

# **A STRATEGY FOR POGO**

## **SUMMARY**

In a little more than ten years, POGO has established itself as a respected and credible voice for the marine science community. Members value POGO as a forum in which they can meet their peer-directors at least annually, in well-attended meetings, to discuss matters of common interest. The POGO programme in capacity-building is universally admired: it receives substantial support from the Nippon Foundation. The pool of former scholars trained under Nippon Foundation – POGO initiatives have been integrated into a global network (NANO), which now has a biannual newsletter and four regional, collaborative research projects. POGO can point to many success stories in its history. POGO has taken a leadership role with GEO in the formulation of an oceans Task, “Oceans and Society: the Blue Planet”. On a broader scale, POGO has created an informal grouping, Oceans United, to allow many organisations to speak with a common voice on issues of relevance to oceans and society. The governance of, and advocacy for, integrated ocean-observing systems is becoming a crowded arena, and some rationalisation is required. POGO could benefit from re-defining its mission, with the aim of clarifying its uniqueness. POGO has a very strong and effective Secretariat, but it is stretched. Individual members should be encouraged to take responsibility for particular issues between meetings and report on them to the Plenary. POGO enjoys excellent working relations with all relevant partner organisations, and has many other strong points, which, collectively, promise a bright future.

## **WHAT IS POGO?**

### **POGO Mission Statement**

In the context of a changing climate, the Partnership for Observation of the Global Oceans (POGO) seeks to demonstrate the value of world-wide cooperation in oceanographic observing and Earth system science for the benefit of society, by providing a forum for world’s oceanographic institutions, represented by their Directors, to promote global oceanography, in particular sustained, long-term, ocean-observing systems; shared use of infrastructure, data and information; capacity building; and public outreach.

### **Origin and Purpose of POGO**

A group of directors of marine research institutions met in Paris in March 1999 to discuss ways in which they could work together more effectively in support of global oceanography. The result was a proposal to establish the Partnership for Observation of the Global Oceans (POGO). A brief statement of the Terms of Reference follows. The complete text and Charter are given in Appendix 1.

## Objectives

As stated at the founding of POGO, the objective of POGO is to make a major contribution to the attainment of sustained in situ observations of the global ocean that meet the requirements of international research and operational programs. As a means of attaining this objective POGO will:

- Initiate key actions to enable effective coordination, integration, and implementation of international ocean observing strategies in close collaboration with the Global Ocean Observing System (GOOS);
- Establish collective agreements among institutions to promote timely developments in ocean science;
- Develop and promote coordinated views of ocean institutions concerning ocean observation and science to governments, international bodies, and others;
- Facilitate linkages between oceanographic research and operational institutions in relation to their goals, plans, and programs;
- Exchange policy and technical information;
- Coordinate the education and outreach programs of its Members;
- Encourage responsiveness to user communities;
- Promote capacity building;
- Promote sharing of facilities and infrastructure;
- Encourage interdisciplinary use of observing infrastructure.

The Partnership will work actively to inform and communicate with the broader community interested in global oceanographic observations and research. Individual Members of POGO will use their best efforts to implement POGO recommendations in their respective programs.

## WHERE ARE WE NOW?

### POGO Structure and Legal Status

POGO is listed with the Registry of Joint Stock Companies in the Province of Nova Scotia, Canada, as a not-for-profit society. This registration reflects the first location of the Secretariat at the Bedford Institute of Oceanography, Halifax, Nova Scotia. The Secretariat still maintains core activities at the Bedford Institute of Oceanography, as required to maintain the not-for-profit status. However, since 2008, POGO also has a Secretariat in the United Kingdom, on contract agreement with the Plymouth Marine Laboratory (PML). All the activities of POGO in Plymouth are audited in Plymouth and reported to the auditors in Nova Scotia, who maintain overall supervision of POGO's finances. The legal registration of POGO has not been implemented in the UK, pending revision of British Act in respect of charities.

