share

the newsletter of the
Australian National Data Service

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MANAGING • CONNECTING • DISCOVERING • REUSING
RESEARCH DATA

Building data communities

In February this year, the Australian National Data Service (ANDS) launched '23 (research data) Things', a self-guided learning program for anybody interested in discovering more about research data or honing their existing skills (see pages 4 and 5 for a full report).

Come November and around 1,500 people have taken part in 23 (research data) Things – or '23T' for short – not just from Australia but from all over the world. Local groups have sprung up to support each other through the weekly tasks. Many groups meet regularly to discuss the ideas and concepts involved, with countless new connections made over tea and cake, or through virtual meetings and online forums.

The result is a community of individuals gaining knowledge and new professional connections – but it is also much more than that. The knowledge gained by participants also benefits Australian research institutions through added expertise and enthusiasm, in turn adding value to Australia's research sector as a whole.

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INSIDE ISSUE 27

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Executive Director's report

Ross Wilkinson, ANDS

Data is a powerful means of supporting communities, including research communities.

In 1992, Donna Harman, a woman of great wisdom at the National Institute of Standards and Technology in the US, invited research groups around the world to participate in the first 'competition' to find methods of building search engines to discover documents using an agreed methodology, all using the same data. I was pleased to be able to take part in the event.

It was both an engineering challenge to work on 1GB of text – hard at the time – and an experimental challenge to establish what methods worked.

Whilst it was a competition, it was really a community collaboration to find out what worked and what didn't. As well as sharing the data, we shared experiences and failures. It was a tremendous impetus to improve search engines.

The big search companies did not exist then, but people who participated went on to establish big companies delivering great industry translation. We all turned up to a cold and dark Gaithersburg, USA, and it was terrific!

Of course this is only one story of how communities are often built around data. The 'competition' to establish the human genome has had a similar community effect, and similar translation into benefits.

This issue of *Share* is dedicated to the many communities that make a difference in translating collections of data to impact – the collectors, the technicians, the research communities and others who all make a big difference. Sometimes we measure data in gigabytes or petabytes. I prefer to measure data in terms of people: how many make the data valuable and how large a community reap the benefits of this value.

Data policy

Greg Laughlin, ANDS Principal Policy Adviser

The policy update in the last edition of *Share* referred to four recent submissions made to government inquiries. In this edition, two of those submissions are covered in more detail:

Productivity Commission Draft Report on Intellectual Property Arrangements

The Productivity Commission called for the Australian and State and Territory Governments to implement open access policies for the outputs of publicly-funded research (by 'outputs' they mean publications such as journal articles, monographs, etc).

ANDS' submission noted that publications have been the subject of open access policies by Australia's major funders for quite a few years. It also sought to extend the Productivity Commission's definition of research outputs beyond publications to include data, techniques, algorithms and software, bringing Australia into line with the major overseas peers.

ANDS noted there are slight differences in the concept of 'open access' for data and publications. Chief among these is that data cannot always be made openly available, for example where legitimate sensitivity, security or commercial reasons exist.

Australian Medical Research and Innovation Five Year Strategy

The Medical Research Future Fund (MRFF) is a $20 billion Government fund. The main thrust in ANDS' submission was to describe the importance of, and opportunities associated with, ensuring that medical research is supported by data strategies, data policy, data infrastructure and services.

ANDS also contended that failure to address this issue in Australia will decrease the return on investment into medical research and deny many current and future researchers the opportunity to take advantage of the emerging trends around data-intensive medical research.

The submission referred extensively to overseas arrangements, international medical funding policies and the overwhelmingly positive economic returns of the main (data infrastructure) proposition.

Plus a new line of inquiry...

Over the next few months ANDS will be looking more closely at reports and other information on research-industry collaborations, where research and other types of data have played a central role. More on that to come in future editions of *Share*.

(continued from page 1)

Data communities taking on the big challenges

Active data communities are vital to the wellbeing of our sector, providing a platform for discussion and evolution of ideas.

Communities of practice have been core to the advancement of research infrastructure, for example when seeking agreement on standardisation of protocols, or keeping up to date with the issues in Australia and further afield.

"All of the world's grand challenges — security, health, resilience — require global effort," says Mark Parsons, Secretary General of the Research Data Alliance (RDA), an international community promoting data sharing and data-driven research (see page 10).

"For example, how could one possibly reach a goal of zero poverty without understanding basic information about global crop production? The RDA provides a neutral place where people can get together to address these issues."

