

	<b>National Environmental Information Infrastructure Reference Group</b>	June 7th, 2017
		Minutes
		<b>Approved</b>

## MEETING #08 – MINUTES FINAL

<b>Meeting</b>	Meeting #08 – National Environmental Information Infrastructure Reference Group
<b>Chair</b>	Dr. Louise Minty, Assistant Director, Environmental Information Services
<b>Meeting Date</b>	June 7 <sup>th</sup> , 2017
<b>Location</b>	Bureau of Meteorology – Winyu Room, Treasury Building Parkes Place West, Canberra
<b>Time</b>	9.30 to 11.30

### MEMBERS

<b>Member</b>	<b>Organisation</b>	<b>Attending</b>
<b>Louise Minty (Chair)</b>	Bureau of Meteorology	Chair
<b>John LaSalle</b>	Atlas of Living Australia	Peter Brenton
<b>John D Moore</b>	Australian Bureau of Statistics	Apology
<b>Adrian Burton</b>	Australian National Data Service	Member
<b>Serryn Eagleson</b>	Australian Urban Research Infrastructure Network	Apology
<b>Anthony Rea</b>	Bureau of Meteorology	Member
<b>Phil Tickle</b>	CRC Spatial Information	Apology
<b>Cynthia Love</b>	CSIRO	Member
<b>Evert Bleys</b>	Department of Agriculture and Water Resources	Member
<b>Liz Edge</b>	Department of the Environment and Energy	Member
<b>Judi Dawton/Alan Barger</b>	Department of Prime Minister and Cabinet	Apology
<b>Neal Evans</b>	Geoscience Australia	Member
<b>Tim Moltmann</b>	Integrated Marine Observing System	Apology
<b>Michelle Black</b>	Murray Darling Basin Authority	Stephen Sunderland
<b>Ben Evans</b>	National Computational Infrastructure	Jingbo Wang
<b>Beryl Morris</b>	Terrestrial Ecosystems Research Network	Apology

## SECRETARIAT

Representative	Organisation
Andre Zerger	Bureau of Meteorology, Environmental Information Services Branch

## OBSERVERS

Representative	Organisation
Chantelle Doan	Bureau of Meteorology, Environmental Information Services
Vivienne Bordas	Bureau of Meteorology, Environmental Information Services

## MINUTES

<b>Item 8.1</b>	<b>Opening &amp; attendance</b>
	<p>Dr. Louise Minty (Chair) welcomed participants to the eighth meeting of the National Environmental Information Infrastructure Reference Group (NEIIRG). Louise announced that the Bureau is undergoing a restructure that will take effect on July 1 2017. As a result the NEII programme will move to the Data and Digital group with Anthony Rea taking on the role of the chair of the reference group. Louise thanked members for their sustained contribution and participation in the programme. Anthony noted that the restructure is a positive development given the renewed focus on customers and the prominence of data in the new structure.</p>
<b>Item 8.2</b>	<b>Minutes from Meeting #07 and actions</b>
	<p><b>Approved</b> the minutes as a true and accurate record of the NEII Reference Group meeting #7 held on the 20<sup>th</sup> October 2016. Minutes will be made public at <a href="http://www.neii.gov.au">www.neii.gov.au</a>. Dr Andre Zerger provided an update on standing action items.</p> <p><b>Actions</b></p> <p>7.1 Members to advise on additional communication and promotion opportunities to improve national awareness regarding the release of the NEMSR. <b>Closed, covered in item 8.5 under NEMSR working group.</b></p> <p>7.2 Member to advise on their priorities regarding inclusion of additional networks into the NEMSR through 2016-17. <b>Closed, covered in item 8.5 NEMSR working group.</b></p> <p>7.3 Reference group members to let Evert Bleys know if they use anything on the ANRDL <b>Closed</b></p> <p>6.3 NEII Programme to continue expansion of the conformance framework to other information types including observations, monitoring sites and controlled vocabularies. <b>On-hold until vocabulary service is released.</b></p> <p>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. <b>Closed noting that Nicholas Car from Geoscience Australia is now progressing this work under the auspices of the Australian Government Linked Data Working Group. Nick will be invited to present on this work at the next meeting.</b></p>
<b>Action 8.1</b>	NEII programme to circulate communique from Linked Data Working Group regarding persistent identifiers and invite Nicholas Car to the next meeting of the Reference Group.
<b>Item 8.3</b>	<b>NEII Programme update</b>
	<p>Ms Chantelle Doan provided an update on the NEII Programme as per the item detailed in paper 8.3</p>