## Role of the Secretariat

The Secretariat is the executive arm of POGO. In the context of a rotating Executive Committee, the Secretariat provides the all-important element of continuity and corporate memory. The functions of the Secretariat currently include

- managing POGO-related correspondence and communications;
- handling the POGO finances, including audit;
- organising and running POGO General Body Meetings, in consultation with the Executive Committee, the General Body and relevant external bodies;
- organising and running POGO Executive Committee Meetings, in consultation with the Executive Committee, prior to the General Body Meetings, and additionally if deemed necessary;
- executing and coordinating follow-up actions from meetings, and addressing related issues that emerge in-between meetings;
- liaising with the Executive Committee, the Members and relevant external bodies as needed in between meetings, to promote POGO activities and goals;
- leading the POGO News and Information Group and coordinating media and outreach-related activities;
- production of a regular newsletter to inform membership, and other interested parties, of POGO activities and relevant matters;
- managing various Fellowship programmes in the light of POGO's general commitment to build capacity in ocean observations;
- liaising with international and intergovernmental bodies in the marine field (such as IOC, GEO, SCOR) and developing joint initiatives, as required and as appropriate;
- oversight of the NF-POGO Centre of Excellence programme at Bermuda Institute of Ocean Sciences (Bermuda);
- producing promotional material;
- conceiving and developing exhibits at major public events, such as GEO Ministerial Meetings and EXPO 2012 (Yeosu)
- representing POGO at selected, important scientific events and meetings;
- representing POGO at selected meetings of international science coordination and policy bodies;
- liaising with the Nippon Foundation (our principal sponsor) and other donors;
- developing and maintaining an international network of former scholars trained under Nippon Foundation-POGO initiatives (the NANO Network), including publication of a NANO newsletter and coordination of NANO research projects;
- drafting of position papers, statements, press releases and declarations associated with POGO activities;
- acting as a spokesman for the marine community (Voice of the Oceans) through Oceans United; and

- maintaining a website for POGO, one for Oceans United and one for the Network of Scholars (NANO).

### **POGO Secretariat (Manpower and Expertise)**

Given its executive role, the Secretariat was conceived of as requiring leadership by a scientist of long experience in science coordination, outreach and capacity building. Initially, these duties would be in the hands of a senior scientist of international reputation, with the intention to develop younger staff into such roles, as and when suitable candidates were found. In the past, the manpower in the Secretariat has been enhanced by a fifteen-month secondment from a member institute (JAMSTEC), which was mutually beneficial and very useful. Although the scope of the duties in the POGO Secretariat has expanded over the years, the manpower in the office has not increased in proportion. Currently, the POGO Secretariat consists of

- an Executive Director, Trevor Platt (50% of full time);
- an Assistant Director, Shubha Sathyendranath (10% of full time);
- a Scientific Coordinator, Sophie Seeyave (100% of full time); and
- an Administrative Assistant, Laura Ruffoni (40% of full time).

The total strength of the Secretariat is two full-time equivalents.

### **Role of the Executive Committee**

The Executive Committee of POGO includes the immediate past, present and next Chairs, as well as the host member of the current year's meeting and that of the next year's meeting.

In recognition of the already heavy work load of the members of the Executive Committee in their own institutions, the Executive Committee is not conceived of as the executive arm of POGO (that function lies with the Secretariat). Rather, the Executive Committee is the advisory arm of POGO. It provides the Secretariat with a sounding board for decisions that need not go to the full membership, or that need to be made quickly. A related function is to develop, in consort with the Secretariat, the strategic lines for future POGO initiatives.

The Chair of POGO is the elected leader of the Partnership. He chairs the annual meeting of POGO and the Executive Committee Meetings. He presides over meetings at which the vision and the broad scope of POGO activities are set, in consultation with the Members. The Members look to the Chair to exercise leadership and presence to set the tone of these meetings and to ensure a constructive outcome. In this respect he has a first-among-peers role. The annual meetings, which provide the one opportunity in the year for the Members to meet as a group, are known for their congeniality, and it is up to the Chairman to ensure that this spirit is maintained. He functions as a spokesman for POGO (and by extension for the marine community) as needed. He is required to sign certain POGO documents (for example, proposals and reports sent to the Nippon Foundation).

Inclusion of the incoming Chair and the past Chair on the Executive helps maintain continuity and corporate memory, which is seen as a vital contribution. Those members who host the annual meetings are members of the Executive in the year before and in the year of the meeting. They

also have a strong influence on the tone of the meetings, if only indirectly. There have been many excellent examples of hosts providing such influence, engineered in ways typical of the culture in the host country, and POGO is indebted to all of them.

