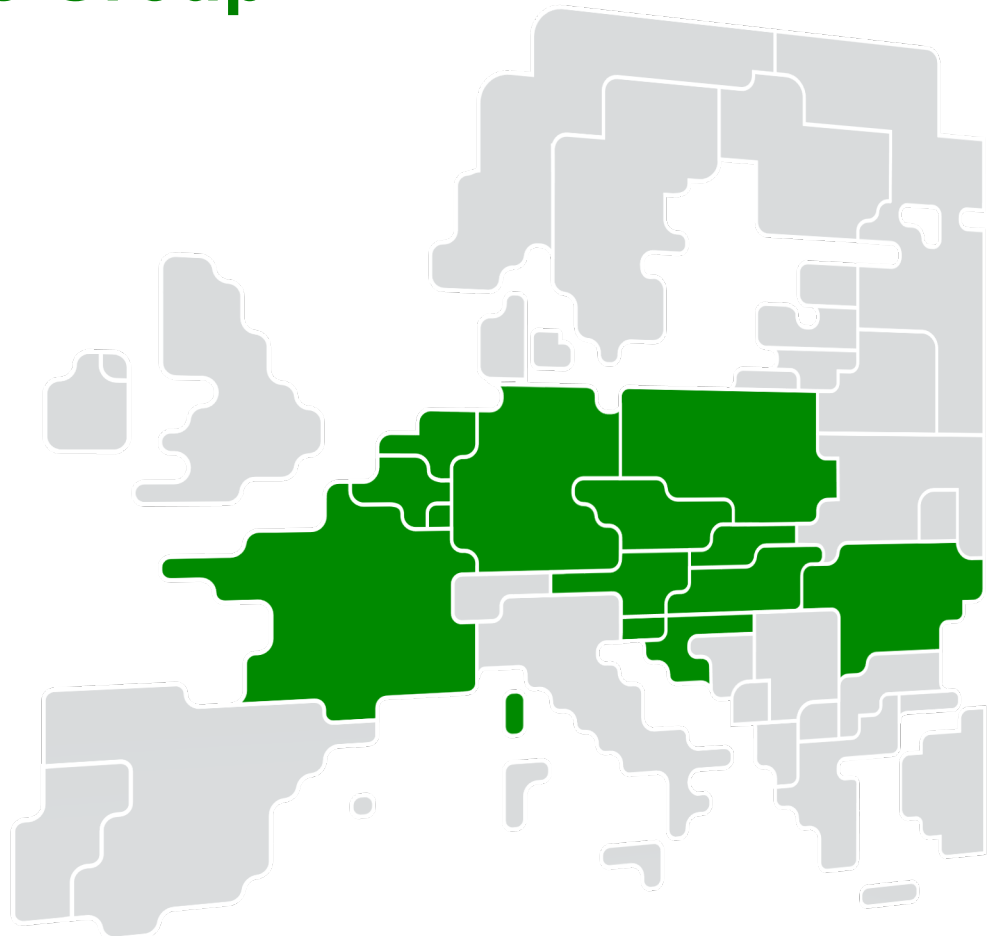# Core Consultative Group

18/04/2023

10:00 – 15:00h (CEST)
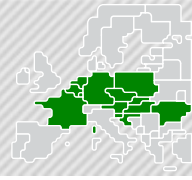Microsoft Teams meeting

1. Welcome and Introduction

Practicalities, announcements and reminders

Co-chairs

Hélène ROBAYE
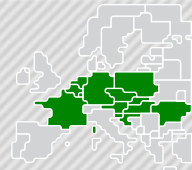Market Participants, Engie

Ruud OTTER
Core TSOs, Tennet BV

Steve Van Campenhout
Core TSOs, ELIA

Practicalities

- During meeting
  - Please use the **Q&A functionality** in Teams to address questions (not the chat). If you have a specific question on the slide, include the slide number in your question.
  - After each topic there will be a short Q&A section to see if all key questions have been addressed
- Follow up
  - Minutes and final meeting documents will be shared with CCG distribution list
 - JAO Q&A forum

Agenda

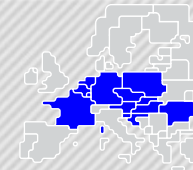| SUBJECT	WHO	TIMING
1 **Welcome and introduction** • Announcements • Agenda for today	H. ROBAYE	10:00 – 10:15
2 **Core CCR implementation roadmap** • General update on roadmap	STK managers	10:15 – 11:00
3 **Intraday Capacity Calculation** • Implementation readiness • Results of the EXT//run • Feedback from Market Parties on the results	B. MALFLIET	11:00 – 12:30
		LUNCH: 12:30 – 13:30
4 **Day-Ahead Capacity Calculation** • CGM improvements roadmap • SPAICC	R. KAISINGER	13:30 - 14:30
5 **Data publication & updates to Publication Tool** • Updated publication of ID ATC parameters • Deployment of IVA justification	M. MIHAYLOVA	14:30 – 14:45
6 **AOB & closure** • Next Core CG meeting	R. OTTER / S. VAN CAMPENHOUT	14:45 – 15:00
APPENDIX • Glossary of common abbreviations		

STK managers
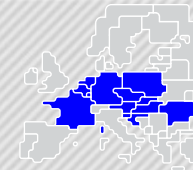
Reminder

- Core TSOs have engaged in the recent months to update the Core CCR integrated roadmap 2023 and beyond
- In parallel, prioritisation discussions are ongoing with Core NRAs, ACER and followed-up via MCSC

Please find on the next slides the Core CCR roadmap, and the interdependencies of the Core implementation projects

- The next slide highlights from a process view, the high level interdependencies and how the different projects being implemented relate to each other
- CGMES implementation adds another layer of interdependencies, creating "clusters" of projects that can only go-live at the same time
- Finally the Core CCR integrated roadmap illustrates the clusters & sequence of projects/implementation. The timings of implementation can shift
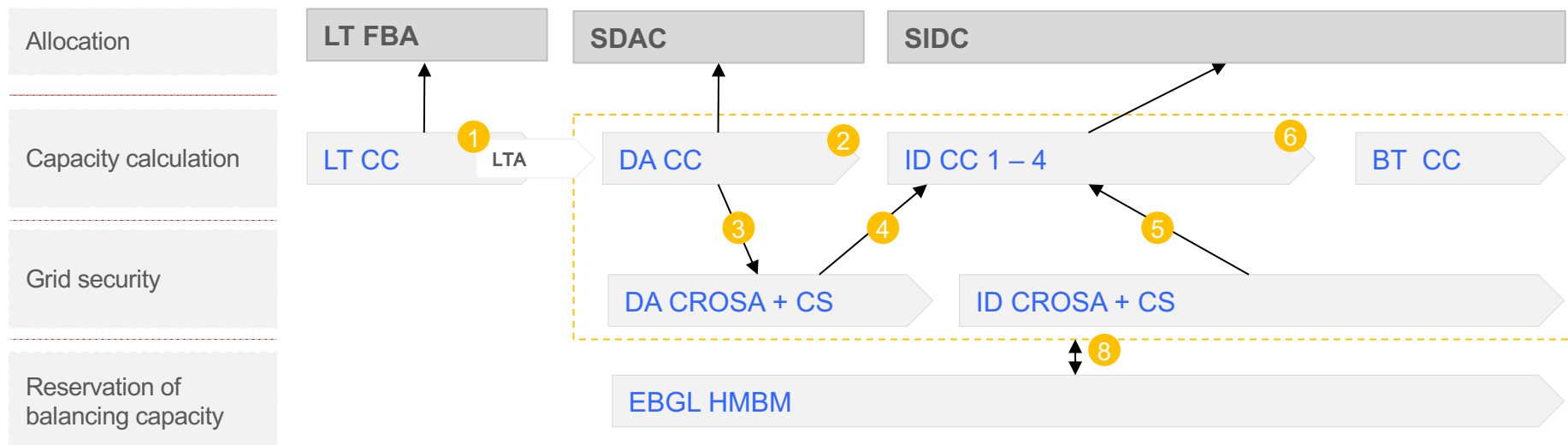
Functional packages in line with current Core CCR roadmap 2023 and beyond (draft):

1. LTCC is input for LTA inclusion in DACC; operational reality = transitional phase without LTCC

2. DACC is the starting point for ID left-overs for 15:00;

3. DACC Coordinated Validation requires regional coordination of XB RAs to secure same level of coordination as DA CROSA

4. ROSC DA CROSA is the starting point for IDCC1; according to current legal timings we will have a transitional phase where IDCC1 is executed without having ROSC in place yet (i.e. starting point will be DACF outcome instead of DA CROSA)

5. ROSC ID CROSA 1/2/3 is the starting point for IDCC2/3/4; according to current legal timings we will have a transitional phase where IDCC2 is executed without having ROSC in place yet (i.e. starting point will be IDCF outcome instead of ID CROSA). Also, the ID CCM does not yet include IDCC 3/4

6. IDCC 1/2/3/4 after DA CROSA / ID CROSA is the starting point for BTCC: it is the most recent CROSA>IDCC run relative to the delivery hour that makes up the starting point i.e. the first delivery hour is based on DA CROSA + IDCC1, the last delivery hour is based on the last ID CROSA + IDCC 4

7. EGBL MBM will require to update DACC, IDCC, ROSC processes (both the legal framework, as well as IT tools and processes).

