



Participants

- German Transmission System Operators
- Market Associations:
 - Bundesverband der Energie- und Wasserwirtschaft
 - Oesterreichs Energie
 - EFET Deutschland

The main objectives of the meeting are explained, namely to

- Ensure transparency and information sharing
- Exchange on the DE-AT BZB Project and use the opportunity to exchange with market associations

Market associations stressed the need for clear external communication, full transparency and a clear planning that is available to all market parties as implementation of the DE-AT Bidding Zone Border is seen as a significant change.

DE-AT BZB TSOs provide the feedback that the external communication and full transparency will be secured:

- A specific web page to broadly share background information on the project (incl. Q&A)
 - <http://www.jao.eu/support/resourcecenter/overview?parameters=%7B%22IsDEATBZBProject%22%3A%22True%22%7D>
- Intensive dialogue with concerned TSOs & NRAs
- Intensive dialogue with DE/AT market associations → For example: This/ Today's meeting
- Pursue CWE Consultative Group & Core Consultative Group (x2/year) to broadly involve and inform stakeholders

Regulators defined the final deadline for implementation, DE-AT TSOs performed an impact assessment and concluded from a technical point of view the test phase can start on 1st July 2018, followed by go-live on 1st of October 2018.



DE-AT TSOs explained that the main driver behind the introduction of the implementation of the DE-AT Bidding Zone Border is Security of Supply (SoS). The increasing renewables with high North-South flows and related dynamic nature of the infeed increases the uncertainty in the grid and this is a trend that will continue. Hence, also trade from Germany to Austria has been growing continuously. In addition, there is a decline in the redispatch potential available within Germany (specific reserve power contract arrangements not approved after winter 2017/2018), which as a consequence further endangers SoS, which today is compensated by a significant amount of redispatch.

There are significant investments made in grid development within Germany to alleviate the constraints experienced today and avoid applying the amount of redispatch, but this will require time to develop and in the meantime a mechanism needs to be in place to limit overloads and the amount of redispatch required.

DE-AT TSOs agreed with Market Associations that a dedicated Market Forum will be organised in the 2nd half of November to ensure all market parties can be informed on the most relevant topics and questions can be raised.

There are a few questions raised by DE-AT TSOs for which feedback is requested before the end of July latest:

- What is the position of Market Parties related to PTR and FTR?
- What is the view of Market Parties on the preference for the external parallel run:
 - Provide realistic bids for both bidding zones
 - DE-AT NEMOs to split the operational bids

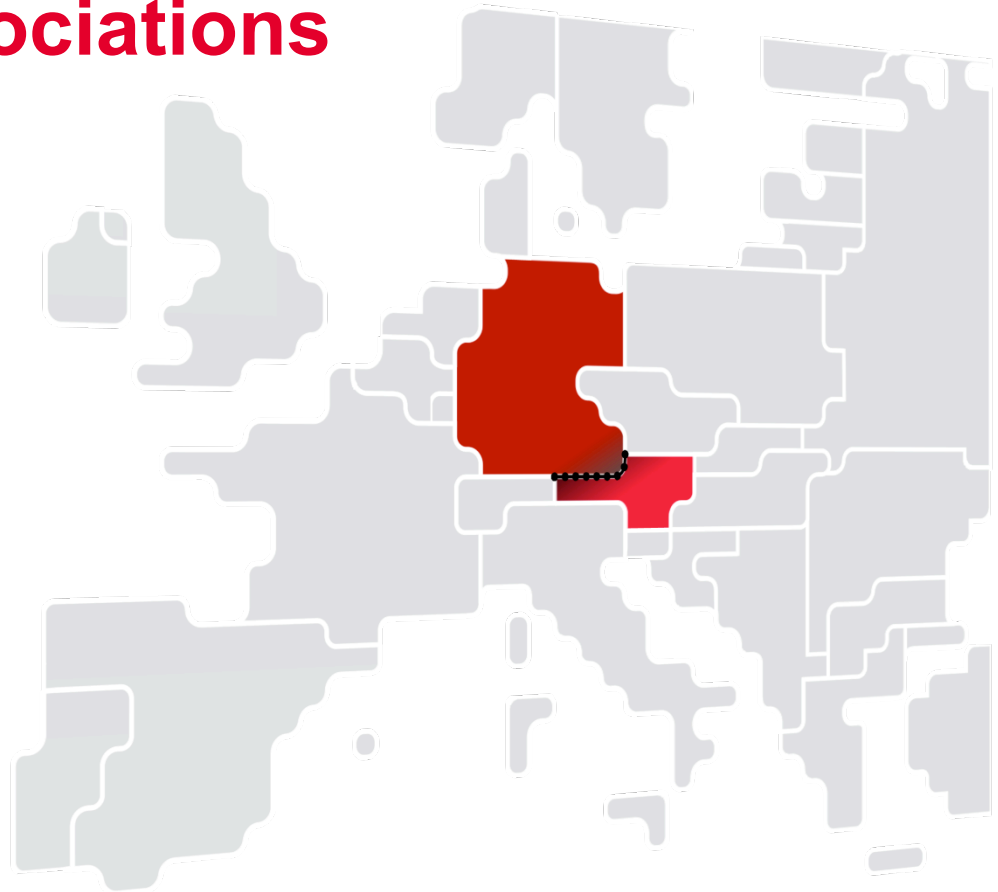
What are their views on the added value of the external // run and the preference of the duration (max 3 months)

