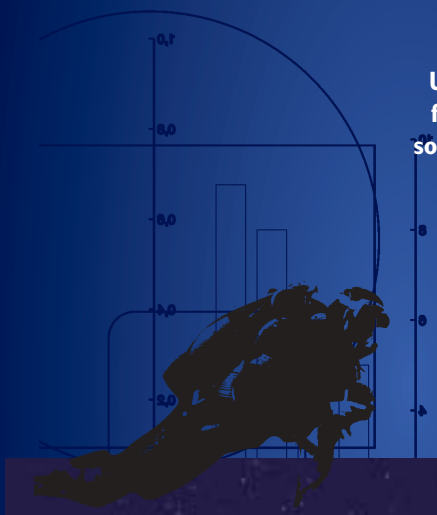
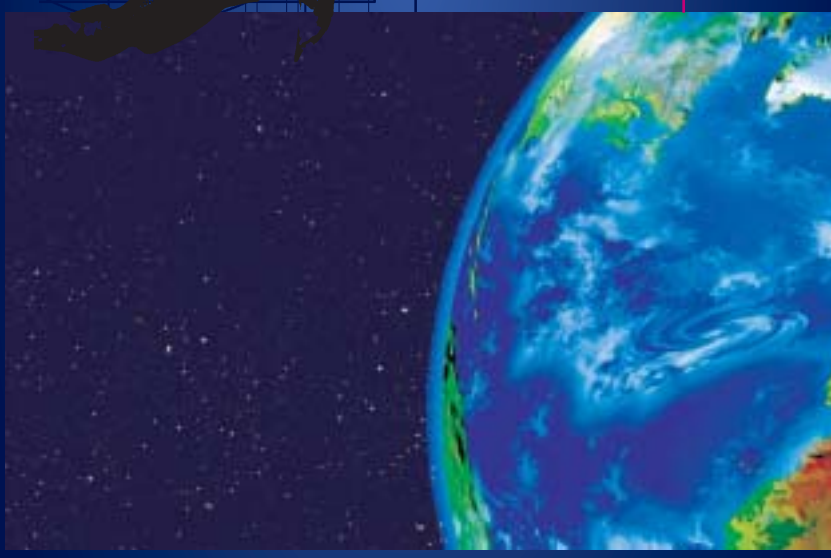
An invitation to join IOC/UNESCO

Business Partnerships for Global Observing Systems (BPOS)

Using observations for environmental, social and economic sustainability





UNESCO

In today's world, the private sector is the dominant engine of growth – the principal creator of value and managerial resources. If the private sector does not deliver economic growth and economic opportunity – equitably and sustainably – around the world, then peace will remain fragile and social justice a distant dream.

Kofi Annan
Secretary-General of
the United Nations

Building partnerships

The Intergovernmental Oceanographic Commission (IOC) is forming a partnership with the private sector for the purpose of obtaining information about the way in which your industries use and rely on information about the environment. In addition, we solicit your input as to the requirements for additional information that may allow us to better configure the Global Observing Systems so as to provide maximum benefit to humanity. We solicit sponsorship, through our trust fund, for the creation of roundtables, workshops and training material including guidance manuals and curricula for the better incorporation of weather, climate and ocean information into businesses. Raising the awareness of the kind of information that is available, the sources and reliability of the information and particularly the uses of the information in business operational decisions and strategic planning are primary goals of potential partnerships.

Business Partnerships for Global Observing Systems (BPOS)

Background

There are a number of global observing systems coordinated by the IOC and the World Meteorological Organisation (WMO) which are deployed for monitoring climate (the Global Climate Observing System, GCOS), ocean conditions (the Global Ocean Observing System, GOOS), and the weather (World Weather Watch, WWW).

These are in turn, in the process of being integrated into a suite of observing systems that will constitute a global network providing greatly improved spatial resolution of environmental conditions. As a result of the improved monitoring and data collection, the accuracy of forecasting environmental conditions will be substantially improved.

