

# SPANISH DEMO

## DSO FLEXIBILITY LOCAL MARKETS FOR CONGESTION MANAGEMENT



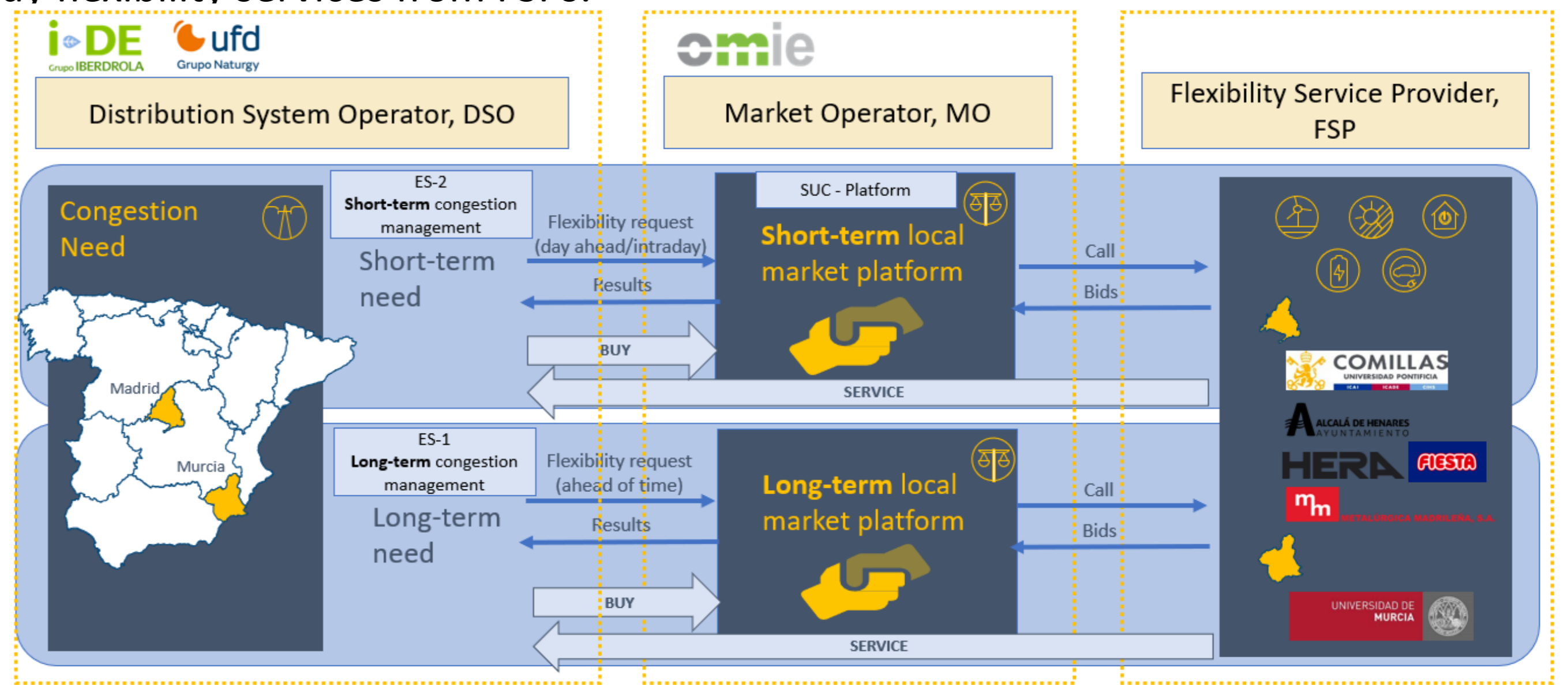
### Problem Statement

The OneNet Spanish demonstrator aims at unlocking the flexibility of the resources connected to the distribution system to contribute to congestion management at the distribution level.

It involves two Distribution System Operators (DSOs) namely i-DE and UFD, OMIE, the nominated electricity market operator (NEMO) for managing the Iberian Peninsula's Day-ahead and intraday electricity markets, IDAE, which is the Spanish Government's Institute for the Diversification and saving of Energy, Comillas Pontifical University and six Flexibility Service Providers (FSPs).

