a presentation on the status of DIPWG as well as a status report of the portrayal library. Colby said S-52 will be replaced by the S-101 portrayal model which will be based on XML and XSLT. IHO will be sending a request for proposal for the catalogue development.

Colby mentioned that a new Chart 1 with ECDIS symbology is available for free download from the NOAA website at http://www.nauticalcharts.noaa.gov/mcd/chartno1.htm.

7.0 MPA Product Specification

Tony Pharaoh presented the status report on the work concerning MPA Product Specification. He reported a new exchange set was created which brought into question whether we should create a Portrayal Product Specification using current S-57 symbology or wait and use the XML structure of symbol portrayal in S-101.

Tom LOEPER discussed the US position on MPA and mentioned that NOAA leadership would like to finalize the MPA schema as soon as possible and continue the SNPWG workplan.

Action Item 16/2 - IHB to put the MPA Product Specification on the IHO/SNPWG site if the next level of completeness is archived.

9.0 Challenges with revision of dated Danish nautical publication

Pelle AAGAARD presented the challenges of updating dated Nautical Publications from the Danish perspective. The Danish Pilot dates back to 1893 and the current version is over 30 years old and only available in hard copy format.

First, the Danish HO scanned the book and put it through an OCR program. Pelle gave an overview of challenges while reviewing the information such as fixing outdated positions, handling frequently utilized terms, agency name change, and place name

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inconsistencies. Pelle mentioned it is only for the sake of the mariner that place names are used at sea.

Later in the process a chart was created depicting the publication coverage area. Pelle said that unlike ENC's, paper charts transcend national boundaries so it is important to understand the structure of neighbouring countries.

The Danish HO concluded that when a publication is well structured, language would present fewer issues and, like many countries, ships are more concerned with carriage requirements rather than how the information is portrayed. Pelle concluded by saying the customer doesn't really know what they want making it difficult for an HO to make decisions on content.

10   Results of the SNPWG Survey

The SNPWG nautical publications questionnaire was active from 1 February to 30 April and the group discussed the results. The survey sample was restricted to experienced mariners and training facilities specializing in EDCIS. The questions were from a mariner's perspective to develop a prioritized list for SNPWG to attack sailing direction topics.

The result of the survey showed mariners overwhelmingly selected Traffic Management as the top priority followed by Navigational Marks, Hydrography, and Radio Signals.

Takeshi OHHARA compared Japanese structured SD items with the questionnaire results and he gave an overview of the areas they had difficulties mapping. Items that were difficult for Japan to map included: Sea Training Areas, Fisheries, Marine Casualties, and Overhead Bridge and Cables. The group discussed the difficult items and was able to provide satisfactory solutions for both Japan and the SNPWG questionnaire/ data model.

8   Product Specification Radio Signals

Alain ROUAULT presented the status of Jusslandian List of Radio Signals along with the changes which occurred recently. The most significant changes based on the group's review of the content. Jens suggested binding radio channels with associated frequencies.

Action Item 16/3 - All Members will verify with their respective HO's whether frequency values are necessary for MF, HF, and UHF radio channels. They are currently written as Digital Selective Calling (DSC) channels paired with assigned frequencies. First thoughts of the group indicate that it is redundant to have both channel and frequency listed together.

Alain's collection of radio signal information is very comprehensive. Radio Signal information is being stored in various nautical publications in many different ways and different levels of detail. Alain's collection covers all of these variations. The group decided to review the content to assign each information to one or more potential product specifications. A short discussion between Mike and Jens clarified the purpose of the work and the meeting proceeded.

The group reviewed the collection Jusslandian List of Radio Signals information. The information was assigned to the potential product specifications. New boxes which would help to simplify the understanding of the collection were suggested and are indicated in red in the table below.

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Information Category	Placement in survey category	Remarks
Pollution reporting - Non-Traffic Regulations (social/political)	Non-Traffic Regulations (social/political)	
Pre-arrival to Quarantine Reporting	Traffic Management, (traffic control), Marine Services (shore services) or Traffic Control	
DGPS	Navigational Marks	Add new box that includes navigational services
Legal time	Social/Political Geopolitical items look-up information	
Firing Practices and exercise area	Traffic control	
Meteorological	Radio services	
Internet weather services	Radio services	
NAVTEX	Radio services	
Radio Facsimile	Radio services	
SAFETYNET	Radio services	
SEA AREAS	Radio services	
MSI	Radio services	
SAR	Reference	Reference was decided with a category of SAR to be created? (Raphael suggested possibly more than one)
AMVER	Social/political (Non-traffic regulations)	
General notes: 96 hour notification of arrival	Traffic Management (Traffic Control)	
Deep sea Pilotage	Marine Services	
Local Pilotage - Marine	Marine Services	

