

# Teledyne CARIS perspectives on S-100

Stakeholder Forum at HSSC15

Karen Cove



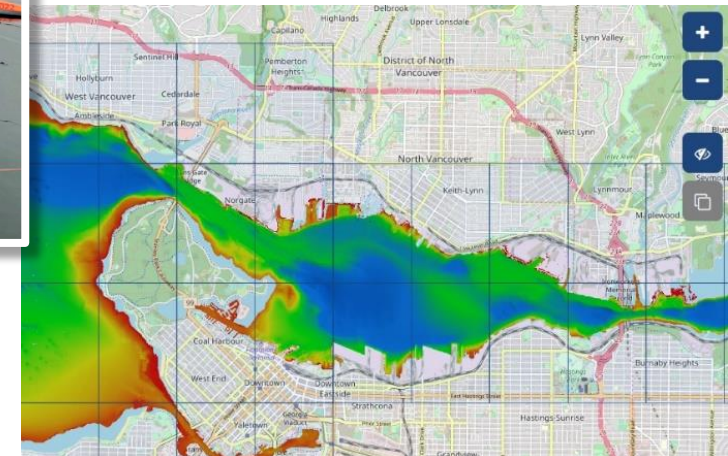
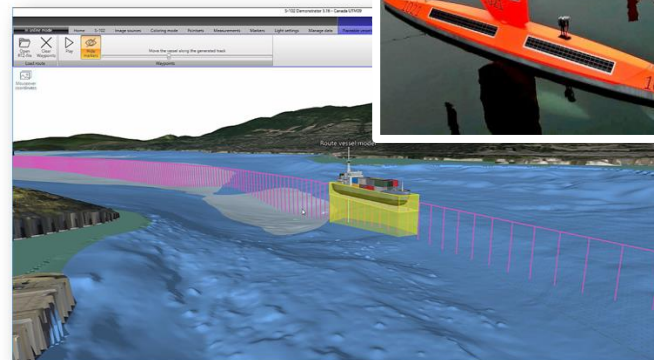
# Ready, set...go!

- We are ready to support organizational adoption of S-100
- Embedded in standards development
- Trusted technology partner
- Access tools, training, and professional services



# Part of a bigger picture

- Digitalization across Maritime sector
- Opportunities and challenges



# Collaboration & partnership

- Learn from each other - successes and failures!
- Coordinate efforts
- Leverage existing implementation approaches, workflows and infrastructure
- We all need to get there together for this foundation piece to be established

