

**Attendees:**

Member State	Organization	Personnel
Brazil	Brazilian Navy Hydrographic Center	Cesar Reinert
US	US Naval Oceanographic Office	R. Wade Ladner
Canada	Canadian Hydrographic Office	Lynn Patterson
UK	UK Hydrographic Office	Tom Richardson, Barrie Greenslade
US	National Oceanic and Atmospheric Administration	Julia Powell, Colby Harmon
France	SHOM	Geoffroy Scrive
Republic of Korea	KHOA	Yung Baek
	CARIS	Hugh Astle
	IIC Technologies	Edward Kuwalek
	Idon Technologies	Doug O'Brien
	SevenC's	Holger Botheim
	Transas	Konstantin Ivanov
	Primar	Svein Skjæveland

**References:**

- a. TSMAD27 6.1 S-102 Update and Sub Working Group
- b. S-102 Sub-working group minutes from 20 Jan 2015 telecom
- c. TSMAD29/DIPWG7 11.3A S-102 Specification Update Impact Study

**Discussions/Decisions:**

- Discussions started with background information on the origins of S-102. The attendees were briefed on items from References a, b and c. The goal of the working group was to identify changes in the standard to rectify error and deficiencies.
- Those discussions started with a lack of a file naming convention. Decision was made to adopt conventions similar to S-101 where the name starts with a two letter designation for the producer and must have a .102 extension. Each file must have a 10MB size limit.
- Discussions then ensued on exchange set/discovery metadata. The decision was made to inherit the S-100 exchange set mechanism and extend it as necessary.
- Digital Signature / encryption were also discussed. The decision was made to, in the interim use the S-63 capabilities as documented in the S-101 draft. However, it was also decided that S-63 has deficiencies and must also be updated. The standard needs to be migrated to S-100. Those issues will be addressed by the S-100 Working Group.
- Maintenance was then addressed. It was decided the maintenance would be a "file" replacement. A clause needs top added to S-102 to address this issue.
- Discussions on the optional layers in S-102 ensued. While suggestions were made in reference b to remove optional layers, it was decided here to leave them in and ensure they are documented. However, one member suggested allowing

the capability of adding other layers such as “Bottom Type”. After discussions it was decided this is not an attribute of bathymetry and needed a different product specification.

- Discussions then started on Portrayal. While the group phased in and out of discussions on simply portraying bathymetric gridded data and its impact on the S-101 underlying bathymetric features (soundings, depth curves, etc.) several decisions were made. First, the product specification needs to include a portrayal clause which defines two types of portrayal: 1. Ramp of colors cut into the ENC replacing skin-of-the-Earth features; 2. A two color scheme depicting safe/unsafe waters based on a mariner provided context parameter. It was decided that further guidance on S-1xx product interaction needs to be addressed at the S-100 Working Group level.
- The last discussion was on encodings. Reference b also recommended allowing additional encodings in addition to HDF. It was decided that the spec should only have one encoding and should stay with the established HDF5.

#### Action Items:

Number	Description	Resp. Party	Due Date
2_15-1	Add clause describing file nameing and size conventions.	S-102 Project Team	
2_15-2	Add clause defining S-102 exchange set and catalog. The exchange set will be inherited from S-100 and include discovery metadata.	S-102 Project Team	
2_15-3	Add clause describing Digital Signature and encryption mechanism as is currently defined in S-63.	S-102 Project Team	
2_15-4	Propose that S-63 be incorporated into S-100 to allow use by S-1xx Product Specifications	S-102 Project Team	S-100 WG meeting (Sept 2015)
2_15-5	Add Clause describing maintenance for S-102 products	S-102 Project Team	
2_15-6	Modify clause(s) to ensure additional layers are defined appropriately	S-102 Project Team	
2_15-7	Add a portrayal clause as defined in the minutes from 03 Feb 2015. Include the point portrayal from the Tracking List.	S-102 Project Team	
2_15-8	Add annex defining validation checks	S-102 Project Team	
2_15-9	Add Feature and Portrayal Catalogs	S-102 Project Team	
2_15-10	Create an S-100 Exchange Set Schema as part of the schema repository	S-100 WG	

**Next Meeting** TBD.