Hands-on workshops teach Monash bioscience researchers software development skills (Credit: Monash Bioinformatics Platform)

Australia's research capacity relies on upskilling, information exchange and evolution of best practices. The benefits can be particularly strong when people cross their natural work boundaries to create cross-discipline communities.

"Building a community around a diversity of disciplines helps research deal with the ever-increasing complexity of data"

Steve Androulakis is the manager of the Monash Bioinformatics Platform, which provides bioinformatics support to Monash University and affiliated organisations. It is building a loosely linked community of bioinformaticians across all of Monash, available to help with specialist advice on experimental design or analysis.

"Cross-discipline working brings a fresh creativity and insight to our group," he says. "We regularly see our scientists creating interactive apps and complex visualisations from data, while our engineering and statistics staff become engaged in the world of high impact medical research. Building a community around a diversity of disciplines helps research deal with the ever-increasing complexity of data."

Data technicians from different fields are also coming together to attend Tech Talks or use Virtual Laboratories (see pages 6 and 7).

Data from the ground up

As well as the experts, new technology has enabled communities of amateur enthusiasts to contribute to Australian research data like never before.

Organisations like Redmap and the Atlas of Living Australia use their websites to capture valuable data on Australian species direct from volunteers and hobbyists out in the field (see pages 8 and 9).

Huge collections of images, previously impossible to analyse by staff, are now being verified by an online community of so-called 'citizen scientists' from their living rooms.

There are many other types of data communities besides these, including a host of research data-related communities supported by ANDS (see page 9).

Issue 25 of *Share* celebrated 'the people behind the data': the individuals and teams whose expertise and enthusiasm makes everything in our sector happen.

In this edition we look at what brings those people together into data communities, and the value this adds to Australia's research system.

Data communities do amazing Things

Karen Visser and Gerry Ryder on the success of 23 (research data) Things

23 (research data) Things is a treasure trove of activities, ideas, examples and thought provoking questions for anyone who cares for, and about, research data.

The 23 topics include quirky and serious explorations of what research data is and why it is such a global hot topic: finding it, reusing it, managing it, describing it, how and why to publish it, tools and apps for value adding and visualising it, data literacy, citation, data management plans and more.

Starting in March 2016, some 1,500 participants tackled 23 (research data) Things in their own way. They have chosen from three levels of activities for each 'Thing', delving deep into some Things and skimming over others.

Whether through one of the 49 local groups set up across Australia or as an individual participant, everybody soon became part of the '23T' community.

Cake has played a big role in 23T! (Credit: Sonja Barfoed)

The origin of Things

The concept stems from the original 23 Things program designed by Helene Blowers in 2006, and more specifically *23 Things: Libraries for Research Data* developed by Michael Witt in 2015 as part of the Research Data Alliance Libraries for Research Data Interest Group, and made available as an RD-A Supporting Output.

The 2016 research data version, managed by ANDS, was a genuine community effort. Over 70 topics, activities and examples were suggested by participants, which were then massaged into 23 topics, each with three levels of complexity: 'Getting started', 'Learn more' and 'Challenge me'. All resources used in the program are free to use, share and repurpose through a Creative Commons licence.

The people involved in the program are from universities, libraries,

Hannah Shelley

Information Services Librarian, Australian Catholic University

I'm an early career librarian working in the university sector, so I'm keen on professional development and looking ahead at what I think will be important in my field for years and decades to come.

Research data management is an interesting area that is gaining a lot of momentum in university libraries, so I wanted to learn more. 23 (research data) Things was a great way to develop my knowledge and pick up some practical tools and resources to add to my professional 'grab bag'.

Hannah Shelley (supplied)

There were some topics where just an introduction was enough, and some where I wanted to delve a little deeper, so I enjoyed the self-directed nature of the program and being able to choose which activities I did.

It was also incredibly valuable to be part of a community going through the program and hearing other people's thoughts, concerns, insights and tips – especially those more developed in their career and experienced in working with data.

I work in a team that supports researchers and academics, and the program has equipped me with knowledge, ideas and tools that I can apply at work. I've become excited about research data and hope to incorporate it into my long-term career.

eResearch agencies, business, government, health, museums, not for profits and other educational sectors. Whilst mostly within library and client services roles, the professional diversity was astonishing, from archivists to web developers and everything in between.

