

CORESO OPERATIONAL REVIEW 2010

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Coreso key figures for 2010

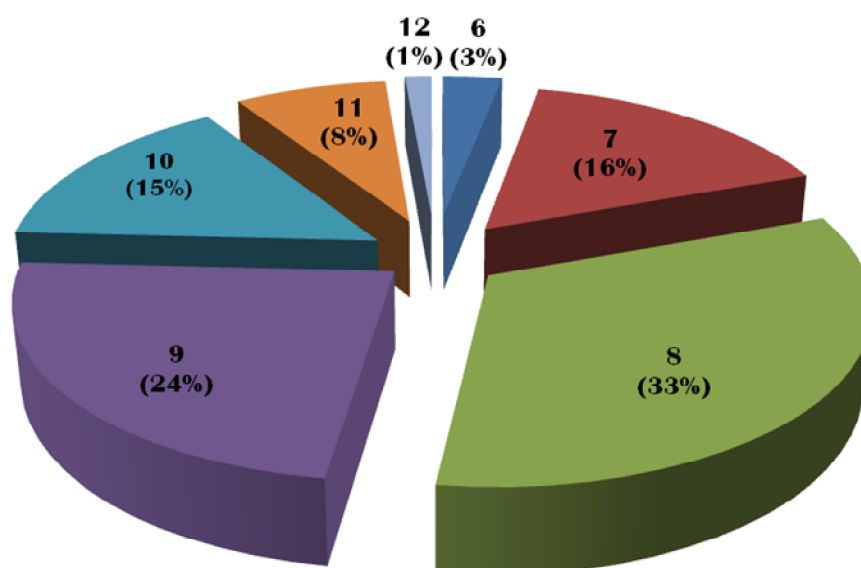
Coreso performance

MAIN PERFORMANCE FIGURES

Publication of 24 merged timestamps
 Number of SMART* performed for Elia and RTE
 Number of BALIT variants performed in day-ahead
 Number of other variants performed in day-ahead

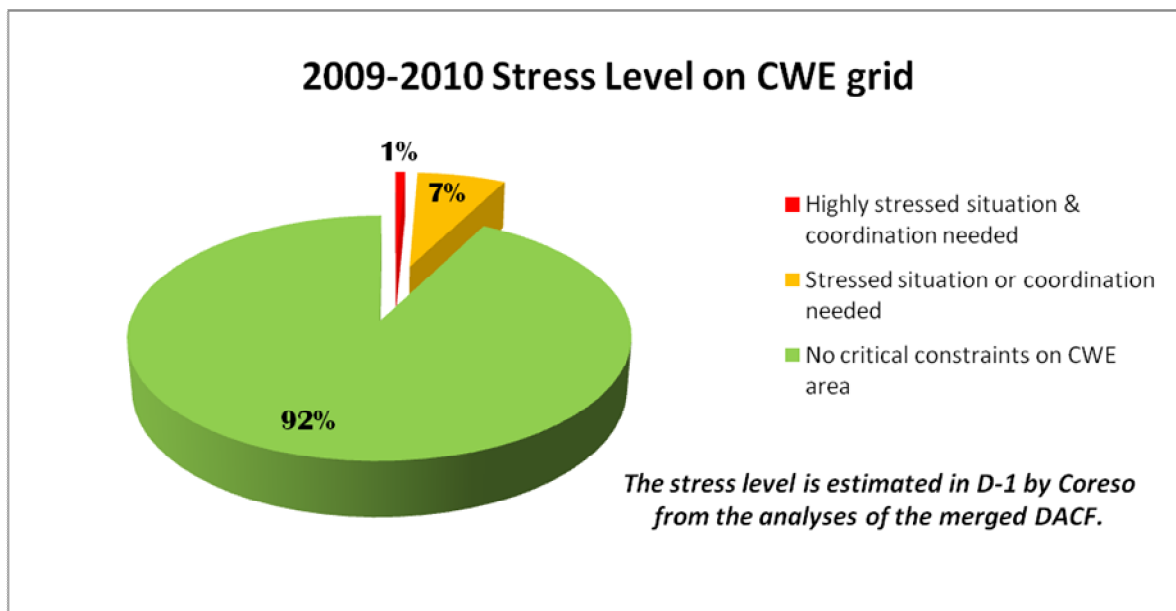
361/365 days
35
48
165

Number of Security Analyses performed in D-1



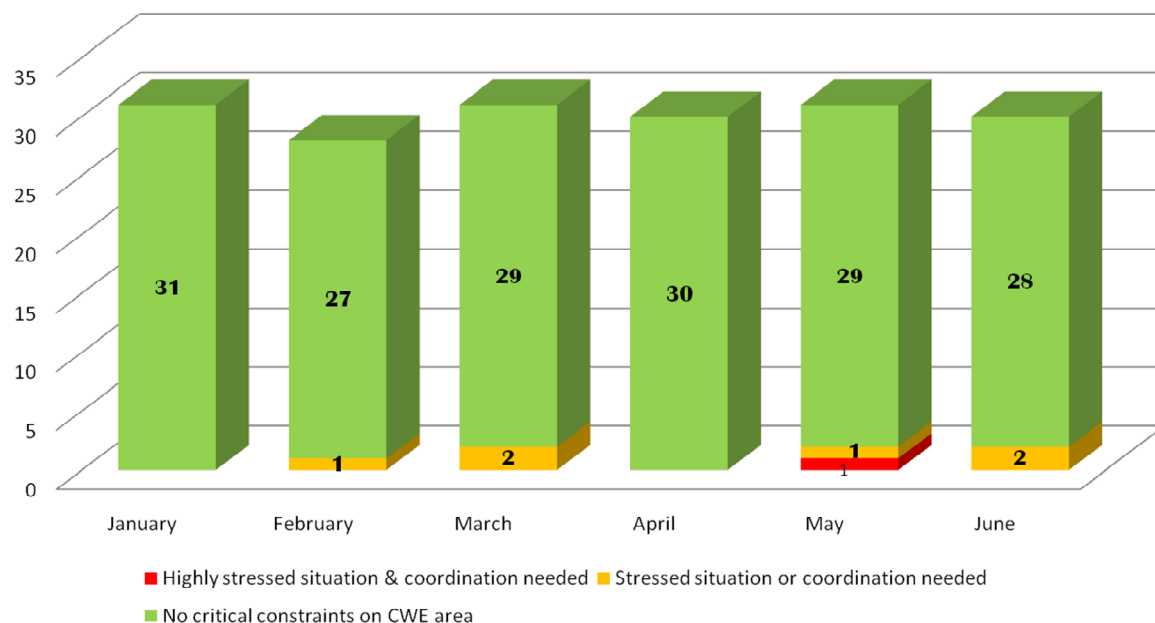
*SMART : System Modification Advice Request

