

Report of the Trustees and
Financial Statements
For The Year Ended 31 March 2021
for
Partnership for Observation of the
Global Ocean CIO
T/A POGO

Bromhead
Chartered Accountants
Statutory Auditors
Harscombe House
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Plymouth
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Partnership for Observation of the
Global Ocean CIO
T/A POGO

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Report of the Trustees
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The trustees who are also directors of the charity for the purposes of the Companies Act 2006, present their report with the financial statements of the charity for the year ended 31 March 2021. The trustees have adopted the provisions of Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2019).

REFERENCE AND ADMINISTRATIVE DETAILS

Registered Company number
CE010344 (England and Wales)

Registered Charity number
1171692

Registered office
Plymouth Marine Laboratory
Prospect Place
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Plymouth
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PL1 3DH

Trustees
Prof N Owens (Chair)
Prof H Brinkhuis
Dr E Pavia Lopez
Dr G Lericolais
Prof T Li (resigned 29.1.21)
Dr E Mahu
Dr S Juniper
Dr S S C Shenoi (resigned 12.10.20)
Professor SH Tan (appointed 27.11.20)
Captain F A Arias-Isaza (appointed 27.1.21)

Company Secretary

Auditors
Bromhead
Chartered Accountants
Statutory Auditors
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OBJECTIVES AND ACTIVITIES

Objectives and aims

The charity aims to bring together the world's major oceanographic institutes to plan joint actions to advance sustained ocean observations for societal benefit. POGO institutes are motivated by a common belief that advancing scientific understanding of the ocean is rooted in making systematic, high quality measurements. They believe that this understanding and its wise use are critical to, and will make a real positive difference in, enabling humanity to develop a sustainable relationship with a healthy, productive and biologically diverse ocean. POGO is further motivated by the shared belief that its vision can only be realised by working together across the world, where we can achieve together what none of us could do alone.

The ocean produces half of the world's oxygen, most of its fresh water and much of its food. It regulates climate and weather, is critical to the cycling of heat, water and carbon. It is the source of huge biodiversity. However, far too little is actually known about the state and functioning of the ocean. Accordingly, scientifically sound study of the ocean and support and advocacy for such study (and for the conclusions drawn from such study) is of vital importance to mankind. POGO seeks to expand international support for ocean observing, through innovation of the ocean observing system, capacity development and outreach/advocacy.

In terms of innovation, POGO members are at the forefront of oceanographic methods and technology development, often in partnership with industry, as they are the future "users" of such new technologies. Thus, POGO is in a critical position to identify the emerging methods and technologies that POGO members are developing and using, and highlighting those that can be expanded and deployed on a global scale in order to achieve global datasets of specific parameters measured using the same methods. POGO is also strongly focussed on the affordability issues associated with ocean observing, particularly for developing countries, and is therefore engaged in projects looking to develop low-cost sensors and systems for coastal ocean observing. The societies and economies of many developing countries rely heavily on the ocean, for example through coastal tourism, trade infrastructure, natural resource extraction, and small-scale and industrial fisheries and aquaculture. However, extreme weather events, sea-level rise, tsunamis, harmful algal blooms and water pollution threaten the world's poorest and most vulnerable coastal and island communities. Ocean observations and information services can be used to improve human health and safety and food security, support livelihoods and small-scale economic activities (artisanal fisheries and aquaculture, coastal tourism), and improve climate resilience and disaster risk reduction.

POGO also recognises that the expertise for conducting ocean observations is not evenly distributed between countries, and therefore the ocean is unevenly observed, with a much higher density of observations conducted in the North Atlantic and North Pacific, than in, for example, the South Atlantic, South Pacific and Indian Ocean. POGO therefore provides professional training opportunities for early-career scientists, mainly from coastal developing countries, to expand the worldwide capacity for conducting sustained ocean observations, data collection, analysis and management, and interpreting the scientific results for the benefit of society.

Many actors, working together internationally, are needed to bring about sustainable management of the oceans that is informed by sound science, underpinned by a comprehensive global ocean measurement system.

These include:

- 1) National governments working individually and through intergovernmental structures and bodies - who are agents for political action and international consensus and support the governance framework for international cooperation.
- 2) Non-governmental organisations aimed at coordinating science, influencing policy and/or raising public awareness at regional and global scales.
- 3) The wider scientific community, working nationally and internationally - who undertake research, share and synthesise ideas and findings and identify key scientific challenges and develop internationally agreed research agendas.
- 4) Funders of research and monitoring programmes whether they be governments, businesses or not for profit foundations - who provide the resources needed.
- 5) Individual citizens working individually and collectively whose support and desire for a better life and world provides continuing motivation and inspiration for all involved.

POGO highlights the societal need for ocean observations, as well as the key issues facing global ocean observing, and the obstacles hampering the completion of a global ocean observing system, and brings these issues to relevant public and policy fora.

The objects of the CIO are to advance the science of global ocean observation for the public benefit in particular (but not exclusively) by:

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- i. Advancing education in global ocean observation by identifying areas of further study for developing the science of global ocean observation;
- ii. The promotion of research in global ocean observation for the public benefit and the publication and dissemination of the useful results of such research;
- iii. The provision of scholarships and research fellowships;
- iv. The promotion of innovation and technology in the science of global ocean observation.

In the short term, POGO aims to provide training for early-career scientists, to develop the next generation of scientists and ocean observers, as well as to raise the levels of awareness and education about the importance of the ocean and ocean observing for society. Measures of success include numbers of trainees, numbers of countries having received training, numbers of website visits and downloads of outreach materials, mentions on social media and other statistics.

The longer-term vision is to develop the capacity of research institutions in developing countries to conduct ocean observations, by (1) integrating the trained scientists and their institutions into the POGO network and have them actively participate in POGO projects, (2) sharing best practices among POGO member institutions, and (3) contributing to the development and dissemination of low-cost instrumentation for coastal ocean observing. Measures of success include numbers of POGO members and numbers of new (developing) countries being added to the network, establishment of new ocean observing systems in those countries, and demonstrated long-term impacts of the training programmes (e.g. >5 years after the training, on institutional capacity and continued knowledge-transfer).

Significant activities

- i. **Advancing education in global ocean observation by identifying areas of further study for developing the science of global ocean observation:** this has been achieved by supporting Working Groups on specific topics related to ocean observation, such as the Biological Observations WG, which convened an International Virtual Conference on "Environmental DNA (eDNA) in Marine Environments: Opportunities and Challenges" in Nov-Dec 2020.
- ii. **The promotion of research in global ocean observation for the public benefit and the publication and dissemination of the useful results of such research:** this has been achieved through POGO's outreach and advocacy initiatives, through printed, on-line and social media and in particular the creation of short videos. POGO also launched a new citizen science project on coastal litter. Unfortunately, due to the COVID-19 pandemic, it has not been possible to participate in any outreach events as we have done in previous years.
- iii. **The provision of scholarships and research fellowships:** scholarships and fellowships have been provided to 19 early-career scientists for training/education periods of between 1 and 10 months during this financial year (the number is somewhat lower this year due to various training programmes being postponed/affected by the pandemic);
- iv. **The promotion of innovation and technology in the science of global ocean observation:** this has been conducted mainly through two innovation projects focussing on developing low-cost instrumentation for ocean observing aimed at developing countries and citizen science.

More detailed information on these activities can be found below, under the heading "Achievement and Performance".

Public benefit

The trustees have complied with their duty, as set out in the Charities Act 2011, with regard to the public benefit guidance published by the Charity Commission.

The CIO has been working towards achieving its charitable objectives, delivering benefit to the wider public through its work to advance sustained ocean observations.

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OBJECTIVES AND ACTIVITIES

Grantmaking

POGO allocates some of its funds (received from charitable foundations and/or membership dues) to help support ocean observation activities (e.g. through Working Groups) and to provide training for early-career scientists (generally in developing countries). POGO has a set of policies and procedures for allocating such grants, which are summarised below.

POGO issues a call to its members once or twice per year for proposals for Working Groups, workshops, travel grants, training initiatives and other activities that are directly relevant to POGO's core mission, i.e. sustained, long-term ocean observing systems and shared use of infrastructure, data and information. This includes a template for applicants to complete and submit to the POGO Secretariat. Proposals must be submitted by members of POGO, although participants can be from other institutes if necessary. If a Working Group or other initiative wishes to continue for a second year, a request for extension must be submitted, using the template provided, by the same deadline as the new proposals. A sub-committee of POGO members (who do not have conflicts of interest) reviews the proposals, according to a number of criteria, e.g. relevance to POGO's Strategy and priority areas; timeliness of proposal; adequacy of proposed deliverables and milestones; adequacy of WG/project membership (including geographic and gender balance). For training initiatives, the expected impact of the training and proposed methods for evaluating success are also taken into account. The Committee then makes recommendations to the Board of Trustees on the proposal(s) to take forward, depending on the available budget. The availability of other funding sources is not a determining factor in the selection process.

