JAO Auction tool implementation

JAO experienced incidents since launch of its new auction tool end 2015

- Bug in algorithm
  - In particular cause of the auction cancelations on December 31 and January 1
- Bugs in so-called integration layer
  - Pre-bids not processed correctly or not processed at all
  - Gate "freezing" resulting in delays in the auctions
  - No timely sending of files to stakeholders
- Exceptional high traffic in pre-bidding + hard deadline in the auction rules which caused auction cancelation for CEE region and border Fr-Ch on 26/03
  - System froze completely
  - Blocked execution of shadow auctions
  - Therefore no results could be given to the market

Incidents' management

- Once a bug was detected, JAO performed relevant fallbacks

- Where no fallback was available, JAO contacts TSOs/IT supplier to limit the impact for MPs

- In respect of applicable allocation rules, JAO had to cancel auctions where this latter could not be performed properly and informed MPs asap

- Workarounds with TSOs were implemented as long as the bug was not fixed

- Additional actions such as extension of on-call hours were implemented to ensure operational processes

Lessons learned

1) **Time scheduled too short, all the more during a merger**
   - Launch date too ambitious for the quantity of work needed
   - 2 auctions tools run in parallel of deployment of a new tool
   - Merger in the same time : organisational challenge

2) **Tests should have been more carefully run**
   - Test scenarios shall include all specific corner cases tests for the algorithm. Ex-post analysis of test cases of daily auctions from dry-run performed in December with TSOs and market participants show that the number of realistic tests was too limited.
   - In case workarounds might be needed, the workarounds should be tested with TSOs to ensure the workarounds work and to ensure confidence of all involved parties in the workaround application.
   - Future tests shall include a certain time of parallel run in order to test the new systems based on realistic behavior of all parties
   - Future tests shall include a well planned full integration test with participation of all parties involved.

3) **Auction rules can be improved**
   - In case of auction cancellation, an explicit deadline shall be introduced in cooperation with affected TSOs in order to have a firm timeframe in place.

JAO communication management crisis since beginning 2016

- 4 Supervisory Board meetings
  - SB required an independent audit on the eCAT implementation
- High level meeting with Software supplier
  - 2 members of the SB joined the meeting
- 12 letters received, complaining regarding system performance
  - All letters were answered
- April 5 MPs user group meeting
  - See slide 6 for more detailed feedback
- April 7 TSOs service council
  - See slide 7 for more detailed feedback

User Group (MP's) meeting

- Main feedback 05/04/16 :
  - Improve the support and features of the web services to allow for more automated bidding
  - Improve the test organisation to ensure better participation
  - Download possibility on JAO webpage needed, including bid curve in XLS format

- Requests will be implemented.
  - Feasibility to extend the web services in combination with release 3 (summer 2016) is currently discussed with vendor.
  - Test organisation has already been improved. Similar procedure as for March 22 shall be followed
  - Download possibilities on JAO website will be restored, including historical data, as soon as possible

TSO Joint Service Council

- JAO shall find a solution to closely monitor the performance of the system, especially from the Market Participant perspective

- Planning of future releases and major changes shall ensure sufficient testing, especially integration testing

- The use of a ticketing system should improve the communication towards TSOs and Market Participants

- A market participant satisfactory survey shall be performed on a regular basis

JAO and TSOs committed to take the necessary actions to ensure a satisfactory service level

- In January, first patch deployed by GE to stabilize eCAT

- In March, thorough tests with an external tests provider led to new full integration tests. Unfortunately, only 4 MPs joined

- New release of eCAT in March 22nd fixed most of bugs encountered since end 2015.

- IT constraints and 2015 feedback have been taken into account in new HAR for 2017 auctions

- In parallel, strong actions taken:
  - High level meetings with software supplier to ensure that future tool delivery will be satisfactory
  - JAO audit launched (company : KPMG) to get recommendations on eCAT implementation and organisation of the company