CWE Stress level

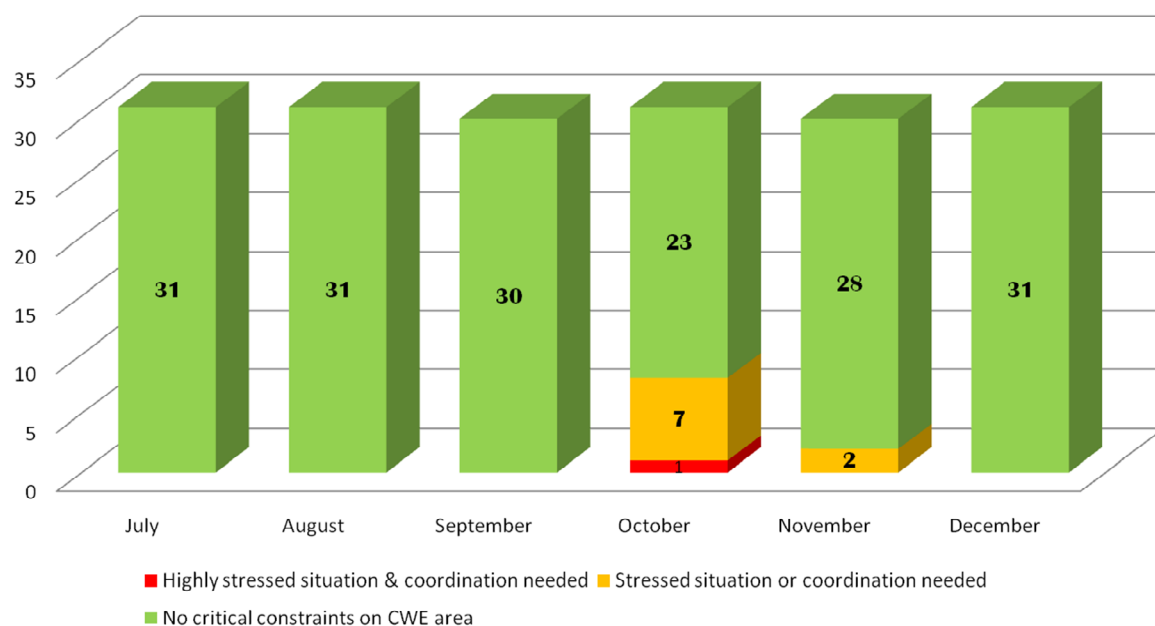


	2009	2010
Red situations	3	2
Orange situations	31	15

CWE Stress Level statistics, January - June 2010



CWE Stress Level statistics, July - December 2010



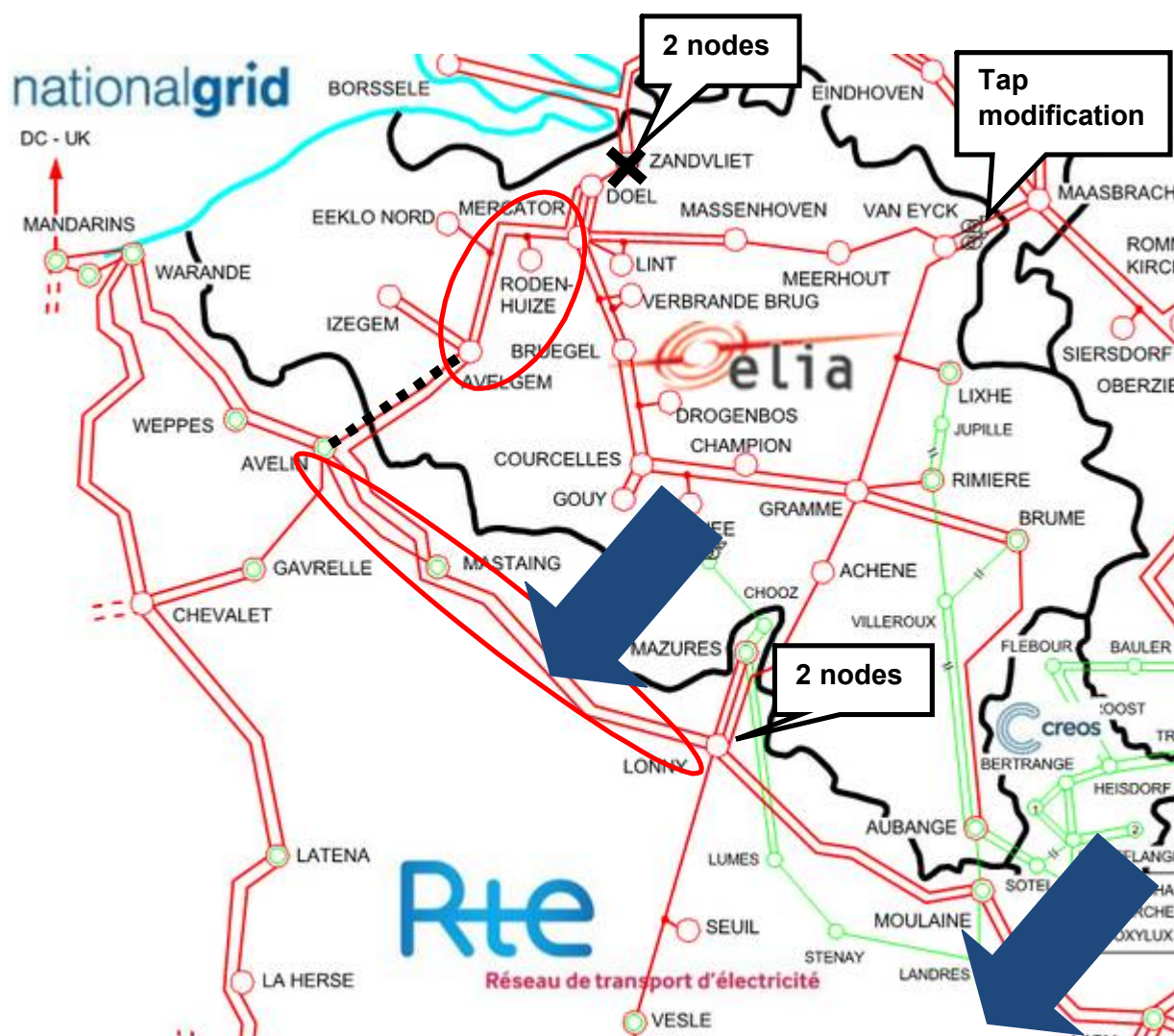
Most stressed situations on the CWE grid in 2010

May the 5th

Context: combination of the unavailability of Zandvliet PST, the planned outage of Avelgem–Avelin 380kV tie-line and high import in France.

Day-ahead foreseen situation: high north to south loopflows through Belgian grid and unacceptable constraints on both Belgian (Avelgem–Mercator axis) and French (Avelin–Lonny axis) grids after line contingencies.

CORESO proposal: specific topology in Zandvliet leading to a disconnection of Dutch and Belgian grids in this substation, preventive tap modification on Belgian PST and topological modification in Lonny 380kV substation. These actions were discussed in day-ahead with Amprion and Tennet and were all applied in real time.

