Industry IOOS Meeting
General Issues of the Private Sector
Questionnaire Results

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Industry IOOS Meeting Presentation
5 March, 2004
Introduction

Review of questions & answers

Review of modes of private sector involvement

Priorities for discussion

The results are based on the answers from 27 returned forms

It has been necessary to précis & reword responses to fit a presentation. If the meaning or emphasis has been in any way changed it was unintentional

Please don’t shoot the messenger!!!
What opportunities does the IOOS offer the private sector?

The commercial opportunities:

- The enhancement &/or development of commercial value added data products & tools
- Data to support model development & validation
- Equipment & instrumentation sales
- Management of systems including deployment & maintenance support
- Data processing, management, dissemination & archiving
- Software development & sales
- Engineering (design & fabrication)
- Communication systems
- The potential for business growth, increased sales volumes & long term market stability

Market entry opportunities for organizations not previously involved
What opportunities does the IOOS offer the private sector?

The industry opportunities:

- Data to support business planning
- Increased operational efficiency
- More effective design of offshore platforms, pipelines & risers.
- Data to support crisis management, response planning & compliance with federal regulations
- Partnering with academic & government organizations for research & development
- Additional research, eg larval movement (shrimp), identification of hypoxic areas & toxic algae blooms (Fisheries)

IOOS opportunities:

- Providing data
- Providing data products
What opportunities does the IOOS offer the private sector?

The research opportunities:

• Data to support research activities
• Data to support model development & validation
• The development of new sensor technology
• Partnering with industry for research & development
• Enhanced knowledge of the marine environment & climate change
• Additional data for use in interpreting local in-house data

Idealistic opportunities:

• Integration of all observational & analytical products that spread across industry, academia, & government
• A venue for organization's to work together, allowing each to achieve their objectives, in a way that is complementary & to both parties benefit.
How to realise private sector involvement:

- Open tenders for all stages of IOOS implementation
- Provide a clear definition of un-enhanced data products provided by IOOS & value-added data products provided by the private sector
- IOOS to provide useful data to support industry
- Ensure that IOOS does not provide services that impact the existing service areas or business opportunities for the private sector
- IOOS to recognise the work that has been done by the private sector in developing expertise, services & customers
- IOOS to seek to use the expertise of the oceanographers in the private sector on a fair & equitable basis
- More active industry participation in regional associations & national committees, via NOAA's Alliance for Coastal Technologies
- Promote research, but avoid government funded facilities being used to create competitors to commercial ventures
- Encourage researchers with ideas to develop & pursue them using private funds

How might such opportunities be realised?
Ideas associated with implementation of IOOS:

• A focused data collection strategy that achieves & maintains the level of recommended support
• High quality observations/data that are delivered on schedule, are easily & freely accessed, are in a format suited for the individual user & are continued into the foreseeable future
• Planning & standardization of observational & analytical products
• The correlation of IOOS data with occurrences of operational incidents to enhance understanding & future operational efficiency
• Joint industry studies. These are often an effective mechanism allowing the burden & involvement to be spread evenly
What are the limitations to private sector involvement?

Money/Funding
- Government funding
- Revenues from the sale of enhanced data products
- Interest only in profit-making ventures
- Fisheries economic ability to buy into/support IOOS
- Costs associated may be too great for SME’s
- Gaining access to private sector scientists requires payment
- Potential economic losses & competition
- Incentive to develop products/services that may be provided by government

Knowledge/Awareness/Understanding
- Insufficient business knowledge of benefits & rewards of IOOS
- Lack of awareness of the regional opportunities at an early stage
- Lack of awareness of private sector scientific capabilities, skills, expertise, assets & influence by public sector
- Lack of understanding of private sector interests
- Private sector currently has no real place at the table in Ocean.US strategy for implementing IOOS
What are the limitations to private sector involvement?

Data
• Depends on the type of data are being made available
• Public availability, data ownership issues & confidentiality
• Private sector reliance on government funded sensors for data, concerned on data access & competition from government
• Private sector use of their own sensors for data, concerned to protect their data.

Implementation
• A clear, focussed collection strategy & resources to achieve it
• Timely data availability for private sector use
• Implementation time for different industries, eg for the oil & gas industry the next five years is important for the GoM
• Extensive R & D measures required for new products & services
• Oceanography is not a core activity many of industries, as such involvement is & will be limited to industry's business needs
• Trust, vision, honesty & co-operation
How might they be decreased at this planning stage?

Money/Funding
• Direct grant money into private industry to participate as contractors
• Open procurement for all aspects (hardware, software & services)

Knowledge/Awareness/Understanding
• Enhance awareness of private sector skills, capabilities & assets
• Explanation of the benefits of IOOS to the private sector
• Enhanced dissemination of IOOS plans, activities & views
• Private sector representative on the Ocean.US executive
• Involvement in governance & planning at national & regional levels
• Contact with key players to establish opportunities & needs
• Better communication!
• Recognize private sector scientific skills & assets as well as abilities in product development & market access
How might they be decreased at this planning stage?

Data
- Share data through license agreements that limit use by a licensee
- Quantify & price data that commercial users wish to purchase
- Develop a model outlining industry participation for private sector data providers, including finances

Implementation
- Utilization & allocation of available public & private sector resources
- Pilot projects undertaken to explore the "boundaries"
- Flexible implementation to explore private sector options
- Commercial-friendly implementation to meet private sector needs
- Standardization of the hardware, software & data management
- Private sector redirection or refocusing of the services it provides, as IOOS implementation will definitely require a new paradigm for service providers
- A reward system/program for participants who contribute via publications & journals
- Look for win-win opportunities
What is needed to foster the vigorous development of the coastal & marine environmental industry?

