



# CALL FOR PAPERS

CIGRE SC B5 Colloquium 2019  
Tromsø, Norway June 24-28, 2019

## CIGRE STUDY COMMITTEE B5 COLLOQUIUM ON PROTECTION AND AUTOMATION

The CIGRE B5 colloquium brings together experts and key players of Protection and Automation systems for the electric power industry: System Operators, Manufacturers, Engineers, Policy Makers, Regulators and Academics. The conference will be a unique forum to share exciting new research, to raise issues and awareness, to discuss future directions, and to network with leading professionals.

### PREFERENTIAL SUBJECTS:

Papers are invited on any topics of interest falling within the following three preferential subjects.

#### **PS 1: Leveraging PMU data for better Protection, Automation and Control Systems**

- Use of PMU data to improve system models and to monitor analogue inputs
- Adaptive protection concepts utilizing PMU data
- Wide area schemes, novel backup protection, power swing protection, and synchronizing schemes based on PMU data
- Improvements in PACS commissioning and post-event analysis using PMU data

#### **PS 2: Time in Protection Applications – Time sources and distribution Methods**

- Sources and distribution of time references in PACS and Wide Area Systems and the related accuracy
- Engineering of time synchronisation and time reference distribution for IEC 61850 process bus based protection and control applications
- Commissioning and testing of time reference sources and distribution means
- Expected behaviour of PACS functions in case of loss and recovery of time synchronisation

#### **PS 3: Future technologies for inter-substation communication, Migrating Digital Teleprotection Channels to Packet-Based Networks**

- Migration of Serial Teleprotection Channels to Packet-Based Networks and best practices for specifying, testing, commissioning and monitoring
- Specification of channel or network performance, data transmission and management of constraints for PACS
- Data Segregation including use of virtual networks and WDM (Wavelength-Division Multiplexing) for PACS and performance analysis methods
- Substitution of serial interface: Technologies, topologies, constraints and experience feedback

**October 31, 2018**  
Deadline for submission  
of Synopsis

**November 15, 2018**  
Notification of acceptance

**January 31, 2019**  
Deadline for submission of  
final papers



## **SUBMISSION**

Authors are invited to submit a Synopsis (about 500 words) of the proposed paper. The Synopsis should be sent by e-mail via their CIGRE SC B5 National Committee Member/Observer to reach the Secretary of Study Committee B5 [richard.adams@ramboll.co.uk](mailto:richard.adams@ramboll.co.uk) by October 31, 2018.

Paper- and synopses templates are available at the conference website [www.cigreb5tromsoe2019.com](http://www.cigreb5tromsoe2019.com)

The submitted synopses will go through a peer review process. The Secretary of Study Committee B5 will notify receipt and acceptance of the synopses before November 15, 2018.

Upon synopsis acceptance, a paper limited to 6 to 8 pages in CIGRE format should be submitted for the final contribution by January 31, 2019. Papers are to be forwarded by e-mail to the Secretary of Study Committee B5 [richard.adams@ramboll.co.uk](mailto:richard.adams@ramboll.co.uk)

Accepted final contributions will be available for the delegates at the conference website before March 30, 2019

Colloquium web pages: [www.cigreb5tromsoe2019.com](http://www.cigreb5tromsoe2019.com)