

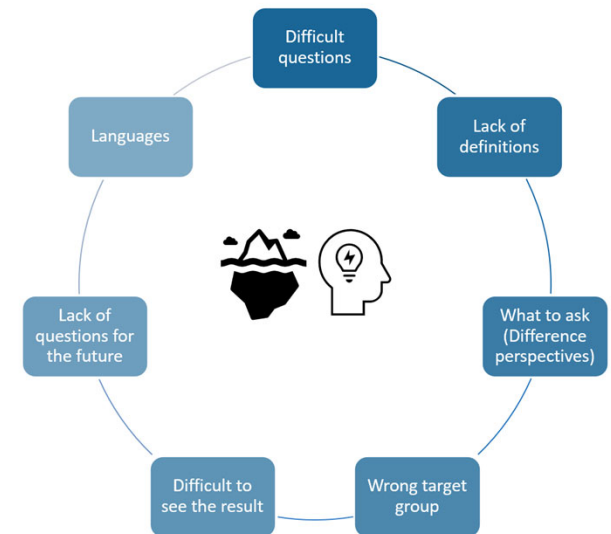
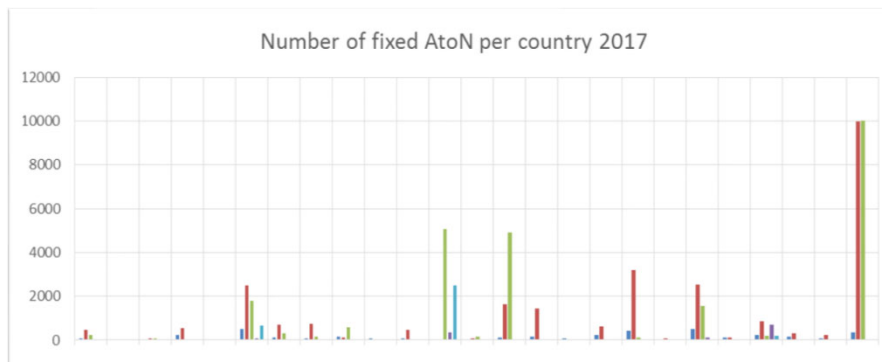
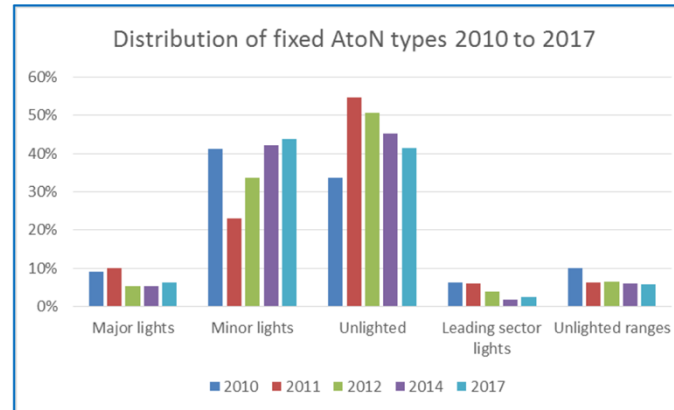
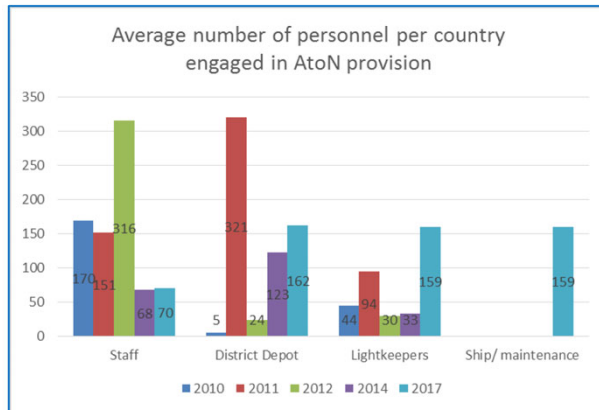


ATON TERMS AND DEFINITIONS; TRANSFORMATION OF NATIONAL ATON DATA TO S-201 DATASET

Minsu JEON, Technical Manager



WHAT IS THE PROBLEM?



- Major lights (nominal range of 10 NM or over);
- Minor lights (nominal range under 10 NM);
- Unlit fixed aids (daymarks only);
- Leading lines: (Sector lights, Lit ranges, Unlit ranges).

LIGHTHOUSE



➤ IALA (MBS)

A tower, or substantial building or structure, erected at a designated geographical location to carry a signal light and to assist marine navigation. It provides a long or medium range light for identification by night.

➤ IHO

A distinctive structure on or off a coast exhibiting a major light designed to serve as an aid to navigation.

➤ Wikipedia

A lighthouse is a tower, building, or other type of structure designed to emit light from a system of lamps and lenses and to serve as a beacon for navigational aid, for maritime pilots at sea or on inland waterways.



BEACON

➤ IALA

A fixed artificial navigation mark that can be recognised by its shape, colour, pattern, topmark or light character, or a combination of these. It may carry various additional aids to navigation.

➤ IHO

A fixed artificial navigation mark that can be recognized by its shape, colour, pattern, topmark or light character, or a combination of these. It may carry various additional aids to navigation. This term is not commonly used when the navigation mark can be classified as a lighthouse.

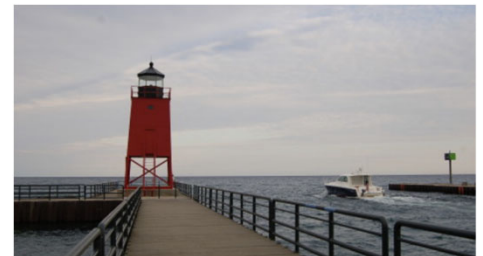
➤ Wikipedia

A beacon is an intentionally conspicuous device designed to attract attention to a specific location. A common example is the lighthouse, which draws attention to a fixed point that can be used to navigate around obstacles or into port. More modern examples include a variety of radio beacons that can be read on radio direction finders in all weather, and radar transponders that appear on radar displays.

Beacons can also be combined with semaphoric or other indicators to provide important information, such as the status of an airport, by the colour and rotational pattern of its airport beacon, or of pending weather as indicated on a weather beacon mounted at the top of a tall building or similar site. When used in such fashion, beacons can be considered a form of optical telegraphy.