Market associations and DE-AT TSOs agreed to organise a forum in the second half of November with Market parties (not only DE/AT ones), NEMOs and NRAs on the DE-AT BZB project.



DE-AT BZB project information meeting with market associations

26th of June 2017, Munich





Introduction

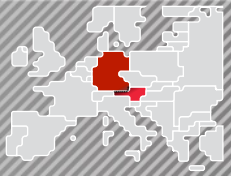
Meeting objectives

- **Ensure transparency** and information sharing
- Exchange on the DE-AT BZB Project and use the **opportunity to exchange** with market associations

Starting point and main target to be acknowledged

- DE-AT regulators agreed to **implement a capacity allocation at the DE-AT border by October 2018 within the CWE FB MC**
- Since Core DA FB CC will not be operational by this deadline it shall be **temporarily implemented in the CWE FB DA MC**
- During this temporary period the TSOs will be able to limit the flow to 4,9 GW, leading to a higher level of security
- Within the Core DA FB project, all methods and processes will be adopted accordingly
- Full harmonization and coordination for all bidding zone borders within the Core region **will be achieved in Core FB DA MC**
- Following the outcome of the negotiations between BNetzA and E-Control, the deadline for **Go Live has been updated to 1st of October** with a test phase starting on July 1st, 2018

The next slides present the DE-AT BZB Project background and address the main concerns received so far



Regulatory Request triggered the project

BNetzA

- German regulator Bundesnetzagentur requires German TSOs to implement a capacity management mechanism on the German-Austrian border.
- German TSOs are bound to this instruction and this urges German TSOs to implement this border far ahead of current Core CCR TSOs' planning, that shall meet requirements of ACER's CCR decision, foreseeing separate German and Austrian bidding zones, with the border between both bidding zones as part of CCR Core, as well

Reserve power contract arrangements not approved after winter 2017/2018

- German TSOs are contracting reserve power plants to secure availability of re-dispatch options during the winter period (Netzreserve), in Germany and neighboring countries
- There are clear signals that contracting foreign reserve power plants will not be approved any longer after winter 2017/18
 - Current contracts with foreign generators will end in Spring 2018
- Instead, the need for reserve power plants shall be reduced by limiting power flows across the German-Austrian border
- This in consequence means that some kind of capacity management must be implemented before winter 2018/2019

BNetzA and E-Control agreed on framework

- Mid of May 2017 E-Control and BNetzA published a press release, stating that both regulators have agreed on a common framework for the introduction of capacity management:
 - Inclusion of this border in CWE FB MC
 - 4.9 GW exchange capacity of Long Term Transmission Rights
 - An updated go-live date of 1st October 2018

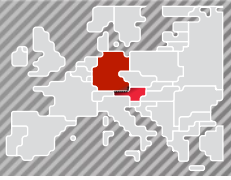


Below you will find the defined target solutions to introduce a Bidding Zone Border in Germany and Austria for initially the temporary solution in the CWE FB DA MC

