

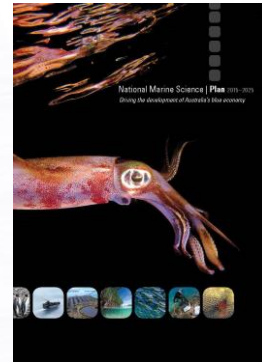
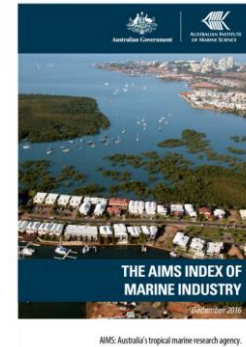
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**The National Innovation and Science Agenda
meets a growing blue economy –
opportunity knocks?**

***Tim Moltmann (UTAS) – IMOS Director
and National Marine Science Committee Chair***

Opportunity knocks?

- Australia has a vast ocean territory underpinning its valuable and growing blue economy – this is a comparative advantage for the nation
- Our national marine science capability is strong, though gaps and priorities have been identified
- Australian Government believes innovation and science will harness new sources of growth and economic prosperity (think blue!)
- Publicly funded science is expected to engage with industry and translate research into impact



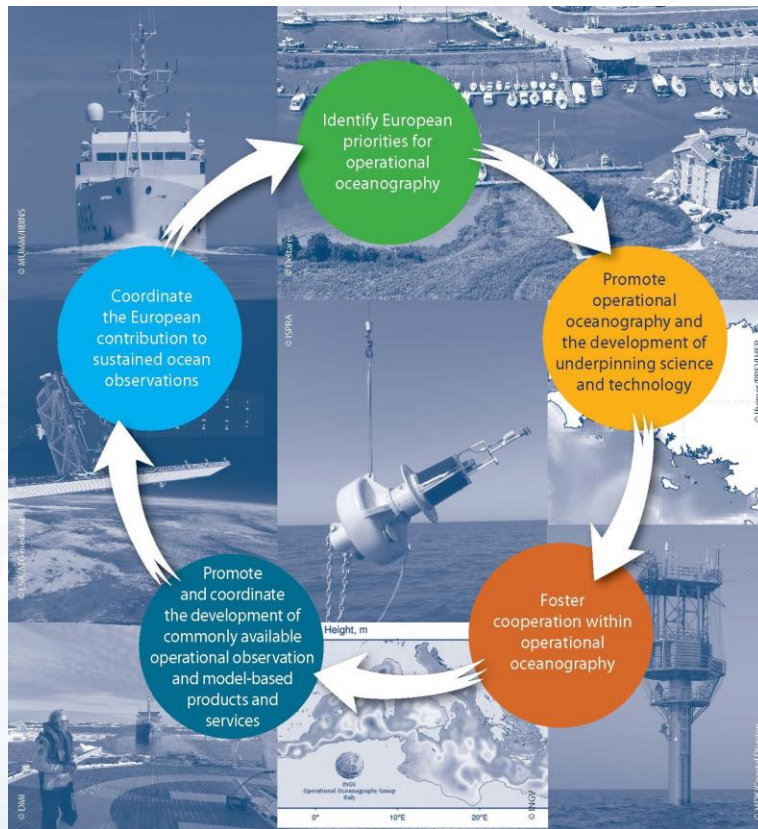
What do we want the role of FOO to be?

- So far...
 - Organised an inaugural FOO conference in 2015 (123 people)
 - Working Groups established in two of six priority areas
 - Website and quarterly communications, 'list' grown to >200
 - Steering Committee active, covering all 'four pillars'
 - FOO having some influence e.g. on IMOS
 - Second FOO conference organised in 2017...
-
- It's still early days for FOO (and we're all volunteering our time!)
 - So far it has been about awareness, information, discussion



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Here's how our European colleagues* are thinking about operational oceanography



1. Identify priorities
2. Develop underpinning science & technology
3. Foster cooperation
4. Requirements for new products & services
5. Contribution to sustained observing

