Assessing Offshore Energy Risks

Detailed marine mapping is being used to identify and understand the risks associated in the siting of offshore renewable energy installations. Purchased by Abbott Risk Consulting, the SeaZone data is being used to explore the impact of new installations on other marine users and in support of studies involving Computational Fluid Dynamics (CFD) modelling.

Abbott Risk Consulting (ARC) undertakes navigational safety and engineering risk management in the offshore oil and gas and renewables sectors. The data purchased from SeaZone, including SeaZone HydroSpatial and SeaZone Charted Raster, is being used by ARC to support an increasing number of studies, in particular those involving assessment of navigational risk associated with the siting of offshore renewable energy installations (wave, tidal and wind) in coastal waters. The data is also being used in support of CFD studies involving fluid flow modelling including turbine siting and spacing.

Using MapInfo software, ARC is able to combine the SeaZone data with other types of marine information including detailed bathymetric data from surveys, array / device location data and other marine use data in order to fully determine the impact of installations and resulting risks.

SeaZone HydroSpatial data is ‘off the shelf' authoritative digital marine mapping, engineered and maintained from raw material from hydrographic offices and other data agencies. HydroSpatial provides reference information comparable with land mapping and is designed for easy access and cost effective use in desktop and web GIS, satisfying the majority of user needs and applications. SeaZone HydroSpatial consists of six topic layers including Bathymetry and Elevation, Natural and Physical Features, Structures and Obstructions, Socio Economic and Marine Use, Conservation and Environmental Protection and Climate and Oceanography.

SeaZone Charted Raster provides the ideal backdrop mapping for a variety of applications. Based on scanned and geocoded images of Admiralty Charts it is available for immediate use in Geographical Information Systems (GIS) with the need for additional software, add-ons or plug-ins.