

TSMAD 25

Tokyo, Japan (15 – 18 January 2013)

S-101 Survey Report**ECDIS Manufacturers**

Survey period : 13/07/2012 - 22/08/2012

Scrubbing consists in the elimination of empty answers, or non ECDIS manufacturers answers.

After scrubbing and fusionning we collect 15 answers :

Electronic Chart Center AS (ECC), Konsberg Maitime, Jeppesen, PC Maritime Ltd, TRESKO, Japan Radio Co. Ltd, gtyr', Totem Plus, GEM elettronica srl, Transas, Random Limitada, Geomaris GmbH, Euronav Ltd, Soft Business Union, Northrop Grunman Sperry Marine

Due to troncated digits sum of ratio are not always 100%.

Ratio are **blue highlighted** if there is a wide consensus.

Ratio are **yellow highlighted** when opinions are divided.

General Questions

1.- What is the name of your organisation ?

2.- Were you aware before this survey that an S-101 ENC product specification is being developed as a replacement for the S-57 ENC product specification?

93% Yes

7% No (GEM elettronica srl)

Machine Readable Catalogues

3.- Do you consider this to be a positive step forward?

7% No answer (Japan Radio Co. Ltd.)

87% Yes

7% No (Euronav Ltd)

“Quality of presentation may improve, but we are still not sure whether there are big benefits to customers.” (Japan Radio Co. Ltd.)

4.- If the answer is NO, please explain why you answered NO.

“S57 is still not being produced and used correctly at the moment adding a new format beggars disbelief! This is highly dangerous and pretty pointless for most S57 users. Consistency and stability is the most important factor here.” (Euronav Ltd)

5.- Will this impact any maintenance service you currently provide to customers?

67% Yes

33% No

6.- If the answer is YES, please explain how and why.

« simpler upgrade » (Electronic Chart Centre AS (ECC))

“Software upgrades will be necessary.” (PC Maritim Ltd)

“Transition period problems” (TRECO)

“Some equipment are unable to update because there are limitations of hardware.” (Japan Radio Co. Ltd)

“New SENC format changes in ECDIS ENC-SENC conversion.” (Transas)

“New software tool will have to be developed.” (Random Limitada)

“We will need to implement new software to support this. Having seen the problems S57 (and S52) has presented over the years - Just look at the recent problem of non-compliance of systems found.. “. (Euronav)

“By the effort need to update the systems to support both S-101 and s-57.” (Soft Business Union)

“Our products are maintained in accordance with current standards. However, until the vast majority customers have transitioned from S-57 to S-101 there will be a need to maintain product on both standards, which will significantly increase maintenance costs. In addition, section 9 of the information paper (S-101 and type approval) appears incorrect in its assessment of the need for type approval. Where software updates are made Notified Bodies understandably take the view that re-certification is required when functional changes are introduced. This is based on the position taken by more than one Notified Body that we have worked with. It would probably be the case that re-certification is not needed if only the data used by the ECDIS changes, but where the ECDIS software is updated to provide new (or even modified) capabilities Notified Bodies are consistent in requiring re-certification.” (Northrop Grumman)

7.- Would you support the sole use of the default symbol set, rather than developing your own bespoke version at a later date and as a supplementary option for the user?

80% Yes

20% No (Japan Radio, Transas, Random Limitada)

“Consistency!” (Euronav Ltd)

“On the condition that the default symbols are accepted as fit for purpose by the user community.” (Northrop Grumman)

8.- Do you think that the new concept of providing point in polygon information in the data will greatly improve its use?

27% No answer

47% Yes

27% No

“What is 'point in polygon info' info ?” (TRESKO)

“We are still not sure.” (Japan Radio Co. Ltd)

“Do not know.” (Transas)

“? Will it help if a polygon needs to be clipped anyway - or does it imply don't use it if not on screen?.” (Euronav Ltd)

“It is the kernel providers who would be best placed to answer this question. However, we are not aware of any negatives of this approach and can understand the potential positives.” (Northrop Grumman)

9.- Do you think there is a strong enough case to persuade your customers to upgrade to an S-100/S-101 environment?

7% No answer

40% Yes

53% No

10.- If NO, please explain why.

“Difficult to explain the benefit of S-101 over S-57.” (Electronic Chart Centre AS (ECC), Norway)

“Why change a working unit?” (Jeppesen)

“Customers are conservative.” (TRESKO ENGINEERING)

“Because improvement of UI and display of overlay information can be realized in current S-57 specification or alternative method. For example chart data for optimal economic ship operation will be provided or chart price will become lower, these will be of big benefit to user.” (Japan Radio Co., Ltd.)

“Mariners do not rely solely on ECDIS to navigate safely. The additional information in S 101 follows the law of diminishing returns.” (Random Limitada)

“We do not know which benefits the future S-101 standard will provide for the mariner compared to the established S-57 (ENC) chart format.” (Geomaris GmbH)

“Why - for most it will bring no obvious benefits.” (Euronav Ltd)

“In some ways the answer is yes and no. We expect the answer to be "yes" by the time of first deployment but further S-100 product specs, availability of data for these products, and support for these products by kernel providers will be important in making the business case. Alignment with e-Navigation goals may wekk be an important factor. At present, our customers are not particularly concerned about this, and need to be convinced that they can get added value, especially when they have

recently had financial outlay for ECDIS mandation.” (Northrop Grumman Sperry Marine)

11.- Please comment if there any other changes/ improvements that you would recommend.