<b>Discussion</b>	<p>Members asked whether the NEII programme was capturing user statistics to better understand infrastructure use. It was noted that the programme has scheduled a 17-18 project to collate and report user metrics in a federated information infrastructure. This is a complex challenge given data are distributed across custodian systems. NCI noted they have developed a tool to collect data from data download points through a 'system crawler'. CSIRO suggested a data citation index may also be useful to identify how data are being used.</p> <p>The NEII programme provided an overview of their work with NCI and GA to develop a proposal to the PM&amp;C-led Platforms for Open Data program to develop an Australian Government Environmental Data Analytics Toolkit. If successful the intent would be to broaden participation to the other NEIIRG members.</p>
<b>Action 8.2</b>	NEII programme to distribute the Platforms for Open Data proposal to members
<b>Recommendations</b>	<b>Noted</b> the NEII programme is tracking on-schedule against the NEII Roadmap 2014-2019.
<b>Item 8.4</b>	<b>NEII Vocabulary Services Project</b>
	<p>Dr Andre Zerger presented an update on the NEII Vocabulary Services project which commenced in December 2016 and represents the 5<sup>th</sup> and the final NEII component to be built before the programme focusses on system integration. While the original intent was to build a vocabulary service from first principles, a review of existing systems and capabilities undertaken in March 2017 resulted in a decision to adopt a blended solution with the Australian National Data Service's (ANDS) Research Vocabularies Australia (RVA) platform as its backbone. An NEII hosted instance of the CSIRO SISSVoc Linked Data Application Programming Interface will complement the ANDS capability to support additional customisation and provide improved system redundancy. It's expected that the NEII Vocabulary Service will go live in July 2017 with all initial environmental vocabularies discoverable through <a href="http://www.neii.gov.au">www.neii.gov.au</a> and RVA.</p>
<b>Discussion</b>	<p>ALA asked about the system ability to subset from international vocabularies. It was noted that technically this will be possible but remains an agreements and governance challenge that will receive attention once the system is operational. DAWR asked about alternative systems for vocabulary management and the NEII programme noted that a review of alternates had been conducted and summarised in an options paper that is available to members. It concluded that the ANDS RVA implementation was world class and had received support from other organisations including IMOS and GA. Common platform adoption by partners also provides numerous benefits. CSIRO noted they have also elected to adopt the ANDS solution rather than reviewing alternate options and aligning with a common infrastructure made strategic and technical sense. ANDS noted the importance of initially publishing environmental vocabularies through a common infrastructure which would then lead to options for improved content integration and system enhancement. The chair noted that it was pleasing a number of groups were working together through a common infrastructure which assists us to realise a whole-of-government agenda around vocabulary content and systems design.</p>
<b>Recommendations</b>	<b>Noted</b> the NEII vocabulary service project progress
<b>Action 8.3</b>	Secretariat to circulate NEII Vocabulary Services options paper to members.
<b>Item 8.5</b>	<b>NEMSR working group</b>
	<p>The NEMSR now contains 4375 monitoring sites across 15 networks and from six organisations. As such its evolving into an important national capability by harmonising how the environmental information community describes and publishes monitoring site data. The programme has received excellent support from the current group of network owners. Given ongoing NEMSR engagement, technical and policy needs that depend on input from network owners the programme has established the NEMSR working group as its key engagement mechanism. The chair noted that under the NEIIRG TORS working groups can be created as needed and this group was formed prior to member approval owing to immediate operational imperatives. The group met once on April 3<sup>rd</sup> 2017.</p> <p>At meeting one members agreed there was public good value in publishing the superset of environmental monitoring sites developed by the NEIIRG in late 2015. However prior to publishing this list on <a href="http://www.neii.gov.au">www.neii.gov.au</a> members should be provided another opportunity</p>

