Fugro – International Data Sharing Workshop

Fugro is the world’s leading Geo-data specialist, collecting and analysing comprehensive information about the Earth and the structures built upon it. Through integrated data acquisition, analysis and advice, we unlock insights from Geo-data to help our clients design, build and operate their assets in a safe, sustainable and efficient manner. Working around the globe, we employ approximately 10,000 employees in 65 countries. By deploying our fleet of specialized assets and cutting-edge digital solutions, we provide a vital contribution to building a safe and liveable world.

Of the 17 interconnected SDGs, our solutions and services for the energy and infrastructure markets are directly aligned with three Sustainable Development Goals. In addition, we apply our knowledge and resources to help other areas of development: life below water and life on land. In line with our materiality assessment and full evaluation of the sub targets of each SDGs we have decided to focus on 5 of the 17 SDGs where we consider Fugro’s contribution most meaningful. These are as follows:

- Goal 7: Affordable and Clean Energy,
- Goal 9: Industry, Innovation and Infrastructure,
- Goal 11: Sustainable Cities and Communities,
- Goal 14: Life Below Water, and
- Goal 15: Life on Land.

Specifically related to the oceans, Fugro is leading the private sector in its support of and participation in The Nippon Foundation-GEBCO Seabed 2030 project, an initiative to inspire the complete mapping of the world’s oceans by 2030 and to compile all bathymetric data into the freely available GEBCO Ocean Map. A wholly mapped ocean will inform global policy, improve sustainable use and advance scientific research. It is also a critical pillar of the United Nations Decade of Ocean Science for Sustainable Development (2021-2030), which Fugro has been supporting through its participation in the 1st Global Planning Meeting and numerous regional planning workshops. In support of both Seabed 2030 and the UN Ocean Decade, Fugro has been working with clients to investigate bathymetric and oceanographic data-sharing opportunities and we have also initiated a crowdsourced bathymetry program within our global fleet of survey vessels, with over 1,100,000 km$^2$ of Fugro “in-transit” bathymetric data contributed to Seabed 2030 and ultimately the UN Ocean Decade over the past 4 years.

We utilize specialized sensors and platforms to acquire Geo-data, which are subsequently analyzed and interpreted by our professional scientists, engineers, surveyors and geologists, who deliver information and knowledge to clients that are typically energy, engineering or development companies; national or local governments; and multilateral development banks.
Very generally speaking, Fugro characterizes the world using Geo-data and applies our understanding of this geodata and environmental forces through the life of any asset on the coast or in the sea to provide criteria for design and operations of the asset through monitoring the asset’s response to these forces, whether through instrumented monitoring or targeted inspection.

Fugro collects and manages the following types of ocean data globally:

- Bathymetry (multibeam, single beam and lidar)
- Seafloor backscatter
- Water column backscatter
- Sidescan sonar
- Sub-bottom profile
- Magnetometer
- Gravity
- High-resolution geophysics
- Conductivity
- Temperature
- Density
- Hyperspectral imagery
- Multispectral imagery
- RGB imagery
- Geochemical properties
- Tides and water levels
- Wave height, period, and direction
- Wind speed and direction (single point and profiling lidar)
- Air temperature
- Barometric pressure
- Surface Ocean Current speed and direction
- Sub-surface Ocean Current speed and direction
- Ocean bottom seismicity
- Turbidity (acoustic and optical)
- Transmissometry
- Tsunamis
- Sediment transport
- Hydrodynamic modelling (for currents, tides and waves,)
- Atmospheric modelling
- Coring samples
- Drilling samples
- Grab samples