

## **DESCRIPTION OF SOUNDING DATA**

### **General**

Digital sounding data are hydrographic data in vector format derived from echo sounding or other hydrographic surveys (e.g. laser sounding). Soundings data are primarily used in the production of nautical charts, fairway design and maintenance.

The sounding data sold on the market do not replace the printed nautical chart used for navigation. The Finnish Maritime Administration does not take responsibility for any damage caused by the use of the material.

### **Coverage**

Sounding data are available on sea areas and the Vuoksi, Kymi and Päijänne waterways. The digital sounding data are more detailed for merchant channels and small craft tracks. For other areas the availability of digital soundings data vary.

The frequency of soundings produced through methods such as echo sweeping and multibeam systems is < 2 m. The frequency of soundings produced by other methods (such as sounding along a predetermined line) is 10-40 metres.

Of the sounding materials basic soundings are maintained for nautical chart production, with a distance between depth points of 30-40 metres. More detailed sounding materials than the basic soundings can be made to order from frequent sounding data.

The availability of soundings is always checked order-wise.

### **Coordinate system**

The material is published in the KKJ coordinate system as horizontal coordinates. If necessary, amendments to projection zones are possible.

Later on it will be possible to deliver data in the EUREF coordinate system.

### **Description of sounding data**

#### **Survey methods**

Sounding data are surveyed through sounding along a predetermined line, through echo sweeping and multibeam systems.

#### **Accuracy of surveys**

The accuracy of surveyed depth points ranges between 0.3 - 1.0 metres, depending on the survey method and topography.

#### **Positional accuracy**

The positional accuracy of sounding data ranges between 2 – 20 metres. The positional accuracy of open sea sounding data from the 1970s can be 20 metres.

Since the mid-1990s, the positioning method has applied DGPS equipment for surveying depth points, with a positional accuracy of 2-5 metres.

#### **Reference levels**

The reference level of open sea sounding data is linked to the mean water level system, which is expressed as e.g. MW2000. The reference level of inland waterways sounding data is based on the mean water level during the merchant shipping traffic season linked to the systems NN or N60.

#### **Update interval**

There is continuous maintenance of sounding data. Surveys are carried out in sea areas and inland waterways every year.

#### **Confidentiality of data**

Sounding data are confidential with some exceptions (inland waterways, fairway areas, fairway space). Delivery of sounding data on sea areas requires permit by the Defence Forces in accordance with the Territorial Surveillance Act.

#### **Delivery format**

ASCII file (x coordinate, Y coordinate and sounding)