



S-131 Update NIPWG9

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S-131

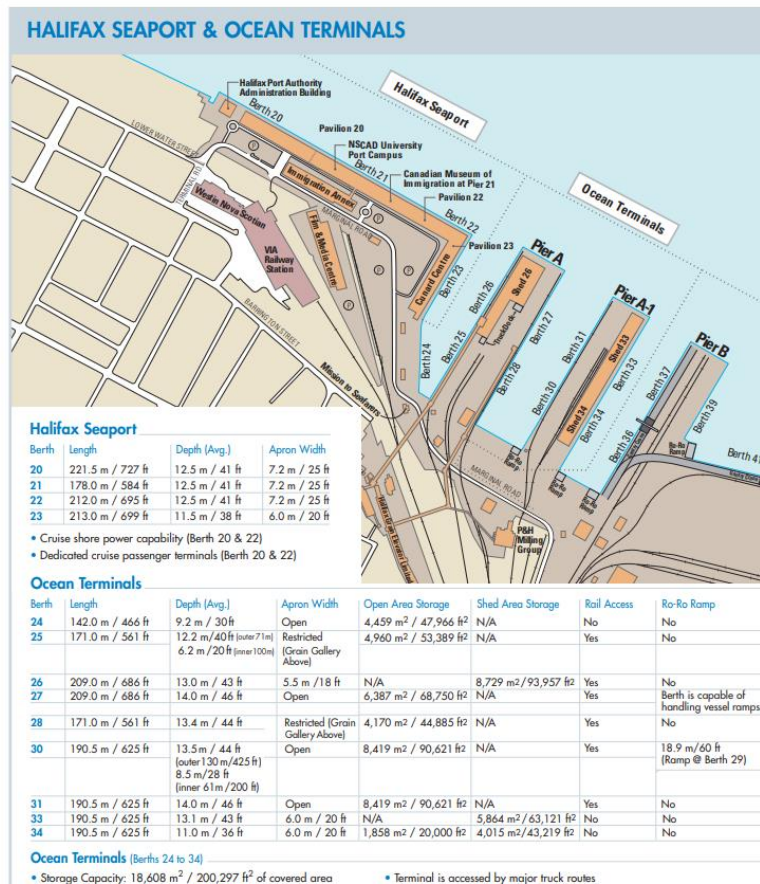
- S-131: Marine Harbour Infrastructure
- Dual purpose:
 - assisting data exchange
 - distribution to end users
- Development underway by S-131 project team under the IHO Lab

Navigating the S100 World



S-131 Marine Harbour Infrastructure

- Designed for the end user
- Aimed for berth-to-berth route planning and execution
- Knowing all the services they need while at port are available and accessible as well as having a smooth transition into their berthing position is essential





S-131 Marine Harbour Infrastructure DB

- Traditional harbour component of Sailing Directions/Coast, as well with IMO Resolutions A.893(21) and A.862(20)
- From local fishing harbours to mega ports
- Improve the information exchange between harbours and hydrographic offices by acting as a neutral repository of harbour information



Source: CHS Sailing Directions ATL110



Source: CHS Sailing Directions PAC201

IHO Lab & CHS Investment

- Joint undertaking - Member States & Stakeholders
- Innovative test-bedding
- Project Registry - avoid duplication & optimise resources
- Canada recognized importance of S-131– neutral repository
- \$200k investment
- Input from various departments – data flow pipeline
- 2 year project – underway & on track

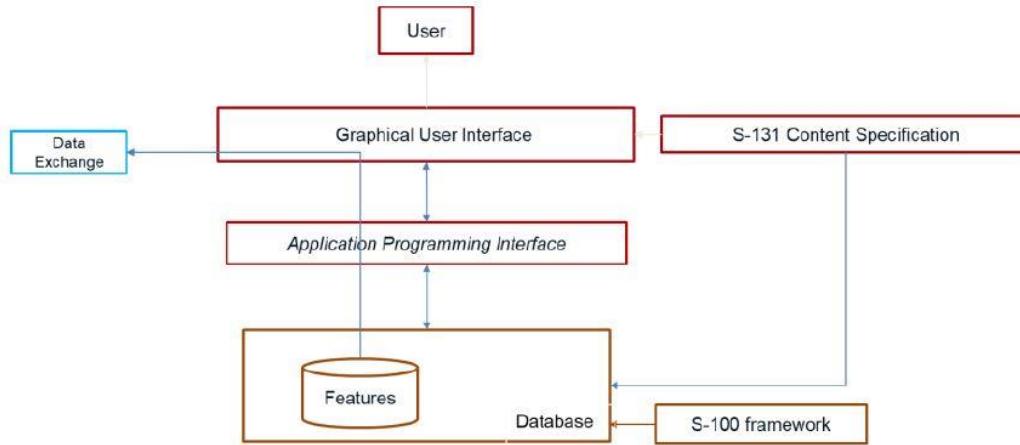


S-131 - Goals

- Proof of Concept Database solution – import, extract, customize
- Trusted environment
- S-131 compatible
- Source supplier - input & validate
- API - needs capability to connect existing users' GIS
- Filter
- Interim solution -> permanent



