US IOOS®

Zdenka Willis
Director, US IOOS

SECOORA annual meeting

IOOS | EYES ON THE OCEAN™

U.S IOOS By The Numbers

17
Federal Partners
Providing a Federal Backbone for IOOS

11
Regional Associations
Observing Assets and Data Feeds

1
Alliance for Coastal Technologies
A partnership supporting sensor evaluation and verification

1
Coastal Ocean Modeling Testbed
COMT - a conduit for research models to transition to operations

1
Marine Biodiversity Observing Network
MBON integrates marine biodiversity and ecosystem data

697
National Platforms
Buoys, Water level guages, Coastal and Estuary stations at the National level

254
Regional Platforms
Buoys, Water level guages, Coastal and Estuary stations at the Regional level

9
Ocean Technology Transition Projects
OTT supports transition of marine sensors to operations

15
Animal Telemetry Projects
Providing data on animal responses to the ocean and environment

140
HF-Radar Installations
High-Frequency Radar measures speed & direction of ocean currents

41,820
Glider Days
1 Glider in the water collecting data for 1 day

8
QARTOD Manuals
Realtime Oceanographic Quality Assurance

>15,000
Datasets
Oceanographic Datasets available in the IOOS Catalog

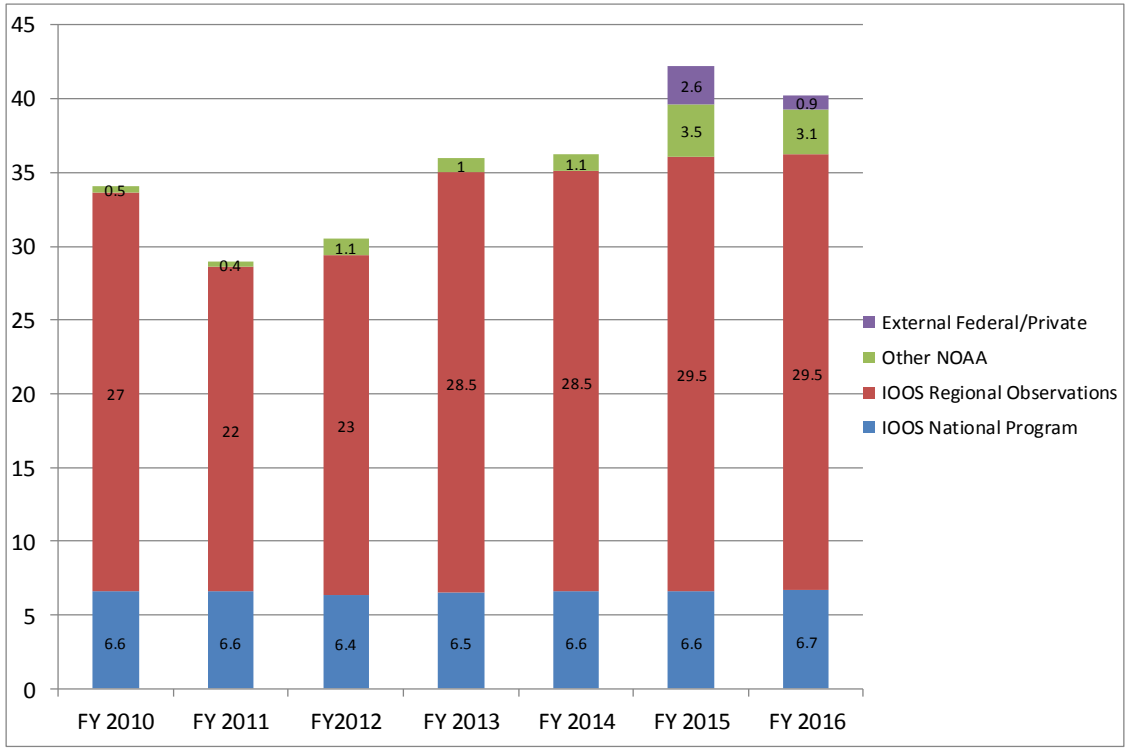
42
Servers
Top-level domains hosting data access

