CSIP-AUS COMPLIANCE

ANU testing & certification launch

1 October 2025

Australian
National
University

Agenda

Time	Session	Presenter
9.30	**Welcome & introduction**	Josh Vote
9.40	**Summary of service and compliance**	Laura Jones
11.00	**Morning Tea**	
11.20	**Concurrent sessions:**	
	• Client compliance (Hanna Neumann H1.33)	Mehdi Nikpendar & Mike Turner
	• Server Compliance (Other half of Hanna Neumann 1.33)	Josh Vote
1.20	**Lunch**	
2.20	**OEM learnings sharing presentations**	MC: Laura Jones Rod Dewar: Fronius John Laird: Catch Power Daniel Lewis: Solar Edge Kristen Kuzil: GE Vernova
3.50	**Afternoon tea**	
4.10	**Making CSIP-AUS work for OEMs facilitated discussion**	MC: Laura Jones

What is the ANU service?

- A nationally consistent testing and certification service for CSIP-AUS

- Enables testing against version 1.2 of CSIP-AUS

- Aim is for a nationally consistent approach
- Reduced/no DNSP specific testing

- Modelled on previous SA Power Networks service

Timeline

- ANU service go-live today! - **1st October 2025**

- SAPN service will stop accepting applications for new testing at the same time - **1st October 2025**

- SAPN service closes completely on **1st November 2025**

Differences to SAPN service

- Test procedures aligned to **SA TS5573:2025 (CSIP-AUS 1.2)**

- Capable of testing to all classes in SA TS5573:2025
  - Generation and load
  - Additional test procedures/classes from Synergy storage extensions

- Key date: **July 2026** CSIP-AUS 1.1a/HB218 sunsets, CSIP-AUS 1.2 becomes mandatory

Do I need to retest everything?

Based on our early testing, we have found most clients need work to become compliant with 1.2

So at this stage, retesting is required – but is hopefully easier

Client testing

Self-testing   **Witness testing**   **Registration**

OEM
(inverter & software clients)

OEM has new product to certify

OEM registers with CACTUS (self-service tool)

OEM undertakes self-directed testing

OEM completes self-directed testing

Re-run tests if necessary

OEM books witness test

OEM undertakes test

OEM receives test results and is either certified or re-tests

OEM receives invoice for listing new inverter

Re-run tests if necessary

Australian National University

ANU available to provide email and meeting support

ANU sends OEM instructions

ANU undertakes witnessing of test

ANU produces test report

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CLEAN ENERGY COUNCIL

CEC receives certification from ANU

CEC invoices OEM, checks compliance * and updates list

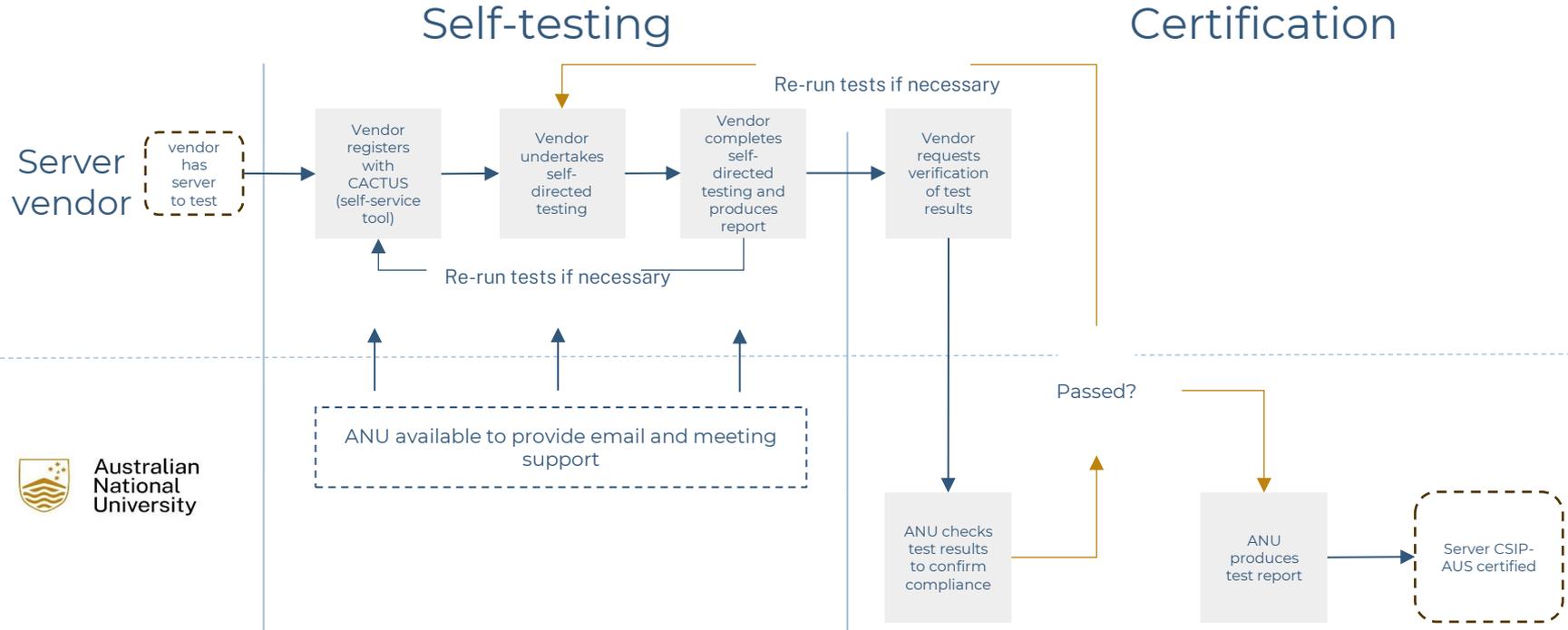CEC updates API and publishes updated list

