

Result of the Questionnaire

		Finland	Sweden	Poland	Estonia	Latvia	Lithuania	Russia	Germany	Denmark	Comments
Q.1	Does your country have sufficient ENC coverage of its waters along all the borderlines to your neighbouring countries in the Baltic Sea?	NO	YES	YES	YES	YES			YES	YES	Most of the contries have sufficient ENC coverage, only Finland expect full ENC by the end of 2010
a.	If the answer is NO, please list which countries you are bordering without full coverage.	Sweden, Russia									
b.	If the above answer is NO, when do you expect full ENC coverage along all these borders?	By the end of 2010									
Q.2	Have the Hydrographic Office in your country produced ENC from scratch (new sources different from the paper charts)?	NO	Both	NO	Both	Both			Both	NO	The majority of the counties are making some of its ENC from scratch and it seems not to give inconsistency with the neighbouring countries only some minor dissimilarity.
	If the above answer is YES or both, does the border of some of these ENC coincide with the borderline to other countries in the Baltic Sea?		NO		NO	YES			NO		
	If the answer is YES, does it then give inconsistency with some of your neighbouring countries (short description)?					Very small area (fairway) on the border with Estonia. Practically no discrepancies. We draw 15m depth contour, Estonia – no.					
Q.3	Please list the use of vertical datum and sounding datum your country is using in your ENC production.										
	Vertical datum:	2 = mean lower low water springs 3 = mean sea level 19 = approximate mean sea level	3 = mean sea level 19 = approximate mean sea level 24 = local datum	3 = mean sea level	3 = mean sea level	3 = mean sea level			3 = mean sea level	3 = mean sea level	Vertical datum: All countries are using mean sea level as vertical datum except Finland and Sweden whom also use mean lower low water springs, approximate mean sea level and local datum.
	Sounding datum:	2 = mean lower low water springs 3 = mean sea level 19 = approximate mean sea level	19 = approximate mean sea level	3 = mean sea level	3 = mean sea level	3 = mean sea level			3 = mean sea level	3 = mean sea level	Sounding datum: All countries are using mean sea level as sounding datum except Sweden whom are using approximate mean sea level. Finland are also using mean lower low water springs and approximate mean sea level as sounding datum.
Q.4	Does the Hydrographic Office in your country follow the IHO recommendations for compilation scale?	NO	NO	YES	YES	YES			NO	YES	The majority of the counties are following the IHO recommendations for compilation scale or intend to do it in the near future. This could be one of the big issues to obtain consistency in the future. If all the countries could agreed
	If you don't follow the IHO recommendations, what is the reason for not following the standard scale? 1:3 000 000 1:1 500 000 1:700 000 1:350 000 1:180 000 1:90 000 1:45 000 1:22 000 1:12 000 1:8 000 1:4 000	CSCL 25 000 has been used since the start of ENC production in usage band approach. In usage bands general and harbour recommended values (180 000 and 12 000) are in use. The original plan was to start production of new editions of approach cells when full coverage has been achieved but due to problems with production that has not happened yet.	CSCL 30 000 and 50 000 differ from the IHO recommendations for compilation scale. The non-standard scales are used as a compromise with the purpose of harmonising better with Denmark.		5 000 7 500 25 000	2 000 5 000 7 500 10 000 25 000			We had produced a lot of cells and found our own compilation scale rule before the IHO recommendation came out. Generally, our rule is that compilation scale is double chart scale but must not become larger than source survey material.		

	Do you plan to follow the IHO recommendations for compilation scale in the future?	IHO recommendations will be followed in the future.	N/A		N/A	1 cell 25 000 – will be cancelled 2 cells 10 000 will be replaced with new cells 8 000 in December 07/January 08 (in preparation) 1 cell 10 000 planned to be replaced with new cell 8 000 in January 09 (Pävilosta) 1 cell 10 000 - ? Lielupe not yet decided to keep or cancel this cell 1 cell 7 500 and 1 cell 5 000 will be replaced with new cells 4 000 when Next Editions have been prepared 2 cells 2 000 - remains			Because we currently transfer all of our data into a database system, we decided to adapt our compilation scales to IHO recommendations as soon as production of ENC's out of the database will start.		It is not possible for all the countries could agree on following the same compilation scale it could be a start and easier to carry on with the other issues related to the inconsistency in the Baltic.