CGMs play a pivotal role in all processes and creating a lot of dependencies between processes

- **Target file format for common grid models is CGMES**: **basis for all future processes**
- Migrating operational processes to CGMES is an additional challenge and must be considered very carefully. The first implementations in Core (DACC, IDCC, LTCC) are developed in UCTE-DEF and will have to migrate to CGMES
- Later processes should be implemented directly in CGMES
  - ROSC will be the first CORE CGMES-based process
  - Further implementations of IDCC and BTCC directly in CGMES

Taking into account both functional and CGM related dependencies, a certain sequence of implementation has been derived:

1. Key priorities are IDCC & ROSC
2. DA Coordinated Validation is strongly linked to ROSC
3. BTCC is dependent on having ROSC and IDCC completed
4. EGBL MBM comes last as it requires to update all previous processes
5. Topics that can be de-prioritised / planned independently
   1. DACC & LTCC transition to CGMES
      1. Being the last processes foreseen to switch to CGMES, this is to be limited as possible to reduce the operational burden of having to work with two file formats in parallel
      2. LTCC needs to migrate to CGMES by 1 year after DACC CGMES implementation (legal obligation)
      3. Also agreed with NRAs that 1 year after LTCC go-live, LTCC will use AC load-flow engine. Currently AC load-flows engines are available only in CGMES
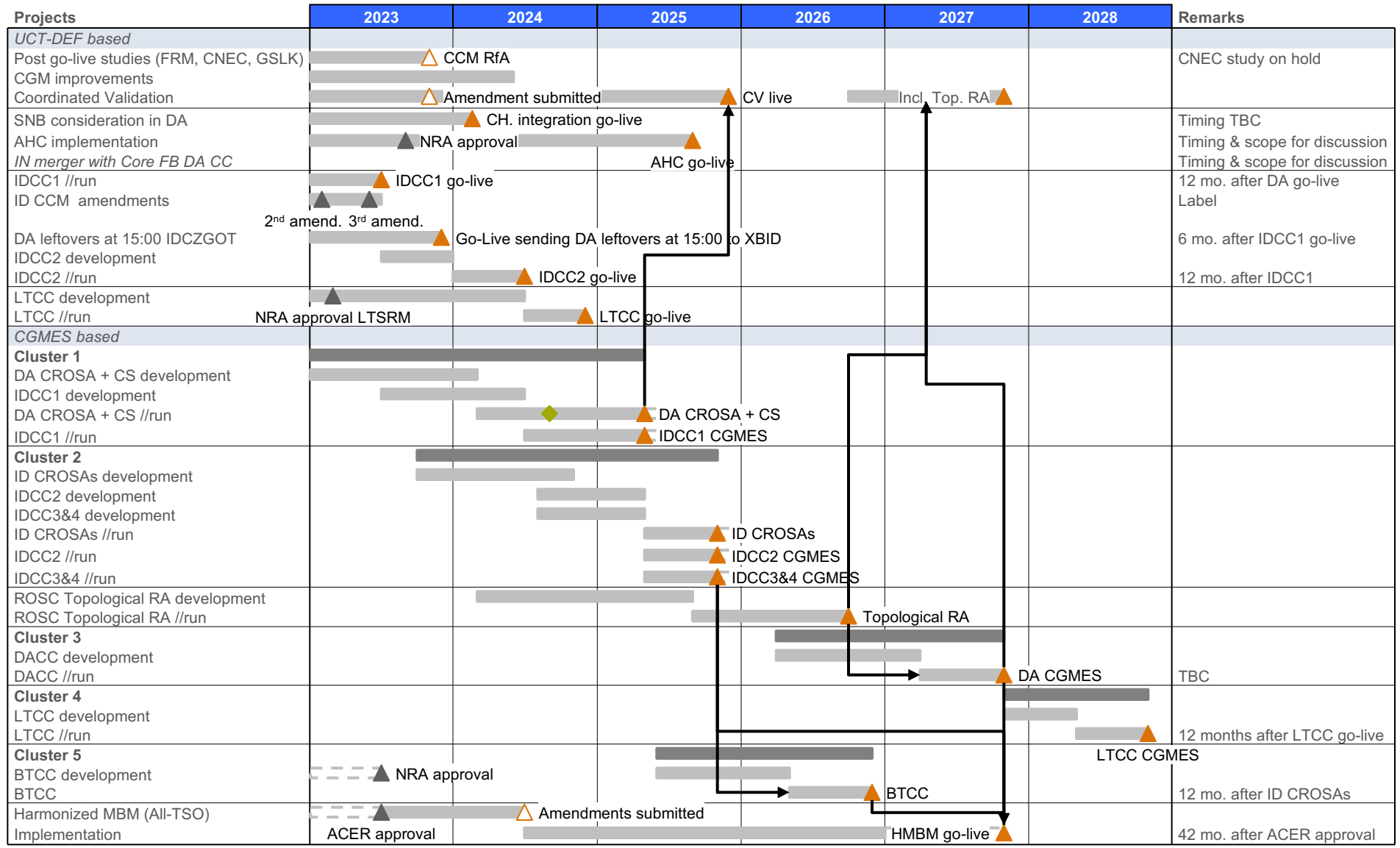   2. Some DA post go-live studies
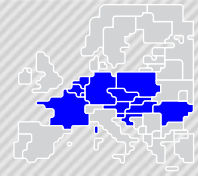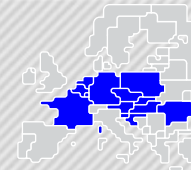
Core CCR high-level roadmap 4/4

STK managers

General disclaimer: The presented roadmap illustrates the clusters & sequence of projects/implementation. The timings of implementation can shift

Projects	2023	2024	2025	2026	2027	2028	Remarks
UCT-DEF based							
Post go-live studies (FRM, CNEC, GSLK)	△ CCM RfA						CNEC study on hold
CGM improvements							
Coordinated Validation	△ Amendment submitted		▲ CV live		Incl. Top. RA ▲		
SNB consideration in DA	▲ CH. integration go-live						Timing TBC
AHC implementation	▲ NRA approval	▲					Timing & scope for discussion
IN merger with Core FB DA CC			AHC go-live				Timing & scope for discussion
IDCC1 //run	▲ IDCC1 go-live						12 mo. after DA go-live
ID CCM amendments	▲ ▲						Label
	2nd amend. 3rd amend.						
DA leftovers at 15:00 IDCZGOT	▲ Go-Live sending DA leftovers at 15:00 to XBID						6 mo. after IDCC1 go-live
IDCC2 development							
IDCC2 //run		▲ IDCC2 go-live					12 mo. after IDCC1
LTCC development	▲						
LTCC //run	NRA approval LTSRM	▲ LTCC go-live					
CGMES based							
Cluster 1							
DA CROSA + CS development							
IDCC1 development							
DA CROSA + CS //run		◆	▲ DA CROSA + CS				
IDCC1 //run			▲ IDCC1 CGMES				
Cluster 2							
ID CROSAs development							
IDCC2 development							
IDCC3&4 development							
ID CROSAs //run			▲ ID CROSAs				
IDCC2 //run			▲ IDCC2 CGMES				
IDCC3&4 //run			▲ IDCC3&4 CGMES				
ROSC Topological RA development							
ROSC Topological RA //run				▲ Topological RA			
Cluster 3							
DACC development							
DACC //run					▲ DA CGMES		TBC
Cluster 4							
LTCC development							
LTCC //run						▲	12 months after LTCC go-live
						LTCC CGMES	
Cluster 5							
BTCC development	▲ NRA approval						
BTCC				▲ BTCC			12 mo. after ID CROSAs
Harmonized MBM (All-TSO)	▲	△ Amendments submitted					
Implementation	ACER approval				HMBM go-live ▲		42 mo. after ACER approval

▲ NRA/ACER approval milestone △ Core amendment submission ▲ Core process go-live milestone ◆ Decision point go-live with or without ID CROSA

7

Reminder

- Core TSOs started the IDCC EXT//run on 05/12/2022 with the go-live parameters (ID RAM 50MW, PTDF threshold 3% and 50% DA FRM value) to reach the objectives:
  - Prove TSOs & RCCs operational readiness for Go-live (Daily execution by operators, according to operational HLBP timings);
  - Prove ID CC process;
  - Obtain acceptance of ID CC results;
- An exception to the go-live parameters applies for PSE. PSE uses 100% of DA FRM value.
- Below, the current legal deadlines on implementations for the intraday timeframe are shown:

Time		Source	Capa Calc	Allocation	Current legal implementation deadline
D-1	15:00	D2CF	DA leftover	IDA1	6 months after IDCC1 go-live (requested to be extended)
D-1	22:00	DACF	IDCC1**	IDA2	12 months after implementation of DA FB MC
D	03:00*	IDCF	IDCC3?		No legal requirement for implementation
D	10:00	IDCF	IDCC2	IDA3	12 months after IDCC1
D	15:00*	IDCF	IDCC4?		No legal requirement for implementation

Indicative – to be detailed during implementation phase (and to be aligned with ID CROSA timings)

** Readiness of IDCC1 for IDA2 uncertain due to pending decision by ACER on ID CCM amendments. The impact on IDA2 capacities if IDCC1 is not ready before IDA2 go-live is still to be assessed.

3. Intraday Capacity Calculation
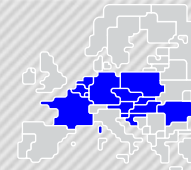
Inform on status of IDCC1 readiness

Core TSOs are preparing to be ready for IDCC go-live in June 2023. Core TSOs expect to be technical ready in May 2023. Market participants to be informed on the go-live readiness for IDCC1 in June 2023:

Topic	Key deliverables	Status
Operational readiness	• Local readiness	🟢
Technical readiness	• Go-live HLBP • XBID integration	🟡
Acceptance of results	• TSO acceptance • NRA acceptance • Market parties acceptance	🟡
Legal readiness	• Approval of 2nd and 3rd Amendment	🔴

Core NRAs escalated the 2nd and 3rd amendment of ID CCM to ACER on 03/04/2023.

