



INTERFACE

TSO-DSO-Consumer INTERFACE architecture to provide innovative grid services for an efficient power system

FLEXIBILITY MARKETS OF THE FUTURE AND TSO-DSO COOPERATION, 13.02.20, Brussels
Dagmar Ilp, Elering, WP 5.3 Single Flexibility Platform demo leader

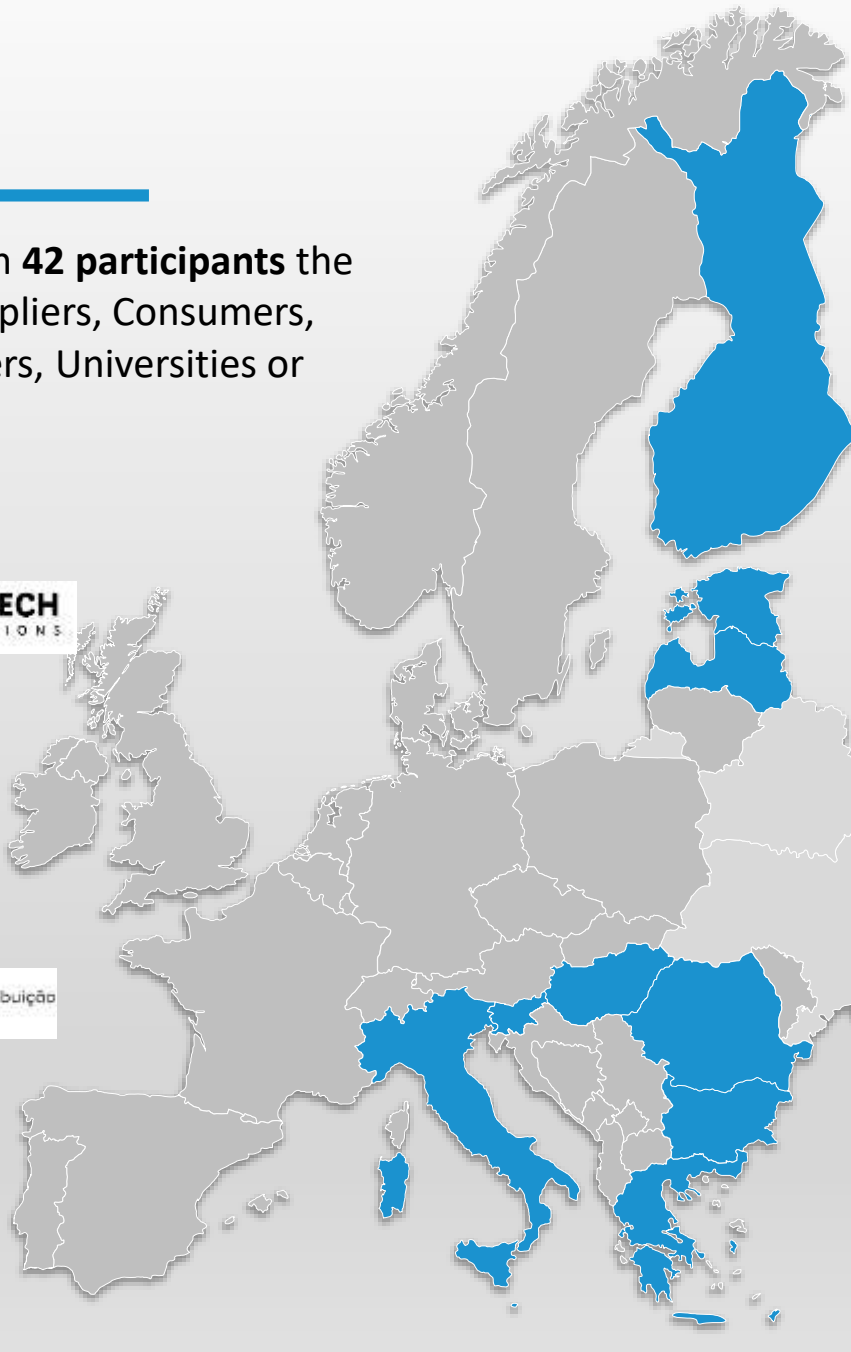


This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant agreement No 824330

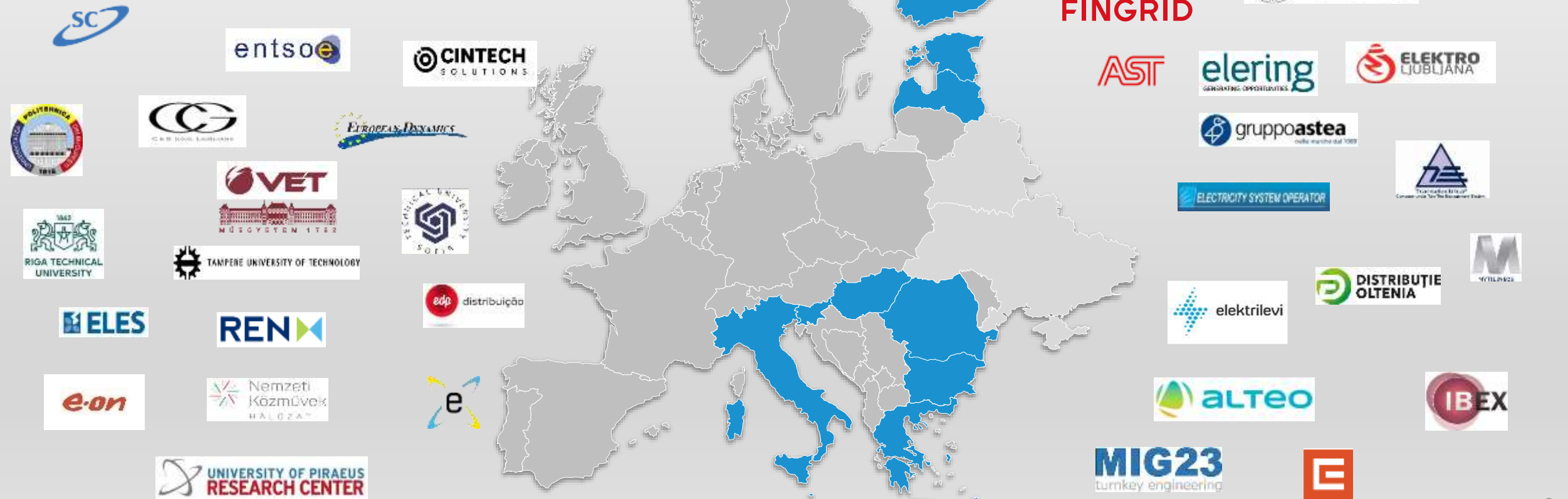