The program has resulted in a step change in the broader community engagement with the research data sector. Participants tell ANDS they have been "alerted to new aspects of research data", opening up new possibilities and bringing wider benefits to their institutions.

"I thought I was 'into' data management but now my thinking and learning has broadened so much I have more questions than answers," says Julie Toohey, Health Librarian at Griffith University and co-coordinator of the 23 Things health data virtual community group.

Or as another 23T enthusiast put it: "The more I put into it, the more I get out of it. The more I engage with and explore the ideas presented, the more I discover."

University of South Australia City West 23T Group (supplied)

What's next?

The next phase will involve repurposing the materials for contextualised use, such as the '10 medical and health research data Things' already released – an adaptation of the program for those working with sensitive health and medical data.

University of Queensland 23T Group (supplied)

All materials from the program, including activities, resources and workshop materials, have been wrapped up in a reusable format to create a toolkit anyone can adopt and adapt. The content can be used to help build research data management capability in Australia, in turn further strengthening our research data communities.

It's never too late to begin 23 (research data) Things! All resources will remain online at ands.org.au/23-things.

Vladimir Bubalo

23T Group leader at Macquarie University

Having been involved in four ANDS funded research data management (RDM) projects at Macquarie University and working with various stakeholders during these projects, I realised there was a gap in knowledge and understanding about issues related to research data management. It was affecting both our researchers and our support staff.

The interest [in 23T] has been substantial, with the initial webinar attended by close to 90 staff and students across the university. We promoted the program as wide as possible to our researchers and support staff resulting in elevated awareness of issues related to RDM.

The program was helpful on many levels, not only as a tool to help understand the issues better or expand skills, but also to provide a good check list for issues our researchers are facing. It had lots of resources all in one place, with easily reusable content.

We had quite a few passionate discussions about various aspects of RDM, and we all learned something.

Our librarians are now a lot more confident in answering RDM related questions from researchers and more equipped to recognise the needs and issues they face.

We are now investigating further avenues of development, expanding this to the wider eResearch space. We are looking at Software Carpentry, Data Carpentry and Library Carpentry as the next step. We are also looking at Author Carpentry, which is currently in development.

Macquarie University 23T group – Vladimir is on the right (Credit: Vladimir Bubalo)

Data technologist communities

Andrew Treloar on how the Monthly Tech Talk series is bringing together data technologists

Achieving success in eResearch infrastructure requires a focus on three elements: partnerships, services and skills. Over the life of ANDS, the organisation has invested significantly in partnerships and services, but has not fully explored the value of increasing skills in some communities.

Through the work of the Capabilities team, led by Karen Visser, ANDS has built a vibrant data librarians community. The success of the 23 (research data) Things initiative is testament to this – around 1,500 registrations and significant engagement across the country (see previous story on pages 4 and 5).

But data librarians are not the only community that is making a difference in research data. As part of its Business Plan for 2015-16, ANDS identified a need to expand its work in community building for data technologists.

This group is less easy to pin down than data librarians, but has been defined to include anyone in the research-producing sector who is involved with creating or supporting tools or technologies that work with data. This group is more diverse than data librarians, and employed in a wider range of agencies. So identifying them took a while, and the momentum was a bit slower to build.

Because ANDS wanted to help the community come together, two decisions were taken early on.

The first was not to use this as a way to push ANDS services; it was deliberately structured as a listening and facilitating exercise. The idea was for the community to identify what it wanted to talk about, and for ANDS to help.

The second was to try to make this more than just another webinar series. And so the Monthly Tech Talks series was born.

Each Tech Talk event is structured on a hub and spoke model. People physically meet in venues around Australia's States and Territories, connected via video conferencing. After the presentations (short ones with time for questions, totalling only one hour) the meeting turns into a social function.

The result has been a steady increase in those registering and attending from meeting to meeting. Recent events have attracted over 100 people around the hubs.

The topics covered so far – selected through a poll of the community – have included Cloud Power User, DOIs, Security in the Cloud, Imaging Analysis, Big Data Analysis and Software-Defined Networking. The session on Provenance (4 November) is the last for the 2016 series.

If you are interested in attending future events, see ands.org.au/techtalks for more information. Events are held on the first Friday of each month.

A few words of thanks

ANDS would like to acknowledge the fantastic energy and enthusiasm shown by Dr Xiaobin Shen (recently departed from ANDS to AAL), who was responsible for initiating these talks and facilitating them up to the September meeting. The credit for their success and momentum belongs in large part to him. ANDS is committed to continuing and building on the excellent foundation that he has laid.

