





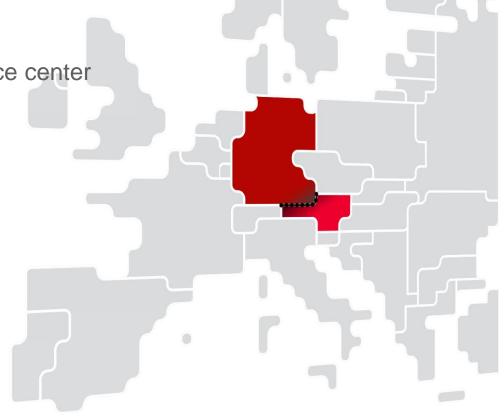




DE-AT BZB Market Parties
Conference

24th of November 2017

NH Vienna Airport Conference center



#### Agenda

#	Topic	Objective	Timing	Project Party	Presenter
	Registration and coffee				
1.	Welcome	Kick-off the Market Parties Conference	09:00 – 09:10	DE-AT BZB Project	B.BARTOSCH as Chair
2.	Background & Introduction	<ul> <li>Background DE-AT BZB</li> <li>Formal decisions in EU context</li> <li>Explanation decisions for implementation DE-AT BZB</li> </ul>	09:10 - 09:40	BNetzA & E-Control	M.RÜTZEL S.KAISER
3.	DE-AT BZB Project status	<ul> <li>Design of future cross border capacity allocation on DE-AT border</li> <li>High-level planning &amp; milestones</li> <li>DE-AT BZB project status <ul> <li>Long-term</li> <li>Day-ahead</li> <li>Intraday</li> </ul> </li> </ul>	09:40 – 10:10	DE-AT TSOs	J.AXMANN H.KÖHLER
		External experimentation & External parallel run approach	10:10 – 10:30	NEMOs	A.WEISS
4.	Stakeholder management	<ul><li>Information channels</li><li>Scheduled stakeholder meetings</li></ul>	10:30 – 10:45	DE-AT BZB Project	D.BECK
Break-out (15 min)					
5.	Q & A	Questions & Answers (delivered prior meeting)	11:00 – 11:30	DE-AT BZB Project	B.BARTOSCH
		Questions & Answers	11:30 – 12:30	All	B.BARTOSCH
6.	Closure	Closure of the Market Parties Conference	12:30 – 12:45	DE-AT BZB Project	B.BARTOSCH

#### **Agenda**



#### 1. Welcome

#### Welcome



Today, the **DE-AT Bidding Zone Border (BZB) project** is glad to inform you about the current status and to answer your questions

In the name of all project partners, the Chairman would like to welcome all stakeholders and is looking forward to constructive discussions



#### Regulatory background and key facts

- DE-AT TSOs follow the agreement between DE-AT NRAs to implement capacity management at the border DE-AT
- Bundesnetzagentur and E-Control agreed on **key aspects of the new bor**der:
  - to be implemented in CWE Flow-based day-ahead Market Coupling (CWE FB DA MC)
  - 4.9 GW of Long-Term capacity
  - o go-live date: October 1st, 2018; test phase starting July 1st, 2018
- Long-term solution will be achieved with implementation of Core FB DA MC, since the border is also part of the Capacity Calculation Region (CCR) Core
  - DE and AT will be treated as two separate bidding zones from the very beginning of CCR Core
  - DE-AT BZB project will bridge the gap between the status quo and CCR Core
- The DE-AT border will be regularly evaluated according to the bidding zone review in accordance to CACM guideline. This, however, is not in the scope of this project



#### Where are we today?

#### Design phases are finished for all time-frames

 DE-AT BZB has concluded the conceptual preparations for Flow-Based capacity calculation and allocation

#### Experimentations are running

- In April, DE-AT TSOs started internal experimentations
- Internal experimentations are in the final stage and currently being verified with CWE TSOs
- After internal experimentation, external experimentations will be performed to assess in more detail the impact on CWE FB Market Coupling