WHAT IS THE PROBLEM?





OTHERS FROM IHO S-100 GI REGISTRY

➤ Major light description

A description of navigationally significant lights essential for marking landfalls, offshore dangers, shipping routes, port access channels or protection of the marine environment.

➤ Sector light Sector Obscured

The light sector has been fully or partly obscured.

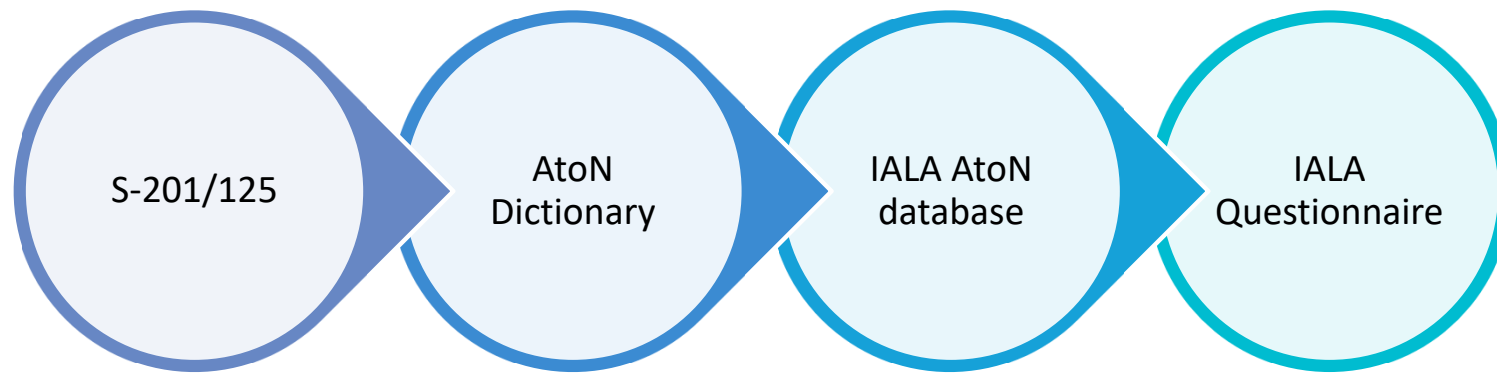
➤ Light Unreliable

The light is unreliable due to technical problems.