During Core IG 11/04, ACER indicated that they cannot decide on the amendments before the go-live date of June 2023. Therefore, the go-live date of IDCC1 is currently uncertain.

- ACER is to decide on the amendments within 6 months after escalation (03/10/2023)
- After the decision is made, Core TSOs will need time to process the decision of ACER. The required time for this depends on the content of the decision. It is highly probable that the ACER decision will result in a significant delay.

🟢 On track
🟡 Expected to be ready in time
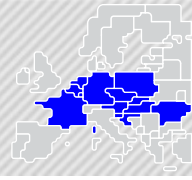🔴 At risk of not being ready in time
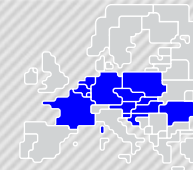
Background on EXT//run results from BD20220906 – BD20230409 (210 BDs)

- For ATC comparison results from internal //run phase 3.2 have been included in order to enlarge the dataset.

- DA leftovers – ID ATCs after increase/decrease as submitted to XBID at 22:00

- **Note:** Due to issues in the INT//Run or EXT//Run the following 6 BDs were excluded from the ATC comparison: 06/09, 13/10, 14/10, 30/10, 15/11, 03/03. As a result, KPIs comparing ATCs contain results of 210 business days.

Summary of the observed results

- Stable results are observed in the past months

- When comparing the IDCC EXT//Run results with the current operational ID ATCs (DA leftovers after increase / decrease) the following is observed:
  - Number of occurrences of BZ borders with zero or negative ATCs in //run is lower compared to DA leftovers.
  - On average positive ATCs from IDCC//run are lower than DA leftovers. When observing the results, it is important to focus on most relevant borders/directions (e.g., some of the reductions are in directions which are not often used by the market).
  - Frequency of isolation is significantly increased especially for NL. Few other BZs (BE, CZ, RO export) have also increased isolation compared to DA leftovers.

- When evaluating the results of the last two weeks (until BD20230409), only few BDs with higher number of TS with empty domains and a higher percentage of ATC < 0 are observed.

Market participants are informed on the status per TSO of providing their IVAs currently to the EXT//run process and the date when this TSO started applying IVAs

- The following TSOs are applying IVAs
  - CEPS (BD20221205, representative values from BD20230328), HOPS (BD20230118), SEPS (BD20230301), MAVIR (BD20221206), ELES (BD20230131) , TEL and PSE (BD20230314), iDaVinCy TSOs (BD20230322)
- RTE & ELIA are both not planning to apply IVAs (also not after go-live) with the currently foreseen IDCC methodology, or as long as XBID does not manage Flow-Based parameters

Market participants are informed on the TSOs which are planning to perform ATC validation and if necessary limit the ID ATCs and the way in which these TSOs are planning to perform ATC validation

- RTE & Elia
  - RTE & Elia does not foresee to perform ATC validation on a daily basis. ATC validation will only be used in case of major issue (IT issue, unexpected outage during the capacity calculation,…) to prevent potential critical grid situations.
- iDaVinCy
  - ATC validation will be used as a backup in case the common iDaVinCy process or the individual IVA upload fails. In the first case, ATC validation will be performed for all iDaVinCy TSOs, in the latter for those with problems in uploading the individual IVA file. In case of this fallbacks, predefined max ATC values will be provided to the CCCt.
- APG
  - APG follows a similar approach as RTE. Additional ATC validation will therefore only be performed in case of major issues or unexpected developments during the capacity calculation and validation process, which could otherwise lead to potential critical grid situations.
- MAVIR
  - ATC validation will be part of MAVIR validation process: as a backup of the classic IVA validation tool

## See next slide for KPI on applied IVAs by TSOs
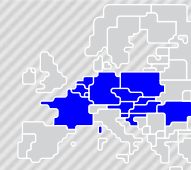
EXT//run: KPI results - IVA interventions for 19.1.2023 – 26.03.2023

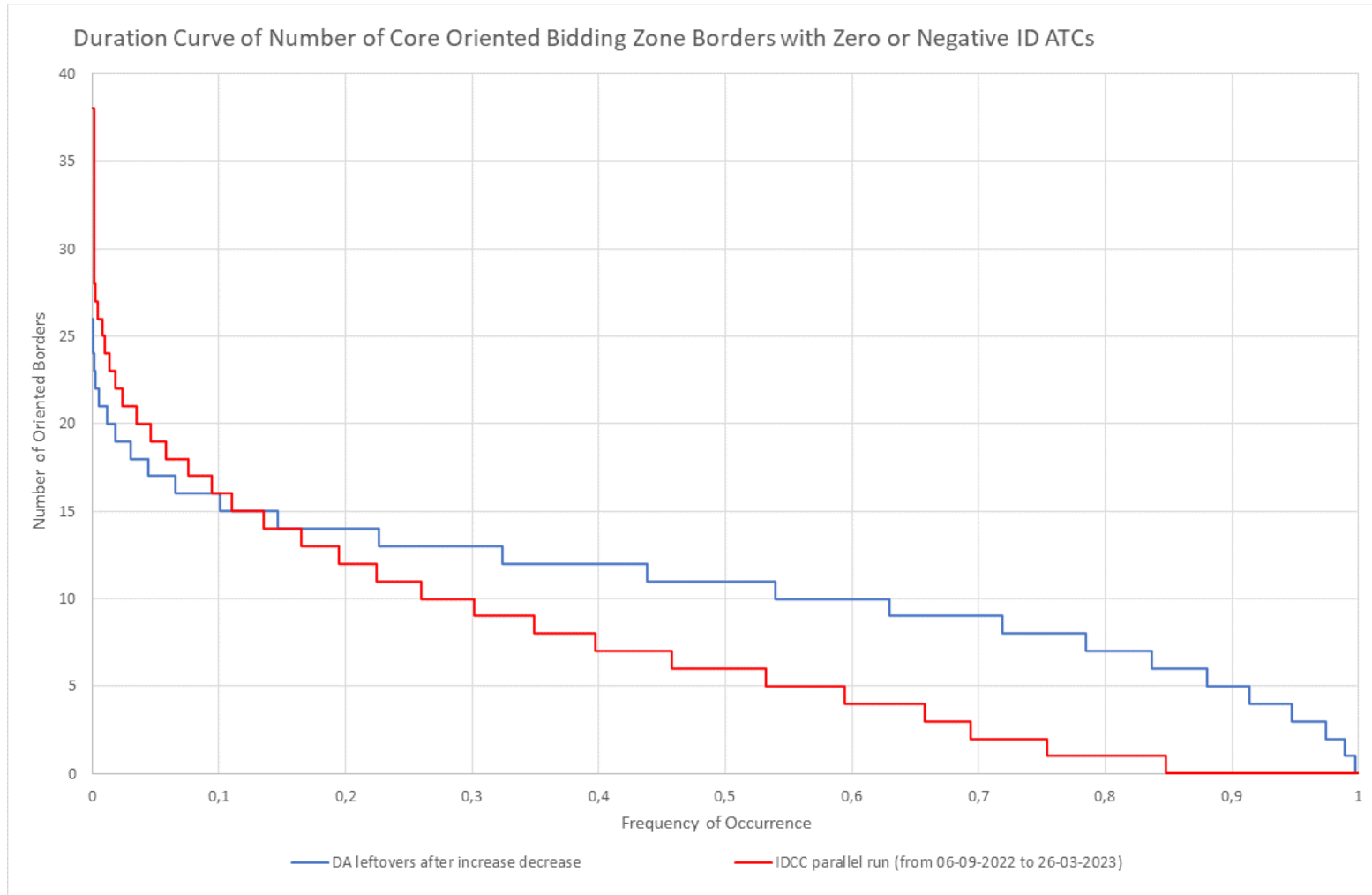IVA aggregations per TSO for period 19/1/2023 - 26/3/2023
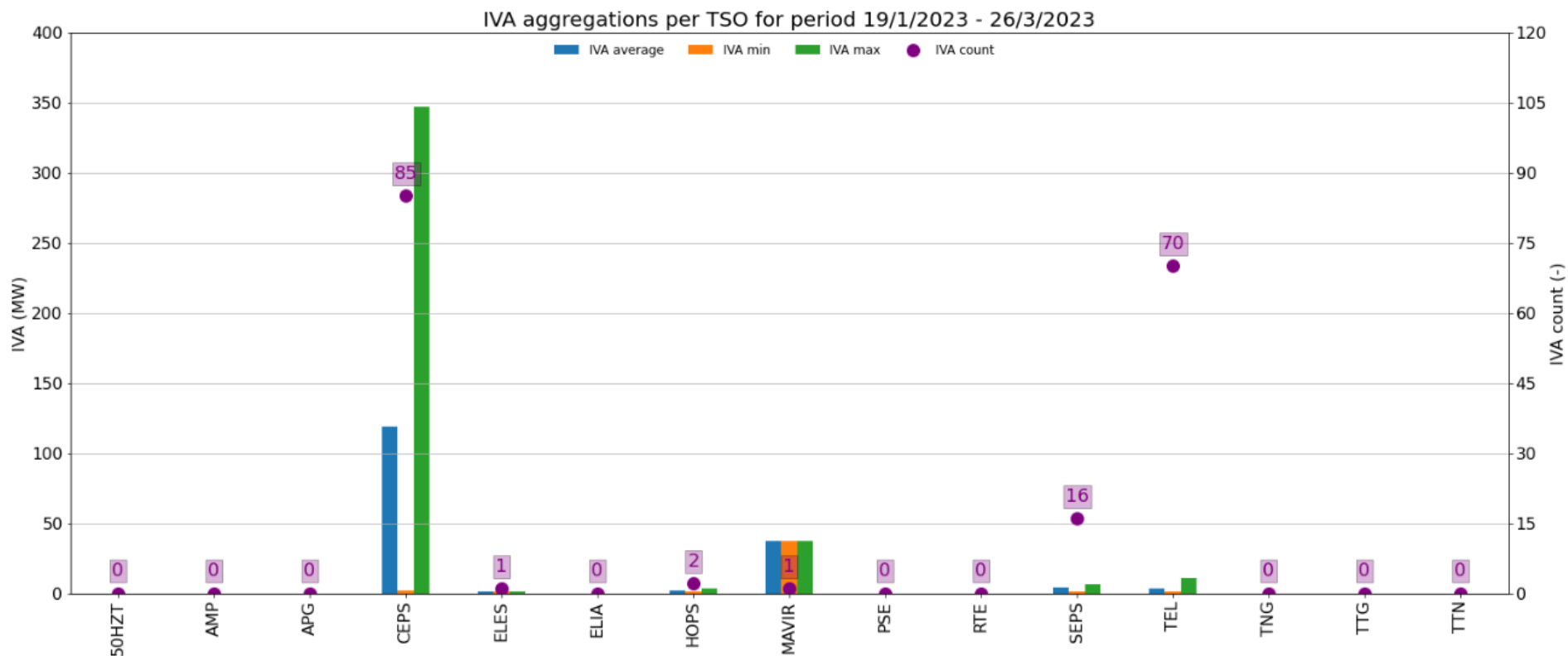
- IVAs are applied as a result of finding congestions that cannot be solved with RA during local validation phase.
- The justification of IVA applications in the EXT//run can be found on the JAO publication tool.
- ČEPS' values are not fully representative, and the local validation tool is subject to further development (lower or no values are expected).
- The high-frequency low-valued IVA values by TEL were caused by an error in local tooling.
- All 16 low IVA values from SEPS were provided on BD 02/02 during testing of the local validation tool and they are not representative. Since then, no IVAs have been applied by SEPS.
- As of 28/03/2023, the EXT//run results are fully representative for go-live for all parties
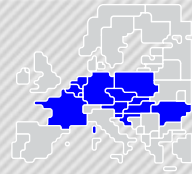
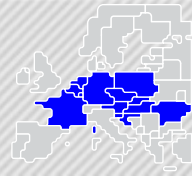## Negative or zero ATC values – comparison DA leftovers vs. IDCC //run results