## **The POGO Annual Meetings**

The POGO annual meeting is usually held in January. It is primarily a meeting of the member Directors (or their delegates), complemented by observers and representatives of partner organizations, as required. Attendance is usually a very high proportion of the members (typically more than 80%). The venue for meeting is decided by selection among the various invitations made by member Directors.

Suggestions for Agenda items are solicited by the Secretariat, from the Executive and the members, starting in July – August. It is an opportunity for the members to help determine the shape of the meeting. Meanwhile, Secretariat begins to construct a draft agenda, which is circulated to the membership.

## **POGO AND ITS PARTNER ORGANISATIONS**

### **Relationship between POGO and IOC**

POGO has always enjoyed a good relation with IOC, based on mutual respect between the Principals. For example:

- When POGO established its capacity-building programme, it was managed by POGO, but with extra financial support from both IOC and SCOR. The IOC contribution was \$30K per annum. After some years, the former Executive Secretary of IOC decided to withdraw the support (directing some of the funds to a new and unilateral IOC training programme for laboratory directors). POGO carried on the Fellowship programme, at a reduced level, jointly with SCOR. The new Executive Secretary has expressed a wish (September 2, 2011) to re-enter the sponsorship of the POGO-SCOR programme. There is also a new Deputy Secretary at IOC, with particular responsibility for capacity building.
- When POGO took the leadership role to establish Oceans United, the former Executive Secretary of IOC was invited to become its spokesman, and a website was established in Paris. When his term at IOC ended, the new Executive Secretary agreed that the spokesman role in Oceans United should pass back to POGO. Custody of the website has been repatriated to POGO and the logo has been redesigned.
- Recognising that progress in GOOS has slowed recently, IOC has streamlined and simplified the GOOS governing structure this year, which is a welcome development. The current (temporary) leader of GOOS in IOC is Albert Fischer, with whom POGO already has an excellent working relationship. His enthusiasm, dynamism and positive outlook bode well for the future of GOOS. Furthermore, POGO is a recognised stakeholder in the Committee for Framework for Ocean Observations, which should facilitate POGO inputs into the future development of GOOS.

Relations between POGO and IOC at present are very strong, and POGO should capitalise on them to mutual advantage.

## **Relationship between POGO and GEO**

GEO is an intergovernmental organization dedicated to realization of the societal benefits of Earth observations. It was founded in 2005. POGO attended the founding meeting and has been an enthusiastic supporter ever since. Within GEO various marine initiatives are active, including some to which POGO extends at least moral support. But until recently, the aggregate impact of oceans within GEO has been less than deserved. POGO has worked hard to reverse this state of affairs, including support for David Farmer, Howard Roe and others to visit the GEO Secretariat in Geneva as ambassadors for oceans. POGO has also been a strong advocate for the inclusion of marine issues in GEO BON, the biodiversity element of GEO, which now has a Working Group on marine ecosystems. Jesse Ausubel (Sloan Foundation), a friend of POGO since its inception, and the father of the Census of Marine Life programme, has also been extremely influential in working with POGO to raise the profile of oceans within GEO.

A major breakthrough was achieved in 2011 through the creation, under POGO sponsorship, of a new umbrella Task in GEO, devoted to oceans. The Task is called Oceans and Society: Blue Planet. By grouping all the marine themes of GEO under one Task, it serves to emphasize the breadth and scope of marine activities in GEO, to integrate them where possible, and to highlight the leadership role of POGO as the voice of the oceans.

Affiliation with GEO has been beneficial in particular instances as an aid to funding of projects in which POGO takes an interest. For example, the Canadian Space Agency (CSA) has funded the SAFARI project (fisheries and remote sensing) and the ChloroGIN project (world network for chlorophyll and related measurements of in situ bio-optical properties). In both of these cases, affiliation of the work with GEO was a key factor in the decision of CSA to support them. Both projects are widely seen as success stories within GEO, and reflect well on the foresight and leadership shown by POGO in fostering them. Other instances include the DevCoCast Project (demonstration project for the GEONETCast concept) and the EAMNet Project (Europe - Africa Marine Network), funded by the European Union, and building on GEO initiatives.

Through constant effort over the years to advocate for oceans in GEO, the POGO Secretariat has developed excellent working relations with the GEO Secretariat, which have helped enormously in the establishment of the new Task.