Money/Funding
- Long-term financial commitment & interest by the Federal & State governments
- More federal & state money for industry by making subcontracts available to commercial entities on a local basis, not just through long-term program providers

Knowledge/Awareness/Understanding
- Scientific objectives to address with IOOS
- Educate clients that commercial data products can be cost effective
- Educate the local government & private sector on what is needed for IOOS & the potential benefits
- Continuous public/private/academic co-operation & communication to assess & address impacts & breakdown longstanding opinions
- Greater awareness of existing initiatives & how they can contribute to IOOS
- Improved visibility of US Government & Ocean.US initiatives
- Improved access to planning & implementation information
What is needed to foster the vigorous development of the coastal & marine environmental industry?

Data
• Free access to the data for researchers & the general public
• Access to data products that can form basis for decisions & actions
• Reduce the products/services that IOOS develops for industry
• Share data & information

Implementation
• A consortium of government agencies & industry consumers
• A broader focus & understanding of the market for IOOS products
• More private sector involvement in all aspects of IOOS
• Delineation of the needs of all stakeholders associated with IOOS
• More transparency within the IOOS planning process
• Better dissemination of IOOS information
• Open tender procedures for all aspects of IOOS
• Standardization, co-operation & integration of all IOOS components
• Better public relations to grab the nation's attention
• Public focus on regulatory needs & environmental safeguards
• Private focus on specific products/services for specific industries
• Common vision re priorities that intersect eg profits vs IOOS themes
### Modes of private sector involvement

<table>
<thead>
<tr>
<th>Private Sector Interests and Roles in IOOS</th>
<th>AVERAGE</th>
<th>STD DEV</th>
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<tbody>
<tr>
<td>in use of data and data products?</td>
<td>4.2</td>
<td>1.2</td>
</tr>
<tr>
<td>in planning?</td>
<td>4.1</td>
<td>1.1</td>
</tr>
<tr>
<td>in operating hardware and software?</td>
<td>3.9</td>
<td>1.3</td>
</tr>
<tr>
<td>in evaluating test and operational products?</td>
<td>3.9</td>
<td>1.3</td>
</tr>
<tr>
<td>in running/maintaining the operational system?</td>
<td>3.7</td>
<td>1.5</td>
</tr>
<tr>
<td>as research partners?</td>
<td>3.7</td>
<td>1.3</td>
</tr>
<tr>
<td>as active advocates?</td>
<td>3.7</td>
<td>1.2</td>
</tr>
<tr>
<td>in testing hardware and software?</td>
<td>3.5</td>
<td>1.3</td>
</tr>
<tr>
<td>in supplying hardware and software?</td>
<td>3.4</td>
<td>1.5</td>
</tr>
<tr>
<td>in program management?</td>
<td>3.3</td>
<td>1.4</td>
</tr>
<tr>
<td>in provision of private data for use in the IOOS?</td>
<td>3.3</td>
<td>1.7</td>
</tr>
<tr>
<td>in provision/sale of goods &amp; services used in the private sector to various user groups?</td>
<td>3.3</td>
<td>1.7</td>
</tr>
<tr>
<td>in outreach?</td>
<td>3.1</td>
<td>1.3</td>
</tr>
<tr>
<td>in hiring graduate students and graduates?</td>
<td>3.1</td>
<td>1.5</td>
</tr>
<tr>
<td>in governance?</td>
<td>3.0</td>
<td>1.5</td>
</tr>
</tbody>
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Note scores were based on 27 returns

Average interest is the median value or greater for all aspects of IOOS
Priorities for discussion

The private sector is broad and has three main wishes regarding IOOS:
• Involvement in IOOS planning, implementation and operation
• Access to and use of IOOS data to derive & provide data products for industry
• Access to and use of assessed IOOS data and data products to enhance business efficiency and planning

Note potential for conflict within the private sector regarding two points

Discussion priorities focus potential public/private sector relationships
• Money/Funding
• Knowledge/Awareness/Understanding
• Data
• Implementation
Priorities for discussion

Money/Funding
- IOOS needs long-term funding commitment by government
- Open procurement procedures for all aspects of IOOS
- Make subcontracts available to commercial entities on a local basis, not just through long-term program providers

Knowledge/Awareness/Understanding/Misconceptions

Problems
- Lack if public sector awareness of private sector interests in IOOS as well as private sector capabilities & resources
- Lack of private sector knowledge of IOOS & its benefits, awareness of opportunities and involvement in IOOS strategy and planning

Solutions
- Broader involvement, enhanced communication & improved information dissemination between all the key IOOS stakeholders at all stages of strategy, planning, implementation and operation
Priorities for discussion

Data

Problems
• What data will be free by IOOS?
• What data products will be derived by IOOS?
• What data products will be left for the private sector to derive?
• How private sector data be included?

Solutions
• Provide clear definition of base data products provided by IOOS & value-added data products provided by the private sector
• Develop a model/license agreements outlining industry participation for private sector data providers that limit use by a licensee
Priorities for discussion

Implementation

Problems
• What are the needs & areas of focus of all IOOS stakeholders?
• Time for IOOS implementation and influence on different industries
• Delivery of data on schedule, easily & freely accessed by all users
• Fair allocation & utilization of available public & private resources
• How to promote research without creating competitors?

Solutions
• Balanced national and regional groups of public and private sector stakeholders to ensure that the needs, timescales and areas of focus for the majority are considered. Ocean.US?
• A focused data collection strategy that achieves & maintains the level of recommended support
• Pilot public/private JIP’s with flexible implementation undertaken to explore “capabilities” & "boundaries”
• Standardization of IOOS components where appropriate while maintaining a level playing field for all who want involvement
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Thank You
Open for discussion