Server testing

Self-testing

Certification

Server vendor

vendor has server to test

Vendor registers with CACTUS (self-service tool)

Vendor undertakes self-directed testing

Vendor completes self-directed testing and produces report

Re-run tests if necessary

Vendor requests verification of test results

Re-run tests if necessary

ANU available to provide email and meeting support

Passed?

ANU checks test results to confirm compliance

ANU produces test report

Server CSIP-AUS certified

Australian National University

Accessing

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CACTUS
(CSIP-Aus Compliance Testing for Utility Services)

https://cactus.cecs.anu.edu.au/

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ANU testing service inbox

csipaus-cert@anu.edu.au

Testing and certification service website

https://www.csipaus.org/certification
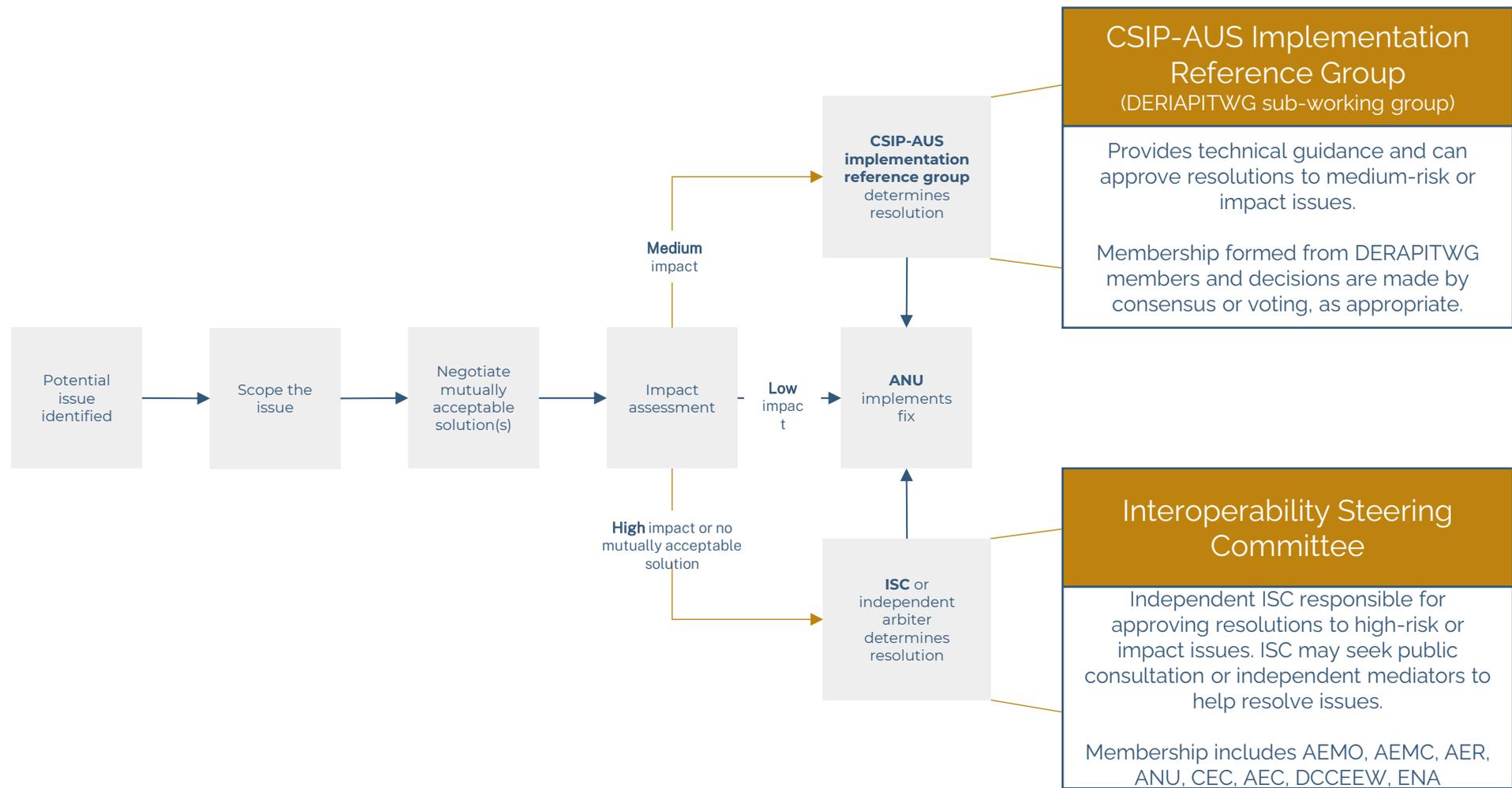
Support model

