Abstracts

This Technical Brochure firstly provides an introduction to the synchronised measurement technologies that are the fundamental enabler of WAMPAC (Wide Area Monitoring, Protection, and Control) and defines the major building blocks of any WAMPAC system. Next, the benefits of synchrophasors to the protection and control of power systems are presented. Furthermore, a review of the practical WAMPAC applications that have been deployed in power systems is provided. The results of a detailed survey of the usage and acceptance of WAMPAC in utilities worldwide are presented to establish a better understanding of the trends emerging in the deployment and attitudes toward wide area protection and control technologies. The Brochure also addresses the actual challenges and requirements of WAMPAC solutions, e.g. design, testing and maintenance considerations, with concluding remarks on the future development of WAMPAC.