Danish Geodata Agency

DGA Production Questionnaire



Background

In June 2021 DGA sent a questionnaire to neighbouring HOs asking a number of production questions.

Why?

DGA has recently moved to database production and this has highlighted a number potential decisions needed on:

- Data layers
- Rescheming
- Gridding
- Future of production

DGA wanted to learn from other countries experience and potentially align with neighbouring offices practices.



Questionnaire

14 questions focused on technical and policy decisions

3 sections:

- Production
- ENC Gridding
- Paper chart production

Did not ask about S-100 directly as aware some Regional Hydrographic Commissions are setting up sub working groups

3



Respondees

Initially sent to Baltic Sea Hydrographic Commission & North Sea Hydrographic Commission

• Potentially send to ARHC later

Agreed to share the anonymised results at RHCs

Received responses from 12 countries

Danish Geodata Agency

• 1 was unable to answer as they were not the producing authority.

Included DGA's 'response' in results, so have a total of 12 responses.

Remember these results are only representative of the countries that replied

27-1	0_2021
21-1	0-2021

Denmark Estopia	Belgium
Estonia	France
Germany	Germany
Latvia	Iceland
Poland	Ireland
Russian	Netherlands
Federation	Norway
Sweden	Sweden
	United Kingdo
Bold = duplicated	



Production



Database system:

11 using Database systems

• (3 using a combination of systems)

1 not using Database system

Data layers:

No. of data layers	No. of users
1	1
3-5	4
13-16	4
21	1

Other information on scales and data layers is available

5

	Danish	Geodata	Agency
--	--------	---------	--------

12 answers

12 answers

10 answers



Production

Scaleless data:

Conflated data:

81% are using some scale less data

54 % using conflated data

46% do not use conflated data

ENC to paper chart relationship:

90% try to maintain a 1:1 relationship between the data layers feed ENC and paper charts

Features:

- Aids to Navigation
- Limits and boundaries
- Wrecks
- Magnetic Variation

Features:

Generally point features such as Aids to Navigation

27-10-2021

Danish Geodata Agency

6



ENC Gridding

Are your ENCs gridded?:



Of those who gridded:

66 % using a variation of grids based on degree limits e.g. 1x1 or 0.5x0.5

34% vary the grid at scale

42% gridded all Usage Bands (1-6)

68% only gridded some Usage Bands

27-10-2021

• Generally 2, 3 & 4

Time taken to grid data:

42% ENC data has always been gridded

7

42% 1-1.5 years

16% 2-3 years



6-7 answers



Paper chart production

Paper chart production portfolio



Increase Maintain Decrease

Decrease

- Paper chart demand reducing
- Free up capacity for other tasks

Maintain

• Production system is streamlined so there is no need to reduce

27-10-2021

• Reviewing situation

Increase

• New coverage areas

'Back up' charts

100% of respondees said they had no intention to produce 'back up' charts



Danish Geodata Agency



Paper chart production

Are you looking at fully automated chart production?

Comments:



2 respondees are **actively working** on automated chart production now

Majority are waiting for technological improvements

Many are actively involved in the IHO NCWG sub group

9

Danish Geodata Agency

27-10-2021

7 answers



High level findings:

- 1. We are using a variety of production systems
 - Structuring data quite differently
 - Those using the same systems are not using them in the same way

Remember these results are only representative of the countries that replied

- 2. Majority of countries are trying to maintain a 1:1 relationship between their data layers for ENC and paper charts
 - How does 1:1 relationship fit with want to decrease paper chart portfolio?
- 3. 50% of countries ENCs are gridded. Of those who are not, some are considering pre S-101.
 - Gridding generally takes between 1-1.5 years
- 4. Results are split on whether to maintain, increase or decrease paper chart portfolios.
- 5. No HO is intending to make 'back up' charts
- 6. 75% of countries are looking to fully automate chart production either now or in the future
 - Many are waiting for technological improvements