

## REPORT

By: Ataollah Mokhberdoran

**Subject**: "From Innovation to Operation"

**Date**: January 20, 2015

As the first speaker of the day, Alexandre Torreele started his presentation by the title of "From Innovation to Operation". Initially, the prsentation started by introducing the "Elia Gorup". Elia Group is the owner of two companies by the names of "50Hertz" and "Elia". 50Hertz is in charge of delievring electric power from the north to the south of Germany while Elia is more associated with the electricity tranmission issues in Belgium and nearby countries. Elia operates, maintains and develops a network consisting of lines, underground cables, transformers and substations linking producers and consumers of electricity. In addition to delievering power from producers to the large and small size consumers in Belgium, Elia is actively involved in importing/exporting of elctricity from/to France, Netherland Luxemburge. As it was highlighted by the presenter, Elia's strategy is to remain focused on their core business and take advantage of international growth opportunities in grid.

After discussing some points about the definition of innovation from litrature, the inovvation approach at Elia was presented. The innovation management approach at Elia consists of four complementary building blocks. From the structural point of view there are innovation process and innovation portofilio blocks and also from the supportive point of view there are innovation culture and innovation network blocks.

It was also pointed out that a successfull innovative project would has a 15 years timeline. Typically, long term studies like PhD or Post-Doc studies are done in the first 5 years of an innovative project. Then a set of desk studies including some simulation tasks would be done. Finally, during the last 5 years, proof of concept should be obtained by having pilote projects in production environment. All mentioned steps should be carried out by a coordination beetween Project & Innovation Management (PIM) and Buisiness departements.

At the end, some features of current innovative projects at Elia were illustrated by Alexandre. MEDOW project is one of the innovative projects which is going on at Elia. The MEDOW early stage researcher based at Elia is performing research to answer the following question:

How does a DC link behave in a meshed AC grid?