POGO and the Nippon Foundation have set up the NF-POGO Alumni Network for Oceans (NANO) to maximise the benefits to the alumni from the training received and facilitate active contacts among the alumni. Through POGO, the Nippon Foundation funds modest regional and global research projects and public outreach projects. Proposals are received in response to an open call, and funding is renewed for successive years based on performance. The projects are selected according to the following criteria:

- (1) Projects should have an observational/applied focus (not "blue skies" research)
- (2) They should have a societal benefit focus
- (3) They should add value to and build upon existing programmes/projects
- (4) Funding should be used mainly for coordination (but also consumables, field work, modest equipment).
- (5) Projects should be coordinated by NANO alumni but participants can be a mixture of alumni and external scientists. They should be supported by senior mentors and endorsed by the participating institutes' senior management.
- (6) They should include a minimum of two different countries, preferably more.

POGO also offers scholarships/fellowships to individuals, both through the Nippon Foundation grant and using its own funds and a grant from the Scientific Committee on Oceanic Research (SCOR). These fellowships all operate following similar procedures, i.e. an announcement and call for applications is made, which is open to anyone who fulfils the country and scientific background/career stage requirements (e.g. Official Development Assistance recipient countries, early-career scientists, but not just those affiliated with POGO member institutions). An impartial committee composed of one or two members of the POGO Secretariat plus 2 or more experts from the scientific community (often involved in teaching/supervising students) is assembled to review the applications, based on a set of criteria such as quality of the applicant (education/experience/potential), quality of the training proposal or motivation letter, quality of the host institute (if applicable), relevance to POGO and to the priority areas identified in the call for proposals, and potential for sustained capacity building in the host institute/country. The scores are then totalled and a number of top-ranked applicants are selected according to the budget available, with consideration given to gender and geographical balance, as well as occasionally other factors such as whether the candidate has received POGO funding previously.

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STRATEGIC REPORT

Achievement and performance

POGO Communication Strategy:

Overall, POGO has increased its visibility through its web presence, social media and representation at international meetings (all virtual this year). Specifically, POGO was represented by Secretariat staff, trustees or members, at:

- IOC-UNESCO Virtual Ocean Literacy Summit (June 2020)
- GEO Virtual Symposium (June 2020)
- the Ocean Best Practices 4th Annual Workshop (Sept 2020),
- EU4Ocean workshop - Designing Ocean Literacy action in Europe (Sept 2020)
- the SCOR Annual Meeting (Oct 2020)
- the North Pacific Marine Science Organisation (PICES) Annual Meeting (Nov 2020)
- Various planning meetings and webinars for the UN Decade of Ocean Science for Sustainable Development
- The Economist World Ocean Summit (March 2021).

POGO representatives also contributed to planning and oversight committees for:

- the Group on Earth Observations (GEO) Blue Planet Initiative
- the International Quiet Ocean Experiment (IQOE)
- Ocean Info Hub
- the 2nd Operational Satellite Oceanography Symposium (OSOS2)
- the UN Decade on Ocean Science for Sustainable Development Communications Advisory Group
- CommOcean 2020 (Marine Science Communication Conference)
- Ocean Obs Research Coordination Network
- The World Congress of Marine Stations

Presentations were given on POGO at several of these events. POGO information packs have also been sent to a number of prospective members in Africa, Asia, Australia, Europe, and Latin America.

The **POGO website** underwent a complete rebuild during 2020, with the new site launched in August. In addition to the redesign, the Secretariat took the opportunity to register four new domain names which are more in line with POGO's name and social media identity (pogo-ocean.org and derivatives).

The new design presents a more holistic view of POGO activities, including features such as interactive membership list, with a zoomable map, and summaries of how our members contribute to GOOS. The site also boasts an interactive timeline of POGO's history, with thoughtful contributions from Founders, Members, Partners, Alumni and more.

POGO maintains an active social media presence on Twitter ([@POGO_Ocean](https://twitter.com/POGO_Ocean)), Facebook ([POGO.Ocean/](https://www.facebook.com/POGO.Ocean/)). Instagram ([/pogo_ocean](https://www.instagram.com/pogo_ocean)) and LinkedIn ([/pogo_ocean](https://www.linkedin.com/company/pogo_ocean)), as well as a minor presence on YouTube. Social media continues to be an excellent means to share news and information with an interested and interactive audience.

In addition, the secretariat runs or shares responsibility for the following Twitter accounts: Ocean Training Partnership, NANO Network, and Blue Planet.

Charitable activities

Object 1: Advancing education in global ocean observation by identifying areas of further study for developing the science of global ocean observation:

Progress has been achieved by providing grants for the establishment of 2 new Working Groups (WGs) in 2020/21, as well as through an International Conference on eDNA Opportunities and Challenges, and a Nippon Foundation-POGO Alumni Network for the Ocean (NANO) Global Project.

International Virtual Conference on eDNA: Opportunities and Challenges (led by POGO Biological Observations WG):

Remaining grant from the Lounsbery Foundation used to fund the virtual conference.

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The use of environmental DNA (eDNA) and other omics analyses in studies of marine ecosystems has blossomed. Both scientists and managers hope that the rigorous development of these analyses will allow us to address important science and management questions through our ability to census marine biota across multiple trophic levels with a single sample of DNA. Species of special interest for eDNA observation include those that are commercially important, protected, or invasive. The techniques are also amenable to automation in situ and deployment in global observing systems. At this time there are significant challenges to making rapid and major advances in understanding the techniques and their application to decision-making and management related to both analytical methods and strategies for sampling. The UN Decade of Ocean Science for Sustainable Development offers the potential to engage scientists and managers around the world to resolve these challenges and develop an observational strategy that can answer critical questions for each. Building on the call to action at OceanObs'19 for enhancing biodiversity observations as well as the growing number of organisations fostering omics and eDNA development, this meeting provided an opportunity to envision what a sustainable global 'omics/eDNA monitoring system could look like and (i) promote global coordination among the organisations that are fostering eDNA and 'omics for marine environments, and (ii) coordinate efforts to develop a programme proposal in response to the call for action from the UN Decade of Ocean Science for Sustainable Development. The proposal was submitted to the UN Decade for endorsement in January 2021.

Other future directions for the POGO Bio Obs WG, and thus for POGO, include (1) inexpensive technologies for biological observing (also linked to OpenMODs topic below), (2) data archaeology for critical marine biodiversity observations, (3) interoperability of marine biological data, and (4) capacity development for biological observing.

WG on Building Capacity in Ocean AcidificaTion MoniToring in the Gulf of GuineA (BIOTTA)

Grant (10K EUR) awarded to the University of Ghana to lead the WG and support capacity building workshop; funding has leveraged 100K USD from the Ocean Foundation to purchase equipment to set up the monitoring stations.

The Gulf of Guinea (GoG) is host to many distinct ecosystems, among which is the Guinea Current Large Marine Ecosystem extending from the intense upwelling area of the Guinea Current in the north to the Benguela Current in the south. The GoG region is, however, characterized by a high poverty rate within fishing communities, with an average daily income of USD 6.1 for over 610,000 artisanal fishers, with the situation getting worse in recent times due to continual decline in fish landings. Dotted along the relatively wide continental shelf of the GoG are several lagoonal/estuarine systems including adjacent coastal marine waters that provide livelihood benefits, i.e., nutrition and jobs to deprived communities living around them. The productive waters of the GoG support shellfish and a diverse finfish fishery which provide significant income to coastal communities in countries such as Cote d'Ivoire, Ghana, Togo, Benin and Nigeria. Climate change in West Africa is characterized by increasing temperatures, changing ocean pH, erratic rainfall patterns and an increase in the number of extreme events. Changing ocean pH coupled with other climate and non-climate stressors such as pollution and overfishing present huge threats to the future of the fishery and other marine resources in the region. A lack of skills in the measurement of ocean acidification (OA) hinders ocean observation which puts the fishery and other marine biological resources in the GoG at a greater risk. This deficit in ocean acidification measurement skills forestalls our understanding of species vulnerability to changing pH. The BIOTTA working group will equip graduate students, early career ocean scientists and other marine science professionals in the GoG region with skills on sustainable OA data acquisition to expand our understanding of the threats, risks and impacts to marine ecosystems and chart pathways for sustainable management of marine resources at risk to OA in the GoG region. This working group hopes to also bridge national, regional and international data gaps in ocean acidification.