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Services		
Notice of ETA	Traffic Management (Traffic Control)	
Notice of ETD	Traffic Management (Traffic Control)	
Vessels in a dangerous condition	Traffic Management (Traffic Control)	
Bridge to Bridge Radiotelephone regulations	Social/political (Non-traffic regulations)	
Piracy - Merchant Navy Voluntary Reporting Scheme	Social/political (Non-traffic regulations)	
* New box should be created under social/political named voluntary		
Right Whales	Traffic Regulations	
Reporting Systems	Marine Services	
* New Marine services boxes named voluntary and mandatory reporting systems will be added.		
Pilotage	Marine Services	
VTS	Traffic Management (Traffic Control)	
Port	Reference Services (lookup information)	

Action item 16/4 - Alain will extend the port information so we can have a better idea of what will be included.

After reviewing FLGINF in the Radio Signal Product Specification, SignalFlag was a suggested addition to CATFLG on the Wiki page.

Action Item 16/5 - Jens will update the Wiki page and add Signal flag to CATFLG.

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19   S-10n Product Specification Template and check list

Eivind MONG discussed the draft version of the ProdSpec template with the associated checklist. The work was assigned to SNPWG with the intention of getting feedback from the group. Eivind went through a detailed explanation of the product-specification. Members discussed "Use of Language" and whether it should be mandatory or optional.

The topic of Dataset Loading and Unloading was also discussed. TSMAD needs to provide additional guidance on how non-ENC data should load and unload with respect to ENC data.

The Chairman doesn't believe that TSMAD understands what would be the result of such a statement. The Chairman would like TSMAD to understand that such statements will require TSMAD to provide guidance for every product specification based on S-100. This problem should be brought to TSMAD's attention at the next TSMAD meeting.

19.1 Discussion of the draft paper

The **S-10x Product Specification Check List** was discussed showing examples for the type of product versus the type of encoding. It was recommended that each example start with an e.g. to reduce future misunderstandings.

"Coordinate Reference Systems (CRS)
Introduction
<This clause specifies the type of Coordinate Reference System used in the product.>
Spatial reference system:
Projection:
Vertical coordinate reference system:
Temporal reference system:
Coordinate reference system registry: EPSG Geodetic Parameter Registry
Date type (according to ISO 19115):
Responsible party: International Organization of Oil and Gas Producers (OGP)
URL: http://www.ogp.org.uk/
Coordinate reference system identifier (CRSID):
Code space: "

The Group decided that the Coordinate Reference System section as a whole needs more background information and clarification. For instance, should it include the use of either EPSG or the developers own coordinate system?

20   TSMAD submissions of SNPWG relevance (S-100)

Raphael MALYANKAR gave a presentation on the submission of papers relating to new ideas, and S-100 updates and improvements on Roles, Codelists, and Geometries.

The primary question was do we need new geometry types? Raphael said that it is essential to have a complete list of geometry types because if a new type is added, an entirely new version of S-100 would have to be created.

Examples of new shapes were discussed that are not in the current list of geometries including radius, circle, sectors, arc, and offset curve.

James RAPAPORT said that if there is a requirement for circle then it should be created. Mike gave some examples of circles that he discovered which are oval shaped.

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With edition 1.0 of S-100, the cartographer can currently draw arcs and circles using the "curve" spatial object. Jeppesen would like SNPWG input for new geometric types for the next version of S100.

Jeppesen and Caris discussed the merits of having different types of geometries available in an S-100 environment such as circle, sectors, arcs, and offset curves.

Eivind indicated that geometries do have legal connotations associated them and that displays need to have the proper geometry to depict an exclusion area for right whales as an example. The area is legally defined as a 300 meter circle around a pod of whales but if the circle was created with an inadequate geometry, the vessel could hypothetically be inside the exclusion area even though the system portrays the opposite. Insufficient geometries like this one may result in a fine.

Mike will send Eivind and Raphael an example of the unique shapes used in NGA publications.

Action item 16/6 - Jeppesen will create a paper which includes a proposal for new shapes which need to be included in S-100 whereupon Eivind will send it to the Chairman after which it will be reviewed and sent to TSMAD. The paper will be circulated within SNPWG with a proportionate time to respond in.

Eivind and Raphael discussed their idea of adding a code list register to the GI registry so that developers have a central code repository which would include such topics as language, or ship type. S-100 could be extended with a new attribute type named "code list" which would be an enumeration.

Action item 16/7 - Jeppesen and USA (NGA) will write a paper to include a proposal for a new attribute type named "code list" as an enumeration with examples of list types such as Country, World Port Index numbers and language. Code list needs to be included in S-100 so it can be sent for review to the Chairman and forwarded to TSMAD under the name of SNPWG.

