

FIRST ACTIVATION OF FLEXIBILITIES IN INTERFLEX'S FRENCH DEMO, NICE SMART VALLEY

The French Demonstrator of InterFlex - Nice Smart Valley - started its experimental phase during the summer of 2018, with the first activation of flexibilities upon DSO's demand.

The objective of the demonstration is to design mechanisms and tools fostering the use of local flexibilities to relieve distribution grid constraints which may arise in areas with significant renewable energy generation.

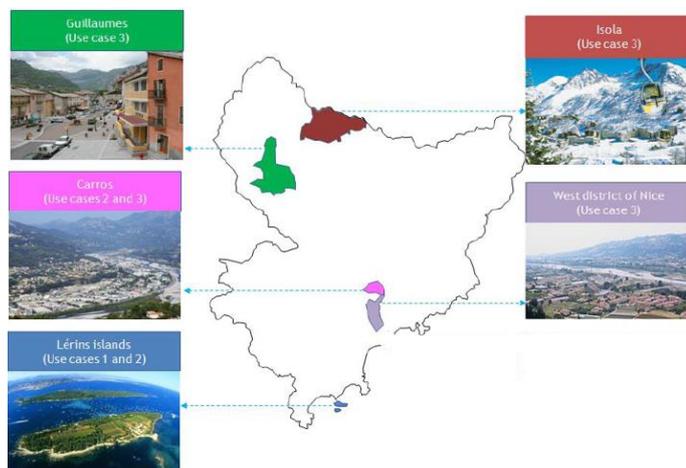
For that purpose, several types of flexibilities are provided by the two aggregators of the French demo, EDF and ENGIE:

- Behaviour based flexibilities, where B2C customers lower their consumption upon aggregator's demand. Today, 60 B2C customers volunteered to be part of the demonstration.
- Managed flexibilities, where B2C or B2B customers support the grid through modulated production or the use of adaptable loads (such as dual energy heaters): 10 B2C and 1 B2B customers provide gas/electricity flexibilities, and gas cogeneration production are about to be installed on 1 B2B customer facility.

The IT developments made to connect the gas appliance to the aggregator portals and manage these Gas/electricity flexibilities were achieved by GRDF in order to promote the use of the gas network for electrical flexibilities.

Enedis developed and installed a flexibility platform (E-Flex) at its Regional Control Agency which allows to request and activate flexibilities of the aggregators and the customers. Besides, ongoing works with the aggregators aim at designing the flexibility activation processes. In case of grid constraints, the DSO requests flexibilities in a specific area via the E-Flex platform. In response to the DSO's demand, aggregators propose a portfolio of flexibilities that the DSO chooses to activate or not. If activated, the effect of this activation is measured thanks to the Linky smart meters.

The aggregators are pursuing the customer recruitment and strengthen the IT system, in order to enhance the effect of the respective activation campaigns on the grid. Thanks to first lessons learnt the involved partners in the Nice Smart Valley project will go deeper into the market design: How many activation scenarios are relevant or needed? How can the economic value of a local flexibility be evaluated? How can we design the merit order which leads the DSO to select the best offer among the locally available flexibilities?



Demonstration Areas of InterFlex French Demo- Nice Smart Valley