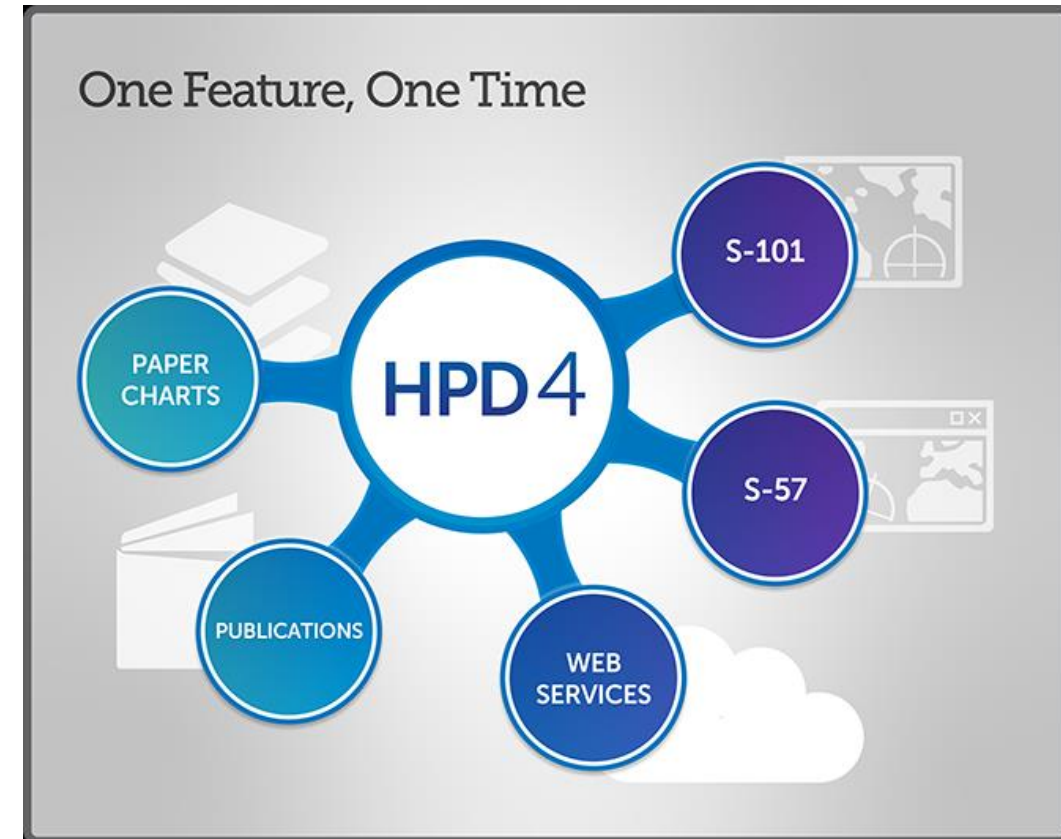


CARIS' Juan Carballini with S-100 workshop participants and SOHMA Authorities



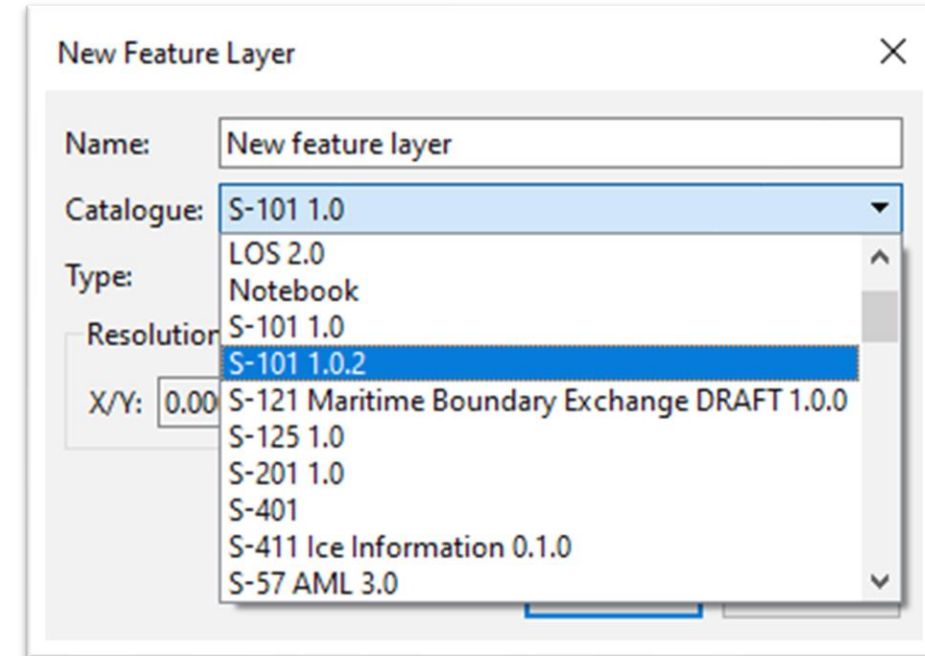
# S-100 tools

- Enabling S-100 production
  - HPD needs the S-100 module
  - S-57 Composer needs the S-100 module per application instance.
- Once acquired, S-101 configuration is ready for use, with other specifications easily added to the product folio.
- BDB powers S-102 and other raster overlay product creation



# S-100 tools

- S-100 module provides functionality to
  - Edit S-100 vector features
  - Convert S-57 ENC <-> S-101 ENC
  - S-100 vector HPD Source database
  - Export S-101 new editions and updates
  - Create and edit S-101 exchange sets
- BDB & CARIS Cloud provides
  - S-102 datasets
  - Bathymetry Data Service is the distribution pipeline to push raster data to RENCs and other stakeholders
- Opening S-100 datasets are supported in all CARIS desktop applications



