

	National Environmental Information Infrastructure Reference Group	April 12 th , 2016
		For endorsement

MEETING #06 – MINUTES DRAFT

Meeting	National Environmental Information Infrastructure Reference Group
Chair	Dr. Louise Minty, Assistant Director, Environmental Information Services
Meeting Date	April 12 th 2016
Location	Bureau of Meteorology – Darcy Room Level 3, 14 Childers Street, Canberra
Time	2.00 pm to 5:00 pm

MEMBERS

Member	Organisation	Attending
Louise Minty (Chair)	Bureau of Meteorology	Chair
John LaSalle	Atlas of Living Australia	Member
John D Moore	Australian Bureau of Statistics	Member
Adrian Burton	Australian National Data Service	Richard Northam
Andrew Dingjan	Australian Urban Research Infrastructure Network	Apology
Tony Boston	Bureau of Meteorology	Bob Wilson
Phil Tickle	CRC Spatial Information	Apology
Cynthia Love	CSIRO	Member
Evert Bleys	Department of Agriculture	Member
Tony Rothnie	Department of Education	Lindsay Morgan
Lee-Anne Shepherd	Department of the Environment	Emma Hyland
Toby Bellwood	Department of Prime Minister and Cabinet	Michelle McCue
Neal Evans	Geoscience Australia	Member
Tim Moltmann	Integrated Marine Observing System	Member
Stephen Kay	Murray Darling Basin Authority	Member
Ben Evans	National Computational Infrastructure	Apology
Tim Clancy	Terrestrial Ecosystems Research Network	Apology

SECRETARIAT

Representative	Organisation
Andre Zerger	Bureau of Meteorology, Environmental Information Services

OBSERVERS

Representative	Organisation
Roger Proctor	Integrated Marine Observing System
Dominic Lowe	Bureau of Meteorology, Information Systems and Services
Chantelle Doan	Bureau of Meteorology, Environmental Information Services
Marissa Byrnes	Bureau of Meteorology, Information Systems and Services
John Timermanis	Bureau of Meteorology, Environmental Information Services

MINUTES

Item 6.1	Opening and attendance
	Dr. Louise Minty (Chair) welcomed participants to the sixth meeting of the reference group.
Item 6.2	Minutes from Meeting #05
	Approved the minutes as a true and accurate record of the NEII Reference Group meeting #5 held on the 17 th November 2015 noting that these will be made public at neii.gov.au along with earlier minutes. Andre Zerger provided an update of the action items.
Item 6.3	NEII Conformance Framework
	Dr Andre Zerger provided an update regarding the work program of the NEII Conformance Framework Working group and sought member approval for publication of the framework as Version 1.0. Version 1.0 of the framework covers only a subset of the information types detailed in the NEII Reference Architecture and will be expanded in future versions. The Working Group were keen to record the need to expand this list in future versions of the framework, to include: environmental observations, monitoring sites and vocabularies. The Bureau committed to scheduling informal discussions after the release of the framework with a view to potentially establishing a working group or community of practice around “observations” in particular. In addition, the Working Group identified value in sharing agency architectural solutions, initially through the web and collaboration space but potentially face-to-face.
Discussion	Members reflected on the positive operation of the working group and endorsed the need to address environmental observations and related information types in future versions of the framework. Discussion ensued about the possible role for some agencies offering a hosting solution for web data services where ICT maturity precluded delivering data at-source. ABS noted that a whole-of-government interoperability approach is equally about what each agency must give up as much as what they must adopt.

	Regarding the framework members noted the importance of a public release to test its effectiveness ahead of any possible expansion to additional information types.
Recommendations	<p>Noted the conclusion of activities under the NEII Conformance Framework Working Group and member contributions to this process.</p> <p>Approved the publication of the NEII Conformance Framework Version 1.0</p> <p>Endorsed the need to (a) create a mechanism to share technical learnings in regard to NEII implementation, initially through document sharing and potentially other fora, and (b) expansion of the framework to other information types including observations.</p>
ACTION	<p>Action 6.1 NEII Programme to release the Conformance Framework as Version 1.0</p> <p>Action 6.2 NEII Programme to create a mechanism to share technical learnings in regard to NEII implementation.</p> <p>Action 6.3 NEII Programme to continue expansion of the framework to other information types including observations, monitoring sites and controlled vocabularies</p>
Item 6.4	NEMSR Update
	Dr Andre Zerger and Marissa Byrnes provided an updated on the NEMSR build as the next component under the build focus area of the NEII. The presentation provided an overview of the site data scheduled for release in Version 1.0 in June and paid particular attention to the development of the NEMSR information model and planned GeoJSON exchange format. An important by-product of the NEMSR includes the initial development of controlled vocabularies for site attributes including Observation Methods and Observed Properties.
Discussion	Members discussed progress around the build of the NEMSR and expectations around site data supply. IMOS noted the particular importance of NEMSR when combined with contextual data such as marine reserve networks as a tool to identify gaps in the nation's environmental monitoring capability.
Recommendations	Noted the commencement of the NEMSR build and technical engagement currently underway with member agencies to release Version 1.0
Item 6.5	Governance and leadership of environment.data.gov.au
	Dominic Lowe (Bureau of Meteorology, Information Modelling and Catalogues, Information Systems and Services Division) briefed members regarding the existence and potential value of the entity environment.data.gov.au and suggested the Reference Group consider formation of a working group to assess the value to the NEII of assuming leadership, governance and management of this subdomain to support environmental information interoperability, primarily by offering a persistent identifier service.
Discussion and Questions	Members discussed the possible role of this infrastructure from a whole-of-government perspective noting the possible role of the NEII Programme and NEII Reference Group given the overlap of interests. ANDS noted the importance of working in a federated environment and were supportive of exploring the potential of the infrastructure further. Members asked how other sub-domains were been managed and whether they were active. It appears that the environment.data.gov.au sub domain is the only active

