

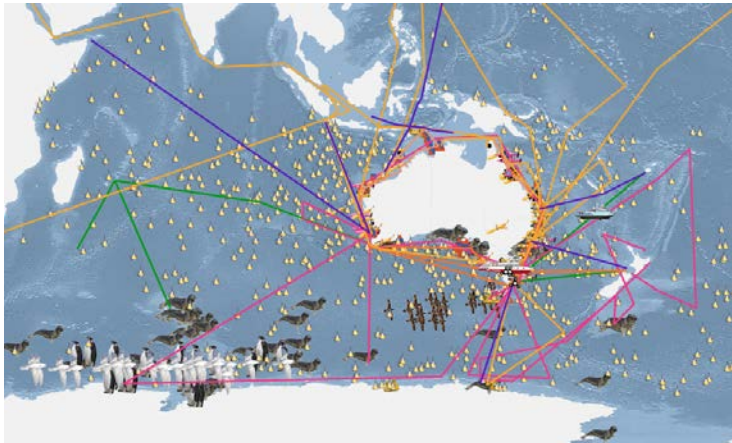


IMOS Activity Planning and Management – a new project aimed at improving how we do this

Emma Sommerville et al
Perth, WA 16th February 2017

What is IMOS Activity Planning and management?

- Essentially it is how we collect the observations - what equipment goes in-and-out of the water, where, when, who leads it, organisations involved, platforms (vessels) used, and when we expect the data to be delivered
- Required as part of our business management system
- There are currently about **300** IMOS tracked activities and **300** milestones a year
- When I started (Dec-13) we did not have a way to easily track these activities – part of my job!



+ Space
and
Time **=**



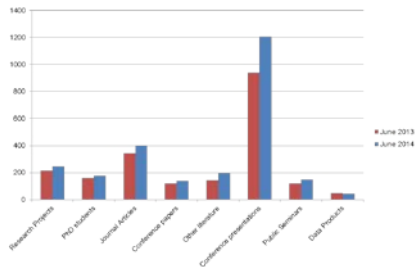
Image credit:
<https://blog.projectplace.com/get-rid-of-project-management-chaos-with-technology/>

IMOS Performance Indicators

- Business systems in place to monitor #2, #3 and #4
- Since Dec-13 we have developed systems to manage #1



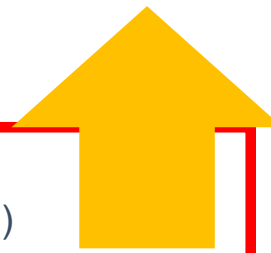
'Circle diagram' and ongoing stakeholder engagement



Publications (Projects, Presentations) Database

1. Deploy and recover equipment

- Activities spreadsheet (internal)
- Monthly Activity Plans (on the website)
- Quarterly Reports (including deployment and data milestones)



4. Ensure relevance and impact of science outputs

2. Make data discoverable and accessible

3. Ensure uptake and use of data

- Facility Workflows (on the website)
- Monthly Data Reports (on the website)
- AODN Portal

Overall Business Management System



Report and Review

(Annual) (Ad-hoc)

- Quarterly reports – Facilities
- Director's reports
- Progress reports – to Dept.
- State Government reports (as required)
- Node reports
- Financial statements
- KPI reports
- Highlights / Marine Matters
- Data reports

- Budget vs actuals / co-invest
- Stakeholder feedback
- Ad-hoc reviews
- Dept. reviews / audits
- Technical reviews
- Data reviews
- Life-time budgets
- KPI reviews

Initiation (Decadal)

- Stakeholder consultation
- Advisory Board meetings
- Strategic planning - decadal
- Science planning - decadal
- Call for proposals – from stakeholders
- Funding proposal – to Dept.
- UJV agreement
- Risk analysis
- Policies
- Groups e.g. FOO, ACOMO, NMSC