# Continuous stakeholder dialogue with Consultative Groups, Market Associations and Market Parties is taking place

- 6<sup>th</sup> of October, project parties informed Market Associations (EFET, Österreich Energie, BDEW) on the project status and discussed the external parallel run preferences
- Previous information have been given on 26/06/2017 and in the framework of workshop at Bonn/BNetzA on 30/03/2017

#### 1. Welcome



#### Latest achievements and further objectives

#### Latest achievements

- Internal experimentation finalized and to be aligned with CWE TSOs
- Enhancement of Flow-Based Common System to support DE-AT

#### Next objectives

- DE-AT project to update approval documents (deadline for German TSOs for the complete approval-request: 01/02/2018)
- External experimentation to be started
- Systems and procedures to be tested

#### Dependencies (1/2)



#### NRA approval

- Bundesnetzagentur, E-Control and DE-AT TSOs have a clear preference for including the DE-AT BZB in CWE Flow-Based Market Coupling
- DE-AT BZB project will update all relevant approval documents on national and regional level
- Regional approval documents will be updated in alignment with all affected TSOs
- CCR Core will be designed with DE-AT BZB from the very beginning

#### Dependency on Multiple NEMO Arrangements (MNA) implementation

- As for other borders, allocation of capacity on the DE-AT BZB in the day-ahead timeframe might be affected by the market entry of multiple NEMOs
- Challenging implementation of Multiple NEMO Arrangements are currently prepared on Multi Regional Coupling (MRC) level, including specific preparations for CWE
  - However, the exact go-live date of MNA is uncertain

#### Dependencies (2/2)



# Dependency on CWE Flow-Based Intraday Capacity Calculation (CWE FB IDCC)

- For the intraday timeframe, DE-AT BZB will start with a simplified approach for capacity calculation (ID ATC after FB MC)
- An upgrade to the Flow-Based IDCC approach is planned
  - However, this depends on the CWE FB IDCC go-live date

#### Agenda

#	Topic	Objective	Timing	Project Party	Presenter
	Registration and coffee				
1.	Welcome	Kick-off the Market Parties Conference	09:00 - 09:10	DE-AT BZB Project	B.BARTOSCH as Chair
2.	Background & Introduction	<ul> <li>Background DE-AT BZB</li> <li>Formal decisions in EU context</li> <li>Explanation decisions for implementation DE-AT BZB</li> </ul>	09:10 – 09:40	BNetZA & E-Control	M.RÜTZEL S.KAISER
3.	DE-AT BZB Project status	<ul> <li>Design of future cross border capacity allocation on DE-AT border</li> <li>High-level planning &amp; milestones</li> <li>DE-AT BZB project status <ul> <li>Long-term</li> <li>Day-ahead</li> <li>Intraday</li> </ul> </li> </ul>	09:40 – 10:10	DE-AT TSOs	J.AXMANN H.KÖHLER
		External experimentation & External parallel run approach	10:10 – 10:30	NEMOs	A.WEISS
4.	Stakeholder management	<ul><li>Information channels</li><li>Scheduled stakeholder meetings</li></ul>	10:30 – 10:45	DE-AT BZB Project	D.BECK
	Break-out (15 min)				
5.	Q & A	Questions & Answers (delivered prior meeting)	11:00 – 11:30	DE-AT BZB Project	B.BARTOSCH
		Questions & Answers	11:30 – 12:30	All	B.BARTOSCH
6.	Closure	Closure of the Market Parties Conference	12:30 – 12:45	DE-AT BZB Project	B.BARTOSCH