✓ 164 light related concepts including light characters in the GI registry

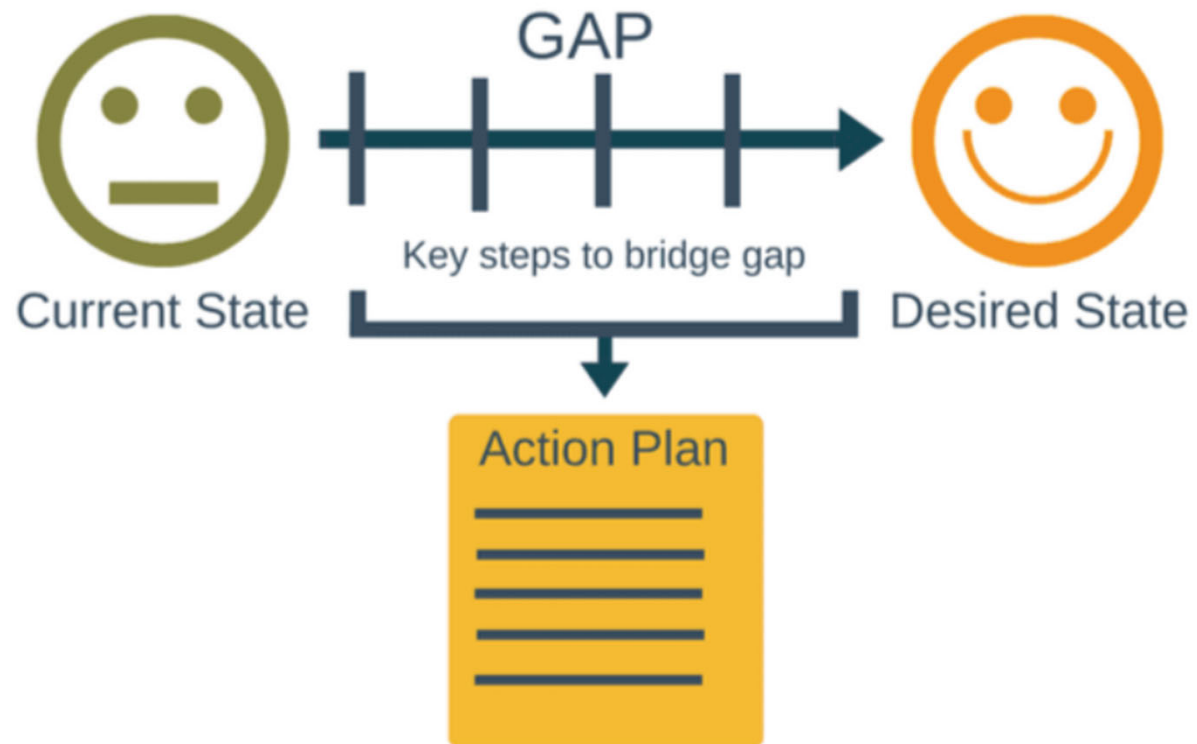


HARMONIZED TERMS AND DEFINITIONS IN DIGITAL WORLD





GAP ANALYSIS

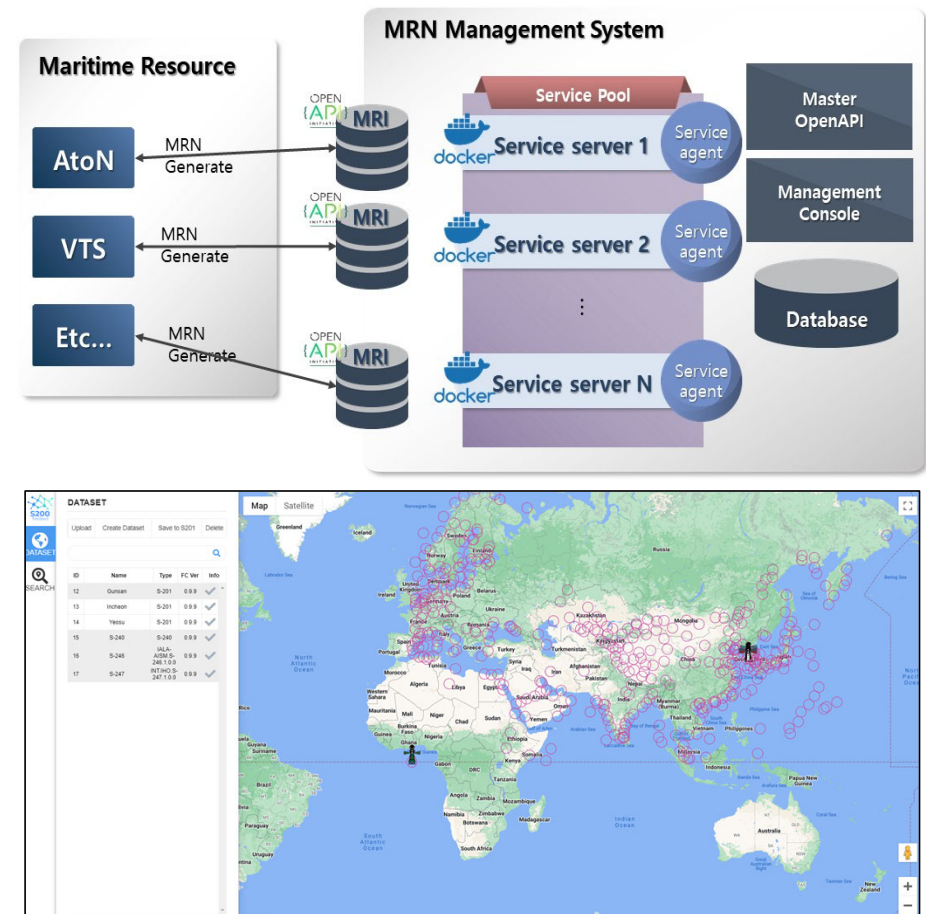




IALA S-200 TESTBED (POWERED BY MOF/KRISO)

<http://tds.blumap.kr/>

- **Input and export S-200 data model**
 - AtoN CA & HO
- **Portrayal** of S-200 datasets
- **Updating the datasets**
- **Quality validation** of S-200 datasets
- **MRN**
- AtoN information Service in terms of e-Navigation
- Etc.





CURRENT STATE - FRANCE

N° identificati	Division territoriale	Zone géographique	Nom du patrimoine	Latitude	Longitude	Nature du support	Marque	Aide lumine	Categorie disponit	e
8500010	SABLES D'OLONNE	1- BAIE DE BOURGNEUF	BALISE LA NORTHE	47°02,626'N	002°01,264'E	Support fixe	Latérale bâbord	Non	Catégorie 2	
4400001	SAINT NAZAIRE	Abords de PIRIAC sur MER	BALISE GRAND - NORVEN	47°23,553'N	002°32,893'E	Support fixe	Cardinale Nord	Oui	Catégorie 2	
4000000	ANGET	Biscarrosse-Soustons	BOUEE COFFRE D'AMARRAGE C.E.L.	44°22,811'N	001°25,487'E	Support flottant	Spéciale	Oui	Catégorie 2	
2A00000	AJACCIO	ABORDS AJACCIO	FEU DE L'ECUEIL DE LA GUARDIOLA	41°54,266'N	008°43,220'E	Support fixe	Latérale bâbord	Oui	Catégorie 2	
1400000	OUISTREHAM	Abords d' ARROMANCHES	Abords d' ARROMANCHES - BOUEE SUD	49°21,347'N	000°37,267'E	Support flottant	Latérale bâbord	Non	Catégorie 3	
7600001	LE HAVRE	Côte d'Albâtre	Abords de Dieppe - Bouée du Daffodils	50°02,486'N	001°03,974'E	Support flottant	Cardinale Ouest	Oui	Catégorie 3	
2200001	LEZARDRIEUX	Abords de Binic	ABORDS D'ETABLES - BALISE L'OURS SEUL	48°37,207'N	002°48,414'E	Support fixe	Danger isolé	Non	Catégorie 2	
5001000	CHERBOURG	GRANVILLE-Abords de Carteret	PORT DE PORTBAIL BOUÉE D'ATTERRISSAGE.	49°18,376'N	001°44,882'E	Support flottant	Eaux saines	Non	Catégorie 2	
3500001	SAINT-MALO	Abords de St Briac	BALISE LES LARDIÈRES	48°38,828'N	002°08,010'E	Support fixe	Latérale tribord	Non	Catégorie 2	
3300004	LE VERDON SUR MER	ABORDS DU BASSIN D'ARCAÇON	PHARE DU CAP FERRET	44°38,757'N	001°14,927'E	Support fixe	Feu de jalonnement	Oui	Catégorie 2	
97500002	SAINT-PIERRE ET MIQUELON	Accès au Port de Saint-Pierre	PHARE DE GALANTRY	46°45,910'N	056°09,235'E	Support fixe		Oui	Catégorie 2	
8000000	BOULOGNE / ETAPLES	SAINT VALERY SUR SOMME - ACCES BAIE DE S	SCHENAL DE SAINT VALERY - BOUEE AT-SO	50°13,977'N	001°28,008'E	Support flottant	Eaux saines	Oui	Catégorie 3	
97300000	GUYANE	Chenal du Mahury	DC	04°57,347'N	052°09,574'E	Support flottant	Eaux saines	Oui	Catégorie 2	
97100008	GUADELOUPE	Capesterre Sainte Marie - Goyave - Petit - Bourg	BOUEE FREGATE	16°11,260'N	061°32,950'E	Support flottant	Cardinale Sud	Oui	Catégorie 2	
97600000	MAYOTTE	Bandréle- est Grande Terre	ALIGNEMENT A 292°45 DE LA PASSE BANDÉLÉ - FEU ANTÉRIEUR	12°52,420'S	045°12,930'E	Support fixe		Oui	Catégorie 2	
97300122	GUYANE	Chenal de Kourou	KA	05°09,769'N	052°37,327'E	Support flottant	Cardinale Ouest	Oui	Catégorie 2	
6200025	BOULOGNE / ETAPLES	CALAIS	PORT DE CALAIS - FEU DE LA JETEE EST	50°58,379'N	001°50,449'E	Support fixe	Latérale bâbord	Oui	Catégorie 2	
5000008	CHERBOURG	CHERBOURG-BARFLEUR	ABORDS DE BARFLEUR - BALISE LE MOULARD	49°39,358'N	001°13,944'E	Support fixe	Cardinale Est	Non	Catégorie 2	
97200000	MARTINIQUE	BAIE DE FORT DE FRANCE	PHARE DE LA POINTE DES NÈGRES	14°35,978'N	061°05,415'E	Support fixe		Oui	Catégorie 2	
2B00000	BASTIA	BASTIA	PORT DE BASTIA - FEU DE LA JETEE DU DRAGON	42°41,655'N	009°27,245'E	Support fixe	Latérale bâbord	Oui	Catégorie 2	
97400000	LA REUNION	EST	FEU DU MUSOIR DU PORT DE SAINTE ROSE	21°07,516'S	055°47,194'E	Support fixe	Feu à secteurs	Oui	Catégorie 2	

