## PARTNERSHIPS FOR GOOS AND SUSTAINED OBSERVATION

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The oceans, which cover nearly three-quarters of the Earth's surface, play a vital role in many of the world's global environmental and societal challenges, such as climate change, biodiversity, public health and safety, and economic development. In order to understand the underlying natural processes and the interaction of human activity with these natural processes, among other things, we need to make comprehensive and consistent observations of the oceans. These observations must be planned and carried out in an integrated way with other activities involving the atmosphere, land surface, and ice-covered areas of the planet. The observations must be continuously strengthened by scientific research, improvement in analytical models, and close interaction with users in all areas to develop and deliver useful information products and services that contribute to better decision-making.

Through international organizations, including the WMO, IOC, and UNEP, as well as international scientific collaboration through ICSU and other forums such as the Committee on Earth Observation Satellites (CEOS) and the Integrated Global Observing Strategy (IGOS) Partnership, a number of programs and processes have been established which have provided the fundamentals of an integrated global observing strategy. The Global Ocean Observing System (GOOS) is the major international organizational concept for this effort. Development of the strategy is well advanced, and implementation has begun in some sectors and in some regions. The task is large and complex, and will require the commitment of even more participants than are currently engaged and even greater coordination and integration across diverse scientific disciplines, different economic sectors, established and newly developing technologies, and across national boundaries.

As a contribution to GOOS and related aspects of this effort, such as public outreach and education, oceanographic institutions around the world are forming the Partnership for Observation of the Global Oceans (POGO). POGO includes institutions performing ocean observations, as well as representatives of existing international and regional programs and organizations. The concept for a partnership was inspired in part by CEOS and discussions of the ocean component of an IGOS. POGO is intended to address the question of who speaks for the providers of *in situ* ocean observations. Ocean institution leaders wanted to have an informal forum, complementary to GOOS, to work out implementation and integration approaches, and to address other issues. There is a conscious desire not to create competing science processes, or new bureaucracy, or any additional approval/clearance processes. POGO sees its role, in part, as helping to ensure

that GOOS happens as fully and effectively as possible. POGO focuses on implementation and integration, making the capabilities and programs go farther, faster, and better.

POGO is a partnership of institutions performing oceanographic observations, operating ships, building sensors, collecting and processing data, conducting scientific research, and in some cases providing operational services to the ocean and Earth science communities. Many of these institutions are also involved in teaching and training. As the scale of these activities has become increasingly global, there is an increasing value in coordinating our programs at the detailed implementation level. Through joint planning and exchange of information, the community makes better use of the limited resources available from governments and other sources for ocean observations.

POGO will help focus attention on implementation issues such as may be identified at the OceanObs99 Conference. A specific item is included in the agenda for the first formal POGO meeting in December 1999 to discuss the outcome of OceanObs99 and its implications for POGO.

POGO will not operate major systems or capabilities directly. The projects and programs are carried out by the individual institutions or groups of institutions with funding that will come predominantly from the governments that support the participating institutions. There is a very special and unique role, however, that POGO can play in facilitating activities, and in working with private foundations. In order to achieve integration of an observing system across different disciplines and involving different technologies, funding is sometimes required for work that does not neatly fall within established programs and departmental responsibilities. Through POGO, foundations and others can offer support to those integrative activities that link different projects. Such funds can enable incremental changes that will make a dedicated system more multipurpose, or broaden the participation and benefits from ongoing efforts through outreach activities such as sponsored workshops. POGO has already received some start-up support from two U.S. foundations for the initial organizational activities. Discussion are underway with several other philanthropic institutions to contribute funding to establish and maintain a small POGO Secretariat for a few years until revenue from the dues of participating members and observers is sufficient to cover ongoing operations

By providing a flexible, innovative forum, POGO can help ensure that the observations that are made will contribute to the development of better public understanding and development of policies around the world. By working together, we can observe and better understand the oceans that make the Earth the blue planet.