ANDS would also like to acknowledge the support of Nectar, QCIF, Intersect, VicNode, eRSA and Pawsey in publicising and hosting the meetings.

A recent Tech Talk event in Brisbane (Credit: Nick Hamilton)

Virtual Lab communities

Loretta Davis on how NeCTAR's Virtual Laboratories are enabling high-quality research

(Credit: NeCTAR)

Virtual Laboratories, or VLs, are rich domain-oriented discipline-specific online environments that draw together research data, models, analysis software, computational tools, storage and workflows in an integrated and interactive environment. Each VL is specifically designed to offer a class-leading, cost-effective solution through collaboration.

Leveraging Australia's high speed academic research network in combination with world-leading computational and storage infrastructure, the VLs enable authorised users across global research communities to access specialised high-end services and equipment in a cloud-based environment with desktop convenience.

End users span a range of disciplines from undergraduate and postgraduate researchers through to research communities within local, state and national government organisations, as well as access by industry and not-for-profit organisations. Many VLs also offer training and outreach programs specifically designed to highlight the VL benefits for research applications within the broader community.

Strengthening research community collaboration across international and discipline boundaries is a key outcome of the NeCTAR VL program.

"Community engagement is the catalyst behind all our Virtual Laboratories," says NeCTAR Deputy Director, Michelle Barker.

"NeCTAR's most significant strength is that we are researcher-led and supported. Our VLs are built by – and for – our diverse research communities and now play an integral role in the research ecosystem."

"Each NeCTAR Virtual Laboratory is unique in terms of its function and operation. VLs were initiated to address the specific requirements of individual research communities, were developed by their community, and are researcher-led in their governance structures."

Tailored to the community

Each VL is tailored to the needs of the research community so they operate differently. In many, researchers can access existing datasets and models within the VL as well as load their own datasets and models to run simulations that provide increasingly accurate analysis and extend the range of current data projections.

The result? NeCTAR has been highly innovative in facilitating valuable outcomes across multiple Australian research communities to support improved collaborative outcomes and build skills across multiple sectors. Credit for the continued success of the NeCTAR VLs lies with the communities – communities are the catalyst behind each VL creation, communities are instrumental in their on-going development, and, most importantly, communities are the primary beneficiaries of the VLs.

"Connecting our research communities significantly increases the value of Australian research data," adds Michelle Barker. "Our NeCTAR VLs play a leading role in sharing technology and resources to foster collaborative and innovative research that transcends institutional, discipline and international boundaries."

Find out more: access details for individual laboratories are available at nectar.org.au/labs-and-tools

Who uses the NeCTAR VLs?

The VLs provide access to an increasingly diverse range of communities. This currently includes:

- Alveo - Above and Beyond Speech, Language and Music - Human Communication Science VL
- HuNI – Humanities Networked Infrastructure
- MARVL – Marine Virtual Laboratory
- CWSLab – Climate and Weather Science Laboratory
- endoVL - Endocrine Genomics VL
- IE Lab – Industrial Ecology VL
- BCCVL - Biodiversity and Climate Change VL
- GVL – Genomics VL
- mGVL – Microbial Genomics VL
- CVL – Characterisation VL
- ASVO – All-Sky Virtual Observatory
- VGL – Virtual Geophysics Laboratory
- VHIRL – Virtual Hazards, Impact and Risk Portal

Citizen data communities

Volunteers add value to ALA datasets

Peter Brenton, Atlas of Living Australia

To provide the range and depth of data available through the Atlas of Living Australia (ALA) we rely on many sources of input. The ALA believes that data and insights gained through the efforts of citizen science can be just as valuable as those obtained by scientists working in academia, natural history collections, government agencies and business.

We get all kinds of people contributing to the ALA, from locals adding sightings of plants and animals in their area to the 1000+ volunteers who contribute through DigiVol, our crowd sourcing tool for digitising hand written records into the ALA.

The ALA is partnered with the Australian Citizen Science Association (ACSA) to provide a citizen science project finder and data collection tool (biocollect.ala.org.au). This also interoperates with other global citizen science project registries to improve global project discovery and public participation.

