



An integrated fit-for-the-use assessment of marine data adequacy in the Baltic Sea

Jun She (1) and Antonio Novellino (2)

(1) Danish Meteorological Institute, Copenhagen Ø, Denmark (js@dmi.dk), (2) ETT Solutions Ltd. Genova, Italy (antonio.novellino@ettsolutions.com)

The value of data can only be realized when they are used. Therefore one major factor to determine the extent of the value of data is their level of “fitness-for-the-use”. The purpose of the Baltic Sea Check Point project is to assess adequacy of the Baltic Sea data in areas of air, water, biota, seabed and human activities for their usages in social-economic benefit areas and marine knowledge generation, which are presented by eleven challenge areas. The data assessed focused mainly on in situ observations but also include satellite observations, model data, human activity data and integrated data by combining models and observations.

The eleven challenge areas are wind farm siting, marine protected areas, oil platform leak, climate change, coastal protection, fishery management, fishery impact, eutrophication, riverine inputs, bathymetry and alien species. The assessment is mainly qualitative with focus on the availability and accessibility, e.g. completeness, coverage, resolution and precision when using the data for pre-defined tasks in each challenge areas, e.g., wind farm site suitability design, generate 100 year time series of sea level for the Baltic coastal stretches etc. The procedure of the assessment is taken in four steps: i) to describe the pre-defined data use cases and objectives; ii) to specify data requirements in performing the data use cases; iii) to investigate the data availability and iv) to assess the data adequacy in terms of the “fitness-for-the-use” of data in the selected challenge areas by comparing the data availability with the data requirements. Due to the complexity involved in the assessment, in-situ observations, especially those from EMODnet, are given more focus than other datasets although all the potential data sources from national, regional and European levels are taken into account. For each challenge area, data adequacy for key variables is assessed and outcomes will be reported. Recommendations for major data gaps, priorities for future observations will also be given. The developed web platform for challenges products and assessment will be also presented.