

## Societal needs and marine geological mapping in Finland – case Pyhäjoki

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In the past most of the marine geological mapping in Finland was done systematically map sheet by map sheet. Recently needs-oriented mapping has taken over and nowadays most of the mapping is done to fulfill specific needs of society.

A good example of needs-oriented mapping project is the Pyhäjoki case. Fennovoima Oy is planning to build a nuclear power plant in Hanhikivi, offshore Pyhäjoki, western coast of Finland. For various purposes Fennovoima needed information on the seabed within 25 km radius of the planned power plant site.

According to Fennovoima's assignment GTK launched a marine geological mapping project for years 2012-2014. During the project GTK conducted 2654 line kilometers of acoustic-seismic surveys covering an area of about 1000 km<sup>2</sup>. Seabed substrate maps were drawn for the entire survey area.

Mapping project provided a lot of new information on the seabed conditions of the study area. For example, the submarine continuation of the moraine field south of Raahe is clearly recognisable and the eroding effect of pack ice can be detected in detail.