

Flexi-Sync

Flexible energy system integration using
concept development, demonstration and replication



DELIVERABLE 4.1 - PLATFORM INTEGRATION

VERSION 1.0

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ERA-Net Smart Energy Systems (ERA-Net SES) is a transnational joint programming platform of 30 national and regional funding partners for initiating co-creation and promoting energy system innovation. The network of owners and managers of national and regional public funding programs along the innovation chain provides a sustainable and service oriented joint programming platform to finance projects in thematic areas like Smart Power Grids, Regional and Local Energy Systems, Heating and Cooling Networks, Digital Energy and Smart Services, etc.

Co-creating with partners that help to understand the needs of relevant stakeholders, we team up with intermediaries to provide an innovation eco-system supporting consortia for research, innovation, technical development, piloting and demonstration activities. These co-operations pave the way towards implementation in real-life environments and market introduction.

Beyond that, ERA-Net SES provides a Knowledge Community, involving key demo projects and experts from all over Europe, to facilitate learning between projects and programs from the local level up to the European level.

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1 PLATFORM INTEGRATION TASK (D4.1)

Utilifeed is responsible for coordinating the collection, cleaning and uploading of meter data to the Utilifeed platform. The data will be used to make thermal demand predictions that is an input to the optimization service. Having the data standardized in the platform will also make sharing easier for the owners of the data. The demonstration sites involved in the Flexi-sync project are the owners of their own data.

Deliverable 4.1 required:

1. Utilifeed to gather demand side meter-data from energy companies participating in the Flexi-sync project.
2. Clean the received data and validate that it is correct. Physically impossible or malformed data is removed in this process.
3. Upload the data to the Utilifeed platform where it will be accessible by services and persons authorized to access it.

Data can now be downloaded from the Utilifeed API. A request needs to be made using the Flexi-sync data sharing policy.

The demo site in Berlin is not built yet and therefore has no available meter-data. Simulation data is available for the demo sites that cover most needs in the project, until additional meter-data gradually becomes available, starting in May 2021. The simulation data will not be uploaded to the platform since it does not fulfil the requirements of the platform and it is not complete. It is shared manually on request with the parties that need it. When meter-data is available from the outstanding site, it will be uploaded.

From all other demo sites, meter-data has been cleaned and uploaded.

1.1 Description of the data

For all sites with meter-data, at least three years of data has been uploaded. The data represents all substations in the full heating and cooling grids. For the vast majority of the substations, data is available for every single substation. There are a few exceptions where a number of substations have been aggregated to a cluster that represents the sum of the substations.

The vast majority of the data consists of hourly values on the primary side of the heat exchangers in the substations. The data includes values for:

- Energy
- Volume flow
- Supply temperature
- Return temperature

1.2 Delays

Unfortunately, this deliverable has been delayed due to several causes:

- Covid-19 while not halting progress did result in delays in the Spring of 2020 as many partners adjusted their working circumstances.



- The Palma demo site was delayed due to requiring signoff from a regulatory body. Once this was resolved progress was extremely quick.
- The Eskilstuna demo site was delayed due to difficulties related to extracting data from the metering system.
- Utilifeed ran into some technical challenges while cleaning the last of the data which added an additional delay of two weeks.



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