



IALA ACTIVITIES AFFECTING HSSC

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Deputy Secretary General &

Dean of the IALA World-Wide Academy



IALA Strategic Vision and Goals for 2026

Goal 1

Marine Aids to Navigation are developed and harmonized through international cooperation and the provision of standards.

Goal 2

All coastal states have contributed to a sustainable and efficient global network of Marine Aids to Navigation through capacity building and the sharing of expertise.





IALA Committees

The “Power House” of IALA

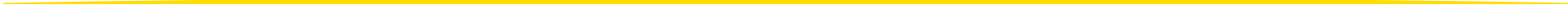
- AtoN Requirements and Management (ARM)
- Engineering and Sustainability (ENG)
- Vessel Traffic Services (VTS)
- e-Navigation (ENAV)





The IALA World-Wide Academy

Jacques, Gerardine, Omar and Kevin



Status of the IALA IGO project

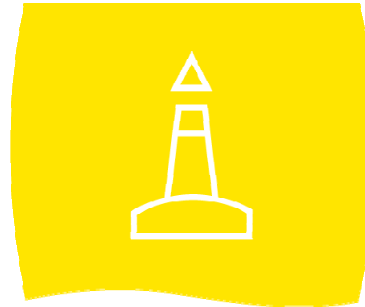


- **2010** - First discussions in IALA and with the French Government
 - **2012-2016** - Draft Convention Text developed
 - **2014** - General Assembly Resolution
 - **2017** - Preparatory Diplomatic Conference in Paris, France
 - **2018** - Preparatory Diplomatic Conference in Marrakech, Morocco
 - **2019** - Preparatory Diplomatic Conference, Istanbul, Turkey
 - **2020** - Diplomatic Conference in Kuala Lumpur, Malaysia
-

The Seven IALA Standards (May 2018)



S1010
ATON PLANNING
AND SERVICE
REQUIREMENT



S1020
ATON DESIGN
AND DELIVERY



S1030
RADIONAVIGATION
SERVICES



S1040
VESSEL TRAFFIC
SERVICES



S1050
TRAINING AND
CERTIFICATION



S1060
DIGITAL
COMMUNICATION
TECHNOLOGIES



S1070
INFORMATION
SERVICES

Some
Recommendations
normative if
compliance is
being claimed





IALA Data Product Specifications

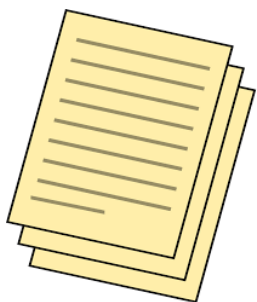


IALA's role in S-200 PS development

- IHO has approved IALA as a **Submitting Organization** and **Domain Controller**
- IALA Product Specifications namespace is S-201 to S-299
- **IALA S-200 domain encompasses data products relating to:**
 - Aids to Navigation
 - Vessel Traffic Services
 - Positioning Systems
 - AIS, ASM, VDES
- **Relevant IALA Publications**
 - R-0147 on Product Specification Development and Management
 - G-1106 on the Development of Product Specifications
 - G-1087 on the Management of the IALA Domain
 - G-1128 on the Specification of e-Navigation Technical Services



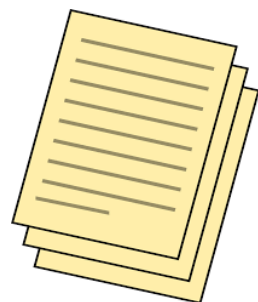
Five types of e-Nav “specifications/descriptions”



**Maritime
Service
Descriptions**

IMO

Basic Principles
Technology
Agnostic



**S-100, S-200 ...
Data Product
Specifications**

**IHO (S-100)
IALA (S-200)**

What to do
(IALA
Recommend
ations)



