



FOR IMMEDIATE RELEASE
19 September 2017

GEBCO-NF Alumni Team enters testing phase ahead of \$7 Million Shell Ocean Discovery XPRIZE semi-final

The GEBCO-NF Alumni Team, one of up to 20 teams competing in the \$7 Million Shell Ocean Discovery XPRIZE competition, has entered its testing phase ahead of the competition's upcoming semi-final stage. The Shell Ocean Discovery XPRIZE is a global competition with the aim of advancing deep-sea technologies for autonomous, fast and high-resolution ocean exploration; only a small fraction of the world ocean floor has been mapped using modern techniques.

The GEBCO-NF Alumni Team concept consists of an Unmanned Surface Vessel (USV), an Autonomous Underwater Vessel (AUV), and a combination of communications hardware and software to process and transmit data remotely. The USV, or 'SEA-KIT', has been designed and built by Hushcraft Ltd based in Tollesbury, Essex. SEA-KIT will transport and automatically deploy the AUV, owned by Canadian firm Ocean Floor Geophysics, which will descend and autonomously map the ocean floor. Once the AUV is back on land, the network attached storage device will be removed and connected to shore-based work processing stations. Bathymetric data will then be downloaded and processed.

Initial testing of SEA-KIT has now begun, with successful systems checks completed ahead of her first trip out to sea following an inspection for MCA certification. On 3rd Sept 2017, SEA-KIT completed its first sea trials, which was followed later that week by a naming ceremony in Tollesbury, UK. The vessel was named USV Maxlimer – after one of GEBCO's alumna, Maxlimer Anziani Vallee, who was killed in a tragic accident in January this year.

After these initial tests in the UK, the USV was shipped to Horten, Norway, for a week of advanced testing with the AUV. SEA-KIT will then have its automation and software configuration merged with Kongsberg Maritime's K-MATE technology, which will enable the USV to follow the AUV on the surface during mapping missions. This testing schedule will ensure The GEBCO-NF Alumni Team is on track for successful participation in the XPRIZE semi-final.

The GEBCO-NF Alumni Team is led by alumni of The Nippon Foundation / General Bathymetric Chart of the Oceans (GEBCO) Postgraduate Certificate in Ocean Bathymetry Training Programme, now in its fourteenth year, run at the Centre for Coastal and Ocean Mapping at the University of New Hampshire. GEBCO is the only organisation with a mandate to map the entirety of the world's ocean floors. The Nippon Foundation, led by Chairman, Mr Yohei Sasakawa, agreed to provide more than 3 million US dollars to the Team's concept to be utilised in the semi-finals.

The Team is made up of alumni from Israel, Japan, Mauritius, Madagascar, Poland, Russia, South Africa, USA, and the Philippines, as well as technical advisers from Canada, New Zealand, Norway, the UK, and the USA. All alumni hold positions in their own countries' maritime industries, including within government, research organizations and hydrographic offices, and benefit from a range of professional backgrounds including engineering, software development, physics and offshore project management.

Robin Falconer, of the GEBCO Guiding Committee, said "this technology is vitally important, not only for our success in the Shell Ocean Discovery XPRIZE, but for ocean floor mapping more generally. In addition to this competition, GEBCO and The Nippon Foundation are working together on Seabed 2030, which aims to map the entire ocean floor by the year 2030. Mr Yohei Sasakawa has announced that The Nippon Foundation is planning to contribute US\$18.5 million for the first ten years of the Seabed 2030 project. With current mapping techniques this goal would be impossible – but through initiatives like the XPRIZE and the technological innovation they bring, we are moving ever closer to meeting the challenge of creating the ultimate bathymetric map of the ocean floor".

The GEBCO-NF Alumni Team's concept has excited industry experts with its wide range of planned capabilities. Potential usage reaches far beyond bathymetric mapping, with a range of oceanographic observational and data collection functions, equipment deployment and real-time monitoring of marine environments, for the benefit of all human and marine life on earth.

-ends-

For more information contact:

Patrick Orr
Patrick@raittorr.co.uk
+44 20 7922 7713

Henry Gilliver
Henry@raittorr.co.uk
+44 20 7922 7719

About GEBCO:

GEBCO (The General Bathymetric Chart of the Oceans) is a joint project of the International Hydrographic Organisation (IHO) and the Intergovernmental Oceanographic Commission (IOC) of UNESCO – the United Nations Educational Scientific and Cultural Organization. It has its origins in the GEBCO chart series initiated in 1903 by Prince Albert I of Monaco. GEBCO is the only international project with a mandate to map the floors of the global oceans.

The **Nippon Foundation**, a private, non-profit foundation, was established in 1962 for the purpose of carrying out philanthropic activities, using revenue from motorboat racing. The Foundation's overall objectives include social innovation, assistance for humanitarian activities and global ocean management. Its philanthropic ideals embrace social development and self-sufficiency, and it pursues these principles by working to improve public health and education, alleviate poverty, eliminate hunger and help the disabled.

