



**4TH MEETING OF THE HYDROGRAPHIC SERVICES AND
STANDARDS COMMITTEE**

**TAUNTON, United Kingdom,
25-28 September 2012**

SNPWG Report

SNPWG's vision

✦ Bringing nautical publication information into the ECDIS machine

✦ According to ToR

- ✦ Distance Tables,
- ✦ List of Buoys and Beacons,
- ✦ List of Lights,
- ✦ List of Radio Signals,
- ✦ List of Symbols, Abbreviations and Terms used on Charts,
- ✦ Mariners' Handbooks,
- ✦ Notices to Mariners,
- ✦ Routeing Guides,
- ✦ Sailing Directions,
- ✦ Tidal Stream Atlases,
- ✦ Tide Tables.

From NP1/2 to NP3



<http://www.squidoo.com/adjust-car-mirrors>

- ✦ NP3 information provision
- Harmonized data model
- Clear access to information
- Information is georeferenced

vessels over 60 m length or 10 m beam

Pilot Station
Travmünde

Pilot Requests

- approaching
at least 12 hours before light-buoy 1 Lübeck-Gedser-Way
if the voyage time is less than 3 hours immediately
after leaving the previous port
confirmation 2 hours before light-buoy 1
- departing or shifting

BALTIC HANDBOOK III
SEE SECTION C2.1
Fehmarn to Travmünde

SEE SECTION C2.2
Travmünde and Lübeck

Click topics or map objects

C2.1.1 Fehmarn to Neustädter Bucht
C2.1.2 Neustädter Bucht
C2.1.2* Grossenbroder Binnensee

C2.2.1 Travmünde and Trave
C2.2.2 Lübeck

From NP1/2 to NP3

- ✦ And the steps in between?
- Develop a data model (NPUB Data Model)
- Validate the data model
- Use cases
- Tests, tests, tests

Progress made

- ✦ NPUB Data model is complete for the moment
 - Comprises most NP information
- ✦ Use of GML features
 - ISO 8211 vs. ISO 19136 was considered
- ✦ MPA Product Specification (assigned to SNPWG by HSSC1) needs fine tuning

Progress made

- ✦ Entry to relevant IHO registry
 - Example features and attributes incorporated
 - Awaiting significant registry handling improvements

Status of MPA ProdSpec

MPA Product Specification

MPA Product Specification	
😊	ProdSpec
😊	DCEG
😞	Portrayal (awaiting DIPWG response)
😞	Data Quality (awaiting DQWG response)
😞	Feature Dictionary
😞	Registry
✓	Data sets
😊	Mapping and creating related GML files

MPA Data model



page

discussion

view source

history

Scientists investigate that which already is; engineers create that which has never been. (Albert Einstein)

MPAARE

GEO OBJECT CLASS

Feature: Marine Protected Area

Acronym: MPAARE

Camel case: MarineProtectedArea

Set Attribute_A: **CATIUC**; **CATREA**; DATEND; DATSTA; JRSDTN; NOBJNM; OBJNAM; PEREND; PERSTA; RESTRN; STATUS;

Set Attribute_B: INFORM; NINFOM; NTXTDS; PICREP; SCAMAX; SCAMIN; **TXTDSC**

Set Attribute_C: SORDAT; SORIND

Associated information object classes: **AUTORI**; **NATINF**; **RCMDTS**; **REGLTS**; **RESEDES**;

Definition:

Marine Protected Area: Any area of the intertidal or sub tidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment. (IUCN – The World Conservation Union. 1998. Resolution 17.38 of the 17th General Assembly of the IUCN. Gland, Switzerland and Cambridge, UK.)

INT 1: IN 22

M-4: 437.3;437.6

Remarks:

No remarks.

Distinction:

caution area; marine farm/culture; military practice area; restricted area

Justification:

to be completed

Comment:

No comments.

