Vision and Expected Outcomes

The U.S. Integrated Ocean Observing System (IOOS) is developing as a "user-driven", integrated system of observations and data telemetry, data management and communications (DMAC), and data analysis and modeling that routinely, reliably, and continuously provides data and information required to address seven societal goals:

Societal Goals

(1) Improve predictions of climate change and weather and their effects on coastal communities and the nation;
(2) Improve the safety and efficiency of maritime operations;
(3) More effectively mitigate the effects of natural hazards;
(4) Improve national and homeland security;
(5) Reduce public health risks;
(6) More effectively protect and restore healthy coastal ecosystems; and
(7) Enable the sustained use of ocean and coastal resources.

Principles

(from IOOS Development Plan … 2006)

To achieve this vision, development of the IOOS must adhere to the following principles:

(1) Enable user groups from both private and public sectors to achieve their missions and goals more effectively;

(2) Develop the system with guidance, from both data providers and users from public and private sectors, that is based on sound science and encompasses a continuum of research to operational activities;

(3) Judiciously integrate existing assets that meet requirements set forth in Part I, section 2.4 and address the seven societal goals and regional priorities;

Principles

(from IOOS Development Plan … 2006)

(4) Improve the IOOS by enhancing and supplementing the initial system selectively over time;

(5) Routinely, reliably, and continuously serve data and information for multiple applications that provide social and economic benefits both to the nation and to a broad spectrum of users from public and private sectors that use, depend on, manage, or study marine and estuarine environments and the natural resources within them;

(6) Openly and fully share data and information produced at the public expense in a timely manner, at no more than the cost of dissemination;

Principles

(from IOOS Development Plan … 2006)

(7) Programs and activities must meet federally approved standards and protocols for observations, data telemetry, and DMAC in order to ensure data quality and interoperability;

(8) Establish procedures to ensure reliable and sustained data streams, to routinely evaluate the performance of the IOOS and assess the value of the information produced, and to improve operational elements of the system as new capabilities become available and user requirements evolve;

(9) Improve the capacity of all states and regions to contribute to and benefit from the IOOS through training and infrastructure development nationwide;and

(10) Demonstrate that observing systems, or elements thereof, that are incorporated into the operational system either benefit from being a part of an integrated system or contribute to improving the integrated system in terms of the delivery of new or improved products that serve the needs of user groups.

Givens

- A lot of planning has been conducted over 20 years
- Some execution has taken place
  - Regional investments and demonstrations of effectiveness are increasing
- There is a growing cadre of devoted IOOSians
  - Regional organization is strong and getting stronger
- Federal agency ‘buy-in’ has evolved (with the 4 Ns consistently leading)
  - Navy was a strong lead for years (Ocean.US)
  - NOAA grew into the leadership role
  - NSF’s OOI has developed in parallel
  - NASA has provided sustained leadership
  - Other agencies have maintained a sometimes strong continued presence (USACE, MMS/BOEM, USGS, EPA, USCG, JCS)
- Congress has blessed the development of a program of record …
- By some measures we are setting the tone for international development
- By some measures we have a lot of international catchup to do

Unknowns

- Best operating model
- Political capital of IOOS
- Financial commitments across the board
- Optimal governance structure
- Infrastructure capitalization priorities
- Risk tolerance of partners in IOOS
- Other …

Questions we want to address *(audience participation)*

- What is the best business model for IOOS?
- …

We (this FAC) do want to …

- Add value to the body of knowledge regarding IOOS
- Support 'vetted plans' (e.g. Ocean Research Priorities Plan, NOP Implementation Plan, **esp. Actions 2, 3, 4 and 7 under Obs, Mapping and Infrastructure**)
- Ensure a sustainable operational concept for IOOS
- Increase awareness of IOOS and its value
- …

We do NOT want to …

- Oversee program management
- Duplicate effort of other bodies (ORAP, IOOC, NORLC, NOC, …)
- …

Vision and Expected Outcomes

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Is it time for a new vision for IOOS?

Vision and Expected Outcomes

We envision an enterprise of ocean observations that builds on extraordinary successes to dates, and merges with expected developments. Ultimately, we foresee a capability utilizing and delivering products from ocean observations, that is fully integrated into the culture of our society, and is considered a non-negotiable component of our ability to enhance the lives, livelihoods and quality of life of future generations.

- The ocean observation services that are provided will be "full spectrum":
- The ocean observing system will be a public-private enterprise
- The ocean observing enterprise will be expressed through a new system of governance
- The ocean observing system will promote the establishment of new models for workforce development