Layers

Search Layers

- Project Demo1
  - Coastal
    - Coastal
    - Deleted from Coastal
  - Markers

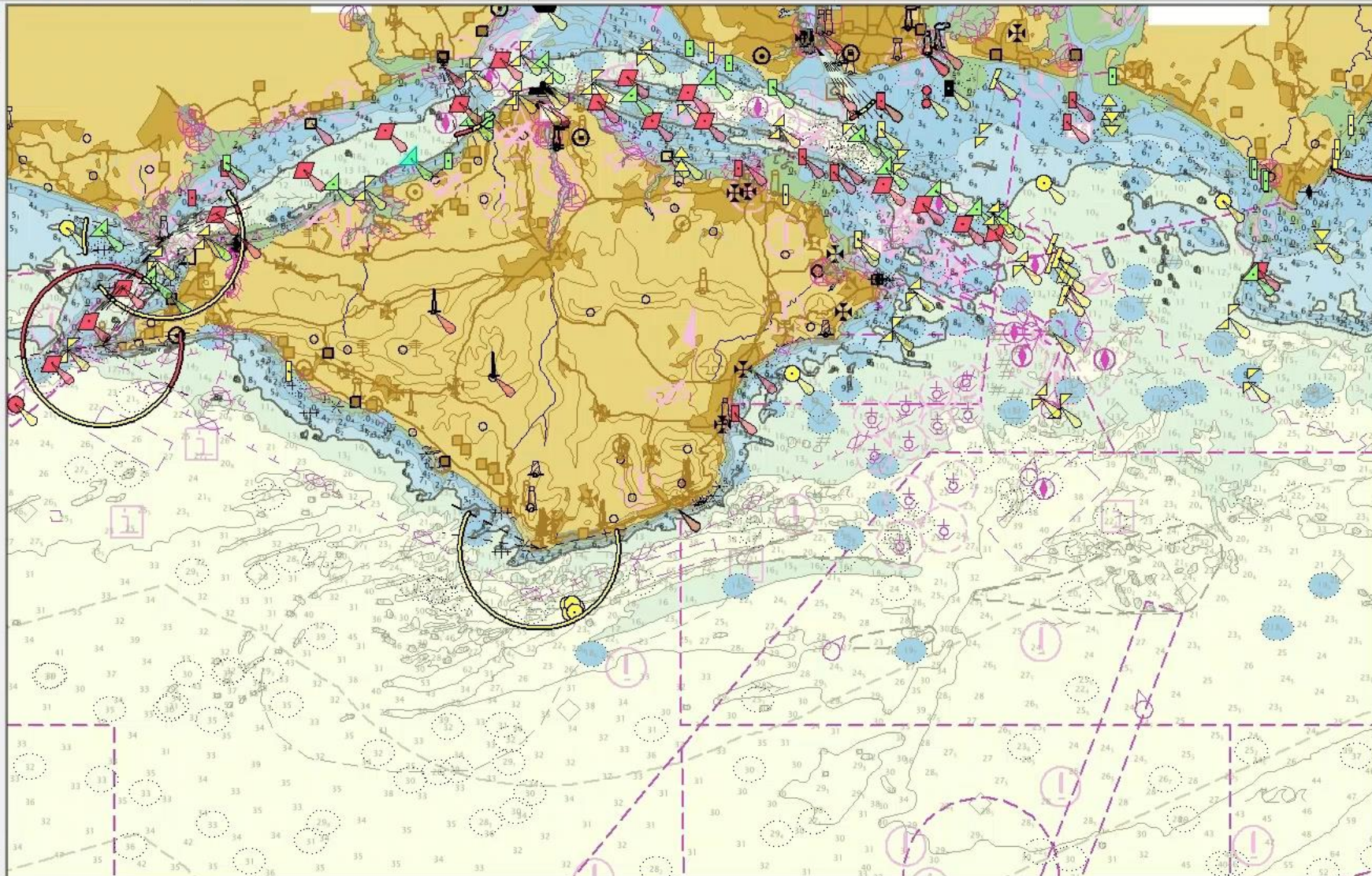
Layers Markers

Project

Search Project Items

- Untitled
  - Data Sources
    - Project Demo1

Project Marker Details



Attributes - BOYLAT

Attributes	
Buoy shape	conical (nun, ogival)
Category of lateral mark	starboard-hand lateral mark
Colour	green
Colour pattern	
Conspicuous, radar	
Date end	
Date start	
Marks navigational - symbol	
Nature of construction	
Object name in nation	
Object name	Salt Mead
Periodic date end	
Periodic date start	
Status	
Vertical accuracy	
Vertical length	
Scale minimum	
Scale maximum	
Textual description in nation	
Pictorial representation	
Textual description	
Information	
Information in nation	
Recording date	
Recording indication	
Source date	20060919
Source indication	GB, GB, Reprt, FODB-0002a2
Product Template	

Selection

Feature ID	Acronym	Name	Geometry	Latitude	Longitude	Depth
1C 000001...	BOYLAT	Buoy, lateral	Point	50.741891N	001.384006W	