* Thanks to EuroGOOS for this diagram



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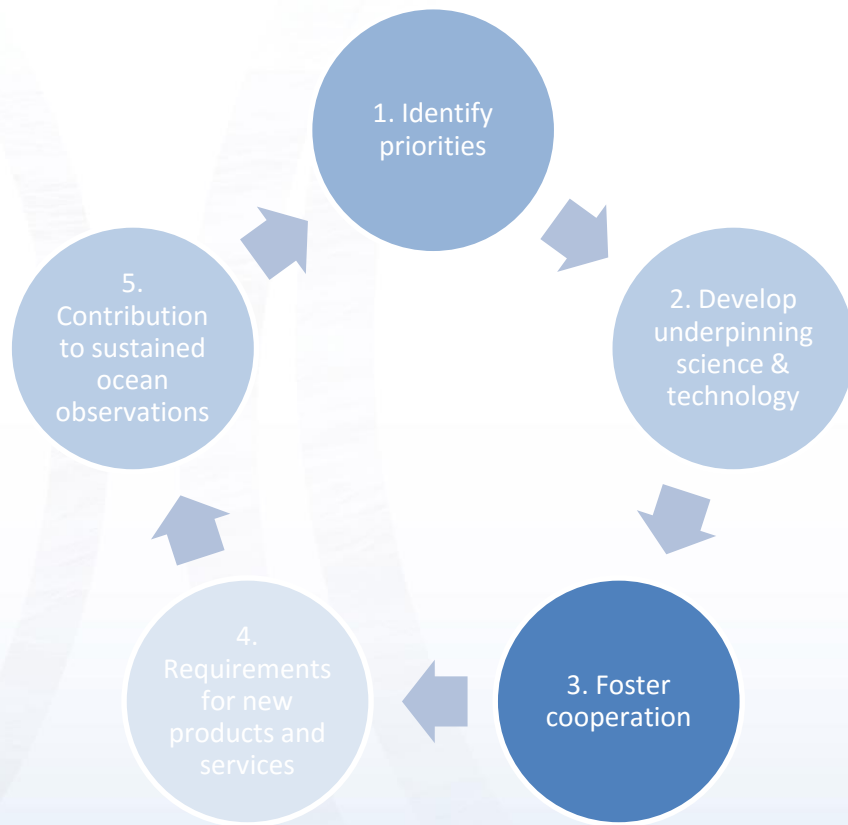
Let's use this as a 'strawman' for AFOO



1. Identify priorities
2. Develop underpinning science & technology
3. Foster cooperation
4. Requirements for new products & services
5. Contribution to sustained observing



Current status



- So far AFOO has largely been about fostering cooperation
- Some priorities identified at FOO 2015, with voluntary WGs for two of six
- Some indirect influence in science & technology (e.g. IMOS)
- Some indirect influence in sustained observations (e.g. AOOP)
- No role in requirements for new products & services



What could it look like?

Candidate priority areas
1. Surface currents
2. Surface waves
3. Thermal structure
4. Consensus forecasting
5. Data products
6. Data stewardship

e.g. Australian
Ocean Observing
Partnership (AOOP)

e.g. Australian
National Shelf
Reanalysis (ANSR)