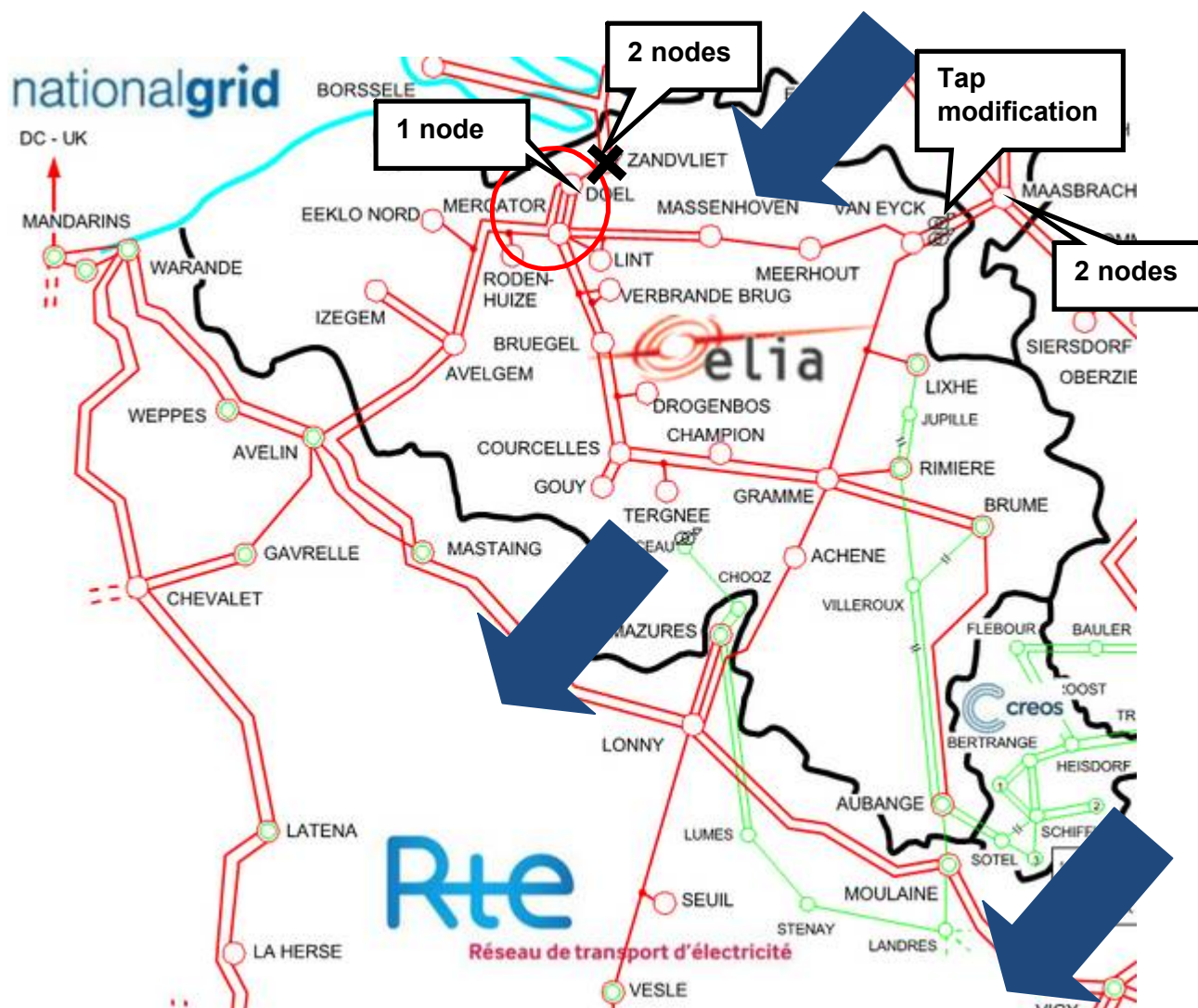


 **October the 18th**

Context: combination of high export from the Netherlands (bank holidays), high import in France due to a massive strike and the planned outage of Zandvliet PST.

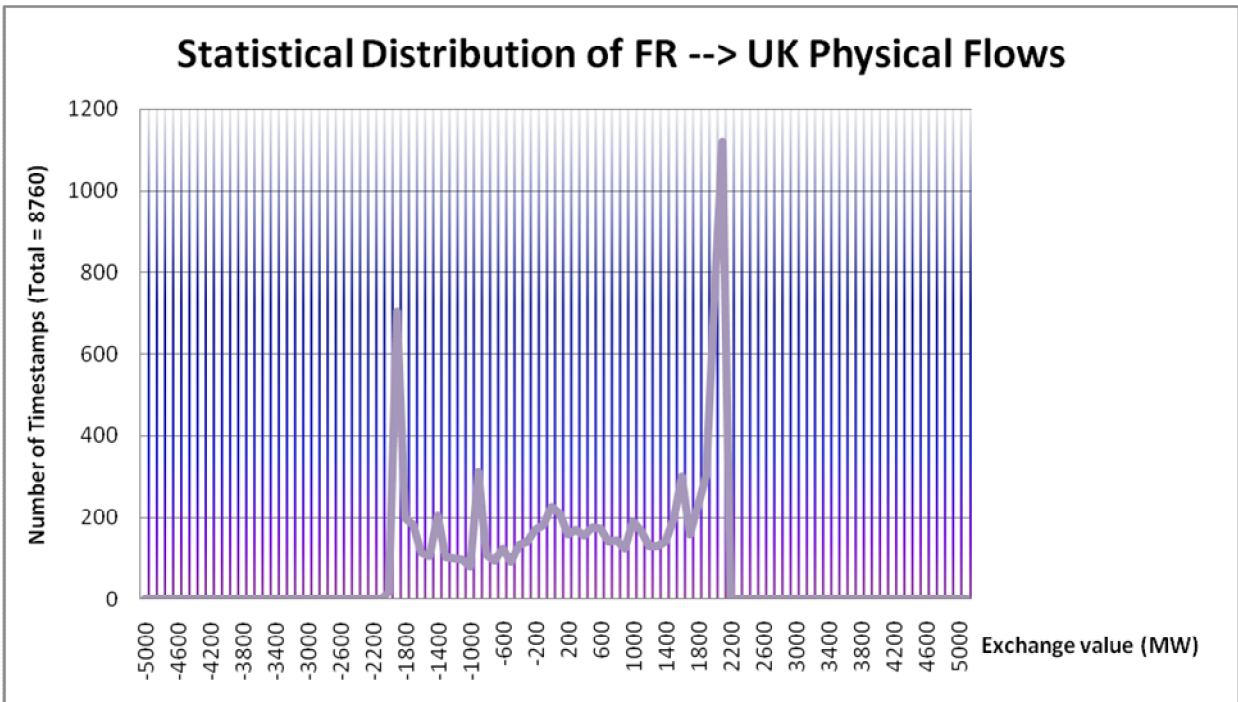
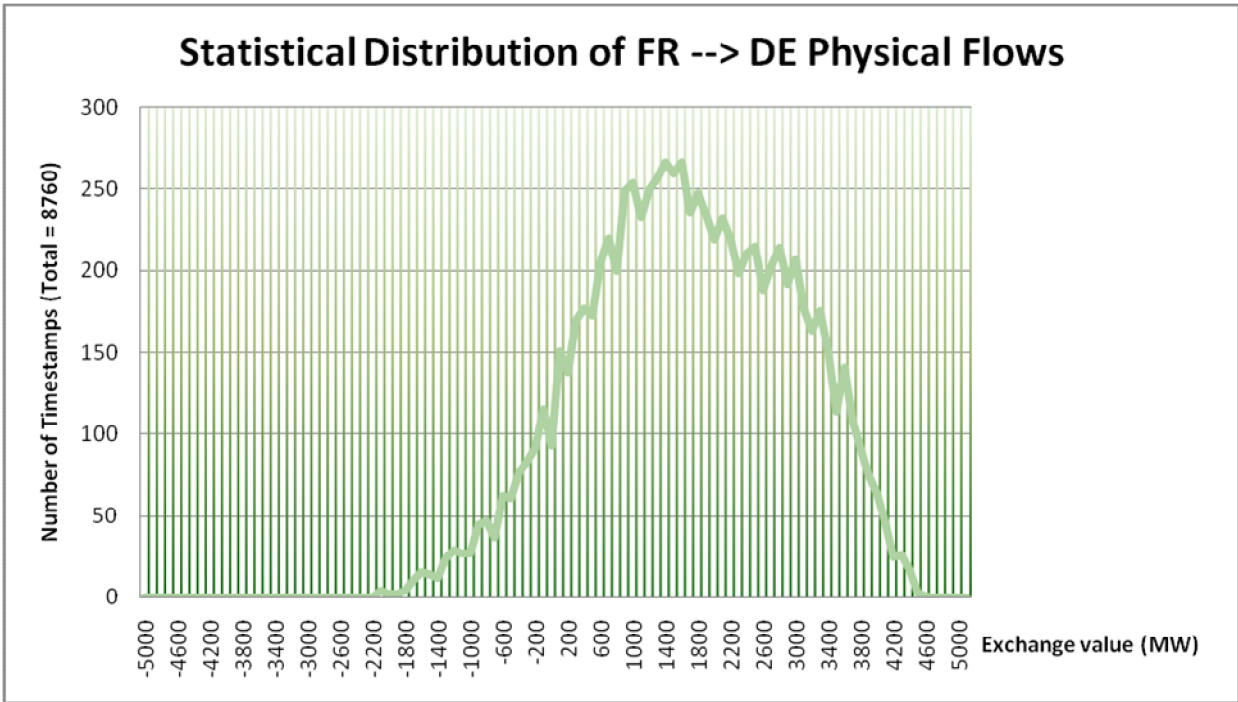
Day-ahead foreseen situation: high north to south loopflows through Belgian grid and unacceptable constraints in Mercator area in case of line tripping.