20.2 Introduction of the persistent unique identifier

Tony discussed the importance of having unique identifiers in an S-100 environment. He demonstrated the concept using a specific light. This specific light is being coded once with a unique identifier but it could be used many times across many products.

Eivind will make a proposal at TSMAD26 for persistent unique identifiers and supporting business rules in S-100. The inclusion of suitable feature-based persistent unique identification schemes and appropriate business rules within S-100 would facilitate the unambiguous exchange of data between e-navigation stakeholders, hydrographic offices, and other related communities.

A Feature Object identifier exists in S-101 but there are no plans for it to be included in S-100.

11   Collation and distribution of navigation information to ships

Yiorgos PALIERAKIS of Novaco described some experiences they had working directly with the customer. Novaco needed to answer a few questions before they could begin making and distributing product. Who is the customer? Is it the ship owner, the Captain or the Mate? Yiorgos said the customer still prefers paper since it is what they are used

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to. He also said they are not overly concerned with cost. The mariner just wants a simple cost effective solution.

A major concern of the mariner is the amount of time it takes a ship to receive updates for charts. nIn the past it took 6 to 8 weeks for a ship to receive an update. With current processes and technology, Yiorgos said it takes about 3 weeks for a correction to reach the ship (the amount of time to compile the corrections). Also, the size of electronic corrections is increasing but bandwidth is not which continues to be a problem. Costs have gone down per MB of transmission but the file size has increased.

Novaco is a privately funded UK company with a global presence focused on e-distribution. Novaco provides an e-DHL-like service for many mariner products with the core products being used for correcting charts and publications. Yiorgos gave a demonstration of how the chart correction process works on the database. The UK releases NTM correction updates on Mondays (or Tuesdays if a holiday falls on that Monday) 10 days earlier than published dates for printed material. Yiorgos followed by giving a presentation of the publication update process.

Novaco does not have complete worldwide coverage due to satellite path limitations but a customer can use e-mail as a work-around for ships.

Yiorgos gave a live demo on how the program works. He described the process and mentioned that every week there is significant preparation to compile the information. The service broadcasts twice a day for charts and twice for publications. Files can be sent to specific computers and folders.

Yiorgos continued with the demo showing what a user receive station looks like and what information is currently available in the broadcast service. He demonstrated the speed of the system by transmitting and receiving a file.

Yiorgos said that the cost would be reduced from $2000 with the current process to $150 with the Novaco service. Pelle questioned if there is a way that other nation's English version of NTM information could be provided through this service rather than wait for UK to process it. Yiorgos said that some countries such as Australia do provide information.

12 Wiki work

The Chairman said the registry process is not working properly and that the SNPWG would need to continue working with the Wiki. He gave an overview on the status of the information provided in the Wiki. The source indication complex attribute was developed to a level at which only reporting date und ID Code remain open. Both have to await the outcome of the TSMAD harmonise data model discussion.

The other Wiki contributions were introduced to get the group's opinion.

The changes included:

1. **Satellite images** changed to **remotely sensed images** with more information added to define it.

2. **Photograph** with the definition: information obtained from photographs.

3. Country is currently a string but if code list is introduced then we can use it.

4. **PICCAP** definition added: Short description on the purpose of the image.

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5. **PICINF** definition changed to: A set of information to provide credits to picture creator, copyright owner etc.

6. **Remarks:** e.g. mandatory copyright notices

7. **BRGINF**

A discussion occurred around the room concerning photograph directions and orientation limits. One perspective was based on the need of the mariner and a developer's view for future capabilities.

Action Item 16/8 - All Members review bearing information use and we'll address the topic at SNPWG 17

8. **TXTCON**
Will complete after the discussion with TSMAD on source

12.2 *Source data types for S-1xx*

Richard DOBSON presented his review of source data types.

Jens said the source named "other" needs to be removed and a complete list needs to be created.

The group compared SORTYP with Richard's list to create a more accurate representation of source type.

A discussion concerning whether it's necessary to have source type included in S-1xx took place. The group decided to compare Wiki **SORTYP** with Richards's list and consolidate it into a single list and place hold status on it. The following changes were made to SORTYP:

9. Industry publications was changed to: 9. Industry publications and reports

Definitions for items 12, 13 and 14 were drafted.

13   Potential ProdSpec (follow-up HSSC 4/27)

Jens started a discussion of potential SNPWG Products and the order of their production.

The group reviewed the NPUB features stored in the Wiki and assigned each feature to one or more potential product specifications (see table below).