5.
Contribution
to sustained
ocean
observations

4.
Requirements
for new
products and
services

1. Identify
priorities

2. Develop
underpinning
science &
technology

3. Foster
cooperation

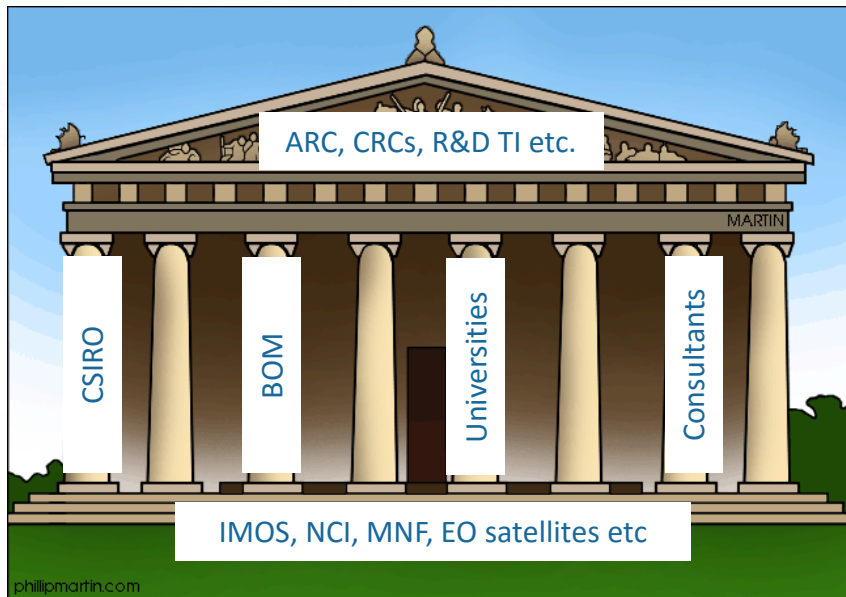
Marine science

- Institutions
- Infrastructure
- Programs

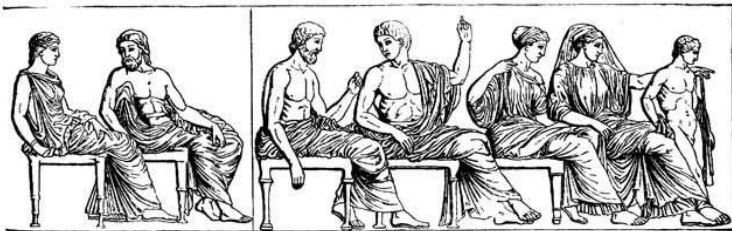
Biennial conferences,
website, regular
communication,
working groups



FOO and the national innovation and science system (1/2)



- The national innovation and science system is made up of:
- Institutions
 - Each with a distinctive role
 - CSIRO, BOM, Universities, Consultants etc.
- Infrastructures
 - Underpinning, supporting all
 - IMOS, NCI, MNF, EO satellites etc.
- Programs
 - Providing focus, scale, synergy
 - ARC programs, CRCs, R&D TI etc.
- Users and Stakeholders
 - Industry and Government

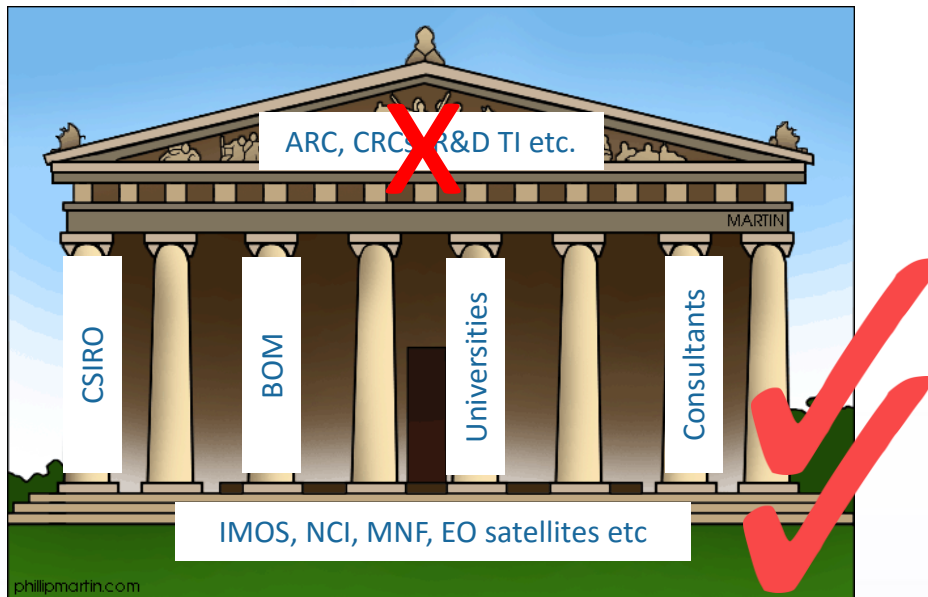


Industry and Government users



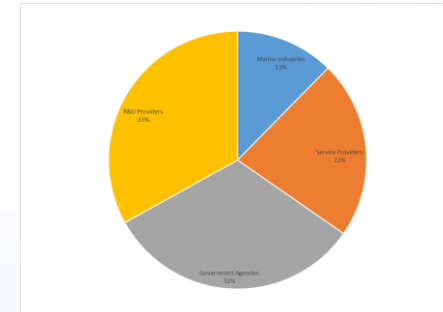
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FOO and the national innovation and science system (2/2)

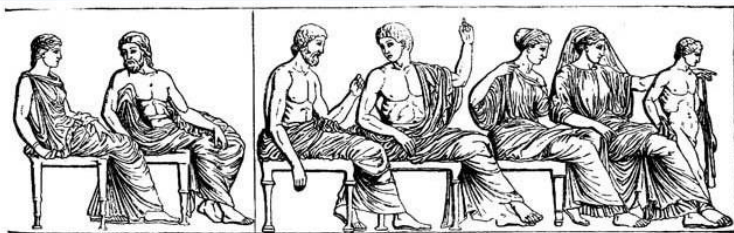


- FOO has made a good start in fostering cooperation between most of these elements

