



FutureFlow

Designing eTrading Solutions for Electricity
Balancing and Redispatching in Europe

Project Overview



This project has received funding from the
European Union's Horizon 2020 research and innovation programme
under grant agreement n° 691777

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RESEARCH AND INNOVATION ACTION



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- **HORIZON 2020, Call: H2020-LCE-2015-3**
Advanced architectures and tools for pan-European markets for ancillary services and balancing
- **Project title:** Designing eTrading Solutions for Electricity Balancing and Redispatching in Europe
- **Project acronym:** FutureFlow
- **Grant Agreement No.:** 691777
- **Duration:** 4 years (1.1.2016 - 31.12.2019)
- **Coordinator:** ELES d. o. o., Slovenia
- **Consortium:** 12 partners from 8 countries

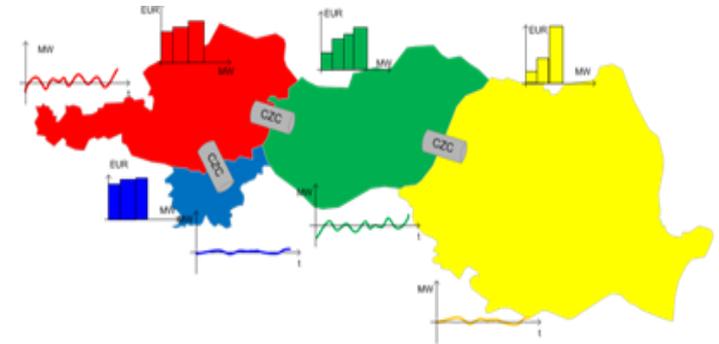


- **General objective:** To design and pilot test for access of advanced consumers and distributed generators to a Regional Platform for balancing and redispatching services
- **Maximum grant amount:** 12,985,233.50 € (100 % reimbursement)

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Background and motivation

- The growing share of renewable electricity units has reduced drastically the capabilities of conventional, fossil-fuel based means to ensure balancing activities and congestion relief through redispatching. There is a need to face future balancing and network security challenges with the help of a more intensive and joint approach at regional level.
- FutureFlow links interconnected Electricity Grids of four TSOs of Central - South Europe (**ELES**, Slovenia; **APG**, Austria; **MAVIR**, Hungary; and **TRANSELECTRICA**, Romania).
- Environmental policies call for the integration of environmentally friendly technologies into the electricity market with additional focus on electricity balancing.