# Background of the DE-AT Bidding Zone Border project

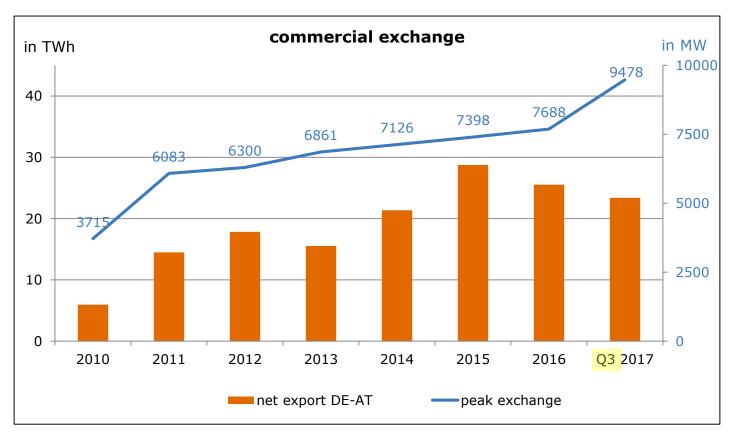
Market Parties Conference on the implementation of capacity allocation on the DE-AT bidding zone border 24th of November, Vienna

#### Status Quo - Trade





- Commercial exchange across the German-Austrian border is currently not restricted
- Especially peak exchange increased within the last years



Sources of the data: Entsoe, APG

# The discussion on the joint bidding zone and a split has a history





- Addressed in different regional groups
- Bilateral discussions between Germany and Austria
  - TSOs & Regulators
  - Politically
- Non-binding ACER Opinion
- Decision on Capacity Calculation Regions

# Cornerstones of the DE-AT capacity allocation





- Firm Implementation date 01.10.2018
- Implementation planned within CWE FBMC
- 4,9 GW as PTR
- Capacity is technically supported by redispatching capacity in Austria
- Without prejudice to CACM and FCA processes, to which BNetzA and E-Control are fully committed

# Background to some elements of the solution



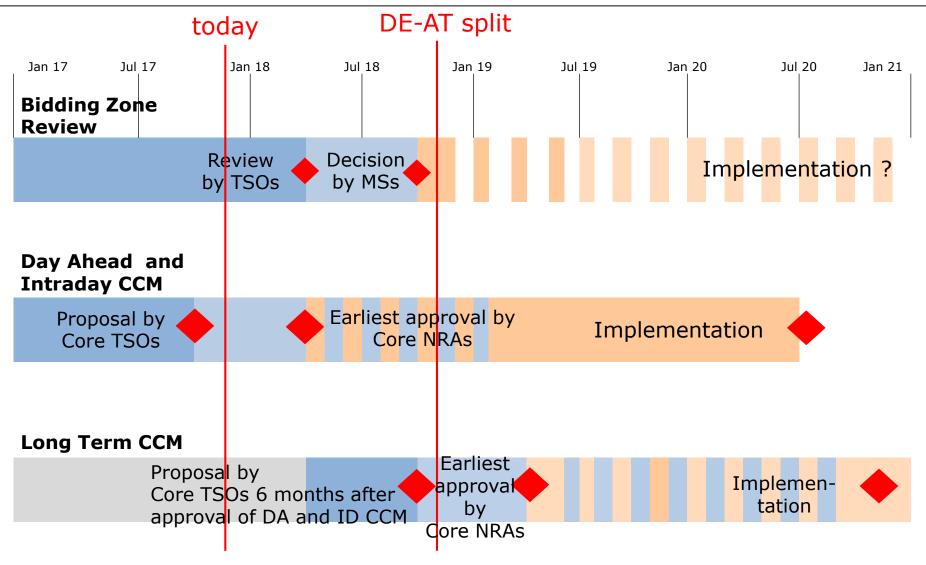


- Aims for a compromise between market integration aspects and network security
- Installed thermal capacity DE-AT in excess of 10 GW
- 1/1.5 GW of redispatch are made available at minimum in Austria

#### Formal decisions in the EU context - Timeline







# CWE FBMC is the objective, but not yet fully clear





- Relevant critical network elements in CWE FB will determine flows – step towards EU target model
- This will lead to relief for neighbouring networks
- Negative impact on other CWE border capacities shall be avoided, more capacities shall be available
- If an implementation in CWE FB turns out not to be possible, implicit NTC would need to be discussed as an alternative

#### Outlook





- We have the objective to provide all available information and coordinate to the extent possible – will be continued once new elements become clear
- Some approval steps are needed but objective to keep this as slim as possible
- Information on the capacity assessment is exchanged and will be continued
- The CWE SPAIC anlyses and the Core analyses will give best insight on effects of the DE-AT split and 4.9 GW PTRs