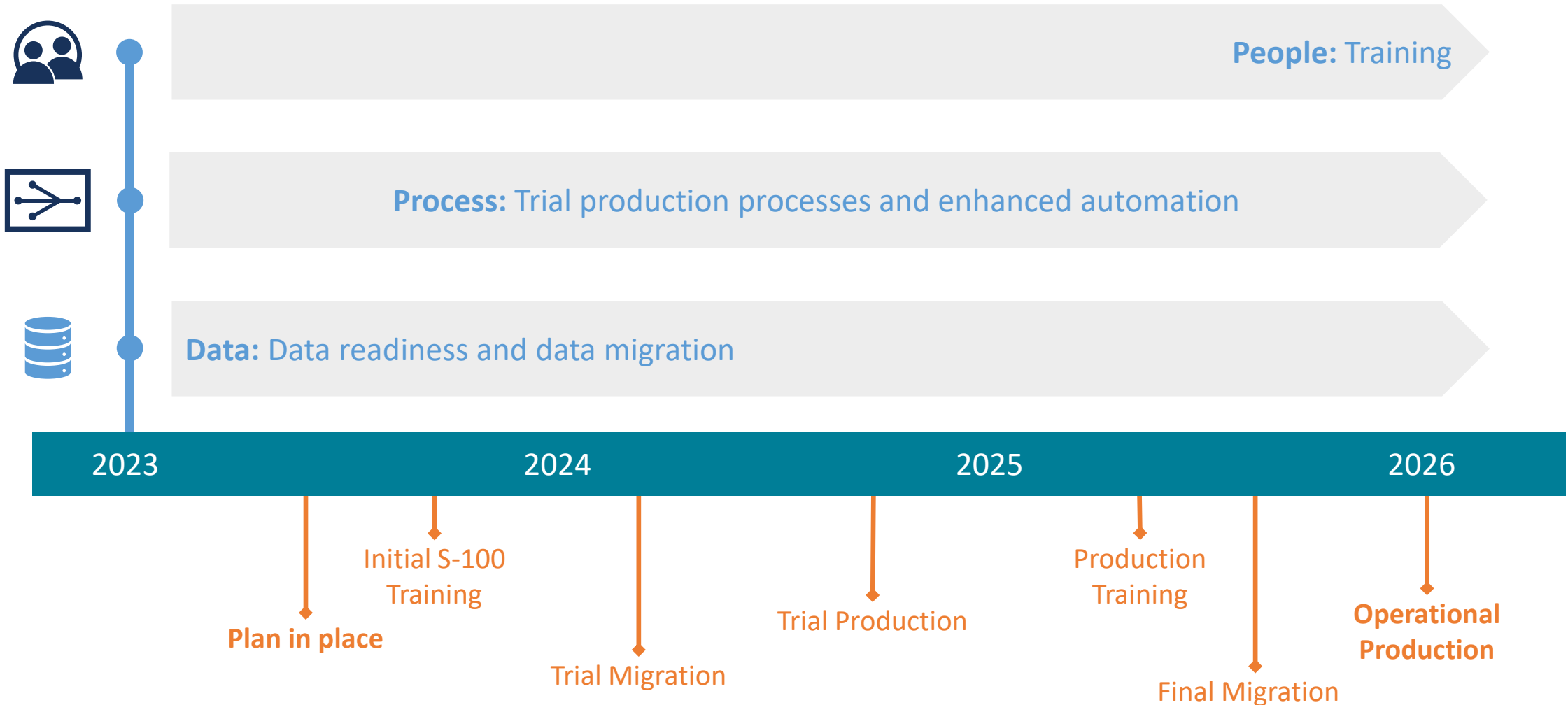
Components (1 components)

- Point

Coordinates

	Latitude	Longitude	Z (m)
1	50.741891N	001.384006W	

# Plan to achieve dual-fuel production





# Training and consulting

- Instructor led courses
  - Onsite or remote
  - HPD, S-57/S-100 Composer, Workflow Automation
- E-learning
  - S-100 theory and concepts workshop
  - **S-101 Production Course**
- Webinars
  - Recent ones for Automating ENC and Paper Chart workflows
- Consulting

 **CARIS S-100 Online Workshop**

**CARIS S-100 Online Workshop**  
with CARIS S-57 Composer 

Teledyne CARIS is pleased to present this short online training program which looks at the **International Hydrographic Organization (IHO) S-100 Standard**, and the related **S-101 Electronic Navigational Chart (ENC) Product Specification** which is being developed to support the creation of next generation ENC products.