1
IOOS
Integrated Ocean Observing System

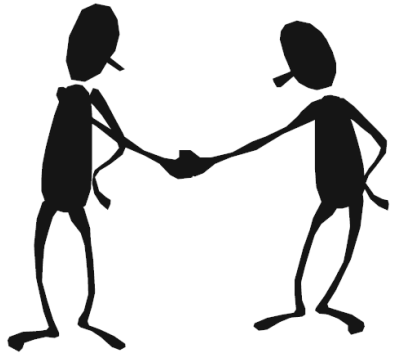
Programmatic - 2016

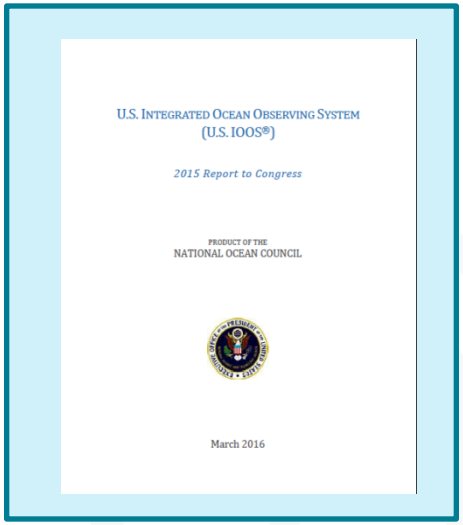
Budget History FY10-FY16

$ in M



5 year Awards

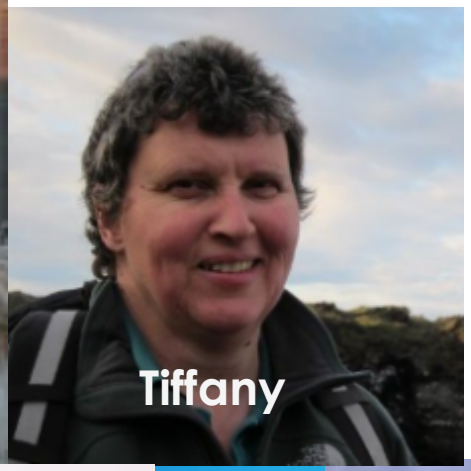




Administration Transition

IOOS | EYES ON THE OCEAN™

MAY 2016 Staffing and Leadership Update

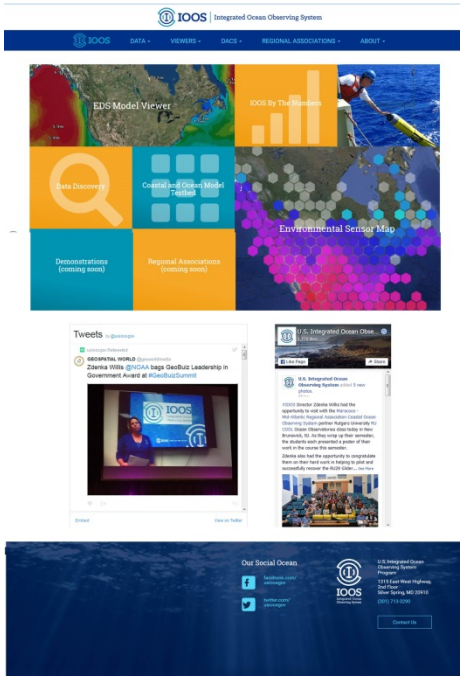


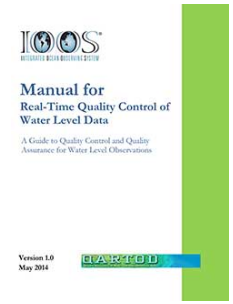
DMAC – Keep on Advancing

ioos.us Project

Outcomes:

- Single landing page/entry point for DMAC access.
- Full Capacity in June
- **New Glider DAC**