To date, OA monitoring efforts in Africa remain a major challenge with a paucity of data mainly as a result of the lack of prerequisite skills for carrying out OA measurements. BIOTTA aims to complement global efforts such as the Global Ocean Acidification Observing Network (GOA-ON) and the International Ocean Carbon Coordination Project (IOCCP) by convening a series of virtual regional workshops and webinars to train young and professional scientists in setting up and maintaining OA observation systems in the GoG and other African coastal waters.

The BIOTTA working group is working to:

1. Develop a coordinated network for observing OA in the GoG
2. Develop capabilities to undertake analysis of seawater OA parameters using low-cost, readily available and easy-to-use equipment
3. Map OA hotspots in BIOTTA member countries for long-term OA monitoring
4. Initiate sound OA monitoring activities in BIOTTA member countries after successful mapping of hotspots in these countries, making use of OA observation kits developed by GOA-ON and the International Atomic Energy Agency (IAEA)
5. Integrate into global OA observing networks, such as GOA-ON, with the goal to share and make data available to the global ocean observing community.

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WG on Acquisition of Oceanographic Data for Sustainable Resources Management in the Gulf of Guinea:

Grant (10K EUR) awarded to the Nigerian Institute for Oceanography and Marine Research (NIOMR) to lead the WG, support travel costs and ship operations.

The initiation of an oceanographic network and a regional databank is a very important project to be embraced by all countries within the West African sub region. Sea surface temperature in the Gulf of Guinea varies at seasonal and inter-annual time scales, and thus may have a strong impact on climate (West African monsoon onset and intensity), precipitation (water resources), and fisheries. The WG aims to obtain data on seawater characteristics up to the 500m isobath within the Gulf of Guinea region. This will provide salient information for physical, chemical, biological and geological description of the water column and sediment characteristics within this region. The main objectives are to collect oceanographic data to complement the completed and ongoing international programs within the Gulf of Guinea region, establish and maintain in-situ long term network of measurements within the Gulf of Guinea, and also incorporate training and local capacity building.

In order to fulfil one of the goals of POGO in building a community of ocean scientists, this WG brings together marine scientists from five African countries within the Gulf of Guinea region (Nigeria, Benin, Togo, Ghana and Côte d'Ivoire), in partnership with oceanographers from GEOMAR, Germany (5 out of these 6 institutions are POGO members). The main goals are:

- To establish a regional oceanographic databank needed for studies on the analysis and monitoring of ocean and climate conditions within the Gulf of Guinea, their influence on the regional climate, and sustainable management of living and non-living resources (e.g. identification of potential fishing zones)
- To promote regional capacity building through academic/research institutions and shipboard trainings
- To develop and maintain a long-term ocean monitoring network within the Gulf of Guinea region
- To assist governments through research and development in implementing sustainable economic policies on living and non-living resources, which are geared towards sustainable societal livelihood.

Due to COVID, most of the WG activities took place via virtual meetings of the participants. However, NIOMR was successful in organising daily sampling trips during a 1-week period in January, and hosted 6 early-career scientists (funded via NF-POGO shipboard training fellowships) from 4 of the participating African countries for 1 month prior to the cruise and 1 month after the cruise. These were trained by NIOMR in various aspects of shipboard sampling, analysis and data processing.

NANO Global Project "A global study of productivity, deoxygenation and ocean acidification at selected coastal sites":

Research grants awarded to participating institutions in the following countries: Argentina, Tunisia, Brazil, Ghana, Colombia, Mexico, Bangladesh and Kenya.

The NANO global project has three major components:

- 1) Promote in situ and remotely sensed observations of the ocean at selected coastal sites in order to contribute to the global effort of monitoring the levels of ocean acidification and deoxygenation;
- 2) Provide opportunities to the project participants for: i) capacity building to strengthen their efforts to monitor levels of acidification and oxygenation; ii) join larger observation networks of ocean acidification and deoxygenation;
- 3) Organize workshops and webinars dedicated to share experiences in i) monitoring levels of productivity, acidification and oxygenation; ii) training on marine data management; iii) compare results from fieldwork and produce a biogeographic distribution of the stations.

Field work was conducted in 2020-21 in all countries, for a set of variables (e.g., temperature, chlorophyll-a, pigments, bio-optical variables, conductivity, nutrients, total alkalinity, pH, dissolved oxygen, phytoplankton) varying from station to station. The budget was allocated depending on the local sampling costs, so as to enable each country to sample on a bimonthly basis (up to a maximum of 3K EUR per station). However, sampling was hampered by COVID restrictions, particularly during the first half of the year, and the bimonthly sampling was not always possible to maintain.

Object 2: The promotion of research in global ocean observation for the public benefit and the publication and dissemination of the useful results of such research:

POGO outreach and advocacy:

Public outreach is normally conducted through participation in international exhibitions, however 2020 has been an unusual year, with most face-to-face exhibitions, meetings and conferences either cancelled or moved online due to COVID-19 restrictions. After COVID travel restrictions were implemented, POGO continued to participate in numerous events virtually (see section on Communication Strategy).

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This year has seen a significant move away from printed (paper) materials. This change was already beginning to take place in 2019 - e.g. displaying laminated 'hard copies' of leaflets on our booths, together with an array of QR codes to allow mobile device users to access digital copies quickly and easily, or handing out branded USB Flash Drives, pre-loaded with digital materials. However, the 2020 shift to virtual meetings has made paper products almost obsolete. All of POGO's brochures, leaflets and other written products are available as digital versions online.

In August, the Secretariat commissioned a new POGO video, to celebrate 20 Years of Ocean Partnerships, highlighting POGO's key achievements. The video has been designed in 5 parts, with an introduction, a section on each of the Three Pillars, and an 'outro'. The idea is that each of these short segments can be used independently, or together, which makes the format suitable for a range of platforms, eg social media, conference booths etc. We wanted the film to represent the global nature of POGO, and to include faces/voices from POGO members and alumni around the world. Producing such a 'composite' video has proved a challenge under the 2020 restrictions, but the video was successfully completed and launched at the POGO annual meeting in January 2021.

Finally, POGO has been preparing Fact Sheets as outcomes of the Working Groups and Training Initiatives, summarising the scientific objectives of the WGs and their societal relevance, and providing recommendations for policy makers, where relevant. A fact sheet from the Working Group OASIS: observing and understanding the Oceans below Antarctic Sea Ice and Ice Shelves was published in partnership with the Southern Ocean Observing System (SOOS) and members involved. This and other publications are available at <https://pogo-ocean.org/outreach-and-advocacy/media-and-publications/>.

Collaborations with other organisations:

POGO also leads a group of science communicators called "Ocean Communicators United". This is an informal grouping of representatives of international, regional or national oceanographic research organisations that provides a forum for its members to share information, expertise, best practices and materials related to marine science communications. Through OCU, the POGO Communications Officer has been invited to serve on the UN Decade Communications Advisory Group, to help define the networking, engagement and communications tools required to involve key stakeholders in the UN Decade of Ocean Science, which will run from 2021 to 2030. This will be a major public engagement initiative, led by the United Nations, to educate and empower people to address the climate and ocean crisis we are all facing.

Six OCU members have committed to a working group on the topic of "Making Outreach Easy", with a view to developing guidance for outreach work, and a first virtual meeting was held on 18 Nov 2020. The WG members agreed to initiate the project by surveying the target audience (i.e. marine scientists with little or no outreach experience, but who would like to do more) to find out more about the barriers they perceive or have encountered. The WG has analysed the results and will use them to inform the content of the planned publication, which will be shared through the Ocean Best Practices repository (as per the 2017 "Writing a Communication Strategy: A Step-by-Step Guide and Template. Tailored for International (Marine) Science Organisations").

Object 3: The provision of scholarships and research fellowships:

Scholarships and fellowships have been provided to 19 early-career scientists for training/education periods of between 3 and 10 months during this financial year. These consisted of:

- **Scholarships for 10 scholars from 10 countries to attend the Nippon Foundation-POGO Centre of Excellence in Observational Oceanography** hosted by the Alfred Wegener Institute (a POGO member institute) in Germany, originally planned to run from September 2020 to July 2021. The postgraduate-level training consists of 1- to 2-week modules on all aspects of observational oceanography (e.g. physical, chemical, biological, remote sensing, modelling) as well as key skills (scientific writing, presentation skills, scientific communication, research ethics) and a 3-month individual research project. Due to COVID, the course started on-line, with the 10 scholars attending modules from their home countries until they were able to travel to Germany (this took between 1-2 months depending on the country). Only 2 of the scholars were not able to travel (from Pacific Islands) and will attend the practical part of the training with the next cohort, in 2022. Upon arrival in Germany, the scholars continued to attend classes remotely for the first 2 months, but were able to interact with one another in-person (as a single household). The practical, in-person training and independent research projects are due to start in May.
- **3 Visiting Fellowships awarded to early-career scientists from developing countries to spend up to 3 months at another research institute** receiving individual training and supervision on a research topic of their choice. This year's fellows were from Colombia and Morocco, and visited research institutes in Spain. Another 3 Fellowships (for individuals from India and Venezuela) are still pending due to the international COVID-related travel restrictions.
- **6 Shipboard Training fellowships for one week on-board a research ship** receiving hands-on training in sampling and analysis techniques, and an additional one-month stay at the host research institute prior to the cruise and a further month after the cruise to analyse the data and interpret the results. Fellows were from Benin, Cote d'Ivoire, Ghana and Nigeria, and the host institute was in Nigeria.

