

# An Australian Ocean Observing Partnership (AOOP)

– what is it, and why do we need it?

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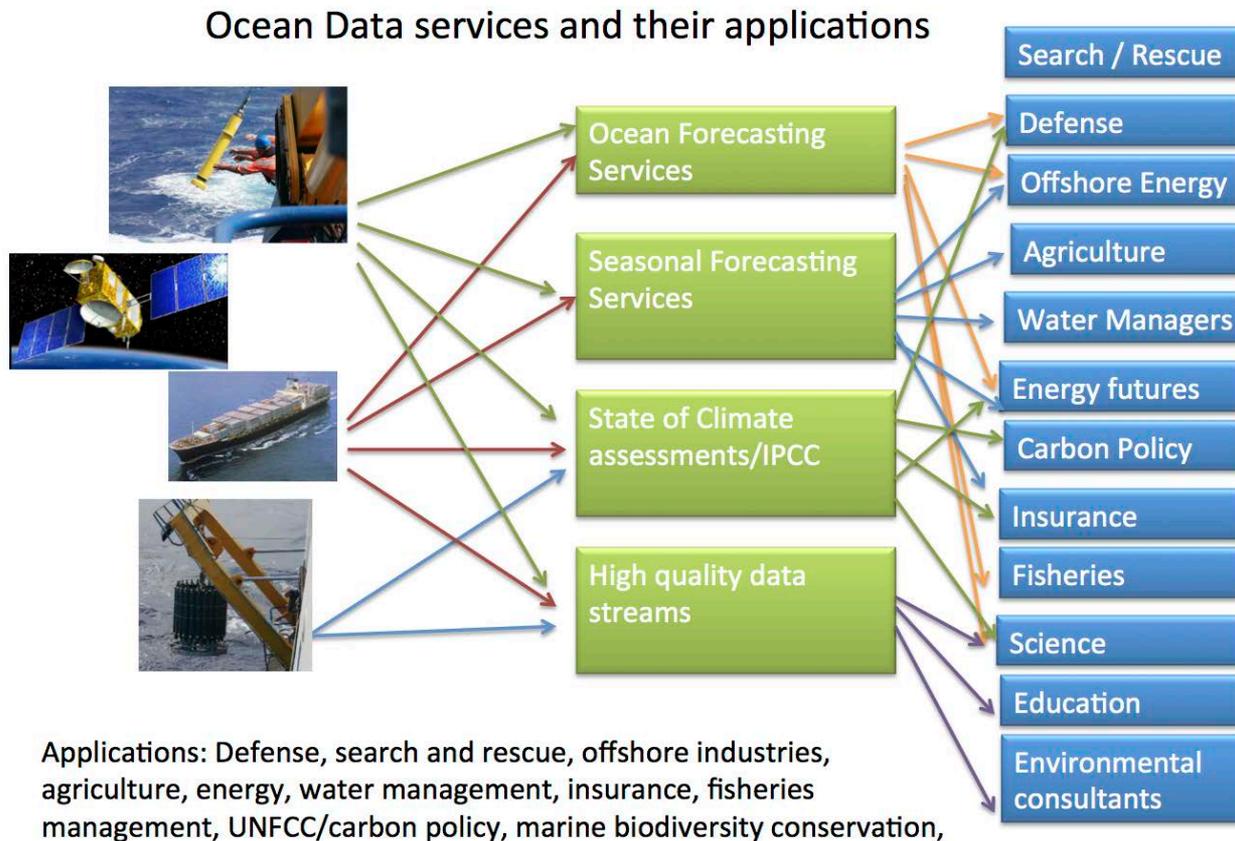


# Outline of the talk

- Background
- Introduce the concept for an Australian Ocean Observing Partnership (AOOP)
  - Rationale
  - Characteristics of Ocean Observing Systems
  - A Nationally Coordinated Network of Ocean Obs
  - Partners in Australian Ocean Observing Systems
  - Next Steps

*20 minutes presentation, 10 minutes discussion*

# Why ocean observations matter



Plus coastal monitoring, storm surge, disaster risk reduction/response, etc....