'Citizen'-based contributions to mainstream scientific investigations are becoming increasingly important. Technology is helping to facilitate this by enabling projects to be more accessible to the public, providing greater effectiveness of communications between science practitioners and citizen scientists, as well as providing accessible data collection and management tools which improve the flow and quality of data.

Through citizen science we gain valuable current and on-going contributions to scientific knowledge at local, regional and national levels at a time where the cost of running comprehensive more traditional scientific surveys is becoming increasingly expensive.

'Citizen data' in action at Mimosa Rocks (Credit: ALA)

Making opportunities for people to actively participate in real scientific endeavours where their contributions are valued also opens pathways for more people to become professionally involved in science.

Divers and fishers map Australian marine life

Jemina Stuart-Smith, Redmap

Redmap (Range Extension Database & Mapping Project) is an interactive project that engages and inspires citizen scientists across Australia to become involved and aware of what is happening in the marine environment.

The project is centred around a website and phone app encouraging community members (in particular divers and fishers) to report sightings of marine species observed outside their normal distribution range. Once submitted, sighting observations are verified by a team of scientists from around the country, and then displayed on the website.

Understanding change

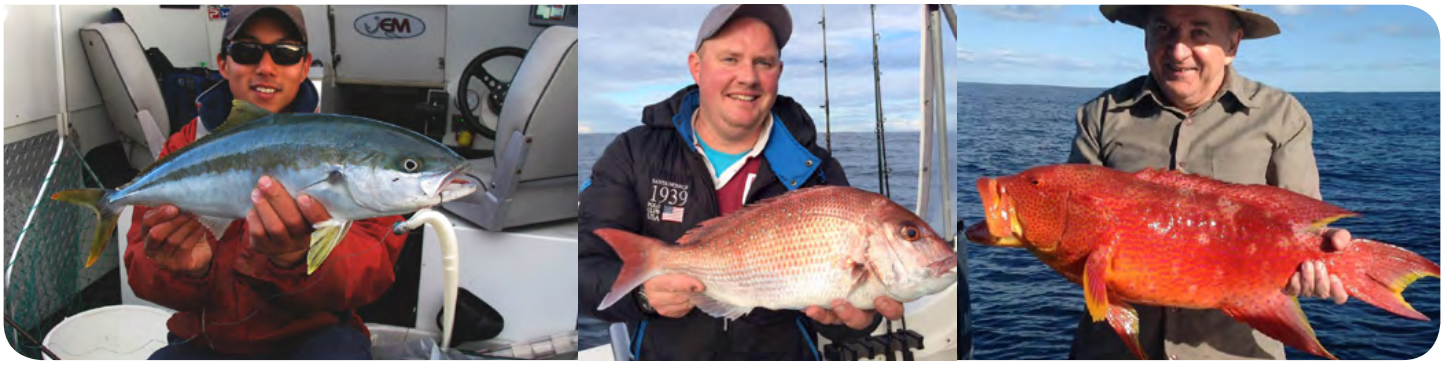
One of the most widespread impacts of climate change is the global redistribution of species, or species 'range shifts', as our natural systems respond to changing environmental conditions.

Identifying possible range shifts in marine species is critical for understanding the impact of climate change on ecosystems and on our ability to be appropriately prepared to respond.

Through participation in Redmap, the community are actively engaged in the generation of knowledge about how our marine systems are responding to both short and long term environmental patterns and changes.

Redmap is a powerful yet simple and positive way to engage people on issues of biodiversity and climate change. It also provides opportunities to learn about scientific principles related to species biology and ecology, oceanography, marine habitats and many other scientific concepts that users may not normally be exposed to.

Redmap provides an easy avenue for active involvement,



(L-R) Yellowtail Kingfish *(Seriola lalandi)* caught by Jonah Yick in Tasmania; Snapper *(Chrysophrys auratus)* caught by Johnny Valentine in Tasmania; Coronation Trout *(Variola louti)* caught by Kelvin Wilson in Western Australia (Credit: Redmap)

demonstrating clearly how the data are important. This facilitates an informed community and provides an effective tool for communicating scientific issues, as well as increasing public participation in data collection.

Over time, Redmap will use this 'citizen science' data to map which Australian marine species may be extending their distribution range in response to changes in the marine environment, such as ocean warming. The data also highlight regions and species that may be experiencing more distribution changes so that research can be focused into these areas.

With unprecedented access to real time ecological observations through advances in geo-referenced technology, automated workflows and the ability to include semi-automated data collation features, citizen science projects present an effective means to increase scientifically-rigorous data capture via community involvement.

