S100 Working Group 4

Meeting Goals

Welcome Delegates

- 18 Member States

- 15 Expert Contributors and other observers

General Meeting Timeline

- 9:00AM Start

- 10:30AM First Coffee

- 12:30PM to 1:30PM Lunch

- 3:00PM Second Coffee

- 5:00PM End

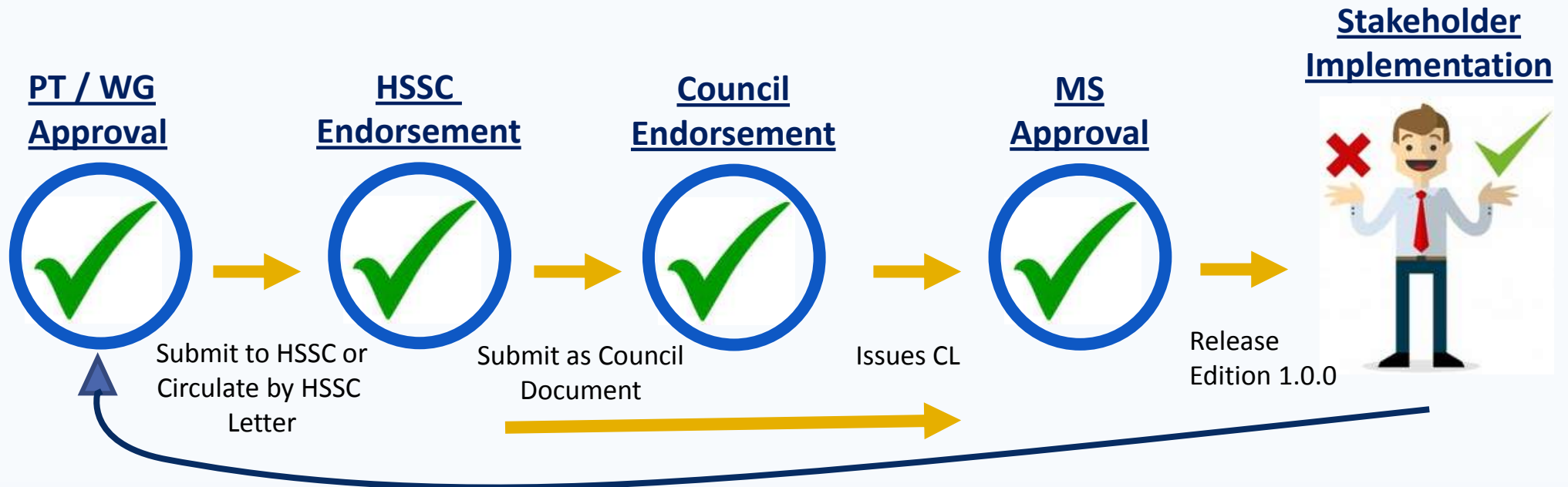- **6:45PM Wednesday Evening – Social Dinner at Utzon Center**

