## PROPOSAL FOR THE CREATION OF A NEW JOINT WORKING GROUP (1)

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| **JWG* N° C1/C3-31** | **Name of Convenor :** Alan Croes<br>**E-mail address**: Alan.Croes@tennet.eu |
| **Technical Issues # (2): 10, 7** | **Strategic Directions # (3): 4, 3** |
| **The WG applies to distribution networks (4): No** | |
| **Title of the Group: Including stakeholders in the investment planning process** | |

**Scope, deliverables and proposed time schedule of the Group :**

**Background:**

A TSO will regularly monitor its investment plans against the long term load and generation predictions within the required policy environment. Proposed investments in infrastructure will be evaluated against efficiency and risk positions in the used asset management framework. It is common that these plans have to be presented to the relevant authorities and/or regulators. Planning horizons differ from country to country, but an investment plan will usually take 7 – 10 years into account and a network vision will take 15+ years into account.

In the publicly published investment plan the necessary investments will be announced. These plans will usually be substantiated with arguments based on:

- Exposed risks;
- Required quality level;
- Necessary transport capacity given the load and generation scenarios;
- Current level of quality and/or required refurbishments;
- Compliance to regulation.

Uncertainty on developments is a great challenge in these plans, as is witnessed with the use and integration of renewable energy sources (RES) and availability of smart grids or storage in the future. Balancing the necessary transport requirements have taken a much more national and international perspective with a great deal of governmental policy uncertainties.

While all the above already poses a great challenge for the investment plans one factor of importance usually is not taken into account. This could be summarized by the realism of realization of the project. The feasibility of projects have a tendency to rely more and more on acceptance from the public opinion and the right of way for “big” electric infrastructure objects. Together with the perceived risk of these objects and diminished available space this imposes a real risk on realization of necessary investments.

Knowledge on these expected “hotspots” and incorporation in the investment planning process is seen as the next challenge for TSO’s. Feasibility analysis, stakeholder involvement, new partnerships in much earlier phases could be the way forward. It is the goal of this workgroup to study the best practices of the Cigre members to improve the feasibility of still uncertain projects (mainly new lines) with expected high stakeholder involvement during tight planning once approved.

**Scope:**

The workgroup seeks to find best practises on this topic through a questionnaire and deliver a technical brochure on this matter.

The questionnaire and technical brochure will address:

- When are feasibility issues taken into account in the investment planning process
- When did early stakeholder involvement prove to be counterproductive and when productive
- How did using new technologies improve stakeholder engagement and public acceptance
- How were the cost impacts of the alternatives compared, e.g. higher costs for expected acceptance vs higher cost for expected delays
- Which stakeholders were identified as target groups and from which point in time
- How was early involvement of stakeholders translated to commitment during the project

- Legal framework in which the stakeholder involvement is organized, also from the perspective of opposition to these projects.
- Guidelines for stakeholder involvement on the investment process given the outcome of the questionnaire

**Timescales: February 2015 – December 2016**

Agreed ToR: February 2015 — Fourth WG meeting: February 2016

First WG meeting face to face: May 2015 (Lund)…… — Internal draft of report: May 2016

Second WG meeting: July 2015……. — Key findings discussed by SCs: August 2016

Survey issued: September 2015…… — Draft report: October 2016

Third WG meeting: November 2015…….. — Final report: December 2016

**Deliverables:**

Technical Brochure with summary in Electra

**Comments from Chairmen of SCs concerned**:

C1 - K. Staschus: I fully support this work

B2 - K. Papailiou: This is a very timely and important subject and evidently also of significant interest to OHL assets, which have their own peculiarities. SC B2 would thus like to participate and contribute with a liaison member to this WG.

**Approval by Technical Committee Chairman** : M. Wald

**Date** : 02/03/2105

(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)

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| **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)

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| **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** | Preparation of material readable for non technical audience |