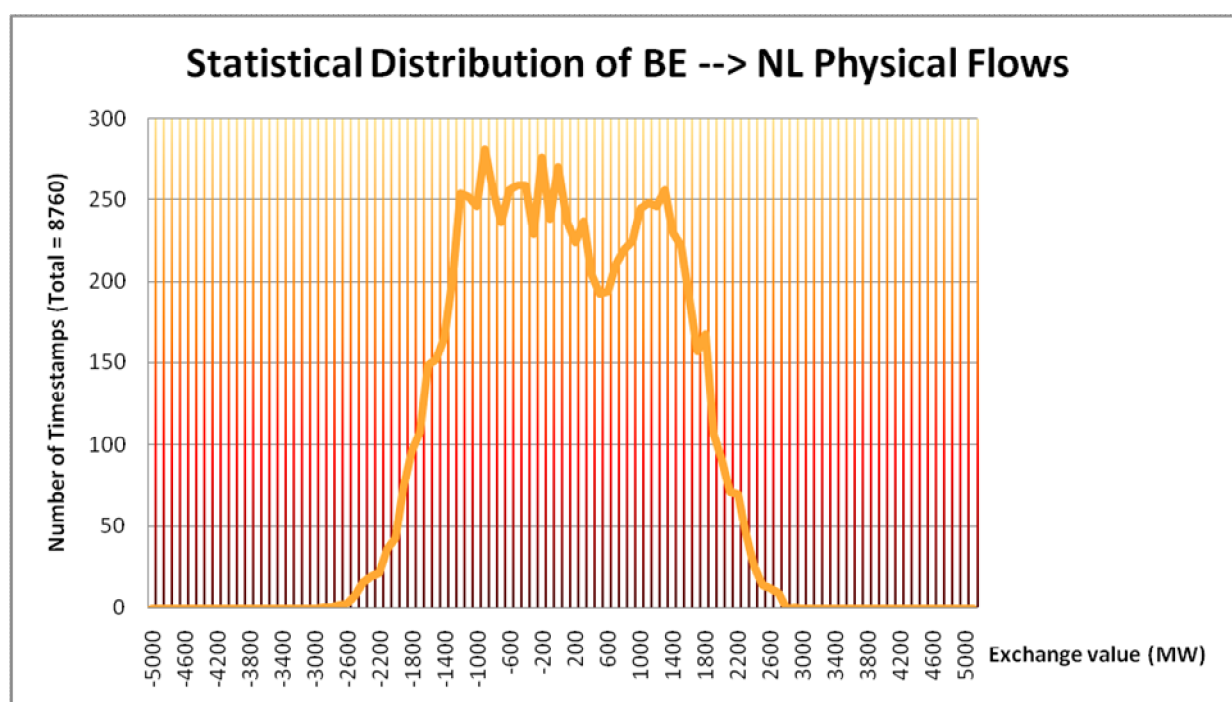
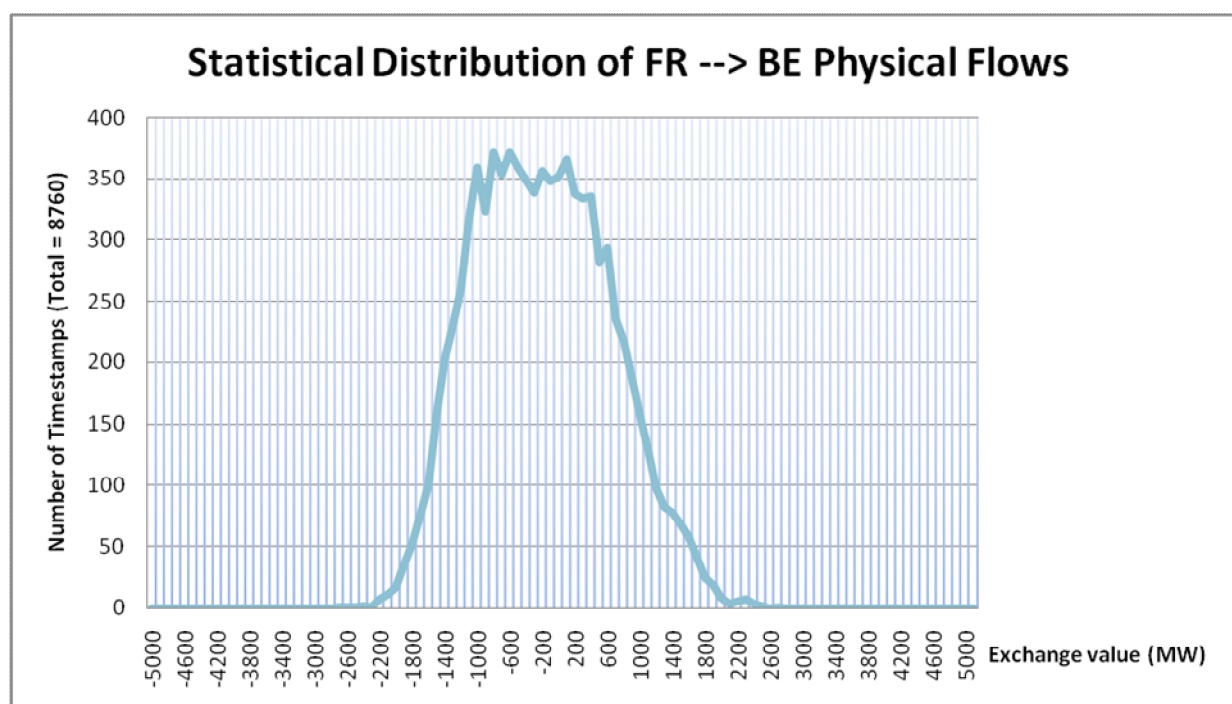
CORESO proposal: specific topology in Zandvliet leading to a disconnection of Dutch and Belgian grids in this substation, preventive tap modification on Belgian PST and topological modification in Doel 380kV substation. In coordination with Coreso, SSC agreed to cancel works in Maasbracht and to apply a special topology there to manage the flows on Maasbracht-VanEyck axis. All these actions were applied in real time but Amprion and Tennet did not accept Zandvliet topology to be kept for the evening peak which provoked some difficulties on the Belgian grid.