#### **Agenda**



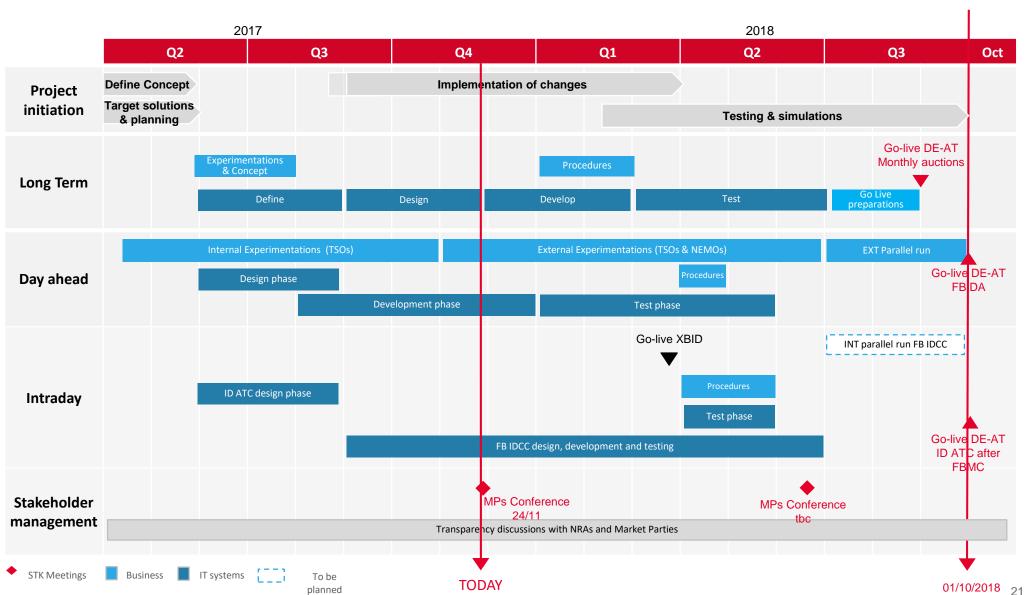
Design of future cross border capacity allocation on the DE-AT border

### Target solutions per timeframe to introduce a Bidding Zone Border in Germany and Austria

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

#### High level planning and milestones





Long-term: concept

LONG TERM DAY-AHEAD

INTRADAY

J.AXMANN



#### 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)
- 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
  - o for 2018 (Oct-Dec) only monthly auctions will be performed

	LONG TERM
TARGET SOLUTION	Monthly & Yearly Products
IMPLEMENTATION DATE	Mid September 2018 (monthly) & 21/11/2018 (yearly)
DELIVERY DATE	1 <sup>st</sup> of October 2018 & 1 <sup>st</sup> of January 2019
CAPACITY CALCULATION	DE-AT long-term CC
Alternatives	-
ALLOCATION	Allocation via JAO

Long-term: status & next steps

LONG TERM DAY-AHEAD

**INTRADAY** 

J.AXMANN



#### Auctioning of the available capacities will be prepared for PTR

- However, this is subject to a decision making process in the Core region, requiring a
  joint proposal by TSOs and an approval by NRA
- Several Core TSOs and NRAs have expressed their objections against PTRs and prefer the implementation of FTRs

#### Status of Long-term developments

- Long-term allocation requirements have been defined
- Update of allocation platform has been initiated (JAO)
- Allocation will be accordance with Harmonized Auction Rules

#### Next steps

Member testing (JAO + Market Participants) scheduled for summer 2018

Day-Ahead: Concept

LONG TERM DAY-AHEAD

**INTRADAY** 

H.KÖHLER



Congestion management on the DE-AT BZB for day-ahead will be in full cooperation in CWE FB DA Capacity calculation and FB DA Allocation via Multi Regional Coupling (MRC)

