



CIGRE Study Committee B5 Protection and Automation

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Protection and Automation
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Study Committee B5 **Scope**

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Principles, design,
application and
management

Of power system
protection,
substation control,
automation,
monitoring,
recording and
metering

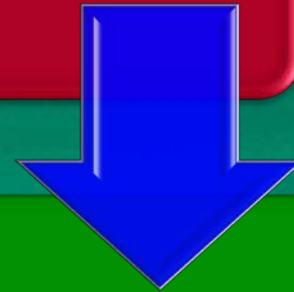
Including
associated internal
and external
communications
and interfacing for
remote control and
monitoring



SCB5 Mission Statement

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Synthesizing and disseminating state-of-the-art **practices** and developing **recommendations**

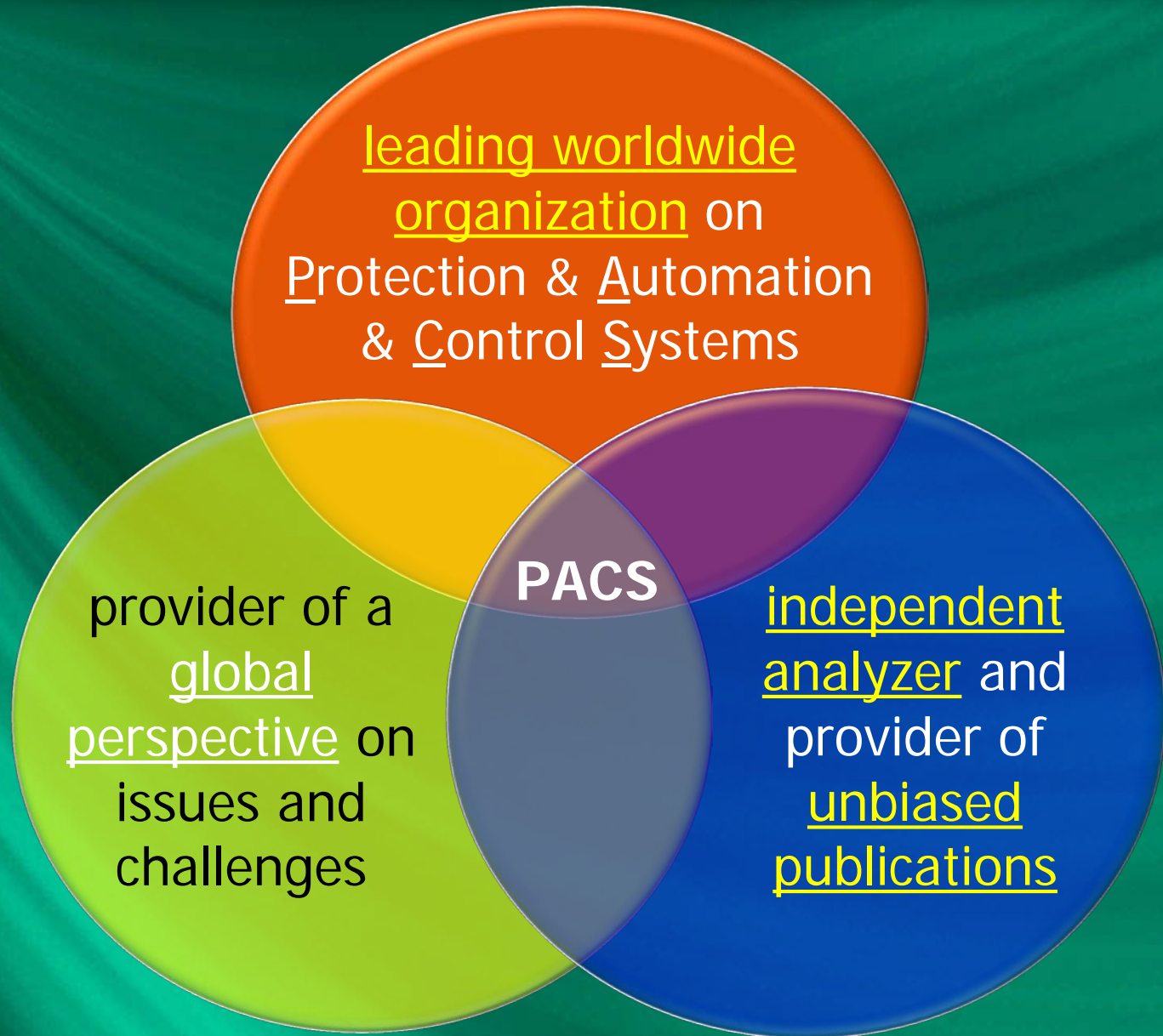


For the **progress** of engineering of power system **protection**, **automation**, **monitoring** and **metering**



SC B5 Strategic **Visions**: To be the ...