**Technical
Service
Specification**

IALA



**Technical
Service Design
Description**

IALA

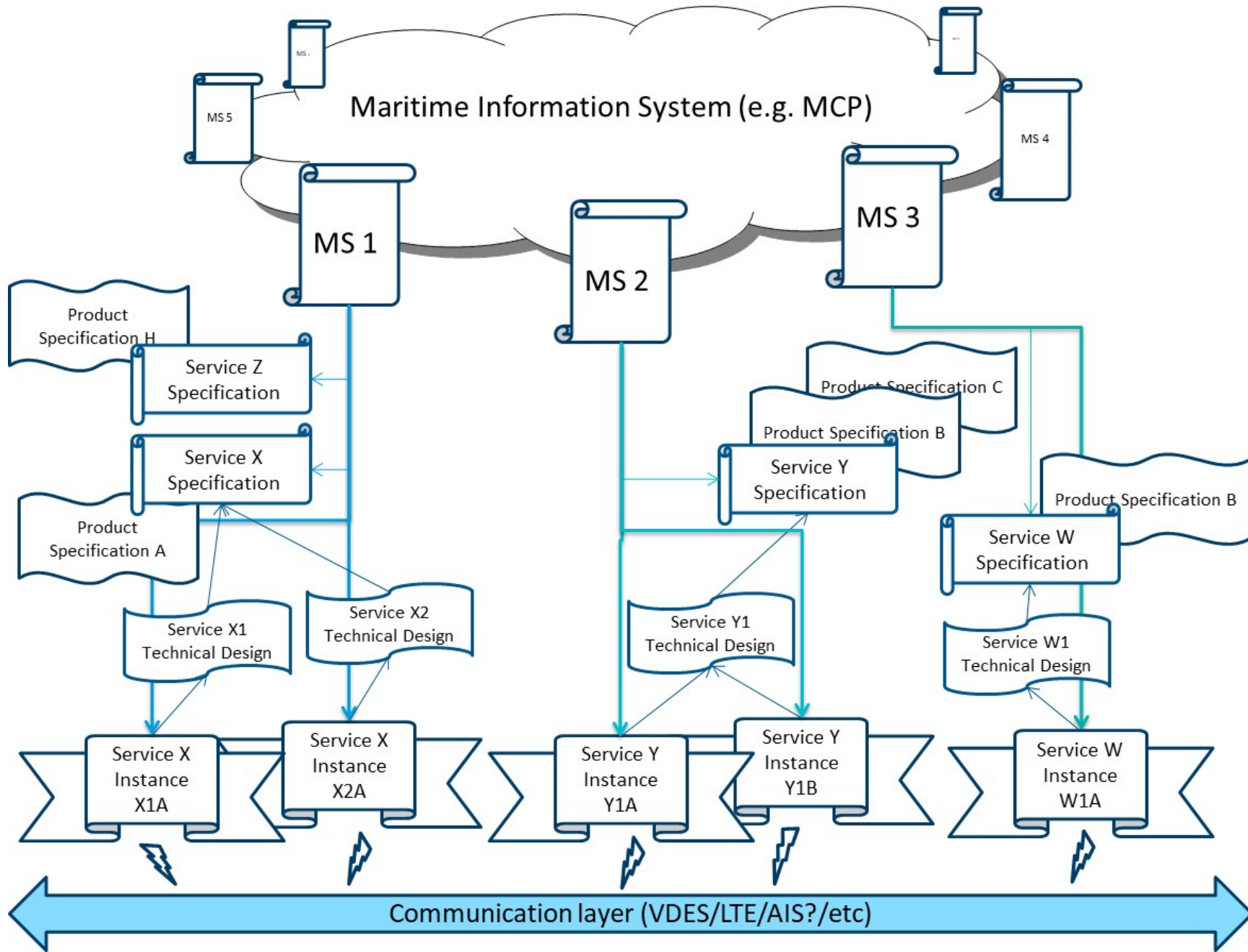
Technology
Selection
How to do...
(IALA Guidelines)