- As soon as Core DA FB is available, all methods and processes will be adopted accordingly together with all other borders of the whole Core region
- During this temporary period the TSOs will be able to limit the flow to 4,9 GW, leading to a higher level of security

	DAY-AHEAD	INTRADAY	LONG TERM
TARGET SOLUTION	Flow-based	Day-ahead leftover capacities (CR for Flow-based)	Monthly & Yearly Products
IMPLEMENTATION DATE	29 September 2018	30 September 2018	Mid September 2018 (monthly) & 21/11/2018 (yearly)
DELIVERY DATE	1 October 2018	1 October 2018	1 st of October 2018 & 1 st of January 2019
PERIMETER	CWE DA FB CC process	CWE ID ATC after FBMC process (CWE FB IDCC process)	DE-AT long-term CC & Allocation
Alternatives	Implicit NTC Explicit NTC	-	-
ALLOCATION	Allocation via MRC	Implicit* Allocation via XBID	Allocation in JAO

* Explicit access for Intraday will have to be further discussed



DE-AT TSOs and NEMOs performed an assessment for the target solutions for the introduction of DE-AT BZB

LT Long Term

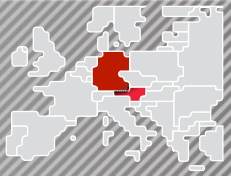
DA Day ahead

ID Intraday

This is presented by describing per time-frame...

- Description concept target solution
- Assumptions/Approach
- Planning
- Dependencies & risks

...to finally be able to conclude on the technical feasibility for DE-AT BZB per time-frame



Description concept target solution

- Aim is to introduce monthly and yearly long-term products on the border between Germany and Austria
- Long-term capacities will be based on a value reflecting required minimum capacities for the DE-AT border (i.e. 4.9 GW)
- Auctioning of the available capacities is proposed to be based on FTR and will be organized by JAO

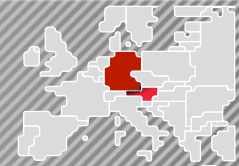
Assumptions/Approach

- Long-term auctions will be based on Financial Transmission Rights (to be confirmed by NRAs)
- Respect the minimum required long-term capacity set by NRAs on 4.9 GW
- LTA values for 2019 will be auctioned according to a splitting rule following TSO proposal and acknowledged by NRAs:
 - 60% for yearly and 40% for monthly auctions

Planning → see high-level planning

Dependencies & risks

- The solution foreseen and the associated planning is based on FTRs, in case PTRs will have to be implemented, this will impact the nomination process.
- There will be several borders implemented at the same time, which might create a dependencies. This risk is known and can be managed with JAO to ensure the long-term products for JAO can be implemented independent of other borders if needed.



DE-AT TSOs propose to implement FTR. Preference from DE-AT TSOs is to remain with the initial proposal and below an explanation will be provided on the reasoning behind this.

	PTR with UIOSI	FTR 'Option'
Right for holder	Nomination. <u>or</u> Fin. remuneration of DA spread (if positive)	Financial remuneration of DA spread (if positive)
Obligation for holder	#NA	#NA
Volume of offered capacity	Defined by LT CC and split rules	Defined by LT CC and split rules
Impact on DA allocated capacities	'Non-nominated' LTR released for DA allocation	All LTR released for DA allocation

Main advantages

FTR options

- Ensure that all capacity is physically available for the day ahead Market
- Create a full level playing field among all market participants for access to cross-zonal capacity
- Result in operational simplification for market parties and TSOs; and lower system and operational costs

PTR options

- Provide to MPs an additional option for physical nomination compared to FTR Options
- PTR does not force MP to trade via the PX (which entails paying fees) to ensure a physical delivery across the border

LTA Inclusion

- LTA Inclusion can be applied for both PTRs and FTRs, so the choice does not impact the application of LTA inclusion as such
- LTA Inclusion – as an ultimate measure – is merely an agreement within CWE to guarantee capacities and cover financial risks

Main difference between PTR and FTR is related to physical nominations. Both PTR and FTR will ensure to the same extend that minimum capacities on the DE-AT BZB are guaranteed



Description concept target solution

- Congestion management on the DE-AT BZB for day ahead will be full in cooperation in CWE FBDA Capacity calculation and Flow based day ahead allocation via Multiple Regional Coupling.

