

AUSTRALIAN
ACCESS FEDERATION
AAF.EDU.AU



The Australian Access Federation

We are on a Mission

We're a driven group of people with a purpose to make access and authentication easier, and more cyber secure for teaching, learning and research.

AAF is an interesting company that does exciting work as a Not for Profit (NFP), which our staff and customers value.

We don't work with old tech

Who wants to work on old tech - not us! Our tech is ahead of the curve because we provide our team with the tools and empower staff to innovate. The AAF is a cloud-native company and the applications and solutions we build are at the cutting edge in identity management.

Our engineering team is conscientious about doing things right the first time, with minimal, to no 'firefighting' of existing tech. Our applications focus on identity management, authentication, and security layers. Our technical team focuses on the entire stack from Ruby on Rails code, to managing AWS infrastructure.

It's a fast-moving space and we help you, to help us:

- Interested in AWS training - sure thing, we have an annual program of training with our partner providers
- Need some time to learn some new tech - of course, our engineering team enjoy *hack time* every Friday afternoon

We do interesting end-to-end Dev/Sec/Ops work, not your standard system upgrade projects!

We are a Not-for-Profit company supporting our owners which are research and education organisations in Australia, that means we focus on delivering leading technology for our communities. AAF staff have a sense of pride and satisfaction, knowing that what we work towards helps to make the world a better place.

Did we mention we are plugged into the Australian Federal Government's eResearch infrastructure roadmap? - that's right - how many companies are part of Australia's Research tech strategy? Our staff work closely with high value innovative initiatives tackling issues from COVID, genome mapping, children's cancer research, astrophysics to identifying low wave frequencies in space and capturing gravitational waves!



We work with interesting customers and stakeholders

Just to name a few, Australia's High Performance Computing Facilities (NCI and Pawsey), Australia's national research and education network provider AARNet, leading research facilities such as the Garvan Research Institute, all the Australian Universities as well as our commonwealth science research organisation CSIRO.

We are a globally connected service working with 85 other community driven organisations who are all doing similar things around the world. This means AAF staff get to collaborate with our global community and take part in innovative activities around the globe. To demonstrate our global reach, we chair the Asia Pacific Identity Management Working Group, the working group for a globally connected authentication framework (eduGAIN) and part of the global REFEDS (Research and Educations Federations Steering Committee). We are also a member of and participate in the Australian Higher Education Cyber Security Service.

When the borders are open, AAF staff are on the road participating in initiatives and working groups with likeminded, tech professionals around the globe. In the past our staff have travelled to interesting places such as Estonia, Prague, Ireland, Norway, New Orleans, India, Iceland, Portugal and China to be part of leading-edge strategy development in trust and identity.

We are passionate about our products and services

The Federation:

The Federation is Australia's national authentication service for research and education. Using cutting edge technologies and standards the Federation delivers world-class single-sign-on that allows individuals across organisational boundaries to collaborate and access online resources within a trusted environment.

The Australian ORCID Consortium

The Australian ORCID Consortium provides a national coordinated approach to Open Research Contributor ID (ORCID – see: orcid.org). The consortium has enabled a globally unique persistent identifier for every researcher in Australia.

Consulting and Training Services

We provide bespoke consulting and support to our communities in meeting their identity and access management needs.

VerifID

VerifID, the national verification service enables universities, public agencies and commercial providers (e.g. Spotify, YouTube and Flight Centre) to accurately deliver services to Australian students and other roles in the research and education sector (see: VerifID.global).



Our company values underpin everything we do

- Innovation - an essential ingredient
- Mastery - a good mix of enthusiasm, quality, care and experience
- Trust - strengthened through our actions
- Community - achieving more together.

We pride ourselves on having a hybrid work environment

Everyone is talking about remote work these days, but the AAF was doing this long before COVID. We have been operating in a hybrid mode for over 10 years. We believe hybrid work provides flexibility and brings out the best in our staff to deliver great outcomes. Hybrid meaning, we empower our staff to work from home, and also join us in the office a couple of days a week to be part of a team that are working towards common goals. We are an innovative tech company after all, and how else do you innovate, share knowledge and professionally grow your career without spending time with your colleagues over a cup of coffee (or a beer or two).. It also gives our staff an opportunity to shine and get the promotion that they are after, rather than hiding behind a camera in a Zoom or Teams meeting. A hybrid approach is in-line with many leading tech companies and this balance supports better well being of our staff, inter-team collegiality and a more positive culture where we can do anything no matter how challenging the task may be.