Q.5	How does the Hydrographic Office in your country assign the ENC's to the 6 different usage bands? 1. Overview < 1 499 000 2. General 350 000 – 1 499 000 3. Coastal 90 000 – 349 999 4. Approach 22 000 – 89 999 5. Harbour 4 000 – 21 999 6. Berthing > 4 000	General: 180 000	General: 90 000 Coastal: 50 000	No differ	General: 180 000 Coastal: 90 000 Approach: 50 000 Harbour: 7 500 - 25 000 Berthing: 2 000 - 7 500	General: 180 000 Harbour: 5 000 - 21 999 Berthing: > 5 000			Overview: Not set General: 150 000 – 400 000 Coastal: 50 000 – 150 999 Approach: 20 000 – 50 000 Harbour: 2 000 – 20 000 Berthing: > 5 000 In case compilation scale touches two usage bands, the cartographer decides on the usage band the cell is to be assigned	General: 180 000 - 699 000 Coastal: 45 000 - 179 999	It's only Poland whom are following the suggestions from IHO for the usage bands. An analysis of all the other countries use of usage bands seems to reach an agreement that the wide of scale for General dosen't fit in the Baltic Sea. Again, This could be one of the big issues to obtain consistency in the future.
	If you don't follow the suggestions from IHO, what is the reason?	In our opinion the Baltic Sea is too small area for general cells with compilation scale less than 350 000. Especially northern shore of Gulf of Finland is too complicated to be portrayed in that small scale. We think there would be also need for coastal usage band in that area.	The generalisation of the information makes it possible to use the ENC in a larger scale. The mariner should be able to zoom the chart to a usable scale without getting an overscale warning in the ECDIS.		We are going to step-by-step	5. and 6. will be changed to requested scale ranges on release of New Cells/Editions			We already produced a lot of cells and found our own rules to the usage bands before the IHO recommendation came out.	In our opinion the waterways in the Baltic Sea area is too small general cells with compilation scale less than 180 000	If it's possible to reach an agreement on this issue, to follow the same scale for usage bands in the Baltic Sea. Then maybe we will be close to have finished the consistency job.
Q.6	Does the Hydrographic Office in your country make use of the attribute SCAMIN for your ENC production?	YES	YES	YES	YES	YES			YES	NO	
	If the answer is NO, what is the reason for not use the attribute SCAMIN?									We await a new production system	Every countries except Denmark are encoding their ENC with tha attribut SCAMIN. As soon as Denmark have a new productionsystem they will following the agreed way to encode SCAMIN (if we agreed). As you can see in the SCAMIN spreadsheet there are no countries whom are following the suggested IC-ENC SCAMIN rules and only few countries has encode the attribute similar to each other.
	If the above answer is YES, have you and some of your neighbouring countries agreed to follow the same method to assign the attribute SCAMIN?	Both	Both	NO	YES	Both			NO		Finland, Latvia and Estonia has agreed to following the same steeps and values for the attribute SCAMIN.
	If YES or both which countries have you agreed with:	Estonia	N/A		Finland, Latvia	Estonia					Sweden has agreed with someone.
Q.6a	If the Hydrographic Office in your country use of the attribute SCAMIN but not follow the proposal made by IC-ENC, consistent application of the attribute SCAMIN, then please describe the way you do it.	We have created our own SCAMIN method in the early phase of ENC production and that method has been is use all the time.	We follow the first agreed consistency recommendations.	N/A	N/A	On release of cells in UB2 and UB3 we had agreed on common values of SCAMIN with our neighbouring country Estonia. In UB4,5,6 – we have used SCAMIN several years ago to achieve better clarity of the screen looking from the point of view of our cartographers. Deeper investigations have been carried out only random.			When we create new editions out of the database we use the rules according IHO Circular Letter 47/2004 plus the additional rules under Annex 2 Concerning Circular Letter 64/2007 we decided not to fulfil it as long as there is no software tool supporting the setting because it is too time consuming. Independent from any rule we set SCAMIN depending on the importance of an individual object. An object in an approach cell that is also shown in the coastal usage gets the default SCAMIN value of the coastal. For example in CL 64/07 it is equivalent to clause 2.3 Optional Advanced approach		No one are has expressed that they in the future wouldn't follow the IC-ENC proposal for SCAMIN values and steeps.