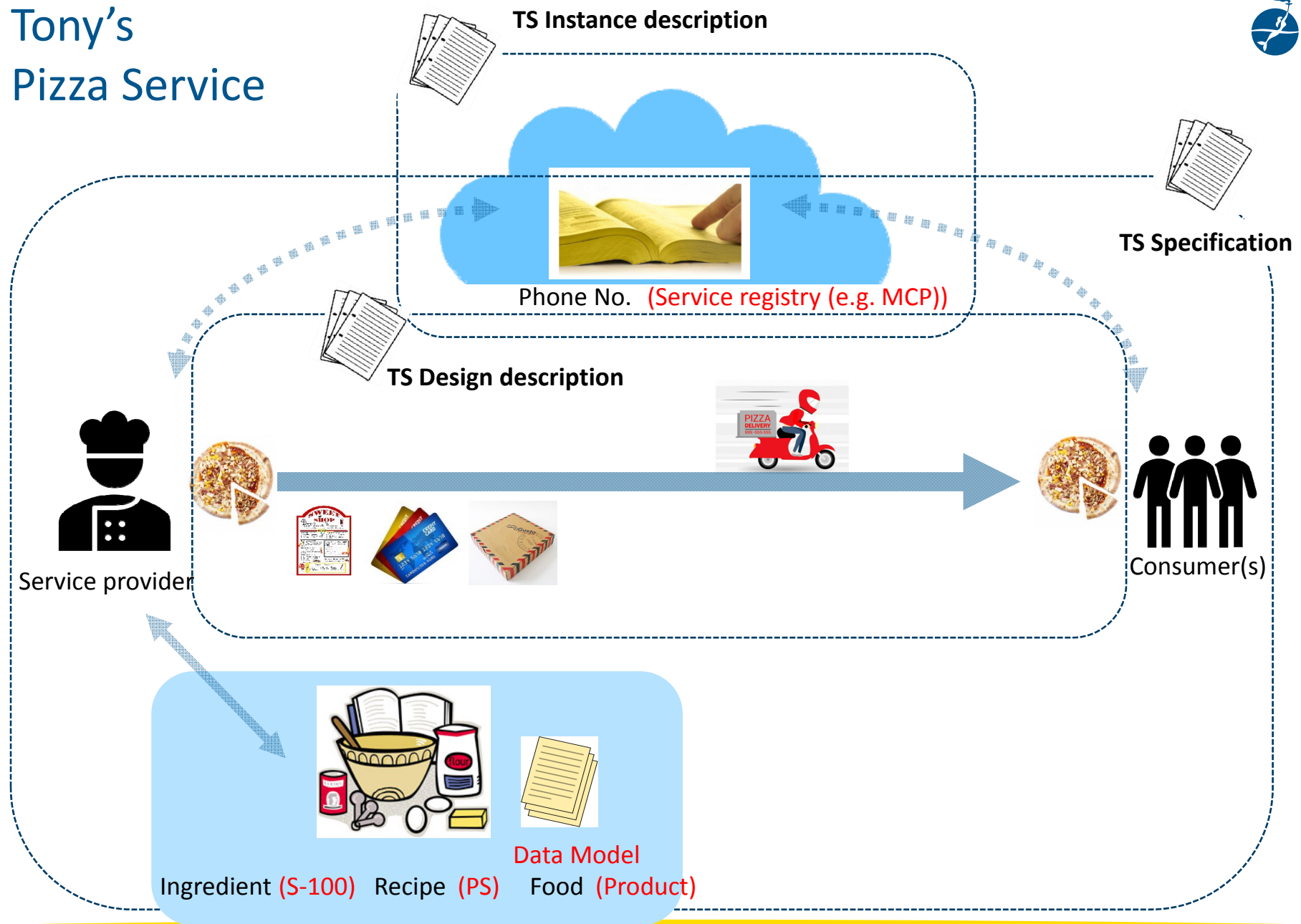
**Technical
Service Instance
Description**