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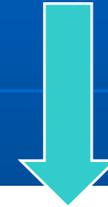
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MPA portrayal proposal

- ✦ According to TSMAD24/DIPWG4-08.4A

Category of Restricted Area doesn't exist



एएएएएएएए

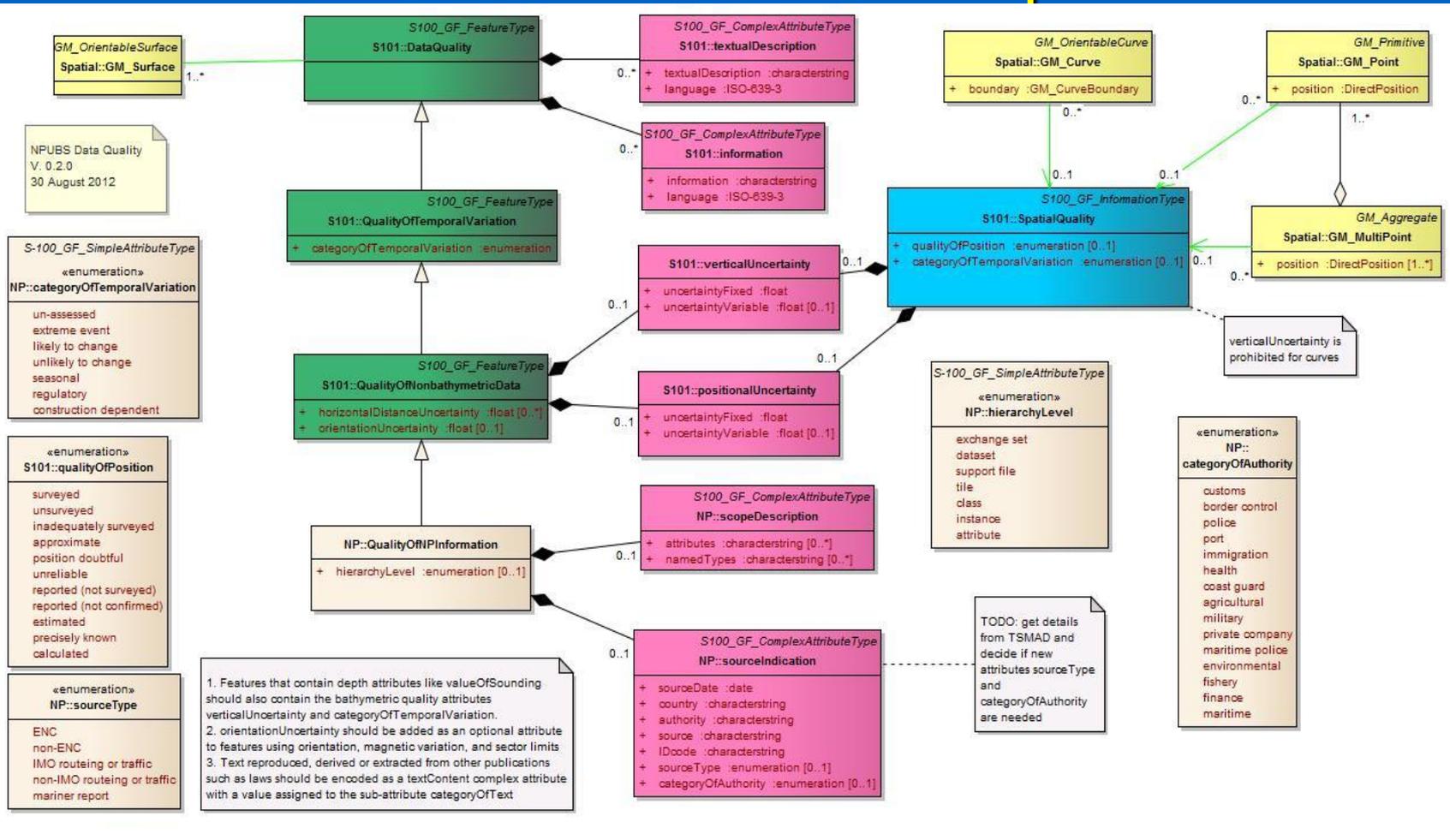


Category of Restricted Area exists

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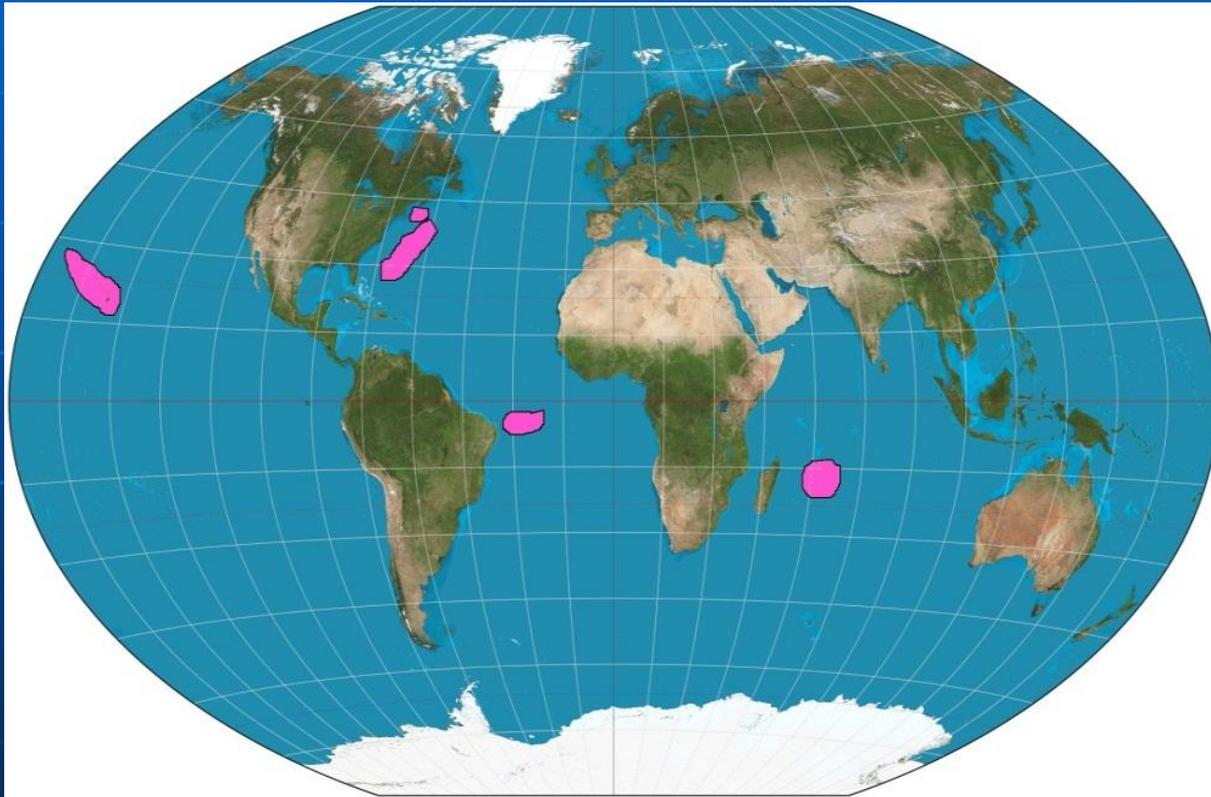
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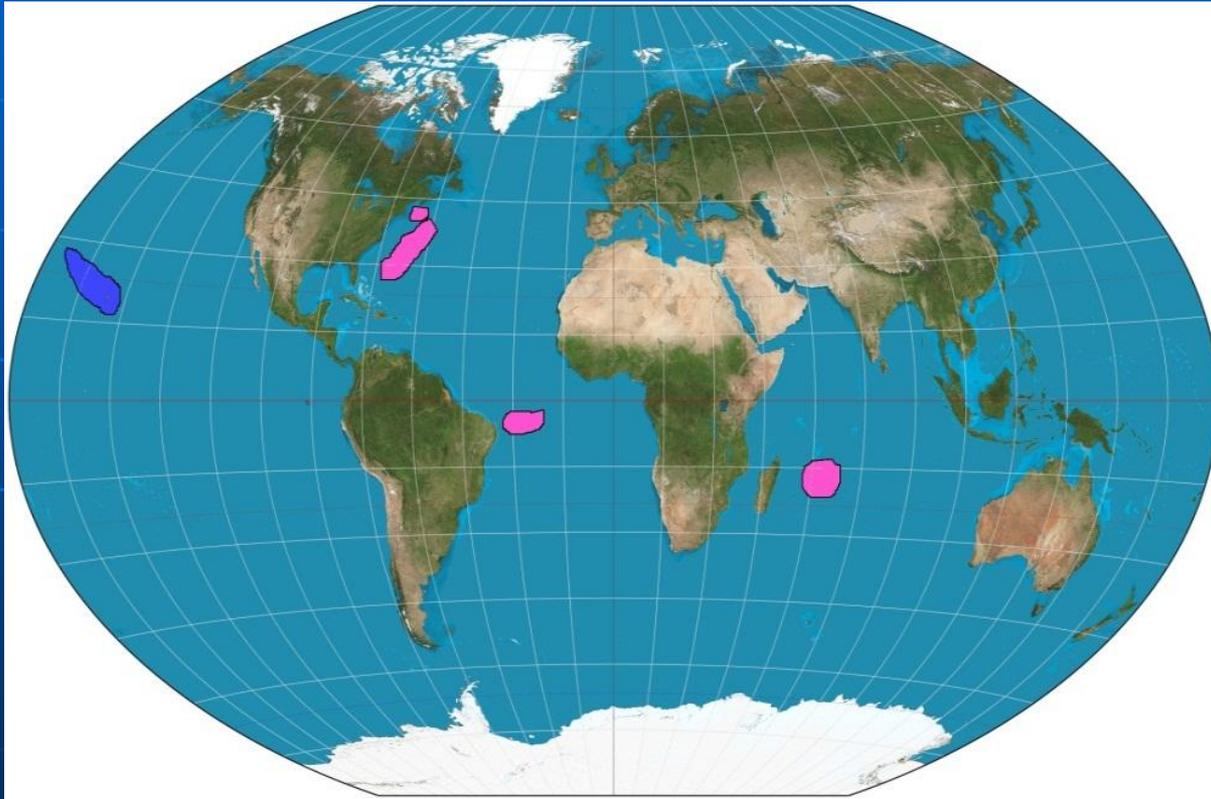