# Background

2014

- NCRIS/IMOS under threat
- ACCSP to be wound up

2015

- Fragility of ocean obs discussed
- BOM Exec briefed

2016

- Action to scope a partnership
- BOM, IMOS + Defence

# The concept for an AOOD

- During 2016, Sue Barrell and Boris Kelly-Gerreyn (BOM), Barbra Parker and Martin Rutherford (Defence) and Tim Moltmann drafted a 'Concept Note' for an Australian Ocean Observing Partnership (AOOP)
- This has now been approved by BOM, Defence and IMOS
- It includes the following sections:
  - Rationale
  - Characteristics of Ocean Observing Systems
  - A Nationally Coordinated Network of Ocean Observations
  - Partners in Australian Ocean Observing Systems
  - Next Steps

# Rationale

- Sustained and nationally coordinated observations of Australia's coastal and ocean environment are essential
- There is no single agency with national responsibility for sustained ocean observations
- The extent of existing ocean observing systems derives largely from commitments by many different agencies
  - At local, state, national and international levels
- This is a fragile type of sustainability
  - Small ongoing commitments, but
  - Heavily dependent on renewal of time-bounded research budgets and application of research effort towards continuation of monitoring programs

# Characteristics of Ocean Obs Systems

Broadly, two categories of ocean observing systems:

- **Sustained:** those that exist with continuing commitment and funding as well as sustained operational support and maintenance.
- **Experimental:** those that exist - possibly for an extended period but on finite funding - as experimental, project-based or R&D activities.

Featuring:

- Diversity of ocean/coastal observing systems & applications
  - Many players, richness of observations, lack of coordinated focus on national ocean observing priorities
- What really needs to be sustained?
- How to work together as partners to deliver a national ocean observing system?

# A Nationally Coordinated Network of Ocean Observations

Timely to combine forces in a tiered ocean observing paradigm:

1. Sustained, Core Australian Ocean Observing System
  - Basic ongoing ocean obs (remote, in situ) that meet national needs
  - Maintain, operate, support, deliver obs from core systems
  - Standards, data sharing, lifecycle management
  - Sustained funding and renewal of capability
2. Experimental, Mission-based ocean observing systems
  - Major research initiatives, with finite life (typically < 7yrs)
  - Innovation pilots, technical/data/process studies
  - Not all could or should transition to sustained

# A Nationally Coordinated Network of Ocean Observations

- Determine requirements for sustained, core systems
  - Process to recognise, support and integrate experimental systems
- Institutional efforts & responsibilities
- Manage/coordinate across whole of lifecycle
- International context

via



# Partners in AOOP include:

Operational agencies and service providers	User community	Research community
BOM	Defence	IMOS
GA CSIRO Ports State agencies AIMS	Customs Fisheries Sea transport Tourism AMSA Oil & gas Insurance	CSIRO AIMS BOM SARDI Universities AAD

- BOM, Defence and IMOS are taking the lead on AOOP
- Not claiming to represent the whole community, but to help us speak as one voice and to coordinate strategically
- Intention is to be inclusive (via IMOS APM, NMSC, FOO...)

# Framing AOOD principles (draft)

- Optimised network design, for efficiency, effectiveness and adequate redundancy
- Open, discoverable, accessible and retrievable data
- Systematic evaluation framework that considers requirements, readiness, funding and lifecycle management
- Coordinated and well-targeted international engagement
- Plan, monitor and assess benefits from ocean observations

# Next Steps

1. BOM, Defence, and IMOS develop and approve the Concept Note by end of November 2016
2. Consultation with the broader Australian ocean observing community using established mechanisms (IMOS APM, NMSC, FOO etc.)
3. Subject to securing the required broad base of support, AOOP brought into existence from 1 July 2017



# Thank you



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