IALA

Actual
Implementation

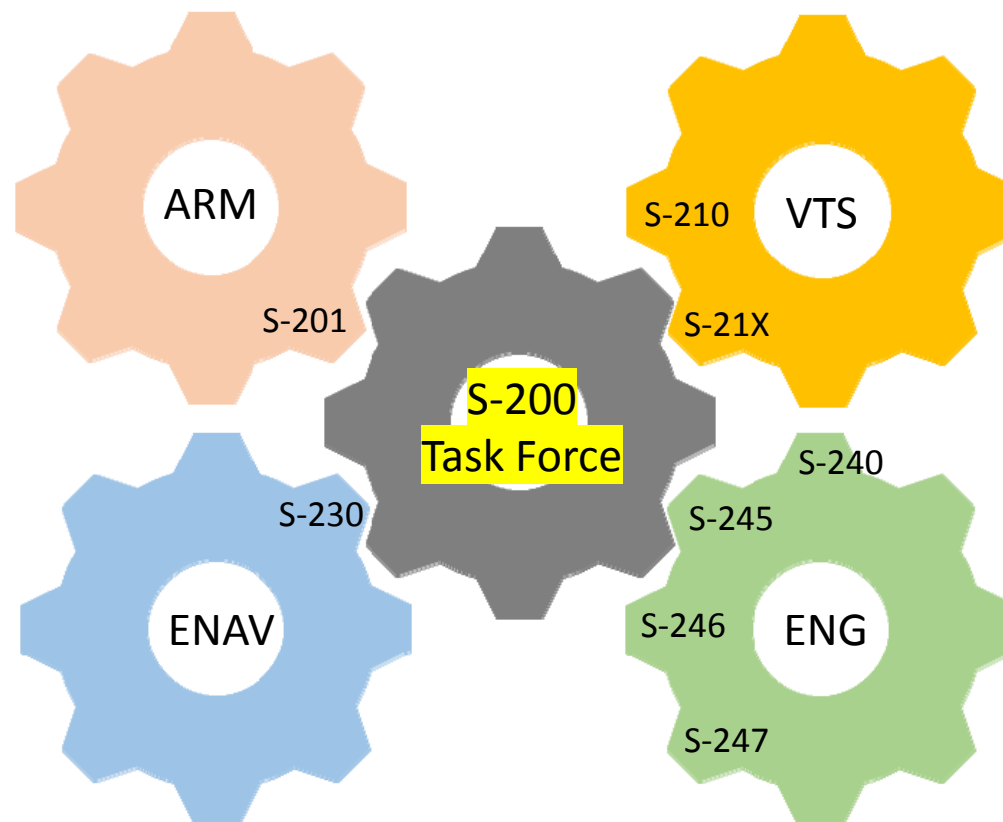


Tony's Pizza Service





Data Product Specification Task Force



Status of S-200 Data Product Specification development

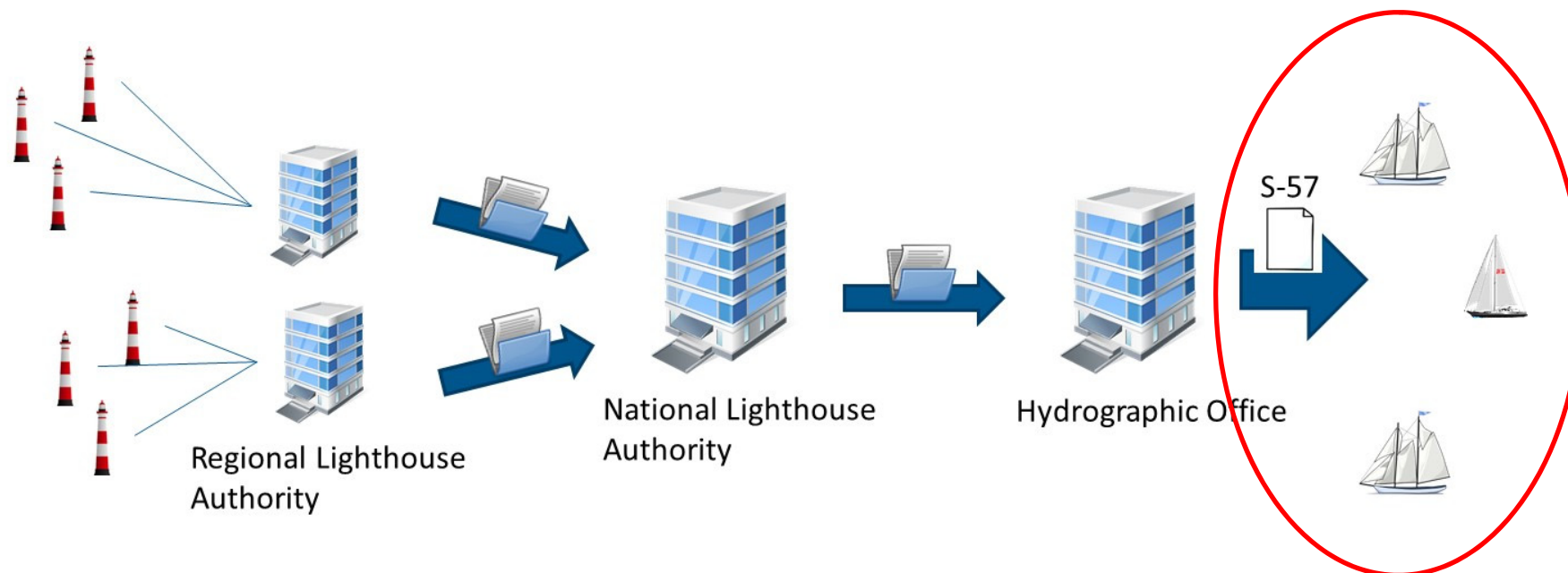


PS No.	Title	Developer	Field Manager	Status	Edition
S-201	Aids to Navigation Information	KRISO/CCG for ARM WG2	Sewoong OH osw@kriso.re.kr	Draft Completed for review Cooperation with IHO on the development of S-125 Marine Navigational Service	<u>Draft 0.0.7 for review</u>
S-210	Inter VTS Exchange Format (IVEF)	VTS WG2	R Hoogendoorn	Pending changes to S-100 to allow for data streaming applications	
S-211	Port Call Messages	IPCDMC	M Bergmann	Draft submitted to IHO	
S-230	Application Specific Messages	ENAV WG1	P Hooijmans -	Planned	
S-240	DGNSS Station Almanac	KRISO for ENG	Cho Yonghun	Completed for review	<u>Draft 0.0.2</u>
S-245	eLoran Additional Secondary Factor (ASF) Data	KRISO for ENG	P Williams	Under development	
S-246	eLoran Station Almanac	KRISO for ENG	P Williams	Under development	
S-247	Differential eLoran Reference Station Almanac	KRISO for ENG	P Williams	Under development	



S-201 - Aids to Navigation Information

- Standardised method of **exchanging information on Aids to Navigation**, initially between lighthouse authorities and hydrographic offices, but ultimately possibly from the AtoN provider to the user (mariner)



- Labour cost, human error, time delay, data quality, security, data validation



S-2XX Product Specification Testbed

<http://theprotest.synology.me:8081/> Ex/ 

- platform to test the S-200 PS and identify benefits and intended usages by member states and stakeholders
- The S-200 test bed consists of geo spatial database and web interface using Google Maps API
- **Aims to**
 - **find unidentified issues before releasing operational versions**
 - apply MRN concept to AtoN domain
 - get the AtoN information consumer involved
 - find the benefits and intended usages