CWE flows & exchanges statistics for 2010

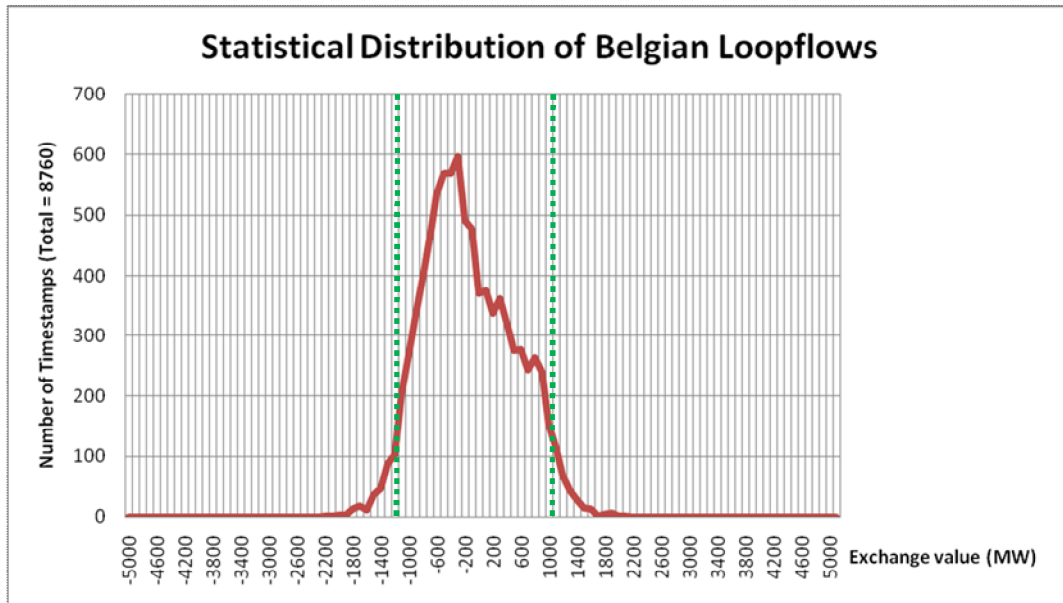
CWE Physical Flows





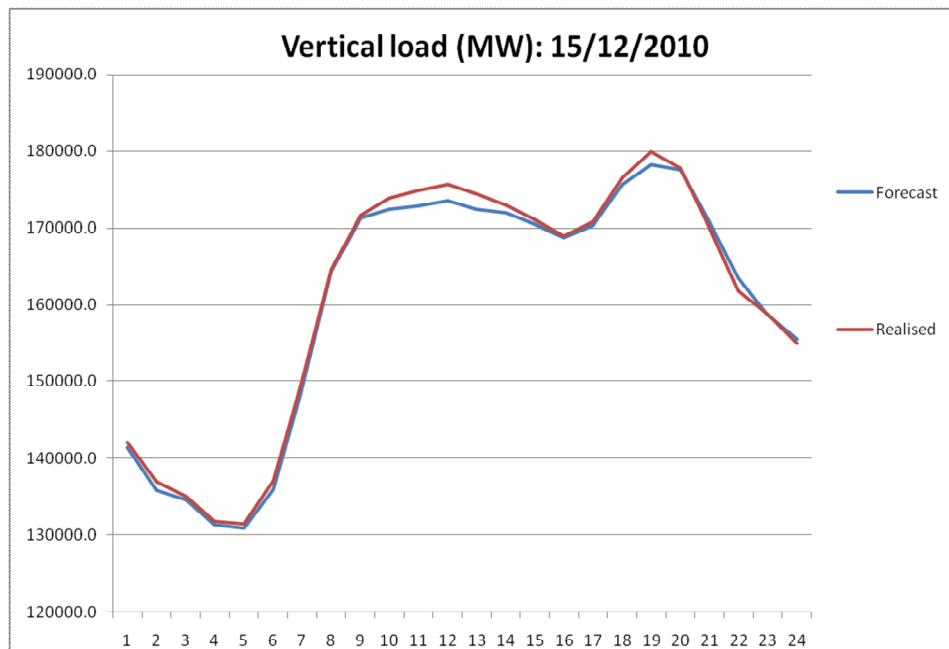
All exchanges and vertical load data are extract from www.etsovista.org

Belgian Loopflows



In 2010, with the PST regulation, loopflows were within the normal range 93% of the time.

CWE Vertical load peak



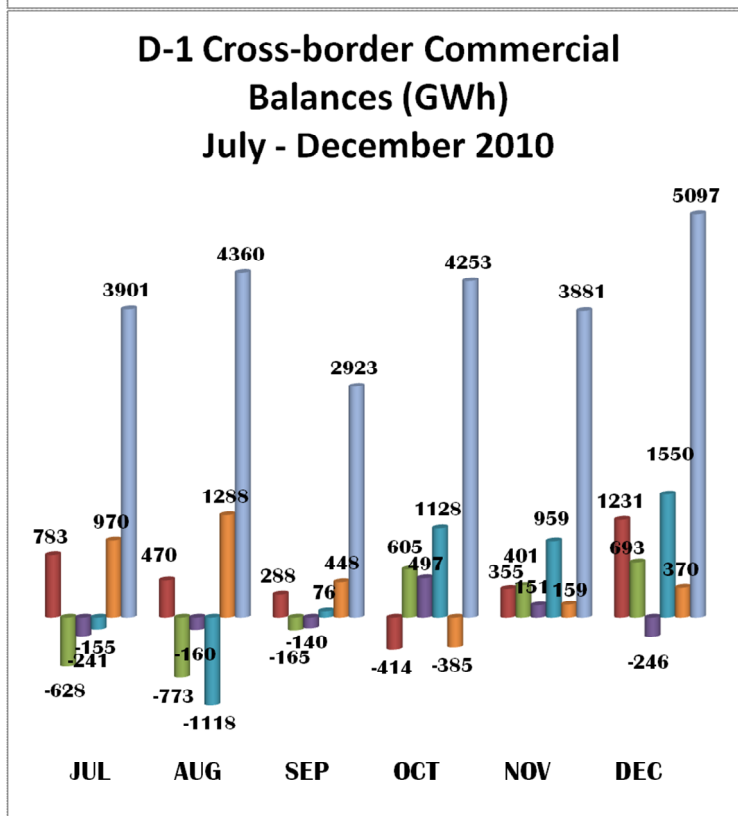
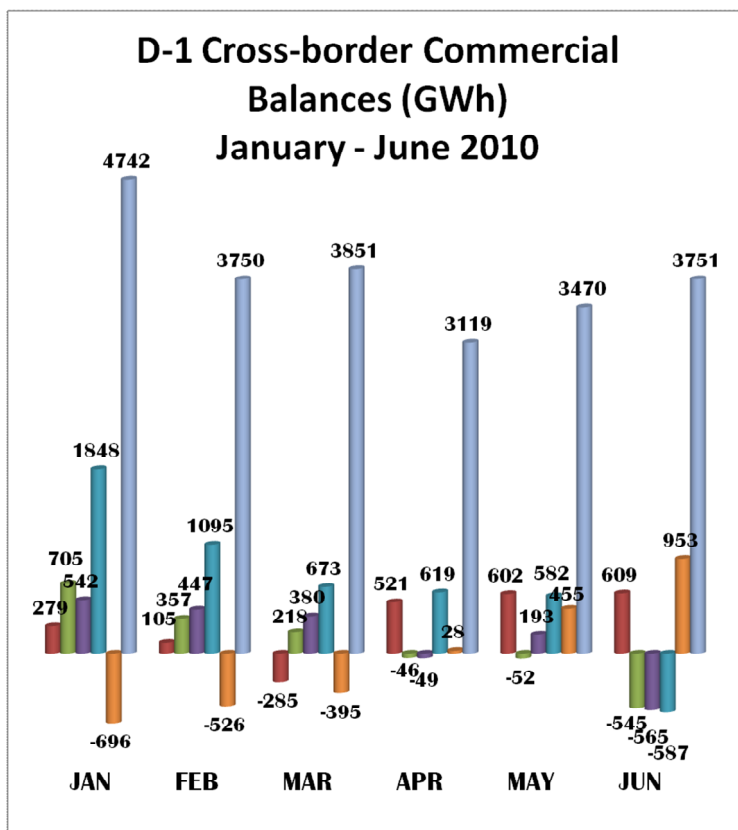
Vertical load peak of 179 840 MW between 18:00 and 19:00 (hourly average).

Aggregation of Belgian, Dutch, French, German and Luxembourg (included in BE and DE) vertical loads (hourly average).