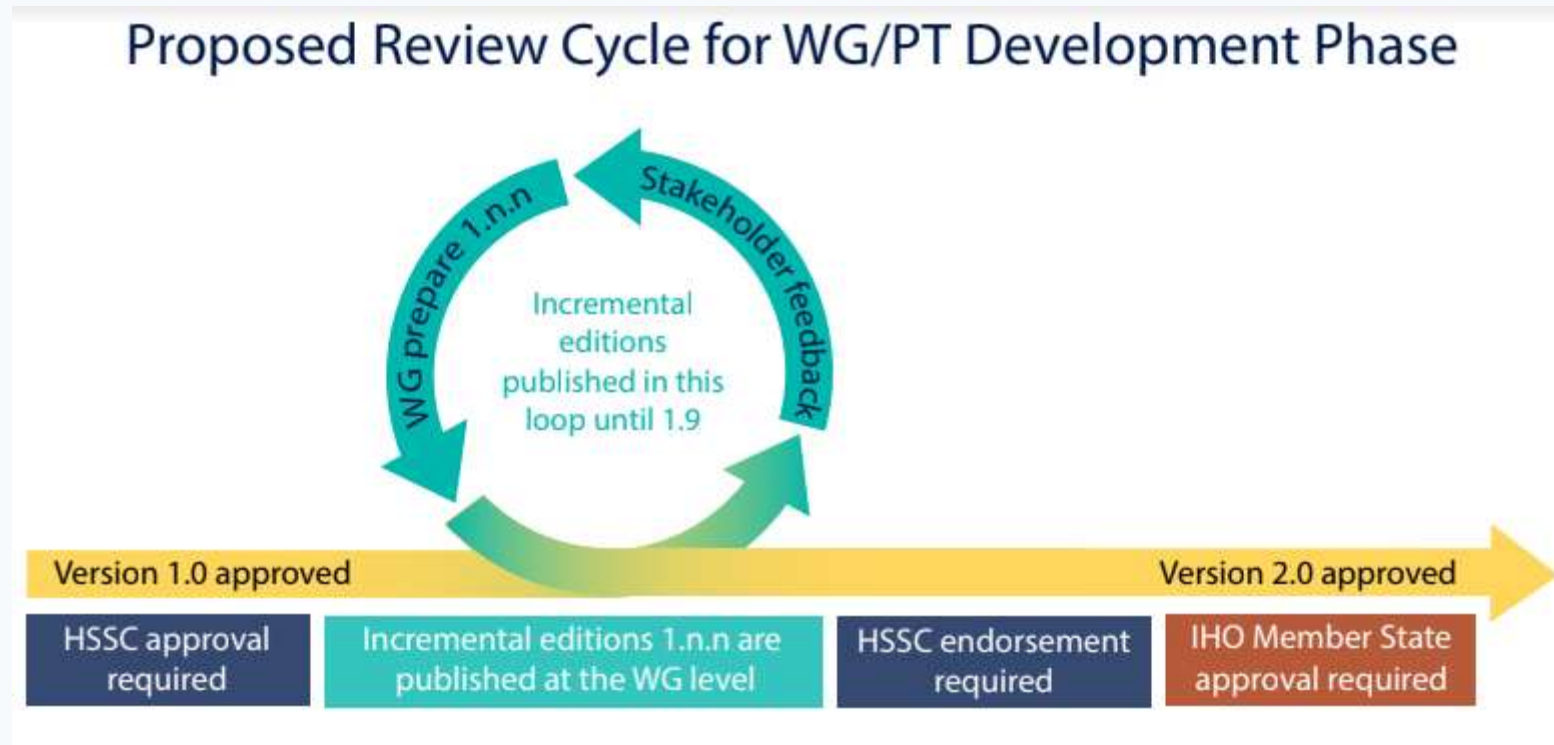# Current Review Cycle for S-100 Based Prod Specs

Res. 2/2007

*…. principles and procedures are intended to be **applied to all proposals for changes to IHO technical standards** and for new work items that will require significant resources to resolve or will potentially impact on those who need to apply the standards.*

Approval Process

PT / WG Approval	**HSSC Endorsement**	**Council Endorsement**	**MS Approval**	**Stakeholder Implementation**
	Submit to HSSC or Circulate by HSSC Letter	Submit as Council Document	Issues CL	Release Edition 1.0.0

Revised Review Cycle for 2/2007

Proposed Review Cycle for WG/PT Development Phase

2018 Accomplishments

- S100 Edition 4.0.0 Published
  - Over 16 proposals were considered over a two and a half year period
  - Major Extensions include
  - Online Communication Extension requested by IALA
  - Scripting language support – requested by OEMs
  - Lua Portrayal support – requested by OEMs
  - Inclusion of bSpline Spatial – requested by WMO
  - Data Protection

2018 Accomplishments

- S-101 Edition 1.0.0 Published

Components	Edition 1.0.0 (2018)	Edition 2.0.0 (2020)	Edition 3.0.0 (2022)
Main Documentation	✓	✓	✓
Feature Catalogue	✓	✓	✓
Portrayal Catalogue	Partial	✓	✓
Validation	Partial	✓	✓
Data Classification and Encoding Guide	✓	✓	✓
Encoding Format	✓	✓	✓
Encryption		✓	✓
Alerts and Indications		✓	✓
Full Test Data Sets for Type approval		Partial	✓
Notes	Portrayal will be limited to S-52 rules translated to LUA	Edition 2.0.0 refines all the additional rules	Operational Edition

