

NIPPON FOUNDATION PROGRAMMES

Submitted by Robin Falconer

SUMMARY

Executive Summary: This document provides details of the activities during 2021 of the various Nippon Foundation sponsors and supported projects and programmes. The UNH-Nippon Foundation Ocean Mapping training programme and Seabed 2030 Project are reported separately elsewhere.

Action to be taken: See paragraph 10

Related documents: None

1. Nippon Foundation - GEBCO Overview

GEBCO has had a relationship with The Nippon Foundation (NF) since 2004 when the GEBCO-NF Ocean Mapping training program began at the University of New Hampshire (UNH). The relationship has deepened to be more than just the UNH training project, which typically is funded at around USD\$620k/yr. NF provided \$400k for special projects in 2011 and have provided funds for an ambassador program, both involving training course alumni. Since 2004 NF have provided a total of approximately USD \$12M for the human capacity development.

NF fully funded the Monaco Forum on the Future of Seafloor Mapping held in June 2016. At the Forum they announced that they intended to establish the Seabed 2030 program with GEBCO. They announced in June 2017 that they intend to support the program for ten years for a total of around \$18M. Since 2017 NF have provided a total of approximately USD\$11M for Seabed 2030.

In addition NF provided \$6.3M for a NF-GEBCO Alumni team to participate in the Shell Ocean Discovery XPRIZE competition in 2017 and 2018. The team won the \$4M first prize. The prize money is held by the Nippon Foundation and is being used within Seabed 2030 to fund alumni and frontier mapping activities.

The total contribution by NF to GEBCO related activity since 2004 is approximately USD\$ 29M. The longstanding partnership with The Nippon Foundation is fundamental to much of GEBCO's work.

2. Seabed 2030

Establishment of the joint NF-GEBCO Seabed 2030 project has been a major milestone for GEBCO. This is reported in a separate report and covered elsewhere in the agenda.

3. UNH training programme

The program is in its 18th year. In addition to the five students currently at UNH, 102 scholars, from 43 countries have been through the course. Covid 19 has significantly disrupted the program in 2020, 2021 and 2022 with international travel restrictions and lockdowns at the University of New Hampshire. Through a combination of online remote teaching and flexibility of scheduling the course has been able to continue, albeit with a different experience for some of the students. This is a tribute to the efforts of Rochelle Wigley course manager at UNH and Larry Mayer director of CCOM

Full details of the programme are provided separately.

In 2020/21 The Nippon Foundation Ocean Affairs Department selected the training program as one of three capacity building programs for external review. The intent was to examine the impact of the programs and how well they contribute to NF's overall strategy of strengthening human resources to address global ocean issues. The Training program received the highest possible rating and the reviewing organization said it was one of the most outstanding programs they have ever reviewed.

The human resource needs of Seabed 2030 and the evolution of methods of ocean mapping mean that it is timely to review the training program at UNH to ensure that it will meet future needs. We had planned to do this but last year a draft proposal for a GEBCO Subcommittee on Education and Training (SCET) was presented. Establishment of SCET could involve interaction with the UNH training program so no action has been taken on a review. We await further progress on the SCET Terms of Reference.

4. XPRIZE Outcomes

The participation of a NF-GEBCO alumni team in the Shell Ocean discovery XPRIZE competition was a major effort by 15 alumni and other advisers. The team won the competition, with its \$4M first prize. The prize money is held by The Nippon Foundation with the intent to fund alumni and Seabed 2030 activities over several years. In 2020 and 2021 \$960k was allocated to the Seabed 2030 Mapping the Unknown Frontiers initiative, and some alumni work.

The team participation in the XPRIZE competition has led to a range of additional developments. The unmanned surface vessel designed and built for the competition by Hushcraft of UK has led to commercial development in a joint venture with Fugro SEA-KIT International. Six vessels have been built or are under construction. The XPRIZE vessel Maxlimer, now operated by SEA-KIT, carried out a 22 day unmanned bathymetric survey in 1000m water offshore UK in a European Space Agency sponsored program. The vessel is currently being shipped to Tonga for a 30 day mission to survey the undersea crater of the volcano that erupted in Jan 2022. The vessel will be operated remotely from the UK. Alumni will be involved in monitoring and processing the EM710 bathymetry from locations around the world. All the Tonga project will be funded by The Nippon Foundation.

5. NF Project Management Committee membership

The NF Project Management Committee has oversight, on behalf of the GGC, of the training program at UNH and other NF funded projects; not including Seabed 2030. Current members are Robin Falconer (chair), Shin Tani, Martin Jakobsson, Hugo Montoro, Taisei Morishita, Dave Monahan and Rochelle Wigley. The advent of Seabed 2030 has changed the financial and organizational interactions between GEBCO and NF. This means that the Management Committee should be restructured. The proposal to establish a GEBCO Subcommittee on Education and Training (SCET) may affect decisions. We await the SCET developments before acting.

6. Recognition

The GGC, on behalf of the IOC-IHO GEBCO Project, recognizes with great gratitude The Nippon Foundation for its range of partnerships with the GEBCO Project over the past 18 years, and the GEBCO Project looks forward to a continuing relationship, especially with the GEBCO-NF UNH alumni and the Nippon Foundation – GEBCO Seabed 2030 project.

7. Action

The GGC is requested to:

- a. **Note** the contents of this report;
- b. **Note** that the total contribution of The Nippon Foundation to GEBCO related activity since 2004 is approximately USD\$ 29M. The longstanding partnership with The Nippon Foundation is fundamental to much of GEBCO's work.
- c. **Express** to The Nippon Foundation the gratitude of the GGC for the Nippon Foundation's continued support of the GEBCO Project, in particular of the UNH Training Course, and of the Nippon Foundation – GEBCO Seabed 2030 project; and
- d. **Take** any other action deemed appropriate.