Duration Curve of Number of Core Oriented Bidding Zone Borders with Zero or Negative ID ATCs

- Number of occurrences of BZ borders with zero or negative ATCs in //run is much lower compared to DA leftovers.
- In IDCC //run 15% of the time all the borders have positive ATC.
- In IDCC //run 70% of the time less than 10 borders have zero or negative ATC values.

Mean positive ID ATCs – DA leftovers after increase/decrease (operational) vs. IDCC //run results

Mean Positive ID ATCs by Oriented Core Bidding Zone Border
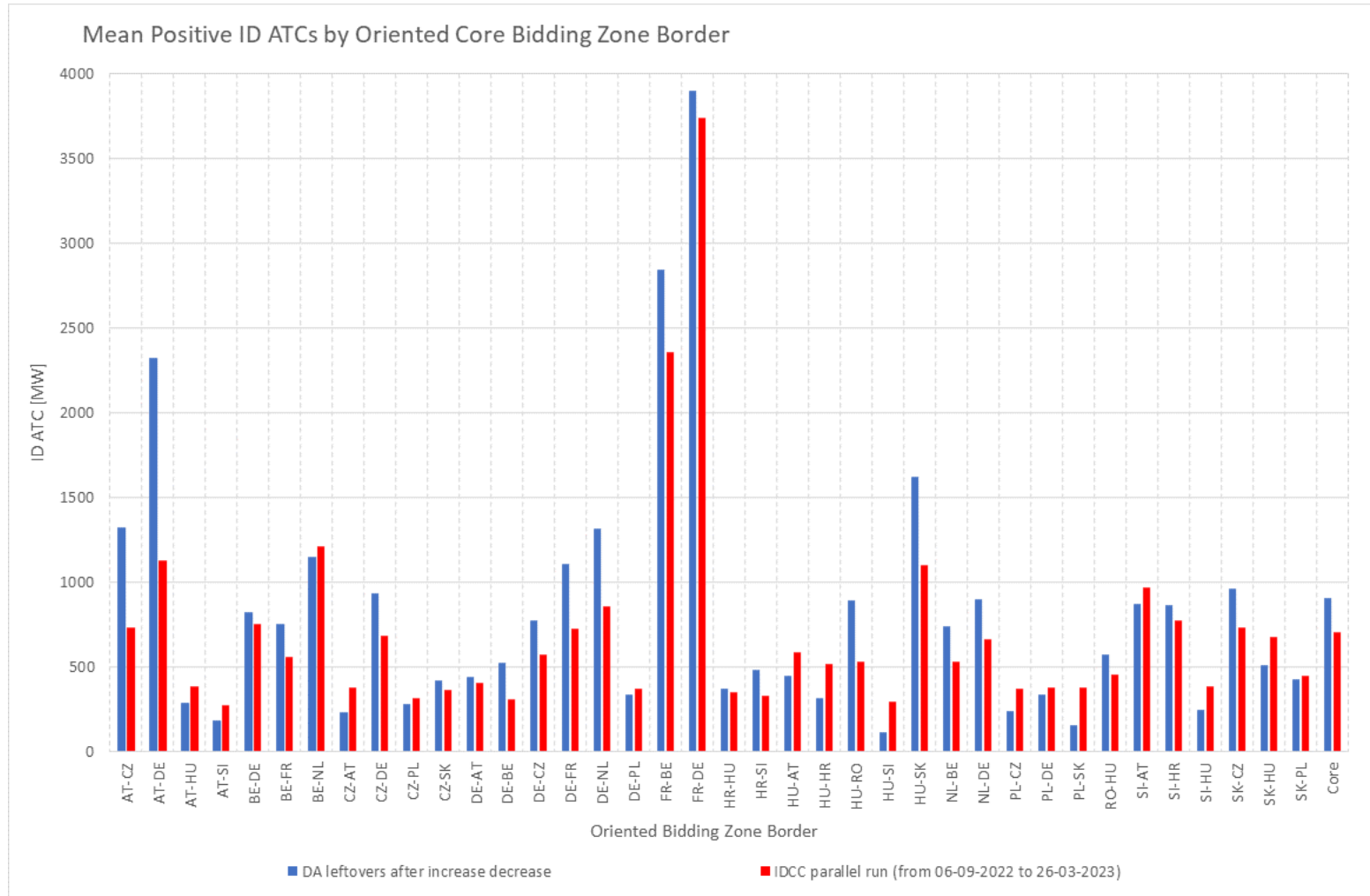
- ● Various results per BZ border but on average positive ATCs from IDCC//run are slightly lower than DA leftovers.
- ● It´s important to focus on most relevant borders/directions (some of the reductions are in directions which are not often used by the market).
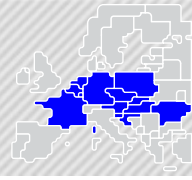
3. Intraday Capacity Calculation
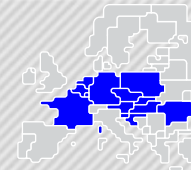
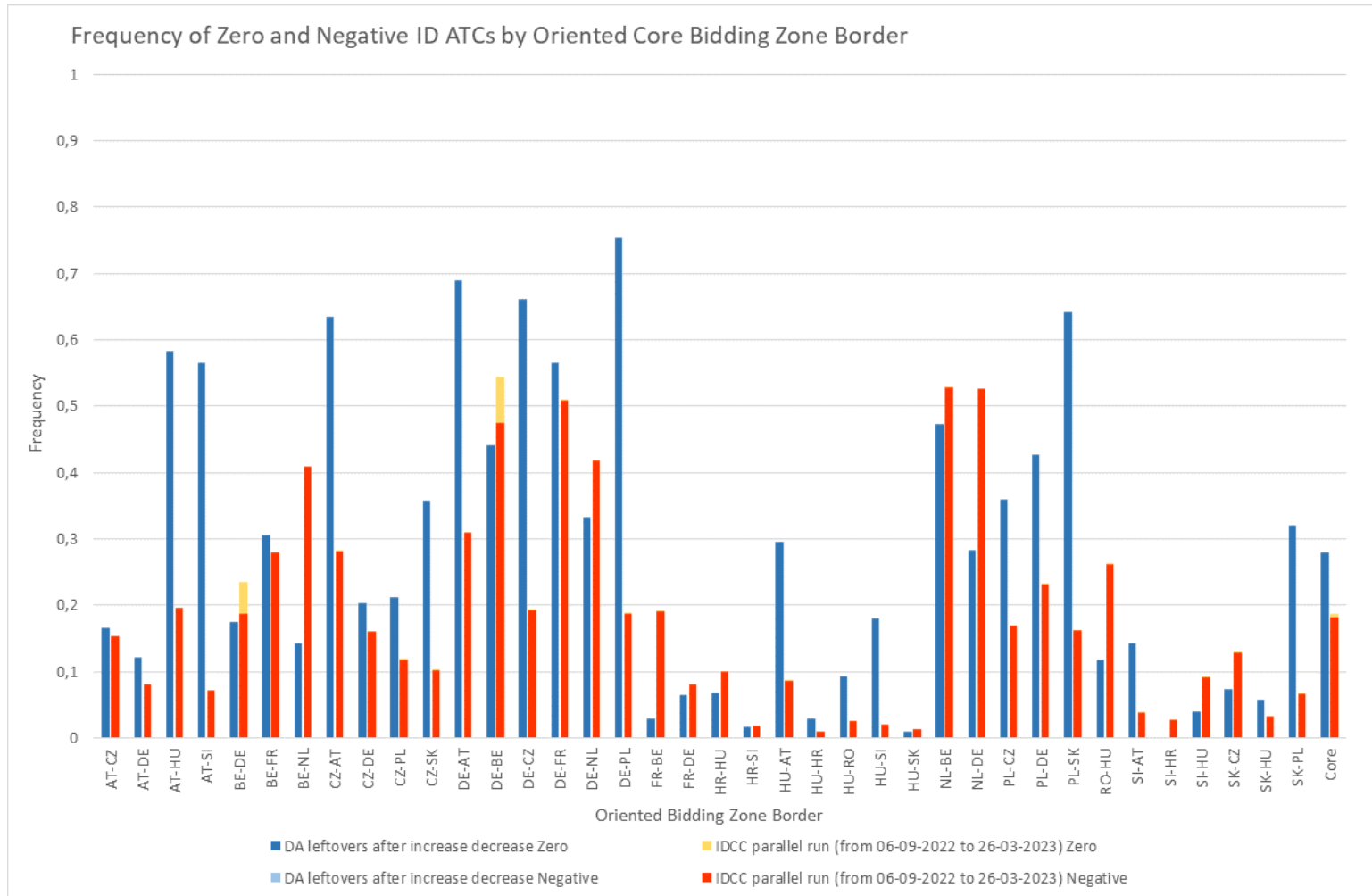## Mean positive ID ATCs – DA leftovers after inc./decr. (operational) vs. IDCC //run results – last month