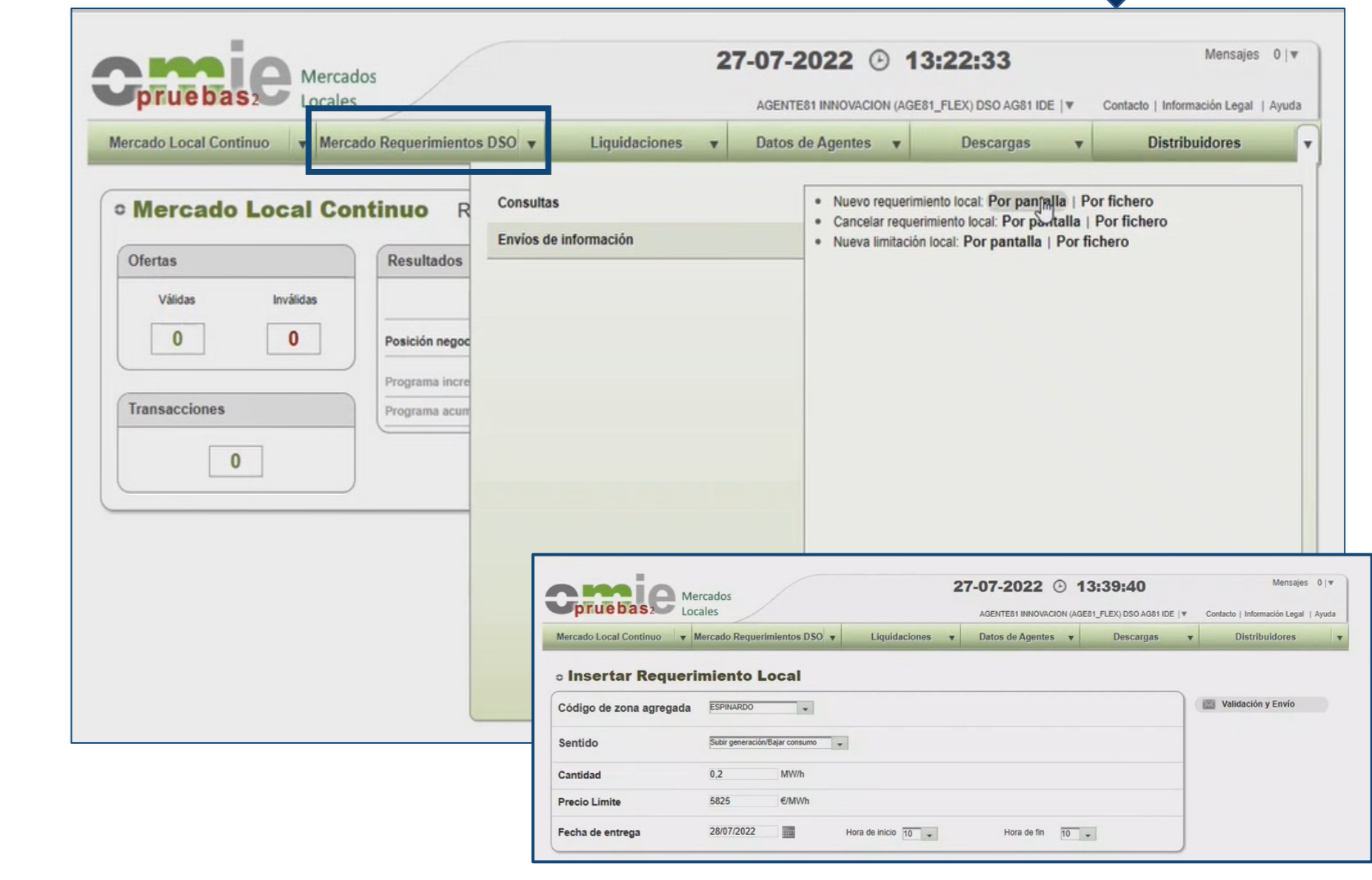
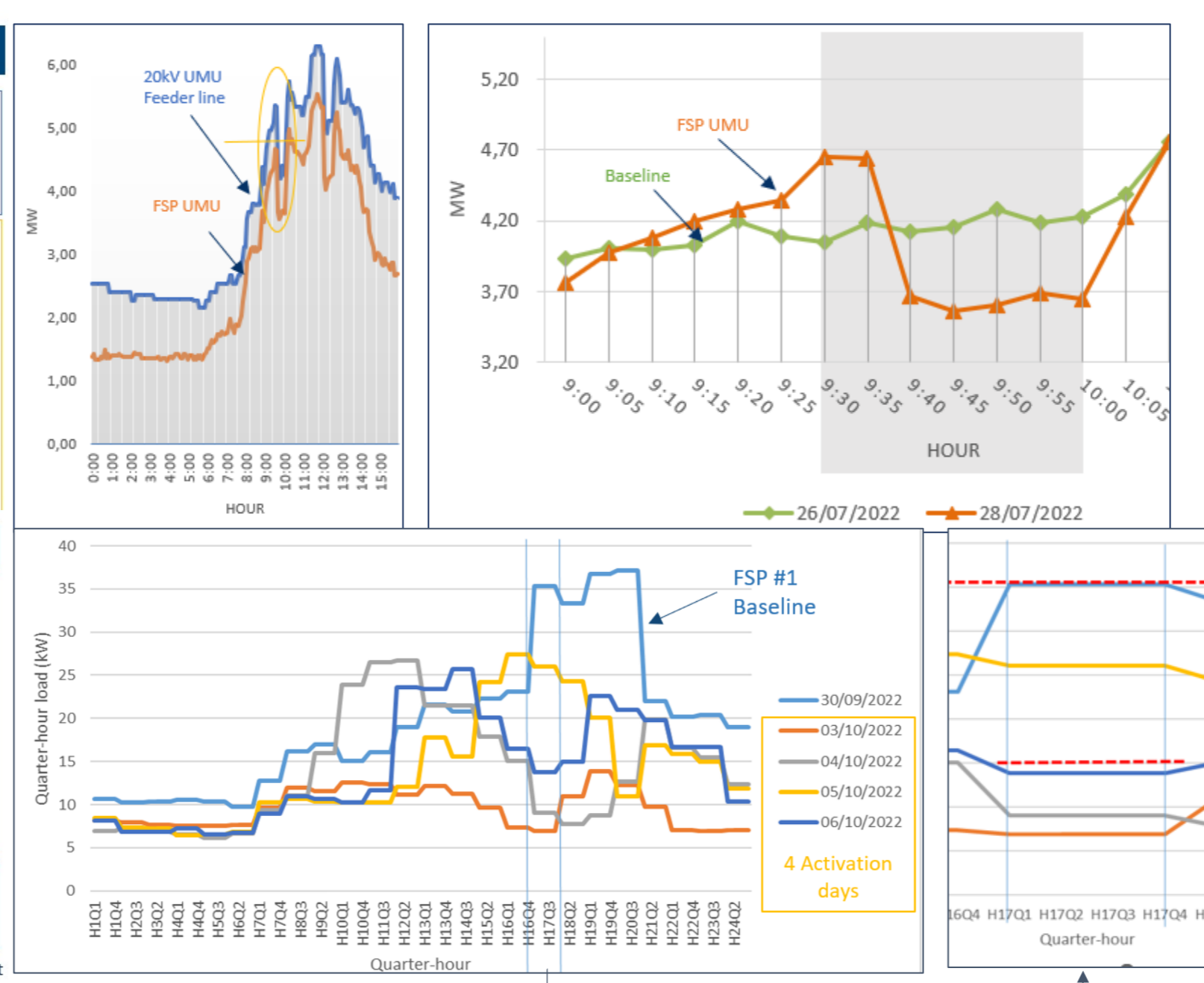