AAF HQ is in the Brisbane CBD where our office is configured with hot desks and meeting rooms specifically supporting our hybrid strategy. We also have a satellite office in Perth with one of our partner organisations. We support staff in other states and territories and bring them to our office to do a comprehensive session with the team when needed.

So apart from working for an awesome NFP tech company who are doing great things, why else should you be part of the AAF?

- A 35-hour working week
- The option to salary sacrifice rent/mortgage payments (yep! that's right)
- Extra-long service leave
- 3 days bonus 'recharge leave' over the Xmas and New Year period

... and most importantly let's not forget that the AAF team prides itself on its inclusive, innovative and flexible culture that rewards and recognises great work.

If you are looking to move into a new role where you have control over what you produce, where you can make a difference and are empowered to utilise best practice techniques to create a positive global impact - then you are the person we've been looking for!



Position Description

Trust and Identity Communication Manager

Position Title: Communications Manager– Trust and Identity Program

Type: Fixed term, 2 years with the possibility of extension

Location: National

Reports to: COO and Head of eResearch

Number of Direct Reports/Staff Supervisory Requirements: None

Open to: Australian or New Zealand citizens or Australian permanent residents who have approval to work in Australia. The position may be open to Australian university staff applying on a secondment basis (subject to the approval of their institution and the AAF).

Organisational Context

The AAF is Australia’s leading technology specialists in identity and access management for higher education and research. We are connected to an international community of scientists and researchers building applications and solutions that make up part of the federal Government’s eResearch infrastructure strategy. We work with universities and research institutions including CSIRO to provide access to resources that tackle issues in health, life science and astrophysics... just to name a few.

The AAF provides a flexible work environment and a team of highly motivated individuals that work towards a common goal of supporting Australia’s higher education and research sector. We enable Australia’s teachers, students and researchers to use identity technologies and policies to create world class outcomes.

For further information about the AAF go to: www.aaf.edu.au

Vision

The AAF’s Vision is to lead access management for Australian education, research and government.

Mission

The AAF’s Mission is to deliver secure federated access that connects Australian teachers, students and researchers to global online resources.

Trust and Identity Pathfinder Program

The AAF have been commissioned by the Department of Education to deliver a two-year pathfinder program. It will develop a national framework for Trust and Identity along with an incubator program to enable a more connected research infrastructure ecosystem. The 2021 National Collaborative Research Infrastructure Strategy (NCRIS) Roadmap identified five step changes that could deliver significant impact for Australian research. One of these step changes was for cutting-edge digital research infrastructure. To achieve this a system-wide approach to identity and access management is required. This will result in more secure research infrastructure that enables access and global connectivity for Australian researchers.

The Pathfinder project will deliver an accelerator and an incubator. The accelerator consists of

1. A national Trust and Identity framework for the NCRIS ecosystem
2. Align and inform practices and policies with global best practice
3. A cohort of identity and access management specialists that can work with individual research groups and research infrastructure providers
4. A suite of reusable T&I software solutions, tools and modules that could be used by research groups and infrastructure providers
5. Deliver additional access, authentication and authorisation infrastructure that builds on the AAF to support the unique needs of the research sector.

The incubator will provide access to T&I resources for NCRIS capabilities that partner with the program. Part of this process will require:

- analyse and mapping of current practises
- integration of existing tools and services with the AAF and NDRI providers
- explore access methods for researchers outside the system
- assist with the adoption of technologies and practises that enhance cybersecurity and resilience of NCRIS.

The Role

You will be working in a dynamic environment to manage the AAF's eResearch communications and engagement activities. The role will be responsible for delivering communication, events and coordinating engagement activities associated with the T&I Program. The role will report to the COO and work closely with the Head of eResearch. The successful candidate will:

- Work autonomously to manage the content and creative functions of the AAF from ideation of concepts through to implementation.
- Be responsible for establishing and implementing multichannel communication and engagements strategies across platforms.
- A team player who builds strong working relationships with internal and external stakeholders.
- Ability to use creativity to develop written and digital content.
- Participate in project planning to develop communication, change, and content strategies.