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Current Issues in Protection and Automation

Substation Automation

- Standardization – IEC 61850 application and standards evolution
- Education – Production of reference documentation and tutorials
- Testing - New requirements for commissioning and maintenance

Protection Monitoring

- New Technologies – FACTS/HVDC requirements and impacts
- Special equipments – Distributed Energy Generation & Storage
- New Sensors – Synchrophasors, Modeling and Transients

New Network Requirements

- Wide-area systems – New requirements and solutions
- Metering – New market demands and smart grids
- Management – Coordination of multiple & scalable applications



SC B5 Strategic Directions

TD1

Facilitate the adoption of new technological solutions

TD2

Explore new concepts of PACS

TD3

Improve the reliability of PACS

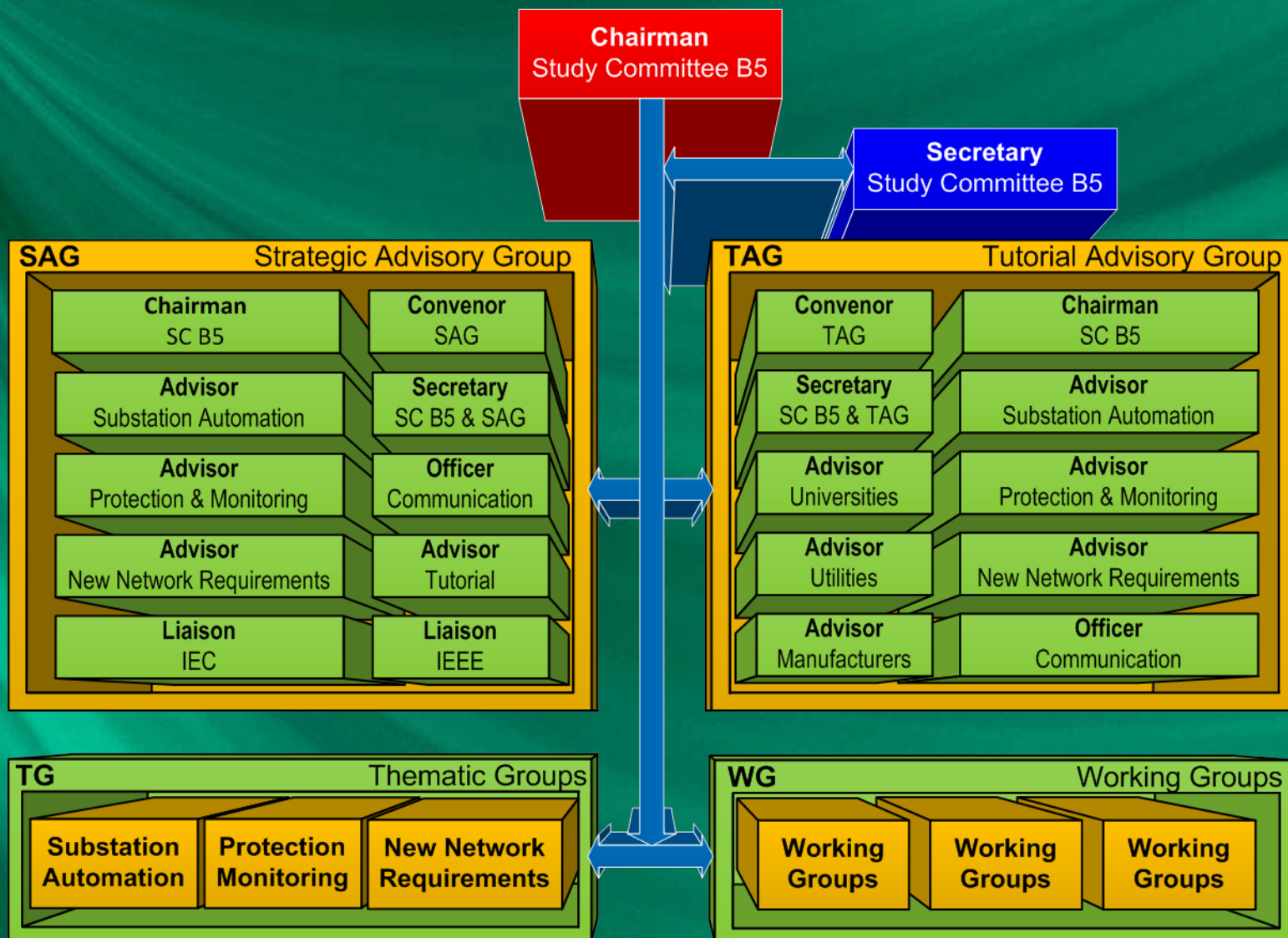
TD4

Analyze the implications of New Network Requirements



Study Committee B5 Organization

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Study Committee B5 Working Groups

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SC B5 Future Colloquia and Discussion Sessions

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China 2015 – Preferential Subjects

- PS1 - User experience and current practice for cyber-security applications
- PS2 - Sub-Synchronous Resonance (SSR) in existing and future networks
- PS3 - Management & Organizational Change in Response to New Protection & Automation Technologies



France 2016 – Preferential Subjects

- PS1 – Protection Automation and Control System (PACS) Optimization and Life Time Asset Management
- PS2 - Coordination of Generator and Power System Protection



Thank you

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Thank you!

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