

Terna - Damas connected to XBID & other system enhancements

Unicorn Systems has successfully completed connection between Damas and XBID platform, adjusted explicit Intraday auctions for Swissgrid, introduced new CRIDA auctions, implemented Allocation constraint functionality and enhanced the system for operators through new Dashboards for improving system monitoring purposes for Italian transmission system operator. Unicorn implemented all those functionalities through its product, the Damas system, which Terna has been using since 2007. Accomplishing this target, Terna joins the XBID market, which is live since June 2018.



Success story

As a part of the project, the Damas system was upgraded in order to support the XBID Continuous Trading as well as the Implicit Intraday Auctions (IDAs), Explicit Intraday Auctions and Allocation Constraints. Due to the large amount of new business processes introduced in this project, Damas system was also enhanced with improved System Monitoring allowing Terna Operators to monitor Damas system in real time.

Due to the introduction of these business processes, the shift is closer to real time of energy supply.

Damas product unique features, long-term cooperation with Terna, as well as the experience of the development team, Unicorn successfully managed all pitfalls and put the solution into operation in September 2021.


From Unicorn's point of view, the delivery of the solution mainly included:

- Reception of Cross-border Nominations (XBN) from XBID
- Matching of Scheduling Area Schedules (SAS) after each Intraday Interval with TSOs
- Matching of Scheduling Area Exchanges (SAX) after each Intraday Interval with VP
- Calculation and matching of available capacities (ATC) for intraday intervals
- Automatic generation of cross-border nominations based on IPEX results for IDAs
- Reception of Intraday Auction Specifications, Results and Rights Document from JAO
- Calculation of Intraday Margins
- Process control - automation of business processes in configurable time intervals
- Allocation Constraints - possibility to work with new types of NTC (Constrained, Unconstrained)
- Alarm functionality - audible and visual alarm for critical issues detected by the system
- System Monitoring - overview of all system processes and their current state
- Dashboard - overview of the current Intraday situation (business processes)
- Enhanced configuration of data flows
- Reporting to Terna IS

Representative statement of Terna

"The connection of our Market Management System - Damas to XBID platform, delivery of adjustments of explicit intraday auctions for Swissgrid and implementation of new CRIDA auctions, Allocation Constraints and Monitoring Dashboards were one of the important challenges in 2021. I would like to highlight that Unicorn's teams provided their services on a high professional and reliable level, systematically, well documented, and in a standardized manner - respecting the agreed approaches and procedures. Thereby, Unicorn Systems contributed to our higher involvement in the significant transeuropean projects and enhancement of Damas system."

In Rome on

 Sarais Fabio, Terna Rete Italia S.p.A.