#### Status of Preparations

- **CWE FB Capacity Calculation** (TSOs):
  - System Adaptations specified and ordered from IT providers
  - Offline Test-Environment available
- MRC (TSOs and NEMOs):
  - Change request issued at MRC Level
  - PCR algorithm will be adapted
- **CWE Processes:** 
  - Updates of Procedures and Agreements are initiated

	DAY-AHEAD
TARGET SOLUTION	Flow-based
IMPLEMENTATION DATE	29 September 2018
DELIVERY DATE	1 October 2018
CAPACITY CALUCLATION	CWE DA FB CC process
Alternatives	Implicit NTC Explicit NTC
ALLOCATION	Allocation via MRC

Day-ahead: Experimentations & // Run

LONG TERM DAY-AHEAD

INTRADAY

H.KÖHLER



#### Impact assessment of the BZB split and preparation for go live will be done / provided by experimentations and a parallel run

**Internal Experimentations** (TSOs):

Focus: Test of IT-Systems and getting an insight on the impact on the

**CWE FB results** 

Status: final phase, to be verified with CWE TSOs

External Experimentations (TSOs and NEMOs):

Focus: Assessment of the impact of DE-AT and MNA on FB, as well as on

market results

Status: scheduled for Dec. 2017 – Jun 2018

• External parallel run (TSOs, NEMOs, Market Parties):

Focus: To facilitate market parties in the preparation of the implementation of the DE-AT BZB

more information in **NEMO** presentation

#### Current Flow-based results of the internal experimentations show

- preloading of the most active CWE constraints is significantly reduced
- in general import and export possibilities for all BZs of the CWE region are increased
- hence a positive impact on the CWE region has been observed

The results are currently being evaluated within the CWE region

Day-ahead: next steps



#### Next steps

- Preparations for external experimentations, including market simulations, between TSOs and NEMOs have been started recently
- Testing of the enhanced Flow-Based Common System will Start in Q1 2018
- External parallel run will start on 01/07/18
- → Today NEMOs present the approach of external experimentation and the parallel run in 'External experimentation & parallel run approach'

Intraday: concept

LONG TERM DAY-AHEAD

**INTRADAY** 

J.AXMANN



#### Capacity Calculation:

Aim is to start with left-over capacities of Flow based market coupling before moving to Flow based Intraday

- Temporary solution: **ID ATC after FBMC** process → Using left-over capacities of flow-based day ahead market coupling for the German Austrian border
- Final solution: **FB IDCC including the DE-AT BZB** → The flow-based intraday capacity calculation system that is planned to go-live first without the DE-AT BZB, will then include the German Austrian border
- The available intraday capacities are allocated in XBID in an implicit continuous process based on the First-Come First-Served Principle.

	INTRADAY
TARGET SOLUTION	Day-ahead leftover capacities (CR for Flow-based)
IMPLEMENTATION DATE	30 September 2018
DELIVERY DATE	1 October 2018
CAPACITY CALCULATION	CWE ID ATC after FBMC process (CWE FB IDCC process)
Alternatives	-
ALLOCATION	Implicit Allocation via XBID

J.AXMANN



#### Status of Intraday developments

- XBID system: User Acceptance Test Phase, Local Implementation Project (LIP) testing in parallel
- Design finalized for ID ATC after FBMC
- Design and development started for FB IDCC