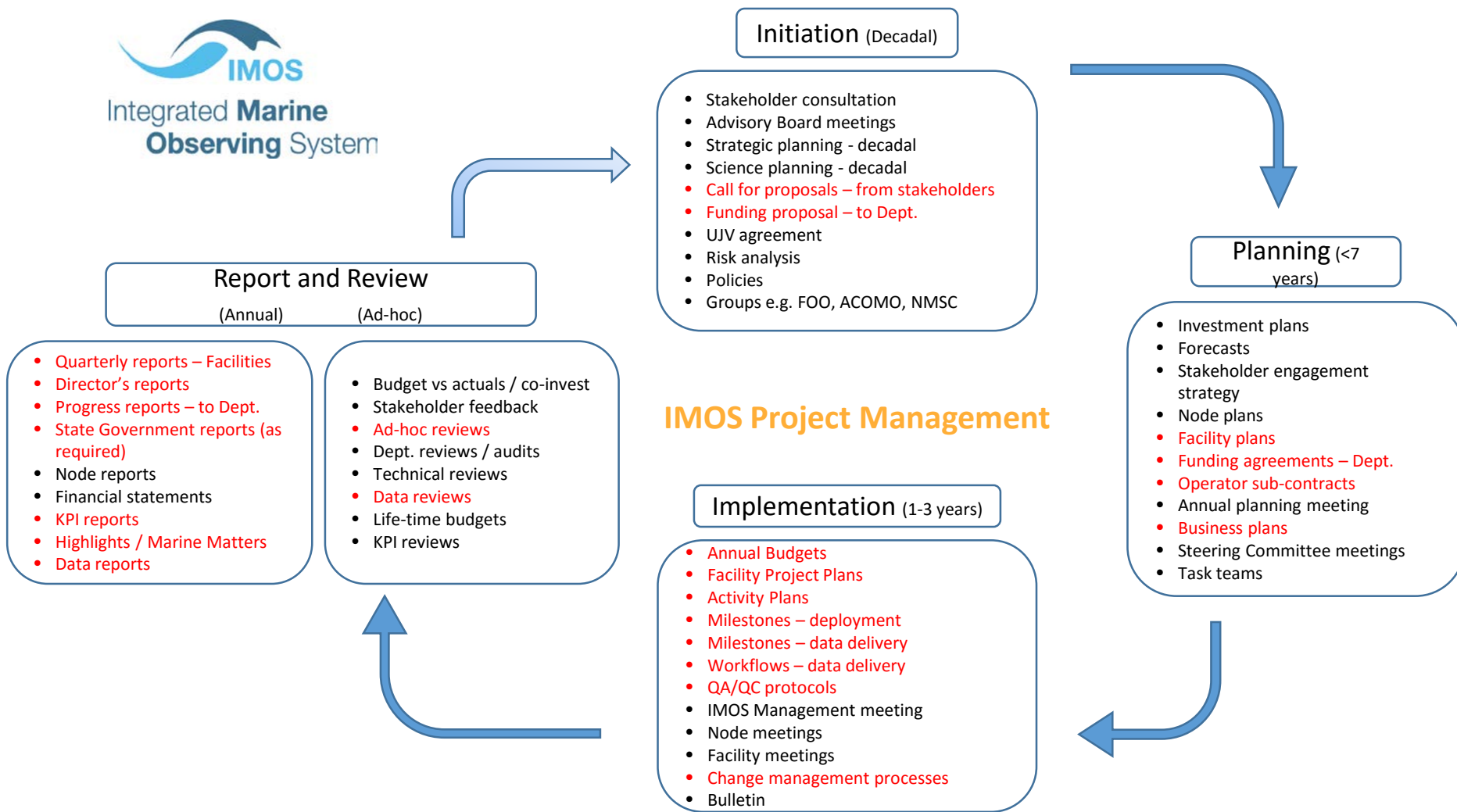
IMOS Project Management

Implementation (1-3 years)

- Annual Budgets
- Facility Project Plans
- Activity Plans
- Milestones – deployment
- Milestones – data delivery
- Workflows – data delivery
- QA/QC protocols
- IMOS Management meeting
- Node meetings
- Facility meetings
- Change management processes
- Bulletin

Planning (<7 years)

- Investment plans
- Forecasts
- Stakeholder engagement strategy
- Node plans
- Facility plans
- Funding agreements – Dept.
- Operator sub-contracts
- Annual planning meeting
- Business plans
- Steering Committee meetings
- Task teams



What does this look like?