Mean Positive ID ATCs by Oriented Core Bidding Zone Border
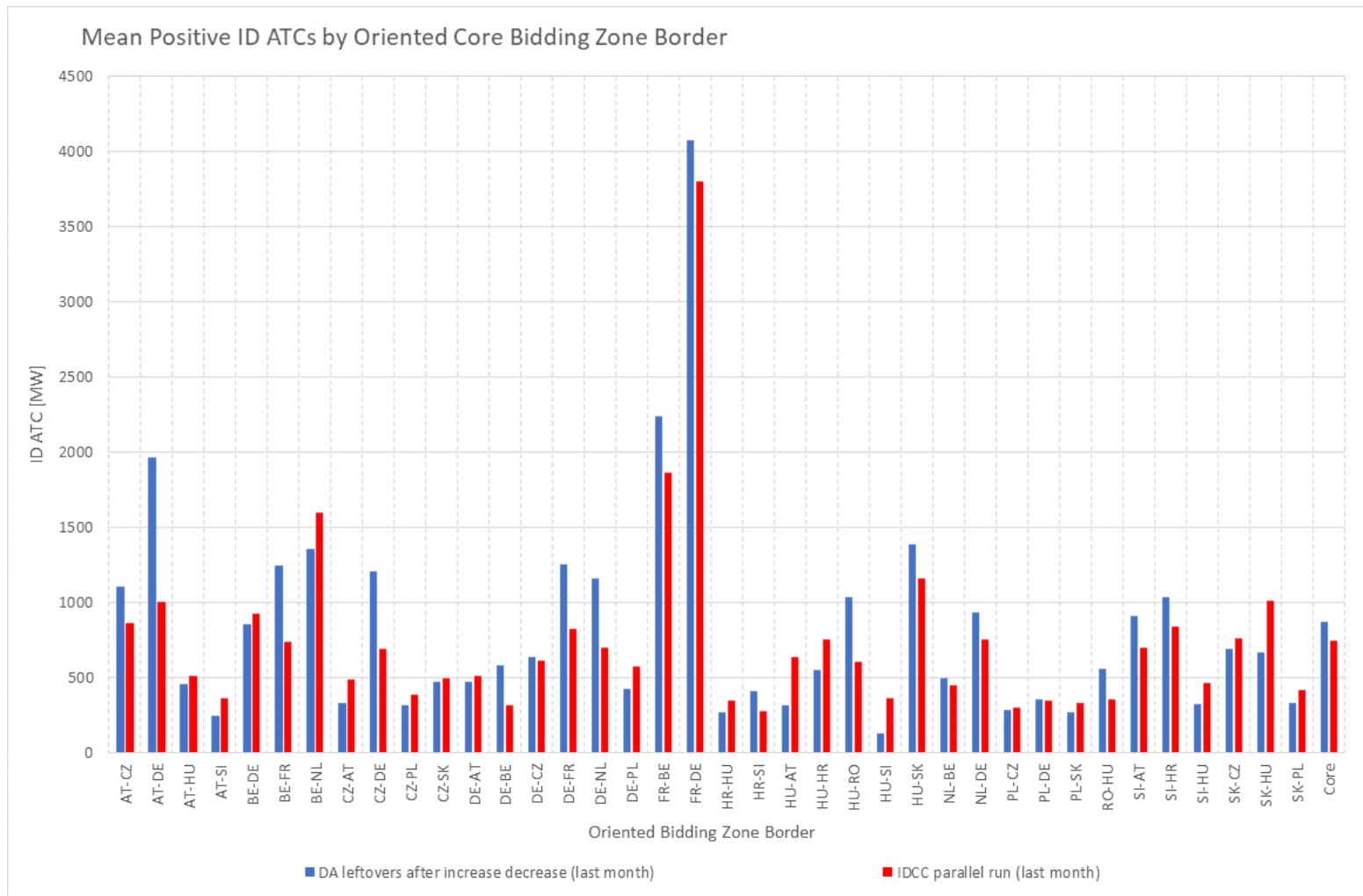
- Recent results (27/02 - 26/03) show improved IDCC ATC results on many borders.

B. MALFLIET

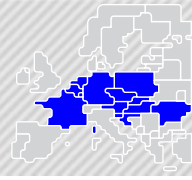## Frequency of zero and negative ID ATCs – comparison DA leftovers vs. IDCC //run results

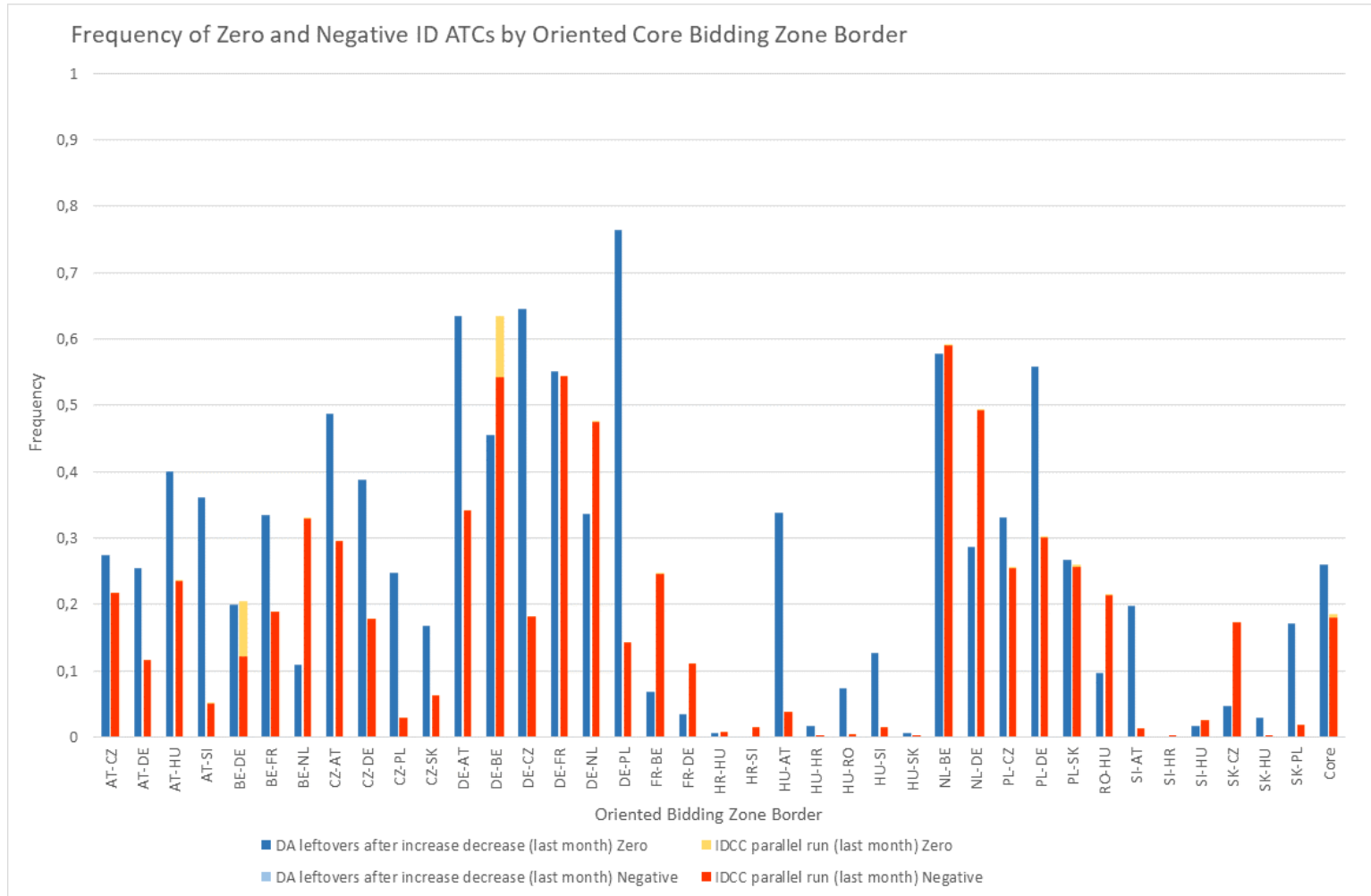Frequency of Zero and Negative ID ATCs by Oriented Core Bidding Zone Border

- Frequency of zero or negative ATCs in //run is significantly lower compared to DA leftovers for many Core borders.
- In IDCC //run negative ATCs are much more frequent than zero ATCs.
- On Core level, the frequency of non-positive ATCs in //run is 10% lower compared to DA leftovers.