New/Updated Manuals 2015

Dissolved Nutrients Observations

Ocean Optics Data

In-situ Temp. and Salinity Data

In-Situ Current Observations

In-Situ Surface Wave Data

Dissolved Oxygen Observations

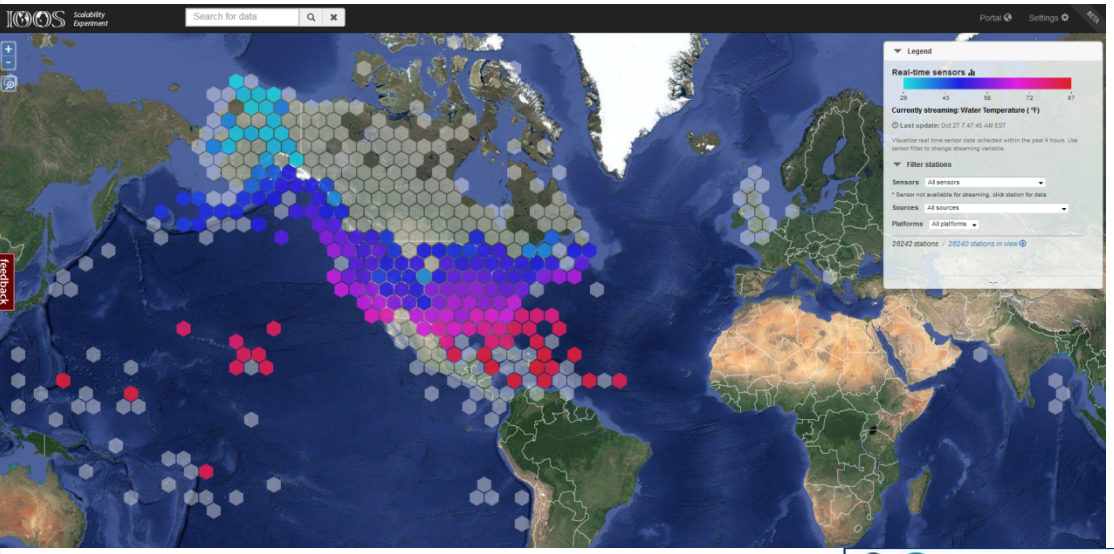
New/Updated Manuals - 2016

Glider

HFR Currents

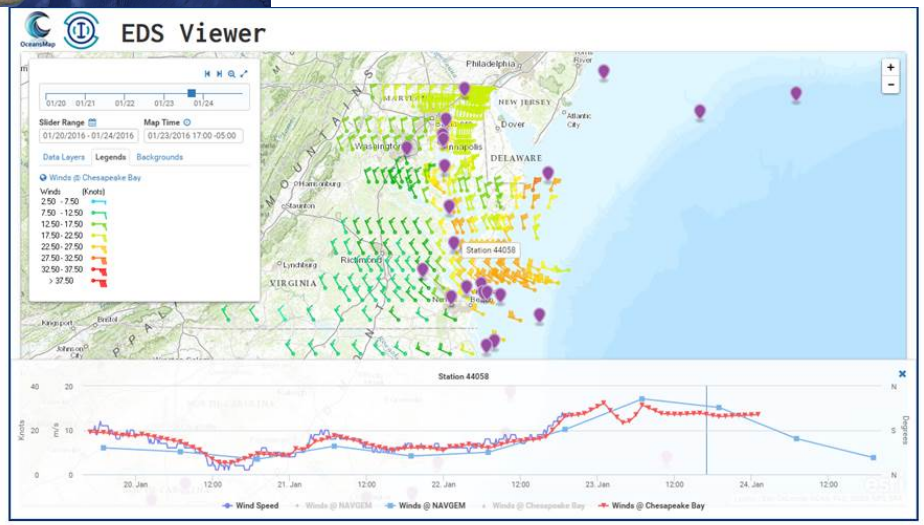
Water Level

DMAC – Environmental Sensors & Model Access



- 2 week cache of ALL known, available real-time observations
- AOOS & Axiom
- Release June 2016

- THREDDS, WMS access to all model output
- ASA
- Released 16 May 2016



Blizzard 2016: CBOFS winds at 1/23 17:00 EST. Time-series of model output and buoy observations (1/20 - 1/23)

IOOS | EYES ON THE OCEAN

HF Radar FY16 Outlook

- Refinement of O&M costs
- **At your local WFO**
- Significant Wave Height
- Tsunami detection – partner with NWS
- Global HF Radar – GEO/GOOS
- BOEM: CODAR understand offshore wind turbines impact to HFR
- Archiving continues every month