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The feedback on these programmes was overwhelmingly positive, not only from the scholars and fellows, but also from the host supervisors and parent supervisors, who commented on the networking and collaborations as well as the cultural exchanges facilitated by the programmes, and the enhanced skills and knowledge the fellows bring back to their home institutes and pass on to their peers.

Grants were awarded to 1 member institutions to support the following training programmes:

- Institute of Oceanology, Chinese Academy of Sciences (IOCAS) to support a training course on subsurface mooring deployment (pre-payment made but course postponed to 2021/22 due to COVID).

Object 4: The promotion of innovation and technology in the science of global ocean observation:

This has been conducted mainly through two innovation projects focussing on developing low-cost instrumentation for ocean observing aimed at developing countries and citizen science. These both address the issue that, despite a high-level political endorsement, there are few international initiatives to make more observations possible in coastal areas with little resources. In particular, the ability to access user-friendly, low-cost instrumentation is still a limiting factor in coastal ocean observing, since the majority of marine observation equipment is difficult to deploy, costly to operate and requires specific technical skills. On the other hand, recent technological advancements have allowed novel improvements in sensors, platforms and communication that will enable a step change in coastal ocean observing philosophy.

"Open Access Marine Observation Devices" (OpenMODs):

Grant awarded to National Institute of Oceanography and Applied Geophysics (OGS), Alfred Wegener Institute (AWI) and Instituto do Mar (IMar), but in 2020/21 only paid to OGS as other activities were postponed due to COVID.

Supported by POGO since 2018-19, this project has the overarching goal "to devise ocean sensors and monitoring devices, globally available to all and not just to a privileged few". The overarching objective of OpenMODS 2.0 is to realize a prototype of a versatile low-cost ocean observing platform ready to be tested and equipped with a variety of sensors, to consolidate and enlarge the potential user community and to narrow the data and knowledge gaps between "advanced" and "developing" countries. Its potential is not limited to developing countries but it can be advantageous in all those applications that require a high temporal and spatial coverage of observations. The implementation of the prototype has followed three main lines: the platform, the sensors and the communication systems.

The project participants have agreed that the platform will implement the following functionalities:

- can operate with minimum modifications as moored system, drifting buoy or manually deployed equipment;
- can mount essential sensors and operate in dual mode as a self-recording system or real-time autonomous system;
- mounts a low-cost low-power embedded system to acquire, control, process, store and (in case) transmit data;
- employs low-cost material (e.g. plastic pipes for domestic use for the instrument housing);
- simplifies the assembling process of the system in order to be done on-site by trained non-professional operators or for educational purposes.

The sensors are not supposed to substitute the best technological products available on the market. Instead, they are meant to complement/integrate these, by extending the coverage/number and by making them deployable also by trained non-professional operators. The sensor choice will be defined by their performance starting with temperature and pressure sensors. An accurate GPS system is also needed for localization and tracking.

The general idea is that the platform has to be an open and expandable system. Although, the implementation on the platform of other sensors for example for the measurements of salinity, chlorophyll, dissolved oxygen, turbidity is not part of this step of the project, it has been considered.

Lastly, the communication system will implement the following functionalities:

- will use the most popular low-cost/no transmission cost communication systems;
- will enable the timely communication of the relevant data and control flags and its delivery on the web;
- will be ready to exploit at best the present and future opportunities and facilities offered by the Internet of Things technologies.

The resulting platform will then be tested and used as educational equipment in a conceptual framework of science, technology and practice transfer and dissemination to the local user communities. The prototype potential is not limited to the developing countries. It is useful for any infrastructural remote and poorly observed regions and it can be advantageous for those applications requiring a dense coverage of timely observations in remote/under-observed sites, especially along coasts.

Partnership for Observation of the
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Report of the Trustees
For The Year Ended 31 March 2021

A virtual meeting of the project participants was held on 11-12 Nov 2020. The scope of the meeting was to compare, combine and network different viewpoints and expertise and to determine the best solutions for the realization of the low-cost (or cost-effective) prototype and finalize a technical document as a final plan.

Priority was given to:

- a platform that will operate in drifter mode which is extremely easy to deploy and perfect for studies associated with search and rescue operations (another need that has emerged). It also constantly guarantees the knowledge of the instrument position. The platform can be easily converted into the moored mode
- temperature and pressure sensors should be low-cost with the idea to replace them rather than calibrate them
- LoRaWAN communications preferably with Bluetooth integration for the in-situ download of the data.

"Social AGITation for Temperature Analysis" (SAGITTA):

The project is aimed at implementation of citizen science approach for consistent and regular temperature profile data collection in the coastal ocean. This requires distribution of cheap and simple temperature-depth (TD) probes among representatives of the general public. Though suitable equipment is present on the market, it is quite expensive (5,000-9,000 USD per probe) and relatively complex for users without specialised training. Therefore the project aims to create a cheap TD probe, simple smartphone application and web portal to make this idea possible. The probe should be cheap (about 100 USD) yet scientifically reliable. The smartphone app will be used for probe control, instant data visualization and data transmittance to the web. The web portal is necessary for data storage, access and dissemination; it will also be useful for training and outreach. The main achievements this year have been (1) finalising the probe prototype, (2) preparing it for manufacturing and (3) initiating the development of the smartphone application.

A Russian company (AppFox) was contracted to develop Terms of Reference (ToR) for the app development, including all possible desired functions of the app (e.g., training mode, link to video lessons, FAQ, feedback, push notifications), which may only be implemented in future versions of the app. The ToR were then used to request quotations for app development. Conversations with potential developers for the smartphone application were held in autumn 2020. In late November, a contract with a USA-based company (ENC Data) was signed and discussions were held on features of the application requiring modifications in the ToR. The development started in early December 2020. By February, ENC Data team provided an update on the application with a layout and list of accomplishments so far, which included: Icon, header, and menus designed, Screen flow implemented, Maps implemented via OpenStreetMaps (OSM), Geolocation permissions implemented, User login/authentication via Amazon AWS, WiFi and data collection dialogs started, MySQL database created to hold measurement data.

ENC Data requested a prototype sensor for the application-device connection development phase. As proper waterproof housing was still under development, a special version of the prototype was prepared, which included additional switches for easier test control and absence of waterproof housing. Unfortunately, this prototype experienced malfunctioning in internal electronics, for which search for the source and correction took a few weeks. This issue was fixed by changing the scheme of the switch power supply and adding a filtering unit (RC-filter) to the ground connection of the switch. This was also added to the board scheme to include this step into manufactory assembling of the board and make further assembling easier. The testing prototype was finally shipped to USA with batteries and a brief manual.

As a result of all of the communication efforts previously detailed, as well as targeted efforts by trustees and by the Secretariat to recruit new members, POGO's membership grew from 45 to 51 between April 2020 and March 2021.

Financial review

Principal funding sources

The principal sources of funding are:

- Membership dues: these are used to cover all operational costs of the charity as well as some grants and fellowships
- Grants from charitable foundations and other organisations, notably the Nippon Foundation, which supports POGO's capacity development programme, the Lounsbery Foundation, which has supported POGO's work on biological ocean observations, and the Scientific Committee on Oceanic Research (SCOR), which co-funds the POGO-SCOR visiting fellowship programme.

Partnership for Observation of the
Global Ocean CIO
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Report of the Trustees
For The Year Ended 31 March 2021

STRATEGIC REPORT

Financial review

Reserves policy

POGO's reserves policy was adopted in Jan 2020. The target minimum Operating Reserve Fund is 12 months of average operating costs. The calculation of average monthly operating costs includes all recurring, predictable expenses such as salaries and benefits, insurance, office, travel, communications, projects, Working Groups and capacity development programmes. Depreciation, in-kind, and other non-cash expenses are not included in the calculation. The calculation of average monthly expenses also excludes one-time or unusual, capital purchases. Based on the current year results the reserves policy is around £210,000 which is the average operating costs less expenditure relating to restricted funds.

