

ANU readies for laser comms role in Moon mission

The Australian National University's Mount Stromlo observatory is preparing to test laser communications as part of NASA's planned Artemis II lunar mission.

The university has obtained a scientific licence from the Australian Communications and Media Authority for its ANU Quantum Optical Ground Station, supporting transmissions of up to 2000GHz at the 195,300GHz frequency and receiving at 193,400GHz. The licence specifically permits communications with Artemis II.

Artemis II is expected to launch on 6 March at the earliest, after a delay caused by a liquid hydrogen leak earlier this month.

ANU last year revealed details of its work with the NASA Glenn Research Center in Cleveland on deep space communications using lasers. During the mission, NASA intends to transmit 4K video along with flight procedures, pictures, science data, and voice communications from the Moon to Earth.

Mount Stromlo will be a test location for a transceiver designed by the research centre, rather than a primary ground station.

NASA said in June that the test could prove the potential of using commercial parts to build affordable, scalable space communications systems that could support future missions to the Moon and Mars. "Engaging with The Australian National University to expand commercial laser communications offerings across the world will further demonstrate how this advanced satellite communications capability is ready to support the agency's networks and missions as we set our sights on deep space exploration," said Marie Piasecki, NASA's Space Communications and Navigation Program technology portfolio manager.

Rohan Pearce

OneWiFi urges smart city funding to be tied to council savings

Neutral host infrastructure provider OneWiFi has urged the federal government to link local government capital funding to projects that deliver measurable operating efficiencies, arguing that smart city technologies capable of improving councils' fiscal sustainability are being overlooked.

In a submission to the House of Representatives Standing Committee on Regional Development, Infrastructure and Transport, OneWiFi managing director Mevan Jayatilleke said funding programs should prioritise technology investments that reduce long-term costs while improving community liveability.

Jayatilleke said OneWiFi routinely presented business cases showing early payback from smart city investments, but councils were often unwilling to fund ongoing operations even where efficiencies were clear.

"We routinely encounter the absence of sufficient funding to operate the solutions on an ongoing basis, despite compelling business cases," he said.

The submission said councils were more likely to support smart city initiatives



Mevan Jayatilleke

where benefits were clearly articulated and backed by internal leadership, but otherwise remained hesitant, even where a business case existed.

OneWiFi operates multi-carrier, neutral host mobile infrastructure in regional and remote communities and is rolling out 25 additional sites in regional NSW and Queensland under the Mobile Black Spot Program Round 7, with infrastructure sharing already demonstrated in locations including Wilcannia and Brewarrina.

Jayatilleke said in-kind developer contributions should be more systematically applied in new developments, particularly in peri-urban growth areas, to embed smart city infrastructure from the outset.

“In-kind developer contributions should be applied in new developments to smart city solutions and thereby local government can take advantage of smart city technologies in realising operational efficiencies using systems paid for and embedded by developers,” he said.

He warned that failing to support digital connectivity risked the creation of new mobile coverage gaps and said inadequate mobile, Wi-Fi and low-power connectivity remained a barrier to effective council operations in large regional local government areas.

Grahame Lynch

Top-level domain custodians must plan for failure, Clark tells APRICOT

The chief executive of the Internet Association of Australia has warned that custodians of top-level domains must have robust continuity arrangements in place to ensure ongoing operations when technical failures occur, suggesting the Internet Corporation for Assigned Names and Numbers should consider using proceeds from the creation of generic top-level domains to support emergency continuity processes across the Domain Name System and the Regional Internet Registries.

Speaking on a panel at APRICOT 2026 focused on the stability of regional internet registries and proposed emergency continuity provisions in a draft document from the Number Resource Organisation, IAA chief executive Narelle Clark said outages and operational errors were inevitable.

“Some time ago, let's just say a CCTLD operator that we know and love very, very much dropped the key,” Clark told the conference. “Now, we don't know ... that's exactly what happened because there was no public statement of ‘this is what happened and this is what we did and this is why it happened’ and all of that. So we're still waiting for that public account of what went wrong.”

Clark did not identify the country code top-level domain in question. In March 2022 auDA disclosed that the .au domain had experienced a technical issue that “impacted a small number of .au users”, which was resolved within two hours. At the time, auDA attributed the incident to a bug in the process that generates Domain Name System Security Extensions digital signing records. In September 2023, registry operator Identity Digital also reported a 47-minute DNSSEC-related issue affecting .au.

“Things will go down,” Clark said.