Column A : National identification number

Column B : Regional service in charge

Column C : Geographical area

Column D : Name

Column E : Latitude

Column F : Longitude

Column G : Type of support (fixed, floatting, radionavigation)

Column H : Mark

Column I : Présence of light

Column J : IALA categorisation (1, 2, 3 ... and 4 for AtoN doesn't contribute to the safety of navigation)



CURRENT STATE - SWEDEN

Station id	Lotsområde	Beskrivning	Objekttyp	IALA-typ	Status	Nautisk karaktär	Stationssläge N	Stationssläge E	Fastställandeslag	Farled	Farledsklass	IALA-kategori	Ägare	Driftansvarig
							SWEREF99	SWEREF99	atus					
1130045	SE	ÄMBORÖGRUNDET	Prick	Bubordsmärke /R	I-drift		59-28.7795499	16-56.2713473	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1110136	SE	ÄDELSÖ SANDVIKSGRUND	Prick	Styrbordsmärke /G	I-drift		59-28.4311109	17-29.6242177	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
500005114	SE	AGGÅRD	Prick	Styrbordsmärke /G	I-drift		59-30.9540212	16-42.7300591	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1130037	SE	AGNEVUDE	Ledfyr		I-drift	ISO 45 10197	59-31.08012	16-58.00017	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1130126	SE	ÄLMÖLUND NORRA GRUND	Prick	Styrbordsmärke /G	I-drift		59-32.8072712	16-34.4072841	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
61810045	SE	BADHAFVRYGGAN NORD	Södg	Okänd	I-drift		59-11.4000000	17-38.0100000	FF	901	1	2. Important 99.0%	Sjöfartsverket	Kanalkontroll Södertälje
61810044	SE	BADHAFVRYGGAN SYD	Södg	Okänd	I-drift		59-11.3661000	17-38.0483800	FF	901	1	2. Important 99.0%	Sjöfartsverket	Kanalkontroll Södertälje
1130255	SE	BEKOPSTÄNNA	Ledfyr	Sjömärke	I-drift	ISO 35 01196	59-31.2087500	16-57.9720000	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1130134	SE	BÖCKFJÄRDSKLACK	Prick	Bubordsmärke /R	I-drift		59-18.5658559	17-32.7587443	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1110133	SE	BÜÖRÖ LERA	Prick	Styrbordsmärke /G	I-drift		59-18.2220358	17-34.5336952	FF	901	1	2. Important 99.0%	Sjöfartsverket	Farledsgrupp Södertälje
1130327	SE	BÖNNERFJÖD	Ledfyr	Fyr	I-drift	Fl(4) 125 01373	59-16.3057000	17-34.7621000	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
500004799	SE	BRÄNTEN	Varningsfyr		I-drift	Fl 35 01107	59-25.21602	17-35.96981	FF	901	1	1. Vital significance 99.8%	Tegle Nät AB Vatten	Farledsgrupp Södertälje
1130018	SE	BRYGGHOLMEN	Ledfyr		I-drift	Fl(2) 65 0456	59-31.8004600	17-06.9569700	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1110152	SE	BRYGGHOLMEN SÖRA	Lydbol	Styrbordsmärke /G	I-drift	Q 0240	59-31.1575289	17-08.0843631	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Baltica
1130346	SE	DILPHAMMENS INSEGLING GRÖNA NEDRE	Ensfyr		I-drift	Q 0242	59-35.598654	16-31.531130	FF	901	1	1. Vital significance 99.8%	Mälarenhammar AB	Mälarenhammar AB
1130344	SE	DILPHAMMENS INSEGLING RÖDA NEDRE	Ensfyr		I-drift	Q 0242	59-35.55579	16-31.51277	FF	901	1	1. Vital significance 99.8%	Mälarenhammar AB	Mälarenhammar AB
1130343	SE	DILPHAMMENS INSEGLING RÖDA ÖVRE	Ensfyr		I-drift	ISO 25 03195	59-35.58435	16-31.44036	FF	901	1	1. Vital significance 99.8%	Mälarenhammar AB	Mälarenhammar AB
1130341	SE	DILPHAMMENS INSEGLING RÖDA NEDRE	Ensfyr		I-drift	Q 0242	59-35.2417700	16-31.0819000	FF	901	1	1. Vital significance 99.8%	Mälarenhammar AB	Mälarenhammar AB
1130342	SE	DILPHAMMENS INSEGLING RÖDA ÖVRE	Ensfyr		I-drift	ISO 25 03195	59-35.2093900	16-31.077800	FF	901	1	1. Vital significance 99.8%	Mälarenhammar AB	Mälarenhammar AB
61810000	SE	FÄJA BÖDA SÖDERTÄLJE KANAL	Överg Led anordning	Okänd	I-drift		59-11.0847500	17-38.5787000	FF	901	1	2. Important 99.0%	Trafikverket Region Stockholm	Trafikverket Region Stockholm
500000488	SE	FÄJLÖ	Ledfyr		I-drift	Fl(2) 65 0327	59-30.1284900	16-50.0086000	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1130055	SE	FÄJLÖGRUNDET	Lydbol	Styrbordsmärke /G	I-drift	Q 0240	59-29.8266000	16-49.9458000	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Baltica
1130348	SE	FÄJLÖGRUND	Ledfyr		I-drift	Fl(2) 65 03131	59-31.13068	17-30.7826	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1110149	SE	FÄJLÖGRUND	Prick	Styrbordsmärke /G	I-drift		59-31.1208488	17-09.7463874	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
50000265	SE	FÄJLÖGRUND	Ledfyr		I-drift	Q 0455	59-31.7003200	16-40.4238500	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1130123	SE	FÄJLÖ MILLERSTA	Prick	Bubordsmärke /R	I-drift		59-32.7918178	16-34.5651483	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1130125	SE	FÄJLÖ NORRA GRUND	Prick	Bubordsmärke /R	I-drift		59-32.7524880	16-34.0974800	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1130122	SE	FÄJLÖ SÖRA GRUND	Lydbol	Bubordsmärke /R	I-drift	Fl 35 01103	59-32.1168146	16-34.6858781	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Baltica
1130300	SE	GIMPELSTENNA	Prick	Bubordsmärke /R	I-drift		59-30.3854601	16-46.1012455	FF	901	1	2. Important 99.0%	Sjöfartsverket	Farledsgrupp Södertälje
1130044	SE	GISSELGRUNDET	Prick	Bubordsmärke /R	I-drift		59-29.2311901	16-52.1551012	FF	901	1	2. Important 99.0%	Sjöfartsverket	Farledsgrupp Södertälje
1130043	SE	GISSELGRUNDET	Ledfyr		I-drift	Fl(2) 65 0453	59-29.6630000	16-52.1328600	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Farledsgrupp Södertälje
1130097	SE	GRÄNFJÄRDSKLACK	Lydbol	Styrbordsmärke /G	I-drift	Q 0240	59-30.4261971	16-46.5603213	FF	901	1	1. Vital significance 99.8%	Sjöfartsverket	Baltica