The Operating Reserve is intended to provide an internal source of funds for situations such as a sudden increase in expenses, one-time unbudgeted expenses, unanticipated loss in funding, or uninsured losses.

Operating Reserves are not intended to replace a permanent loss of funds or eliminate an ongoing budget gap. It is the intention of POGO for Operating Reserves to be used and replenished within a reasonably short period of time. The Operating Reserve Fund is defined as a designated fund set aside by action of the Board of Trustees. The minimum amount to be designated as Operating Reserve will be established in an amount sufficient to maintain ongoing operations and programmes for a set period of time, measured in months. The Operating Reserve serves a dynamic role and will be reviewed and adjusted in response to both internal and external changes.

The amount of the Operating Reserve Fund target minimum will be calculated each year after approval of the annual budget, reported to the Finance Committee/Board of Trustees, and included in the regular financial reports. The Operating Reserve will be funded with surplus unrestricted operating funds. The Board of Trustees may from time to time direct that a specific source of revenue be set aside for Operating Reserve.

The main contingencies allowed for by the Reserves Policy, are:

- POGO having to relocate the office, in case the agreement in place with the current Secretariat host(s) is terminated by either party. The provision in the contract is for 6 months' notice, which would mean any costs incurred would have to be met at relatively short notice. Costs could include redundancy and other compensation that POGO may be required by law to pay the staff (e.g. related to the Transfer of Undertakings (Protection of Employment) -TUPE; legal costs; potential increased salary costs related to employment by a different host, etc. If POGO were to start employing the Secretariat staff itself there would be additional costs related to HR/IT and other services, office rental etc.

- Other emergencies including legal costs, insurance excess, or uninsured losses.

- Loss of income: This is a potential threat caused by fluctuations in membership, or by some members being unable to pay their dues in a given year. In addition, the Nippon Foundation grant is only renewed from one year to the next, so if it is not renewed we would potentially receive very little notice of this (in this case the project would not go ahead, but additional funds from POGO could potentially be needed to cover staff costs, to which NF contributes £31,000 per annum).

The amount of reserves currently held is £367,198 which is higher than the amount stated in the reserves policy, although there are a number of workshops and other activities POGO has committed to funding. The reserves should therefore be reduced in 2021-22, although expenditure is still very dependent on the global situation with the COVID-19 pandemic and associated international travel restrictions.

Partnership for Observation of the
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Report of the Trustees
For The Year Ended 31 March 2021

STRATEGIC REPORT

Financial and risk management objectives and policies

The trustees have a duty to identify and review the risks to which the charity is exposed and to ensure appropriate controls are in place to provide reasonable assurance against fraud and error. The trustees recognise that risks can arise not only from the charity's activities but also from failure to act or exploit opportunities. The trustees do not consider that all risks should be avoided. They are not averse to taking reasonable risks as part of their strategy to achieve the charity's objectives. However, they wish to be made aware of the major risks the charity faces so that they can plan how to manage those risks and mitigate their effects. The trustees have therefore appointed the Chair and CEO to review major risks and make recommendations to the trustees as to how to manage them. The trustees expect all members, staff and volunteers when engaging in any activity to consider the risks it poses and to act in accordance with any recommendations made for risk management. The trustees expect that staff and volunteers will not engage in significant types of activity which are not similar to activities the trustees are already aware of, without first having made to the trustees a proper proposal for the charity engaging in such activity, including an analysis of the risks such activity might pose to the charity. The trustees have the same expectation in relation to significant increases in activities already pursued by the charity or significant changes in the way those activities are pursued.

Risk management will be conducted according to the following steps: (1) identify the risks, (2) assess the risks, (3) evaluate what action needs to be taken, (4) monitoring and assessment.

The trustees have developed and approved a risk management policy and a risk register to identify and assess the potential risks and develop strategies to manage them. The risk register is reviewed monthly by the Chair and CEO, and twice per year by the Board as a whole. Given the charity is relatively young, it has not had a great deal of time to develop a mature 'risk appetite' approach. It is the intention of the charity for Trustees to engage in 'risk appetite' training with a view to developing a measured approach to risk. The time-scale for this will be agreed during 2021/22.

Future plans

During the coming period the organisation will work towards its aims in respect of education for developing the science of global ocean observation, developing the science as well as publishing and disseminating the results of research undertaken. The CIO will continue to provide scholarships and research fellowships in accordance with its objects, using funds from membership dues as well as grants from the Nippon Foundation, the Lounsbery Foundation and SCOR. Specifically, POGO will:

- Expand its global footprint and benefit from in-kind support from member institutions by establishing Regional and Thematic Secretariat Nodes in other parts of the world, funded entirely by the host institutions (in China and Germany to begin with)
- Continue to fund Working Groups such as the Biological Observations WG, BIOTTA, Data Acquisition in the Gulf of Guinea, and a new WG on Women in Science
- Conduct a project on marine litter funded by the Richard Lounsbery Foundation (funding was received in Dec 2020 for this and preparatory work started in Jan/Feb 2021)
- Continue the OpenMODs project on low-cost technology development
- Continue global research projects for NF-POGO alumni
- Continue to run the NF-POGO Centre of Excellence and provide Visiting Fellowships and Shipboard Training Fellowships for early-career researchers
- Hold exhibition stands and give presentations at major international conferences (if and when the global health crisis allows for these to resume)
- Increase its visibility and outreach/advocacy impact, through the development of new outreach materials, case studies on the societal benefits of ocean observations, and sponsorship of a Supplemental Issue of the journal Oceanography, on ocean observing.

STRUCTURE, GOVERNANCE AND MANAGEMENT

Governing document

The Charitable Incorporated Organisation ("the CIO") is governed by its constitution in accordance with the Charities Act 2011. The CIO is based on the association model.

Recruitment and appointment of new trustees

Trustees are selected from the membership organisations and are appointed by the decision of the members of the CIO at the annual general meeting (with the exception of two trustees elected by the trustees themselves to improve regional and/or gender balance and/or to fill gaps in expertise). Each appointment is for a term of two years (renewable once), ending at the close of the meeting of the board of trustees immediately after an AGM.

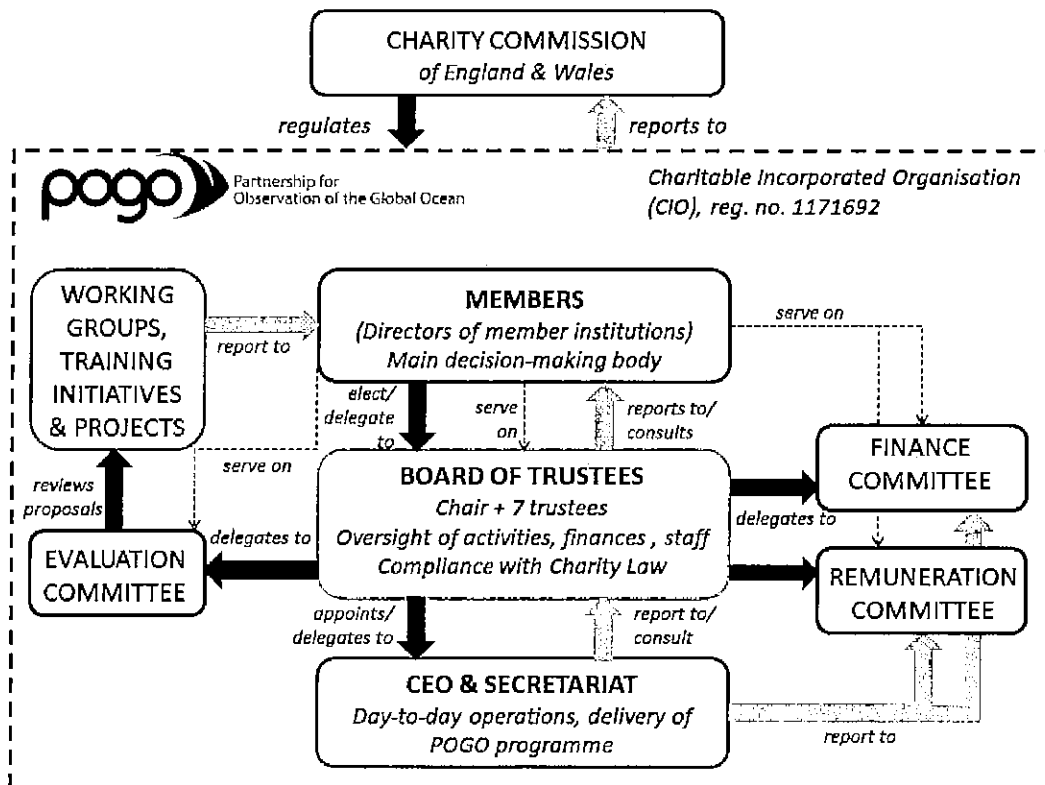
**Partnership for Observation of the
Global Ocean CIO
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**Report of the Trustees
For The Year Ended 31 March 2021**

STRUCTURE, GOVERNANCE AND MANAGEMENT

Organisational structure

Membership of the CIO is open to any oceanographic research institution, educational department or organisation from any part of the world that is interested in furthering the purposes of the CIO. The affairs of the CIO are managed by a Board of Trustees, elected by the members. The day to day operations of the CIO are delegated by the trustees to the CEO. Financial matters are delegated to a Finance Committee, which makes recommendations to the Board of Trustees. The governance structure is summarised in the following diagram.



