

# S-128 Observations

- Drafting of S-164 has led to consideration of S-128 and its use on the S-100 ECDIS
- From the ECDIS perspective the S-128 drives the content of the Update Status Report
- This shows the content of the ECDIS system database vs what is “available” from the service provider
- For each “dataset” in the system database (or intersecting a selected route)
  - If the revision of the dataset installed is the same as those specified in the last installed S-128 then the dataset is “up to date”
  - If the revision of the dataset installed is earlier than those specified in the last installed S-128 then the dataset is “not up to date”
  - If the dataset can not be identified in the S-128 or the S-128 is itself out of date then the dataset is marked as “unknown”
- These reports are defined in S-98 Annex C Appendix 3 (this is version 1.0.0 and needs updating and bringing to a revision 2.0.0)

[Revised Form]

**Report Name:** *Electronic Navigational Charts (ENC) Update Status Report*

**Vessel Name:**

**Identifier:**

**Update Reference Date:** *(from S-128)*

**Date of Report:**

**Content:** *Filtered for Route Plan “Goteborg – Kiel”*

**Start WP:**

**End WP:**

**Dataset Status Summary**

<b>Data Server: XXXX</b>					
<b>Product</b>	<b>Dataset Name</b>	<b>Edition</b>	<b>Update</b>	<b>Issue Date</b>	<b>Status</b>
S-101	101US23495820	10	4	2020-01-02	Up to Date
S-102	102US29348021				

# A (Slightly Historical) Perspective

- Update Status Report is carried out on S-57 ECDIS by a combination of S-63 files (most notably the PRODUCTS.TXT)
- The most important elements are:
  - Completeness (it must have ALL content uniquely identified and accounted for within the service)
  - Currency (it must be a recent version)
  - It is compiled and distributed by the service provider but contains information unique to each data providers' datasets.
  - All items must have some kind of spatial extent to allow the route checking functionality to work (coverage is also contained in CATALOG.XML and each dataset)



	S-57/S-63	S-100/S-128
Naming	PRODUCTS.TXT/SERIAL.ENC	128[XXXX][YYYYYY].GML
Identifier	"Data Server" (in SERIAL.ENC) (>=1)	Producer Code of 128 dataset
Completeness	Reissue	Can be updated (Part 10b)
Currency	SERIAL.ENC Date	Issue Date/Update Date
Compiled By	Service Provider	Service Provider

# So what...?

- Naming of S-128 datasets probably isn't important. The Data Producer code will probably be that of a service provider. S-63/S-57 allows for multiple data providers to be installed on the ECDIS. S-128 and exchange sets can do the same thing. But for most simple use cases a single data producer can issue one or more S-128 datasets and the ECDIS will aggregate them together to form a picture of the "revision status of the ECDIS"
- Coverage information for what is installed on the ECDIS is likely to be taken from the actual datasets, not the catalogue information held within the S-128. However, the modelling for these should try to agree for consistency
- Identifiers need to be agreed which match up all elements in S-128 with those (potentially) installed on the ECDIS
- The GML Part 10b update mechanism allows S-128 datasets to be incrementally updated which is incredibly useful for service providers. The choice of new edition vs incremental update can then be left to the service provider to manage as they see fit. Issue dates and update issue dates for S-128 are the revision "reference date" (in the ECDIS sense)
- Other mandatory attributes (copyright, compilation scale, typeOfProductFormat etc) probably don't need to be mandatory for the sake of S-128
- S-128 can fulfil a useful purpose in identifying "equivalent" ENCs for Dual Fuel mode on the ECDIS. The ECDIS must be able to differentiate between S-57 and S-101 cells which are "different" and those which are "equivalent" because it has to install the S-101 version by preference (S-98). S-128 is the only place where this equivalence can be identified (through an association).
- S-98 can be updated to clarify how S-128 should be used