This workshop shows examples of creating and processing S-100 products in [CARIS S-57 Composer](#) but no software is required in order to participate.

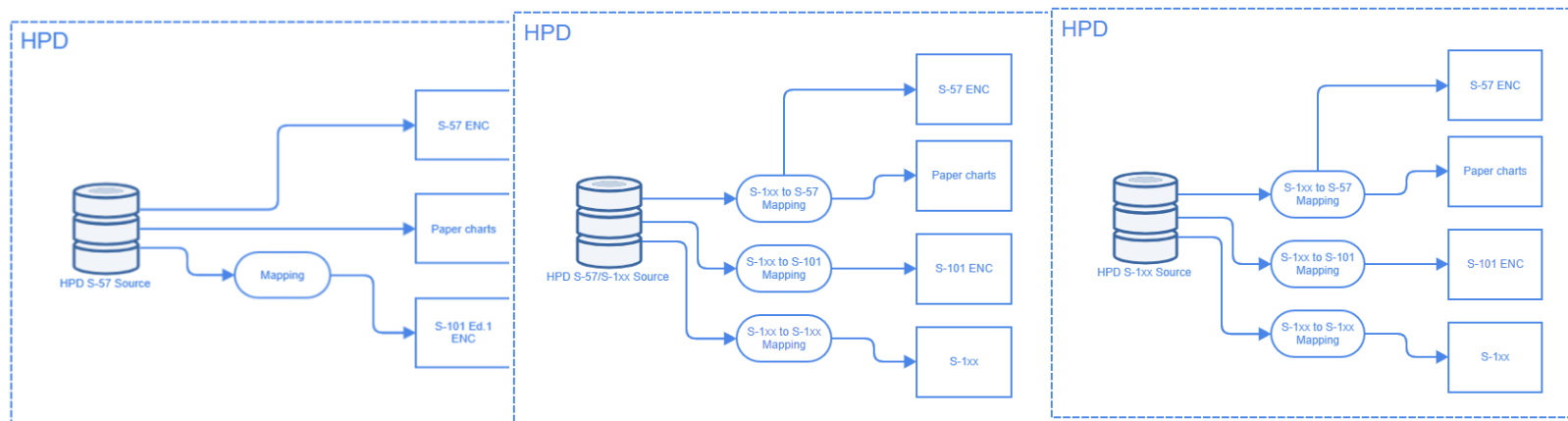
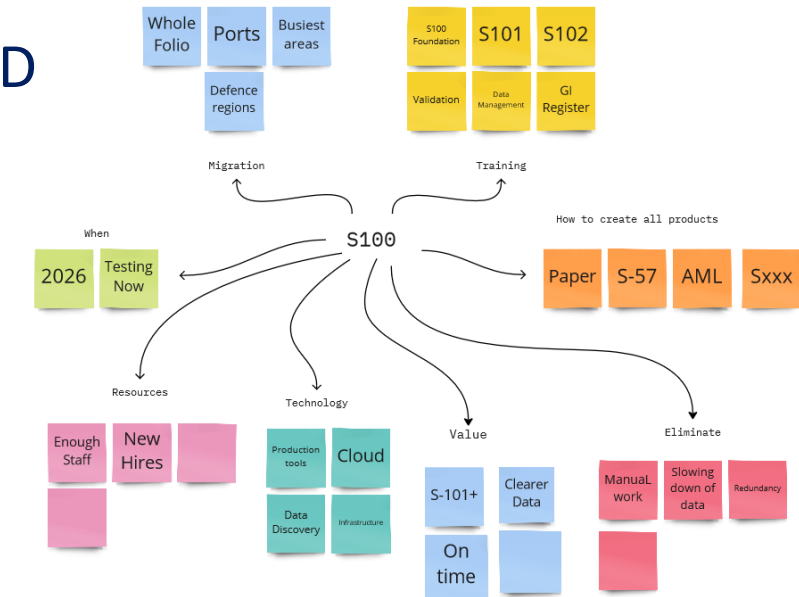
- Information: workshop [description and requirements](#)
- Length: 8 hours (estimated - completion time will vary)
- Cost: \$300 USD\*\* for 90 days access to the course - [registration information](#)
- \*\*The cost is currently waived for CARIS software users who are not...

