

63rd Meeting of the Nordic Hydrographic Commission Meeting 9 – 11 April 2019, Helsinki, Finland

Paper for Consideration by NHC63 Digital products for the leisure market

1. Introduction / Background

At the NHC62 meeting at Arkö, Sweden April 2018 it was decided that Denmark should send out a questionnaire to the attendees to the NHC-meeting about nautical digital products for the leisure market. Denmark send out a questionnaire after the NHC62 meeting and we have received answers from all NHC MS

2. Analysis/Discussion

Below is the answers from the NHC MS.

Question 1: Please describe how you currently distribute electronic nautical charts to the leisure market for navigational purposes	
Answers	
Denmark	The Danish Geodata Agency (DGA) manages licensing agreements with a range of corporate entities who in turn create derived products based on data created by the DGA.
Finland	We have national terms and conditions for the re-use of Finnish S-57 ENC data. Technically remote ECC Geoview HO is been used for distribution.
Iceland	We don't have any direct licensing agreements for the leisure market.
Norway	The Norwegian Mapping Authority – Hydrographic Service (NMA-HS) distribute Electronic nautical Charts (S57 format) to the leisure fleet through a network of distributors. See more information on our web page: https://kartverket.no/en/Maps--Nautical-Charts/Nautical-Charts/norwegian-chart-data-for-chartplotters/ To become a distributor an agreement has to be entered between the NMA-HS and the company.
Sweden	We have licensing agreements with 18 companies. They receive the S-57 data through ECC service Geoview and raster data delivered via FTP.

Question 2: Please describe how you currently distribute data to the leisure market for other use (e.g. WMS or data for other use than navigation)	
Answers	
Denmark	The licensing agreements include options to create such products for the end-user market.
Finland	We distribute our data via FTA geoportal – WMS, WFS, data download, WMTS
Iceland	See above answer (We don't have any direct licensing agreements for the leisure market.)
Norway	All our open data sets and WMS services are distributed to the public including the leisure market, through www.geonorge.no
Sweden	Leisure market do not request data for other use but for other markets (companies, administrations etc) we distribute via FTP.

Question 3: Please describe the legal aspects or requirements for use of electronic charts in the leisure market in your country (are leisure crafts required to use official / updated electronic charts?)	
Answers	
Denmark	Leisure crafts are required to be able to navigate safely through the waters and use proper navigational tools, but no range of products are specifically required.
Finland	Leisure crafts are not at the moment required to use official or other charts although it is been strongly recommended by Finnish Maritime Authorities. However, there is an on going work for legislative amendment that requires leisure crafts to carry official charts on board.

Iceland	There is nothing in our laws or regulations about leisure crafts and the use of electronic charts.
Norway	Leisure crafts are not required to use official/updated electronic charts.
Sweden	They are, “all ships, irregular of size...” but according to Swedish Transport Agency this market is not regulated/controlled.

Question 4: Which plans for modernization for the leisure market does your HO have for the future?

Answers	
Denmark	In 2018 the DGA created a new licensing agreement, which greatly increases the range of updates our licensees receive, and thus are able to provide directly to the end-users. Furthermore the licensees were given the option of creating a public WMS as well as incorporate a national bathymetric model into their derived products.
Finland	We have prepared the digital era understanding the increasing use of chart plotters and digital applications. Currently we already provide S-57 ENC data and in addition, we are looking at how to disseminate additional data requested by boaters in the future.
Iceland	None
Norway	NMA-HS does not have any plans for modernization for the leisure market currently, but are focusing on providing the leisure market the best data available to make it possible and easy to get them. This is for example done by reducing cost, and adjusting agreements to fit the service provider in the leisure market better.
Sweden	We strive to have terms and products that correspond to the licensee’s demands. For example, there is a request to offer subscription solutions to the end user market. In our new agreement, we will therefor offer a price model for this purpose. The sales process is very effective as it is but we will prioritize surveying shallow waters to offer better S-57 data to the leisure market.

Question 5: Please describe your financial distribution model in relation to electronic charts for the leisure market

Answers	
Denmark	Royalties are reported to the DGA biannually via sales reports.
Finland	We use traditional model containing fees for usage and marketing. Sales reports are been required annually. Marketing fees are been invoiced according the sales reports. There are two models for reporting allowing traditional off line products and web based applications.
Iceland	N/A
Norway	The financial distribution model is included in the licensing agreement on distribution of Electronic Sea Chart Data. The distributors report sales quarterly and the royalty to the NMA-HS is calculated according to this formula, $\text{Products sold} \times (\text{Retail price} - 40\%) \times 20\% \times \text{NMA}\%$.
Sweden	We have a fixed fee of 50 KSEK or 100 KSEK and then a royalty rate of 35% or 25%. This means our customers can choose between a lower fixed cost and a higher royalty or vice versa. We also have a minimum fee (40 SEK).

Question 6: Please describe any considerations and/or plans to modernize the financial aspects of the distribution agreements in the leisure market

Answers	
Denmark	There are no current plans for modernization in this area. Perhaps automation is relevant in the future.
Finland	We consider simplifying usage fees by applying just annual fees despite the usage/download amount or product type i.e. vector or raster.
Iceland	N/A
Norway	We do not have any plans regarding this at the moment.
Sweden	See question 4. New agreements are to be signed before 2018-12-31.