Induction and training of new trustees

The charity trustees makes available to each new trustee a copy of the CIO's constitution and any amendments made to it, as well as a copy of the CIO's latest trustees' annual report and statement of accounts, and the Charity Commission's guidance documents on the role of the trustee. All trustees have previous knowledge of the activities of POGO and are given guidance on their responsibilities as a trustee. Trustees are also invited to training courses on governance, which the charity pays for. These have been attended virtually in 2020/21, and the trustees found the virtual training mode to be very effective.

COMMENCEMENT OF ACTIVITIES

The CIO was formed in February 2017 to take on the activities of a Canadian Society with the same name. The process for transferring operations to the CIO took longer than initially anticipated and had not taken place at 31 December 2017.

Operations began in the CIO in July 2018.

Partnership for Observation of the
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Report of the Trustees
For The Year Ended 31 March 2021

GOVERNANCE STATEMENT

The Board of Trustees have had due regard to the principals of recommended practices as set out by the "Charity Governance Code" and have applied these wherever practical and in decision making.

STATEMENT OF TRUSTEES' RESPONSIBILITIES

The trustees (who are also the directors of Partnership for Observation of the Global Ocean CIO for the purposes of company law) are responsible for preparing the Report of the Trustees and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing those financial statements, the trustees are required to

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charity SORP;
- make judgements and estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in business.

The trustees are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the charitable company and to enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

In so far as the trustees are aware:

- there is no relevant audit information of which the charitable company's auditors are unaware; and
- the trustees have taken all steps that they ought to have taken to make themselves aware of any relevant audit information and to establish that the auditors are aware of that information.

AUDITORS

The auditors, Bromhead, will be proposed for re-appointment at the forthcoming Annual General Meeting.

Report of the trustees, incorporating a strategic report, approved by order of the board of trustees, as the company directors, on 18 January 2022 and signed on the board's behalf by:

Prof N Owens - Trustee

Report of the Independent Auditors to the Trustees of
Partnership for Observation of the
Global Ocean CIO

Opinion

We have audited the financial statements of Partnership for Observation of the Global Ocean CIO (the 'charitable company') for the year ended 31 March 2021 which comprise the Statement of Financial Activities, the Statement of Financial Position, the Statement of Cash Flows and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

In our opinion the financial statements:

- give a true and fair view of the state of the charitable company's affairs as at 31 March 2021 and of its incoming resources and application of resources, including its income and expenditure, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We are independent of the charitable company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the trustees' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the charitable company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the trustees with respect to going concern are described in the relevant sections of this report.

Other information

The trustees are responsible for the other information. The other information comprises the information included in the Annual Report, other than the financial statements and our Report of the Independent Auditors thereon.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Charities (Accounts and Reports) Regulations 2008 requires us to report to you if, in our opinion:

- the information given in the Report of the Trustees is inconsistent in any material respect with the financial statements; or
- the charitable company has not kept adequate accounting records; or
- the financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.

Responsibilities of trustees

As explained more fully in the Statement of Trustees' Responsibilities, the trustees (who are also the directors of the charitable company for the purposes of company law) are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the charitable company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the charitable company or to cease operations, or have no realistic alternative but to do so.

Report of the Independent Auditors to the Trustees of
Partnership for Observation of the
Global Ocean CIO

Our responsibilities for the audit of the financial statements

We have been appointed as auditors under Section 144 of the Charities Act 2011 and report in accordance with the Act and relevant regulations made or having effect thereunder.

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a Report of the Independent Auditors that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below:

Obtained and understanding of the laws and regulations applicable to the company through discussions with management, and those charged with governance, as well as reviewing legal correspondence files of the company. These laws and regulations were identifies follows; health and safety, employment and company law. Additionally the group that the entity is a subsidiary of has a strict moral code that has to be upheld.

Obtained an understanding of the entity's policies and procedures for assessing fraud risk and identifying actual or alleged fraud by discussions with managements and those charged with governance.

Obtained an understanding of the effectiveness of the entity control environment by testing of management override of controls, which includes but is not limited to; testing of journal entries and accounting estimates and reviewing transaction occurring outside the normal scope of business.

The use of qualified and experienced staff members to ensure the audit team is comprised of only competent and capable members who are able to recognise and document any instances of non-compliance.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at www.frc.org.uk/auditorsresponsibilities. This description forms part of our Report of the Independent Auditors.

Use of our report

This report is made solely to the charitable company's trustees, as a body, in accordance with Part 4 of the Charities (Accounts and Reports) Regulations 2008. Our audit work has been undertaken so that we might state to the charitable company's trustees those matters we are required to state to them in an auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charitable company and the charitable company's trustees as a body, for our audit work, for this report, or for the opinions we have formed.



Bromhead
Chartered Accountants
Statutory Auditors
Eligible to act as an auditor in terms of Section 1212 of the Companies Act 2006
Harscombe House
1 Darklake View
Plymouth
Devon
PL6 7TL

Date: 27.01.22

**Partnership for Observation of the
Global Ocean CIO
T/A POGO**

**Statement of Financial Activities
For The Year Ended 31 March 2021**

	Notes	Unrestricted fund £	Restricted funds £	31.3.21 Total funds £	31.3.20 Total funds £
INCOME AND ENDOWMENTS FROM					
Charitable activities	3				
Centre of Excellence		-	653,548	653,548	514,169
Subscriptions		245,796	-	245,796	215,256
Fellowship programme		-	7,871	7,871	8,268
Citizen Observation of Local Litter in Coastal ECosysTems		-	73,625	73,625	-
Investment income	2	2,415	-	2,415	6,164
Total		248,211	735,044	983,255	743,857
EXPENDITURE ON					
Charitable activities	4				
Centre of Excellence		-	511,312	511,312	499,101
NANO activities		-	40,337	40,337	36,420
Shipboard training		-	12,573	12,573	127,780
Biological observations		-	13,786	13,786	26,009
POGO activities		206,166	3,914	210,080	205,771
Fellowship programme		-	7,893	7,893	12,205
Citizen Observation of Local Litter in Coastal ECosysTems		-	3,429	3,429	-
Total		206,166	593,244	799,410	907,286
NET INCOME/(EXPENDITURE)		42,045	141,800	183,845	(163,429)
RECONCILIATION OF FUNDS					
Total funds brought forward		325,153	200,793	525,946	689,375
TOTAL FUNDS CARRIED FORWARD		367,198	342,593	709,791	525,946

The notes form part of these financial statements

Partnership for Observation of the
Global Ocean CIO
T/A POGO

Statement of Financial Position
31 March 2021

	Notes	Unrestricted fund £	Restricted funds £	31.3.21 Total funds £	31.3.20 Total funds £
CURRENT ASSETS					
Debtors	9	30,340	-	30,340	23,742
Cash at bank		<u>418,129</u>	<u>1,033,108</u>	<u>1,451,237</u>	<u>1,232,299</u>
		448,469	1,033,108	1,481,577	1,256,041
CREDITORS					
Amounts falling due within one year	10	<u>(81,271)</u>	<u>(690,515)</u>	<u>(771,786)</u>	<u>(730,095)</u>
NET CURRENT ASSETS		<u>367,198</u>	<u>342,593</u>	<u>709,791</u>	<u>525,946</u>
TOTAL ASSETS LESS CURRENT LIABILITIES		<u>367,198</u>	<u>342,593</u>	<u>709,791</u>	<u>525,946</u>
NET ASSETS		<u>367,198</u>	<u>342,593</u>	<u>709,791</u>	<u>525,946</u>
FUNDS	11				
Unrestricted funds				367,198	325,153
Restricted funds				<u>342,593</u>	<u>200,793</u>
TOTAL FUNDS				<u>709,791</u>	<u>525,946</u>

The charitable company is entitled to exemption from audit under Section 477 of the Companies Act 2006 for the year ended 31 March 2021.