Q.7	Please list the standard depth contour range the Hydrographic office in your country is using in its ENC production.	10, 20, 50, 100, 200	3, 6, 10, 15, 20, 50, 100, 200	2, 5, 10, 15, 20, 50, 100	0, 2, 5, 10, 20, 50, 100, 200	5, 10, 15, 20, 50, 100, 150, 200			0, 2, 5, 20, 30, 50 furthermore we have 3, 17 and 40m contours where we consider them nautically relevant.	2, 4, 6, 10, 17, 20, 30, 40, 50, 100	Today no one are following the same depth contour range and maybe it would be an issue that also would cost a lot of work especially for those countries whice are used the same source for paper charts and ENC.
Q.7a	Please list if your have any plans for change of contours in the future.	We have some plans to change that in the future but final decision of the values has not been done yet.	No direct plans, but we see the need for more detailed depth information.	N/A	NO	N/A			N/A	We don't have any plans to change it. But if we have to change it, it will not be before 2010.	No one in the near future have plans to change the use of its depth contour range
Q.8	Does the Hydrographic Office in your country make use of the attribute CATZOC with value 6 (zone of confidence U (data not assessed))?	YES	NO	NO	YES	YES			NO	YES	It dosen't look like that the countries in the Baltic Sea has a overconsumption of using the value 6 for CATZOC except Finland whom are using it for 95% of its data.
	If the above answer is YES, to what extent does your office utilize this value for your bathymetric data? [In percent %]:	95%			2%	N/A				Less than 1%	
	If the answer is YES, what is the reason for use of the value: 6?	It has been challenging to compile necessary information from the survey data due to long processing time of the surveys.			N/A	CATZOC=6 for all Land areas 2. General 1/3 – 100% zone of confidence = U, 1/3 devided: zone of confidence = A2 for resurveyed fairways, other=U, 1/3 devided: zone of confidence = A2 for resurveyed fairways, other=B 3. Coastal 1/6 – 100% zone of confidence = U, 5/6 devided: zone of confidence = A1, A2 for resurveyed areas, other=B 4. Approach 5. Harbour 6. Berthing CATZOC=6 not used for water areas				N/A	
Q.9	Does the Hydrographic Office in your country use point object with the same attributes values repeatedly instead of encode it as an area?	NO	YES	NO	NO	NO			NO	NO	Only Sweden are using point objects with the same attributes values repeatedly and the reason for doing it in a such way depend on scale an object type.
	If the above answer is YES, how dense do you place these uniform points objects? [Up to a number of points in a specific area]:		It depends on the scale and type of point objects.			magnetic variation as point object : 1 point for entire cell					
Q.10	Does the Hydrographic Office in your country encode rocks as a seabed area (SBDARE), Obstruction (OBSTRN) or as an Underwater/awash rock (UWTROC)?	UWTROC, OBSTRN	UWTROC	UWTROC	SBDARE, OBSTRN	UWTROC, OBSTRN			SBDARE, UWTROC	SBDARE, UWTROC, OBSTRN	It doesn't seams to give any problems even we are encoding these objects in a different way or at least it's unknown.
	If the above answer is SBDARE or OBSTRN do you then encoded these objects as point, line or area?	POINT			POINT, LINE, AREA	POINT, AREA			AREA	POINT, AREA	
	Does it give inconsistency with some of your neighbouring countries?	Not known			NO	NO			NO	NO	
Q.11	Does the Hydrographic Office in your country encode remains of a wreck or other foul area as Obstruction (OBSTRN) or as WRECK (WRECKS)?	OBSTRN	WRECKS	OBSTRN	BOTH	WRECKS			BOTH	OBSTRN	Only Latvia are encoding remains of a wreck as a WRECKS without always use a value for VALSOU.
	If you encoded as a wreck do you then use the attribute VALSOU?		YES/NO		YES	YES, if it is known NO, if not specially investigated			YES		
Q.12	Does the Hydrographic Office in your country follow the IHO recommendations to hold the ENC production systems at a resolution of 0.0000001 (10 ⁻⁷) and the COMF value to 10000000 (10 ⁷) for all ENC cells?	YES	YES	YES	YES	YES			YES	YES	Every countries are using a resolution of 0.0000001 (10 ⁻⁷) and the COMF value to 10000000 (10 ⁷) for all ENC cells. Latvia still have one ENC which will be cancelled in the future.