Most business and economic forecasting solutions increasingly need input from multiple observing systems. This can now be achieved and will contribute to sustainable development and improved economic and living conditions.

Promoting and coordinating the international observing system effort

"The purpose of the Commission is to promote international cooperation and to coordinate programmes in research, services and capacity-building, in order to learn more about the nature and resources of the ocean and coastal areas and to apply that knowledge for the improvement of management, sustainable development, the protection of the marine environment, and the decision-making process of its Member States".

(Article 2(1), IOC Statutes)

Improved Marine Observations for the IOC and WMO lead to better

Air quality

forecasting and management

Climate

prediction

Oceans

conditions forecasting

Weather

prediction and management

Weather, Climate and Ocean Forecasts are used in operations and strategic planning of the following sectors:

Energy

Uninterrupted power generation

Health

Forecast spread of disease

Tourism/ Leisure

Peak demand forecasting

Transportation

Safe, efficient routing

Finance

Risk ratings for investment

Uses for environmental information products

In Energy Industry Operations

- Energy load forecasting, balancing and pricing
- Fuel mix determination and procurement decisions
- Facility energy management
- Wind farm siting

In the Health Industry

- Health forecasts
- Spread of toxins and pollutants both airborne and waterborne
- Famine, flood, and drought climate forecasts
- Health facility scheduling and caseload planning

In the Transportation Industry

- Ship route optimisation and planning
- Aviation routing and planning
- Intermodal transportation optimisation
- Trucking industry logistics

In the Tourism and Leisure Industry

- Infrastructure planning for new construction
- Training courses for staff development programmes
- Seasonal planning for resort load capacity
- Hazard and risk management preparation
- Cruise line and recreational boating route planning

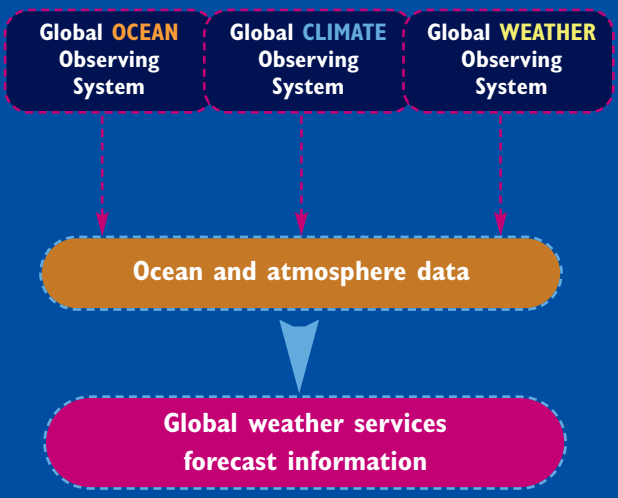
In the Finance Industry

- Risk rating for compliance
- Weather derivatives for trading, futures and hedging
- Environmental evaluation for asset manager investment decisions
- Information for insurance policy premium and deductible determination