## **Relationship between POGO and SCOR**

SCOR is the leading international organisation in the marine science arena, and it is essential that POGO maintain good relations with it. We enjoy the highest level of cooperation with SCOR, especially with its Executive Director, Dr Ed Urban. For example:

- POGO funds jointly with SCOR a fellowship programme that enables young scientists from developing countries to study for up to three months in a major oceanographic institution chosen by the candidate. The programme is managed by POGO. Candidates are selected by a committee in which both POGO and SCOR are represented. POGO and SCOR also collaborate in assessing capacity building at the world level in marine science and coordinate their respective capacity-building programmes. Together with partner organisations IOC-IODE, SCOR and POGO have created a website advertising summer schools and other training opportunities in ocean sciences ([www.oceansummerschools.org](http://www.oceansummerschools.org)).
- SCOR has established jointly with POGO a new research initiative, the International Quiet Ocean Experiment (IQOE). This is a programme aimed at the acoustic background in the ocean, including its antropogenic and natural components. The initiative has high momentum and will soon issue a science plan. It has already had an article in Oceanography magazine. Its recent science meeting in Paris was given excellent coverage by a leading French newspaper (Le Monde). The Sloan Foundation is deeply interested in IQOE and provided funding for workshops and an open science meeting, held at IOC (Paris) on 30 Aug - 2 Sept, 2011.

## **Relationship between POGO and the Sloan Foundation**

POGO owes its very origin to the Sloan Foundation, which funded the first exploratory meeting of POGO in Paris in 1999 (POGO-0). Dr. Jesse Ausubel of the Sloan Foundation also assisted POGO leadership to raise start-up funds from other charitable organisations in the USA, which was crucial for the operation of POGO until it was established as a dues-paying, not-for-profit society in Nova Scotia (Canada). As the funding agency for the very successful (and recently completed) Census of Marine Life Programme, Sloan has been a supporter of POGO from the beginning. At critical moments, Sloan funding has helped POGO realise ambitions that otherwise would have remained unattained. For example, Sloan enabled POGO to establish David Farmer and others as ocean ambassadors to the GEO Secretariat. Sloan has always supported POGO in its efforts to raise the profile of oceans within GEO, for example by appearing as part of the POGO delegation at Plenaries of GEO, including Ministerial Plenaries, enabling the participation of media experts in support of outreach, and sharing with POGO the burden of dealing with media interviews associated with press releases. Sloan Foundation also funded the production of the highly-successful POGO video.

Although the Census is now over, we expect that Sloan will continue to be interested in oceans (they have now extended their prestigious Sloan Research Fellowship scheme to include oceans), and will continue to engage with POGO in the realisation of initiatives of common interest. Current dialogues with the Sloan Foundation include the International Quiet Ocean Experiment and the Deep Ocean Carbon Observatory.

## **Relationship between POGO and the Nippon Foundation**

Nippon Foundation (NF) is POGO's biggest sponsor, by far. Their annual support at present exceeds \$600K per annum. POGO has cultivated with care its working relation with the programme officers at NF, and it may be said that these interactions are on the highest level of mutual trust. The principal joint initiatives between POGO and NF are the Centre of Excellence in Ocean Observations, established initially at BIOS (Bermuda), and the network (NANO) of former scholars trained under NF-POGO programmes (including the former NF-POGO Visiting Professor scheme).

Bermuda Institute of Ocean Sciences made an outstanding job of creating and maintaining the Center of Excellence, which each year trained ten scholars from developing (and developed) countries for ten months. The calibre of the scholars is very high. The programme is oversubscribed by a factor of about ten. The venue for the Centre of Excellence was re-opened to bids from member institutes in December 2012.

In addition to the training in Bermuda, each year the Centre organises regional training at a (movable) site outside Bermuda. This regional training lasts from two to four weeks, and builds on the presence at the chosen site of scholars who have already taken the Bermuda training, thus increasing the impact of the investment in the Centre. Regional training courses have been held in Brazil, Viet Nam and India.

POGO and the Nippon Foundation expect the former scholars of the Centre and other NF-POGO training schemes to remain engaged by participation in a world-scale network (NANO) of former scholars. The pool of former scholars (232, as of September 2012) has now reached a critical mass. The network is under active development and has a biannual newsletter and four regional, collaborative research projects.

In joint activities with NF, the Foundation acts as more than a funding agency, participating in the the planning meetings and in development of the programme. The relationship between POGO and NF is, in this sense, that of partners.