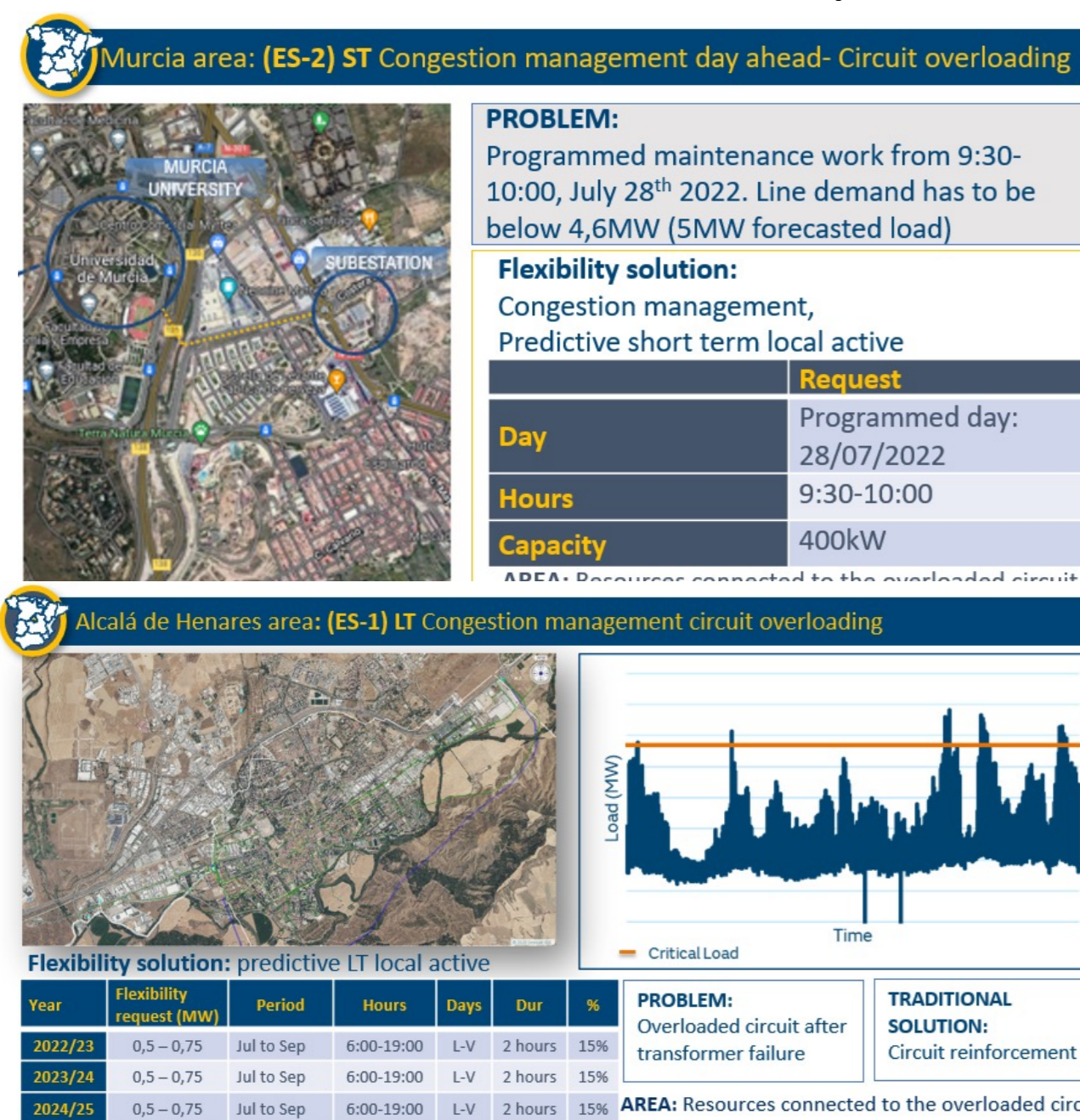