Frequency of zero and negative ID ATCs – comparison DA leftovers vs. IDCC //run results – last month

Frequency of Zero and Negative ID ATCs by Oriented Core Bidding Zone Border
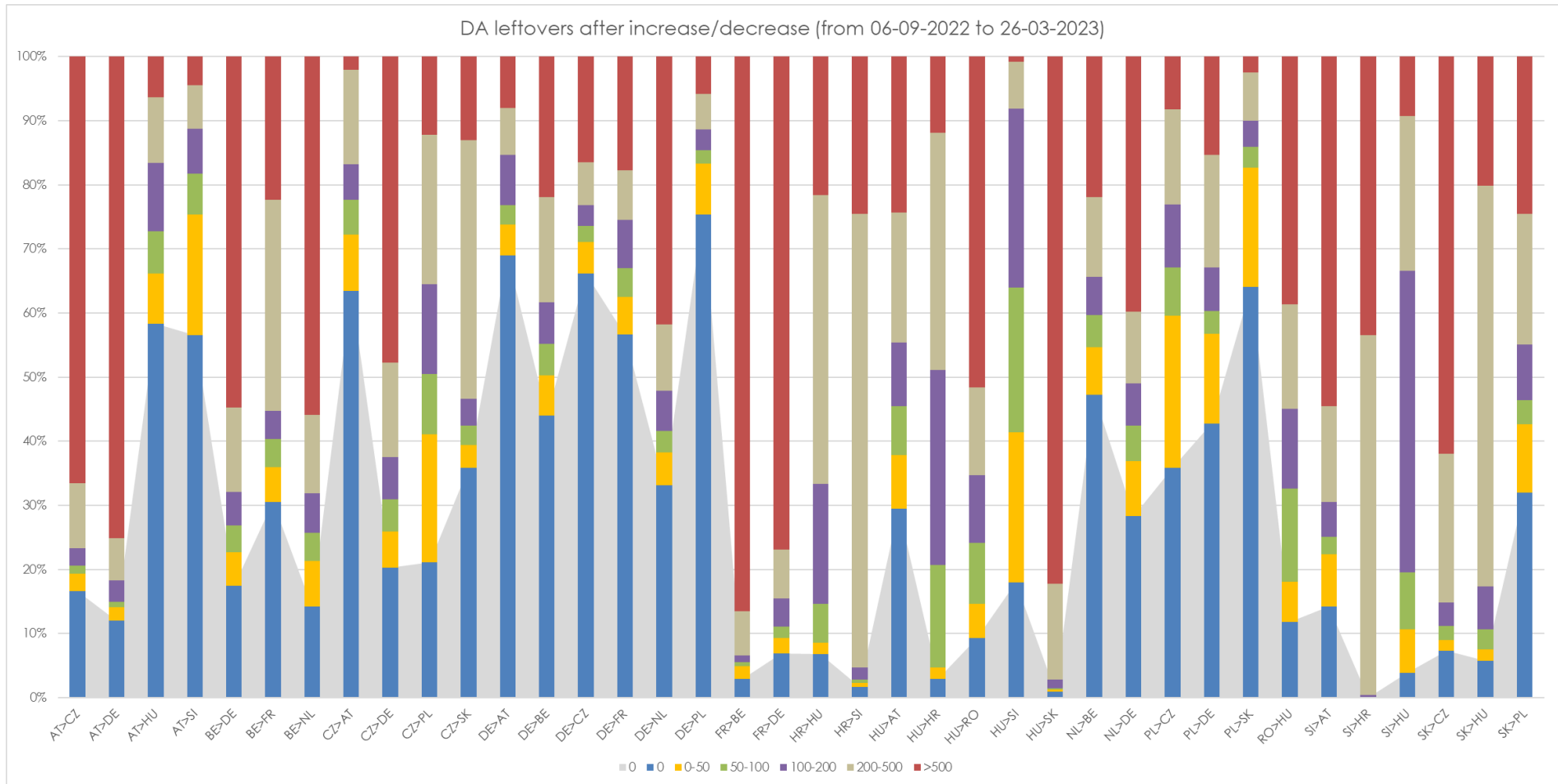
- Recent results (27/02 - 26/03) show that frequency of zero and negative ID ATC from IDCC//run is lower compared to DA leftovers for most of the borders and also on Core average level.

Frequency of DA leftover values after increase/decrease

DA leftovers after increase/decrease (from 06-09-2022 to 26-03-2023)

Legend: 0 | 0 | 0-50 | 50-100 | 100-200 | 200-500 | >500

- The KPI shows the frequency of ATCs over the Core borders in various ranges (MW)
- Frequency of zero ATCs for several borders is considerable
- The number of borders with high frequency (> 50%) of zero ATCs is more commonplace compared to IDCC //run results

3. Intraday Capacity Calculation

Frequency of ID ATC values //RUN

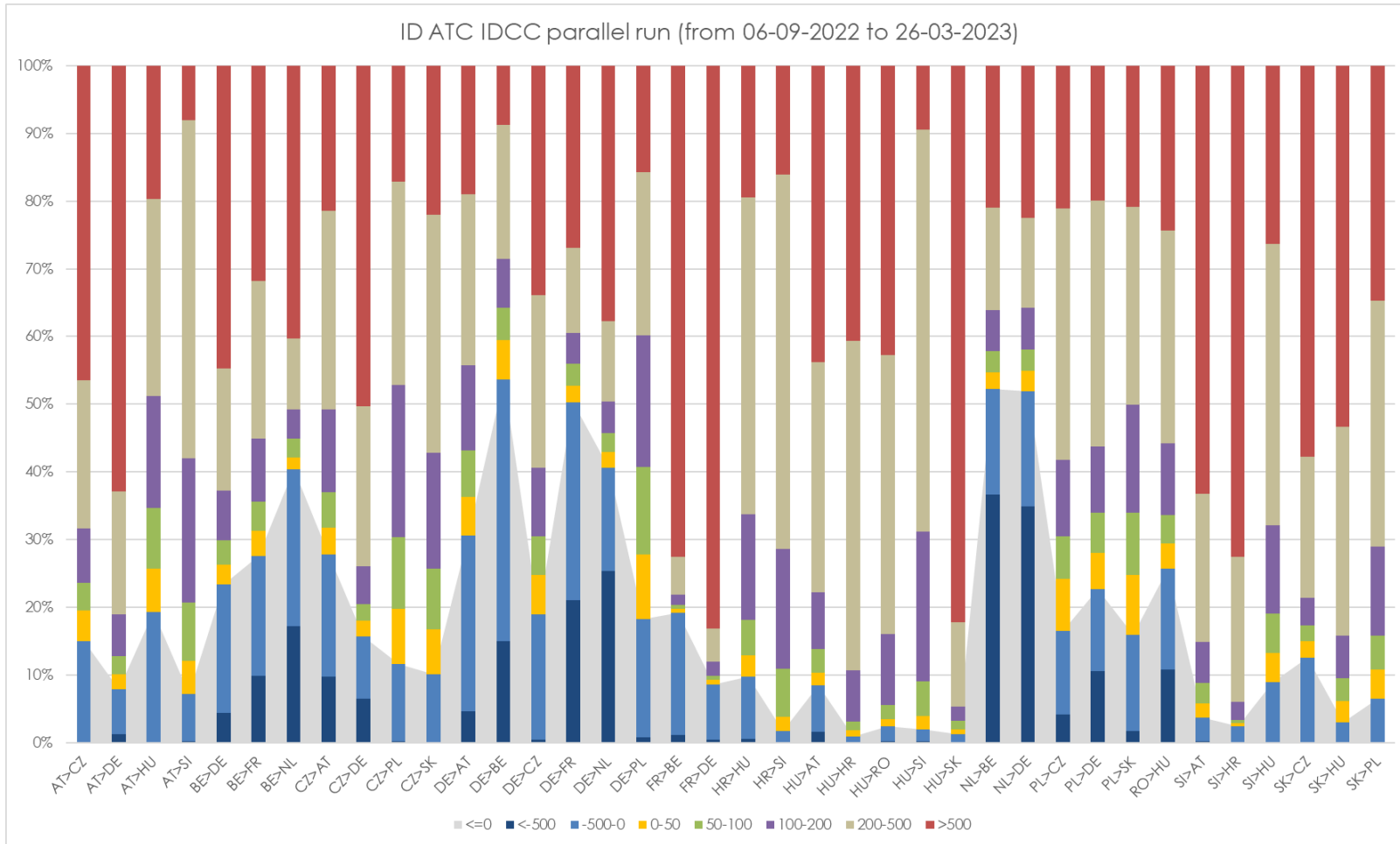ID ATC IDCC parallel run (from 06-09-2022 to 26-03-2023)

Legend: <=0, <-500, -500-0, 0-50, 50-100, 100-200, 200-500, >500
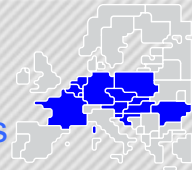
- The KPI shows the frequency of ATCs over the Core borders in various ranges (MW)
- The more even distribution of positive ATCs (200-500 MW) is greater compared to DA leftovers
- The number of Core borders with high frequency of zero ATCs is less compared to DA leftovers
- There is still high frequency of non-positive ATCs in //run over a few borders

Frequency of Isolated Core BZs by import, export and both directions – DA leftovers vs. IDCC //run results

Frequency of Isolated Core Bidding Zones by Import, Export and Both Directions

- Frequency of isolation is significantly increased especially for NL. Few other BZs (BE, CZ, RO export) have also increased isolation compared to DA leftovers.
- In majority of bidding zones there is only small or no increase of isolation.
- In general, frequency of total isolation in both directions is quite rare.
- TEL has indicated that the high frequency of isolated Core BZ instances is not a concern for TEL, as this KPI only relates to Core borders (RO-HU), while ID allocation exists on other non-Core borders. Moreover, if there is a high DA allocation in one direction, it can happen that there is not enough capacity left for the ID process in this direction, but there is capacity left in the opposite direction.