Assumptions/Approach

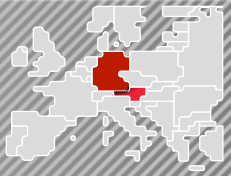
- There are two SPAIC (Standard Process Assessing Impact of (significant) Changes) foreseen
 - DE-AT TSO SPAIC: focus on confirmation first assumption and have insight on the impact
 - DE-AT TSO & NEMO SPAIC: focus on assessing impact of MNA & DE-AT and market simulations
- An external parallel run is foreseen to facilitate market parties in the preparation of the implementation of the DE-AT BZB

Planning → see high-level planning

Dependencies & risks

There are externally driven developments that have to be implemented in parallel with the DE-AT changes in IT systems e.g.

- CGMES – new format for Common Grid Models that will be implemented throughout Europe
 - System to be developed within CWE to enable DE-AT will support CGMES as well as the current format (UCT-DEF)
- Multiple NEMO Arrangement (MNA): facilitating that multiple NEMOs can be active within the same bidding zone
 - In case the MNA developments are delayed, a decision is required from NRAs
- To perform experimentation and // runs for FB IDCC incl. DE-AT, the DA MC point (incl. DE-AT) is required. As this is ‘only’ available in May 2018, this could mean that CWE FB IDCC will Go Live without DE-AT and DE-AT will be added afterwards



Description concept target solution

1. ID ATC after Flow based market coupling increase/decrease process

- Intraday capacities between DE-AT will be based on the left-over capacities of CWE FB DA after market coupling as long as FB IDCC is not yet implemented within CWE. Allocation will be performed via XBID (LIP 5).

2. Flow based Intraday

- Final aim is to calculate ID capacities for DE-AT, based on the Flow based method to be implemented in CWE (Q4 2018).
- Allocation will also be done via XBID.

Assumptions/Approach

- Current working assumption is that the border will not (actively) participate in the CWE ID ATC increase/decrease after FBMC process. ID capacities for DE-AT will be equal to day-ahead leftover, avoiding extensive system changes and need for regulatory approval assuming that this would be applicable only for limited period of time.
- CWE planned an internal parallel run and external parallel run for FB IDCC, which will have to be adjusted for DE-AT BZB.
 - FB DA MCP (incl. DE-AT) is needed to perform FB ID CC //run (incl. DE-AT), which is 'only' available as of May 2018.
 - CWE will have to further discuss and assess how to incorporate DE-AT in the CWE FB IDCC planning and approach.
- Scheduling and nomination process design for XBID takes into account that it can be used also in case of a capacity allocation.

