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**Designing eTrading solutions for electricity balancing and redispatching in  
Europe**

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**Main problem addressed:**

Four European TSOs of Central-Eastern Europe (APG from Austria, ELES from Slovenia, MAVIR from Hungary and Transelectrica from Romania), together with power system experts from multiple research institutions, electricity retailers, IT providers and renewable electricity providers, joined effort to design a unique regional cooperation scheme that aims at designing Balancing and Redispatching markets and open it to new sources of flexibility and supporting these sources to participate on such markets competitively.

**Why is it important for society ?**

An ambitious goal of the FutureFlow project is proving that in ten to fifteen year future consumer engagement and renewable energy sources including distributed generation and eventual supplementary technologies could replace the fossil-fuel based power plants on the segment of system flexibility and security provision when and only when proper cross border regional market integration mechanisms will be developed and put in place.

**What are the overall objectives?**

The overarching goal of the FutureFlow is to design and pilot test, at a plausible scale, comprehensive techno-economic models for open and non-discriminatory access of advanced consumers (DR) and distributed generators (DG) to the Regional Platform for ancillary/balancing and redispatching services. The main idea of the project is to design and implement cross-border balancing and redispatching mechanisms, including the Common Activation Functions (CAF) tailored to congested borders, based on a harmonized set of requirements for DR and DG to be able to compete in these markets.

**Project's product**

Within the project, the three level IT architecture has been developed connecting the Flexibility aggregation Platform with the Regional cross-border balancing Platform and TSOs environment. The complete IT architecture enables real-time field pilot tests with DR&DGs in Austria, Slovenia, Hungary and Romania. Over 100 DR&DG units with overall reserve power of cca. 50 MW were tested their capability of providing the most complex balancing services (mFRR and aFRR), first within the local TSO environment and afterwards

in the cross-border real-time tests.

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