- Institutions
- Infrastructures
- Users and Stakeholders



- However there is no current engagement with funded Programs that
 - give priorities 'teeth'
 - enable new products and services

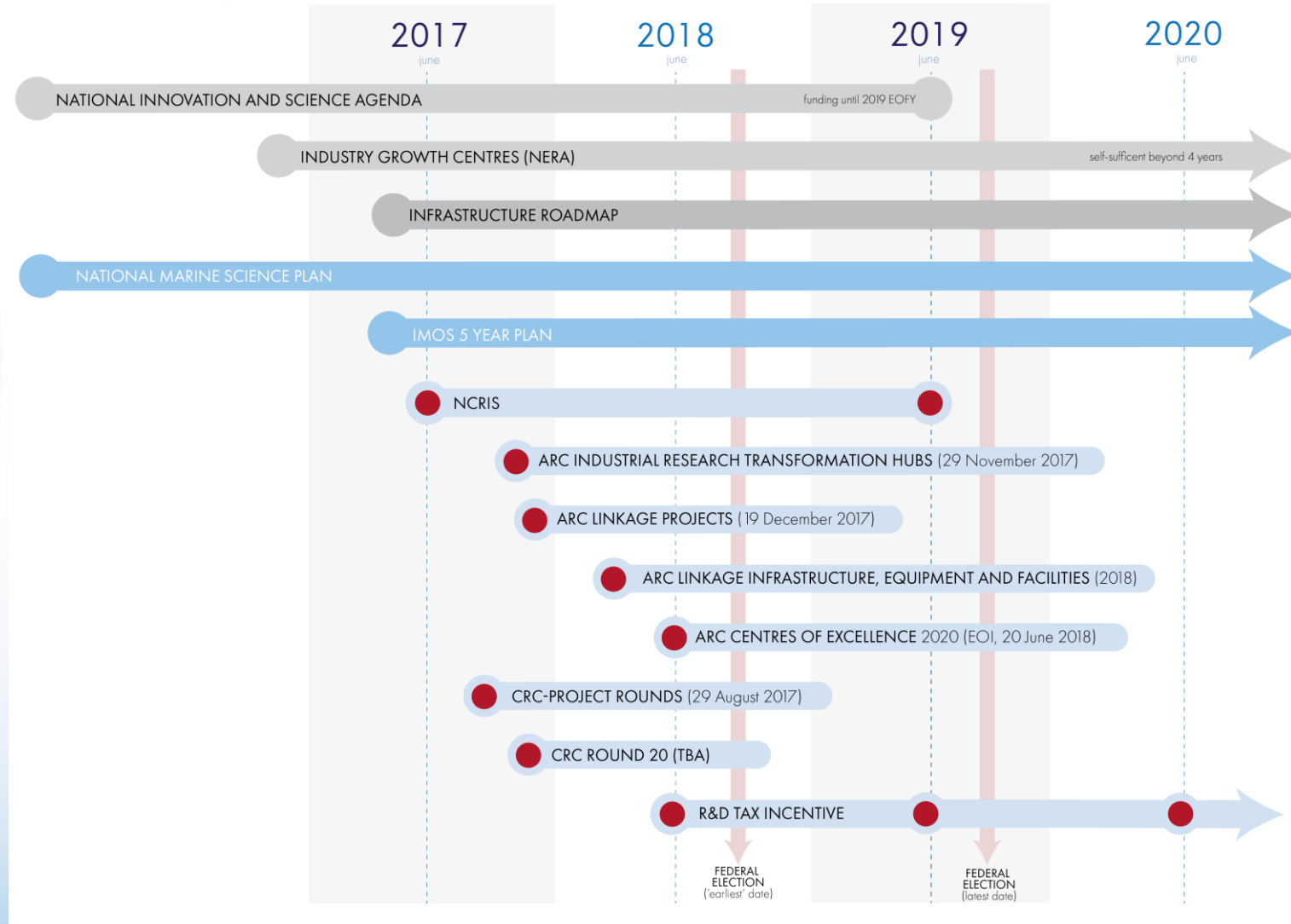


Industry and Government users



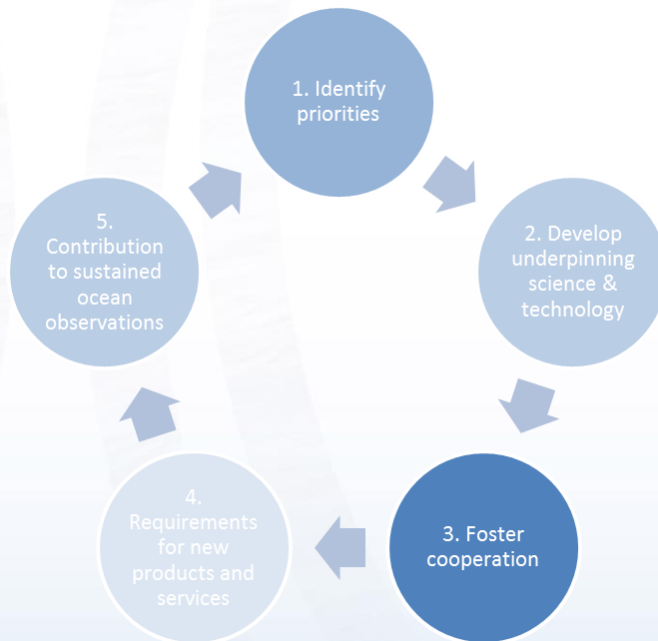
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Opportunities exist for FOO in the national innovation and science system

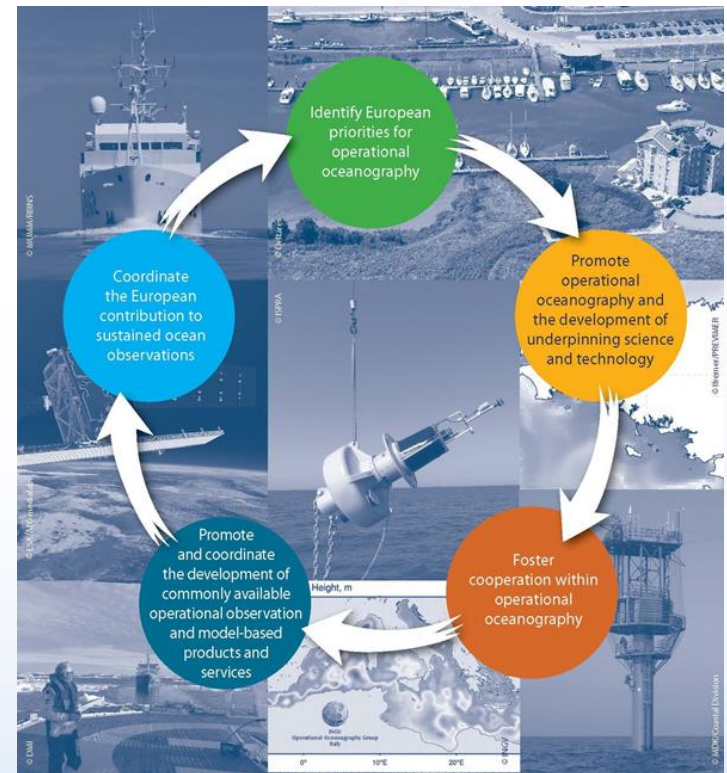


So what do we want the role of FOO to be?

As it is?



a la Europe?



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What could it look like?

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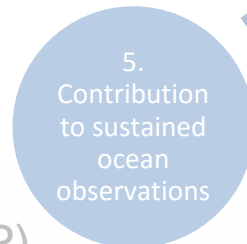
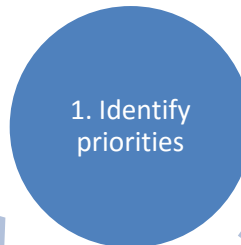
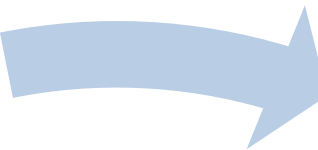
If FOO is to evolve

- setting of priorities, and
- requirements for new products and services

are arguably the next steps...

e.g. Australian
Ocean Observing
Partnership (Aoop)

? e.g. Australian
National Shelf
Reanalysis (ANSR)



Marine science

- Institutions
- Infrastructure
- Programs

Opportunities do exist in the national innovation and science system to respond to industry priorities, and access program funding...

Summary

- Valuable and growing blue economy + National Marine Science Plan + National Innovation and Science Agenda + FOO = opportunity knocks?
- FOO has made a good start in raising awareness, sharing information, stimulating discussion
- It could do more (European example)...
- Funded programs/projects will be required to affect change, and opportunities do exist
- Setting priorities and requirements for new products and services are arguably the next steps



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THANK YOU

FOR DISCUSSION...

For discussion...