	to review their contributions.
<b>Discussion</b>	Reference group members supported the establishment of the working group and agreed the superset of monitoring sites should be published on <a href="http://www.neii.gov.au">www.neii.gov.au</a> after a final review. Members noted the importance of the NEMSR product to improving discovery, access and re-use of environmental information and it now simply remains for the product to receive more widespread uptake by people and systems.
<b>Recommendation</b>	Members <b>endorsed</b> formation of the NEMSR working group.
<b>Action 8.4</b>	Members to review the superset of environmental monitoring sites prior to their publication on <a href="http://www.neii.gov.au">www.neii.gov.au</a> and provide feedback to <a href="mailto:environment@bom.gov.au">environment@bom.gov.au</a> .
<b>Item 8.6</b>	<b>CSIRO update</b>
	Cynthia Love provided an update around data management activities in CSIRO noting that CSIRO are first and foremost a research organisation. CSIRO's data management activities are underpinned by a number of principles including: (a) thinking big and starting small, (b) building an enterprise capability, (c) prepare to change and grow, (d) support a wider collaborative network, and (e) increase data discovery by having multiple access points and linking these. A key product emerging from recent data management activities is the CSIRO Data Access Portal which is a hybrid metadata repository working with a data store. Achievements through the development of the portal include: (a) protecting and publishing collections of data, (b) ingest workflows that support access management, licencing and citation, (c) publishing software, (d) establishing links between publications, data and software (e) developing feeds to other portals to increase exposure. Effort is also being devoted to data governance to move it from being fragmented, local and unplanned to a coherent, planned environment where data are considered an important asset to the organisation. Future plans include; (a) a refresh of how collections, services and software are presented; (b) a trusted data repository; (c) improved storage with improved integration with existing network storage;(d) support for services, vocabularies and semantic discovery; (e) provenance management; and (f) object and file level metadata.
<b>Discussion</b>	Members explored the challenge of developing data management policy in the context of supporting infrastructure. CSIRO noted the importance of first developing a capability and then developing policy to support uptake. Policy is an important instrument to support legal obligations and related responsibilities but may not be the best instrument to achieve uptake and engender change. With infrastructure in place more detailed data management planning can be implemented and should occur early in project genesis, supported by policy for, example around licencing.
<b>8.7</b>	Member updates (by exception)
	<b>ALA</b> - have recently worked on creating linkages and interoperability across capabilities for example they are currently working with AEKOS and NECTAR with respect to virtual laboratories. They are also working on the BioCollect to support more effective field-based data acquisition. This includes tagging records with global DOIs. ALA are also presently hosting the Australian Citizen Science association. <b>CSIRO</b> are hosting an annual Conference on Computational and Data Intensive Sciences to be held on 17-20 July in Melbourne.
<b>8.8</b>	<b>Other business &amp; next meeting</b>
	Secretariat noted that the NEII programme is increasingly collaborating with NIWA New Zealand and they would value more formal involvement with the NEII programme potentially through membership of the Reference Group. Members endorsed progressing an invitation to NIWA NZ to join the group as an observer. Next meeting to be held in between the 1 <sup>st</sup> - 15 <sup>th</sup> September 2017.
<b>Action 8.5</b>	Secretariat to invite NIWA NZ to join the reference group as observers.

## OPEN and MEETING ACTIONS

Actions completed and accepted by the NEIIRG will be removed from the rolling action list and are available and [www.neii.gov.au](http://www.neii.gov.au) (password protected collaboration space)

#	Action	Due	Status
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	In-progress
8.1	NEII programme to circulate communique from Linked Data Working Group regarding persistent identifiers and invite Nicholas Car to the next meeting of the Reference Group.	ASAP	In-progress
8.2	NEII programme to distribute Platforms for Open Data proposal to members	ASAP	Complete
8.3	Secretariat to circulate NEII Vocabulary Services options paper to members.	ASAP	Complete
8.4	Members to review the superset of environmental monitoring sites prior to their publication on <a href="http://www.neii.gov.au">www.neii.gov.au</a> and provide feedback to <a href="mailto:environment@bom.gov.au">environment@bom.gov.au</a> .	ASAP	In-progress
8.5	Secretariat to invite NIWA NZ to join the reference group as observers.	ASAP	In-progress