The members have not deposited notice, pursuant to Section 476 of the Companies Act 2006 requiring an audit of these financial statements.

The trustees acknowledge their responsibilities for

- (a) ensuring that the charitable company keeps accounting records that comply with Sections 386 and 387 of the Companies Act 2006 and
- (b) preparing financial statements which give a true and fair view of the state of affairs of the charitable company as at the end of each financial year and of its surplus or deficit for each financial year in accordance with the requirements of Sections 394 and 395 and which otherwise comply with the requirements of the Companies Act 2006 relating to financial statements, so far as applicable to the charitable company.

These financial statements have been audited under the requirements of Section 145 of the Charities Act 2011.

The financial statements were approved by the Board of Trustees and authorised for issue on 18 January 2022 and were signed on its behalf by:

N Owens - Trustee

**Partnership for Observation of the
Global Ocean CIO
T/A POGO**

**Statement of Cash Flows
For The Year Ended 31 March 2021**

	Notes	31.3.21 £	31.3.20 £
Cash flows from operating activities			
Cash generated from operations	1	<u>216,523</u>	<u>(94,630)</u>
Net cash provided by/(used in) operating activities		<u>216,523</u>	<u>(94,630)</u>
Cash flows from Investing activities			
Interest received		<u>2,415</u>	<u>6,164</u>
Net cash provided by investing activities		<u>2,415</u>	<u>6,164</u>
Change in cash and cash equivalents In the reporting period		218,938	(88,466)
Cash and cash equivalents at the beginning of the reporting period		<u>1,232,299</u>	<u>1,320,765</u>
Cash and cash equivalents at the end of the reporting period		<u>1,451,237</u>	<u>1,232,299</u>

**Notes to the Statement of Cash Flows
For The Year Ended 31 March 2021**

1. RECONCILIATION OF NET INCOME/(EXPENDITURE) TO NET CASH FLOW FROM OPERATING ACTIVITIES

	31.3.21 £	31.3.20 £
Net Income/(expenditure) for the reporting period (as per the Statement of Financial Activities)	183,845	(163,429)
Adjustments for:		
Interest received	(2,415)	(6,164)
(Increase)/decrease in debtors	(6,598)	105,794
Increase/(decrease) in creditors	<u>41,691</u>	<u>(30,831)</u>
Net cash provided by/(used in) operations	<u>216,523</u>	<u>(94,630)</u>

2. ANALYSIS OF CHANGES IN NET FUNDS

	At 1.4.20 £	Cash flow £	At 31.3.21 £
Net cash			
Cash at bank	<u>1,232,299</u>	<u>218,938</u>	<u>1,451,237</u>
	<u>1,232,299</u>	<u>218,938</u>	<u>1,451,237</u>
Total	<u>1,232,299</u>	<u>218,938</u>	<u>1,451,237</u>

The notes form part of these financial statements

Partnership for Observation of the
Global Ocean CIO
T/A POGO

Notes to the Financial Statements
For The Year Ended 31 March 2021

1. ACCOUNTING POLICIES

Basis of preparing the financial statements

The financial statements of the charitable company, which is a public benefit entity under FRS 102, have been prepared in accordance with the Charities SORP (FRS 102) 'Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2019)', Financial Reporting Standard 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland' and the Companies Act 2006. The financial statements have been prepared under the historical cost convention.

The charity constitutes a public benefit entity as defined by FRS 102.

The trustees consider there are no material uncertainties about the charity's ability to continue as a going concern. These financial statements are prepared on a going concern basis. The financial statements are prepared in sterling which is the functional currency of the charity and rounded to the nearest £1. The significant accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all years presented unless stated otherwise. The charity adopted SORP (FRS 102) in the current year and an explanation of how transition to SORP (FRS 102) has affected the reporting financial position is given in note 16.

Income

The charity receives annual subscriptions from its members in alignment with the financial year. Any subscriptions billed in advance are deferred and recognised in the following financial period. All other income is recognised in the Statement of Financial Activities once the charity has entitlement to the funds, it is probable that the income will be received and the amount can be measured reliably.

Expenditure

Liabilities are recognised as expenditure as soon as there is a legal or constructive obligation committing the charity to that expenditure, it is probable that a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably. Expenditure is accounted for on an accruals basis and has been classified under headings that aggregate all cost related to the category. Where costs cannot be directly attributed to particular headings they have been allocated to activities on a basis consistent with the use of resources.

Grants offered subject to conditions which have not been met at the year end date are noted as a commitment and accrued as an expense.

Allocation and apportionment of costs

All costs that can be directly associated with a charitable activity have been attributed to the activity.

Support costs are those that assist the work of the charity but do not directly undertake charitable activities. Governance costs involving the public accountability of the charity and its compliance with regulation and good practice include costs relating to statutory examinations and legal fees.

Finance costs include all expenses incurred for operation of the charity's bank accounts as well and the total foreign exchange gain or loss the charity has achieved or suffered in the financial period.

Taxation

The charity is exempt from corporation tax on its charitable activities.

Fund accounting

Unrestricted funds can be used in accordance with the charitable objectives at the discretion of the trustees. Restricted funds can only be used for particular restricted purposes within the objects of the charity. Restrictions arise when specified by the donor or when funds are raised for particular restricted purposes.

Further explanation of the nature and purpose of each fund is included in the notes to the financial statements.

Foreign currencies

Assets and liabilities in foreign currencies are translated into sterling at the rates of exchange ruling at the statement of financial position date. Transactions in foreign currencies are translated into sterling at the average rate of exchange ruling for the year. Resulting exchange differences are taken into account in arriving at the operating result.

Partnership for Observation of the
Global Ocean CIO
T/A POGO

Notes to the Financial Statements - continued
For The Year Ended 31 March 2021

1. ACCOUNTING POLICIES - continued

COVID

On 11 March 2020 the coronavirus disease called 'Covid-19' was assessed as a pandemic and on 23 March 2020 a lockdown was imposed across the United Kingdom to stop the spread of the virus. As a result, economic uncertainties have arisen across the global economy which have had an effect on the charities ability to operate.

As stated on page 7 it did have a small impact on field work due to be carried out in the year as collecting sampling was hampered by restrictions. It also impacted the charities' ability to hold face to face meetings, however by using online resources there were still able to carry out these meetings with a high attendance. The trustees believe there will be a limited ongoing impact.

Donated goods

Donated goods are provided in the form of office space with Plymouth Marine Laboratory. The relationship remains healthy and the trustees feel this service will be provided for the foreseeable future.

2. INVESTMENT INCOME

	31.3.21	31.3.20
	£	£
Deposit account interest	<u>2,415</u>	<u>6,164</u>

3. INCOME FROM CHARITABLE ACTIVITIES

	31.3.21	31.3.20
	£	£
Grants	653,548	514,169
Subscriptions	245,796	215,256
SCOR income	7,871	8,268
Grants	<u>73,625</u>	-
	<u>980,840</u>	<u>737,693</u>

Grants received, included in the above, are as follows:

	31.3.21	31.3.20
	£	£
Nippon Foundation	653,548	514,169
Richard Lounsbery Foundation	<u>73,625</u>	-
	<u>727,173</u>	<u>514,169</u>

4. CHARITABLE ACTIVITIES COSTS

	Direct Costs £	Grant funding of activities (see note 5) £	Support costs (see note 6) £	Totals £
Centre of Excellence	76,794	434,518	-	511,312
NANO activities	14,401	25,936	-	40,337
Shipboard training	99	12,474	-	12,573
Biological observations	13,786	-	-	13,786
POGO activities	28,542	38,928	142,610	210,080
Fellowship programme	-	7,893	-	7,893
Citizen Observation of Local Litter in Coastal ECosysTems	<u>3,429</u>	-	-	<u>3,429</u>
	<u>137,051</u>	<u>519,749</u>	<u>142,610</u>	<u>799,410</u>

**Partnership for Observation of the
Global Ocean CIO
T/A POGO**

**Notes to the Financial Statements - continued
For The Year Ended 31 March 2021**

5. GRANTS PAYABLE

The total amount awarded to institutions was £454,976 (2020: £504,671), those institutions are listed below:

Alfred-Wegener Institute
Isituto Nazionale di Oceanografia e di Geofisica
Nigerian Institute For Oceanography & Marine Research
University of Ghana College of Basic and Applied Sciences
Institute of Oceanology, Chinese Academy of Sciences

Grants paid to Alfred-Wegener Institute are for the provision of the Centre of Excellence, which provides scholarship training to improve the global knowledge regarding ocean observation.

Grants paid to Isituto Nazionale di Oceanografia e di Geofisica are for the provision of Open Access Marine Observation Devices (OpenMODS), which helps provide access to important ocean data to less developed countries.