DEED OF VARIATION TO GRANT AGREEMENT IN RELATION TO FUNDING FOR THE NATIONAL COLLABORATIVE INFRASTRUCTURE STRAT Marine Observing System

Agreement Variation

Details

Date: 19 August 2016

Commonwealth of Australia reprints Department of Education and Training
 ABN 12 862 898 150

University of Tasmania
 ABN 30 764 374 782

(Recipient)

Recitals

- A On 10 September 2010 the University and the Operator entered into an Operator Sub-Contract Agreement (the "Agreement") under the terms of which the Operator was to undertake tasks in relation to the Integrated Marine Observing System (IMOS).
- B Since entering into the Agreement, the Parties have subsequently agreed on variations to the Agreement and on 18 February 2016 in response to continuous Project Funding.
- C On 14 July 2015, the funding reduction and the University entered into a variation to extend IMOS until 31 December 2016. A copy of the Deed of Variation to Grant Agreement (NCRS 2015 DeedV) is attached as Annexure A.
- D Based on the NCRS 2015 Deed, the Parties wish to vary the Agreement for the purpose of extending the term period for the Project until 30 June 2017, to be contained on the same terms.
- E It is agreed that all additional milestone details related to the increased investment have been captured in the Schedule.

Project ID	Project Name	Project Start Date	Project End Date	Project Status	Project Manager	Project Lead	Project Sponsor
IMOS-001	IMOS Core System	2010-09-10	2016-12-31	Completed	John Smith	John Smith	John Smith
IMOS-002	IMOS Data Hub	2011-01-15	2016-12-31	Completed	Jane Doe	Jane Doe	Jane Doe
IMOS-003	IMOS Data Collection	2011-03-01	2016-12-31	Completed	Bob Brown	Bob Brown	Bob Brown
IMOS-004	IMOS Data Processing	2011-05-01	2016-12-31	Completed	Alice White	Alice White	Alice White
IMOS-005	IMOS Data Delivery	2011-07-01	2016-12-31	Completed	Charlie Black	Charlie Black	Charlie Black
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IMOS-007	IMOS Data Backup	2011-11-01	2016-12-31	Completed	Eve Blue	Eve Blue	Eve Blue
IMOS-008	IMOS Data Restoration	2012-01-01	2016-12-31	Completed	Frank Purple	Frank Purple	Frank Purple
IMOS-009	IMOS Data Migration	2012-03-01	2016-12-31	Completed	Grace Yellow	Grace Yellow	Grace Yellow
IMOS-010	IMOS Data Integration	2012-05-01	2016-12-31	Completed	Henry Orange	Henry Orange	Henry Orange
IMOS-011	IMOS Data Analysis	2012-07-01	2016-12-31	Completed	Ivy Red	Ivy Red	Ivy Red
IMOS-012	IMOS Data Visualization	2012-09-01	2016-12-31	Completed	Jack Pink	Jack Pink	Jack Pink
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IMOS-014	IMOS Data Archiving	2013-01-01	2016-12-31	Completed	Leo Green	Leo Green	Leo Green
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IMOS-016	IMOS Data Restoration	2013-05-01	2016-12-31	Completed	Noah Purple	Noah Purple	Noah Purple
IMOS-017	IMOS Data Migration	2013-07-01	2016-12-31	Completed	Olivia Yellow	Olivia Yellow	Olivia Yellow
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IMOS-021	IMOS Data Reporting	2014-03-01	2016-12-31	Completed	Sarah Brown	Sarah Brown	Sarah Brown
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IMOS-023	IMOS Data Backup	2014-07-01	2016-12-31	Completed	Uma Blue	Uma Blue	Uma Blue
IMOS-024	IMOS Data Restoration	2014-09-01	2016-12-31	Completed	Victor Purple	Victor Purple	Victor Purple
IMOS-025	IMOS Data Migration	2014-11-01	2016-12-31	Completed	Wendy Yellow	Wendy Yellow	Wendy Yellow
IMOS-026	IMOS Data Integration	2015-01-01	2016-12-31	Completed	Xavier Orange	Xavier Orange	Xavier Orange
IMOS-027	IMOS Data Analysis	2015-03-01	2016-12-31	Completed	Yara Red	Yara Red	Yara Red
IMOS-028	IMOS Data Visualization	2015-05-01	2016-12-31	Completed	Zoe Pink	Zoe Pink	Zoe Pink
IMOS-029	IMOS Data Reporting	2015-07-01	2016-12-31	Completed	Adam Brown	Adam Brown	Adam Brown
IMOS-030	IMOS Data Archiving	2015-09-01	2016-12-31	Completed	Bella Green	Bella Green	Bella Green
IMOS-031	IMOS Data Backup	2015-11-01	2016-12-31	Completed	Carl Blue	Carl Blue	Carl Blue
IMOS-032	IMOS Data Restoration	2016-01-01	2016-12-31	Completed	Dora Purple	Dora Purple	Dora Purple
IMOS-033	IMOS Data Migration	2016-03-01	2016-12-31	Completed	Ethan Yellow	Ethan Yellow	Ethan Yellow
IMOS-034	IMOS Data Integration	2016-05-01	2016-12-31	Completed	Fiona Orange	Fiona Orange	Fiona Orange
IMOS-035	IMOS Data Analysis	2016-07-01	2016-12-31	Completed	Gavin Red	Gavin Red	Gavin Red
IMOS-036	IMOS Data Visualization	2016-09-01	2016-12-31	Completed	Helen Pink	Helen Pink	Helen Pink
IMOS-037	IMOS Data Reporting	2016-11-01	2016-12-31	Completed	Ian Brown	Ian Brown	Ian Brown
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IMOS-041	IMOS Data Migration	2017-07-01	2016-12-31	Completed	Mark Yellow	Mark Yellow	Mark Yellow
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IMOS-043	IMOS Data Analysis	2017-11-01	2016-12-31	Completed	Oscar Red	Oscar Red	Oscar Red
IMOS-044	IMOS Data Visualization	2018-01-01	2016-12-31	Completed	Peter Pink	Peter Pink	Peter Pink
IMOS-045	IMOS Data Reporting	2018-03-01	2016-12-31	Completed	Quinn Brown	Quinn Brown	Quinn Brown
IMOS-046	IMOS Data Archiving	2018-05-01	2016-12-31	Completed	Ryan Green	Ryan Green	Ryan Green
IMOS-047	IMOS Data Backup	2018-07-01	2016-12-31	Completed	Sarah Blue	Sarah Blue	Sarah Blue
IMOS-048	IMOS Data Restoration	2018-09-01	2016-12-31	Completed	Tyler Purple	Tyler Purple	Tyler Purple
IMOS-049	IMOS Data Migration	2018-11-01	2016-12-31	Completed	Uma Yellow	Uma Yellow	Uma Yellow
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Annual Business Plan Period 1 July 2016 to 30 June 2017