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INTERINTERFACE consortium represents through **42 participants** the full traditional value chain: TSOs, DSOs, Suppliers, Consumers, Aggregators and ESCOs as well as IT providers, Universities or Research Centers



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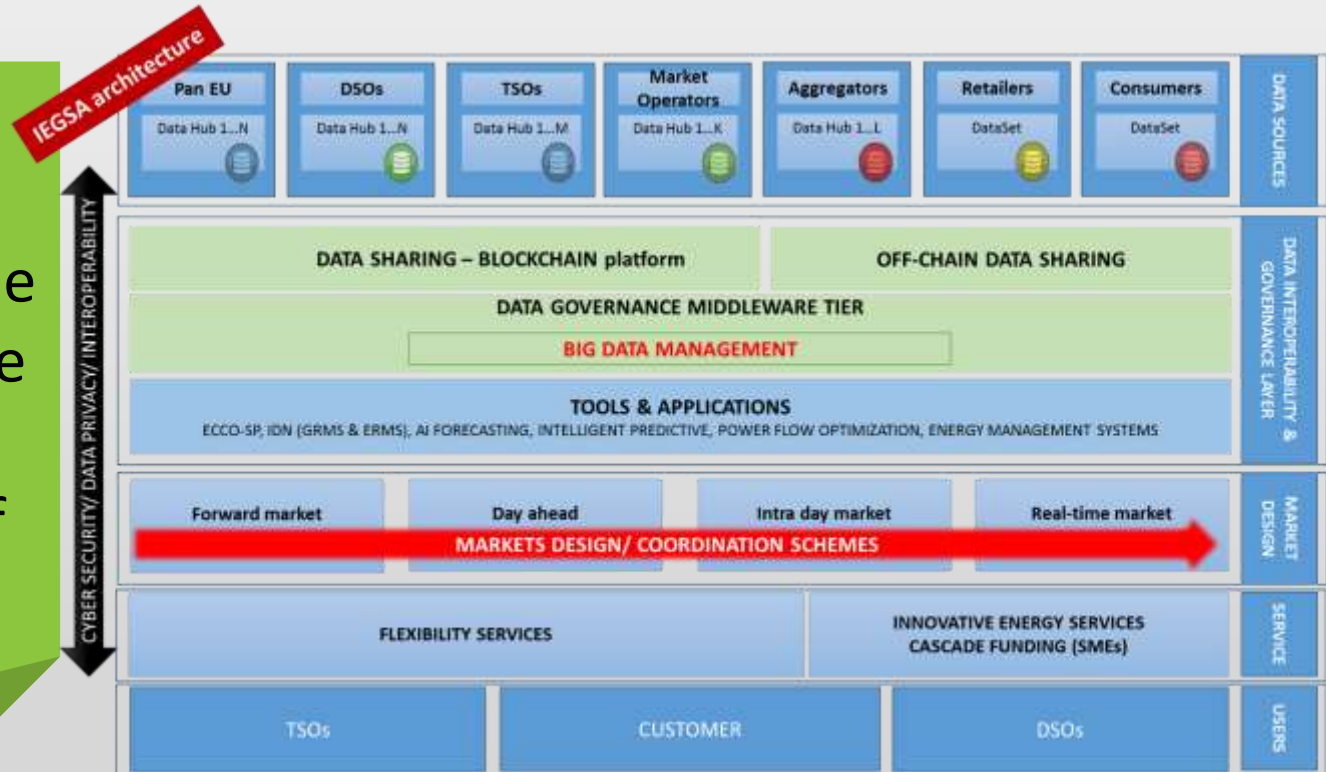
What's the value of running a platform?