Support model like SAPN's service:

- Documentation available online: SA TS5573:2025, Cactus online help, ANU test service manual

- Email support available through csipaus-cert@anu.edu.au

- Virtual support sessions (Zoom/Teams)

- Witness testing and certification is free

- Device hosting at ANU DERlab available on cost-recovery basis

Issue management

We have defined a process to raise and manage issues

- Common issues:
  - Issues with CACTUS
  - Standard interpretation
  - Issues with the standard
  - Issues with certification

- Principles:
  - Enable appropriate governance for type of issue
  - Give those impacted a voice

Potential issue identified → Scope the issue → Negotiate mutually acceptable solution(s) → Impact assessment

Medium impact → **CSIP-AUS implementation reference group** determines resolution

Low impact → **ANU implements fix**

High impact or no mutually acceptable solution → **ISC** or independent arbiter determines resolution

CSIP-AUS Implementation Reference Group
(DERIAPITWG sub-working group)

Provides technical guidance and can approve resolutions to medium-risk or impact issues.

Membership formed from DERAPITWG members and decisions are made by consensus or voting, as appropriate.

Interoperability Steering Committee

Independent ISC responsible for approving resolutions to high-risk or impact issues. ISC may seek public consultation or independent mediators to help resolve issues.

Membership includes AEMO, AEMC, AER, ANU, CEC, AEC, DCCEEW, ENA

Impact assessment

Impact Level	Minor Change	Moderate Change	Major Change	Standard Revision
Single party	ANU	CIRG	CIRG	ISC
Multiple parties	CIRG	CIRG	CIRG	ISC
System-wide	CIRG	CIRG	ISC	ISC

How large is the change?

This refers to the **scope and complexity** of the change. Examples include:

- **Minor clarification**: e.g. correcting a typo or clarifying a term without changing its meaning.
- **Moderate adjustment**: e.g. refining a test procedure or updating a definition to align with common practice.
- **Major change**: e.g. modifying a test class, adding a new requirement, or changing the behaviour of a CSIP-AUS function.
- **Standard revision**: e.g. requiring an amendment to SA TS5573:2025 or introducing a new version of CSIP-AUS.

Who will be impacted by this change and how much?

This refers to the **breadth and depth of stakeholder impact**. Examples include:

- **Single party**: e.g. a clarification that affects only the raising party.
- **Multiple affected parties**: e.g. a change that affects several OEMs or server vendors.
- **System-wide impact**: e.g. a change that affects all certified devices or requires re-certification.

CEC listing

- ANU will submit test reports to CEC and OEM the same way SAPN did

- CEC will manage listing

- ANU service can test against DER-load profiles as well as DER-generation, but current CEC list is only for CSIP-AUS 1.1a generation profile
  - A fix is in development, but in the meantime a list of CSIP-AUS 1.2 certified devices and relevant test classes will be maintained on csipaus.org

Test classes

Table 12.5(A) — Applicability of tests to classes of DER client

Test designation	Client type
(A)	All clients managing DER that are not claiming conformance with the demand response capabilities defined in Section 10
(G)	Clients managing generation-type or storage-type DER
(L)	Clients managing load-type or storage-type DER
(C)	Clients confirming with the optional ConnectionPoint extension
(S)	Clients implement Subscription/notification functionality
(M)	Clients supporting management of sets of DER as described in Clause 13.6
(DER-A)	All DER
(DER-G)	All DER capable of generation
(DER-L)	All DER capable of consumption
(DR-A)	All clients managing demand response devices, including DREDs or electrical products with demand response capabilities
(DR-D)	Clients managing or incorporated into DRED demand response devices that are not integral to an electrical product
(DR-L)	Clients managing load-type or storage-type electrical products with demand response capabilities
(DR-G)	Clients managing generation-type or storage-type electrical products with demand response capabilities

Test classes

- Previous SAPN test service implemented a subset of CSIP-AUS v1.1a tests relevant to generation; ANU test service can test all classes from TS5573 (table 12.5A-D)

- Client developers can choose which classes they test to. They will be listed on the test certificate

- Common classes:

  - Generators: A, DER-A, G, DER-G, S, M (if multi-DER supported)

  - Loads: A, DER-A, L, DER-L, S, M (if multi-DER supported)

- E.g. solar inverters are generators, EV chargers are loads, Batteries are both

- You don't need to test to all compatible classes

Questions and discussion

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Read the manual

https://www.csipaus.org/s/CSIP-AUS-support-guide_external_v10.pdf

Server and client sessions

Sharing learnings from OEMs

- Rod Dewar, Fronius

- John Laird, CATCH Power

- Daniel Lewis, Solar Edge

- Kristen Kuzil, GE

Facilitated discussion