The role will work with the Head of eResearch to manage program communication activities and promote the outcomes for 6 incubator projects which will be run in partnership with various NCRIS capabilities.

The role will be part of a small national team of specialists, including program managers, business/eResearch analysts, identity management specialists, engineers, marketing, and communications professionals.

Key Responsibilities

- Lead content planning activities and implement the AAF brand and product initiatives.
- Develop and create multichannel communication and engagement strategies for the T&I program.
- Strong content writing, editing and proofreading skills.
- Undertake detailed communication work, including:
 - Develop and maintain content that can be used on multiple platforms
 - Manage various publishing platforms to distribute content to niche audiences via emails, web, social, video, events, presentations.
- Research and evaluate new communication technologies and strategies.
- Conduct and develop webinars and presentations as required
- Develop websites, design and content that meets accessibility requirements.
- Analyse data and provide feedback to inform content decisions.
- Lead and manage the coordination of events.
- Develop and implement social media campaigns that strengthen AAF's online presence and T&I program.
- Develop and design basic communication collateral and templates.
- Foster a culture based on collaboration, teamwork and quality.
- Support the COO and Head of eResearch to deliver reports and business documents from time to time.
- Other tasks as required.

Your experience and skills

We are seeking a motivated, organised and pro-active person to work with and contribute to our communications team. You will have well developed written and verbal communication skills, the ability to work across teams and be comfortable working autonomously. Previous experience in a research or high education environment is highly desirable.

Qualifications

A degree with subsequent relevant experience OR a combination of relevant experience, broad knowledge and industry training.

Skills and Capabilities Required

You will be assessed based on the following:

1. Demonstrated organised approach to work. Strong attention to detail in writing, editing and proofreading. The ability to set objectives, prioritise tasks and meet deadlines with minimal supervision.
2. Ability to lead and develop communication strategies from ideation through to creation and implementation.
3. Experience with implementing communication projects and change management to support these projects.
4. Experience with content development, proofreading and editing. Including strong attention detail.
5. Excellent written and oral communication skills for developing and delivering communication collateral for multiple platforms.
6. Demonstrated experience in the development and delivery of communication and change management strategies for a large number of stakeholders groups.
7. Demonstrated intermediate/advanced skills in the use of office software, Adobe design products, social media platforms and web editing software applications.
8. Demonstrated ability to engage and manage external suppliers as required including but limited to graphic designers, professional writers and photographers.
9. Ability to work effectively in both a small team structure as well as independently demonstrating initiative, motivation, problem solving and organisational skills to achieve specific goals.
10. Desirable: Experience within higher education/research environment.

Other Job-Related Information

Applicants should note that:

The position is:

1. A fixed-term full-time position
2. A 35-hour week, with normal working hours from Monday through Friday
3. Flexible working hours and work from home arrangements (subject to negotiation and prior approval)
4. Some travel may be required (circumstances permitting).
5. The position is based in an office in the city of the successful candidate, or a work from home arrangement may be supported subject to negotiation and approval.

National Research Infrastructure Gap Identification

Pathfinder for a Trust & Identity Framework & Infrastructure

Gap identified:

The 2021 National Research Infrastructure Roadmap Exposure Draft (Roadmap) recognised trust and identity (T&I) as an important part of the national digital research infrastructure (Chapter 5.8). The Roadmap also identified that it forms part of cutting edge national digital research infrastructure (Chapter 6.1).

The Roadmap noted that an investment in T&I “... would result in more secure research infrastructure and allow secure access and global connectivity for Australian researchers. Investment would provide the capacity to develop cutting edge trust and identity solutions to prepare for future cybersecurity risks and technology disruptors.”.

In 2020, the Australian Access Federation (AAF) documented this gap in its *Making the Case*¹ briefing paper along with a clear strategy on how to address it. This paper was recognised by many members of NCRIS as an accurate reflection of a clear gap within the NCRIS system. To address this gap some NCRIS projects have recognised the urgency and importance of T&I and have their own initiatives underway. These initiatives are looking at solutions that could then be implemented for the broader NCRIS system as part of a larger T&I solution.