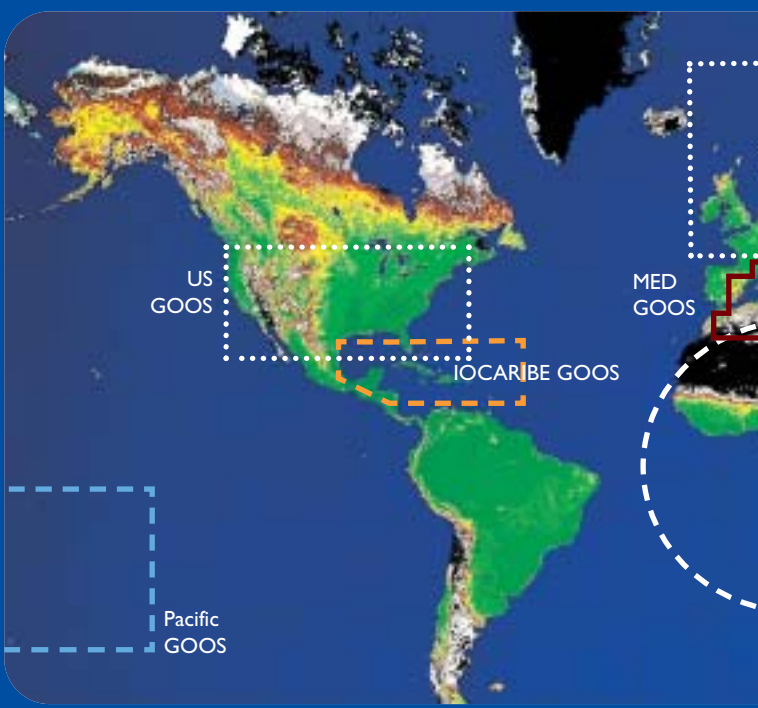
Observing the global ocean, weather and climate for sustainability

While the IOC together with the WMO coordinate and standardise the global observation programmes such as GOOS, WWW and GCOS, to insure that the highest quality information is provided to the governments and the public, we also have a sustainability mission that we value – that of aiding in the use of the information for the overall benefit of societies. Because sustainability consists of social, economic as well as environmental benefits, maximising the use of the information and forecasts for the economies and communities as well as the environment of nations is also a primary objective. We already have developed a strong training component to our mission, and train scientists to use new techniques and methods that evolve under the sponsorship of our programmes. We also want to foster the incorporation of this information into the business communities to aid economic growth of nations. To this end, we are seeking partnerships with the businesses and economic associations of member Nations to expand the capacity-building mission.

With the WMO and UNEP, IOC co-sponsors ocean and atmospheric observation systems for weather, climate and ocean forecasting



GOOS Regional Programmes



The Global Ocean Observing System

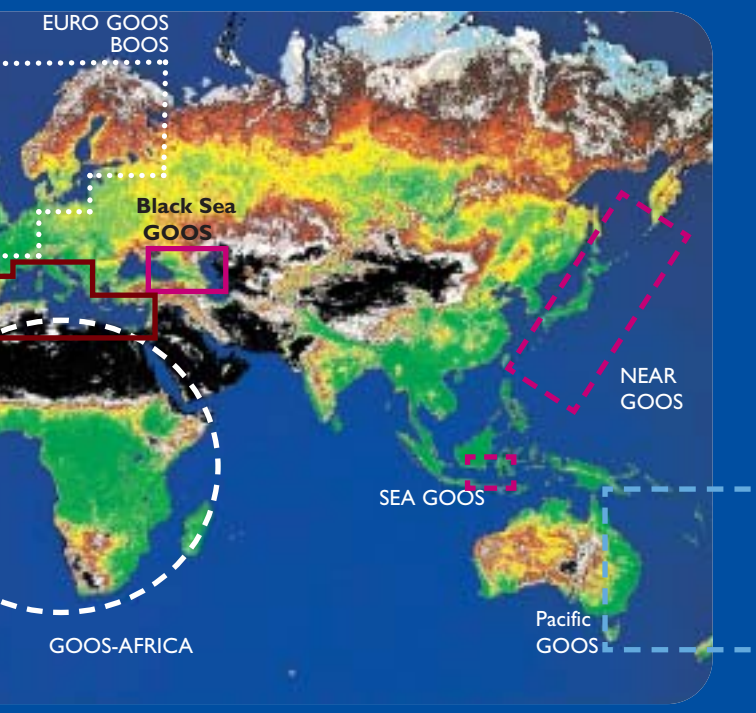
GOOS

GOOS

is envisioned as a permanent global system for observations, modelling and analysis of marine and ocean variables to support operational ocean services worldwide