S-2XX Product Specification Testbed

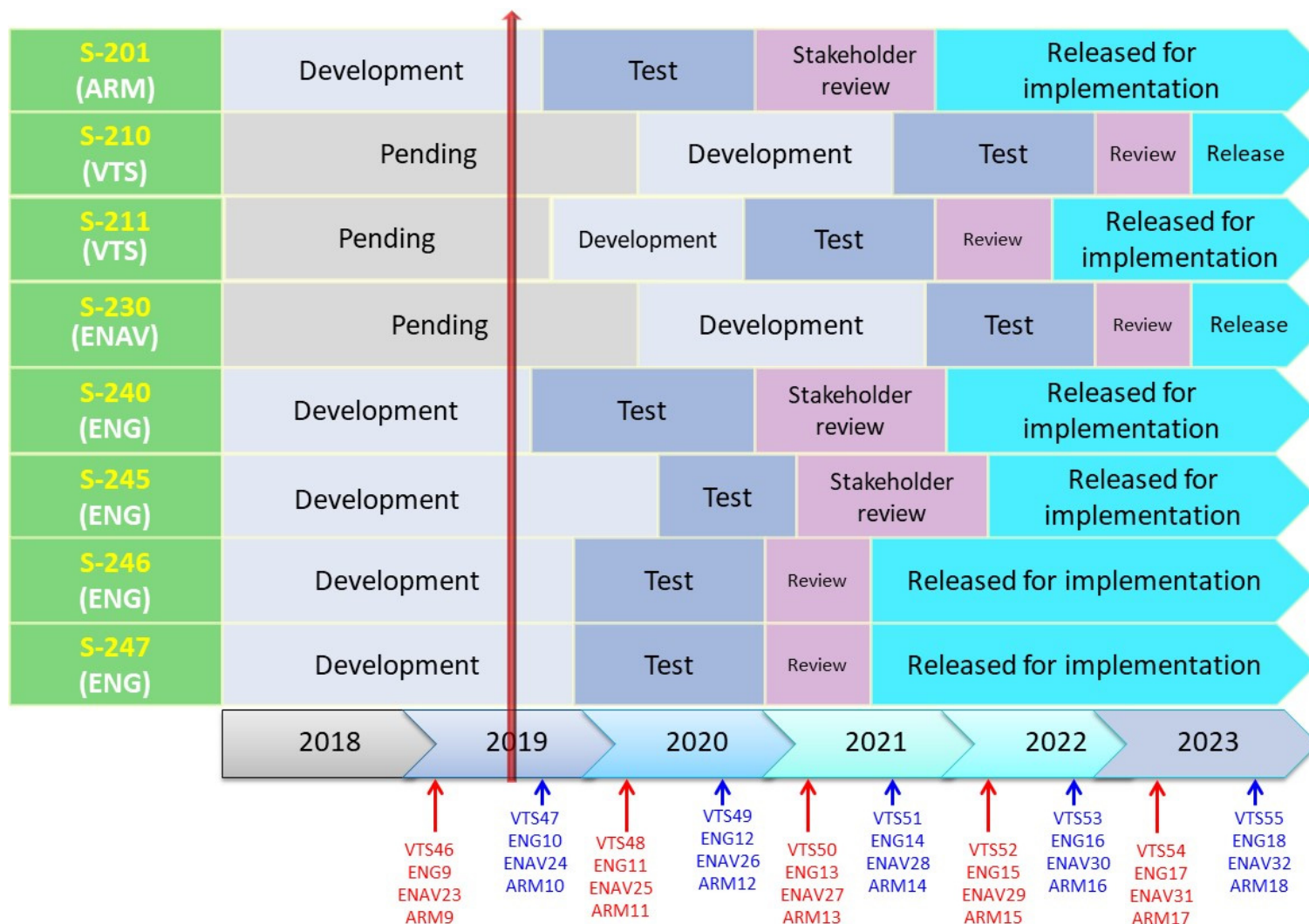
S-200 Testbed System Setting Insert

Map Satellite

S-201 Datasets			
LOL			
Search			
Selection			
ID	Name	Type	FC_Ver
1	S246_TEST000_001	S-246	0.9.9
2	S247_TEST000_001	S-247	0.9.9
3	240DATA	S-240	0.9.9
4	201 Gunsan	S-201	0.9.9
5	Incheon	S-201	0.9.9
6	KRABAB2020	S-201	0.9.9
7	KRHJ0402HJ	S-201	0.9.9
8	Yeosu	S-201	0.9.9