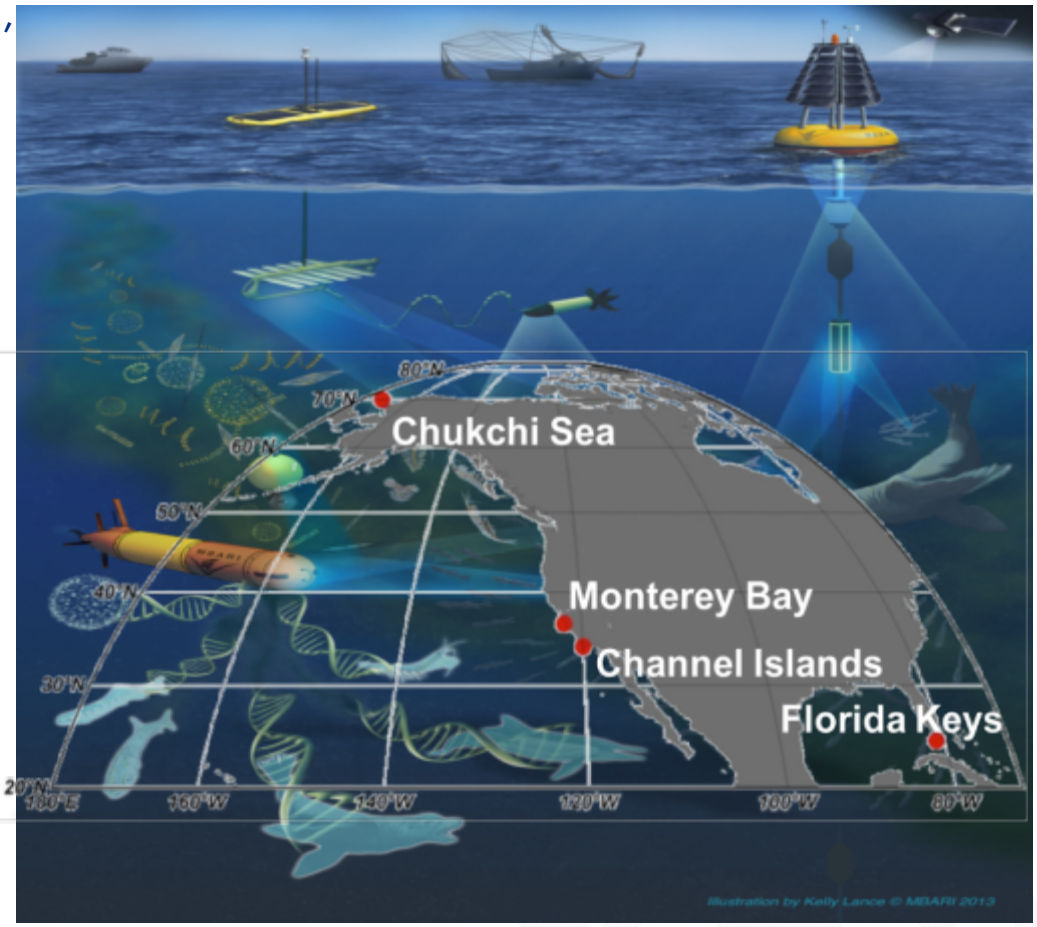
U.S. Marine Biodiversity Observation Network

Interagency support:

- $15M: NASA, NOAA (IOOS & OER), BOEM – FY14-18
- In-kind from USGS on DMAC, ecological mapping units
- MarineGEO/Tennenbaum is an MBON partner

MBON goals:

- Increase efficiencies and fill gaps in biodiversity monitoring
- Integrate biological and environmental observations
- Integrate remote sensing with in situ
- Develop methods for automated sampling of marine biodiversity
- Lead global development of marine biodiversity indicators and variables
- Develop a U.S. MBON
- Advance global MBON