	If the above answer is NO, please write the resolution and the COMF value you are using.					1 cell remaining (10 ⁶) from 2003 will be cancelled					
	Resolution:										
	COMF value:					1 cell remaining (10 ⁶) from 2003 will be cancelled					
	If the answer is NO, what is the reason for not following the IHO recommendations?										
Q.13	Does the Hydrographic Office in your country encode both of these objects (CBLSUB) and (CBLARE)?	NO	YES	NO	YES	NO			YES	YES	

	If the above answer is YES, have you then agreed with your neighbouring countries which type you are using at the borderline?		NO		YES				YES	NO	
	No matter YES or NO, does it give inconsistency with some of your neighbouring countries? State the area and describe the inconsistency.	Not known	N/A	N/A	N/A	Latvian Swedish border: cables,submarie Usage Band 2 LV Compilat.scale 1:180 000 (paper chart analogue 1:200 000) SCAMIN: 699 999 SE Compilat.scale 1:90 000 (expect. paper-chart analogue to be 1:200 000) SCAMIN: 349 999 Latvian Estonian border: cables,submarie Usage Band 3 LV Compilat.scale 1:90 000 (paper chart analogue 1:100 000) SCAMIN: 349 999 (not in use) EE Compilat.scale 1:90 000 (paper chart analogue 1:100 000) SCAMIN: 349 999 (not shown)			In some cases it happens that a cable ends on the border or its position is not identical. This mostly happens with disused cables.	YES, some cable areas doesn't have the same extent as our neighbouring countries	The use of the objects CBLSUB and CBLARE differ from country to country. Sometimes it gives some inconsistency at the borderline and one of the reasons could be the different use of compilation scale and placing of usage bands.
Q.14	Does the Hydrographic Office in your country make use of the object (SEAARE) to encode the name of the sea areas?	YES	YES	YES	YES	YES			YES	YES	
	If the above answer is YES, do you then use the object as a point or a polygon?	POINT, POLYGON	POINT, POLYGON	POINT	POLYGON	POLYGON			POLYGON	POLYGON	
	Describe if there is inconsistency with some of your neighbouring countries?	Not known	N/A	N/A	N/A	NO			N/A	It gives inconsistency when the neighbouring countries are using points	
Q.15	Does the Hydrographic Office in your country announce preliminary and/or temporary corrections in the updates?	YES	NO	YES/NO	YES	YES/NO			YES	YES, depends on importance/duration	
	Preliminary	YES	NO	NO	YES	N/A			YES	YES	
	Temporary	YES	NO	YES	YES	YES, if announce=to make an update, if the mentioned item is published in NtM			YES	YES	
	If no, do you have any plans in that respect?		YES	NO		NO					
Q.16	Does the Hydrographic Office in your country use the "Usage Indicator" [USAG] with value "C" when the feature is truncated by the data limit?	YES	YES	YES	YES	YES, (Not HO, dKartEditor is)			YES	YES	All countries are using the "Usage Indicator" [USAG] with value "C" when the feature is truncated by the data limit.
Q.17	Does the Hydrographic Office in your country test/validate ENC before launching?	YES	YES	YES	YES	YES, Not quite clear question			YES	YES	
	If the above answer is YES, how do you test/validate (methods and equipment)?	New cells/ editions: Full validation using dKart Inspector and ENC Analyzer, visual check using Furuno ECDIS and possibly Orca Master, dKart Navigator or Transas Navi-Sailor. Updates: full validation using dKart Inspector and visual check using Furuno ECDIS.	dKart Inspector ENC Analyzer	dKart Inspector ENC Analyzer CARIS validation tools	dKart Inspector 5 ENC Analyzer 2.4.2.2	dKart Inspector ENC Analyzer			dKart Inspector ENC Analyzer	CARIS HOM dKart Inspector ENC Analyzer FURONO ECDIS	All countries are testing/validating its ENC before launching. Everyone is using dKart Inspector and ENC Analyzer. Poland and Denmark are furthermore using CARIS validation tools. For visual checking Finland and Denmark are also using Furuno ECDIS.
