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| • <b>Draft Report with conclusions</b>  | <b>December 2016</b> |
| • <b>Final report approved</b>  | <b>March 2017</b>    |
| <b>Comments from Chairmen of SCs concerned :</b>                              |                      |
| <b>Approval by Technical Committee Chairman :</b><br><b>Date :</b> 28/11/2014 |                      |

A handwritten signature in black ink, appearing to read "M. Wald", is written over the signature line of the approval section.

- (1) Joint Working Group (JWG) - (2) See attached table 1 – (3) See attached table 2  
(4) Delete as appropriate

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

|           |  |
|-----------|--|
| <b>1</b>  | Active Distribution Networks resulting in bidirectional flows within distribution level and to the upstream network.   |
| <b>2</b>  | The application of advanced metering and resulting massive need for exchange of information.   |
| <b>3</b>  | 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.   |
| <b>4</b>  | 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.                   |
| <b>5</b>  | New concepts for system operation and control to take account of active customer interactions and different generation types.  |
| <b>6</b>  | New concepts for protection to respond to the developing grid and different characteristics of generation.   |
| <b>7</b>  | New concepts in planning to take into account increasing environmental constraints, and new technology solutions for active and reactive power flow control.                   |
| <b>8</b>  | New tools for system technical performance assessment, because of new Customer, Generator and Network characteristics.   |
| <b>9</b>  | 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. |
| <b>10</b> | 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)**

|          |   |
|----------|---|
| <b>1</b> | The electrical power system of the future                   |
| <b>2</b> | Making the best use of the existing system                  |
| <b>3</b> | Focus on the environment and sustainability                 |
| <b>4</b> | Preparation of material readable for non technical audience |