List of SNPWG features assigned to potential ProdSpec candidates				
AISATN	Navigational Services			
BERAST	Marine Services			
CALARE	Marine Services			
CONSHA	Traffic Management			

DGPSST	Navigational Services			
FLGINF	Social/ Political	Traffic Management		
GMDSSA	Radio Services	Reference		
INMSAT	Radio Services			
MPAARE	Traffic Management			
MRNSRV	Marine Services	Traffic Management		
NATCND	Environment			
NAVARE	Radio Services	Reference		
NAVTEX	Radio Services	Reference		
PILBOP	Marine Services	Traffic Management		
PIRARE	Social/ Political	Traffic Management		
PLTSRV	Marine Services			
PRTARE	Marine Services	Social/ Political	Harbour Infrastructure	
RADSTA	Traffic Management			
RDOCAL	Traffic Management			
RDOSTA	Radio Services			
RDOSVC	Radio Services			
RSCSTA	Reference			
SECLVL	Traffic Management	Social/ Political		
SLCONS	Hydrography	Topography	Harbour Infrastructure	
SMCFAC	Marine Services	Harbour Infrastructure		
SUPPLY	Marine Services	Harbour Infrastructure		
TIMZON	Reference			
UKAARE	Traffic Management			
WASDIS	Marine Services	Harbour Infrastructure		
WATARE	Traffic Management			
WETFCA	Reference			

13.1 & 13.2 *Product Specification working order & content of products:*

1. Radio Services + Reference (associated with radio services entries)

Based on a lack of guidance from the questionnaire participants said they actually refer to existing digital tools.

The product could be used in ECDIS systems (as an overlay) and on other devices.

Will keep the DIPWG and DQWG involved and would encourage TSMAD to provide the mechanism on how to interact with ENC.

This product involves many features, information features, and all kinds of attributes. The product interacts with areas stored in a reference Product Spec component.

This product allows the group to validate a significant proportion of the NPUB data model.

2. Navigational services (including navigational marks) - Finland and Denmark volunteered to create the NP-1 Data sample which will be presented at SNPWG17

   This product will require significant interaction between the ENC and NPUB but the mechanisms of how to do it are not clear at this stage.

   An alternative solution would be the extraction of NavMarks from the ENC and to transfer the responsibility of them to the NPUB domain. In this case the NavMarks would be overlays on ENCs, similar to the US IENC approach.

3. Physical Environment (Hydrography + Topography + Environment (attach NPUB information to existing HYDRO feature)) - UKHO volunteered to create the NP-1 Data sample which will be presented at SNPWG17

4. Traffic Management - U.S., Japan and S Korea (Takeshi and Kim will check with their office) volunteered to create the NP-1 Data sample which will be presented at SNPWG17

Items need interactions with ENC. The current version of S-100 doesn't provide the detail of how that could be done in a sufficient way.

Tony suggested that SNPWG put in a request for TSMAD to create a template for the creation of data specification.

Action item 16/9 - FI and DK will create the Navigational services (including navigational marks) NP-1 Data sample and present it at SNPWG17.

Action item 16/10 - UK will create NP-1 Data sample for Physical Environment (Hydrography + Topography + Environment (attach NPUB information to existing HYDRO feature)) and present it at SNPWG17.

Action item 16/11 - US (NGA), JP and KR (Takeshi and Kim will check with their offices) will create the NP-1 Data sample for Traffic Management and present it at SNPWG17.

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Action item 16/12 - FR to revise the current Radio Services data sample and will send to the relevant parts to the respective parties.

13.3 *Timeline*

The SNPWG Chair, supported by Jeppesen, investigated and considered several tools which could help to make the working status and progress of the group more accessible. The main objective was to find a tool which could easily be handled, free of charge, and the results to be used for other common applications.

Several tools are not freely available or their license regime will not allow a non-commercial use without payments. The group decided an Excel-based Gantt diagram for use by the SNPWG. The main disadvantage of this tool is that it will not allow flexible start and end dates and dependencies to deliverables of other HSSC WG.

The tool can be easily extended to provide additional information on open working items. That would allow the group to track those working items as well.

The Chairman asked the Members where the file should be stored so it can be easily accessed for member contributions. It was agreed by the SNPWG that the timeline would be placed on the IHO site.

The group proceeded to populate the timeline beginning with Radio Services.