Credit: MBARI

IOOS | EYES ON THE OCEAN

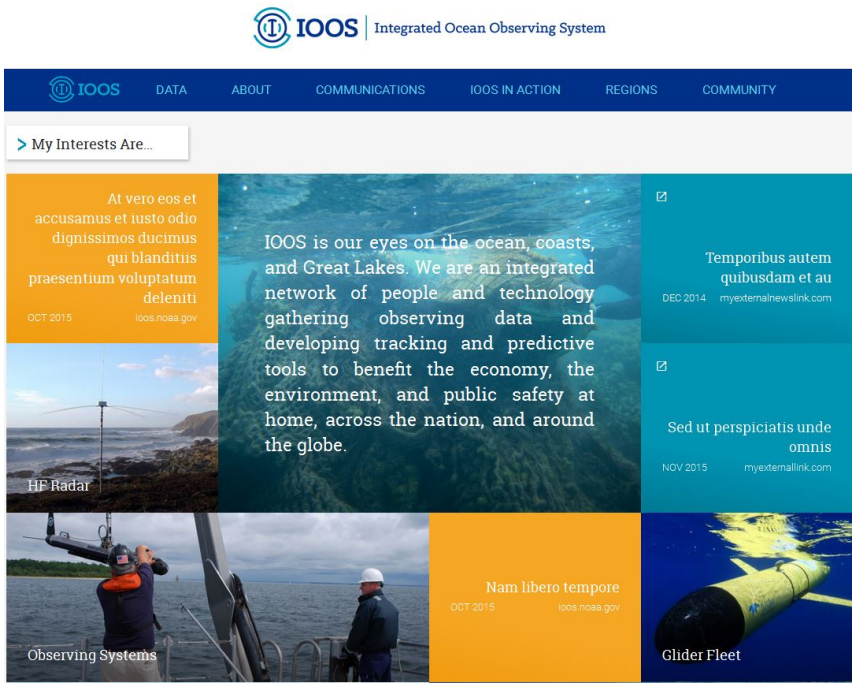
IOOS New Logo

- **Collaborative effort:** IOOS Office, Interagency Ocean Observation Committee (IOOC), Regional Associations,
- **Streamlined, integrated design** reflects IOOS's renewed focus on the user experience.
- Light and dark blue stand for the **coasts and deep water**.
- Integration represents **a signal moving out** in stages—local-national-global.
- There's **more to discover** every time you see it—just like there is with IOOS.

Communicating

New Web Site

- Dynamic, Interactive; Streamlined
  - May 2016



Getting our Story Out

New outlets:

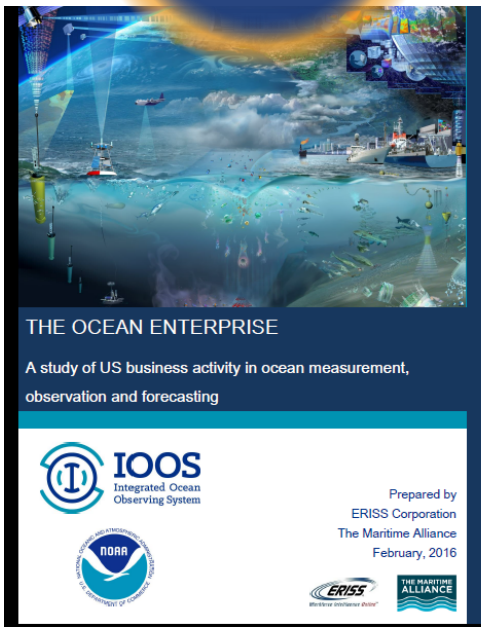
- NOAA.GOV: New! Web stories 200-400 words in length, always with photos.
- New NOS Site: Photos, photos, photos; reinforced by close NOS Comms cooperation.
- Social Media: Regular posts create visibility with peers, partners, general public.
- IOOS Blog: Coming soon! Highlight projects, RA successes, events, topics, and more.