[Register](#) [Login](#)

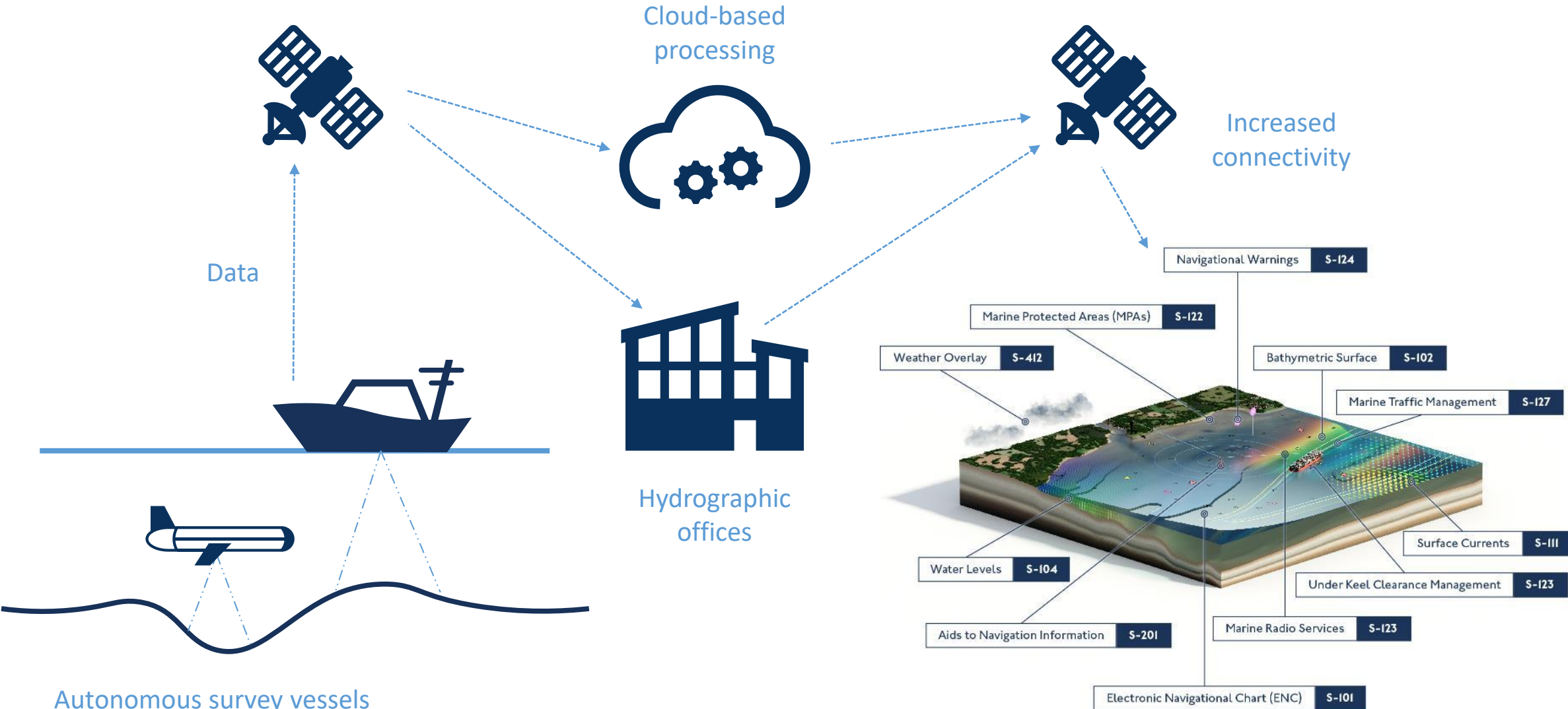


# S-100 Sandbox

- A Cloud based, secure environment for S-100 enabled HPD
- A customizable environment that we manage for you
  - With relevant to your CARIS system files
  - Your test data and data model
- Subject matter expert guide to facilitate your S-100 aims
- Single or multi use environments