T&I is not unique to NCRIS. The Australian Federal Government has implemented a number of digital identity initiatives over the years, including myGov, myGovID and more recently the Trusted Digital Identity Framework (TDIF). The government has also recognised the increasing threat posed to critical infrastructure² and individuals in the 2020 Cyber Security Strategy.³ NCRIS is a significant investment in infrastructure and T&I aligns closely with these initiatives. Finally, the University Foreign Interference Taskforce (UFIT) aims to provide better protection for universities.

TDIF, the Australian Cyber Security Strategy and UFIT all rely on T&I frameworks, policies and infrastructure to be effective. Not addressing T&I within NCRIS undermines these national initiatives, as well as puts Australia’s research infrastructure and individual researchers at risk. Cyber-attacks increasingly focus on exploiting weaknesses in individuals and their credentials rather than the traditional exploitation of systems. Foreign interference often starts with an individual being approached via a trusted network or relationship. A robust T&I for NCRIS would provide a higher degree of protection for researchers.

A gap in T&I within NCRIS also has consequences, including:

- Diminishing the utility, efficiency and performance of the NCRIS system;
- Australian researchers are disadvantaged in their ability to collaborate nationally and internationally, making it harder for them to access and be part of international research;
- Puts Australia at the back of the pack in the global research infrastructure space, with many other countries already moving to address T&I for their research system.

The NCRIS system is at a critical point in its evolution, with the potential for the sum of the parts of the system to far exceed the sum of the individual projects. This will require a greater level of integration between different research infrastructures and addressing the T&I gap will be a significant enabler.

If the T&I gap is not urgently addressed now in a system-wide encompassing approach, Australia risks having fragmented T&I across the research system, leading to infrastructure that is accessed by bespoke T&I islands that do not work with national and international research infrastructure. Trying to recover from a fragmented T&I landscape will be costly and take time and significant resources.

Over the next two years, the ARDC is focussing on delivering a suite of Thematic Research Data Commons (RDCs) to provide an integrated set of digital research services that can be refined and tailored as needed for a particular

¹ Making the Case, an NCRIS Trust and Identity Capability, making a more interconnected, efficient and secure NCRIS system: ncris.aaf.edu.au

² Security Legislation Amendment (Critical Infrastructure) Bill 2020: <https://www.homeaffairs.gov.au/reports-and-publications/submissions-and-discussion-papers/protecting-critical-infrastructure-systems>

³ The 2020 Cyber Security Strategy, aims to strengthen the protection of Australians, business and critical infrastructure from sophisticated threats: <https://www.homeaffairs.gov.au/about-us/our-portfolios/cyber-security/strategy>

National Research Infrastructure Gap Identification

Pathfinder for a Trust & Identity Framework & Infrastructure

research community. Strategically selecting thematic areas in which to build larger, coordinated and optimised initiatives will enable the ARDC to meet the needs of the greatest number of researchers. As the ARDC moves to the Thematic RDC model, T&I is integral for ensuring researchers from academia, the public sector and industry have a seamless and cyber secure experience accessing digital research infrastructure.

Given the ubiquity of national digital research infrastructure that underpins modern research across nations and around the world, T&I impacts all Australian research communities and fields. T&I is an integral part of a researcher's daily workflow, touching every part of the research endeavour.

Solution proposed - A pathfinder for a trust and identity framework and infrastructure

The proposed solution includes an accelerator and an incubator as detailed below.

The **Accelerator** consists of the following elements:

1. A T&I Framework for NCRIS - Adapt the pre-existing work of the European Union Blueprint Architecture framework and other world-leading initiatives, to build a Trust and Identity Framework that is fit for purpose for the Australian research system, whilst ensuring that it both aligns and integrates with international frameworks and systems.

Benefits: A standardised framework to guide the development and implementation of T&I for the NCRIS system by research infrastructure providers that aligns with the Australian government TDIF and international frameworks.

Alignment: This directly aligns with the urgent needs of the ARDC Thematic Research Data Commons and BPA's BioCommons for a national approach for trust and identity for our infrastructures. Implementing an NCRIS system-wide approach would have significant positive flow on effects, providing other research infrastructure providers with reusable reference architectures that they can adopt for their own context.

Indicators/KPIs: The development of a T&I framework for NCRIS

2. Trust and Identity Cybersecurity - Deliver trust and identity infrastructure that has met a rigorous plan of cyber security. This will lower the risk of cybersecurity breaches for NCRIS and align with national and international best practice.