#### Next steps

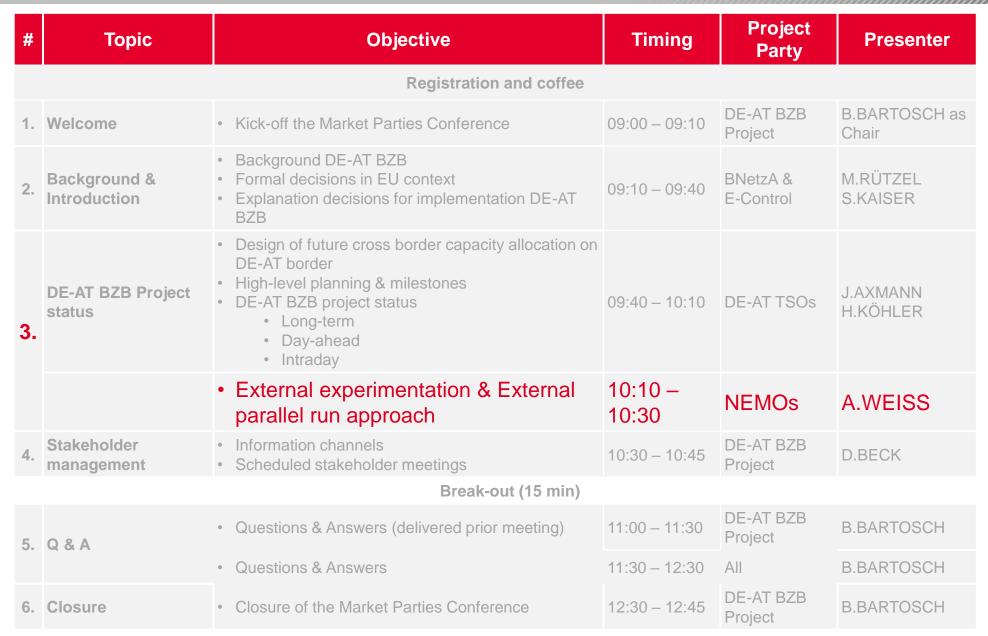
Intraday: status

- Perform impact assessment for XBID LIP 5 changes due to DE-AT BZB
- Development of FB IDCC and ID ATC after FBMC

#### **Implementation**

- End Q1 2018 (foreseen): go-live XBID including DE-AT border with unlimited capacities (in normal grid situations), explicit allocation (via phone at APG for new/modified schedules between APG and a German scheduling) possible
- From 30<sup>th</sup> Sept. 2018: Intraday Capacity DE-AT will be limited, only implicit allocation via XBID

#### **Agenda**



External Experimentation & External parallel run approach (1/3)

It is proposed to analyze the impact of the Request for Change for DE-AT split, in a two-step approach, each having a specific process and objective.

#### 1. External Experimentation DE-AT

- For Stakeholders to assess the impact of the DE-AT split on the results
- Based on one year of historical recent data
- Experimentation performed by TSOs and NEMOs, with historical DE-AT orders aggregated separately into 2 order books (namely DE and AT order books done by NEMOs), FB parameters based on 12 typical Business Dates on recent data.
- Publication towards all Stakeholders in Q2 2018 including the FB parameters used, the 12 typical days and their category

#### 2. External parallel run DE-AT

- For Market Participants to assess the impact of the DE-AT split on Market Coupling outcome
- Production data
- Publication of parallel run results on a daily basis from July to September 2018

External Experimentation & External parallel run approach (2/3)

3 months External Parallel Run will be performed in July-September 2018, prior to DE-AT split go-live

#### **Objectives**

- For Market Participants to assess the impact of the DE-AT split on Market Coupling outcome
  - Please note that results do not condition DE-AT split go-live
- Publication of parallel run results during 12 weeks before the go live

#### Input data

- MRC production data
  - Daily production data remain unchanged but
    - DE-AT historical order books will be daily split by NEMOs according to the physical fulfillment (DE or AT) of the orders submitted
    - CWE FB parameters computed daily by TSOs for 5 bidding zones (AT, BE, DE, FR and NL)

During the parallel run MPs will be requested to submit for the operational DA MRC their orders in the area of their physical fulfillment (DE/LU or AT)