## **CAPACITY BUILDING IN POGO**

POGO is universally admired for its suite of capacity-building programmes which provide advanced training in ocean observations, especially for personnel from developing countries and economies in transition, through a series of fellowship schemes and a Centre of Excellence. It comprises:

- The Centre of Excellence in Observational Oceanography (established initially at Bermuda Institute of Ocean Sciences), a joint venture of POGO and the Nippon Foundation, under which ten scientists from developing countries, annually, are supported to study for ten months in an intensive programme related to ocean observations. This is now the flagship of POGO training, supported with more than half a million dollars per annum by the Nippon Foundation.
- The POGO-SCOR Fellowship Programme, annually, under which scientists from developing countries can spend up to three months training in a major oceanographic institution. POGO awards about a dozen of these each year. The programme is over-subscribed by a factor of up to eight. As of December 2012, more than 140 young scientists have been trained under this scheme.
- The POGO Visiting Professor Programme under which one senior scientist, annually, visits a



developing country to conduct training in ocean observations.

- The POGO-AMT Fellowship Programme, under which one scientist annually can participate in a major oceanographic cruise (the AMT cruise), and spend time at a participating major oceanographic institute before and after the cruise to experience cruise preparation and data analysis. In 2011, this programme was over-subscribed by a factor of fifty. This programme has served as a model for the creation, in 2013, of a similar scheme in partnership with the Porcupine Abyssal Plain (PAP) cruise programme run by the UK National Oceanography Centre, and with the EU FP7 project GreenSeas.
- The POGO-UCT Bursary Programme under which one African graduate student, annually, is supported to study at the University of Cape Town, South Africa.
- Travel support for participants from developing countries attending Austral Summer Institute courses at the University of Concepcion, Chile.
- Although it is not funded by POGO, the EAMNet Fellowship Programme, under which scientists from African countries can visit major oceanographic laboratories for training in use of remote sensing for ocean observations, is modelled very closely on the POGO-SCOR Fellowship Programme. It is administered from Plymouth and is an example of the synergy resulting from the co-location of the POGO Secretariat in a member institution.

All in all, this suite of training programmes is making a very significant contribution to reducing the deficit in trained observers of the ocean in developing countries. Under POGO capacity-building schemes, over 500 young scientists from about 60 countries have received advanced training. The massive over-subscription for POGO training schemes provides ample proof that the effort is responding to a genuine need. Feedback from both host supervisors and the trainees themselves is highly positive.

Former scholars or alumni of NF-POGO training become members of the rapidly-developing NANO network, which was created in 2011. It is anticipated that this network might expand in the future to include the other POGO trainees (subject to POGO resources).

## POGO OUTREACH

In its role as advocate for ocean observations, POGO engages in outreach activities of different kinds. The GEO Plenary provides an annual forum for outreach, as do events such as the annual Conferences of the Parties (COP) to the Framework Convention on Climate Change and the Kyoto Protocol. The GEO Plenaries, especially the occasional Ministerial-level ones, can often be used as a vehicle for media releases and a press conference. The media releases produced for Cape Town and Beijing Ministerial summits were well received by the press. Generally, POGO has limited resources (money and manpower) to do more than one or two such meetings in a year. Sometimes, it is expedient to join another delegation, as was done for the CoP in Copenhagen (Scripps delegation) and for GEO in Washington (Census of Marine Life delegation).

From time to time, much bigger opportunities arise for outreach. An excellent example is the EXPO in Yeosu, Korea (May-August 2012) where POGO was invited to make an exhibit in the Ocean and Coasts Best Practices Area Pavillion. This was a very worthwhile initiative for POGO, with over 1 million visitors attracted to the Pavilion where POGO was exhibiting, but it did impose a significant additional burden on the Secretariat for conceptual design, liaison with the EXPO directors, liaison with the Korean designers, arranging loan of exhibits from institutes,

legal discussions about contracts, and many other unanticipated issues. POGO's participation was entirely funded by the EXPO organisers, who provided in-kind support totalling 150K USD.

The POGO Secretariat coordinates the outreach activities of POGO in collaboration with the News and Information Group.