Technical framework – IEGSA

Interoperable pan-European Grid Services Architecture (IEGSA):

1. to act as the **interface** between the power system (TSO and DSO) and the customers
2. to allow **coordinated operation** of all stakeholders to use and procure **common services**



What's the value of running a platform?

A common pan-European architecture that connects market platforms linking wholesale, retail and reserve (balancing) markets

1. Increases the liquidity of existing reserve (balancing) markets
2. Decreases barriers for smaller Flexibility Service Providers (DER)
3. Introducing new and common flexibility grid services: cross-border exchange
4. Closer cooperation between TSOs and DSOs
5. To engage end-users promoting digital technologies customers are familiar with
6. Removing constrained data access
7. Standardizing of prequalification processes
8. To determine the location of the flexibility assets in the grid

What's the value of running a platform?



WP 5.3 Single Flexibility Platform: cross-border demo

WP 5.3 Single Flexibility Platform will integrate flexibility resources on local, DSO and TSO levels to a marketplace that will allow valuation of these resources based on the needs of the different grid levels and market participants



What's the value of running a platform?

WP 5.3 Single Flexibility Platform: cross-border demo

Business use cases will be tested and demonstrated:

a) congestion management

From TSO / DSO side

b) frequency / balance management

in TSO side, including mFRR, aFRR, FCR products and demonstration in cross-border usage

c) flexible grid connectors

where both contracts and technical feasibility will be demonstrated

d) trading between interested market participants

e.g. BRPs, prosumers

Who earns money?

Where is the money coming from (e.g. from consumers via network tariffs or based on avoided curtailment costs or avoided network investments) and how do you set prices for flexibility?

- **Customers** earn money from lower grid tariffs and added flexibility revenues
- **Flexibility Service Providers** (i.e. aggregators) have opportunities to earn money from new flexibility services
- **System Operators** pay for services, but save on system operation and network investments
 - This results in lower tariffs that contain the cost of flexibility
- **System operation (short-term congestion management):** System Operators are willing to pay the price of the alternative action (i.e. as reduction of transmission capacity of Estonia-Finland) or flexibility – if the alternative is more expensive, we will use flexibility instead.
- **Network investments (long-term congestion management):** System Operators set prices based on for how much society can save on long-term investments.

If your market has limited liquidity, does your cost of curtailment put a cap on the price of flexibility? If there are no costs for curtailments, what kind of caps do you have?

There are technical caps on certain markets

The market design is under discussion to create even more incentive towards offering flexibility

- *In the case of grid congestion, we will have the choice of using flexibility or down regulating (or to use other grid planning activities).*
- *System Operators will be prepared to use flexibility so that the cost of restraint will be reduced.*
- *If the cost of the curtailment is lower, System Operators will no longer use flexibility.*



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For R&I projects: will the project/platform/market continue when the R&I funding stops?

- The regional participants are committed to collaborative work based on project outcomes and already **in process of implementing initial components**
- **The post-project governance model** is already under discussion
- **Additional development** is also planned in **joint European project OneNet**

CONTACT US



/ InterrfaceH



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/ www.interfface.eu

Dagmar Ilp

WP 5.3 Single Flexibility Platform demo leader

Dagmar.ilp@elering.ee

+372 55 05718



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Thank you very much for your
attention!

Questions?



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