CSIP-AUS – the journey so far

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Collaborative Energy

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Where it all started in 2018

- **More PV entering the grid**, reducing market prices and projected to increase network costs
- **Simple fixed / zero-export rules** protected networks, but lost customer value
- **Needed a common, secure way to coordinate CER** across regions and jurisdictions
- **Traditional solutions were expensive** and don't maximise customer benefits

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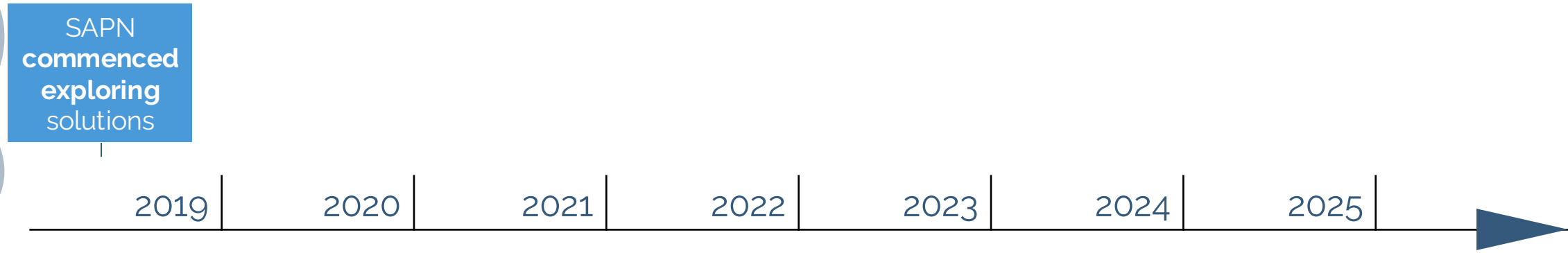
Identified priorities

Decarbonisation and security	integrate increasing volumes of solar while maintaining system security
Customer value	enable households and businesses to export more and maximise their return
Least-cost solutions	maximise capacity of existing assets over traditional network augmentation



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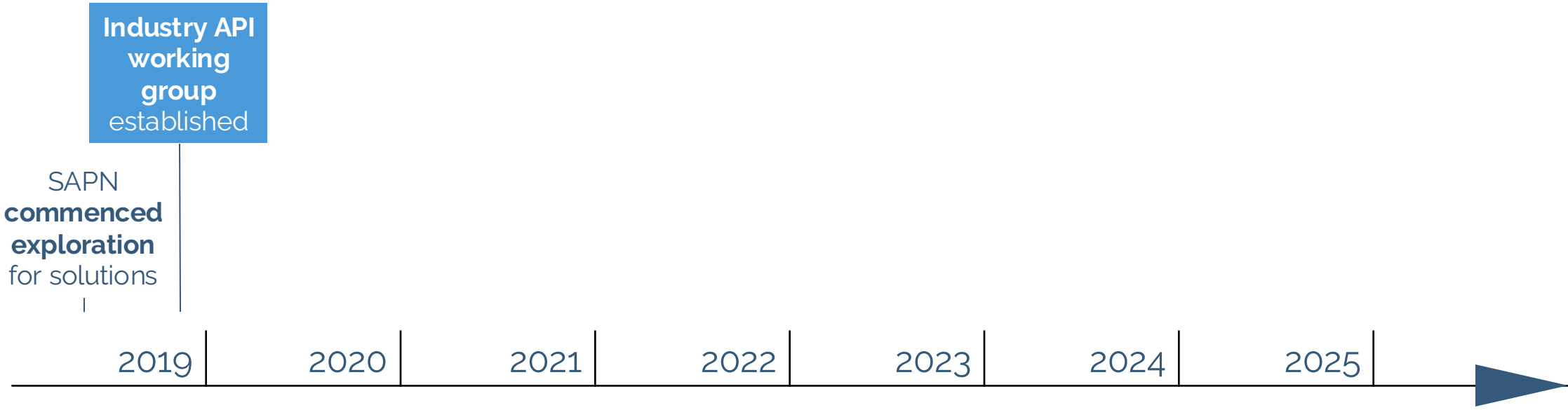
Industry collaboration was vital

- Open collaborative industry working groups with DNSPs, OEMs, aggregators, retailers, government and research
- Converged on international base: IEEE 2030.5 / SEP2
- Australian-specific protocol established to meet local needs and conditions –> CSIP-AUS was born



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First use case - flexible exports

Concept

- Offered choice between
  - fixed export limit - 1.5kw/phase
  - flexible exports - 1.5-10kw/phase
- Flexible export limits typically allowing 10kw 95%+ of the time
- Automated signals - no manual intervention required

Industry API working group established

SAPN **commenced exploration** for solutions

SAPN **Flexible Exports trials commence**

QLD launches Dynamic Connections

2019 2020 2021 2022 2023 2024 2025

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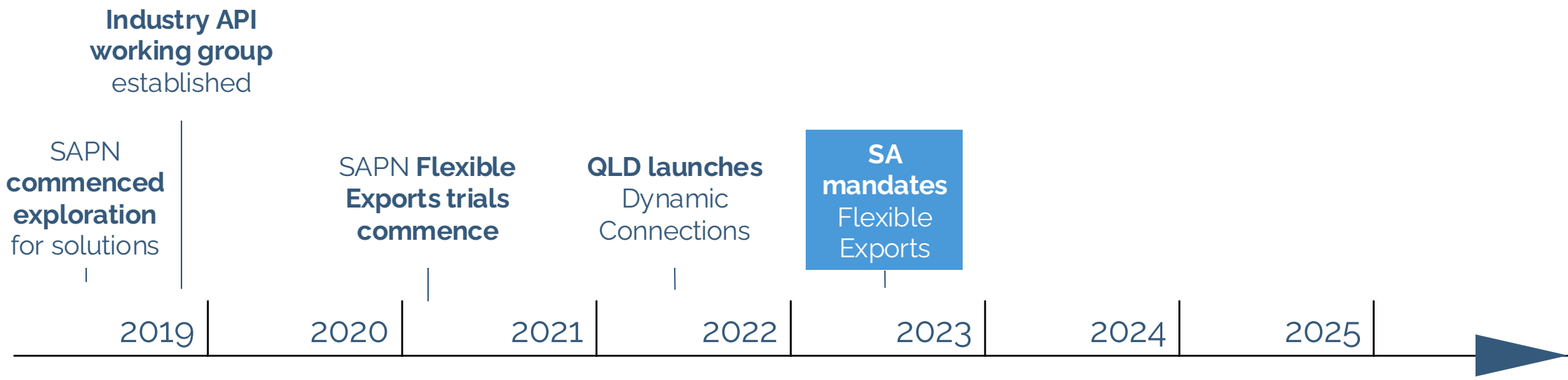
First use case - flexible exports

Outcomes

- **Customers** - higher exports and return over time
- **Networks** - better utilisation of existing assets, targeted constraint management and avoided infrastructure upgrades
- **Industry** - shared interface between DNSP servers, aggregators and devices
- **Emissions** - increased utilisation of renewable energy



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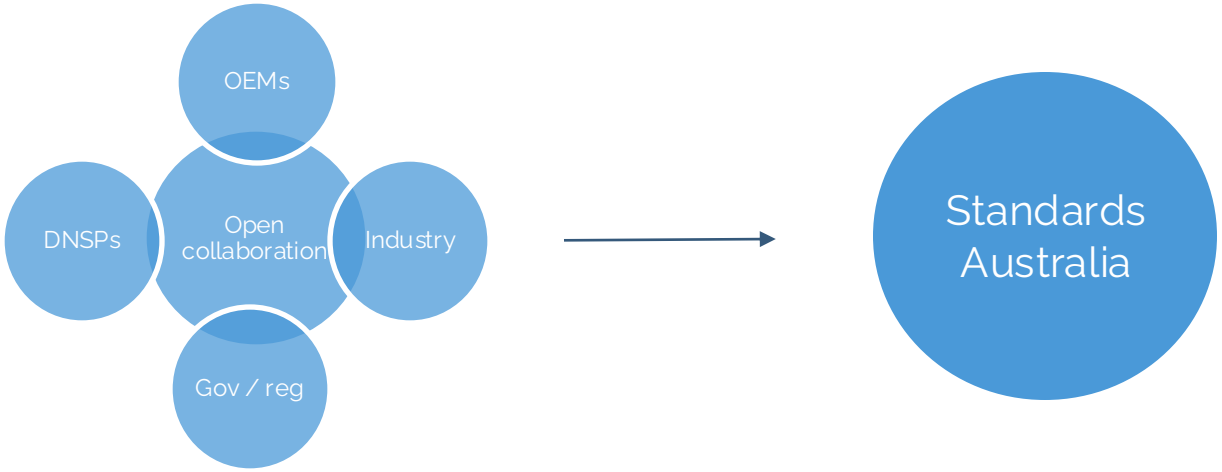
Formalising standards

