

# NIPWG9 – Action item 21 Gap between French SDs and S-100 based nautical publications





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# **STUDY CASE**

Instructions nautiques (sailing directions) C23 – Chapter 3.4 Bay of Lorient and ports of Lorient

International Hydrographic Organization







### STUDY CASE

International Hydrographic Organization

### A very classical chapter

#### 3.4 Bay of Lorient and ports of Lorient

3.4.1 Generalities

3.4.2 Anchorages

#### **3.4.3** Navigation in channels

**3.4.4 Trafic regulation** 

3.4.5 Pilotage

**3.4.6 – 3.4.12** ... Ports in bay of Lorient

#### 3. DE LA POINTE DE TRÉVIGNON À LA PRESQU'ÎLE DE QUIBERON

3.1. Généralités	
3.1.1. Environnement	
3.1.2. Atterrissage	
3.1.3. Station de signaux.	
3.1.4. Station de sauvetage	
3.1.5. Zones	
3.2. Entre la pointe de Trévignon et la pointe du Talut	
3.2.1. De la pointe de Trévignon jusqu'à Port Manec'h	
3.2.2. Port Manec'h et Belon	
3.2.3. Brigneau	
3.2.4. Merrien	
3.2.5. Doëlan	
3.2.6. La Laïta (rivière de Quimperlé)	
3.2.7. Le Pouldu	
3.2.8. Guidel	
3.2.9. Entre l'embouchure de la Laïta et la pointe du Talut	
3.3. Île de Groix et abords de Lorient	
3.3.1. Île de Groix	
3.3.2. Ports d'échouage de l'île de Groix	
3.3.3. Port-Tudy (île de Groix)	
3.3.4. Anse du Pérello (côte continentale)	
3.3.5. Lomener	
3.3.6. Larmor-Plage	
3.3.7. Petite Mer de Gâvres	
3.3.8. Gâvres	
3.3.9 Locmalo	
3.4. Rade et ports de Lorient	
3.4.1. Généralités	
3.4.2. Mouillages	
3.4.3. Chenalage	
3.4.4. Zone maritime et fluviale (ZMFR) de Lorient	
3.4.5. Pilotage	
3.4.6. Kernével	
3.4.7. Lorient La Base	
3.4.8. Kéroman	
3.4.9. Port de commerce de Lorient	177
3.4.10. Port de plaisance de Lorient.	
3.4.11. La rivière du Blavet	
3.4.12. Le Rohu	



### **3.4.1 Generalities**

01 3.4.1. Généralités

06



3.4.1. - Rade de Lorient (2016).

- 11 La rade de Lorient s'étend au Nord de la citadelle et se compose de la rade de Port-Louis au Sud et de la rade de Pen-Mané, au Nord.
- 16 Lorient est à la fois un port de commerce, un port de pêche et un port de plaisance établi au confluent des rivières le Ter, le Scorff et le Blavet.
- 21 On accède à la rade de Lorient par les passes de l'Ouest et du Sud. Ces passes aboutissent au passage resserré de la citadelle de Port-Louis. Au Nord de ce passage, on trouve les rades de Port-Louis et de Pen Mané, respectivement au Sud et au Nord de l'île Saint-Michel, et plusieurs ports de commerce, de pêche et de plaisance.

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# **3.4.1 Generalities**

• Annotated aerial photo

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- Geographical layout of the bay of Lorient including the citation of access channels
- Types of ports in the bay (merchant port, fishing port, marina..)
- List of ports, wharfs and location in the bay
- Currents geographical description of the phenomena in the bay with maximal values

### S-126?



### **3.4.2 Anchorages**

#### 3.4.2. Mouillages

Plusieurs zones de mouillages et d'équipements légers bordent les rivages de Port-Louis et de Riantec : secteurs de Locmalo (80 postes), Kerbel (10 postes), La Citadelle (60 postes) et La Brèche (30 postes pour navires légers de loisirs et annexes). Ces zones sont définies par l'*arrêté interpréfectoral du 8 novembre 2018 du préfet maritime de l'Atlantique et du préfet du Morbihan.* Ces zones sont exploitées à l'année, 25% des postes au moins sont réservés aux navires de passage. Le terre-plein de la jetée est accostable des deux côtés.

 Locations (toponyms) of anchorages for leasure boats with some information related

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### **3.4.3 Navigation in channels**

01 3.4.3. Chenalage

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3.4.3. - Passage de la citadelle de Lorient (2016).

#### 01 3.4.3.1. Passe de l'Ouest et accès à la rade de Port-Louis

- *or* La profondeur minimale est de 9,5 m, à laquelle il convient ajouter la hauteur d'eau au moment du chenalage. Le tirant d'eau maximal admis peut atteindre 13 m selon la marée et la houle.
- 13 Deux alignements lumineux successifs facilitent la navigation dans la passe de l'Ouest et l'accès à la rade de Lorient :



# **3.4.3 Navigation in channels**

- Description of each access (channel) with annotated aerial photo
- For each channel
  - Minimal depth, maximal draught
  - General layout, physical limits
  - Leading lines, lights sectors, description of landmarks with L,G position, photos sometimes
  - Buoyage
  - Advice for the use of leading lines, for the change of course when going to the next section of the channel, based on landmarks, by day, by night
  - Advices related the best times related the tide
  - Cautions (shoal, local magnetic anomaly...) related to some parts of the channel
- Navigation rules (priorities, traffic signals, etc) in the channels of Lorient, or in parts of channels

### S-126



## **3.4.4 Traffic regulation**

- Areas concerned, limits of faiways
- VHF watch
- Traffic signals, location and meaning
- Speed
- Crossing
- Fishing regulation
- Anchoring regulation
- Navigation rules for vessels carrying dangerous goods