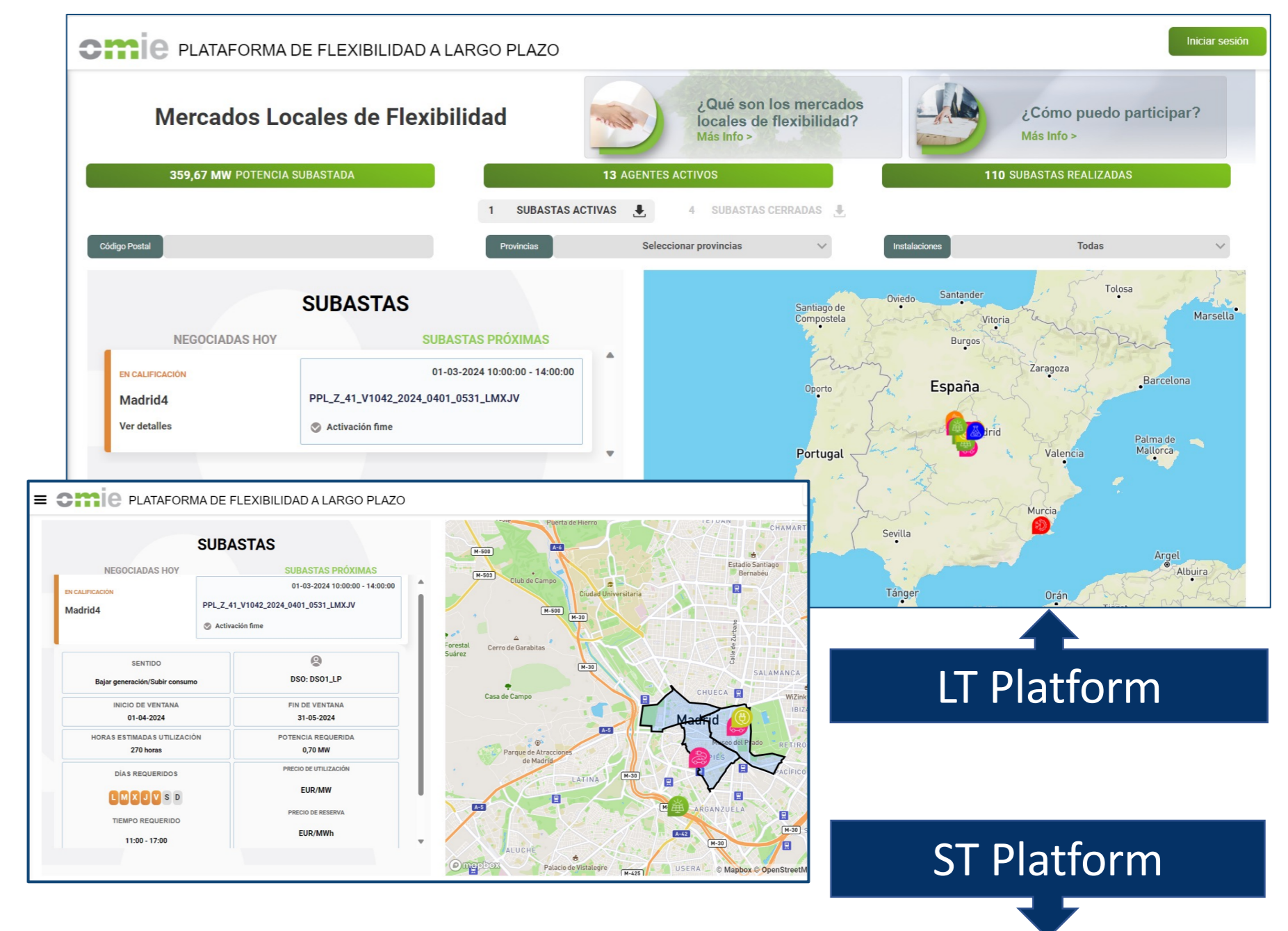
### Demo's Innovation