Question 7: Please describe your paper chart distribution model including print-on-demand licensing structuring as well as plans for the future in this area	
Answers	
Denmark	Currently the DGA has one national distributor, who in turn manages a network of third party distributors. Currently the DGA does not offer any PoD options for distributors due to internal production limitations.
Finland	Paper charts are now exclusively been distributed by our publisher John Nurminen Marine Oy. The next phase will be transition model towards POD.
Iceland	Distribution of our nautical charts is our responsibility through a list of agents. PoD service is not offered, but will probably be considered in the near future.
Norway	The NMA-HS distributes Print-On-Demand (POD) charts through a network of approved POD dealers. To become a dealer the company needs to enter an agreement and send a test plot of a selected chart that has to be approved by the NMA-HS. See list of POD dealers on this web page: https://kartverket.no/en/Bestille/Order-maps-and-nautical-charts/ Since January 2016 all paper charts from the NMA has been distributed through POD dealers.
Sweden	SMA has an in-house PoD service. Charts are printed when ordered and distributed together with the small craft charts from our printing office at the SMA. No plans to change this process in the nearest future.

Question 8: Please describe other important aspects you feel should be included and/or discussed at the meeting	
Answers	
Denmark	No answer
Finland	How each HOs see - user requirements of leisure craft market - the importance of services to leisure craft market - prioritization in activities and operation regarding leisure craft market
Iceland	No answer
Norway	NMA-HS provides official paper and ENC charts to professional use. This is based on international standards and rules for compilation, distribution and use. It is difficult to control the distribution and use of electronic charts/data to leisure market. This makes it difficult to make the data/charts official for the end user. What is best practice for this issue? Since January 2016 all paper charts from the NMA has been distributed through POD dealers.
Sweden	Best practice – paper for PoD-charts Comparison of royalty models Discussions of terms and conditions regarding licensing and other sales. Can we harmonize?

3. Conclusions

Below we have tried to highlight some general trends and views from the answers in the questionnaire.

General trends from question 1.

Please describe how you currently distribute electronic nautical charts to the leisure market for navigational purposes?

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Iceland have no direct licensing agreements for the leisure market. However all other countries have a licensing agreement with a network of distributors, who distribute electronic nautical charts to the leisure market for navigational purposes.

General trends from question 2.

Please describe how you currently distribute data to the leisure market for other use (e.g. WMS or data for other use than navigation)

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Finland and Norway distribute data to the leisure market for other use through different portals.

General trends from question 3.

Please describe the legal aspects or requirements for use of electronic charts in the leisure market in your country (are leisure crafts required to use official / updated electronic charts?)

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In general, there are no requirements for leisure crafts to use official electronic charts. However Sweden requires all ships to use official/updated electronic charts, but according to the Swedish Transport Agency this market is not regulated/controlled.

General trends from question 4.

Which plans for modernization for the leisure market does your HO have for the future?

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Iceland's HO have no plans for the future regarding a modernization of the leisure market according to the answer in the questionnaire. Nor does Norway have any future plans, but chooses to focus on providing the leisure market the best data available to make it possible and easy to get them.

Denmark, Finland and Norway have made some plans for the future modernization of their HO.

General trends from question 5.

Please describe your financial distribution model in relation to electronic charts for the leisure market.

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The different countries use different financial distribution models.

General trends from question 6.

Please describe any considerations and/or plans to modernize the financial aspects of the distribution agreements in the leisure market.

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No countries have any plans to modernize the financial aspects of the distribution agreements in the leisure market. However, Denmark and Sweden have some considerations regarding the subject.

General trends from question 7.

Please describe your paper chart distribution model including print-on-demand licensing structuring as well as plans for the future in this area.

Iceland, Norway and Sweden uses several agents/dealers in their paper chart distribution model. Denmark and Finland only use one agent.

General trends from question 8.

Please describe other important aspects you feel should be included and/or discussed at the meeting

- Finland wishes to discuss how each Hos see: user requirements of leisure craft market, the importance of services to leisure craft market and prioritization in activities and operation regarding leisure craft market.
- Norway questions what the best practice of controlling the distribution and use of electronic charts/data to the leisure market is and that this makes it difficult to make the data/charts official for the end-user.
- Sweden wishes to discuss the best practice – paper for PoD-charts, compare the different royalty models and discuss the terms and considerations regarding licensing and other sales.

Generally most of the different NHC MS have a different approach to the leisure market, e.g. how they focus on digital products, legislation, distribution and financial model. From a user perspective that means commercial companies and especially new companies that want to sell digital products for the leisure market it seems to be rather complicated.

4. Recommendations

It is recommended that the NHC MS discuss:

- how they can make it easier from a regional perspective for private companies to get access to and sell digital products for the leisure market.
- how each HO's see: user requirements of leisure craft market, the importance of services to leisure craft market and prioritization in activities and operation regarding leisure craft market.
- what the best practice of controlling the distribution and use of electronic charts/data to the leisure market is and that this makes it difficult to make the data/charts official for the end-user.
- the best practice – paper for PoD-charts, compare the different royalty models and discuss the terms and considerations regarding licensing and other sales.

5. *Action Required of NHC*

The NHC63 invited to:

- a. Discuss the bullet points that is listed in the recommendations
- b. Agree on a way forward
- c. Take appropriate actions