

NIPPON FOUNDATION PROGRAMMES

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SUMMARY

Executive Summary: This document provides details of the activities during 2020 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 programme 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 since 2015 has provided funds for an ambassador programme. Since 2004 NF have provided a total of \$11,314,934 for alumni 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 project with GEBCO. They announced in June 2017 that they intend to support the project for ten years for a total of around \$18M. Since 2017 NF have provided a total of \$8,095,326 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 with the intent to fund alumni and Seabed 2030 activities.

The total contribution by NF to GEBCO related activity since 2004 is \$25,754,561. 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. XPRIZE

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 some funding was allocated to the Seabed 2030 Mapping the Unknown Frontiers initiative.

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. Three vessels are under construction. The XPRIZE vessel Maxlimer, now operated by Hushcraft, carried out a 22 day unmanned bathymetric survey in 1000m water offshore UK in a European Space Agency sponsored programme. The alumni designed the survey plan and monitored and processed the EM710 MBES data remotely at seven locations around the world.

4. UNH training programme

The programme is in its 17th year. In addition to the six students currently at UNH, 96 scholars, from 43 countries have been through the course. The Nippon Foundation's ultimate goal is promoting human capacity development. They consider it to one their most successful training programmes. Full details are provided separately

The human resource needs of Seabed 2030 and the evolution of methods of ocean mapping mean that it is timely to review the training programme at UNH to ensure that it will meet future needs. It was planned that a review would be put in place in 2018. However given the setting up of Seabed 2030 and the time and workloads involved in the XPRIZE competition the review was deferred. The review parameters and timing will require coordination with Seabed 2030.

5. Nippon Foundation Ambassador programme

The intent of the ambassador programme was to have GEBCO participants and NF-GEBCO UNH alumni visit organizations to encourage them to develop people in positions related to bathymetric mapping. It was decided not to push it in 2019 as there were too many things going on with the Seabed 2030 and XPRIZE. The ambassador programme will not now continue as a distinct programme. It will probably evolve within Seabed 2030 with that programme's component of alumni development.

6. Nippon Foundation Funds

Details are given below of the finances of Nippon Foundation funded projects. In 2019 The Nippon Foundation advised that owing to changes in financial policy across all NF programmes it would be necessary for unspent money in any grant year and/or project to be returned to NF. This is a change from the previous arrangement where unspent funds could be held over. The details of the change were worked through in 2020. Funding in Seabed 2030, XPRIZE operations (not the prize money), the UNH training programme, the Ambassador programme and the special projects were all affected.

6.1 Seabed 2030

The Nippon Foundation announced in June 2017 that they intend to support the programme for ten years for a total of around \$18M. Funding of \$979k for the establishment phase and the first six project months was granted in August 2017. Additional funding was provided for the recruitment costs for the Seabed 2030 director. Funding was \$1.6M for Year 2 in August 2018, \$2.346M for Year 3 in August 2019 and \$2.407M for Year 4 in August 2020. The Year 3 funding included a special \$131k for the Vision to Action workshop held in London in October 2019. Since 2017 NF have provided a total of \$8.095M for Seabed 2030. The funding is disbursed through the IHO under the management of the Seabed 2030 director and project team.

6.2 XPRIZE

The participation of a NF-GEBCO alumni team in the Shell Ocean Discovery XPRIZE competition was fully funded by the Nippon Foundation with grants through NF and the Sasakawa Peace Foundation totalling \$6.3M in 2017 and 2018. This was disbursed through UNH under the team management. The majority of the funds were expended by the end of Dec 2018 at the completion of the team's participation in Round 2 in Greece. At project end the team was \$333,870 under the fixed price grant. The unspent funds were returned to NF. On May 31, 2019 the team was announced as winners of the \$4M first prize. The prize money is held by the Nippon Foundation with the intent to fund alumni and Seabed 2030 activities. Discussions are underway with the NF on a proposal and selection process.

6.3 Training programme at UNH.

Each UNH year starts late August and extends to July the following year. Normally funding is for only one year. In 2016 NF granted funds for two years of the training programme to allow us to focus on implementing Seabed 2030 without having to engage in 2017/18 training course bidding. In 2018 they again granted two year funding, partially to ease bidding workloads whilst doing XPRIZE. The grant was \$649,705 for 2018/19 and \$675,705 for 2019/2020. Plus \$22,000 per year for alumni participation in conferences. The grant for 2020/21 was \$705,369. Retained unexpended funds from previous years of the programme, yet to be finalized, are to be returned to NF.

6.4 Ambassador programme

A total of \$125,500 previously granted had not yet been spent and will be returned to NF.

6.5 Special Projects funds

NF granted, at our request, USD \$400k in 2011 for special projects. Projects had to have a significant component of GEBCO-NF alumni involvement. \$320k has been used for Arctic, Antarctic and Indian Ocean mapping projects. The balance was used to fund parts of the GEBCO-NF alumni participation in XPRIZE. All of this fund had been expended by early 2020.

7. NF Project Management Committee membership

The NF project management committee has oversight, on behalf of the GGC, of the training programme 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, Rochelle Wigley and Bob Anderson (deceased 2019). The advent of Seabed 2030 changes the financial and organizational interactions between GEBCO and NF. This means that the Management Committee should be restructured. A decision will be taken in 2021.

8. Bob Anderson Tribute

Bob Anderson, a stalwart of GEBCO for decades, died suddenly in November 2019 whilst attending the GEBCO meetings in Portsmouth, NH. Bob came from a technical background in the US Navy but made contributions to GEBCO across many areas including, facilitating access to US submarine data, outreach, and production of products. He was a regular active attendee at meetings. His contribution to Nippon Foundation related projects was very significant. From the start of the training programme at UNH he took a personal interest in the students and was a friend and mentor to many, continuing to stay in touch over the years. In the XPRIZE competition his technical advice was pivotal in the choices made on what systems to develop, and he was engaged in it all the way. Bob was a huge contributor to GEBCO and alumni. A much missed colleague and friend.

9. 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 17 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.

10. Action

The GGC is requested to:

- a. **Note** the contents of this report;
- b. **Recognise** that the total contribution of The Nippon Foundation to GEBCO related activity since 2004 is \$25,754,561. 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.