GOOS

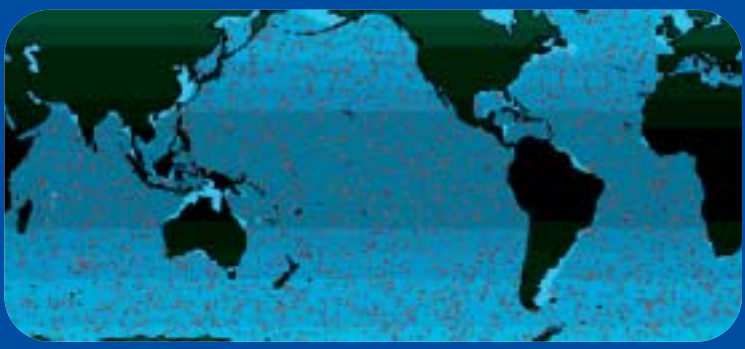
provides the ocean surface component to the climate and weather forecasting; continuous forecasts of the future conditions of the sea for as far ahead as possible; and the basis for forecasts for climate change



System Components of the Global Ocean Observing System

Floats

>> A global array of 3,000 profiling Argo floats to observe the temperature and salinity of the upper layers of the global ocean.



>> Thirteen nations, plus the European Commission, have funded over 900 floats since the inception of the programme in 1999, and proposed plans call for funding of more than 700 additional floats in 2002.

Buoys

>> Buoys are deployed on a regional basis over the globe. This deployment in the Pacific helps predict the El Niño events.

Observations from the TAO/TRITON moorings are transmitted to shore in real time via NOAA's polar orbiting satellites

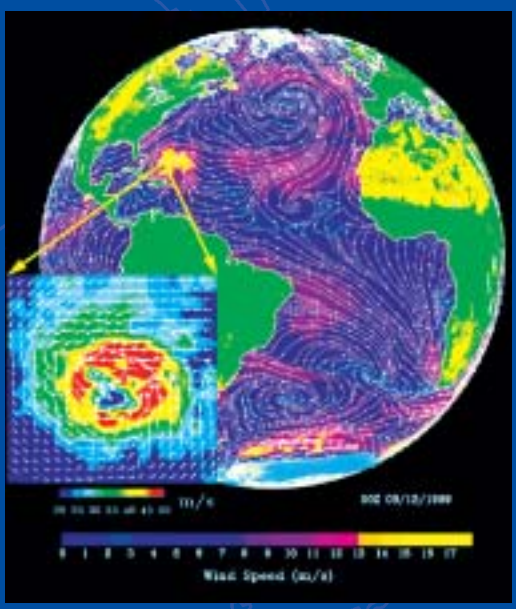
Ships

>> The Ship of Opportunity Programme (SOOP) is also an integral part of the GOOS. Ships of Opportunity are mostly merchant vessels that obtain data on subsurface temperature (and occasionally salinity) along shipping lanes.

SOOP lines in 2000, indicating kinds of lines and degrees of sampling achieved

Satellites

Surface winds in the Atlantic Ocean as viewed by the QuikSCAT scatterometer, with the detailed structure of Hurricane Floyd (August 1999)



The Challenge

Making environmental forecasts into business forecasts

Decisions Influenced by Enhanced Environmental Information:

- Better demand forecasts
- Better operational and management decisions
- Better resource allocation
- Better strategic planning
- Better compliance reporting strategies
- Better infrastructure planning
- Better risk management plans
- Better governance
- Better reputation

BPOS 'Industry Trials' Programme

On the basis of industry and government needs, BPOS is developing partnership teams working together to integrate observing system information into business forecast models and decision aids. BPOS plans to implement five projects over the next three years which will demonstrate the value of improved environmental forecasts to the efficiency, reliability, security, cost effectiveness and safety of operations in the business community.

Companies are invited to host an 'Industry Trial' in their organisation. These will be conducted in the construction, energy, tourism, transport and financial services sectors.