The order of creation will follow this structure:
- Radio Services
- NP-1 Data sample
- ProdSpec
    - Application Schema
    - Feature Catalogue
    - ProdSpec
    - Portrayal
    - DCEG
    - Test Bed

Excel-based Gantt diagram to SNPWG
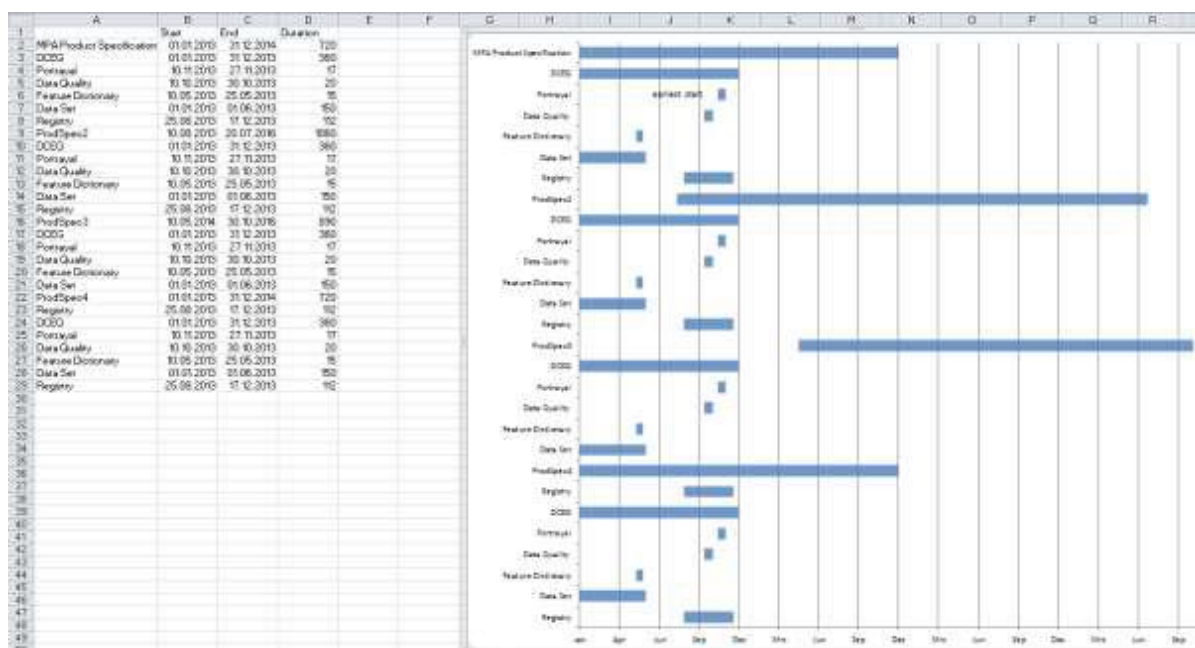
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14 Proposal on List of Lights improvement

Neither the S-57 nor S-101 based-models currently reflect all information needed to describe light information entirely.

SNPWG was invited to review and discuss the proposals of additional light information and the new simplified numbering of light information which would introduce the unique identifier. Tony believes it's important to discuss the topic of unique identifiers.

Jens reminded the group that regulated vessels still have a carriage requirement to carry List of Lights.

A comparison between the model and the List of Lights entries shows that the following information should be modeled:

1. Light Number complex - The subject was discussed in length with no clear concensus and the group will wait to hear the response from TSMAD on Unique Identifiers after the paper is submitted.
2. Additional object name information string - it was suggested that the attribute NAME be included.
3. Additional in category of name but then it was brought to our attention that the DCEG sub-working group already made some amendments to the definition which fits our intention.
4. Relative description of the position string - it was retained by the group.
5. Additional building description string – it was retained by the group

15 ToR review

SNPWG reviewed and discussed the current ToR and created a proposed amendment reflecting the new guidance provided by HSSC.
Changes include:

Objective
To develop guidelines for the preparation of nautical publications, in a format compatible with digital information systems including but not limited to ECDIS.

2. Procedures (paragraph 1)
a) The WG should:
(i) Investigate the data format specifications, content and display requirements of digital nautical publications intended for use in ECDIS and other information display devices.
(ii) Draft guidance document(s) and/or revised technical resolutions, as appropriate.
(iii) Liaise with relevant IHO Technical WG's to ensure, technical feasibility and compatibility of any developed proposals.

Action item 16/13 - The Chairman will submit proposed changes of the ToR to HSSC for endorsement.

16 Work plan for the SNPWG

The Group reviewed and discussed the SNPWG work plan. The Chairman suggested to the group that we should delay the F.1 Resolution in M-3 relating to Nautical Publications and make the information available on the Wiki for edits by the Group.

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Action Item 16/14 - IHB will create a word file concerning M-3 for the NP section to be placed on the Wiki for SNPWG updates.

17   Any other business

The draft minutes were reviewed at the end of the meeting. The draft will be circulated with 14 day's response time. The meeting agreed on tacit approval.

18   Date and place of next meeting

SNPWG17 will take place in Rostock 7 to 11 April 2014.
SNPWG18 tentatively scheduled for either Cadiz or Monaco in December 2014.