S-131 Project & Participants



- Collaborative effort
- Server: IHO Lab
- Back end: IIC
- GUI: NTOU
- Feature Catalogue: Portolan Sciences
- API – tbd (Swagger)
- Hydrographic offices (Canada, Norway, MPA, etc)



S-131: Role of Ports

- Hydrographic offices, stakeholders, shipping companies, brokers and others in the industry
- Ports will play key role – bulk of S-131 data
- Easy access, updating and extraction
- Cultivate relationships





S-131 Database – Overview

- Dataflow/API and DB implementation –progress in parallel with development of use cases (data input, data output and GUI elements).
- As the DB/API is maturing, the GUI is being designed
- Looking ahead:
 - integration of the two main elements
 - comprehensive reference test dataset
- Open source hosting tools (GitHub) for code management, issue tracking and releases
- Monthly meetings of S-131 WG



S-131 Database – Component Status

- Back end: Q2 of Phase 1
- GUI: MPA & NTOU - server specs & workstation setup by e/o 2022. GDLP.
- S-131 Feature Catalogue: draft completed July 2022
- API Middleware
- Beta database of a fictitious port, tests runs with real ports: to be scheduled

3.87 Product

Name: Product [IHOREG 144]

Definition: The various substances which are transported, stored or exploited.

Code: product

Remarks:

Aliases: PRODC

Value Type: enumeration

Listed Values

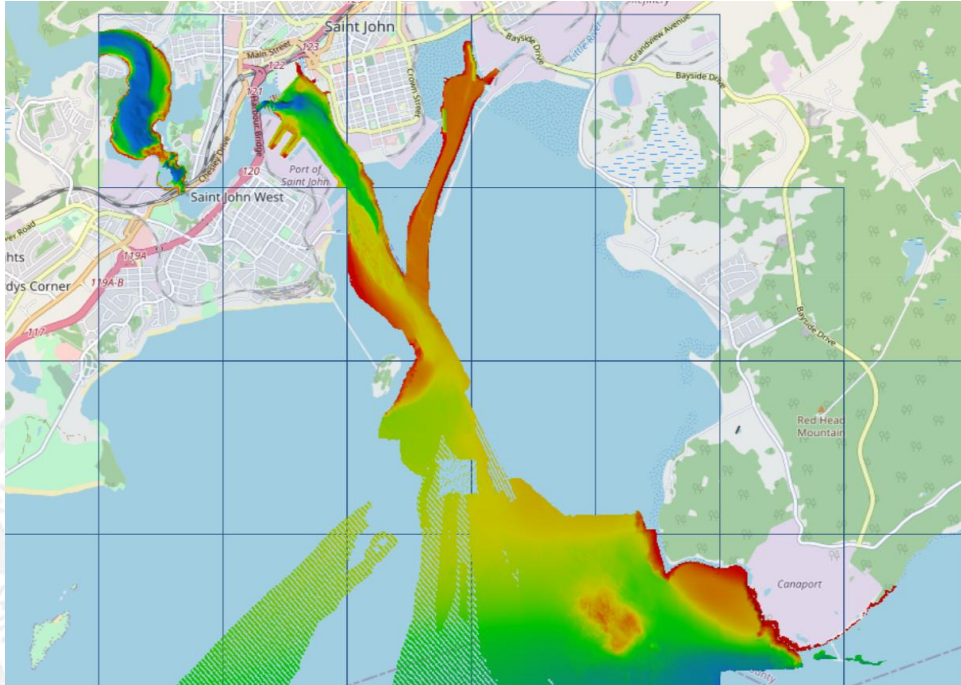
Label	Definition	Code	Remarks
Oil	A thick, slippery liquid that will not dissolve in water, usually petroleum based in the context of storage tanks. [IHOREG 979]	1	
Gas	A substance with particles that can move freely, usually a fuel substance in the context of storage tanks. [IHOREG 980]	2	
Stone	A general term for rock and rock fragments ranging in size from pebbles and gravel to boulders or large rock masses. [IHOREG 955]	4	
Coal	A hard black mineral that is burned as fuel. [IHOREG 982]	5	
Ore	A solid rock or mineral from which metal is obtained. [IHOREG 983]	6	



Challenges

- Identity management – Maritime Connectivity Platform? Who is the authority? The intention is not to build a complex identity management system
- Establishing good information flow between ports and hydrographic offices
- Ports and terminal operators: source providers; hydrographic offices to develop and maintain
- How to cultivate relationships with ports?

Upcoming Steps



- Develop documentation
- Define which source(s) responsible for providing what elements of data.
- Identify test harbours
- Complete testing phase complete - system operational
- Explore subsequent improvements and extended data sharing options



Thank you.

QUESTIONS?



Many thanks for the presentation information and imagery derived from sources including CHS, Eivind Mong, IIC, and the S-131 WG.