Namn		Objektets beteckning		Färg		TO	
BORNHUVUD		Ledfyr		371300		SE	
Status:	I drift	Station ID:	1110127				
Stationssläge N:	59-16.1057000	SweRef99TM N:	6 572 787,410834				
Stationssläge E:	17-34.7621000	SweRef99TM E:	647 011,897604				
Lokalt ID:		Fastställande status:	Fastställt fälmätning				
SRS 44 klass	Ej klassificerat						
Belägenhet:	O om farleden.						
Ägare:		Sjöfartsverket	Driftansvarig:	Farledsgrupp Södertälje			
Telefon dag/vxl:		0771-63 00 00	Telefon dag/vxl:				
			Telefon natt/jour:				
			Mobiletelefon:				
			E-post:	[redacted]@sjofartsverket.se			

Nautisk information:		Sektor	Färg	Lysvidd
Nautisk karaktär:	R(4) 12s	131.0 - 160.6	G	3,8
Teknisk karaktär:	0.7+(1.4)+0.7+(1.4)+0.7+(1.4)+0.7+(5.0)=12s	160.6 - 173.5	W	6,6
Int sjökorts-karaktär:	Fl(4) 12s WRG 6.6-3.8M 6.8m	173.5 - 199.5	R	4,6
Lyshöjd,m	6,8	199.5 - 225.0	G	3,8
Installationsschema:	F-033-1447	225.0 - 310.0	Dk	0
Primärenergi:	Solpanel	310.0 - 345.0	G	3,8
Sekundärenergi:	Batteri	345.0 - 347.4	W	6,6
Linssystem 1:		347.4 - 131.0	R	4,6
Fokalhöjd (mm):	325			
Glashöjd (mm):	356			
Brännvidd (mm):	150			

Enslinje:			
Bäring:			
Racon ID:			
Racon typ:			
Racon:			
Teckenlängd (NM):			
Byggnad:			
Byggnadstyp:	Kur med hög stolpe	Byggnadsår:	1 962
Förtöjningsdjup:		Ombyggnadsår:	
Grundläggningsnivå:		Ritningsnr:	14145 huvudritning
Höjd:	5,5		
Målning:			
Datum för målning:		Luftfuktighet vid utförandet:	
Temperatur vid utförandet:		Målningsmetod:	



CURRENT STATE - US

AID_UID	ATU	PRIMARY	LIGHT_LIST	NAME	AID_TYPE	AID_SUBTY	DESCRIPT	MARKING	ASSIGNED	ASSIGNED	ATONIS_AI	ICE_CONDI	SEASON_F	SEASON_T	OPERATION	RACON_M	RACON_FL	SOUND_EP	SOUND_SI	STRUCTUR	STRUCTUR	REMARK	STRUCTUR	LOCATION	HULL_AUT	HISTORICAL	LSYS_UID	LIGHT_CH	USE_TYPE	LIGHT_NOI	LIGHT_FOC	LIGHT_FOC	ANTENNA	FLASHER_CL	LSCT_UID	ATONIS_LI	BEGIN_AN				
1.0012E+11	1	3	3	North Rock	FD	FX	VAIS	NIAT	44-32-15.8	067-05-13.808W					PERM	Y				CYLINDRICAL		AIS Physical MMSI 993676005.																			
1.0012E+11	1	3.1	3.1	North Sho	FD	FL	VAIS	IALA B	44-31-41.3	067-06-39.200W					PERM	Y						MMSI 993676005.																			
1.0012E+11	1	3.2	3.2	South East	FD	FL	VAIS	IALA B	44-29-32.2	067-04-37.160W					PERM	Y						MMSI 993676005.																			
1.02E+11	1	4	4	NOAA Dat	FD	FL	LB	IALA B	44-16-59.C	067-17-59 Y					REIM							Marked N Yellow.		OTHER		2E+11	FI (4) Y 20s	PN		4			YELLOW								
																						blasts ev 30s (2s bl-2s si-2s bl-24s si). MRASS- Fog signal is radio activated, during times of reduced visibility, turn marine VHF-FM radio to channel 83A/157. 175Mhz. Key microphone 5 times consecutively, to activate fog signal																			
2.001E+11	1	5	5	Mount Des	FD	FX	LTMA	IALA B	43-58-07.C	068-07-42 N/A	N/A				PERM	N		HORN	2BL 30	LT HOUSE	65 for 60		Granite conical tower.				2E+11	FI W 15s	PN		14	75 FT	WHITE		1						
																						blasts ev 30s (2s bl-2s si-2s bl-24s si). MRASS- Fog signal is radio activated, during																			