Background

PROVIDERS
observations

INTERMEDIARIES
value-added products

END USERS
emergency managers, developers, city planners, private sector



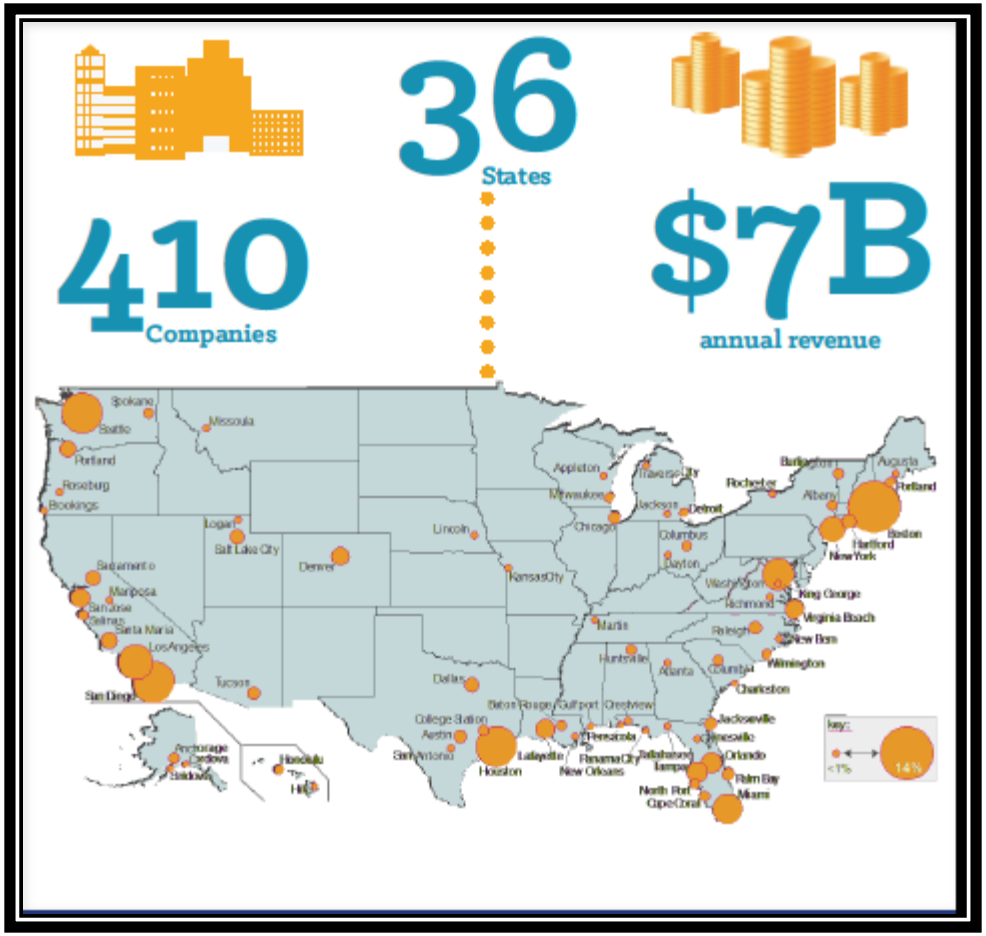
Study focus

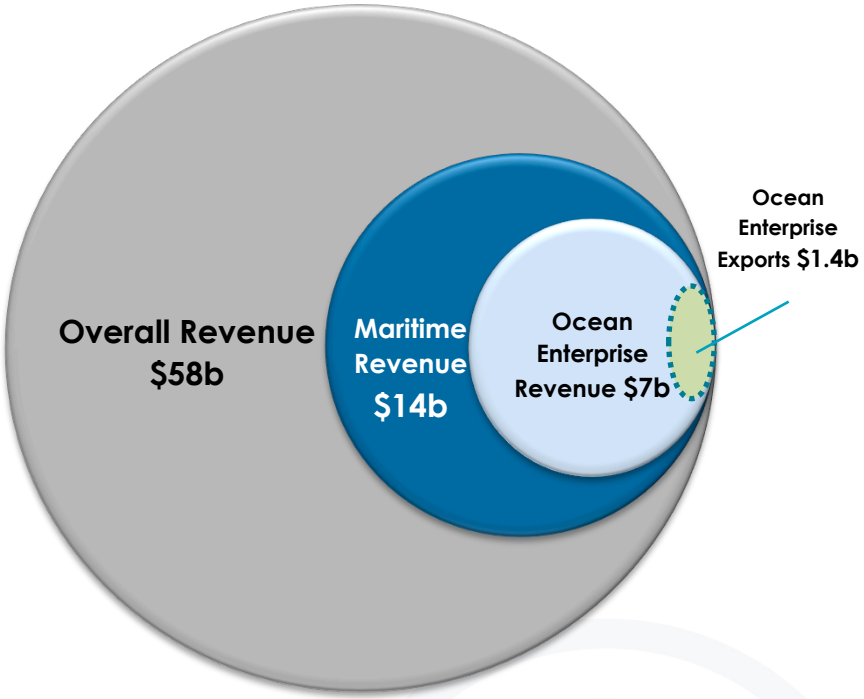
Public, Private, Non-Profit, Research, Academia