2019 Goals

- S100WG Endorsement of the following
  - S-102 High Resolution Bathymetry Edition 2.0.0
  - S-121 Maritime Limits and Boundaries Edition 1.0.0
  - S-129 Underkeel Clearance Management System Edition 1.0.0
  - S-97 Product Specifications Developers Guidebook Edition 1.0.0
  - S-98 Specification for Data Interoperability in S-100 Navigation Systems Edition 1.0.0

2019 Goals

- Major upgrade to the S-100 GI Registry

- Incorporation of Marine Resource Naming into S-97

- Continual Maintenance of S-100 to meet the needs of the wider user community

- Increased Stakeholder Engagement

HSSC Actions

	E-navigation implementation	HSSC10/04 (Former HSSC8/05 and HSSC9/03)	ENCWG and S-100WG to monitor any possible impact of the work on the agreed e-navigation outputs on ECDIS related standards and S-100 related standards respectively.	HSSC-11	Report on HGDM output
	S-101&IMO Performance Standards	HSSC10/05 (Former HSSC8/19 and HSSC9/04)	S-100WG invited to investigate if S-101 ENCs will meet the current IMO Performance Standards so there is no need to consider proposing amendments to the IMO.	HSSC-11	See paper S-100WG4-6.1 readiness S-100WG4-6.10 - Conversion of datasets for ENC validation, ECDIS type approval and security Consider establishing a subWG to better study these issues

HSSC Actions

	S-129	**HSSC10/14**	**UKCMPT to justify according to S-99 the need for the establishment of an UKCM Domain within the Feature Concept Dictionary**	**HSSC-11**	**PT leader should determine if they require a unique domain in the FCD and provide to S100WG to propose to HSSC**
	S-121	HSSC10/15	S-121PT to justify according to S-99 the need for the establishment of an Maritime Limits and Boundaries Domain within the Feature Concept Dictionary	HSSC-11	PT leader should determine if they require a unique domain in the FCD and provide to S100WG to propose to HSSC

HSSC Actions

	S-121	HSSC10/18	S-100WG/S-121PT to keep HSSC Chair/Sec updated on the progress made on the development of S-121 according to the timelines and milestones given at HSSC-10.	From May 2018 until HSSC-11	See also Article dated 27 Nov 2018 in Hydro International S-121 Endorsement at this meeting
	Interoperability	HSSC10/19 (Former HSSC9/08)	S-100WG to consider how to incorporate generic interoperability into future editions of S-100	HSSC-11	Discussion – Does the S-98 Interoperability Specification cover this action?
	Test Bed Platform	HSSC10/20 (Former HSSC9/18)	S-100WG to further develop and finalize the Test Bed Platform and associated guidelines to be used by developers of S-100 based products	HSSC-11	TP - Note that the new registry includes a section for test beds – also the test bed template developed by JP

HSSC Actions

	Data Quality Checklist implementation	**HSSC10/36**	**HSSC agreed that the level of authority of Data Quality Checklist for Product Specifications is a recommendation, which can be adapted as necessary by WGs, under the condition that it will not create any potential interoperability issue. S-100WG to include this guidance in S-97.**	**HSSC-11**	**Decision** **Draft Version of S-97 contains a new part on data quality**
	Data Quality Checklist implementation	HSSC10/37	HSSC WGs and PTs' Chairs to keep the DQWG informed on the DQWG recommendations related to Data Quality that have not been taken into account in the development of their Product Specifications [so the DQWG does not need to reiterate these recommendations at periodic reviews] S-100WG to include this guidance in S-97.	Permanent HSSC-11	Decision Draft Version of S-97 contains a new part on data quality

International Hydrographic Organization
Organisation Hydrographique Internationale

S100WG4 – Aalborg, Denmark, February 27-March 1

HSSC Actions

	S-100 data authentification, quality assurance	HSSC10/55	S-100WG/DQWG to continue the development of recommendations (incl. mitigations measures) and monitoring of cyber security and quality assurance issues as reported by IEC/INTERTANKO.	HSSC-11	Need to wait until we have implementation experience from data delivery using the new S-100 Encryption and Authentication part.
	IHO / ECDIS Stakeholders's Forum	HSSC10/61 (Former HSSC9/57)	IHO Sec. to make a proposal at HSSC-11 for an IHO / ECDIS Stakeholder's Forum to be held in 2020.	HSSC-11	See also action C2/29