CURRENT STATE - AUSTRALIA

Conventions for AtoN characteristics



Australian Government
Australian Maritime Safety Authority



POSITION - Latitude:	POSITION - Longitude:	DATUM:	BROADCAST FROM:	CHARACTER:	MMSI:	BROADCAST RANGE:	LatDec	LongDec
10° 35.4860' S	141° 52.4110' E	WGS 84	AN551-16 Hammond Hill	Message 21: ON AIS AtoN Code: 22 - Cardinal Mark S	995031039	36 NM omnidirectional	-10.5914333	141.873517
10° 32.3250' S	142° 10.1420' E	WGS 84	AN551-16 Hammond Hill	Message 21: ON AIS AtoN Code: 20 - Cardinal Mark N	995031087	36 NM omnidirectional	-10.53875	142.169033
10° 31.5400' S	142° 26.6700' E	WGS 84	AN551-16 Hammond Hill	Message 21: ON AIS AtoN Code: 28 - Isolated danger	995036057	36 NM omnidirectional	-10.5256667	142.4445
11° 25.5500' S	142° 56.2500' E	WGS 84	AN233-16 Cairncross Islets	Message 21: ON AIS AtoN Code: 28 - Isolated danger	995036058	17 NM omnidirectional	-11.4258333	142.9375
14° 09.6300' S	144° 35.5700' E	WGS 84	AN282-16 Pipon Island	Message 21: ON AIS AtoN Code: 28 - Isolated danger	995036059	30 NM omnidirectional	-14.1605	144.592833
10° 29.8650' S	142° 20.7530' E	WGS 84	AN551-16 Hammond Hill	Message 21: ON AIS AtoN Code: 19 - Beacon, Special mark	995036100	36 NM omnidirectional	-10.49775	142.345883
10° 35.2560' S	141° 52.9200' E	WGS 84	AN551-16 Hammond Hill	Message 21: ON AIS AtoN Code: 25 - Starboard hand Mark	995036035	36 NM omnidirectional	-10.5876	141.882

1. Background

The purpose of this document is to provide guidance on AMSA conventions for the recording of Aids to Navigation (AtoN) characteristic attributes.

2. AtoN characteristics conventions

The following tables detail the AMSA conventions for each AtoN characteristic, as well as providing example information.


2.1. Fixed sites - Main Light Characteristics

Characteristic and example information	Description and AMSA convention
IALA AVAILABILITY CATEGORY: 1	This section details the IALA Availability Category for the AtoN that has been assigned by AMSA.
PERFORMANCE CRITERIA (AVAILABILITY): 99.8%	This section details the availability performance target for the AtoN based on the IALA category.
POSITION: Latitude: 37° 34.0350' S Longitude: 149° 55.0130' E Datum: WGS 84	This section details the geographic coordinate position of the AtoN. The position must be recorded in Degrees Decimal Minutes to 4 decimal places. The World Geodetic Spheroid 1984 (WGS 84) is the default datum used in most satellite positioning receivers.
BA LIST OF LIGHTS: K 2558	This section details a unique number for the light referenced in the latest version of the British Admiralty list of lights Vol K or Vol Q.
DAYMARK: Stone Tower and White Lantern Room	This section details the daymark characteristics of the AtoN. It should describe the colour (e.g. White), material (e.g. Concrete) and type (e.g. Tower) of the daymark structure. If the daymark is unpainted, the colour is omitted. The description should also detail any distinguishing features, such as a 'White Lantern Room'. Note: In some cases, there may be a clearly defined daymark shape on the structure as well, which also needs to be detailed (e.g. IALA 'A' slatted green cone on pile with beacon identification sign).
HEIGHT OF DAYMARK: 17.5 metres	This section details the total height of the daymark above ground level for land based sites. If the site is located offshore, the height of the daymark is from Mean High Water Springs (MHWS). 'metres' is to be written in full and lowercase. Note: The height of the daymark is to be written as a single value and rounded to 1 decimal place where applicable.
CHARACTER: Flashing (3) in: 20 secs Flash: 0.6 secs Short Eclipse: 1.2 secs Long Eclipse: 15.2 secs	This section details the character of the light. This must conform to IALA Recommendation E-110 on rhythmic characters for the specific marking application. Seconds is to be abbreviated to 'secs'.
COLOUR OF LIGHT: White	This section details the colour of the light. For sector lights, the multiple colours are to be listed.

Fixed sites - Main Light Characteristics continued on next page

CURRENT STATE - FINLAND





Finnish Transport
Infrastructure Agency

Suomi Svenska English

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Transport network > Data and publications > **Open Data**

Data and publications

Open Data

News

Transport network data

Open API

INSPIRE-data

Terms of use

Digiroad


Maps and charts

Statistics

Publications

Open data for Finnish Transport Infrastructure Agency

Finnish Transport Infrastructure Agency (FTIA) supports development and maintenance for road, railway and waterway networks in Finland by offering its data openly and free for public use.



Principles for open data

Open data is an important factor in all development, planning and purchases that FTIA does. Open data and Open API's are a key factor when renewing old and designing new information systems like the Law for Traffic Services in Finland ([2017/320](#)) obligates. FTIA aims to open its data collections for public use in machine readable formats via Application Programming Interfaces (APIs).

All public data can be published according to the principles of open knowledge. Before the data is opened, Finnish Transport Infrastructure Agency confirms that there are no legal obstacles for the publication.