Other data communities

The stories in this edition of *Share* represent only a selection of the data communities adding value to the Australian research system. Other data communities supported by ANDS include:

ANDS developers community

A portal of information to encourage the reuse and extension of the open source software suite developed by ANDS to run Research Data Australia.

Australian Vocabulary Special Interest Group (ASVIG)

A forum for discussion and activity in the use and creation of controlled vocabularies in research, data, information and collection management.

Australian Research Data Provenance (RDP) Interest Group

Bringing together people who work in the provenance space to facilitate conversation, discuss a range of provenance issues, reduce duplication of effort and coordinate community activities.

RDII (Research Data Information Integration) community

Facilitating the sharing of information and practices between research institutions on system functionalities used to store information about research data, and the integration needed to connect systems.

Data librarians community

ANDS is providing a range of events and resources aimed at building community connections, skills and knowledge within the data librarian community, including through 23 (research data) Things self-learning.

Geoscience data community

Australia's geoscience community produces valuable data ranging from high volume satellite imagery to minute soil samples and maps. ANDS offers support to make geoscience data discoverable through the implementation of standards, identifiers, citation minting and awareness of discipline tools.

Health and medical data community

ANDS has been supporting the health and medical community through running workshops on sharing sensitive data, creating a health data community group during 23 (research data) Things, and developing '10 medical and health research data Things'.

To find out more about these data communities and how to get involved, visit ands.org.au/communities.

International communities

Hilary Hanahoe on the growth and impact of the Research Data Alliance

The exponential growth of the global Research Data Alliance (RDA) community in just over three years is no surprise given the importance and urgency of working towards identifying solutions to support research data sharing and reuse.

What is a surprise though is the level of engagement and dedication of this 4,300-strong volunteer force.

RDA is a unique community-driven organisation offering a neutral space for members, spanning 111 countries, to discuss and develop 'data bridges' to enable the open data sharing across technologies, disciplines and countries.

These volunteers do this through focused Working Groups and exploratory Interest Groups, of which we now have over seventy five.

RDA 8th Plenary Meeting 15-17 Sept 2016, Denver (Credit: Andjani Gatz)

Good gardening

What is the secret behind this growth? We have let 1,000 flowers bloom. And what quantifiable bulbs can we count? Currently RDA has 15 Flagship Recommendations – published concrete proof of the community's increasing commitment to achieving the vision of researchers and innovators.

In Europe alone, there are 1.7 million researchers and 70 million science and technology professionals involved in the creation of new knowledge, products, services and processes. The potential economic and societal impact of this 'industry' is massive.

But this is not only a European phenomenon. All over the world local, national and regionally funded initiatives must synchronise to ensure the digital solutions being developed and produced are suitable to meet end-user needs. RDA gathers data practitioners from a variety of different organisations, from academia to libraries, service providers and digital repositories, enterprise and SMEs, public administration and policy makers. This diverse but essential combination ensures that what is delivered is truly required by the end-users.

The Vermont Monitoring Cooperative – an organisation that provides information essential to understand, manage, and protect Vermont's forested ecosystems – needs to develop the clearest picture of change over time, so they have to utilise all data streams – monitoring, research, and other sources. By adopting the RDA Recommendation on Data Citation, they have identified a way to cite and version data and enrich the metadata. Doing it in a way that any dataset manager can access will provide a lot of new power to users, and by extension to their community.

This is just one example of over 70 cases of adoption and implementation of these technical bridges that the RDA community themselves are defining, discussing, developing and maintaining. When you think that the RDA members mainly collaborate in a virtual workspace and some of them gather every six months in a different place in the world at the Plenary Meetings, it is truly a sign of commitment, dedication and global collaboration.

International recognition

So how, you might ask yourself, does this impact on international data policy? RDA, *per se*, is not a policy organisation, but it does indirectly determine trends and policies by the groups that are set-up and driven forward. The RDA members themselves are policy pioneers. A concrete example of that was the recent landmark achievement of RDA being recognised by the European Commission and European member states as an open, consensus-based and transparent non-profit making membership organisation that develops ICT technical specifications.

These specifications – the recommendations created and maintained by the RDA Working groups – can be referenced in public procurement. Their implementation and uptake will encourage competition, promote interoperability and innovation, and facilitate the provision of cross-border and cross-regional research data services.