http://upload.wikimedia.org/wikipedia/commons/9/91/Winkel_triple_projection_SW.jpg/

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Status of MPA ProdSpec

The image displays two instances of the Snowflake Software GML Viewer 4.0. The primary window shows a 3D visualization of a complex, multi-colored object (likely a vessel hull) with a prominent red section. The interface includes a menu bar (File, Tools, Window, Options, Help), a toolbar with various navigation and editing tools, and a status bar at the bottom with coordinates (59.582654723127035, 37.265472312703594) and a scale of 1:103. A secondary window on the right shows a hierarchical tree view of the GML data structure. An arrow points from the 3D model to this tree view.

Tree View Structure:

- Applicability
 - @ id
 - inv_informationAssociation
 - @ href
 - #USREGLTS4
 - @ id
 - inv_informationAssociation
 - @ href
 - #USREGLTS5
 - @ id
 - inv_informationAssociation
 - @ href
 - #USREGLTS6
 - @ id
 - inv_informationAssociation
 - @ href
 - #USREGLTS7
 - @ id
 - inv_informationAssociation
 - @ href
 - #USREGLTS8
 - @ id
 - inv_informationAssociation
 - @ href
 - #USREGLTS9
 - @ id
 - vesselsMeasurements
 - vesselsCharacteristics
 - length overall
 - vesselsCharacteristicsValue
 - 65
 - vesselsCharacteristicsUnit
 - foot
 - comparisonOperator
 - greater than or equal to

Mapping of information

Current publication content must be mapped according to the data model

The screenshot displays a software interface with two main components: a nautical chart on the left and a data table on the right.

Chart Component: Shows a detailed nautical chart of a coastal area, likely the Jadebusen region. It includes depth soundings, navigational markers, and labels for various locations such as 'Wangerbucht', 'Mellumplate', 'Jade', and 'Wangerland'. A white outline highlights a specific area on the chart, and a blue vertical bar is overlaid on it.

Data Table Component: A table with the following columns: Location in original, e.g., line number; ID; associations; Object; Attributes; sub-attributes (for complex attributes); Content or Value; and allowed value label (optional). The table contains multiple rows of data, with a blue vertical bar highlighting a specific row (row 691).

