



Industry Panel

ANSHM 2025 Conference

Moderator: Peter Runcie

Natural Hazards & Smart Places Theme Leader, NSSN

NSW Smart Sensing Network

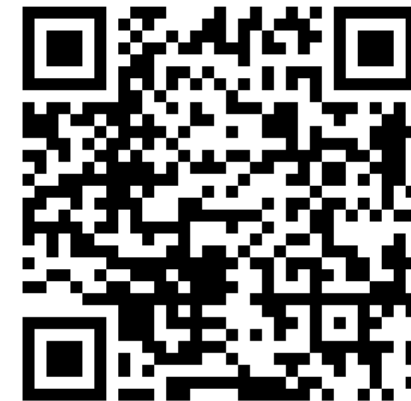


UNIVERSITY
OF WOLLONGONG
AUSTRALIA

NSSN Grand Challenge Fund (Round 6)

Up to \$100k grants (matched)

Closes 24 Feb 2026



www.nssn.org.au/grand-challenge-fund

SHM Context - Civil Infrastructure



Overall Objective	Focus	Example Information & Tools
Long Term City Planning	Future Proof Design	Population Growth Climate Change Transport Strategy
Maintaining Service Availability	Risk Management	Evacuation Scenarios, Flood Modelling, Environmental conditions
Asset Portfolio Management	Investment Prioritisation	Asset usage relative to others
Proactive Asset Management	Active Management of Loading	Traffic characterisation
Predictive Maintenance	Optimal Maintenance	Load History, Environmental History , Remaining Life
Reactive & Condition based Maintenance	Condition Assessment	Imagery
Engineering Validation	Physical Properties of Structures and Components	Engineering models (eg: FE) Strain, vibration sensors etc

A large orange arrow pointing upwards, indicating a progression or broadening of context from the bottom row to the top row of the table.

Broadening Context

Resilience

*Increased sharing of information
and data across
levels of government*

*Cost-sharing to support acquisition
and collective
access to improved hazard, exposure
and
vulnerability information and data*

NSW Disaster Adaptation Plan Guidelines

August 2025



Collaboration



Open Data Sharing Example

NSW Natural Hazard Detection System



Technology agnostic environmental measurements

Data sharing mandatory

Multiple end user organisations

Available to researchers and industry

	Measurements
1	Water over Roads and Assets
2	Flash Flooding Water Levels
3	Water Level from Imagery
4	Rainfall/Soil Moisture Data
5	Ignition Detection
6	Fire Assessment & Monitoring
7	Local Fire Weather Monitoring
8	Fire Fuel & Soil Moisture Monitoring
9	Existing Data

Discussion