The outcome of the projects will be used to optimise the design of the observing systems.

How can IOC assist Member State Businesses?

>> Raise the awareness of availability of new weather, climate and ocean information to aid business decisions

>> Foster the transformation of environmental information into business practice through product development and business re-engineering

>> Factor business needs into the design of the observing system

>> Create training workshops and guidance manuals for the optimal use of environmental information in business plans

What can
a partnership do?

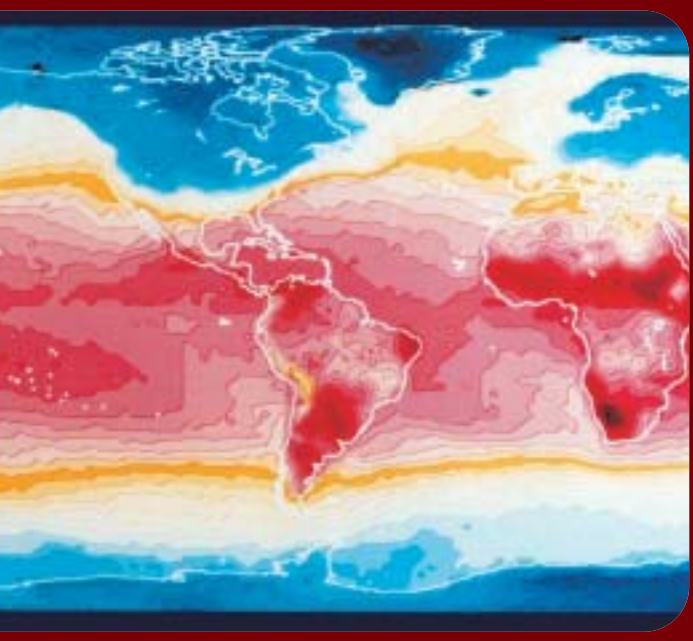
Enhance the flow of environmental information into industry operational decision aids and strategic plans

>> Providing Private Sector Opportunities for Participation in the Design, Deployment and Operation of Global Observing Systems

>> Providing Access to Experts to evaluate your business needs for information and Roadmap Solutions

>> Providing Access to Information through a Resource Library on Applications of Information to Business Operations and Planning

>> Providing Training Sessions for Sector Specific Interests- i.e. oil and gas, water, transportation, etc.



Be a part of the BPOS Subscriber Network

BPOS provides an opportunity to subscribe at 4 levels:

Charter Member

(governments, private sector, public sector)

$50,000 annual fee

- Charter members will serve as the Board of Directors for BPOS

Principal Member

(industry, industry groups and associations)

$25,000 annual fee

- Principal members will serve as industry advisors to the Director

Associate

$15,000 annual fee

- Associate members will gain access to BPOS through workshops, training materials, and seminar series

Affiliate

$5,000 annual fee or sliding scale

- Affiliate members will receive newsletters, website information and participate in seminar series

YOUR CONTRIBUTION FOR 2003 WILL BE USED TO SUPPORT:

- The 2003 "Industry Applications of Observing Systems Products" Handbook
- The 2003 training sessions and workshops:
  - Spring: Using Observing Systems Products in your Energy Business
  - Autumn: Using Observing Systems Products in your Tourism Business
- The BPOS website
- The BPOS Newsletter
- Seminar Series
  An Introduction to Observing Systems Products

“...we can benefit from the partners’ valuable advice in making the decisions for the future.”

Raising awareness

We believe that this is different from other partnerships in that it will have tangible training products and other applications, jointly developed to be incorporated into the re-engineered business management and strategic plans of the partners. The partnership will help the IOC and other UN organisations, to develop a much needed link with industry and the private sector, so we can benefit from the partners' valuable advice in making the decisions for the future. It is hoped that we can start an immediate dialogue to learn from each other.

Patricio Bernal
Assistant Director-General for UNESCO
Executive Secretary, IOC

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