Nurturing and growing healthy international communities is possible; creating global data sharing and reuse solutions is possible; fostering collaboration across geographic and disciplinary boundaries is possible. The Research Data Alliance is the proof. The flowers just keep on blooming.

Chair's report

Ron Sandland, ANDS' Steering Committee Chair

The recent national research infrastructure capability issues paper, prepared as part of the ongoing roadmapping process, places research data in a pivotal role, whether in the capability focus areas or in the capabilities that deal directly with the management, analysis and interpretation of data.

The Government's commitment to long-term investment in NCRIS carries with it an implicit assumption that a significant investment in research data needs to be made to position Australia's research communities in the forefront of global and national research challenges. A corollary of this is that the best investment in Australia's research infrastructure must maximise the value of the research data captured, managed and interpreted within this visionary program.

One of the most important ways in which the value of research data can be maximised is to ensure that it is managed in such a way as to facilitate its collection in discoverable, interoperable and shareable ways. This transcends standard data storage paradigms. Such an approach facilitates the formation of research data communities in which data are readily found and shared, and fosters national and international research collaboration.

These communities enable research to be accelerated and enhance the solution of difficult research problems, whether in the deep science needed to facilitate medical breakthroughs, or in bringing together the multiple sources of data that will enable us to better understand how urban environments can be planned for more sustainable futures.

For individual researchers, membership of these communities provides an extension and facilitation of their ability to collaborate and do better science.

When I needed some data I wrote to potential collaborators around the world, and occasionally this elicited a rich source of data. I'm sure for young researchers now this brave new world is quite thrilling.

eResearch Australasia 2016

ANDS holds joint booth with RDS and NeCTAR

The joint 'Hard Data Café' booth proved to be a hit

ANDS teamed up with Research Data Services (RDS) and National eResearch Collaboration Tools and Resources project (NeCTAR) to host a joint booth at this year's eResearch Australasia conference in Melbourne (10-14 October).

Deploying a vibrant 'rock café' theme, the three organisations came together with the message that they will be collaborating ever more closely in the future, creating a more coherent and connected experience for the research community.

ANDS, RDS and NeCTAR will be working together on a series of coordinated activities to support NCRIS data-intensive capabilities and research institutions through a whole of data lifecycle approach. This will involve connecting together the organisation's existing systems to provide a more cohesive experience.

The NCRIS Roadmap exercise, currently underway, will also be recommending changes to the way NCRIS capabilities work over coming years. Whilst this work is yet to be finalised, RDS, ANDS and Nectar are committed to a strong ongoing collaboration between the three organisations, and have already been working together more closely in recent months to provide more coordinated services across the research data lifecycle, focussing on partnerships, services and skills.

As conference attendees heard: "Together our organisations will become more than the sum of our parts".

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the newsletter of the
Australian National Data Service

ANDS News

Updated Guides page on ANDS' website

The Guides homepage on the ANDS website has recently been revamped, making it quicker and easier to find the information you need.

ANDS has dozens of data-related guides available online, from entry-level to expert. The topics include:

- data licensing
- data publishing
- metadata
- funding
- ethics and sensitive data
- institutional planning
- and many more.

The new page is also a quick link for ANDS' posters and pamphlets.

All of ANDS' guides are free of charge to view online, download or republish with attribution.

See all the ANDS Guides at ands.org.au/guides

New 'data versioning' resource published

ANDS has also published a new online resource all about 'data versioning': what it is, how to do it, and why it matters.

Find out more at ands.org.au/dataversioning

Events

ANDS runs a full calendar of events for the data research community, including numerous online workshops and webinars. For a full list of the latest events go to:

ands.org.au/events

Subscribe to ANDS News

ANDS News is a fortnightly e-newsletter including all the latest news and events relevant to Australian research data. Sign up at: ands.org.au/andsnews

Twitter

Follow ANDS on Twitter for updates, news and events:

twitter.com/andsdata

23 (research data) Things

23 (research data) Things is self-directed learning about data

Start at whichever Thing is currently scheduled, and either catch up or just cherry pick the Things you'd like to know more about. Find out more and get involved at:

ands.org.au/23-things

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NCRIS National Research Infrastructure for Australia
An Australian Government Initiative

ANDS is supported by the Australian Government through the National Collaborative Research Infrastructure Strategy Program. Monash University leads the partnership with the Australian National University and CSIRO.

ANDS Project Partners

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Monash University is the Lead Agent of ANDS

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