Vertical load is the sum of all flows out of the transmission grid via directly connected transformers to distribution grids or other consumers.

CWE D-1 Commercial exchanges

DE --> NL NL --> BE BE --> FR DE --> FR FR --> GB CWE + IFA Absolute Trade Volume

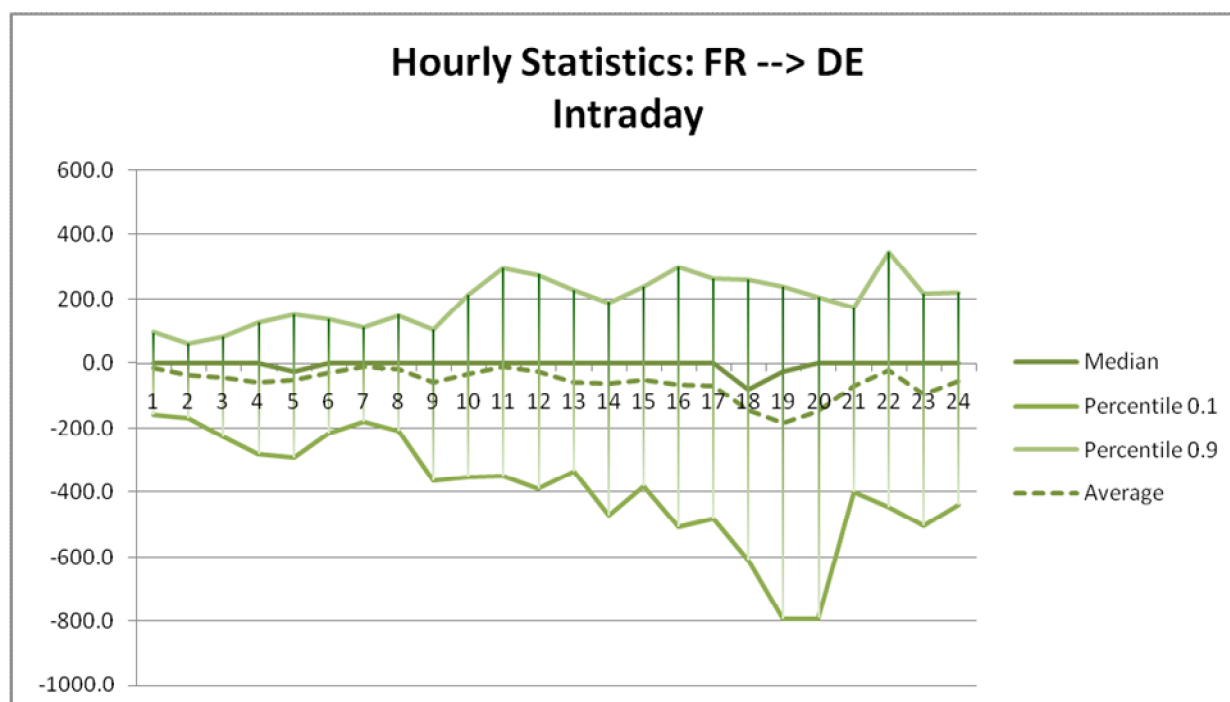
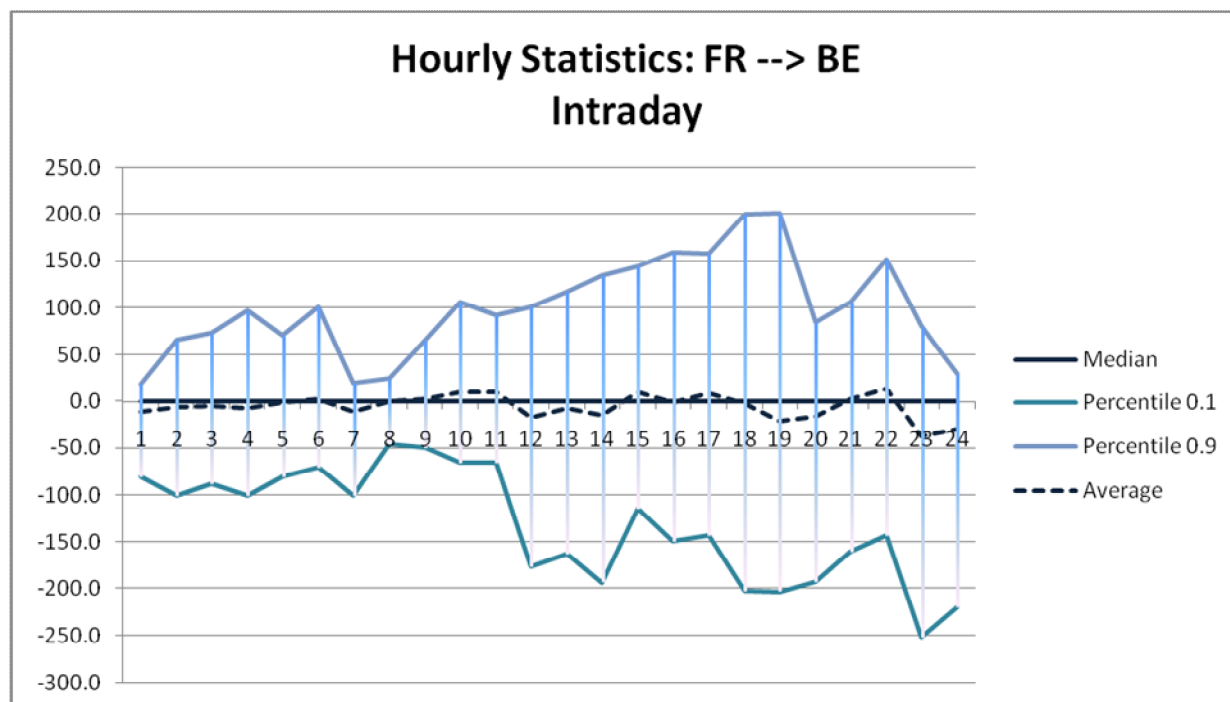