Information, Services, Infrastructure

ISSUES: Oceans – Ecosystems – Climate

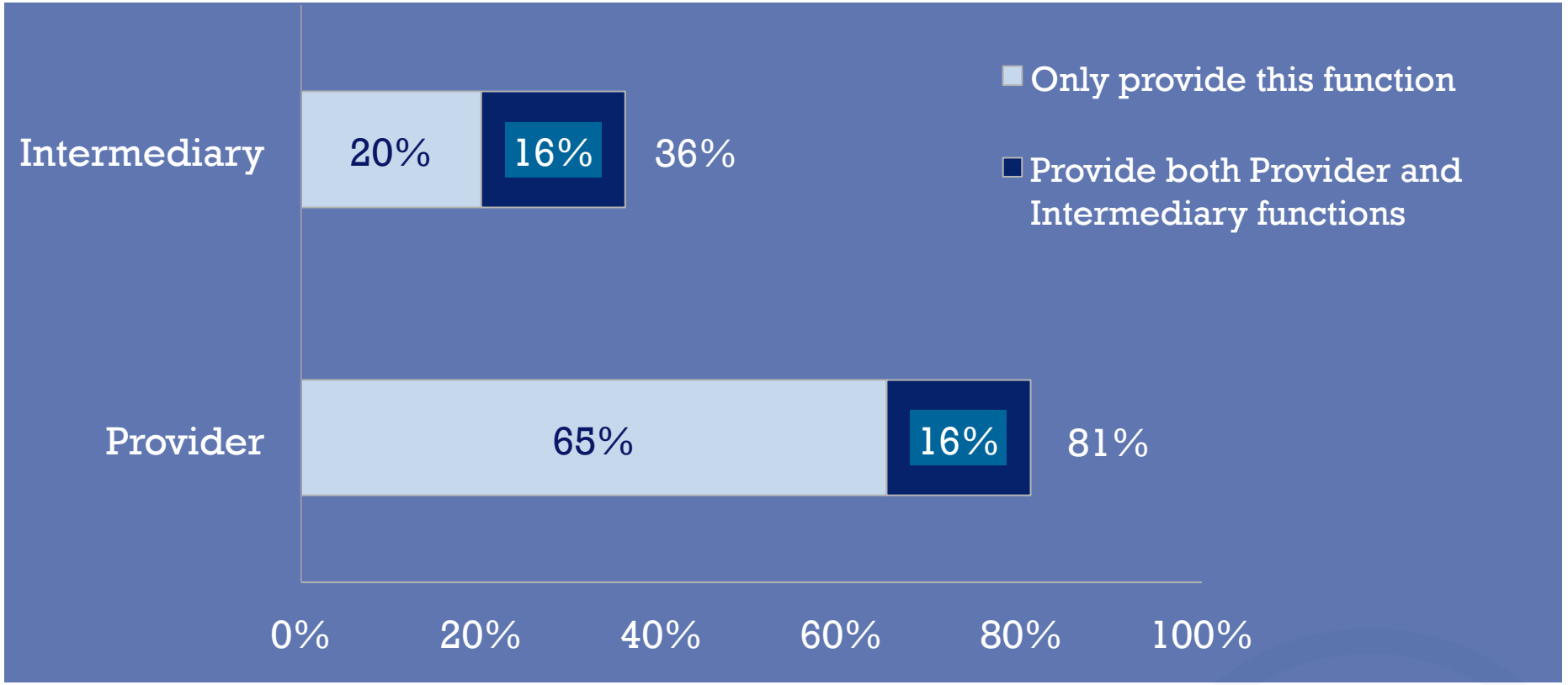
US IOOS/NOAA Ocean Enterprise Study





IOOS | EYES ON THE OCEAN

Ocean Enterprise Study 2015: Functions

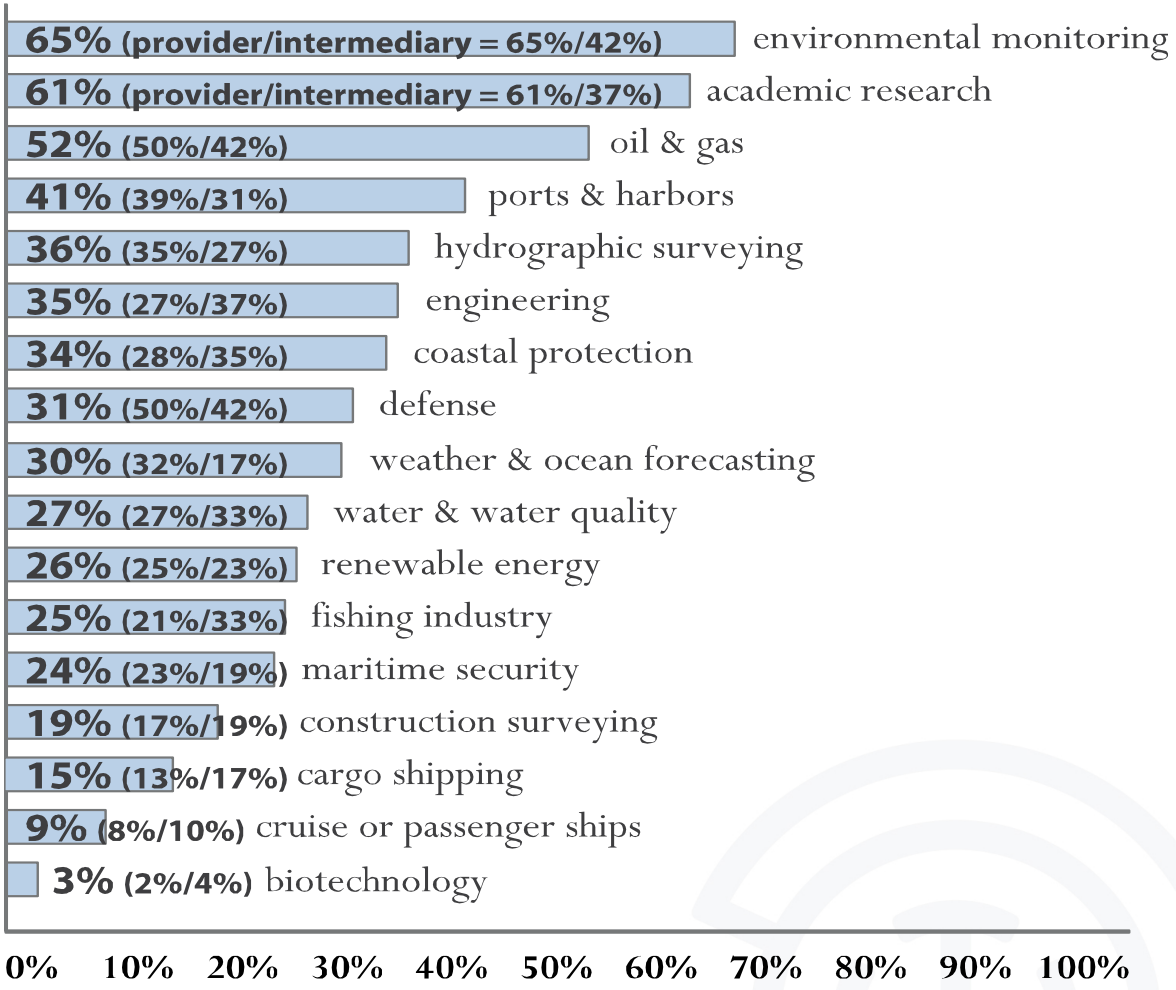


81 % of the companies we surveyed were providers
36% were Intermediaries

Market Sectors

Represents 'overall' activities of firms

Shows provider, intermediary split



IOOS is a Team Sport

Interagency
Oversight IOOS
Task Teams

Programmatic
Operational Capacity
Partnerships
Champion Regional

Congress
OMB
Sponsor Events
RA Coordination

Official Advice
Recommendations

Questions

Enables decision making

Fosters Advances in Science and Technology

www.noaa.ioos.gov

https://www.facebook.com/usioosgov

@usioosgov

IOOS | EYES ON THE OCEAN™

Backup Slides