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Annex A: List of Action Items

Primary objective: Develop guidelines for the preparation of nautical publications, in a digital format compatible with ECDIS.						
Prepared by: Steven Offenback					**Date:** 7 June 2013	
Reporting Period:				**Type of report:**	**Conclusions:**	
From:	June 2013	To:	April 2014	Team Report	Working items to be done by SNPWG	

Planned tasks for this Reporting Period

Action Item	Actor	Task Description	Start Date	Target End Date	Percent Complete	Task Status
14/10	TP	Complete MPA Product Specification for circulation to HOs	04/2011		60	Ongoing
14/11	SNPWG	Circulate inside HOs and obtain comment				Depends on 14/10 progress
15/2	EM+JR	Forward to TSMAD for consideration to change date information by values and text				Ongoing
15/9	EM	Await the next joint TSMAD/DIPWG meeting in June 2013 and the outcome of DIPWG portrayal work. Eivind will liaise with TSMAD/DIPWG and report back to the SNPWG. Note: SNPWG cannot proceed with the MPA Product Specification until this is resolved by DIPWG and approved by HSSC5 in November 2013.				Postponed to SNPWG 17
15/11	TP+JR	Investigate the possibility of taking the MPA work completed to date and creating a web service as an interim solution.			40	Ongoing
16/1	JN/PA/OH	Give a presentation at SNPWG 17 outlining current developments along with giving a greater interpretation of their plans.				
16/2	TP/EM/JR	Put an update of the MPA Product Specification on the IHO/SNPWG site.				

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16/3	SNPWG	All Members will pose the question at their perspective office concerning whether frequency numbers are necessary for MF, HF, and UHF which are currently written as DSC channel already exist which refers to a frequency. It is believed by group that it would make the information redundant.				
16/4	AR	Extend the port information so we can have a better idea of what will be included.				
16/5	JS-F	Update the Wiki page and add Signal flag to CATFLG.				
14/10	TP	Complete MPA Product Specification for circulation to HOs	04/2011		60	Ongoing
14/11	SNPWG	Circulate inside HOs and obtain comment				Depends on 14/10 progress
16/6	EM & RM	Create a paper which includes a submission proposal of new shapes which need to be included in S-100 where upon. The doc will be circulated to review and finally send to TSMAD.				
16/7	EM, RM, SO	Create a paper which includes a submission proposal for a new attribute type named "code list" as an enumeration with examples of list types (such as Country, World Port Index numbers, language) which need to be included in S-100 where will send it along to the Chairman which will be reviewed and sent to TSMAD under the name of SNPWG.				
16/8	SNPWG	All Members review bearing information use and we'll address the topic at SNPWG 17				
16/9	PA+JN	Create the Navigational services (include navigational marks) NP1 Data sample and present it at SNPWG17 NP1.				
16/10	RD	Create NP1 Data sample for Physical Environment (Hydrography + Topography +				

		Environment (attach NPUB information to existing HYDRO feature)) and present it at SNPWG17.				
16/11	MK+TO+KJ	Create the NP1 Data sample for Traffic Management and present it at SNPWG17				
16/12	AR	Revise the current Radio services data sample and to send the relevant parts to the respective parties.				
16/13	Chairman	The Chairman will submit proposed changes of the ToR to HSSC.				
16/14	TP	Create a word file concerning M-3 for the NP section to be placed on the Wiki for SNPWG updates.				

Variance Details:

XXXXX

Corrective Actions:

XXXXX

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Annex B: Agenda

Agenda (as conducted)

No.	Agenda Item	Lead	Documents
	Monday		
1.	Opening and administrative arrangements	MK	
	Opening address on behalf of NGA	KB	
21.	NGA response to the grounding of the USS Guardian	RC	
2.	Adoption of Agenda	JS-F	16-2.1+16.2.2
3.	Minutes of SNPWG 15	TL	16-3
3.1	Corrections		
3.2	Review of Action Items from SNPWG 15		
4.	SNPWG status of work overview	JS-F	16-4
22.	Status of the Nautical Publication Discussion Group of the NHC	JN	
6.	DIPWG 4 Report	CH	
7	MPA ProdSpec		
7.1	Status of work	TP	
7.2	U.S. position on MPA	TL	
10.	ProdSpec Survey	JS-F	16-10
10.1	Results		
10.2	Discussion on how to proceed (follow up HSSC4/27)		
	Tuesday		
5.	TSMAD 25 Report (How to build a ProdSpec)	JP	16-5
9.	Challenges with revision of dated Danish nautical publication	PA	16-9
8.	ProdSpec Radio Signals	AR	16-8A 16-8B
8.1	Presentation of content	AR	
8.2	Discussion on how to proceed	JS-F	
19	S-10n Product Specification Template and check list	EM	16-19.1
19.1	Discussion of the draft paper		
20	TSMAD submissions of SNPWG relevance (S-100)	EM	16.20.1 16-20.2
20.1	Discussion of the potential impact on SNPWG work		
20.2	Introduction of persistent unique identifier	TP	16-20.3

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		Wednesday		
11		Collation and distribution of navigation information to ships	YP	16-11
12		Wiki work	JS-F	16-12.1
12.1		Open and reviewed items		
12.2		Source data types for S-1xx	RD	16-12.2
13		Potential ProdSpec (follow up HSSC4/27)	JS-F	
13.1		Order		16-10
13.2		Content of Products		
		Thursday		
13		Potential ProdSpec (follow up HSSC4/26)	JS-F	
13.3		Timeline		16-13.3
14		Proposal on List of Lights improvement	JS-F	16-14.1
				16-14.2
		Friday		
15		ToR review	JS-F	16-15
16		Work plan for the SNPWG	JS-F	16-16
17		Any other business (e.g. Review of draft minutes)	JS-F	
18		Date and place of next meeting	JS-F	

AR	Alain Rouault (FR)
CH	Colby Harmon (U.S.)
EM	Eivind Mong (Jeppesen Marine)
JN	Jan Nyholm (Finland)
JP	Julia Powell (U.S.)
JS-F	Jens Schröder-Fürstenberg (GE)
KB	Karen Besecky (U.S.)
PA	Pelle Aagaard (DK)
RC	Capt. Raymond Chartier, U.S. Navy (U.S.)
RD	Richard Dobson (UK)
TP	Tony Pharaoh (IHB)
TL	Thomas Loeper (U.S.)
MK	Mike Kushla (U.S.)
YP	Yiorgos Plierakis (Novaco)

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Annex C: List of Attendees

Final List of Participants

IHO MS	Name	email
Denmark	Pelle Aagaard	petar@gst.dk
Finland	Jan Nyholm	jan.nyholm@fta.fi
France	Alain Rouault	alain.rouault@shom.fr
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USA NOAA	Julia Powell (occ)	Julia.powell@noaa.gov
USA NGA	Mike Kushla	Michael.S.Kushla@nga.mil
USA NGA	Steve Offenback	steven.r.offenback@nga.mil
IHB	Tony Pharaoh	pad@ihb.mc

Technical Experts

Caris	James Rapaport	james.rapaport@caris.com
Jeppesen	Eivind Eik Mong	Eivind.Mong@jeppesen.com
Jeppesen	Raphael Malyankar	Raphael.Malyankar@jeppesen.com
Jeppesen	Angel Terry (occ)	Angel.Terry@jeppesen.com
NOVACO	Yiorgos Palierakis	yiorgos.palierakis@novaco.co.uk

External presenter

USA NGA	Capt. Raymond Chartier, USN
USA NGA	Karen Besecky

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Annex D: Updated SNPWG Work Plan

SNPWG WORK PLAN 2013-14

SNPWG Tasks

A	Decide on the Data Structure of NPs-Data intended for use in ECDIS (NP3) (IHO Task 2.6.2 refers)
B	Define the content requirements of NP data intended for use in ECDIS (NP3) (IHO Task 2.6.2 refers)
C	Develop test data (IHO Task 2.6.2 refers)
D	Develop basic display rules for NP data intended for use in ECDIS (NP3) (IHO Task 2.6.2 refers)
E	Draft guidance documents (IHO Task 2.6.2 refers)
F	Maintain and extend IHO resolutions in M-3 relating to Nautical Publications as required (IHO Task 2.6.3 refers)
G	Liaise with other HSSC WG's and other IHO and international bodies (IHO Task 2.6.2 refers)
H	Develop, maintain and extend S-10n - Nautical Information Product Specification (IHO Task 2.6.2 refers)
I	Conduct the 2013 and 2014 meetings of SNPWG (IHO Task 2.6.1 refers)

Task	Work Item	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-Planned O-Ongoing C-Completed	Contact Person	Related Pubs / Standard	Remarks
B2	Model the data where required.	H		2004	Open	O	Chair/Sec SNPWG	S-100	To be included in NPUBS domain of the FCD Register
B3	Review of objects and attributes	H	04/2014	2004	Open	O	Chair/Sec SNPWG	S-100	According to the tasks assigned by HSSC4
B4	Propose amendments to HYDRO domain of the FCD Register	H		2005	Open	O	Chair/Sec SNPWG	S-100	To be included in the FCD register
B6	Populate the NPUBS domain of the FCD Register	H		2006	Open	O	Chair/Sec SNPWG	S-100	

