



CIGRE Study Committee C1

PROPOSAL FOR THE CREATION OF A NEW WORKING GROUP

WG* N° C1.34	Name of Convener: Boudewijn Neijens (CA) E-mail address: BNeijens@copperleaf.com
Technical Issues (1): 10	Strategic Directions (2): 2, 4
The WG applies to distribution networks: <u>Y</u>/N	
Title of the Group: ISO Series 55000 Standards: General Process Assessment Steps and Information Requirements for Utilities	
<p>Background: Over the last decade and a half many electrical utilities have embraced Asset Management (AM) business models in pursuit of optimising value extraction from their asset bases by balancing cost, risk and performance. Asset Management methodology has been shown to be an effective means of meeting stakeholder expectations while being challenged by regulatory and financial constraints.</p> <p>A number of AM approaches have been developed worldwide during this period. The Institute of Asset Management in the UK (The IAM) launched BSi PAS55 in 2004 (revised 2008), and the growing international adoption of this standard led to the International Organization for Standardization (ISO) project to develop Asset Management Standards ISO 55000, 55001 and 55002, which were adopted in 2014. ISO 5500x defines essential elements and provides guidance. The usual approach to achieving Certification against the standard is for an organisation to compare its current Asset Management process against the requirements of the standard in order to identify gaps and then to develop a plan for closing these gaps.</p> <p>A great deal of information and guidance is available to organisations through Corporate Membership of the IAM (for instance, a Self-Assessment Methodology and a developing range of guidance documents). The WG will develop a high level guideline as to what documentation, products and processes pertaining to Asset Management are required in order to streamline the ISO 55000 certification process. Since certain aspects of Asset Management are still being developed and refined, the WG will focus more on “what” is required as opposed to “state-of-the-art” for each requirement.</p> <p>Some utilities have acquired or are in the process of acquiring IT tools that automate data acquisition, provide asset analytics capabilities and assess implications of various investment scenarios. These tools serve multiple purposes, such as business planning, investment prioritization, identification of assets that need attention and automating corrective and preventative maintenance processes. Since these tools usually represent significant investment by utilities, it is proposed that the WG members should assess their general capabilities to deliver data and information needed to support the ISO 55000 certification process. This assessment should acknowledge that the primary driver for acquiring such enterprise tools is to gain business advantage and not to conform to or satisfy the requirements of ISO standards.</p> <p>The WG will utilize to the extent possible results, findings and recommendations from WGs C1.1, C1.16 and C1.25 and provide a forum in which participating utilities can assess their level of AM maturity. The WG will coordinate with the IAM and other bodies that have produced relevant content (e.g. the Dutch NTA 8120:2014 standard for electrical and gas utilities inspired by ISO 55000) to avoid redundant work.</p>	

Scope:

1. Overview of Asset Management principles, fundamentals and relationship between Asset Management Systems and Asset Management, including main elements of an Asset Management System
2. High level description of data and information that need to be provided by utilities to demonstrate meeting of the ISO 55000 requirements
3. Shared Self-Assessment against ISO55000 requirements
4. Analysis of differences between PAS 55 and ISO 55000
5. Survey of utilities showing how much of the required data, information and documentation needed for ISO 55000 certification they have at this point in time, and what their plans are regarding certification (formal/informal, timing).
6. Identification of specific requirements for IT tools for provision of ISO 55000 relevant data and information – illustrated by up to 3 utilities case studies.

Deliverables:

Technical brochure and its summary in Electra

Time Schedule: Start: September 2015

Final report: May 2017

Scope & approach reviewed by C1 in Lund: May 2015

Approved and issued to National Committee: September 2015

Opening meeting/teleconference: November 2015

Teleconferences/Meetings: January 2016, March 2016 & June 2016

Interim report presented to C1 in Paris: August 2016

First draft of report: October 2016

Second draft of report for review by C1: December 2016

Conclusions and final report presented to C1 in Dublin: May 2017

Comments from Chairmen of SCs concerned:

Approval by Technical Committee Chairman:

Date: 09/09/2015



(1) See attached table 1 – (2) See attached table 2

Table 1: Technical Issues of the TC project “Network of the Future” (cf. Electra 256 June 2011)

1	Active Distribution Networks resulting in bidirectional flows within distribution level and to the upstream network.
2	The application of advanced metering and resulting massive need for exchange of information.
3	The growth in the application of HVDC and power electronics at all voltage levels and its impact on power quality, system control, and system security, and standardisation.
4	The need for the development and massive installation of energy storage systems, and the impact this can have on the power system development and operation.
5	New concepts for system operation and control to take account of active customer interactions and different generation types.
6	New concepts for protection to respond to the developing grid and different characteristics of generation.
7	New concepts in planning to take into account increasing environmental constraints, and new technology solutions for active and reactive power flow control.
8	New tools for system technical performance assessment, because of new Customer, Generator and Network characteristics.
9	Increase of right of way capacity and use of overhead, underground and subsea infrastructure, and its consequence on the technical performance and reliability of the network.
10	An increasing need for keeping Stakeholders aware of the technical and commercial consequences and keeping them engaged during the development of the network of the future.

Table 2: Strategic directions of the TC (cf. Electra 249 April 2010)

1	The electrical power system of the future
2	Making the best use of the existing system
3	Focus on the environment and sustainability
4	Interactive communication with the public and with political decision maker