Benefits: A safer and more secure NCRIS environment that can be maintained and sustained at the forefront of best practice.

Alignment: This directly aligns with the Australian government's desire to protect individuals and critical infrastructure through the Cyber Security Strategy and UFIT.

Indicators/KPIs: Cyber secure T&I infrastructure.

3. Skills and Expertise - A cohort of identity and access management specialists that can work with individual research groups and research infrastructure providers.

Benefits: Provide NCRIS capabilities with the expertise they need to design, implement and manage identity and access systems that are best practice and aligned with national and international research infrastructure.

Alignment: This aligns with the need to fill the gap in the sector for skilled identity and access management specialists, the DDeRP skills working group and ARDC's skilled workforce program.

Indicators/KPIs: Increased awareness of the critical nature of T&I within NCRIS.

4. Reusable Tools and Modules - A suite of reusable T&I software solutions, tools and modules that could be used by research groups and infrastructure providers.

Benefits: Significant time savings for all NCRIS projects, standardisation across the system, with the latest tools and modules that comply with the trust and identity framework and are tested and hardened to ensure that they are as resilient as possible to cyber-attacks.

Alignment: This aligns with the ARDC's skilled workforce program.

Indicators/KPIs: Savings across the NCRIS system through adoption of reusable T&I tools and modules.

5. Access and Authentication Infrastructure - Deliver additional access, authentication and authorisation infrastructure that builds on the AAF to support the unique needs of the research sector.

Benefits: Nationally and internationally aligned T&I infrastructure that is tailored to suit the needs of cutting edge research infrastructure, resulting in significant savings and efficiency for the research system.

Alignment: As an underpinning piece of infrastructure on which everything within the T&I space is built, this aspect is viewed as more foundational rather than aligned.

National Research Infrastructure Gap Identification

Pathfinder for a Trust & Identity Framework & Infrastructure

Indicators/KPIs: Successful delivery of T&I infrastructure that meets the unique and cutting edge needs of the NCRIS system.

The **incubators** will provide access to incubator resources to NCRIS capabilities (including but not limited to a subset of the ARDC's Thematic Research Data Commons and BPA's BioCommons) to analyse and map the practises; support the integration of existing tools and services with the AAF and NDRI providers; explore access methods for researchers outside the system; and assist with the adoption of technologies and practises that enhance the cybersecurity and resilience of NCRIS.

Benefits: Act as a catalyst to fast track the adoption of trust and identity and inform future investment and fast track the adoption of a national T&I approach across the NCRIS system.

Alignment: This directly aligns with the urgent needs of the ARDC's Thematic Research Data Commons and BPA's BioCommons for a national approach for trust and identity for these infrastructure initiatives.

Indicators/KPIs: The successful implementation of agreed T&I solutions to enable NCRIS to work with the national T&I framework and infrastructure.

Timeline

The AAF is in a position to commence the establishment of project work within a matter of weeks. AAF is well connected with international partners it would need to engage with and has already been working with the ARDC and Bioplatforms Australia.

Risk

Risk 1 - Endorsement of T&I Framework by all NCRIS Projects - A failure to gain the endorsement of a national T&I framework for research would result in potential fragmentation of T&I, negating the benefits outlined in this proposal.

Mitigated likelihood - Not expected.

Mitigated Impact - Low.

Risk 2 - Tools and Modules developed by international partners prove to be not fit for purpose for Australia, requiring custom development of tools and modules.

Mitigated likelihood - Not expected.

Mitigated Impact - Low.

Risk 3 - Inability to recruit personnel with the necessary skills in identity and access management due to chronic labour market shortages.

Mitigated Likelihood - Expected.

Mitigated Impact - Moderate.

Risk 4 - The capacity of NCRIS projects to engage in incubators is limited, causing delays.

Mitigated Likelihood - Not Expected.

Mitigated Impact - Low.

Risk 5 - Inability to secure the necessary expertise to address cyber security.