Integrated Marine Observing System (IMOS)
 National Collaborative Research Infrastructure Strategy (NCRIS 2016, NCRIS Programme Guidelines March 2016)



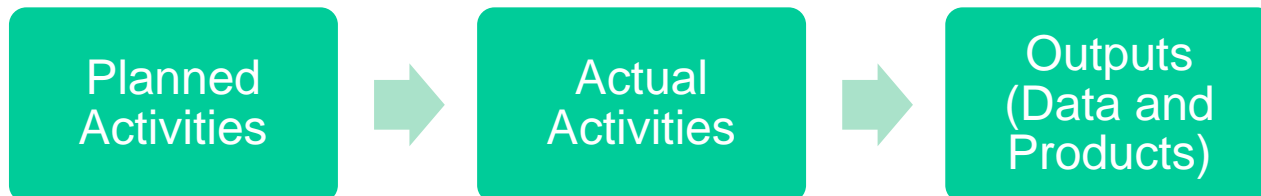
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IMOS Activity Planning Calendar for February 2017

Activity	Start Date	End Date	Activity Name	Activity Type	Activity Status	Activity Lead	Activity Sponsor
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IMOS-020	2014-01-01	2016-12-31	IMOS Data Visualization	Completed	Ryan Pink	Ryan Pink</	

Why do we need to improve it?

