

NSSN Grand Challenge Fund 2021 – Round 2

About the NSSN Grand Challenges

The [NSSN Grand Challenges](#) respond to some of the most gripping challenges of our time. Complex challenges that are critical to our environment, health, economy and society and which demand innovative solutions that will impact future generations.

The Grand Challenges have been selected for the important role smart sensing can play in responding to the issue and where technological innovation holds the promise of creating significant change. They align well with the United Nations [Sustainable Development Goals](#) (SDGs) and have been selected based on the NSSN's unique ability to mobilise the world-class R&D capability across its member universities, in partnership with industry and government, for practical, impactful outcomes.

There are six NSSN Grand Challenges in 2021/22:

- [Ageing](#)
- [Bushfires](#)
- [COVID-19](#)
- [Mining](#)
- [Smart Places & Buildings](#)
- [Water](#)

About the NSSN Grand Challenge Fund

The NSSN Grand Challenge Fund has been established to promote the development of innovative, collaborative research projects that respond to the NSSN Grand Challenges.

Grants of up to \$100,000 per project will support the development of projects that link with industry or government partners and devise a smart sensing solution that has a defined pathway to genuine impact, either through commercialisation or operationalisation.

Eligibility

To be eligible, funding proposals must meet the following eligibility criteria:

- **Leadership:** be led by an NSSN member university
- **Collaboration:** involve a minimum of two NSSN member universities (incl. the lead)
- **Partnership:** partner with at least one industry or government partner
- **Co-investment:** attract cash co-investment from industry/government partners at least equal to the requested amount

Proposals that do not meet these criteria will not be assessed.

Assessment criteria

Proposals will be assessed on the following criteria:

- **Significance** – how the proposal represents a significant and novel approach to addressing the defined Grand Challenge. 40%
- **Collaboration** – how the proposal integrates and fosters genuine collaboration between NSSN member universities. 15%



- **Partnership** – how the proposal integrates genuine partnership with industry and government partners and responds to a defined industry or government need. 15%
- **Governance** – how the proposal defines a realistic research plan and the measures that will ensure delivery on milestones. 15%
- **Impact pathway** – how the proposal defines a pathway to subsequent funding, commercialisation and/or operationalisation. 15%

Applicants are encouraged to speak with their local NSSL Coordinator and the relevant NSSL Theme Leader as early as possible in the application process. This will help to ensure alignment with the NSSL Grand Challenges and provide applications with the greatest chance of success. The NSSL can provide assistance in connecting with relevant industry and government partners.

NSSL Theme Leaders

- Ageing: [Jane Evans](#)
- Bushfires: [Peter Runcie](#)
- COVID-19: [Jane Evans](#)
- Mining: [Don McCallum](#)
- Smart Places & Buildings: [Peter Runcie](#)
- Water Grand Challenge: [Tomonori Hu](#)

NSSL Coordinators

- ANU: [Sean Downes](#)
- Charles Sturt University: [Jamin Forbes](#)
- Macquarie University: [Mark Berlage](#)
- University of Newcastle: [Paul Scobie](#)
- UNSW: [Anthony Morfa](#)
- University of Sydney: [Stephen Lam](#)
- UTS: [Arno Schaaf](#)
- Western Sydney University: [André Urfer](#)

Application process

Applications open	11 November 2021
Applications close	21 February 2022 (5pm)
Eligibility review	22 February 2022
Selection Committee Review	Late February/Early March 2022
Grants announced	Late March 2022
Contracting	April 2022
Funding dispensed	May 2022

Funding conditions

Funding can be used for the following:

- Direct salary costs for investigators/staff of NSSL member universities.
- On-costs consistent with NSSL member university policies.
- Equipment, software, materials and consumables specifically related to the project.
- Domestic travel costs that are specifically related to the project.
- Stipends for HDR students working on the project.



Funding can not be used for the following purposes:

- Salaries of industry partners.
- Costs not directly related to the project.

Matched funding must be:

- in cash and transferable to the NSSN university project partners (in-kind support will be considered in addition to the matching cash contribution).
- from the government or industry partner (University cash contributions will not be considered)
- new funding, specific to the proposed project.

Projects are expected to commence within 30 days of the signing of contracts and conclude within 12 months of signing.

Contracts will include agreed quarterly milestones, monitored by the NSSN through quarterly reporting.

Funding will be paid to the lead organisation in a single tranche at the start of the project. The lead university is responsible for distributing funds to collaborating universities.

A final report will be required at the 12-month mark. A template for which will be provided by the NSSN.

The NSSN will remain actively engaged in the projects, supporting their development, identifying additional funding and partners, and providing advice.

The NSSN reserves the right to publicise funded projects for marketing and communication purposes. All proprietary information will remain confidential.

The Network must be acknowledged as a funder in any publications or reports resulting from the project.

Intellectual Property

The IP relating to each project will be negotiated on a project-by-project basis at the time of contract negotiation. However, the NSSN encourages discussion of IP expectations between partners as soon as practicable in the project planning process.

Access to background IP necessary to implement project IP will be negotiated between the owner of the project IP and the owner of the background IP on a project-by-project basis. Generally, it is agreed that owners of background IP will provide access to such background IP, subject only to the terms of access negotiated in good faith.

IP relating to the project will be owned, as negotiated, by the university/ies and industry partner/s named as partners to the project.

As with all NSSN-supported projects, the Network will not hold any rights to IP, royalties or financial returns resulting from the project.