## SOME POGO SUCCESS STORIES

POGO's successes have been several and far-reaching. Here, we highlight just a few to indicate their significance and scope:

- In the São Paulo declaration of 2001 (see Appendix 3), POGO drew attention to the world imbalance between Northern and Southern Hemispheres in the capacity to observe the oceans, recommending immediate action to enhance such capacity in developing countries. The result was establishment by POGO of a capacity-building programme, including fellowships, participation in oceanographic expeditions, bursaries (University of Cape Town) and provision of travel support for participants in an Austral Summer Institute (Universidad de Concepción, Chile), and a Centre of Excellence in Ocean Observations (Bermuda Institute of Ocean Sciences, Bermuda). The suite of POGO training programmes is regarded with universal esteem. The fellowship programme is carried out in conjunction with POGO's sister organisation SCOR. A major part of the POGO training is supported by the Nippon Foundation, whose confidence POGO has been able to gain, maintain and increase through joint ventures successfully undertaken.
- In the São Paulo declaration, POGO also underlined the relative paucity of ocean observations in the Southern Hemisphere compared with the Northern Hemisphere. Although most of the world ocean lies in the Southern Hemisphere, it is relatively undersampled compared with the Northern hemisphere. POGO called for intensification of observing in the Southern Hemisphere. A direct response was made by POGO member JAMSTEC, which organised, at quite short notice, a circumnavigation of the Southern Hemisphere, the BEAGLE Expedition, using its ship *Mirai*, at cost estimated to be around \$35M. It was an excellent example of direct and significant action resulting from a public statement of POGO. More recently, selected Antarctic Expeditions of Alfred Wegener Institute have been labelled POGO Expeditions, another mark of the importance of the Declaration.
- Around the time POGO was being started, the Argo programme was also beginning. One of the first crusades of POGO was to throw the collective weight of its members behind the concept and the world expansion of Argo. Because the members of POGO are directors with the power to commit resources and influence decision makers, a resolution to accord full support to Argo had immediate effect, and the distribution of floats around the world ocean improved rapidly. This was an instance in which direct action by POGO had a profound effect on enhancing the ocean observing system.
- The GEO Secretariat was established during the early years of POGO. Oceans do not figure among the nine societal-benefit areas around which GEO is structured. From the beginning, it was seen that within GEO, especially at the GEO Plenaries, ocean-related issues were given little attention, even though much ocean-relevant activity was going on in the name of GEO. POGO has worked hard to change this situation. For example, senior delegations of POGO have visited the Director of GEO at the Secretariat in Geneva. With support from the Sloan Foundation, POGO has named ocean ambassadors (David Farmer, Howard Roe) to promote

ocean issues within GEO. The POGO Secretariat has lobbied actively at GEO plenaries for more prominence to ocean matters. Cumulatively, these efforts have helped POGO to place a major Oceans Task (The Blue Planet) on the new GEO WorkPlan. From now on, the ocean should be much more prominent in GEO.

- More recently, POGO Secretariat and POGO member institutions contributed significantly to OceanObs'09 in Venice in 2009, and POGO was able to lobby successfully to open up sustained ocean observations to a broader community, including chemical, biological and biogeochemical observations. POGO also contributed in an important manner to the post-Venice Framework Committee, and is now well-positioned to take a lead in the opportunities that follow from the recommendations of the Committee.
- POGO member institutions have been driving the establishment of OceanSites (coordinated, deep-ocean, multi-disciplinary time-series reference sites), which has made significant progress in recent years.

### **SOME OF POGO'S STRONG POINTS**

POGO has many significant advantages:

- a highly-competent, dedicated and hard-working Secretariat that enjoys excellent working relations with all relevant partner organisations;
- a reputation for effectiveness and innovation in capacity building, an arena in which many organisations speak but fewer act;
- a flagship training programme, the Centre of Excellence;
- a harmonious and collegial membership comprising senior oceanographers who control, by virtue of their positions as directors of institutes, much of the world's advanced capacity to make and use oceanographic observations;
- a world-wide coverage, within its stated scope, of leading oceanographic institutions, with no major omissions;
- the capacity, through Oceans United, to speak as the voice of the world oceanographic community;
- excellent working relations with two major, independent funding organisations (Nippon Foundation and Sloan Foundation)
- as demonstrated by the Argo example, and more recently with OceanSites, the Members have the capacity to act collectively to maximise effectiveness; and
- a forum in which directors of major oceanographic institutions can meet at least annually to discuss issues of mutual interest, to plan joint initiatives, to exchange views informally and, collectively, to steer the programme of ocean observing at the world scale.

These advantages surely provide a strong base from which to develop the POGO organisation into the future.

## **POGO IN THE FUTURE**

### **Oceans United**

Oceans United is an informal grouping of marine interests established under POGO leadership in 2005 to serve as a single voice for the oceans in fora such as GEO and elsewhere. Oceans United is now available as a vehicle to coordinate the development of interdisciplinary ocean observations and to highlight the importance of ocean observations in various international fora. The latest Oceans United initiative has been the creation of the "Oceans and Society: Blue Planet" Task, which held its kick-off Symposium in November 2012.

### **Opportunities and Future of POGO**

Governance of, and advocacy for, comprehensive systems to observe the oceans for the benefit of society is becoming a crowded field. Although POGO has been active in this field for more than ten years, its contributions are in danger of being overlooked because its goals overlap with those of other players, including players with greater resources than POGO. Nevertheless, opportunities for POGO exist. First, because POGO is a non-governmental organisation: it therefore has the possibility to take action rapidly, when required, and to take positions without having to cope with the bureaucratic inertia of more formal bodies. Second, because, after all, the POGO members control much of the world's advanced capacity to observe the oceans and to interpret the results. Third, because POGO as an organisation has earned a strong reputation in the marine community for well-thought-out views on marine issues, stated with moderation. Fourth, because POGO is admired for doing a lot with minimal resources, especially in the field of capacity building. Fifth, because POGO can take a leadership role, as it has done recently in GEO, through Oceans United on behalf of a much wider marine community.

As a first step into the future, it will be important for POGO to reconsider its Mission and to clarify its role in such a way that when particular objectives are set and then reached by POGO, it will be POGO that gets the credit and not some other body. After more than ten years of existence, it is time for POGO to rethink itself and to establish a new Vision for the future.

An efficient way to make progress would be to convene a subset of the Executive to discuss this and to draft the forward-looking texts.

## APPENDIX 1 History

For information, and for historical interest, some of the documents related to the founding of POGO are presented in this Appendix. During the evolution of POGO, some of the procedures mentioned therein have changed.

### Origin and Purpose of POGO

A group of directors of marine research institutions met in Paris in March 1999 to discuss ways in which they could work together more effectively in support of global oceanography. The result was a proposal to establish the Partnership for Observation of the Global Oceans (POGO).

### Participants

**Members:** Members shall be institutions or consortia which have demonstrated capability to undertake global or basin-scale in situ oceanographic observations and research or are capable and willing to make substantial contributions in other forms to the POGO objectives. Where multiple institutions in the same country are eligible for membership, they are encouraged to coordinate so that there are not more than three Members per country. The addition of new Members will be with the consensus of current Members. Members should seek to share with other POGO organizations the data and research results from their organizations, consistent with applicable policies and procedures, and to work toward the broadest possible dissemination of such data and research results.

**Affiliates:** Affiliated organizations may be national, international or nongovernmental organizations concerned with ocean science or operational oceanography, with which it is mutually beneficial that the Partnership maintains collaborative relationships. Organizations must be invited by the Partnership to become affiliates and such affiliation will be with the consensus of the Membership. Affiliates may participate fully in POGO meeting and other activities; however approval by Affiliates will not be required to establish consensus.

### Organization and Procedures

**Plenary Meetings:** POGO will convene at least once every year in plenary session. Each Member and Affiliate will designate a point-of-contact for coordination between meetings. Attendance at plenary meetings of the Partnership shall be open to all Members and Affiliated Organizations. Representatives should be at the level of directors of institutions or equivalent position with authority to commit the resources of the institution.

At each meeting of POGO, the time, place, and host for at least the next two meetings will be established.

**Chairman, Executive Committee, and Secretariat:** The chairmen of the past, upcoming, and subsequent POGO meetings will form the Executive Committee, providing guidance to the organization between meetings. The Directors of Scripps Institution of Oceanography, Woods Hole Oceanographic Institution, and Southampton Oceanography Centre shall serve as the interim POGO Executive Committee. As POGO advances, the interim members will be replaced on the Executive Committee by the designated incoming chairmen.

The Executive Director of the Partnership for Observation of the Global Oceans (POGO) is responsible for the day-to-day management and operation of the organization, under the direction of the POGO Executive Committee. The Executive Committee shall appoint the Executive Director.