- Although we can track activities now, you can see it is quite a manual, time consuming process
- Further improvements had not been prioritised due to ongoing funding uncertainty, but a long-term funding commitment with multi-year planning it has become the right time to tackle this
- The aim of the project is to develop a more streamlined process to manage the IMOS Activity Planning and Management, including the milestones
- We require a system that provides key IMOS managers and users with the ability to monitor activities proactively, with a clear link between:



Considerations include:

- Keep within the vision of the larger program and the four Performance Indicators
- What are the key outputs we really need from this system?
- Can it be linked to AODN database – trial of gliders with unique identifier
- Access and visibility
- Static/regularly updated
- Level of detail (e.g. to sensor/variable level?)
- Alerts/emails? Auto/manual?
- Raw and QC data delivery
- Complexity of different facility types, not all have field based components
- Definition of ‘activities’ (NCRIS 2016 includes: BGC processing, BGC sampling, CTD transect, Deployment, Downscaling and service, Installation, In-water sampling, Operation, Recovery, Removal, Service)

Potential Users

User	Reason(s)	Importance	Frequency
IMOS Project Management personnel	Streamlines planning and reporting	High – Reporting to Department and IMOS Board	Daily/Quarterly – link to funding
IMOS Project Management and AODN Managers and Data officer personnel	A system that provided a clear link between Planned Activities, Actuals and available data is the ultimate goal	Project Management – especially around budgeting, planning and reporting	Daily (eventually)?
Facilities/Sub-Facilities	Contractual reporting (milestones) Provide awareness of other operations happening under IMOS	High – meeting contractual conditions	Quarterly
Vessels	Synergies	Cost-savings, collaboration between Facilities/Sub-Facilities	Quarterly?
Operating Institutions	Assistance with their planning and reporting requirements	Contract Responsibilities	Quarterly?
Nodes and IMOS Scientific Officer	Link to what is happening in the regions	Meetings/Planning	Ad-hoc?
IMOS Communicators	Review of what is planned/what happened	News	Monthly
General science community users	Based on what data is available, be able to see what is coming up that may be in their area of interest	Involvement of wider science community and the uptake of IMOS data	Ad-hoc
Commonwealth Department	Elections, International meetings or interest		Ad-hoc

Other examples

- SOOS have just produced a [Field Project Planning Database](#), which will be released soon
- Allows people working in the Southern Ocean to enter information on their work, by voyage and/or project and also to search for other work that is happening in the region
- Map interface with various features you can use to restrict search
- Can drill down on voyage/project to get further details

SOOS - Field Project Planning Database

Home Search Submit new voyage Submit new project Help Login

SOOS
SOUTHERN OCEAN OBSERVING SYSTEM

Search database

- Text search
- Nation
- Vehicle type
- Ocean sector
- Temporal coverage
- Spatial - Bounding box

Latitude

Southernmost Northernmost

Longitude

Westernmost Easternmost

Click a row in the table below to see all details and projects associated with the voyage.

Voyage name	Vehicle type	Vehicle name	Start date	End date	Nation
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!

No voyages found

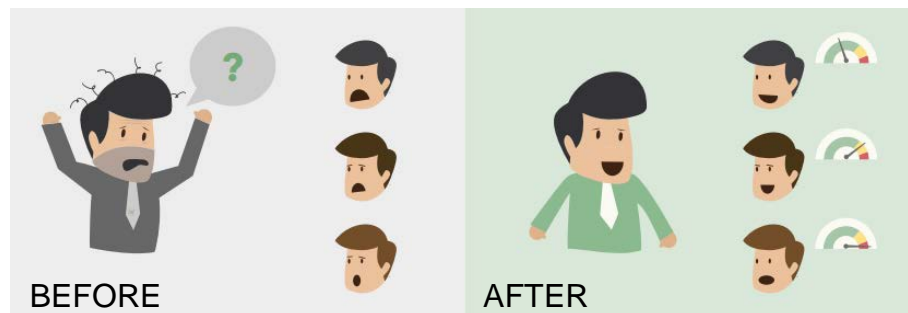
Please use the filters on the left to refine your search

Next Steps

- Investigate other examples from similar programs
- Liaise with other operational managers with similar programs
- Investigate software and discuss with programmers
- User engagement – feedback from community
- Scope project by end-April 2017 and then implement

I'm looking for ideas and feedback from the IMOS community, in particular from Facility/Sub-Facility leaders

Please contact me: emma.sommerville@utas.edu.au



<https://blog.projectplace.com/get-rid-of-the-chaos-with-collaborative-work-management-infographic/>

NCRIS
National Research
Infrastructure for Australia
An Australian Government Initiative



IMOS is a national collaborative research infrastructure, supported by Australian Government. It is led by University of Tasmania in partnership with the Australian marine & climate science community.

www.imos.org.au



The Operators of the IMOS infrastructure are:

