

Report to the CIGRE Australian Technical Council

Study Committee SC C2 and Australian Panel AU C2 Activities



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AU C2 Report 2024
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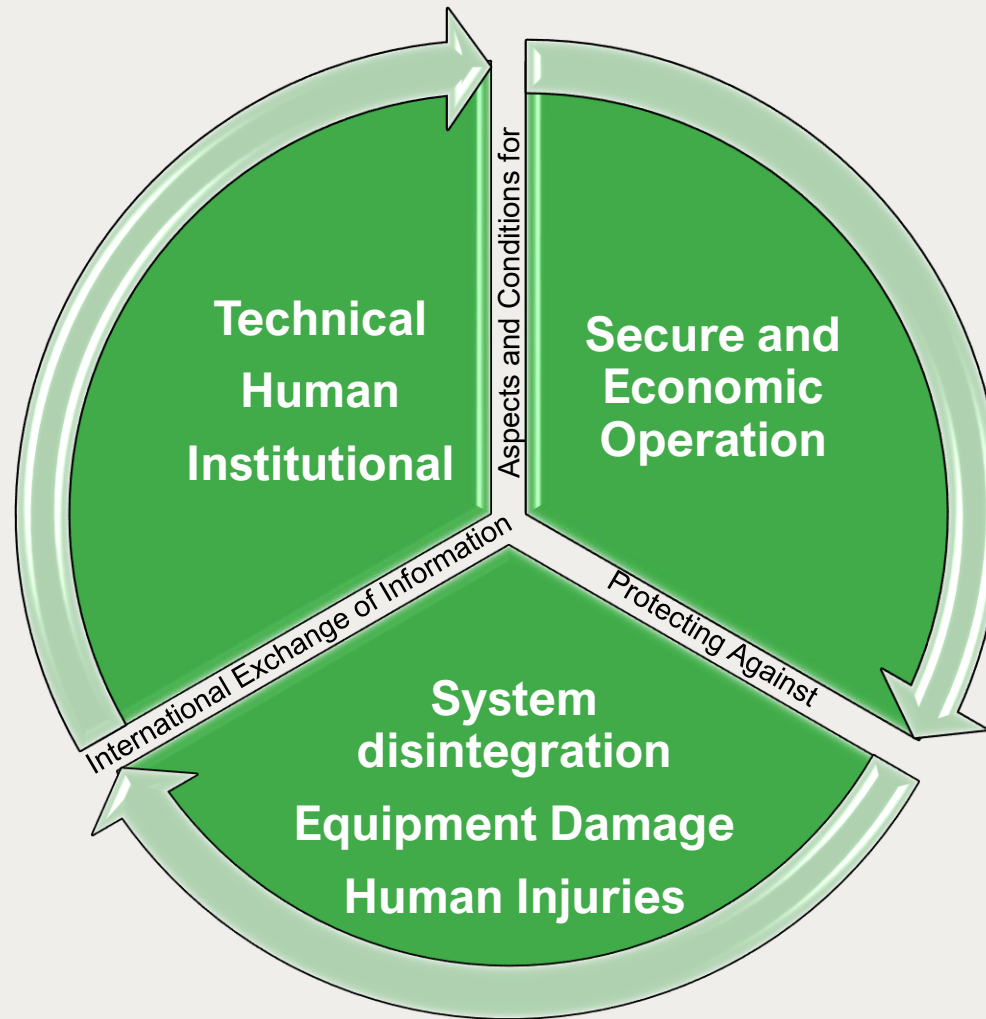
For power system expertise