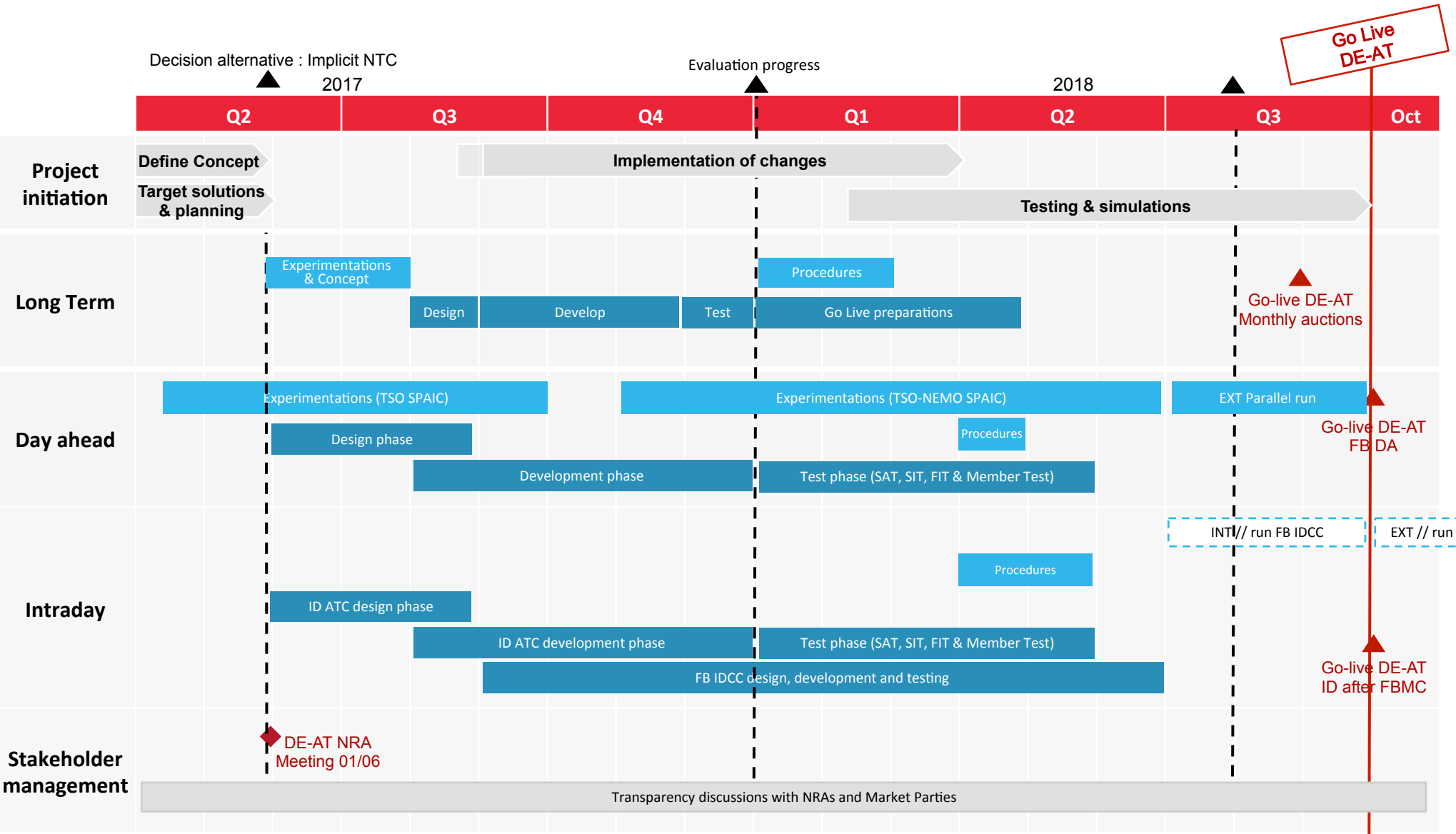
Planning → see high-level planning

Dependencies & risks

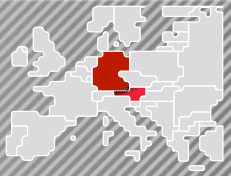
- Implementation of XBID and LIP 5 is required to support the allocation of DE-AT intraday capacities (Q1 2018).
- Changes in scheduling and nomination process will have to be implemented locally; this can take a significant amount of time.
- To take into account DE-AT in CWE FB IDCC, with the need of a CWE FBDA MC point (incl. DE-AT) the planning and approach might have to be changed to respect the earlier defined lead-times and still providing representative results.

DE-AT BZB Project

High-level Implementation plan – project just launched



◆ NRA Meetings ■ Business ■ IT systems □ To be planned

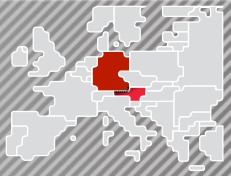


DE-AT TSOs and NEMOs performed an assessment for the target solutions for the introduction of DE-AT BZB

Implementing the target solutions to introduce a DE-AT BZB at the 1st of October 2018 seems to be feasible

- based on today's available information and from a technical feasibility point of view.
- However, delays in projects like (MNA, XBID) and implementing PTR rather than FTR remain a risk for the DE/AT go live.

Technical readiness is foreseen to be finalized before July 2018 to start with the testing as requested



It is foreseen to analyze the impact of the Request for Change (RfC) for DE/AT split under Multi NEMO Arrangements, in a two-step approach, each having a specific process and objective.