Each POGO member may designate a representative to serve on the POGO secretariat; to be involved in overseeing the activities of the organization; and to guide the work of the Executive Director of POGO between plenary meetings. The secretariat group will consult as needed, via teleconferences, email, and other means.

**Funding:** Initial funding for the Executive Director position will be sought from external sources. After a start-up period, expected to be approximately three years, the Members shall bear the costs of maintaining the secretariat of the Partnership (estimated at \$150,000 per year total) on an equitable basis, taking into account the GNP of the home country and the budget of the institution or institutions represented.

The Executive Director will prepare and present a budget and cost-sharing plan for approval by Members. Members and Affiliates will bear their own costs for attending meetings and participating in activities of POGO. Members are invited to share the costs of other Partnership activities through voluntary contributions, which may be financial or in-kind (such as hosting meetings, organizing workshops, conducting pilot projects, financing publications, employing consultants, providing for their own costs of communications, and other such activities.) POGO members are also encouraged to pursue opportunities for securing funds from private sources on behalf of POGO, in consultation with the full POGO membership.

**Working Groups:** POGO may establish, as mutually agreed, working groups on a continuing basis or on an ad hoc basis, as appropriate, to investigate specific areas of interest, cooperation, and coordination and to report at subsequent plenary meetings. Representatives of each Member and Affiliate are invited to participate in any working groups. The continuation of working groups will be reviewed and approved at the annual plenary meetings. Wherever possible POGO will work through existing international mechanisms and will establish its own working groups only where either a) the topic is entirely contained within the POGO objectives and activities or b) no adequate forum presently exists.

A list of Members and Affiliates will be maintained and included as an Appendix to these Terms of Reference.

## **Adoption and Amendment**

These Terms of Reference were drafted at the exploratory meeting of POGO in Paris in March 1999. They were reviewed and modified at the first meeting of POGO in December 1999 in La Jolla, California and adopted by correspondence in January 2000.

## **POGO Charter**

The participants agree to proceed with the establishment of a partnership of institutions (and consortia thereof) which have demonstrated capability to undertake basin-scale oceanographic observations and research together with such associated members and affiliated entities as may subsequently be agreed. Representation will be at the level capable of committing their institutions:

The Partnership shall:

- Initiate key actions to enable effective coordination, integration, and implementation of international ocean observing strategies;
- Establish collective agreements among institutions to promote timely developments in ocean science;
- Promote coordinated views of ocean institutions concerning ocean science to governments, international bodies, and others;
- Facilitate linkages between oceanographic research and operational institutions in relation to their goals, plans, and programs;
- Exchange policy and technical information;
- Coordinate their education and outreach programs;
- Encourage responsiveness to user communities;
- Promote capacity building;
- Promote sharing of facilities and infrastructure;
- Encourage interdisciplinary use of observing infrastructure; and
- Support the partnership Secretariat.

## APPENDIX 2 List of Acronyms

AMT	Atlantic Meridional Transect
BEAGLE	Blue Earth Global Expedition
BIOS	Bermuda Institute of Ocean Sciences
ChloroGIN	Chlorophyll Globally Integrated Network
COP	Conference of the Parties
CSA	Canadian Space Agency
DevCoCast	GEONETCast applications for and by Developing Countries
EAMNet	Europe Africa Marine Network
EXPO	World Exposition
GCOS	Global Climate Observation System
GEO	Group on Earth Observations
GEO-BON	GEO Biodiversity Observation Network
GNP	Gross National Product
GOOS	Global Ocean Observing System
IQOE	International Quiet Ocean Experiment
IOC	Intergovernmental Oceanographic Commission
JAMSTEC	Japan Agency for Marine-Earth Science and Technology
JCOMM	Joint WMO-IOC Technical Commission on Oceanography and Marine Meteorology
NANO	NF-POGO Alumni Network for Oceans
NF	Nippon Foundation
NSF	National Science Foundation
PICO	Panel for Integrated Coastal Observations
PML	Plymouth Marine Laboratory
POGO	Partnership for Observation of the Global Oceans
SAFARI	Societal Applications in Fisheries Aquaculture using Remotely-Sensed Imagery
SCOR	Scientific Committee on Oceanic Research
UCT	University of Cape Town
WCRP	World Climate Research Programme