The openness of data means that the data can be used

- without usage restrictions, [with terms for open licensing](#)
- without cost

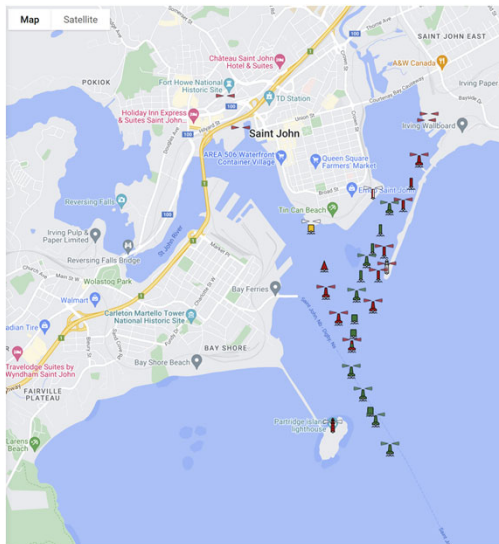
- through self-service electronic API's or by file downloads

News

29.9.2022



CURRENT STATE - CANADA



S-201 Testbed - CCG Feedback October 20, 2022

Entry #38 in the S-201 testbed

38	CCG - Saint John Harbour v2	S-201	0.9.9	<input checked="" type="checkbox"/>
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- 31 aids were added to the testbed covering 4 out of the 5 aid types.

General Feedback

- Unable to edit entry after entering
- Sometimes, the name of the aid appears as "null."
- Unable to include additional equipment related to the aid (e.g. adding a bell to a buoy)
- The testbed allows users to include information that does not appear after when clicking on an aid (e.g. "Installation Date").
- The testbed automatically generates an "AtoNNumber" and "IdCode" for both the structure and the light of an aid based on the country code provided and in order of feature creation.
- The testbed appears to be "adjusting" the coordinates of most aids slightly.
- It appears that the "Light beacon" type does not have all the fields necessary to sufficiently capture information for sector and range lights.
- It appears that the testbed is predicting certain information.
 - o The testbed can correctly predict the "categoryOfLateralMark" and the corresponding light colour for "Light buoy" and "Buoy" types based on the colour of the structure and the IALA MBS Type selected.
 - However, the light colour is not necessarily predicted correctly for "Light buoy" types that are "BuoySpecialPurposeGeneral."
 - o The testbed appears to predict the colour of the light for "Light beacon" types based on the colour of the structure.
 - However, the choice of colours and patterns do not match what is used in Canada, as well as the lack of indicating the presence of a daymark, and therefore it would not be possible for the testbed to accurately predict the colour of the light of these aids.
- The testbed allows the user to indicate the colour of the light for the "Lighthouse" type.
- There appears to be a typographical error under the **S201:Landmark** attribute names where it is written "visuallyconspicuous" and should be corrected to "visuallyconspicuous."

S201:Landmark	
Name	Value
CategoryOfLandmark	tower
visuallyconspicuous	visually conspicuous

Additional Notes

- The English name of an aid was indicated under the "Name" field, while the French name of the aid was indicated under the "Name in national language" field.
- Only the year could be provided for the "Installation Date" field.

- Editing the data
- Language issue
- Coordinates error
- More field required

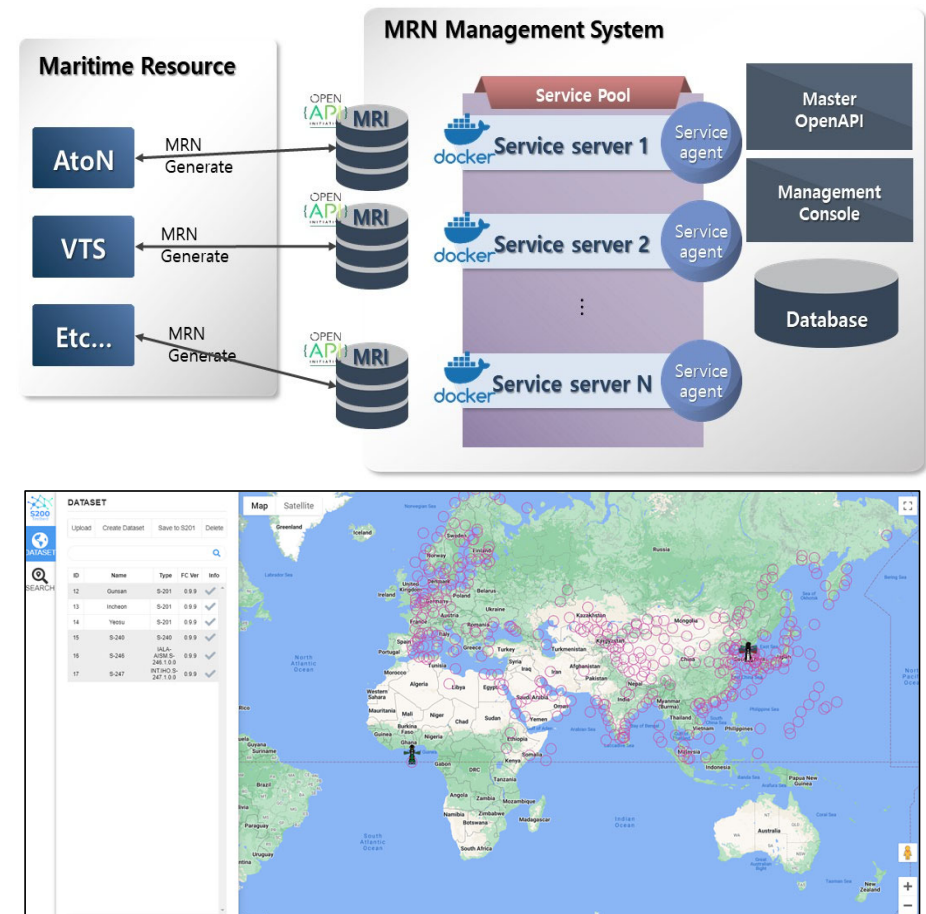
Aid ID	Information entered into the testbed		Resulting information	
	Latitude	Longitude	Latitude	Longitude
J1	45° 14' 12.1" N	66° 2' 40.5" W	45° 14' 12.098" N	66° 2' 40.498" W
J3	45° 14' 24.1" N	66° 2' 48.9" W	45° 14' 24.1" N	66° 2' 48.901" W
J7	45° 14' 34.7" N	66° 2' 56.3" W	45° 14' 34.699" N	66° 2' 56.299" W
J9	45° 14' 44.1" N	66° 3' 2.9" W	45° 14' 44.098" N	66° 3' 2.901" W
J12	45° 15' 6.1" N	66° 3' 10.4" W	45° 15' 6.098" N	66° 3' 10.4" W
J14	45° 15' 16.7" N	66° 3' 17.8" W	45° 15' 16.7" N	66° 3' 17.798" W
JC	45° 14' 55" N	66° 3' 2.7" W	45° 14' 54.999" N	66° 3' 2.699" W
JC4	45° 15' 11" N	66° 2' 50.2" W	45° 15' 11.001" N	66° 2' 50.2" W
JC5	45° 15' 15.4" N	66° 3' 0" W	45° 15' 15.4" N	66° 2' 59.999" W
JC8	45° 15' 23.6" N	66° 2' 47.1" W	45° 15' 23.601" N	66° 2' 47.101" W
JC9	45° 15' 29.5" N	66° 2' 54" W	45° 15' 29.498" N	66° 2' 53.998" W
JC10	45° 15' 33.4" N	66° 2' 43.8" W	45° 15' 33.4" N	66° 2' 43.799" W
JC15	45° 15' 51.3" N	66° 2' 40.8" W	45° 15' 51.299" N	66° 2' 40.801" W
JC16	45° 15' 52.6" N	66° 2' 32.6" W	45° 15' 52.599" N	66° 2' 32.6" W
JC20	45° 16' 11.15" N	66° 2' 23.51" W	No change	No change
JD	45° 15' 43.4" N	66° 3' 26.6" W	45° 15' 43.401" N	66° 3' 26.6" W