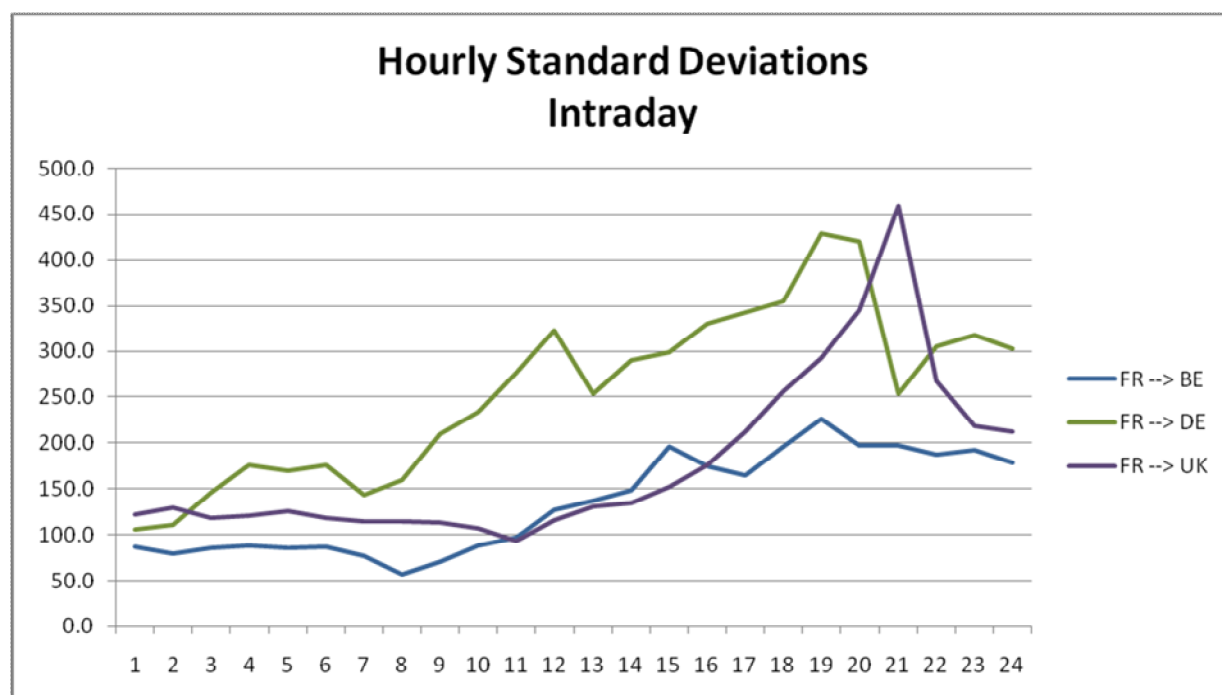
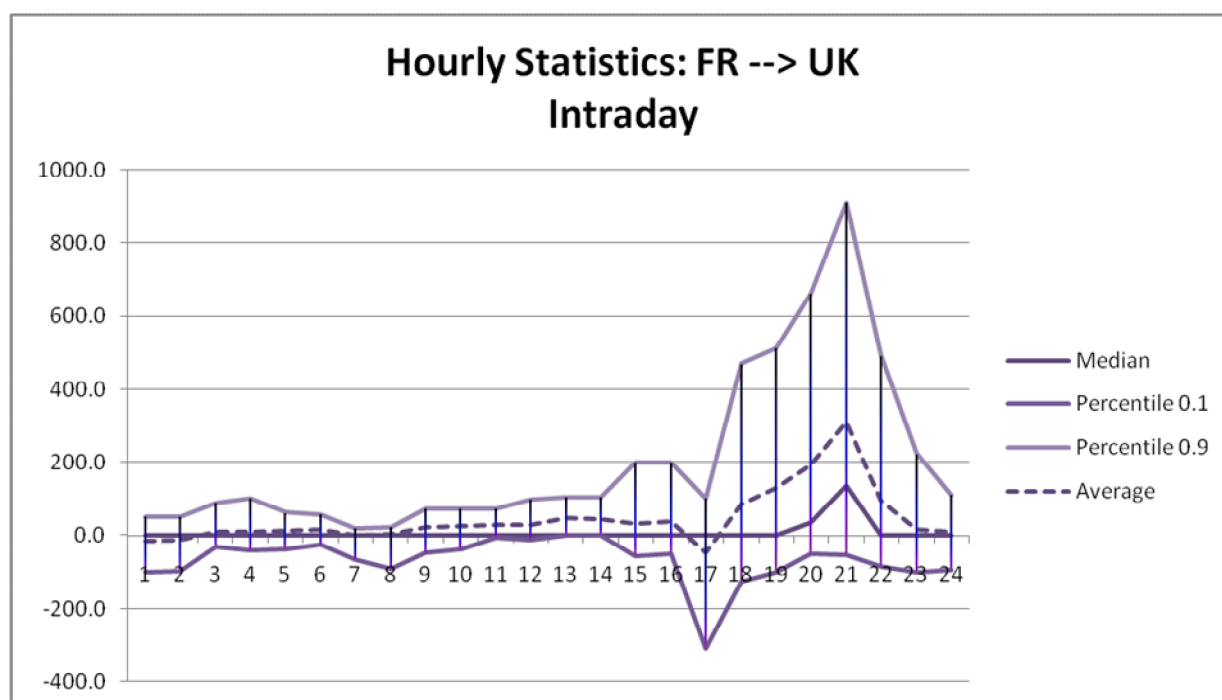
CWE Intraday exchanges

These charts represent the most frequent values of intraday exchanges (in MW). For each timestamp, the intraday volume was included between the 2 percentile curves, 80% of the days.

January – March 2010

This period correspond to the winter time, when the peak demand in the CWE area is in the evening.



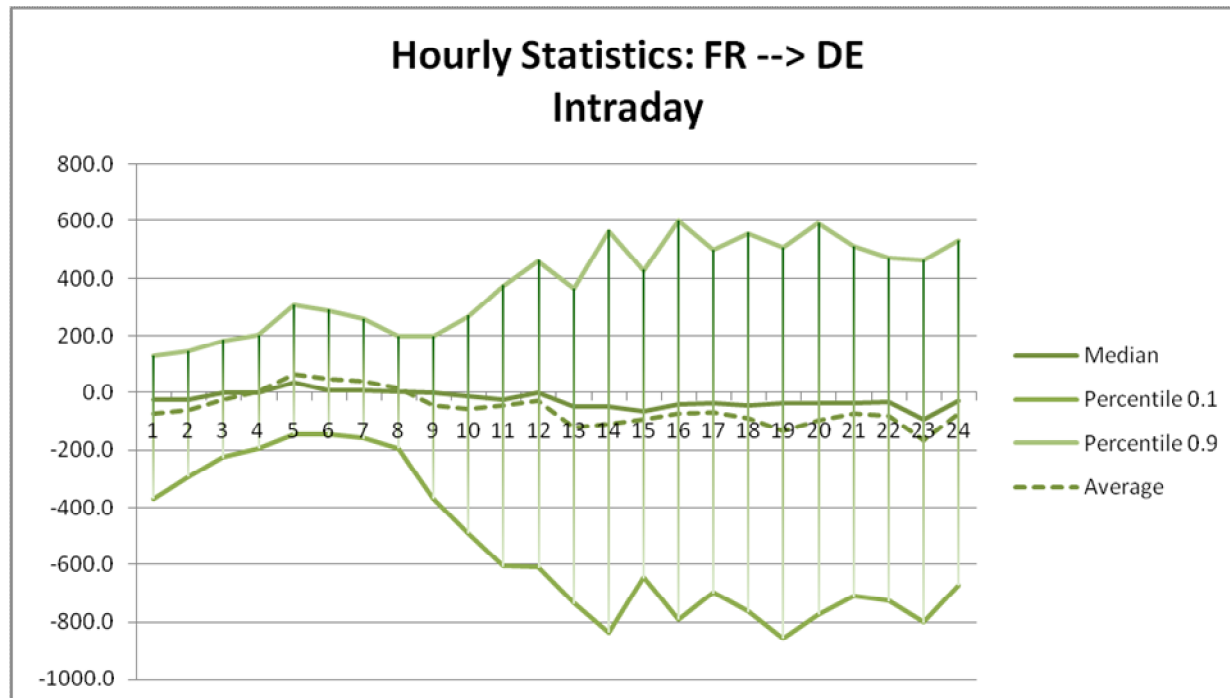
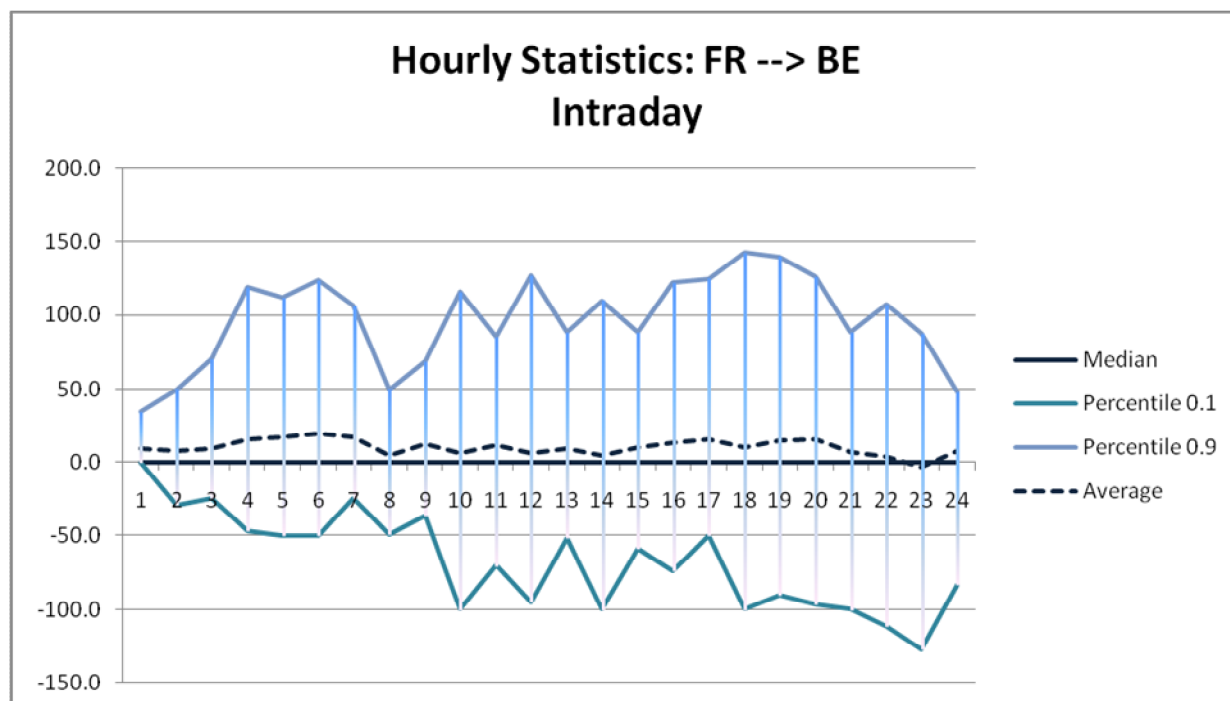