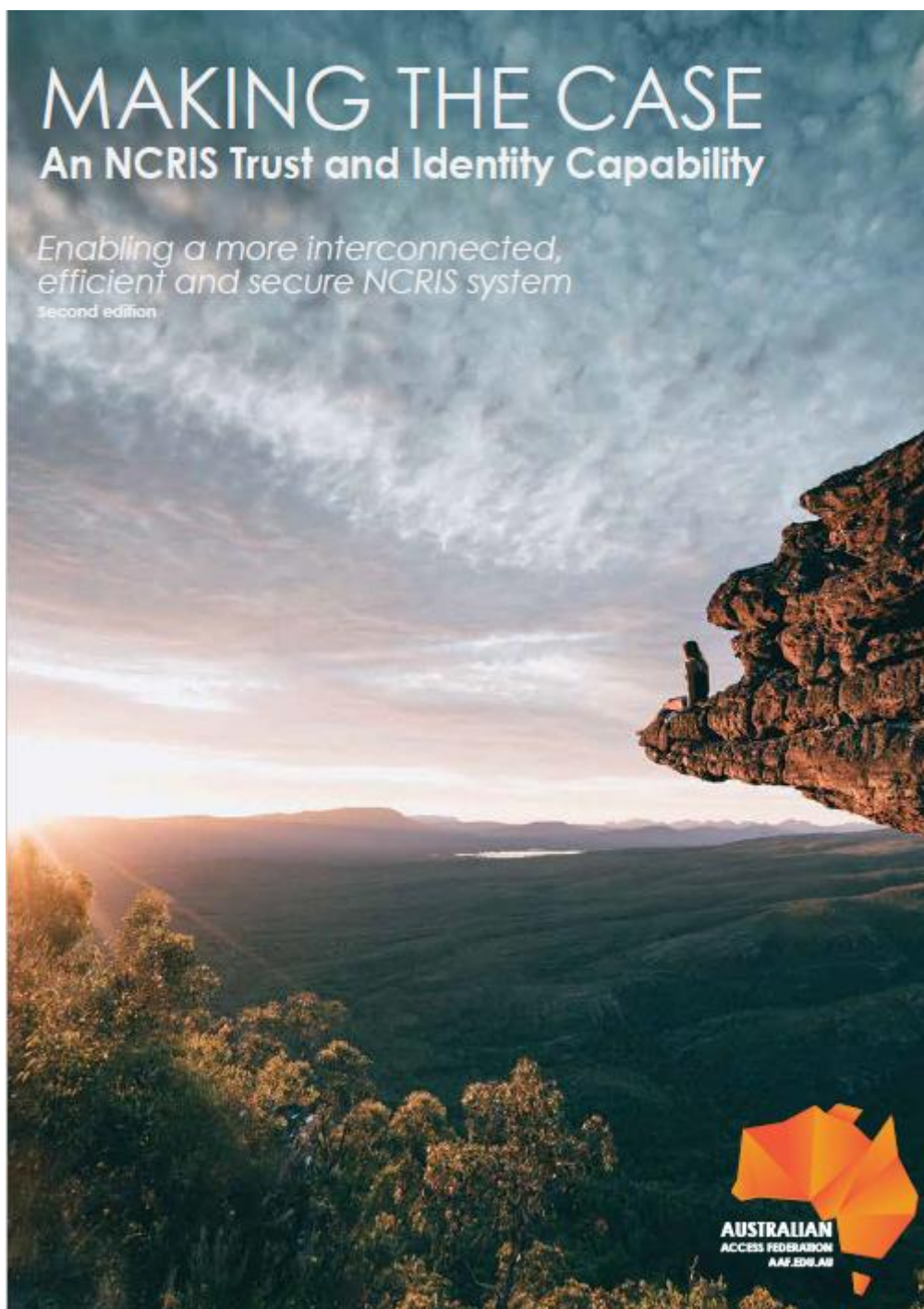
Mitigated Likelihood - Certain.

Mitigated Impact - Moderate.

Resources Required:

The proposed resources required are detailed below:

- Salaries and on costs of dedicated staff to support the pathfinder;
- One-off access to international specialist identity expertise;
- Technology platforms for research specific access and authentication infrastructure;
- Software licensing of existing solutions (2 * incubators year 1; 4 incubators year 2);
- Engagement with the NCRIS community; and
- General project overheads, including limited travel, governance, contract management and other office and project overheads.



Want more information on our vision for Trust and Identity in the research system?

Visit ncris.aaf.edu.au