Grants paid to Nigerian Institute For Oceanography & Marine Research are for the reimbursement of cruise support costs and participants' travel expenses in connection with data acquisition in the Gulf of Guinea.

Grants paid to University of Ghana College of Basic and Applied Sciences are for the provision of workshops in relation to building capacity in ocean acidification monitoring in the Gulf of Guinea.

Grants paid to Institute of Oceanology, Chinese Academy of Sciences (IOCAS) to support a training course on subsurface mooring deployment (pre-payment made but course postponed to 2021/22 due to COVID).

The total amount awarded to individuals was £60,179 (2020: £173,993) and the number of individual beneficiaries was 31 (2020: 73).

Grants paid to individuals are for the reimbursement of travel expenses, workshops and equipment to allow less developed countries access to the best training courses and events to improve global knowledge of ocean.

6. SUPPORT COSTS

	Management £	Finance £	Governance costs £	Totals £
POGO activities	<u>134,154</u>	<u>645</u>	<u>7,811</u>	<u>142,610</u>

7. NET INCOME/(EXPENDITURE)

Net income/(expenditure) is stated after charging/(crediting):

	31.3.21 £	31.3.20 £
Auditors' remuneration	4,847	4,416
Auditors' remuneration for non audit work	2,964	5,700
Foreign Exchange (gain)/loss	<u>73,221</u>	<u>(19,417)</u>

**Partnership for Observation of the
Global Ocean CIO
T/A POGO**

**Notes to the Financial Statements - continued
For The Year Ended 31 March 2021**

8. TRUSTEES' REMUNERATION AND BENEFITS

There were no trustees' remuneration or other benefits for the year ended 31 March 2021 nor for the year ended 31 March 2020.

Trustees' expenses

During the year there were no expenses paid to trustees.

9. DEBTORS: AMOUNTS FALLING DUE WITHIN ONE YEAR

	31.3.21 £	31.3.20 £
Trade debtors	<u>30,340</u>	<u>23,742</u>

10. CREDITORS: AMOUNTS FALLING DUE WITHIN ONE YEAR

	31.3.21 £	31.3.20 £
Trade creditors	52,873	13,143
Other creditors	-	85
Accruals and deferred income	610,055	610,710
Accrued expenses	<u>108,858</u>	<u>106,157</u>
	<u>771,786</u>	<u>730,095</u>

11. MOVEMENT IN FUNDS

	At 1.4.20 £	Net movement in funds £	At 31.3.21 £
Unrestricted funds			
General fund	325,153	42,045	367,198
Restricted funds			
Nippon Foundation Grant	187,852	85,390	273,242
Richard Lounsbery Foundation	<u>12,941</u>	<u>56,410</u>	<u>69,351</u>
	<u>200,793</u>	<u>141,800</u>	<u>342,593</u>
TOTAL FUNDS	<u>525,946</u>	<u>183,845</u>	<u>709,791</u>

**Partnership for Observation of the
Global Ocean CIO
T/A POGO**

**Notes to the Financial Statements - continued
For The Year Ended 31 March 2021**

11. MOVEMENT IN FUNDS - continued

Net movement in funds, included in the above are as follows:

	Incoming resources £	Resources expended £	Movement in funds £
Unrestricted funds			
General fund	248,211	(206,166)	42,045
Restricted funds			
Nippon Foundation Grant	653,548	(568,158)	85,390
Richard Lounsbery Foundation	73,625	(17,215)	56,410
SCOR fellowship			
	<u>7,871</u>	<u>(7,871)</u>	<u>-</u>
	<u>735,044</u>	<u>(593,244)</u>	<u>141,800</u>
TOTAL FUNDS	<u>983,255</u>	<u>(799,410)</u>	<u>183,845</u>

Comparatives for movement in funds

	At 1.4.19 £	Net movement in funds £	At 31.3.20 £
Unrestricted funds			
General fund	313,334	11,819	325,153
Restricted funds			
Nippon Foundation Grant	337,091	(149,239)	187,852
Richard Lounsbery Foundation	<u>38,950</u>	<u>(26,009)</u>	<u>12,941</u>
	<u>376,041</u>	<u>(175,248)</u>	<u>200,793</u>
TOTAL FUNDS	<u>689,375</u>	<u>(163,429)</u>	<u>525,946</u>

Comparative net movement in funds, included in the above are as follows:

	Incoming resources £	Resources expended £	Movement in funds £
Unrestricted funds			
General fund	216,122	(204,303)	11,819
Restricted funds			
Nippon Foundation Grant	519,467	(668,706)	(149,239)
Richard Lounsbery Foundation	-	(26,009)	(26,009)
SCOR fellowship			
	<u>8,268</u>	<u>(8,268)</u>	<u>-</u>
	<u>527,735</u>	<u>(702,983)</u>	<u>(175,248)</u>
TOTAL FUNDS	<u>743,857</u>	<u>(907,286)</u>	<u>(163,429)</u>

Partnership for Observation of the
Global Ocean CIO
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Notes to the Financial Statements - continued
For The Year Ended 31 March 2021

11. MOVEMENT IN FUNDS - continued

A current year 12 months and prior year 12 months combined position is as follows:

	At 1.4.19 £	Net movement in funds £	At 31.3.21 £
Unrestricted funds			
General fund	313,334	53,864	367,198
Restricted funds			
Nippon Foundation Grant	337,091	(63,849)	273,242
Richard Lounsbery Foundation	38,950	30,401	69,351
	<u>376,041</u>	<u>(33,448)</u>	<u>342,593</u>
TOTAL FUNDS	<u>689,375</u>	<u>20,416</u>	<u>709,791</u>

A current year 12 months and prior year 12 months combined net movement in funds, included in the above are as follows:

	Incoming resources £	Resources expended £	Movement in funds £
Unrestricted funds			
General fund	464,333	(410,469)	53,864
Restricted funds			
Nippon Foundation Grant	1,173,015	(1,236,864)	(63,849)
Richard Lounsbery Foundation	73,625	(43,224)	30,401
SCOR fellowship			
	<u>16,139</u>	<u>(16,139)</u>	<u>-</u>
	<u>1,262,779</u>	<u>(1,296,227)</u>	<u>(33,448)</u>
TOTAL FUNDS	<u>1,727,112</u>	<u>(1,706,696)</u>	<u>20,416</u>

NIPPON Foundation Fund - Activities related to the delivery of the Centre of Excellence, the Global NANO project and Shipboard Training and outreach programme.

Richard Lounsbery Foundation Fund - Activities related to the delivery of the Citizen Observation of Local Litter in Coastal Ecosystems programme.

12. RELATED PARTY DISCLOSURES

There were no related party transactions for the year ended 31 March 2021.

13. OTHER DISCLOSURES

During the period Plymouth Marine Laboratories gave POGO free use of office space in lieu of membership fees. This has been reflected in the accounts at a value of £4,126 (2020: £3,998), being the membership fees that would have been paid without the agreement.

**Partnership for Observation of the
Global Ocean CIO
T/A POGO**

**Detailed Statement of Financial Activities
For The Year Ended 31 March 2021**

	31.3.21 £	31.3.20 £
INCOME AND ENDOWMENTS		
Investment income		
Deposit account interest	2,415	6,164
Charitable activities		
Subscriptions	245,796	215,256
SCOR income	7,871	8,268
Grants	<u>727,173</u>	<u>514,169</u>
	<u>980,840</u>	<u>737,693</u>
Total incoming resources	983,255	743,857
EXPENDITURE		
Charitable activities		
Insurance	934	887
Events and associated travel	17,642	33,775
Outreach materials	5,478	2,088
Website development	10,036	3,985
Project administration	29,740	42,744
Bad debts	-	14,412
Foreign exchange (gain)/loss	73,221	(19,417)
Grants to institutions	473,356	504,671
Grants to individuals	<u>46,393</u>	<u>170,638</u>
	656,800	753,783
Support costs		
Management		
Office rent	4,126	3,998
Annual Meetings	3,634	7,862
Postage and stationery	3,929	1,208
Travel	(857)	11,947
Staff training	89	1,605
Subscriptions	1,900	2,071
Contribution to key management personnel	<u>121,333</u>	<u>114,135</u>
	134,154	142,826
Finance		
Bank charges	645	561
Governance costs		
Auditors' remuneration	4,847	4,416
Auditors' remuneration for non audit work	<u>2,964</u>	<u>5,700</u>
	<u>7,811</u>	<u>10,116</u>
Total resources expended	<u>799,410</u>	<u>907,286</u>
Net income/(expenditure)	<u>183,845</u>	<u>(163,429)</u>

This page does not form part of the statutory financial statements