B. MALFLIET
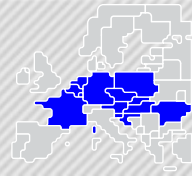
Iterative vs. Optimization approach

Reminder

- The Core ID CCM specifies in article 21 that the iterative approach must be used to extract ID ATCs from the ID FB Domain.
- Core TSOs prepared the IT infrastructure to apply the iterative approach for ATC extraction. A switch to the optimization approach is not possible without extra implementation.

Comparison of both approaches

- To compare the two approaches Core TSOs conducted a very small study for five Business days. This sample size doesn`t provide absolute certainty about the performance of the two approaches but delivers an indication.
- The optimization approach provides slightly higher average ATCs on most of the borders (on few borders results are opposite)
- But the frequency of zero ATCs in the optimization approach is slightly higher on most of the borders than with the iterative approach.

Conclusion

- As the performance of both approaches is very similar and no favorite could be found TSOs decided to stick to the iterative ATC extraction method which is also required by the CCM.
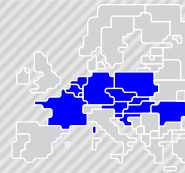
Core TSOs proposed to Core NRAs to replace the post-go live study on FRM by a package where:

- The FRM is defined as a lump sum value of 10%
- CGM quality is improved and monitored

Core TSOs have identified multiple activities to improve the Core FB DA CC CGM quality and created a roadmap to prioritise the different activities. The Core FB DA CC CGM improvements roadmap includes 12 topics to work on with different priorities (very high, high, medium, low).

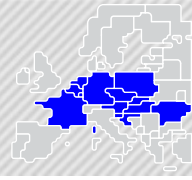Two approaches seemed "initially" possible:

- top-down: Measure the quality of CGMs (KPI for CGM quality) and try to decompose the differences in some root causes. Measuring the quality of the CGMs was already considered as a hard task and is no guarantee for identification/decomposition into root causes.
- bottom-up: Reflect about root causes (sometimes already detected via different indicators), solve those root causes and check whether the quality is sufficiently improved. A non-exhaustive list of topics/improvements for more CGM quality is already identified (see next slide).
- A bottom-up approach has been chosen as
  - A lot of issues and their root causes where already identified during experimentation in the // run
  - Setting up KPIs (top-down approach) would only point into the direction of "an issue exists" but would not directly point into a "root cause" as all root causes are mixed together and KPIs pointing to one unique root cause are hard to be set up: e.g., a KPI that compares the high differences in flows between CGM D2CF@MCP and CGM DACF@MCP would point into the existence of an issue, but in fact the differences are caused by the mixture of
    - IGM quality errors: nodal forecast errors (Load forecast, RES forecast, XR forecast, RD forecast), topology errors, ...
    - Merging quality errors: errors due to replacement/BCI, incorrect handling of XR during merging, ...
    - Capacity Calculation errors/simplifications: loss redistribution errors, impact GLSK errors, impact NPF errors on linearization assumptions, ...
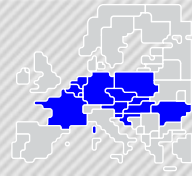
- A list of root causes/issues is mentioned in the next slide.
  - However, this list is non-exhaustive, this list contains very likely the biggest errors occurring during merging and capacity calculation.
- Once the biggest errors in merging and capacity calculation are tackled, it probably could make sense to start comparing CGM D2CF@MCP and CGM DACF@MCP as the mixed behavior of merging quality errors and capacity calculation errors would then be firmly reduced allowing to better identify IGM quality errors: e.g. when IGMs are delivered at Net Position Forecast (NPF), and the NPF is close to the Market Clearing Point (MCP) it might be much more easy to identify IGM quality errors when comparing D2CF CGM@MCP (which is then in fact very close to the combined D2CF IGMs@NPF) with the DACF CGM@MCP.

To explain the merging process and indicate which improvements impact what part of the process, Core TSOs created an overview on the next slide.
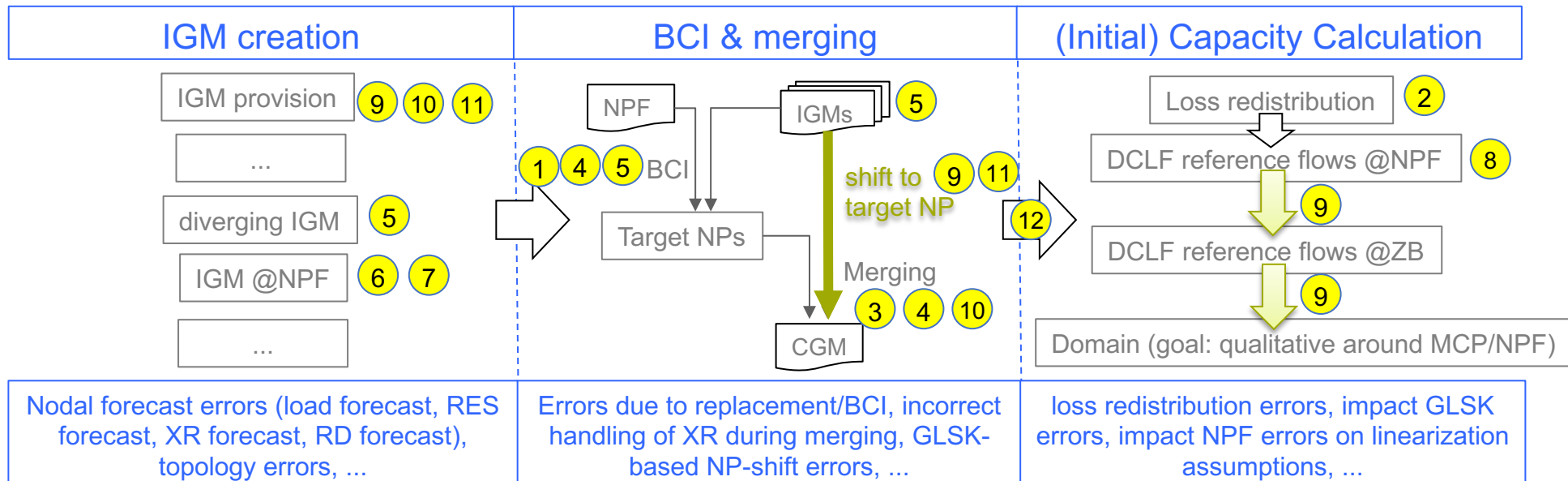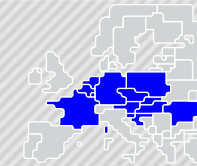
CGM improvements roadmap: overview of planned activities within merging process

Improvements activities / topic IDs:

1. Algorithmic improvement of Base Case Improvements (BCI)
2. DC imbalance
3. Handling of HVDC interconnectors and net positions during the merging
4. Integration of IT and CH in BCI
5. Replacement strategies
6. NPF in IGM creation

7. NP alignment (DE- pre-merge)
8. NPF quality (assumes that all IGMs created @NPF)
9. GLSK methodology
10. DC load flow in merging as fallback process
11. Pre-congestions in CGM
12. RefProg Data Quality Check (DQC)

IGM creation	BCI & merging	(Initial) Capacity Calculation
IGM provision (9)(10)(11)	NPF → IGMs (5)	Loss redistribution (2)
...	(1)(4)(5) BCI	DCLF reference flows @NPF (8)
diverging IGM (5)	shift to target NP (9)(11)	(9)
IGM @NPF (6)(7)	Target NPs	DCLF reference flows @ZB
...	Merging (3)(4)(10)	(9)
	CGM (12)	Domain (goal: qualitative around MCP/NPF)
Nodal forecast errors (load forecast, RES forecast, XR forecast, RD forecast), topology errors, ...	Errors due to replacement/BCI, incorrect handling of XR during merging, GLSK-based NP-shift errors, ...	loss redistribution errors, impact GLSK errors, impact NPF errors on linearization assumptions, ...

4. Day Ahead Capacity Calculation

Operational UCT-DEF II CGM improvements roadmap: very high to medium priority

	2022	2023				2024
	Q4	Q1	Q2	Q3	Q4	Q1

ID6 NPF in IGM creation
A) Central implementation of early NPF + quality improvements
  I. NPF vs local forecast quality assessment
  II. Early NPF (02/11)
  III. Alg. changes in NPF re. CH handling
  IV. NPF file extension (TSO-GLOBAL)
  V. Very early NPF implementation
B) Local TSOs to use NPF in IGM creation
Local TSO implementation of NPF in IGM creation

ID1 Algorithmic improvement of Base Case Improvements
Mid-term: Relaxation of the feasibility range by Coreso when no BCI solution can be found — ▲ **Target**: ID6 implementation

ID2 DC imbalance
FBPCM update: CCCt 3.1.2 release (early Q3 2023)

ID3 Handling of HVDC & NPs during merging
Merging server update: COBRA & MONITA fix, Kosovo NP issue, Moldova/Ukraine split

ID8 NPF model accuracy improvement
Testing of model evolutions NPF accuracy improvement,
(e.g.: inclusion of FB domain data, generation availability data, general model evolution
Implementation of validated improvements — ▲ TSO Go/NoGo on tested improvements

ID12 RefProg Data Quality Check
Process robustness improvement: scope definition — ▲ TSO decision
RefProg DQC implementation (CCCt 3.1.2 release)

ID7 NP alignment
Removal of DC loadflow for DE pre-merge

ID10 DC load flow in merging as fallback process
TSO decision on (not) having DC LF as fallback
DC LF as fallback implementation (TBD)

ID11 Monitoring of pre-congestions
Quarterly monitoring of pre-congestions, follow-up in case relevant (ongoing)
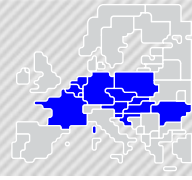
Note: dashed activity boxes represent an indication of the timeline, the due date is not fixed.

