



Questionnaire to BSHC Member States on their implementation status of the transition to a Harmonised Vertical Reference, Baltic Sea Chart Datum 2000.

Please return to Thomas Hammarklint by email (thomas.hammarklint@sjofartsverket.se) at the latest by **25 January 2019**.

Member state	Lithuania
Date of reply	2019-01-25
Point of Contact	Mindaugas Zakarauskas

1. Are all the decisions done to implement the Baltic Sea Chart Datum 2000?

1.1. When the decisions has been done or planned to be done?

We have Lithuanian height system (LAS-07), which came into force 2016-01-01, which is in principle the same as BSCD2000

1.2. What are the national decisive organizations?

Director of National land service under The Ministry of Agriculture of Republic of Lithuania

What is the national status of implementation of chart datum?

2.1. What actions have already been done?

Works in progress

2.2. What actions have been planned to be executed and what is the schedule?

After implementation of bathymetric DB all data will be in new height system.

2.3 Which ENC Approach have been updated with the new reference datum? If possible, attach a chart datum overview covering Your countries nautical charts, designed graphically or as a table, updated around January, 2019. Also, if possible, include an attribute to each named chart describing the CD difference to BSCD2000 in cm (CD minus BSCD2000). Example attached at the end of the Questionnaire (Annex). All charts are still in old BHS-77, paper charts has a note how to calculate depth from BHS-77 to LAS07. The mean difference between systems about 13 cm. $LAS07-BHS77=0.13$

3. Has Your country established the national realization of EVRS and are the water level stations connected to this new height system (BSCD2000)?

3.1 Which organization/-s is responsible for the water level stations/data in Your country?

Tide gauges in Lithuania are belonging to Lithuanian Hydrometeorological Service

3.2 Which reference are used today to present water level information?

Does Your country planning to present water level information referring to BSCD2000? Doing it already today? Date decided for change the reference to BSCD2000?



All data usually are provided in old BHS77, but there is a note to recalculate by yourself upon the needs.

3.3 Are there any plans for digital service/-s intended for the users to have the option to choose MSL or BSCD2000 as the reference level for water level information?

Please see reply at 3.2

3.4 GNSS supported UKC control/confirmation is probably the reality in a few years. But we also need reliable water level predictions for carrying out optimal loading and real time water level data to check the GNSS data. Do we need a shared service in the Baltic Sea for water level information (predictions/real-time), that fulfils nautical needs and demands?

In Klaipeda port UKC is 1.5m, in the case of smaller UKC Harbour Master makes decision individually. In any case precise information on water level and it's prediction would assist in decision making process.

3.5 Do we need to work together with the development of the IHO S-104 standard?

Currently we do not have resources to work in such group, but in principle we support such proposal.

4. Are the relevant national contacts and interest groups defined for the change of chart datum and water level reference?

4.1. What are the essential national interest groups in Your country?

As we know, institutions linked to safety navigation and institution managing tide stations.

4.2. Are the relevant point of contacts known and contacts been made to them?

Contacts known but they are contacted upon the needs.

4.3 Are You planning any information campaign about the change of chart datum and water level reference? If, yes have you published information about this somewhere?

No such campaign is planned yet, but if such need appears, it can be organised.

5. Have You identified any obstacles or major issues concerning transition to the harmonized vertical reference?

5.1. What are the major obstacles or issues?

Currently lot of state agencies and services are under reorganisation, difficult to make plans regarding activity.

5.2. What measures has been planned to avoid them?

Currently lot of state agencies and services are under reorganisation, difficult to make plans regarding activity.

6. Connections to neighbouring countries

6.1. Which are the relevant countries to cooperate?

In our case perhaps would Latvia.



6.2. Are the needed points of contacts already known?

Yes.

6.3. What actions have been agreed with the relevant countries (e.g. synchronising plans and schedules)?

No actions have been agreed yet.

7. Are there any needs for support from BSHC?

8. Do you have any other proposals or guidance to the CDWG to help and foster the transition process?

9. Are you using GNSS and GNSS augmentation services for referring to your (bathymetric) surveys to the chart datum?

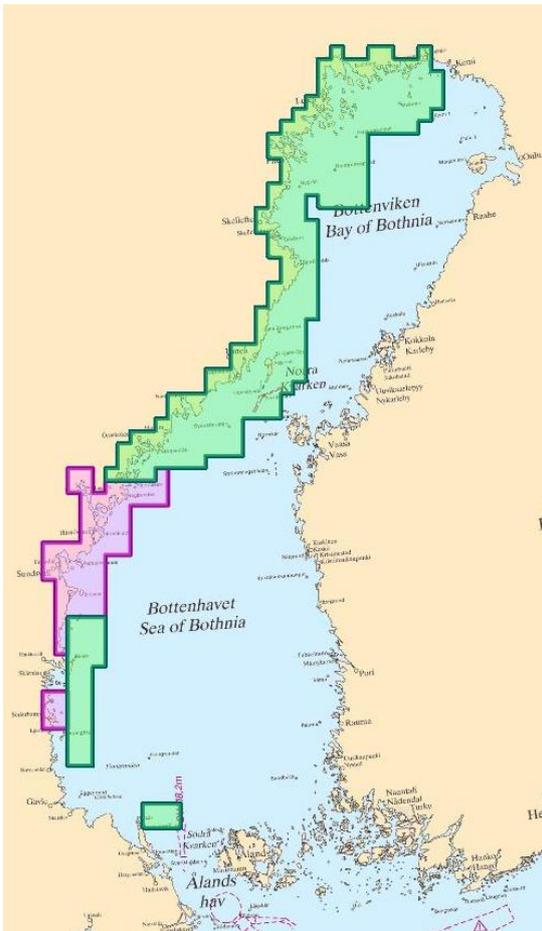
9.1 What GNSS augmentation service is used for hydrographic surveys? (If there are several augmentation services, list all of them.)

DGPS, SBAS.

9.2 To which coordinate system, and vertical reference level/frame the GNSS augmentation service is referred to? (If there are several systems in use, list all of them.)

Currently we are using UTM-34, BHS77.

Annex



Example of ENC Approach from Sweden: Green cells are referring to the new chart datum BSCD2000, purple cells are ongoing adjustments to BSCD2000 and the rest of the cells refer to various Mean Sea Level.