To enable the trading of flexibility products, two local market platforms (LMP), long-term (LT) and short-term (ST), have been developed by OMIE in which the DSOs can buy flexibility services from FSPs:



### Results and Lessons Learned

- LT and ST local market platforms deployment
- Services, products and local market phases definition
- Successfully completion of 10 field tests: 3LT & 6 ST
- FSPs participation going through all market phases: from prequalification, forecasts, qualification, market clearing, monitoring and activation until settlement
- FSPs were able to deliver on time and for the duration set for almost all cases
- LMP have shown to be simple, functional and adequate for the information exchange.
- The demonstrator highlights the potential of local flexibility markets to address network constraints with demand respond



### Main Challenges

- Lack of regulation
- Customer engagement
- Baseline calculation
- Flexibility activation windows duration

### Recommendations

- Development of a local market platform is a key element to ensure a transparent procurement of system services
- Customer engagement strategies are needed to increase customer participation
- Baseline calculation needs to be improved and standardized to measure FSPs delivery compliance
- A clear definition of roles and responsibilities is key to determining the actions to be developed by each agent to unlock the use of flexible resources. To this end, DIRECTIVE (EU) 2019/944 should be transposed to the national regulation.
- While acquiring flexibility in local markets can be an alternative to traditional reinforcement solutions when there are available resources, cost-benefit analysis (CBA) needs to be done to choose the best option in terms of safety, quality, quantity and cost.