#### External Experimentation & External parallel run approach (3/3)

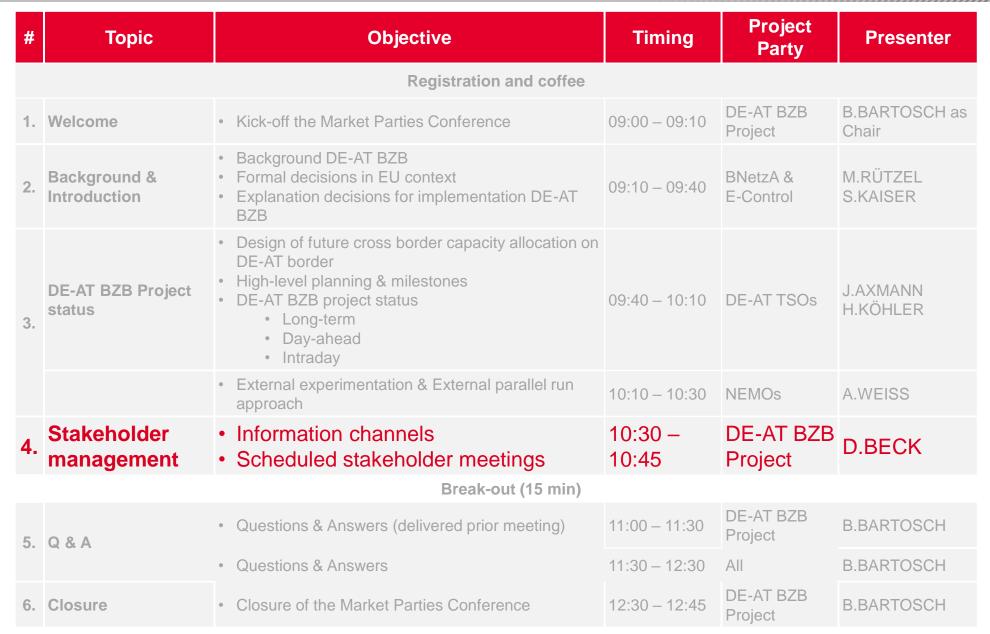
#### Run

Flow-Based Intuitive (FBI)

#### Daily published data

- Same results / indicators as the ones produced for FBI calculation in the PX report
  - Prices, MRC Net positions, CWE Net positions, intuitive patch activations, PRB results and welfare indicators
- FB parameters

#### **Agenda**



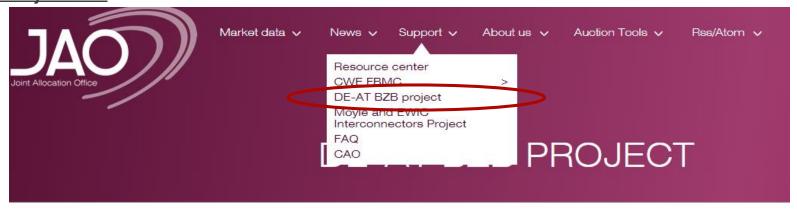
#### 4. Stakeholder management

#### Information channels

#### 4 step approach on stakeholder involvement

- JAO website to broadly share background information on the project with Q&A section
- 2. Intensive dialogue with concerned TSOs & NRAs
- 3. Intensive dialogue with DE/AT market associations
- **4. Pursue CWE Consultative Group & Core Consultative Group** (x2/year) to broadly involve and inform stakeholders

## DE-AT BZB Project Parties provide information via the JAO website <a href="https://www.jao.eu">www.jao.eu</a>





#### 4. Stakeholder management

Scheduled stakeholder meetings



CORE and CWE CG Meeting in Q1 2018

Ongoing interactions with MPs through JAO's website

#### Next MPs Conference foreseen prior summer 2018

- DE-AT BZB Project status update
- Information regarding EXT // run
- Information on member testing
- Go Live planning