1. External SPAIC DE-AT

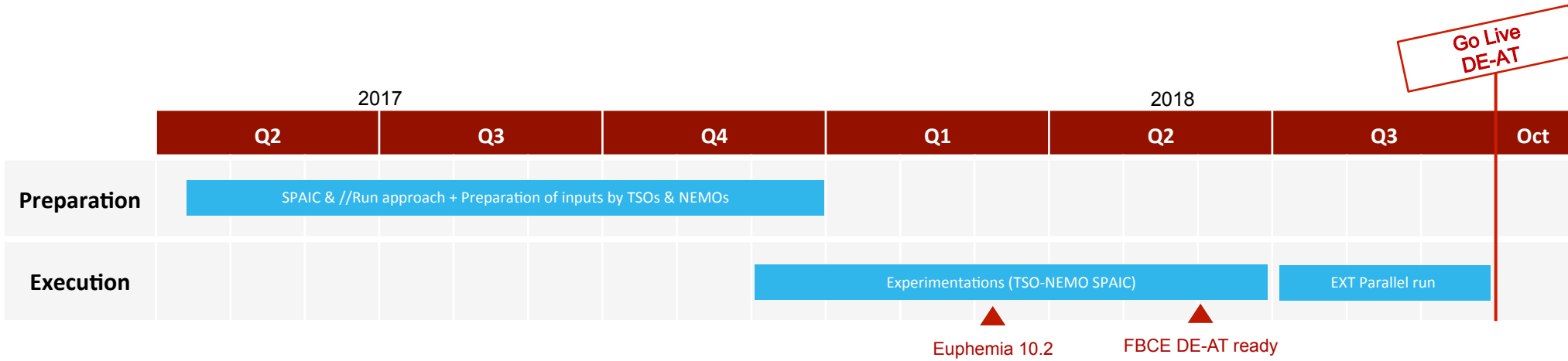
- For Stakeholders to assess the impact of the RfC on the results and performance of the algorithm
- SPAIC performed by TSOs and NEMOs, with use of simulation facility and split order books (done by NEMOs). Based on 12 BDs from clustering on most recent data.

2. External parallel run DE-AT

- For Market Participants to assess the impact of the RfC on Market Coupling outcome
- Publication of parallel run results during 8 weeks before the go live, on weekly/daily basis (tbd)
- Open question to MPs: Is there a preference for MPs for having realistic bids?

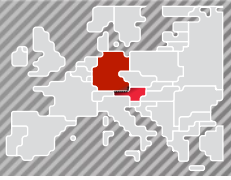
DE-AT BZB Project

Approach experimentation and parallel run



Planning overview (working assumption)

Meeting participants to discuss the approach foreseen and MPs needed for the External // Run



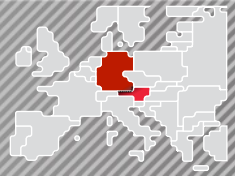
Regular exchanges is a fundamental principle of the project and all project parties are committed to full transparency, while taking into consideration the concerns of stakeholders

The project defined a 4-step approach on stakeholder involvement

1. **Create a specific web page** to broadly share background information on the project. One section “Questions & Answers” will be created to ensure the most common questions are being answered and available for everyone

<http://www.jao.eu/support/resourcecenter/overview?parameters=%7B%22IsDEATBZBProject%22%3A%22True%22%7D>

1. **Intensive dialogue with concerned TSOs & NRAs**
2. **Intensive dialogue with DE/AT market associations** → For example: Meeting planned on 26/06
3. **Pursue CWE Consultative Group & Core Consultative Group** (x2/year) to broadly involve and inform stakeholders



Market Participants (Associations)

- Transparency of the process:
 - Full transparency on the advancement of the project, in particular via a dedicated webpage with “a clear roadmap going all the way to the target go-live date, detailing the various stages and the time schedule allocated to each step”
- Capacity calculation methodology in day-ahead – EFET asks
 - For a confirmation that report on feasibility of DA FB CC will be finalized in May 2017 and publicly available.
 - To award sufficient time for thorough design and testing by all the TSOs of the CWE + Austria
 - For a // run of min 6 months and ideally 12
 - For transparency on statistic data for the functioning of the CWE DA FB algorithm (CBCOs, RAMs)
- Capacity allocation in the forward and intraday timeframes:
 - Forward capacity allocation: EFET asks TSOs about when they intend to proceed to the first allocation of LTRs + the approximate volumes of forward transmission rights they expect to offer to the market
 - Intraday capacity allocation: EFET asks TSOs if the intend to use explicit / implicit / combination of both