S-127



# IHO 3.4.5 Pilotage

- Areas concerned, vessels concerned
- When and how to contact pilot station, entrance procedure
- Anchorage areas, waiting areas
- Pilot boarding (where, how)

S-127



# **1HO** 3.4.6 **Port of ...**

- Geographic configuration, annotated aerial photo
- Type of port
- Data:
  - Signals station
  - CG station
  - Rescue station
  - Admitted vessels, size
  - Tug service
  - Infrastructures (wharfs, berths, length, draught, purposes)
  - Equipments, services, security, contacts
  - Communications (airport)
  - Town (number of residents)

### S-131



# IHO CORRESPONDENCES EXPECTED WITH S-1XX

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Sub-chapter	S-1xx	
Generalities	S-126 ?	
Anchorages	S-127, S-126?	
Navigation in channels	S-126	
Traffic regulation zone	S-127	
Pilotage	S-127	
Ports	S-131	



# IHO S-126 (NIPWG WIKI)

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S-126 : The Marine Physical Environment Product Specification provides historical information on the climate of an area, specifically the weather conditions (temperature, pressure, humidity, etc.) or oceanic phenomenon (currents, sea levels, water characteristics, etc.), of a region. Functionally, it is expected to aid in the identification of landmarks, entrances, hazards, and points of interest along a marked path – enriching the visuals shown on the nautical chart, as well as to help in decision making on how (and when) best to approach the desired port. The product specification contains the information used to understand both the dynamic environmental conditions that surround the mariner but also descriptions of the environment that cannot be rendered on a 2D chart without cognitive overload from symbols and chart clutter. It is also intended to aid the user in filtering and presenting the data only when necessary. The primary users would be the ship itself and the shipping company to use historical data for voyage planning (route, navigation safety, etc.) and to familiarize themselves with an area before entry. Secondary users would be academia and other researchers. The expected functionality would be Route Planning Mode (planning) use.



# HO HYPOTHESIS ON S-1XX (NIPWG9)

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- S-1xx products are pieces of information from NP to be displayed into ECDIS
- A favorite use case: information for voyage planning that would be useful to recall during route monitoring
- Information related to Navigation in channels (directions) matches this favorite use case



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# **NAVIGATION IN CHANNELS - TEXTUAL INFORMATION**

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- Narrative texts providing explanations and advice
- With many references to places that the user has to find on the chart
- Text to find landmarks in the landscape (visual description a photo is better...)

#### 01 3.4.3.2. Passe Sud jusqu'à sa jonction avec la passe de l'Ouest

- 07 Le chenal balisé passe entre deux plateaux de roches.
- 13 Le plateau Les Bastresses, à l'Est de l'entrée de la passe, est balisé par les bouées :
  - « Bastresses Sud » (47° 40,76' N 3° 22,09' W), latérale tribord lumineuse ;
  - « Bastresses Nord » (47° 41,11' N 3° 22,20' W), également latérale tribord lumineuse.
- 19 Le plateau Les Errants, à l'Ouest de la passe, est balisé par la bouée « Les Errants » (47° 41,10' N 3° 22,38' W), latérale bâbord lumineuse.
- 25 Dans ce chenal la profondeur minimale est de 3,9 m.
- 31 Il convient de se méfier d'une roche couverte de 2,2 m d'eau d'eau située pratiquement sur l'axe du chenal (47° 41,32' N – 3° 22,38' W).
- 37 À l'extrémité Nord du chenal, la bouée « Locmalo » (47° 41,68' N 3° 22,13' W), latérale tribord lumineuse, marque la bifurcation pour les navires se dirigeant vers la petite mer de Gâvres.
- 43 RECOMMANDATION. Après avoir dépassé le relèvement à 245° de la tourelle « Les Trois Pierres », venir sur la gauche pour rejoindre l'alignement des feux de l'île Saint-Michel.

Tentative translation www.deepl.com 013.4.3.2. South Pass to its junction with the West Pass 07 The marked channel passes between two rock shelves. 13 The Les Bastresses plateau, east of the entrance to the pass, is marked by the buoys: -"Bastresses Sud" (47° 40.76' N - 3° 22.09' W), on the starboard side; -"North Bastresses" (47° 41.11' N - 3° 22.20' W), also on the starboard side. 19 The Les Errants plateau, to the west of the channel, is marked by the buoy "Les Errants" (47° 41.10' N - 3° 22.38' W), on the port side with a light. 25 The minimum depth in this channel is 3.9 m. 31 A rock covered with 2.2 m of water located practically on the axis of the channel (47° 41.32' N - 3° 22.38' W) should be watched out for. 37 At the northern end of the channel, the buoy "Locmalo" (47° 41.68' N - 3° 22.13' W), on the starboard side, marks the fork in the road for vessels heading towards the Little Sea of Gâvres. 43 RECOMMENDATION. - After passing the 245° bearing of the "Les Trois Pierres" turret, come to the left to join the line of lights of Saint-Michel Island.



# **IHO** NAVIGATION IN CHANNELS – IDEAS FOR IMPROVING UNDERSTANDING (ON ECDIS)

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- On the chart, show objects bounding the channel
- Show dangers in the channel
- Show leading lines (and lights sectors) and other landmarks to be used
- Show photos of some places
- Provide explanations and advice on channel's sections
- Show places quoted in explanations





#### Trends

- Simple model for high added value (modeling according to the result on the display)
- Easy to produce data using existing material (current SD)
- Keep textual explanations and advice in the data (better than a complex model involving tricky/impossible production and unlikely ECDIS advanced features).
- Focus S-126 on ECDIS use cases



### **THANK YOU FOR YOUR ATTENTION !**

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