	<p>domain at this time. ABS were interested to learn whether the infrastructure was about discovery or storage. IMOS noted the importance of the broader data.gov.au agenda and that alignment and contribution at the sub-domain level of environment.data.gov.au is warranted. ANDS noted the critical importance of stable links to datasets and data citation noting that this infrastructure could play this role at a whole-of-government level if managed and supported effectively.</p>
Recommendation	<p>Endorsed the formation of a working group to assess the potential to NEII of assuming governance and management of environment.data.gov.au. The working group would report to a future meeting of the NEII Reference Group through an issues paper.</p>
Action	<p>Action 6.4 NEII Programme to establish the environment.data.gov.au working group and members to nominate representatives. The working group would report to a future meeting of the Reference Group</p>
Item 6.6	<p>NEII Programme update</p>
	<p>As per paper 6.6. There was no discussion of this item.</p>
Item 6.7	<p>IMOS presentation</p>
	<p>Dr Roger Proctor (Integrated Marine Observing System) provided an overview of the IMOS and AODN infrastructure noting that its role is to undertake systematic and sustained observing of the marine environment. IMOS was established in 2006-07. IMOS consists of a number of facilities operating various observing programs including for example Argo Floats, Ships of Opportunity, Deepwater Moorings and related observing platforms. The presentation provided an overview of the recent work with ANDS to publish critical marine vocabularies, development of the IMOS Ocean Data Portal (imos.aodn.org.au), and recent efforts to migrate the data system to commercial cloud hosting solutions. IMOS are currently working with NEII through their contribution to NEMSR with an initial focus on Great Barrier Reef Moorings, Shelf Moorings and Ocean Radar Sites. Presentation noted the potential role of IMOS to provide oceans data in conformance with NEII.</p>
Item 6.8	<p>Member Updates - Including relevant engagement with States and Territories</p>
	<p>ABS – Are currently focused on delivering the 2016 census on August 9th. In parallel ABS are undergoing a statistical transformation process with a focus on online census submission. They have recently migrated away from their old website and have released an Android application for ABS data. Have recently launched a data lab to allow users to access ABS data on-site with modern versions of key software. Projects are also underway to better link data across agencies, in particular social services and taxation information to support policy development.</p> <p>IMOS – In addition to the IMOS overview at item 6.7 IMOS are engaged in the Reef Integration Monitoring and Reporting Program which has a number of working groups one of which has a focus on data.</p> <p>CSIRO – Two year data management programme currently underway with a focus on strengthening the Data Access Portal and specifically working on functionality to better link metadata to data. CSIRO noted the importance of the data ecosystem concept and that no-one entity will control everything. Working with a number of business units to identify data pain points and aspirations to determine where they can better leverage an enterprise function. CSIRO continue to work with the Marine National Facility to better</p>

	<p>support that through the Data Access Portal and are developing an online data management tool for researchers.</p> <p>ALA – ALA continue to create open infrastructure noting that the infrastructure has now been adopted by seven other countries, it currently contains 60 million records and 7 billion downloads. Emphasised the potential role of ALA in more dynamic state of the environment reporting nationally.</p> <p>Department of Agriculture and Water Resources – Are currently implementing a pilot digital transformation project which is expected to conclude in December. The focus is on moving their survey data and making it more open through data services ultimately to produce dynamic reports.</p> <p>Department of the Environment – Progressing the Essential Environmental Measures Programme that emerged under the NPEI initiative with an initial focus on support for a working group on vegetation site data. CSIRO (Simon Cox) is leading work to develop an information model for vegetation site data.</p> <p>Department of Education – Noted the recent decision around decadal funding plan for NCRIS (\$150 million per annum) and current work is underway to develop a long-term strategy through a road mapping exercise chaired by the Chief Scientist with a focus not only on NCRIS but broader research infrastructure.</p> <p>ANDS – confirmed that their commitment to their vocabulary service remains strong and a process is underway to look at eResearch capabilities across NCRIS and data features strongly boding well for sustaining an operational vocabulary service.</p> <p>PM&C – the National Map team from Data61 are working with data.gov.au to extend functionality and planning for the coming two years of work.</p> <p>BoM – Bureau of Meteorology are going through a step-change around data services (web service delivery internally and externally) and are developing infrastructure to in parallel deliver more robust data services. Things that are coming online include an operational OPeNDAP server with map caching to support existing map viewers. The Bureau has recently established a Data Programme to improve enterprise level coordination and delivery of data-related activities.</p>
NEXT MEETING	To be scheduled shortly

ACTIVE ACTIONS

Actions completed and accepted by the NEII-RG will be removed from the rolling action list and are available at neii.gov.au (password protected collaboration space)

#	Action	Due	Status
6.1	NEII Programme to publically release the NEII Conformance Framework as Version 1.0	ASAP	Complete
6.2	NEII Programme to create a mechanism to share technical learnings in regard to NEII implementation.	ASAP	In-progress
6.3	NEII Programme to continue expansion of the framework to other information types including observations, monitoring sites and controlled vocabularies	ASAP	Not-started
6.4	NEII Programme to establish the environment.data.gov.au working group and members to nominate representatives with the group reporting to a future meeting of the Reference Group.	ASAP	In-progress