Location in original, e.g., line number	ID	associations	Object	Attributes	sub-attributes (for complex attributes)	Content or Value	allowed value label (optional)
1							
883	reght13		REGHTS	CATALIT CATRON HEADING		15	
884							
885							
886							
887				INFORM		instructions for safe navigation prohibitions and restrictions affecting navigation for petroleum, gas or chemical tankers see also chapter A 3.2	
888						navigation on river Jade allowed with permit issued by competent VTS Centre if visibility is more than 1 000 m visibility over 500 m for vessels up to 2 000 t cargo capacity	
889						or shortcomings to the equipment and technical features	
890						night of way see C 2.1.1	
891						maritime authority permits extraordinarily large vessel and extraordinary pushing and towing composite units shall obtain a prior permit from VSA Wilhelmshaven	
892						extraordinarily large vessel according to German regulations (SeeStSchStro)	
893						inbound	
894						vessels over 350 m length or over 52 m beam or over 20 m draught	
895						outbound	
896						vessels over 350 m length or over 52 m beam or over 19 m draught	
897						vessels over 16.5 m draught	
898						prohibitions on vessels overtakeing or meeting fairway section between buoys 34 and NWVO tanker unloading bridge	
899						vessels constrained by their draught	
900						vessels over 16.5 m draught	
901						prohibitions on vessels overtakeing or meeting fairway section between buoys 34 and NWVO tanker unloading bridge	
902						vessels constrained by their draught	
903						fairway section between buoys 16Blaue Balje 1 J16 and buoys 19 and 20 and near the pairs of buoy 34, 34/4, 45/4B	
904						vessels of 13.5 m draught or more	
905						vessels of 250 m length or more	
906						extraordinary pushing and towing composite units	
907						fairway section between buoys 15Blaue Balje 1 J16 and buoys 19 and 20	
908						between vessels with a deadweight capacity exceeding 3000 ttw and tankers carrying ethylene dichloride or vinyl chloride monomer.	
909						tug assistance compulsory	
910						inbound	
911						tankers with a draught exceeding 16.50 m from buoy 33 (Wiesedeplatz)	
912						the ability to establish a towing-line connection shall be ensured at all times	
913							
914							
915							

Industrial support

More support by industry is required

The screenshot displays a maritime navigation software interface. At the top, there are five main menu categories: NAVIGATION, NATURAL CONDITIONS, COMMUNICATIONS, LAWS AND REGULATIONS, and GENERAL INFORMATION. Below these are sub-categories: Routeing, Ports, VTS, Reporting, Pilots, Areas, Berthing, and HELP.

On the left side, there is a vertical navigation menu with the following items: Routes, Ports, Port facilities, Navigation aids, Reporting systems, VTS, Protected areas, Natural conditions, Special areas, National jurisdictions, Dangers, Work areas, and Radio services.

The main area shows a map of the North Sea region, including parts of Germany (Schleswig-Holstein, Niedersachsen) and the North Sea. A yellow highlighted area on the map indicates a specific route or area of interest. A red circle highlights a double arrow icon (==>) in the 'More information' column of the 'AREAS' table.

AREAS

Sea area	Name	TSS German Bigt
	More information	==>

REGULATIONS, RESTRICTIONS, RECOMMENDATIONS

Regulations	Category of Authority	Maritime
	Vessels Included	Tanker, unspecified dangerous or hazardous cargo, Gross Tonnage >= 10000 GT
	Vessels Included	Tanker, unspecified dangerous or hazardous cargo, Gross Tonnage >= 5000 GT
	Information	The route should be joined or left at the point closest to the port of destination or departure which permits safe passage between the route and the port.
Regulations	Category of Authority	Maritime
	Information	navigating according to Rule 10 of COLREGS

Search Results

Search radius: NM

Several issues coming up during work

- ✦ Marine overlay vs. part of ENC
- ✦ Handling of dynamic areas (real time data)
- ✦ Identic information in several ProdSpec
- ✦ Numbering of the Product Specification

Next Steps

- ✦ Define the process for the creation of digital nautical publication products.
- ✦ Extend the nautical publications data model (if appropriate).
- ✦ Maintain a close liaison with IALA in particular with e-Navigation project.
- ✦ Next Product Specification: Radio Signal information.
- ✦ Consider future of BLAST DMRG ProdSpec

Action requested of HSSC

- ✦ The HSSC is invited to
 - Note this report
 - Endorse the work done with MPA
 - Endorse the next working package towards the transition of paper based nautical publication into digital format compatible with S100 based ECDIS