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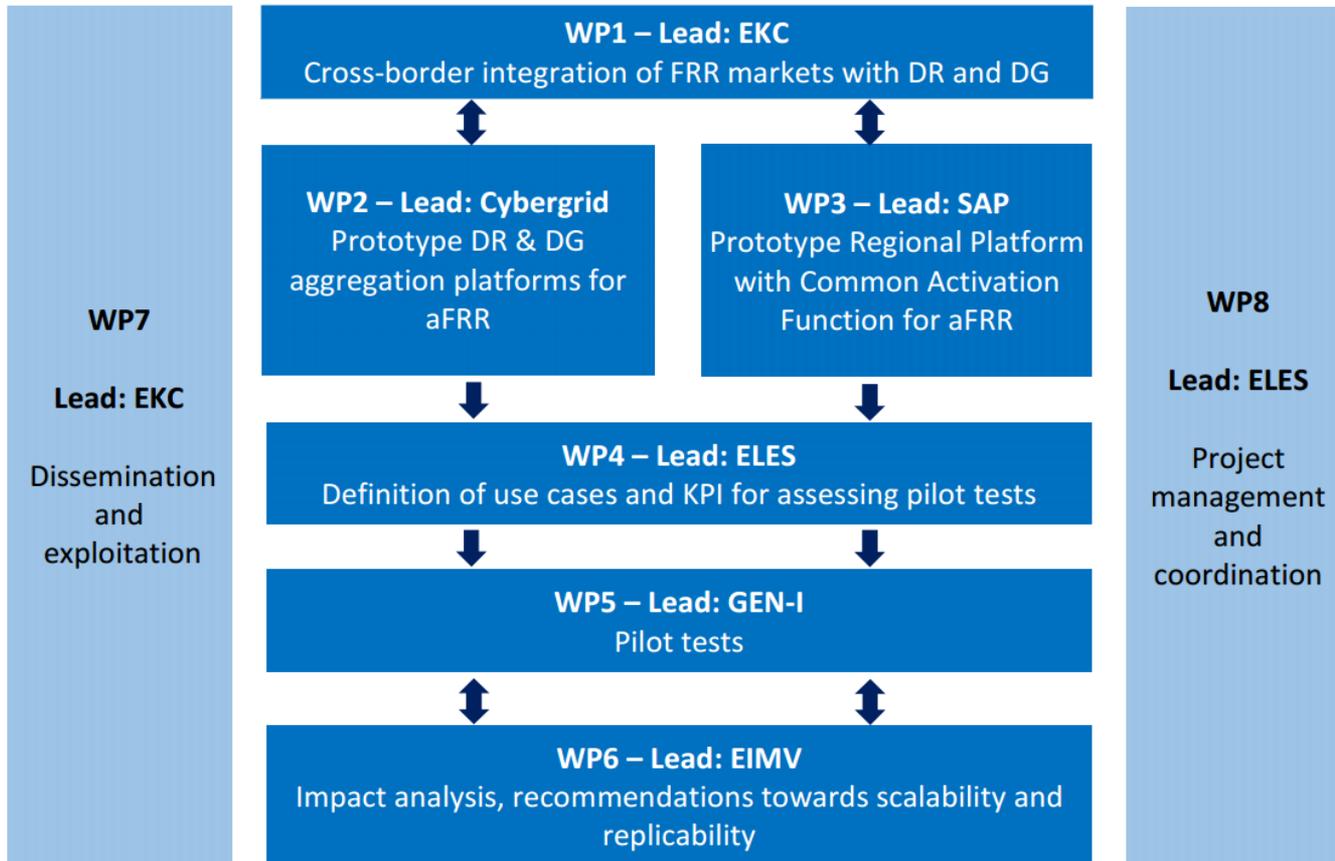
Main features of the project

- Despite many developments in the past, **electricity systems are still characterized by national Control and market zones and Borders.** FutureFlow is bringing solutions, which **will go across this concept** and will have profound impact on Costs and Investments needed.
- **Today** these services are predominantly provided by **Power generation.** By **inviting new actors into their provision,** we are disruptively changing the environment by:
 - new relations between partners in the Power industry,
 - introducing changes in the information flow and
 - changed pattern of power Flows in the electricity systems.
- **Consumers will get** an opportunity to sell their flexibility **to the most valuable market,** reducing their electricity bills.
- A very strong link between Grid Security, Consumers and RES is created by the FutureFlow. **Consumers** instead of being passive observers **become the guardians of the Power System.**



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Work Package structure



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Contribution to technology

- The research and innovation activities involve real energy market players. Between 30-45 MW of the flexible balancing power services expected to be made available to the control areas of the 4 TSOs. This in view of:
 - Prototyping of innovative **flexibility aggregation platforms** within all four control zones,
 - Prototyping of a **regional IT platform enabling** access of these flexibility aggregation platforms to the international markets,
 - Enabling optimization of relevant functionalities within the TSO environments from the regional perspective,
 - **Pilot testing of these platforms and connections**, based on a set of progressively **ambitious use cases** involving real electricity market players.
 - An ex-post impact analysis is proposed to deliver recommendations for the **scaling-up and replication** of the most promising use cases.





ISO 9001 Q-232
ISO 14001 E-079
OHSAS 18001 H-008
ISO/IEC 27001 I-002



**THANK YOU
FOR YOUR ATTENTION**