Planned timeline of S-2XX PS series development

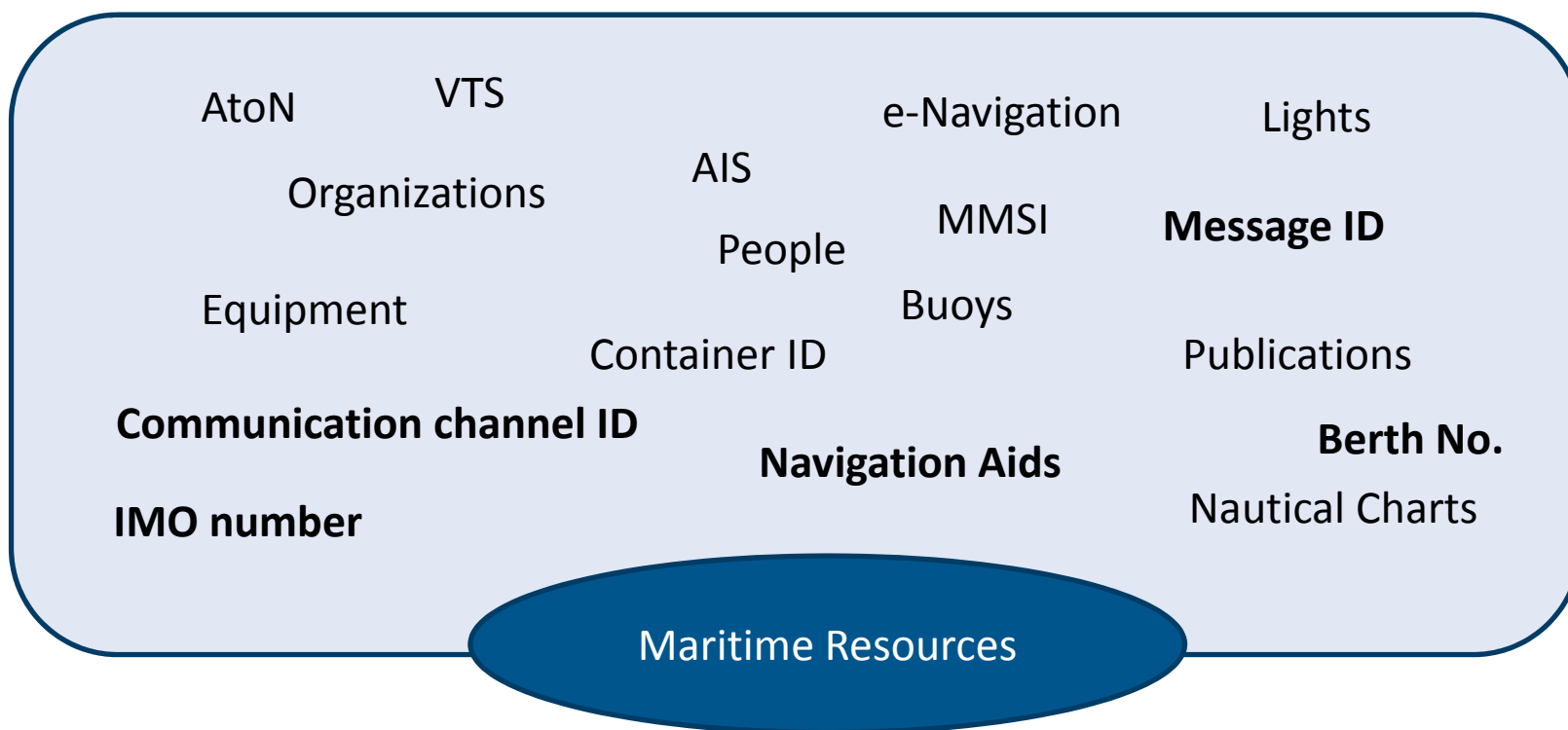




Maritime Resource Name (MRN) development



MRN – a unique identifier for all types of resources



MRN provides the possibility to assign a **unique identifier** for all types of maritime resource in a **machine readable** format.



MRN syntax defined

<MRN> ::= "urn" ":" "mrn" ":" <OID> ":" <OSS>

where:

<OID> *Organization ID*

<OSS> *Organization-specific string*

and

<OSS> ::= <OSNID> ":" <OSNS>

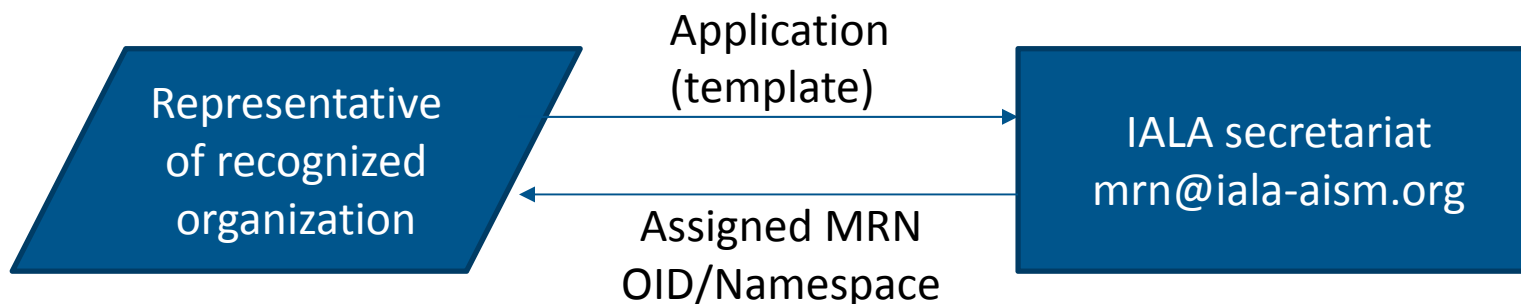
where:

<OSNID> *Organization-specific namespace ID*

<OSNS> *Organisation-specific namespace string*



Procedure on obtainin/assigning MRN OID's



IALA Secretariat will:

Validate the request of the recognized organization;
Update the organization ID (OID/namespace)
Inform the organization of the decision

When there is an appeal:

Forward the appeal to IALA DSG for final decision;
Inform the appellant of the decision

Assigned MRN OID's/Namespaces

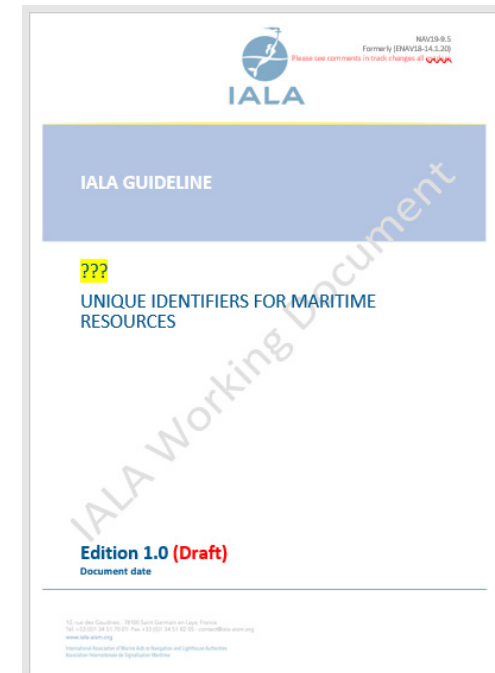


Organization IDs	Date	registering organization	contact
urn:mrn:iala:	2017-07-30	International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) http://www.iala-aism.org	Minsu Jeon minsujeon@iala-aism.org
urn:mrn:iho:	2018-04-04	International Hydrographic Organization (IHO) http://www.iho.int	Anthony Pharaoh addt@iho.int
urn:mrn:mcl:	2017-06-22	Maritime Connectivity Platform Consortium (MCC) https://maritimeconnectivity.net/	Thomas Steen Christensen thomas@dmc.international
urn:mrn:gs1:	2018-10-30	GS1 Global Office www.gs1.org	Jaco Voorspuij jaco.voorspuij@gs1.org
urn:mrn:stm:	2019-03-28	Sea Traffic Management (STM) https://www.stmvalidation.eu/	Fredrik Karlsson Fredrik.Karlsson@Sjofartsverket.se
urn:mrn:mission:	2019-02-01	Manage Information Seamlessly in Ports and Hinterlands (MISSION) https://www.lhg.com/index.php?id=239	Anisa Rizvanolli Anisa.Rizvanolli@cml.fraunhofer.de

Draft Guideline on Unique Identifiers for Maritime Resources



- 1. INTRODUCTION
- 1.1. Related documents
- 2. BACKGROUND
- 2.1. Background documents
- 3. DISCUSSION
- 4. REQUIREMENTS
- 5. MARITIME RESOURCE NAME SYNTAX
- 5.1. Extendability
- 5.1.1. Extended applications within the IALA namespace ..
- 6. AREAS OF APPLICATION
- 7. DEFINITIONS AND ACRONYMS
- 7.1. Definitions
- 7.2. ACRONYMS
- 8. REFERENCES
- ANNEX A MRN FOR AIDS TO NAVIGATION
- ANNEX B MRN FOR VESSEL TRAFFIC SERVICES
- ANNEX C MRN FOR WATERWAYS





Action requested of HSSC:

- Note the information provided



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