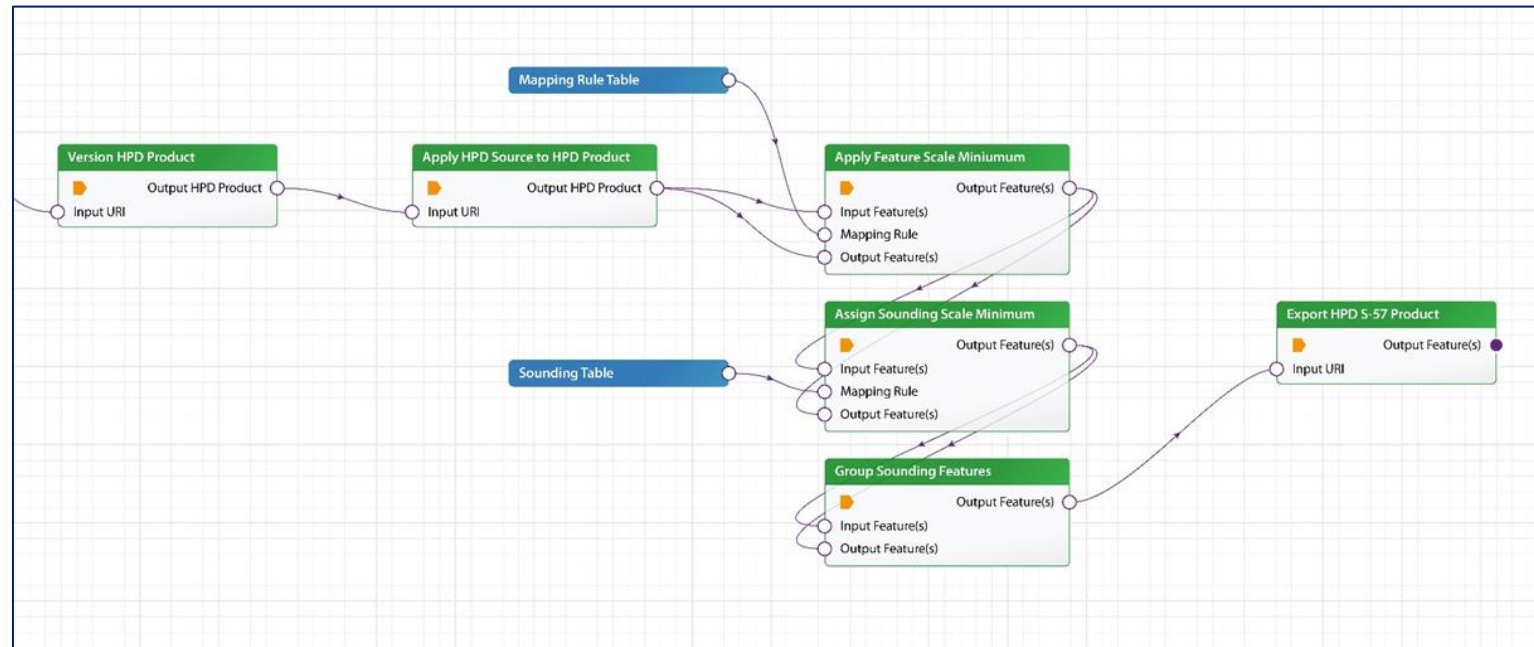


# S-100 transformation

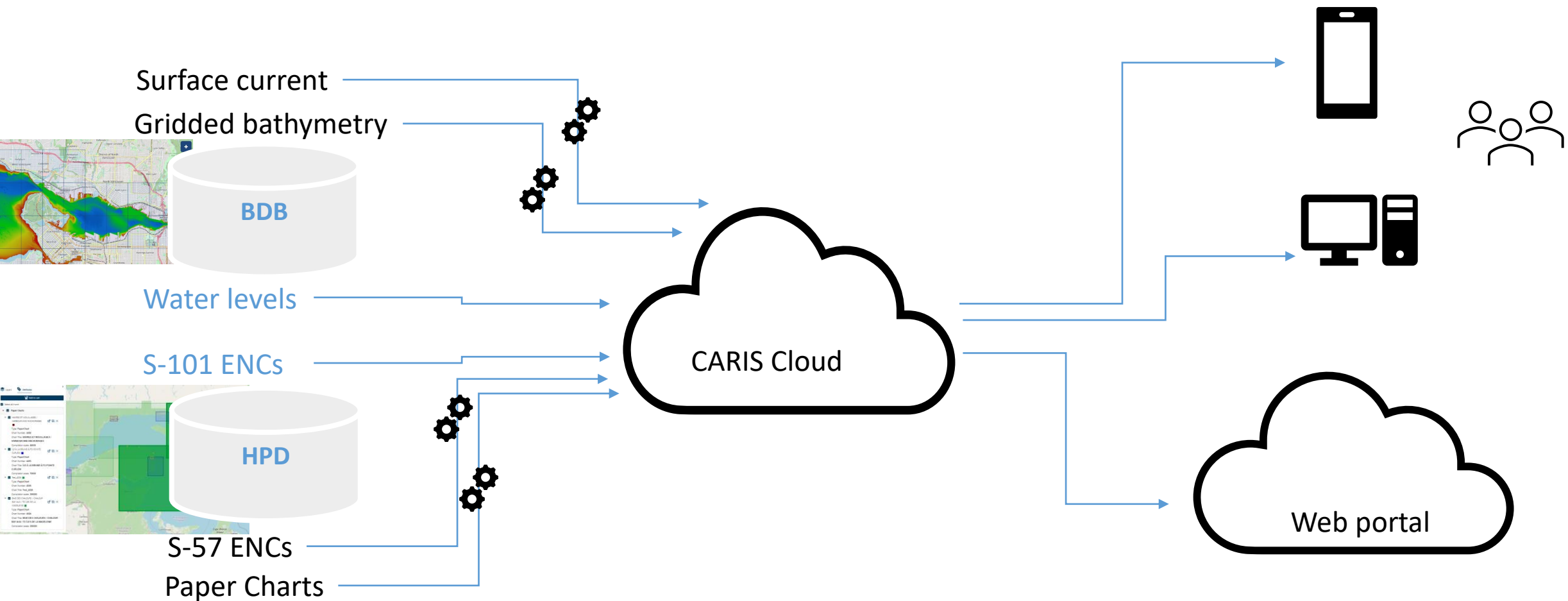


# Automate workflows

- Survey data processing in HIPS
- Survey data loading and validation in BDB
- Bathymetry compilation
- ENC production in HPD
- Paper charts in HPD



# Turn-key production to cloud services connection



*Reproduced with the permission of the Canadian Hydrographic Service*



Teledyne Geospatial  
Imaging Solutions for Land and Water

# Start a pilot project!

## Example: Canadian S-111 & S-102 distributed by PRIMAR Chart Catalogue

- Bathymetry served from CARIS BDB
- Surface Currents served from Environment Canada
- Data flows through CARIS Cloud Services, usage is monitored