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C1	Produce NP1 data sample	H		2009	Open	O	Chair/Sec SNPWG		According to the tasks assigned by HSSC4 Collection of information to be modelled
C1.1	For Radio Services	H	04/2014	2012	2014	O	Chair/Sec SNPWG		
C1.2	For Navigational services	H	04/2014	2012	2014	O	Chair/Sec SNPWG		
C1.3	For Traffic management	H	04/2014	2012	2014	O	Chair/Sec SNPWG		
C1.3.1	For Marine Protected Areas	H	04/2014	2011	2012	C	Chair/Sec SNPWG		
C1.4	For Physical environment	H	04/2014	2013	2014	O	Chair/Sec SNPWG		
C2	Set up a test bed ECDIS	M		Open	Open	P	Chair/Sec SNPWG		
D1	Develop basic display rules for NP data intended for use in ECDIS (NP3)	M		2008	Open	O	Chair/Sec SNPWG	S-52	Close co-operation with DIPWG required
E1	Draft Data Capture and Encoding Guides	H		2008	Open	O	Chair/Sec SNPWG		Document for NPs similar to Use of the Object Catalog
E1.1	For Marine Protected Areas	H	04/2014	2011	Open	O	Chair/Sec SNPWG		To be harmonized with S-101 DCEG; Awaiting next S-100 version
E1.2	For Radio Signals	M		2014	Open	P	Chair/Sec SNPWG		Depends on modeling progress
E2	Draft Sample Product Specification	H		2008	2009	C	Chair/Sec SNPWG		Development of: a) a SNPWG profile of S-100 Part 11 Prod Spec; b) a draft sample for Pilotage; c) a draft sample for Waterways.
E3	Draft Product Specification	H		2010	Open	O	Vice Chair SNPWG	S-10X	Drafted in phases;

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E3.1	For Radio Services	H	04/2014	open	open	P	Chair/Sec SNPWG		
E3.2	For Navigational services	H	04/2014	open	open	P	Chair/Sec SNPWG		
E3.3	For Traffic management	H	04/2014	2011	open	O	Chair/Sec SNPWG		
E3.3.1	For Marine Protected Areas	H	04/2014	2011	2012	O	Chair/Sec SNPWG		Depends on progress of next S-100 version allowing GML data use
E3.4	For Physical environment	H	04/2014	open	open	P	Chair/Sec SNPWG		
F1	Resolutions in M-3 relating to Nautical Publications	M	04/2014	2012	Open	O	Chair/Sec SNPWG	M-3	A review is scheduled due to harmonization of M3 information and potential ProdSpecs content
F2	S-12	L		Open	Open	P	Chair/Sec SNPWG	S-12	If considered necessary
G1	Liaise with the DIPWG for the development of the display rules	H		2005	Open	O	Chair/Sec SNPWG		
G2	Liaise with the TSMAD	H		2004	Open	O	Chair/Sec SNPWG		
G3	Liaise with other groups	H		2004	Open	O	Chair/Sec SNPWG		Including DPSWG, DQWG, TWLWG, MIO's, AML, ICE, Inland ECDIS
G4	Liaise with IALA e-Nav Committee	H		2013	Open	O	Chair/Sec SNPWG		As advised by HSSC4
H1	Develop, maintain and extend S-10n - Nautical Information Product Specification	H	04/2014	2009	Open	O	Chair/Sec SNPWG		Liaise with WWNWS-Sub committee
H1.1	For Radio Services	H	04/2014	2012	Open	O	Chair/Sec SNPWG		
H1.2	For Navigational services	H	04/2014	2013	Open	O	Chair/Sec SNPWG		
H1.3	For Traffic management	H	04/2014	2013	Open	O	Chair/Sec SNPWG		

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H1.3.1	For Marine Protected Areas	H	04/2014	2011	open		O	Chair/Sec SNPWG	
H1.4	For Physical environment	H	04/2014	2013	open		O	Chair/Sec SNPWG	

SNPWG Meetings (Task I)

Date	Location	Activity
13-17 Feb 2012	IHB, Monaco	SNPWG 14
12-16 Nov 2012	Helsinki, Finland	SNPWG 15
3-7 June 2013	Silver Spring (MA), U.S.	SNPWG 16
7-11 April 2014	Rostock (Germany)	SNPWG 17
Dec 2014	Cadiz (Spain)or Monaco	SNPWG 18

Chairman: Jens SCHRÖDER-FÜRSTENBERG, Germany   Email: jens.schroeder-fuerstenberg@bsh.de
Vice-chairman: Tom LOEPER   Email: thomas.loeper@noaa.gov
Secretary: Steve OFFENBACK (Acting)   Email: steven.r.offenback@nga.mil

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