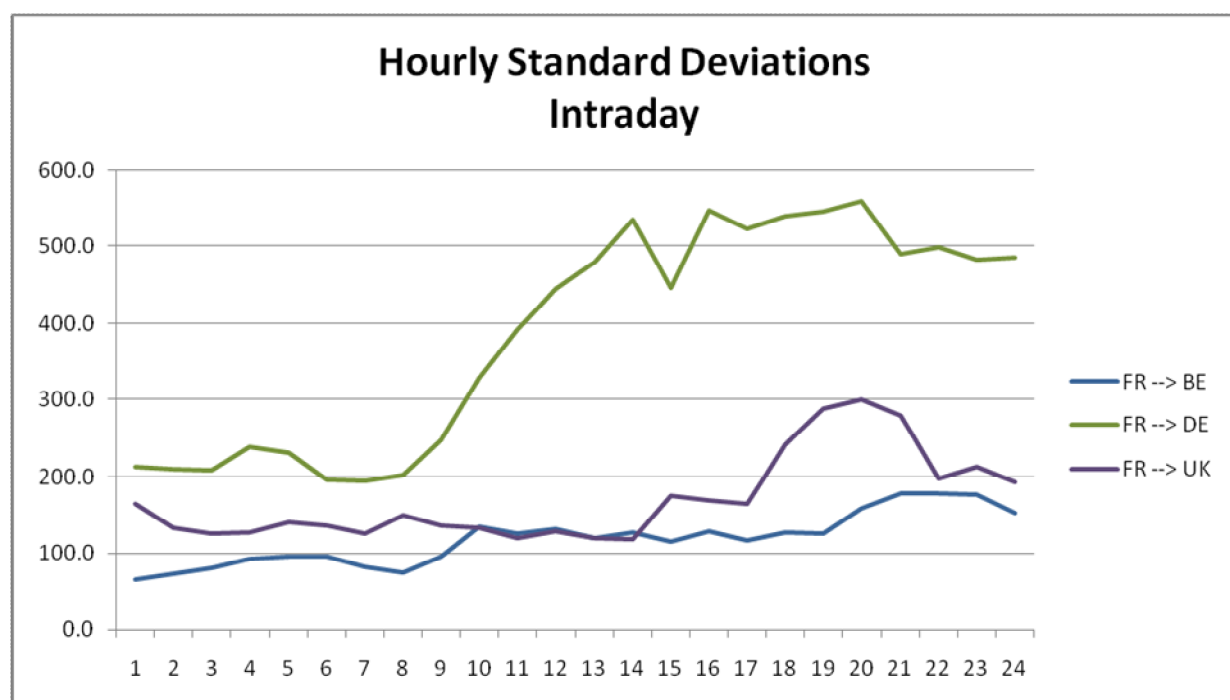
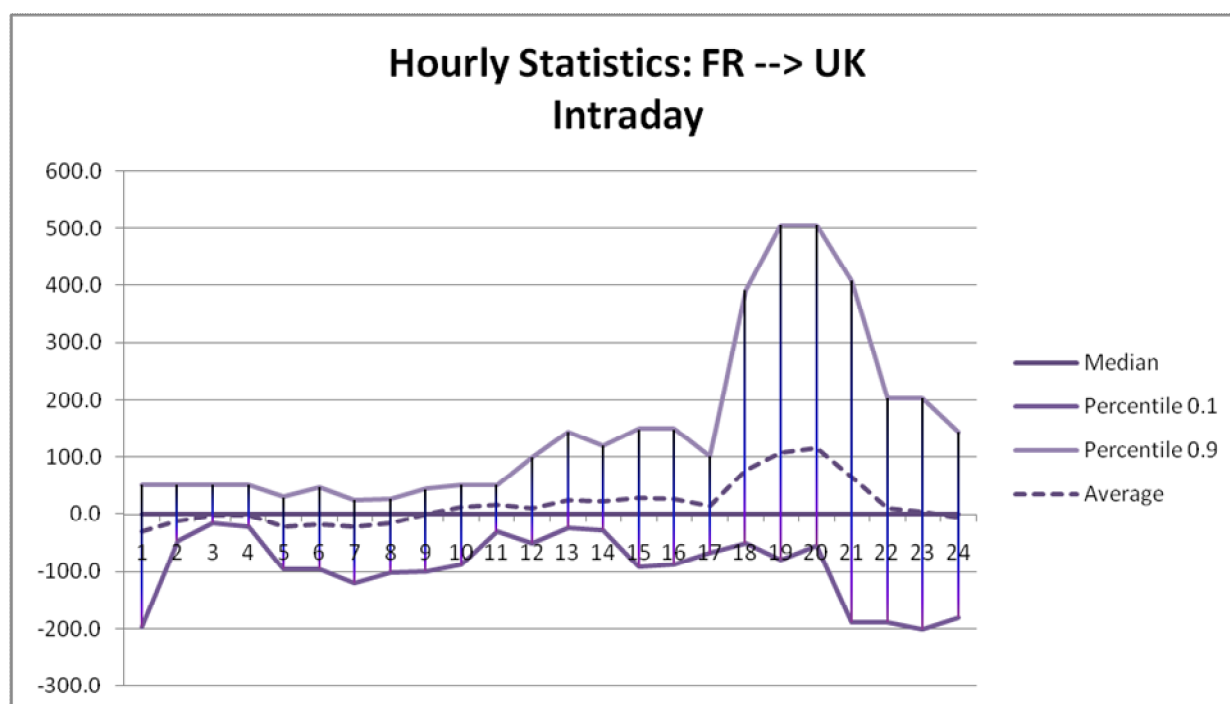
The intraday activity is higher around peak demand time: exchanges are more important but also more fluctuating.

The same performance is observed in November and December.

April – October 2010

This period correspond to the summer time, when the peak demand in the CWE area is at noon.





Evening exchanges remain important but the differences of fluctuation and quantity with morning or noon exchanges are less significant during summer time.