



# OFFICE OF NAVIGATION, HYDROGRAPHY AND OCEANOGRAPHY (TN-ONHO)

Existing documents show that the Turkish Navy has begun to give importance to hydrography and charting in the 15<sup>th</sup> century. Piri Reis, the well-known Turkish admiral collected famous sailing directions of the Mediterranean Sea under the title “Kitab-i Bahri” in 1526, which contains descriptions and drawings of the Mediterranean shores together with valuable information on navigation.

An important contribution to cartography is the chart compiled by Piri Reis showing practically all the sea routes known in the 16<sup>th</sup> century. This valuable chart was discovered in 1929 while Topkapi Palace was being converted into a museum and contains most of the western portion of a larger world map, the remainder having been lost. It depicts the Atlantic Ocean with its islands and coastlines, many ships, animals and inscription is in Ottoman script.

## MISSION

The mission of Turkish Navy Office of Navigation Hydrography and Oceanography (TN-ONHO) is to conduct hydrographic, oceanographic surveys and to meet defence and civil needs for navigational charts, publications and other hydrographic information in a cost effective manner.

In order to meet this mission, the TN-ONHO’s primary aims are:

- To improve maritime safety, the protection of the marine environment and maritime trade

in waters of national responsibility, by providing hydrographic and oceanographic products.

- To improve the effectiveness of the Turkish Navy by providing a range of hydrographic, oceanographic and geophysical products, services and advice to meet the needs of Turkish Navy in times of peace, crisis and war.
- To improve the safe navigation of mariners by marketing the series of paper and digital charts and publications on the surrounding seas of Turkey.

## MAJOR ACTIVITIES

### a. Navigational Activities

- Promulgation of all sorts of navigational information to the mariners for maintaining the safety of life and property at seas,
- Studying and scrutinisation of the position and attributes of aids that will be established, replaced or removed for navigational safety and facility,
- Announcement of navigational aids that are established replaced or removed for navigational safety and facility, to the mariners and
- Adjustment of magnetic compasses of Naval and Coast Guard vessels and repair of magnetic compasses, barometers, thermometers and hygrometers.

### b. Hydrography Activities

The concept of hydrography comprises three principal functions: hydrographic surveying, chart production and military geographic documentation. Activities are to meet, civilian and defence requirements. In order to fulfill these activities, Hydrography Division is responsible for:

- Planning and conducting hydrographic surveys,
- Compiling and producing various kinds of charts and

- Collecting necessary information to produce military geographic documentation of coastal areas.

### c. Oceanography Activities

Division is mainly concentrated on the following type of works in addition to general survey, studies and products:

- Acoustics models applications,
- Oceanographic data support system,
- Data management system studies, marine information service system,
- Mine warfare plot,
- Instrumentation,
- Oceanographic models having environmental applications, such as Oil spills.

### d. International Activities

Activities covering hydrography, oceanography and safety of navigation are performed in accordance with national and international standards. TN-ONHO is a member of various organizations related to hydrography and oceanography, such as International Hydrographic Organization (IHO) and Intergovernmental Oceanographic Commission (IOC).

## CAPABILITIES

TN-ONHO uses up-to-date technology in hardware and software in processes of surveying, data handling, compiling and printing.

## ASSETS

Presently TN-ONHO has two survey ships and two survey boats.

Survey ships TCG “Cesme” and TCG “Çubuklu” both have the latest modern survey equipment for conducting of offshore survey missions. Additionally, TCG “Mesaha-1” and TCG “Mesaha-2” are assigned for coastal survey missions.

**NAFO**

Developing and keeping up-to-date navigational charts of the waters around Turkey is one of the various responsibilities of TN-ONHO.