Dual-track standards development process



Industry API working group established

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CSIP-AUS **v1 published**

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HB218:2023 published

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SA mandates Flexible Exports

2019 2020 2021 2022 2023 2024 2025

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Second use case – emergency backstop

CSIP-AUS was a practical, consistent and cost-effective method for establishing emergency backstop arrangements

- **Coverage**
- **Consistency**
- **Governance and transparency**

Industry API working group established

SAPN **commenced exploration** for solutions

CSIP-AUS **v1 published**

SAPN **Flexible Exports trials commence**

QLD launches Dynamic Connections

HB218:2023 published

SA mandates Flexible Exports

Victoria mandates for emergency backstop

2019 2020 2021 2022 2023 2024 2025

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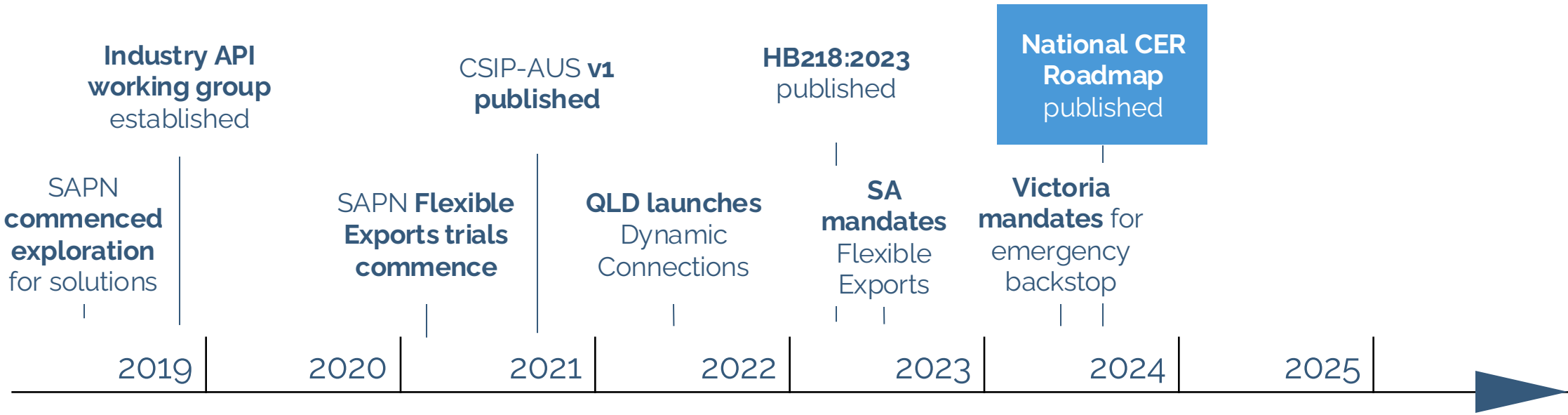
Growing pains

- Inconsistency in processes and interpretation across platforms and regions
- Installer and commissioning challenges under accelerated delivery timelines
- Product listing and sequencing pressures

- Harmonise testing and certification (national testing)
- Consistent commissioning and compliance is crucial
- Consistent communications and protections



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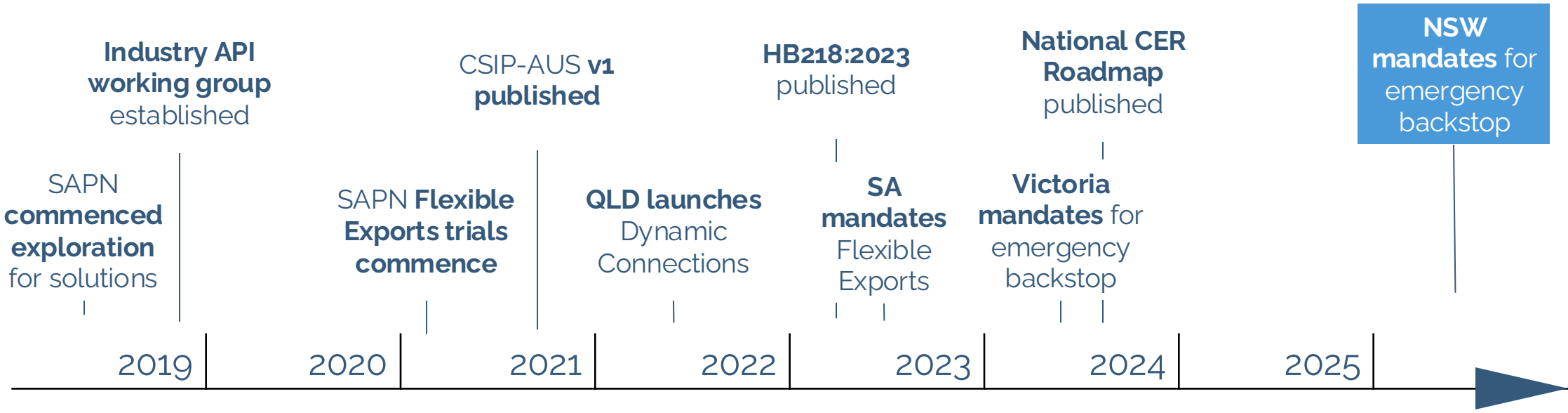
Lessons learnt for NSW