C2

Power system operation
and control

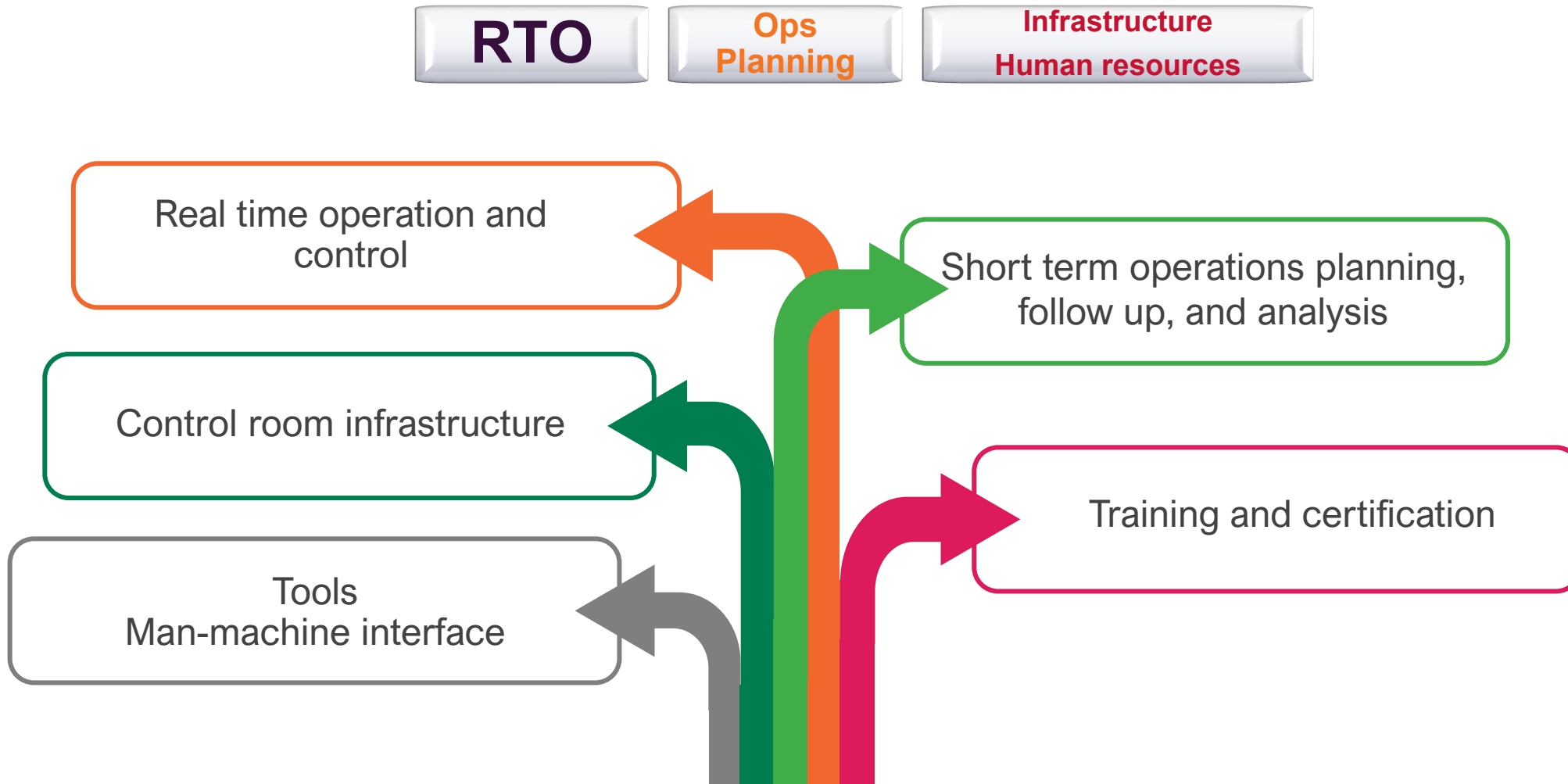


CIGRE Study Committee C2 Scope

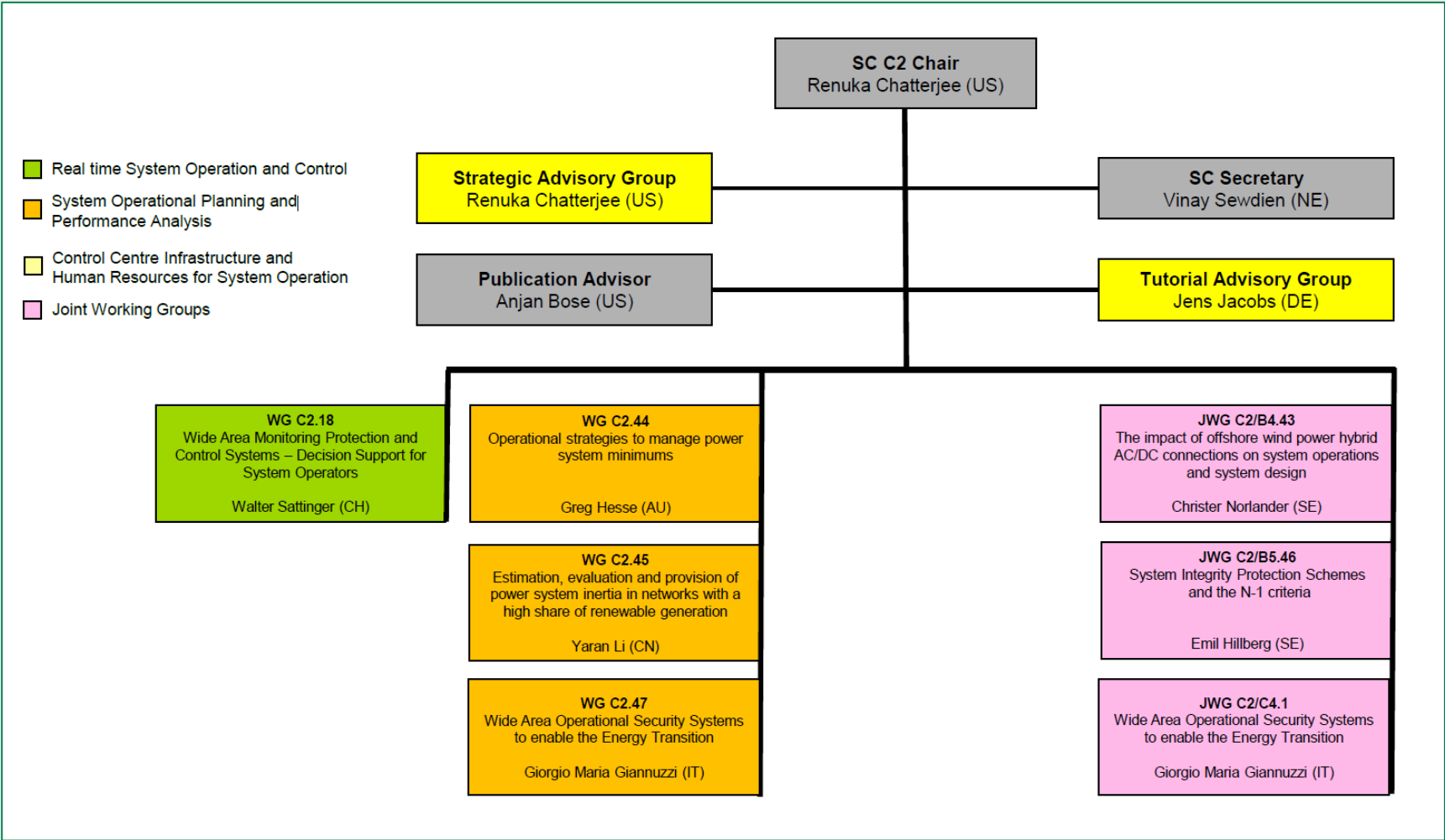


Distil technical concepts from academic ideas, study results and concepts (Operationalise)

Three Technical Directions - address important factors that will influence and define new requirements on the System Operation performance



C2 Working Groups

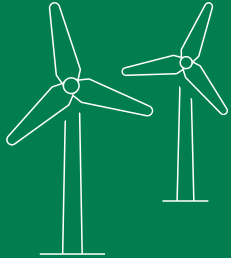


Preferential Subjects – Paris 2026



PS1 - Advanced decision support, training and skills for control room personnel

- New requirements for personnel skills, procedures and tools
- Digitalization and use of artificial intelligence for enhancing decision support
- Operational procedures, tools and processes for operating grids during extreme events



PS2 - Maintaining operational reliability through flexibility

- Methods to identify and quantify system services in response to the energy transition
- Operational experience with flexibility services, including demand side response, topology changes, sector coupling and results from pilots



PS3 - Power system dynamics and control in operations (proposed joint PS with C4)

- Operational experience with managing power system stability, including oscillations
- Monitoring and control of power system dynamics in the control room, including wide area systems
- Impact of adverse interactions between power electronics interfaced devices on system operations



Achievements



New Representatives from TransGrid and Ausnet

- All major Australian / NZ Transmission Operators now have representation



CIGRE Australia Power Electronics and Power System Integration Seminar

- October 2024 Pullman Sydney
- 140 delegates & 44 presentations

TECHNICAL BROCHURE
JOINT WORKING GROUP
C2/C5



JWG C2/C5.06 Webinar and Technical Brochure

- The Impact of Market Interventions by System Operators during Emergency Situations

TECHNICAL BROCHURE
JOINT WORKING GROUP
C2/B4



JWG C2/B4.43 Technical Brochure

- The impact of offshore wind power hybrid AC/DC connections on system operations and system design



THANK YOU



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For power system expertise