IALA S-200 TESTBED (POWERED BY MOF/KRISO)

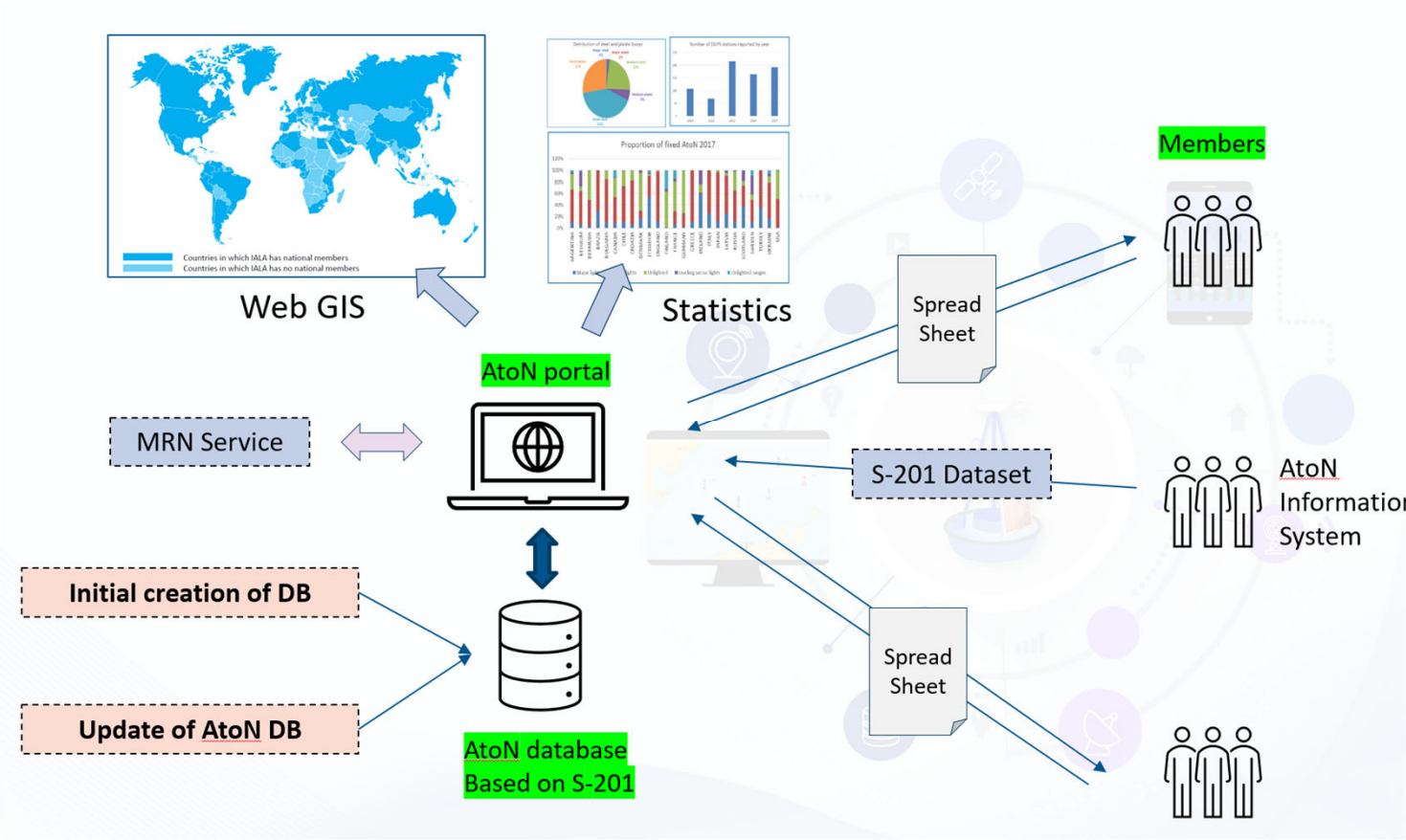
<http://tds.blumap.kr/>

- **Input and export S-200 data model**
 - AtoN CA & HO
- **Portrayal** of S-200 datasets
- **Updating the datasets**
- **Quality validation** of S-200 datasets
- **MRN**
- AtoN information Service in terms of e-Navigation
- Etc.





IALA ATON PORTAL





CONCLUSION

- **Encourage members to join and share the S-200 testbed**
- **Develop a standard AtoN data spread sheet (CSV)**
- **Conduct a gap analysis on transition of national AtoN data to S-201 dataset**
- **IALA IHO Marine AtoN terms and concept harmonization group**



QUESTIONS ?

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