- Single installer portal across all DNSP regions in NSW
- Single cyber requirements and single connection handbook
- Utilise the national testing and certification service for both clients and utility servers



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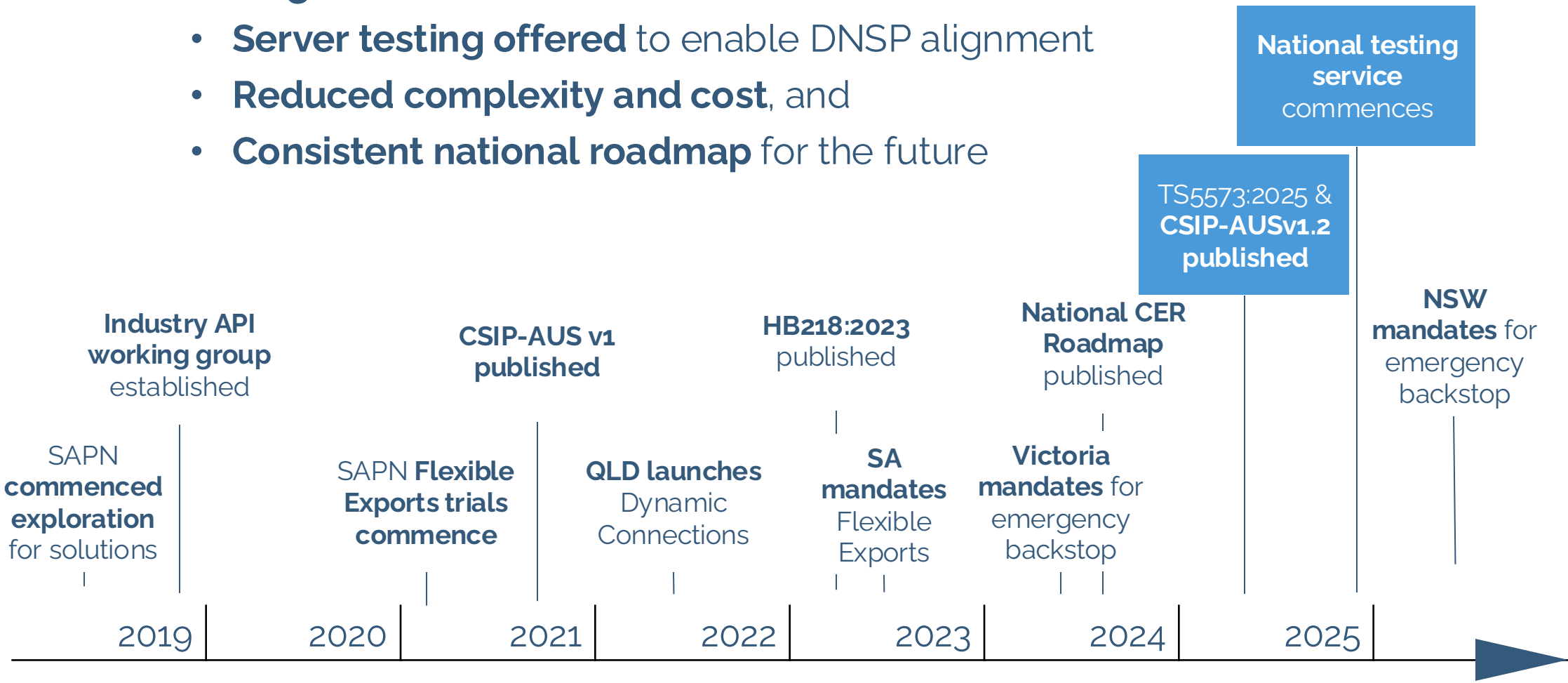
Harmonised national testing service

- **Single 'front door'** for OEMs to become certified
- **Server testing offered** to enable DNSP alignment
- **Reduced complexity and cost**, and
- **Consistent national roadmap** for the future



