

Q&A Project IC BeDeLux

What is the background of the project?

In Luxembourg the public electricity distribution and transmission network is operated and owned by Creos. Creos is facing new challenges in the future, which require to review the appropriateness of the current network topology and to develop a sustainable expansion strategy of its transmission grid. The challenges include, but are not limited to the growing demand in Luxembourg, which require the expansion of the import capacities by reinforcements, and the envisaged restructuring of the 220 kV network by Amprion in the Trier-Luxembourg-Saar region, which affects the security of supply in Luxembourg. The required investments shall besides increasing the security of supply at the same time promote the further integration of the EU internal electricity market as requested by EC Regulation 714/2009.

Due to this, in 2009, Creos started a network development study to investigate an optimal long-term network strategy for the Luxembourgish grid. Creos in cooperation with neighbouring TSOs, in particular Elia, Amprion GmbH (Amprion) as well as RTE Réseau de Transport d'Electricité (RTE), analysed several potential long-term network solutions to ensure the Luxembourgish supply is safe and secure until 2030. The TSOs also investigated potential immediate measures to ensure a safe and secure operation of the grid in 2020 and to allow an expansion of the grid towards a sustainable long-term solution. As immediate measures two variants were chosen that represent the least costly and at the same time easily and quickly implementable solutions: the pre-interim variant (First phase) and interim variant (Second Phase). These solutions will lead to the establishment of a new interconnection between Belgium and Luxembourg. In parallel a reinforcement of the internal Luxembourg network is under construction in order to create a loop around Luxembourg city, so called LuxRing, easing the transit flows between the countries.

What is the main goal of the project?

The decision to implement a physical interconnection between Luxembourg and Belgium was **mainly triggered by Luxembourgish security of supply considerations**. Besides this, the new interconnection will contribute to the European electricity market integration by connecting at physical level the transmission grids of Elia and Creos.

What is the First Phase of the project IC BeDeLux?

- starts with the commissioning of the phase shifter transformer (PST).
- Elia and CREOS will reuse existing infrastructures to create the new interconnection

This approach was chosen as it allows with a very short lead time a significant increase of the Luxembourgish security of supply. The first phase the interconnection is made of a single line **which is not N-1 secured**.

What is the current connection between the Belgium, Luxembourg and German market?

Creos is part of the German bidding zone. There is no market border defined between the Belgium and German bidding zone.

What will be the connection between the Belgium, Luxembourg and German market after completion of the First Phase of the project IC BeDeLux?

The market situation for the three concerned TSOs (Amprion, Creos and Elia) will not change initially. A review of the situation will be done after a trial phase of one year.

At the physical level, there will be an interconnector (BE-LU interconnection) between the countries Belgium and Luxembourg with the interconnection point located at the PST situated in Schiffflange.

Will there be a new bidding zone in Luxembourg?

The Belgian and DE/AT/LU bidding zones will initially not be connected this will be reviewed after a trial phase of one year and, as today, no Luxembourgish bidding zone will be created.

How will the DA capacity be calculated?

Regarding the DA capacity methodology which will be applied on the BE-LU interconnection, Elia and Creos make reference to the CWE flow-based MC solution. Consequently, the available capacity will be calculated according to the flow-based calculation methodology that takes into account that electricity can flow via different paths and optimizes the available capacity in highly meshed grids. The cross-border capacity is therefore calculated in a coordinated manner by the TSOs. However the actual implementation will be reassessed after a trial phase of one year.

What is the current status of the project?

Due to the fact that the impact assessment (IA) simulations indicate that in the majority of the cases the Creos PST would not be considered in the day-ahead allocation due to the limitation of the initial flow-based domain, given the complexity to commercialize the new Creos PST in the day-ahead timeframe of which the feasibility has not been confirmed yet by all involved parties, the limited cases in which this complex process will lead to an actual offering of the Creos PST in day-ahead timeframe and given the fact that the current IA simulations indicated that this offering would only result in a neutral effect on the CWE welfare, the project decided to postpone the commercialization of the new Creos PST. Review of this position will take place after one year of trial phase based on the results of an in-depth review of the additional list of Critical Branch Critical Outages (CBCOs) in the day-ahead market timeframe and the lessons learned regarding the actual real-time usage of Creos PST after a trial phase of one year in order to assess whether a review of the complex operational process for the day-ahead timeframe could be envisaged.

When is the next communication to Market Parties?

The next communication will be in November 2016.