87% No answer

“Provide sufficient information and software tools for Manufactures to implemented the new standard.” (Random Limitada)

“Don't implement it - keep S57 as the required standard - or just extend it.” (Euronav Ltd)

12.- Has your company determined if there is a market for S-101?

7% No answer

20% Yes

73% No

13.- If the answer is YES, please answer the following questions - If S-101 was adopted as an international standard by the IHO in 2014, what is your expected time to market with an S-101 compatible ECDIS?

“2 years” (Jeppesen)

“Depends on detail analysis of the format” (Euronav Ltd)

“Within 6 months” (Soft Business Union)

“The answer to question 12 was no, for reasons given in the answer to question 10. However, we would still expect to develop S-101 compliant product. The time taken would depend on availability of chart kernels, the appropriate test standard, and test houses able to test against the standard. 18 months would be a reasonable estimate. » (Northrop Grumman Sperry Marine)

14.- What factors would influence when you would enter the market with an S-101 compatible ECDIS? Upgraded S-101 and S-63 specifications, customer demands, sufficient S-101 coverage or other?

“Standards must be in a final approved version * The availability of S-101 from HO * S-101 must provide some selling points like expanded coverage, richer data, improved user interface and such.” (Electronic Chart Centre AS (ECC), Norway)

“Customer demand/type approval demand.” (Kongsberg Maritime)

“S-101 data!” (Jeppesen)

“Customer demand Cost of development.” (PC Maritime Ltd)

“Market demand.” (TRESKO ENGINEERING)

"If there are customer demands, business advantage for us, or support from HO (e.g. free distribution of S-101 portrayal library), we will enter the market actively." (Japan Radio Co., Ltd.)

"Sufficient S-101 coverage." (GEM elettronica s.r.l.)

"Customer demand, S 101 coverage, clear specifications." (Random Limitada)

"Customer demand and coverage. Either way its not a welcome change." (Euronav Ltd)

"Sufficient S-101 coverage Customer demands." (Soft Business Union)

"All of the above, together with the availability of chart kernels, the appropriate test standard, and test houses able to test against the standard, as mentioned above. Potential additional S-100 products would aid the business case, as would alignment with IMO eNavigation strategy." (Northrop Grumman Sperry Marine)

Compatibility

15.- How will you manage the process where existing legacy systems only compatible with S-57 will need to be upgraded to support S-10x?

"As any other normal software upgrade." (Electronic Chart Centre AS (ECC), Norway)

"Software upgrade or PC+Software upgrade." (Kongsberg Maritime)

"Converters." (Jeppesen)

"By software upgrade." (PC Maritime Ltd)

"Propose Tresco update." (TRESKO ENGINEERING)

"Software update (if possible) or replacement of equipment." (Japan Radio Co., Ltd.)

"Systems will be upgraded via update CD." (Totem Plus)

"No update, S-10x only for new." (GEM elettronica s.r.l.)

"Keep both." (Random Limitada)

"Cost to customer for new software, Presume there will be suitable plans put in place to allow Type approval of new software running on older approved systems otherwise likly to see a customer revolt!" (Euronav Ltd)

"By replacing the existing systems." (Soft Business Union)

"From the manufacturer's perspective the period of parallel support of S57 and S-101 needs to be as short as possible to reduce maintenance costs. One would hope that in many cases the upgrade process would be a software upgrade only. However, earlier hardware will need to be upgraded. » (Northrop Grumman Sperry Marine)

16.- What is the duration of this process?

“Within 1 year.” (Electronic Chart Centre AS (ECC), Norway)

“2 min and 16 seconds.” (Jeppesen)

“12 months plus.” (PC Maritime Ltd)

“1 Y ?” (TRESKO ENGINEERING)

“Until S-57 ENC become invalid.” (Japan Radio Co., Ltd.)

“several months.” (Totem Plus)

“n.a.” (GEM elettronica s.r.l.)

“5 years.” (Random Limitada)

“Probably a couple of years.” (Euronav Ltd)

“Not estimated.” (Soft Business Union)

“This will be customer led, but again, from the manufacturer's perspective the period of parallel support of S57 and S-101 needs to be as short as possible to reduce maintenance costs.” (Northrop Grumman Sperry Marine)

Promotion

17.- How will you manage any relevant training or information to your users when functionality and ENCs are being delivered in S-101?

“Standard information will be given to our customers.” (Electronic Chart Centre AS (ECC), Norway)

“Incorporation in ECDIS traing course.” (Kongsberg Maritime)

“Seminars.” (Jeppesen)

“Via Computer Based Training.” (PC Maritime Ltd)

“Via the dealers.” (TRESKO ENGINEERING)

“We will prepare fare-paying training regarding S-101.” (Japan Radio Co., Ltd.)

“Technical bulletin.” (Totem Plus)

“Upgrading the user manual.” (GEM elettronica s.r.l.)

“Through manuals.” (Random Limitada)

“Its another layer of cost/training/safety issues for customers.” (Euronav Ltd)

“Not decided yet.” (Soft Business Union)

“This will need to be carefully managed. Existing methods of training provision can be used, but users will need to be well informed.” (Northrop Grumman Sperry Marine)