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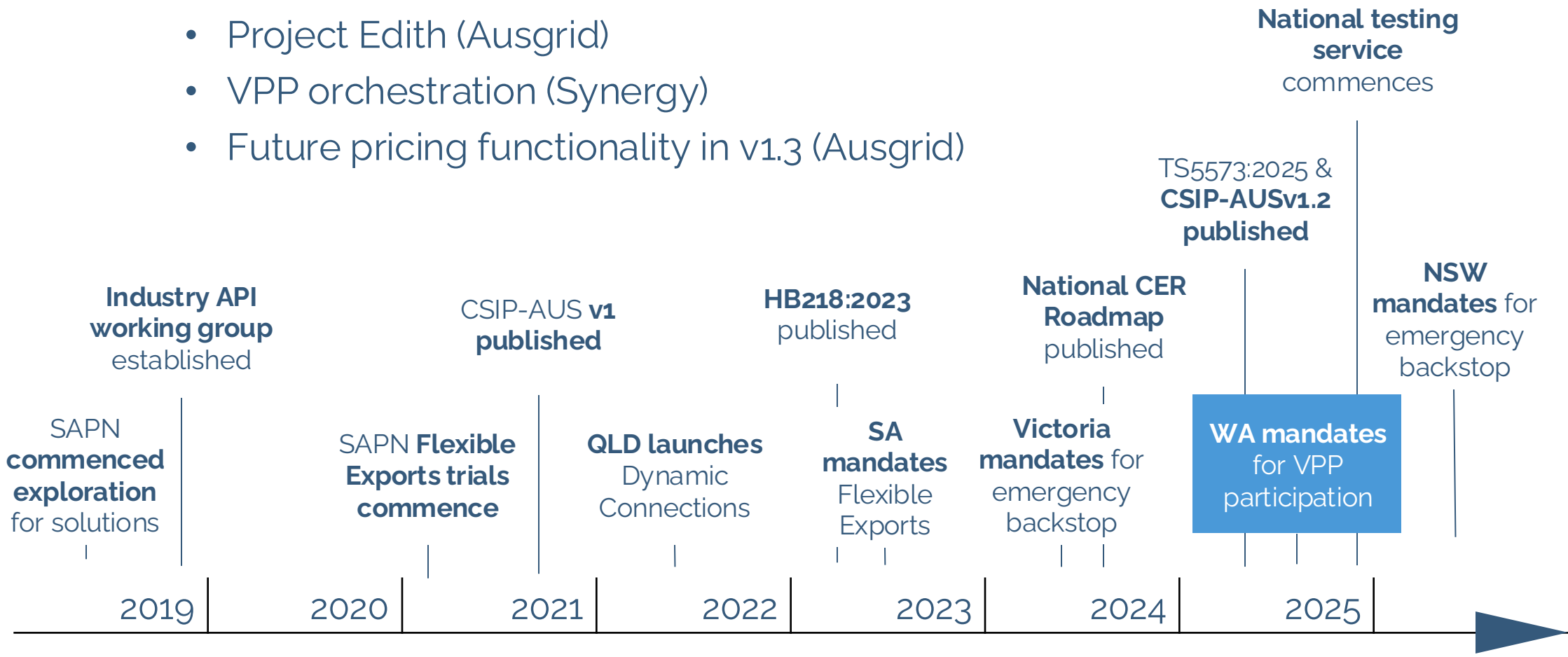
From networks to markets

Several pilots have also been exploring CSIP-AUS for market interactions, including:

- Market active solar (SAPN)
- Project Edith (Ausgrid)
- VPP orchestration (Synergy)
- Future pricing functionality in v1.3 (Ausgrid)



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Fundamental enablers

- **ARENA funding support and alignment to strategic objectives** - both for directly funded CSIP-AUS activities and funded pilots and trials
- **Active, consistent and two-way collaboration with industry** - including passionate people across key organisations committed to the outcomes
- **OEM willingness to trial and support** establishment of the CSIP-AUS ecosystem
- **Broad support from governments when needed** - including emerging alignment on future direction for CSIP-AUS and the National Technical Regulator

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Future priorities

- **Embed national test and certification service** and finalise alignment of DNSP testing and onboarding processes
- **Ensure NSW emergency backstop deployment** in mid-2026 deployment
- **Support commercial testing houses** to provide CSIP-AUS certification
- **Future CSIP-AUS use cases** – expand use for more network, market and consumer outcomes
- **Transition CSIP-AUS to National Technical Regulator for CER** in 2027

Thank you

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