- Next add SevenCs Validation service, plans to add S-104

Search for product ID, title, location or country

S-102

Selection Modes

S102 Products

Add selected

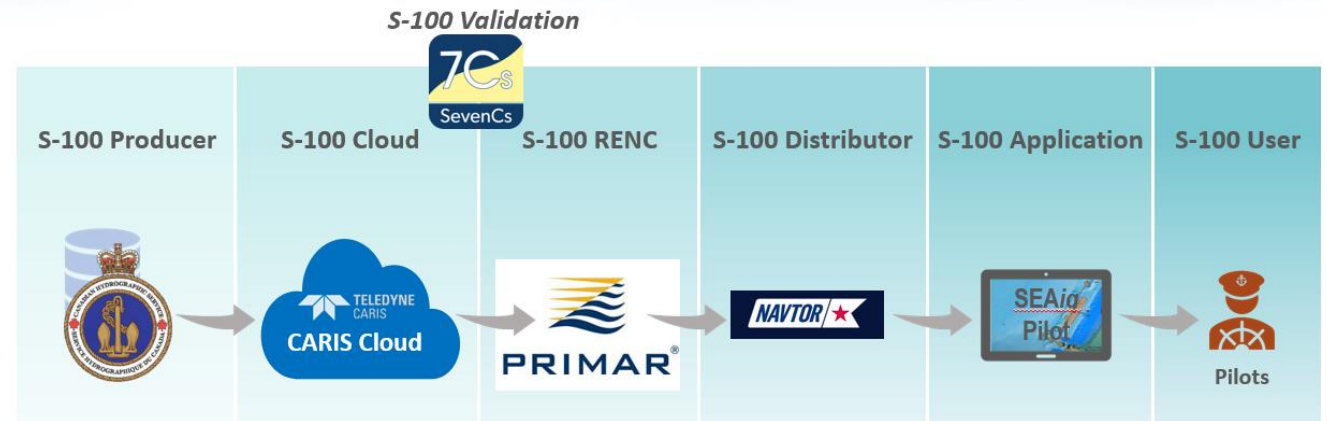
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<input type="checkbox"/> Canada	102CA0024100N05200W
<input type="checkbox"/> Canada	102CA0024100N05300W

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Legend:

- ENC Coverage
- ENC Coverage by Usagebands
- S-102 Coverage
- S-111 Coverage
- RTZ Coverage
- Nautical Publications Coverage
- WMS Coverage

## S-100 Service – Full Value Chain



Thank you!

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Thank you to CHS and UKHO for providing data used for demonstration in this presentation