Q.18	Does the Hydrographic Office in your country test for harmonization for both your own and neighbouring countries before launching ENC?	YES	YES	NO	YES	N/A			YES	YES	
	If the above answer is YES, how do you test (methods and equipment)?	When producing cells of the border areas adjacent cell(s) produced by the neighbouring country is used for harmonizing of the data.	If a new feature is cut by the border we compare how it looks with the neighbouring country's ENC.		Visual	We have compared data and agreed on the border with Estonia and started this process with Sweden.			We exchange data and load it together in the production software in order to see gaps and overlaps and jumps in content and we also load it in an ECS system in order to see it like the user does.	For new ENC, we compare how it looks with the neighbouring country's ENC.	Most of the countries are testing for harmonization both its own and neighbouring countries before launching ENC. It's being tested in such a different ways that harmonisation could be an option.
Q.18a	Do you compare all data boundaries also between larger and smaller scaled cells?	YES	NO	YES	YES	YES			YES	YES	Only Sweden doesn't.
Q.19	Has the Hydrographic Office in your country agreed to exchange data boundary with some of your neighbouring countries so you could follow the suggested 5 metre overlapping buffer zone?	YES	NO	YES	YES	YES			YES	YES	Every country is in some way exchange data boundary with some of its neighbouring countries or intent to do it in the future.
	If the above answer is YES, please list which countries you have agreed with.	Sweden (agreement has been done but this has not been used yet).		Denmark Sweden Germany	Finland Latvia	Estonia			Denmark Sweden Poland (Netherlands)	Sweden Germany (United Kingdom) (Norway)	It seems to be conflicts in the answers.

Q.20	Please list all the object classes the Hydrographic Office in your country is currently using or not using in the Baltic Sea (Choose between using and not using).	Tab "Use of Objects"	Tab "Use of Objects"	Tab "Use of Objects"	Tab "Use of Objects"	Tab "Use of Objects"			Tab "Use of Objects"	Tab "Use of Objects"	
	Using:	Tab "Use of Objects"	Tab "Use of Objects"	Tab "Use of Objects"	Tab "Use of Objects"	Tab "Use of Objects"			Tab "Use of Objects"	Tab "Use of Objects"	
	Not using:										
Q.21	Does the Hydrographic Office in your country encode some of the mandatory attributes with UNKNOWN (no values)?	YES	YES	NO	YES	If this means value=<empty> then YES			YES	YES	All countries except Poland are using the attribute value "UNKNOWN"
Q.22	Does the Hydrographic Office in your country create C_AGGR objects?	YES	N/A	YES	YES	YES			NO	YES	All countries except Poland (and Sweden) are creating C_AGGR objects.
Q.23	Does the Hydrographic Office in your country use straight or geodetic lines to represent lines like border lines between defined points, NAVLNEs or RECTRCs?	Straight	Straight/Geodetic	Straight	Straight/Geodetic	Straight/Geodetic			Straight	Straight/Geodetic	Finland, Poland and Germany don't use geodetic lines to represent lines like border lines.
Q.24	Which version of S-57 does the Hydrographic Office in your country use for ENC production?	3.1	3.1	3.1	3.1	3.1			3.1	3.1	All countries are using version 3.1 in its ENC production.
Q.25	Does the Hydrographic Office in your country exchange survey material with neighbouring Hydrographic Offices across the national borderline or do you survey partly in your neighbour's waterways or vice versa?	YES	NO	NO	YES	YES/NO			YES	YES	4 counties Finland, Estonia, Germany and Denmark are exchanging survey material with some of its neighbouring countries.
	Exchange survey material with neighbouring countries:	YES	NO	NO	YES	NO			YES	YES	5 counties Finland, Estonia, Latvia, Germany and Denmark are Survey partly in your neighbour's waterways.
	Survey partly in your neighbour's waterways:	YES	NO	NO	YES	YES			YES	YES	
Q.26	In case an important waterway is split by national borderlines does the Hydrographic Office in your country agree that the neighbouring Hydrographic Offices edits the whole area on behalf of you or vice versa?	N/A	NO	YES	YES	NO			NO	NO	Poland and Estonia has agreed on if important waterways is split by national borderlines that some of its neighbouring Hydrographic Offices edits the whole area or vice versa.
Q.27	Does the Hydrographic Office in your country publish new editions of ENCs at the same time as the new edition of the corresponding paper charts, earlier or later?	Later	More often	Later	More often	Not so clear for me but: Simultaneously Earlier More often later			Later	More often	It does differ from country to country.