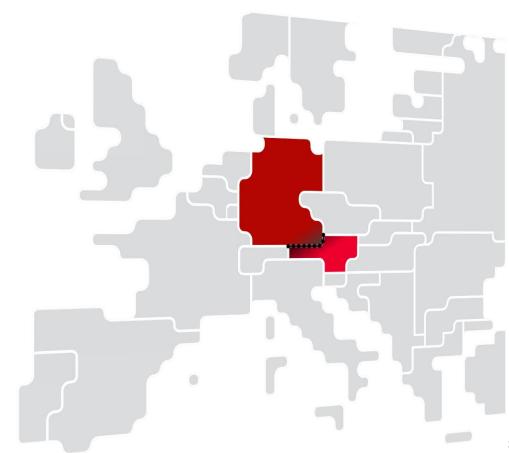








# **Break-Out (15 minutes)**



## Agenda

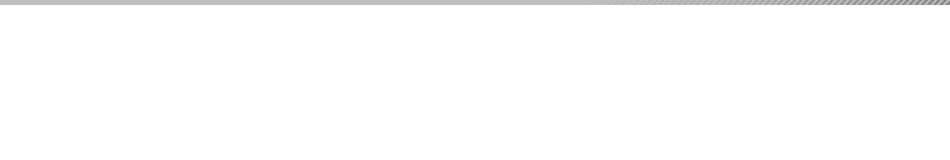
#	Topic	Objective	Timing	Project Party	Presenter
Registration and coffee					
1.	Welcome	Kick-off the Market Parties Conference	09:00 - 09:10	DE-AT BZB Project	B.BARTOSCH as Chair
2.	Background & Introduction	<ul> <li>Background DE-AT BZB</li> <li>Formal decisions in EU context</li> <li>Explanation decisions for implementation DE-AT BZB</li> </ul>	09:10 – 09:40	BNetzA & E-Control	M.RÜTZEL S.KAISER
3.	DE-AT BZB Project status	<ul> <li>Design of future cross border capacity allocation on DE-AT border</li> <li>High-level planning &amp; milestones</li> <li>DE-AT BZB project status <ul> <li>Long-term, Day-ahead, Intraday</li> </ul> </li> </ul>	09:40 – 10:10	DE-AT TSOs	J.AXMANN H.KÖHLER
		External experimentation & External parallel run approach	10:10 – 10:30	NEMOs	A.WEISS
4.	Stakeholder management	<ul><li>Information channels</li><li>Scheduled stakeholder meetings</li></ul>	10:30 – 10:45	DE-AT BZB Project	D.BECK
Break-out (15 min)					
5.	Q & A	<ul> <li>Questions &amp; Answers (delivered prior meeting)</li> </ul>	11:00 – 11:30	DE-AT BZB Project	B.BARTOSCH
		Questions & Answers	11:30 – 12:30	All	B.BARTOSCH
6.	Closure	Closure of the Market Parties Conference	12:30 – 12:45	DE-AT BZB Project	B.BARTOSCH



Is the capacity valid for commercial schedule exchange nomination DE<>AT or for physical loadflows?

#### 5. Questions & Answers

Market Impact



How will the DE-AT split and the minimal longterm cross-border capacity at 4.9 GW influence FCA, FB and the whole future energy market?



How much transmission capacity will be offered via JAO?

How much via annual, quartal or monthly products?

How much at the spot market?



How will the implementation of market coupling in the whole CCR Core influence congestion management on the DE-AT bidding zone border?



How did TSOs take into account the lead times on the side of market parties (e.g. for IT adjustments) for the implementation of the bidding zone border?

When will details on the congestion management for DE-AT border available in order to start necessary adaptations?



Will there be a test environment for scheduling to check formats and compliance?

#### 5. Questions & Answers





How will transparency regarding use of crossborder capacity and activation of re-dispatch be ensured?



What are the real Austrian borders? On the west part of Austria, some lines belong to Amprion, Transnet BW and Tennet, will they belong to APG after the split?



What measures are planned to avoid "scheduled transits"?

Which curtailments will be done towards e.g. CH, SI, HU after introduction of congestion management on DE-AT border?



# What happens with energy generated in relation to re-dispatch in Austria? Are they on the Austrian electricity market?



Are there emergency scenarios to ensure network security and generation adequacy? i.e. "Energielenkung", additional reserves, etc.?

### **Agenda**



#### 6. Closure



DE-AT BZB project parties hope that today's Conference provided you with a deeper insight in the current activities at NRAs, NEMOs and TSOs side, in preparation of the implementation on 1<sup>st</sup> October 2018

We hope that your concerns and questions have been answered today

All project partners are looking forward to further exchanges within the stakeholder meetings and thank you for your participation











DE-AT BZB Project Partners would like to thank you for your attention and participation!