

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

Last three questions (9 - 11) concerns GNSS-augmentation/correction services used in member states.

Please return to Mr. Jyrki Mononen by email (jyrki.mononen@liikennevirasto.fi) at the latest by **30 January 2018**.

Member state	LATVIA
Date of reply	2018-01-30
Point of Contact	ARMANDS MURĀNS armands.murans@lhd.lv

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?
All decisions will be made after clarifying the Baltic Sea geoid.

1.2. What are the national decisive organizations?
“Latvian Geospatial Information Agency”, Maritime Administration of Latvia,
Ministry of Defence

2. What is the national status of implementation?

2.1. When the first BSCD2000 products are planned to be published?
Decision will be made after clarifying the Baltic Sea geoid.

2.2. What is the planned time-span of the implementation? When to start and when all the products are published in BSCD2000?
Decision will be made after clarifying the Baltic Sea geoid.

3. Are the relevant national contacts and interest groups defined?

3.1. What are the essential national interest groups in Your country?
Marine related organizations (ports, etc.)

3.2. Are the relevant point of contacts known and contacts been made to them?
We assume, they are aware of Baltic Sea Chart Datum 2000.



3.3. How is the water level information planned to be provided to mariners and other users in BSCD2000?

Mariners will be informed via products and publications such as charts and Notices to Mariners.

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

4.1. What are the major obstacles or issues?

Not all obstacles are identified yet.

4.2. What measures has been planned to avoid them?

None.

5. Connections to neighbouring countries

5.1. Which are the relevant countries to cooperate?

Estonia, Lithuania, Sweden.

5.2. Are the needed points of contacts already known?

Yes.

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

Not yet.

6. Are there any needs for support from BSHC?

Yes. There is a need for clarification.

Straight transfer of depths on Charts from MSL (as it is now) to BSCD2000 requires reduction of depths for about 16cm in average in Latvia. There is no big practical impact to navigation issues in this case and everything seems fine.

The question is, whether this is correct way to go and up to what values this method is considered correct 20cm ... 30cm ... 1m.... 10m? Let's, for example, take value -10m. How should be shown the MSL depth of 6m on the Nautical chart after transfer to BSCD2000? Should it be land with height of 4m even, if in reality there is still water with depth of 6m?

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

No.

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

Yes.

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

EGNOS, TRIMBLE VRS



Finnish Transport Agency
Hydrographic Office
Helsinki, 8 December 2017

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

WGS84

Most surveys are made in UTM34N.

We use Mean Sea Level (BHS-77) height reference system now.

Any other transformations, if necessary, usually are done during post processing.