Low priority topics or ongoing in different Core tracks (not included in CGM improvements roadmap)

- **ID9** GLSK methodology: improvement potential of the different GLSK methodology applied by TSOs assessment in post go-live studies

- **ID4** Integration of IT and CH in BCI: discussion to be initiated with IT and CH once ID1 is implemented

- **ID5** Replacement strategies for non-Core TSOs: monitoring in place
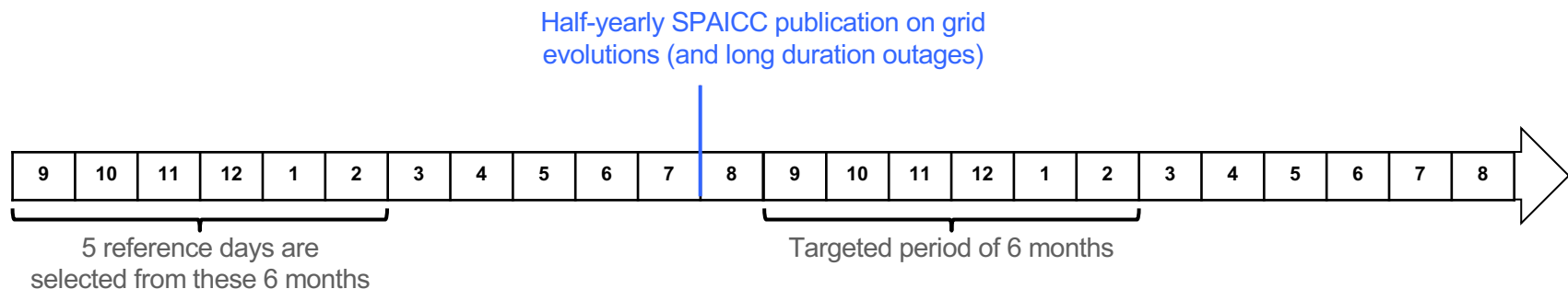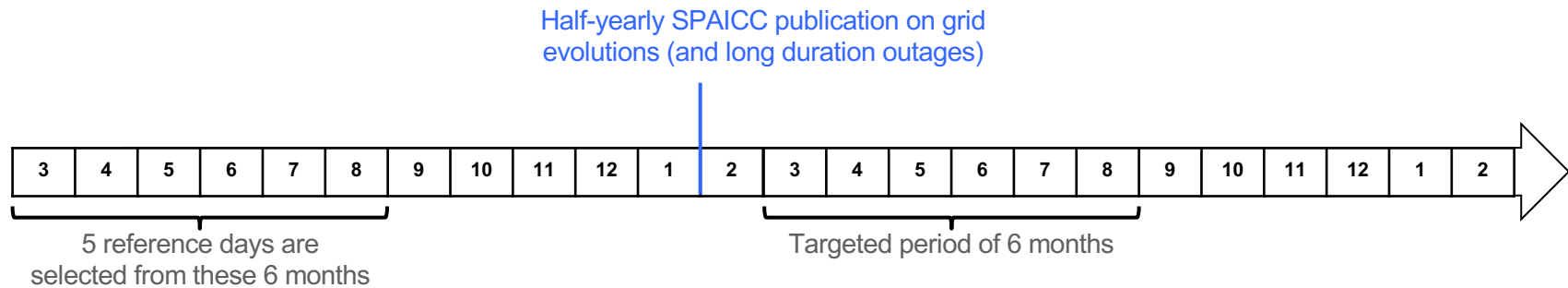
4. Day Ahead Capacity Calculation
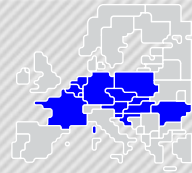
SPAICC

Goal:

- Execute a SPAICC similarly as for the operational Core DA CC process, including minRAM targets and validation processes on historical reference days selected from a similar period, but on adapted grid models including grid evolutions and long duration outages

Approach:

- Half-yearly SPAICC publication linked to the SGM for the targeted period → 2 SPAICC publication/year
- 5 reference days + 2 extra variants to cope for long duration outages (all outages >3 months are grouped together for 1st half and 2nd half of the targeted period)
- Note: proposed start and end points of the 6-months-windows are just an example

Half-yearly SPAICC publication on grid
evolutions (and long duration outages)

| 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 |

5 reference days are
selected from these 6 months

Targeted period of 6 months

Half-yearly SPAICC publication on grid
evolutions (and long duration outages)

| 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

5 reference days are
selected from these 6 months

Targeted period of 6 months

R. KAISINGER
K. VANDERMOT

SPAICC

Reference day selection Methodology:

- Idea is to align with the light SPAIC approach from CWE:
  - Day 1: Sunday in the available period with the lowest wind infeed in CORE
  - Day 2: Workday in the available period with the highest wind infeed in CORE
  - Day 3: Any Workday or Saturday in the available period with average wind
  - Day 4: Lowest exchanges in CORE
  - Day 5: Highest exchanges in CORE
  - ~~Day 6: Smallest flow based domain (volume)~~ → extra variant first ½ of the period of interest
  - ~~Day 7: Largest flow based domain (volume)~~ → extra variant last ½ of the period of interest
- For the period of interest, the reference days will be selected from the same period year-1 (Y-1).
- However, in CORE the domain volume indicator is no longer existing? Therefore Day 4 and 5 can be skipped. As the SPAICC HLBP is designed upon 7 BDs, it is possible to run 2 extra reference days.
- For long duration outages (proposed threshold >3 months), appearing in the considered period of interest, it also might be interesting to have an idea of the impact. TSOs can therefore propose to add those long duration outages as an extra variant, based on one of the 5 reference days. The planned outages with most impact in the first half of the period of interest are bundled together in reference day 6, the ones for the last half are bundled together in reference day 7.

Published Results:

- The final CC domain parameter files will be shared that directly that are ready for use in simulation facility; i.e., file F002, which is in fact the equivalent of CC file F202
- If adaptations in allocation constraint files are expected, also those files will be provided
- This would allow to run interested parties to run a market allocation simulation upon the CC domains
- Where should those files be published? On JAO?
- As after summer holiday period, the study environment of CCCt will be deployed, FBE PT will be capable to share you a plan and timings on the execution of the first SPAICC. This first SPAICC is then to be considered as a try out and might be used to further align on needs and improvements

5. Data publication & updates to PuTo
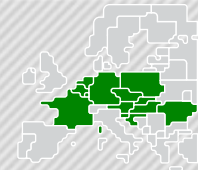
Deployment of IVA justification

The IVA justification was applied on the Core DA Publication Tool and later to the Core Intraday.
The TSO and CNEC display issue on the "Validation Reductions" page has been fixed.

JAO
Joint Allocation Office

JAO Publication Tool
Core ID CCR UAT

DATE
◄ 2023-04-10 ►

HOUR (CET)
00:00 - 01:00 ▼

HUB
All ▼

BORDER
None available ▼

HORIZON
ID2

🏠 **Core ID** 👁
Core Market Graphs
Core Map
Max Net Positions
Max Exchanges (MaxBex)
Initial Computation
Validation Reductions
Final Computation
Allocation Constraints
Used Grid Model
RefProg
Reference Net Position
ATCs for SIDC
NTCs for SIDC
Applied Fallbacks

Validation Reductions

			CNEC with IVA			
Date	**TSO**	**CNEC name**	**Returned Branch**	**IVA [MW]**	**Share of IVA reducing the domain (Optional)**	**Justification**
2023-04-10 07:00:00	TRANSELECTRICA	TR Rosiori 400/220 1 / Oradea Sud - Rosiori	✗	0.060056843		IVA applied due to unsolvable overloads
2023-04-10 08:00:00	TRANSELECTRICA	TR Rosiori 400/220 1 / Oradea Sud - Rosiori	✗	0.11753673		IVA applied due to unsolvable overloads
2023-04-10 09:00:00	TRANSELECTRICA	TR Rosiori 400/220 1 / Oradea Sud - Rosiori	✗	0.17969048		IVA applied due to unsolvable overloads
2023-04-10 13:00:00	TRANSELECTRICA	Arad - Sandorfalva / Portile de Fier - Djerdap	✗	0.32556155		IVA applied due to unsolvable overloads

6. AOB & closure
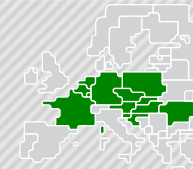
Next meeting and communication channels

Next Core Consultative Group in 2023

- 04/10/2023

Existing Core communication channels

Core Consultative Group mailing list

- Register for future updates by subscribing to https://magnusenergypmo.hosted.phplist.com/lists/?p=subscribe

Core section on ENTSO-E website

- Upload of methodologies and reports on public consultations, current status of the Core CCR program, CG minutes
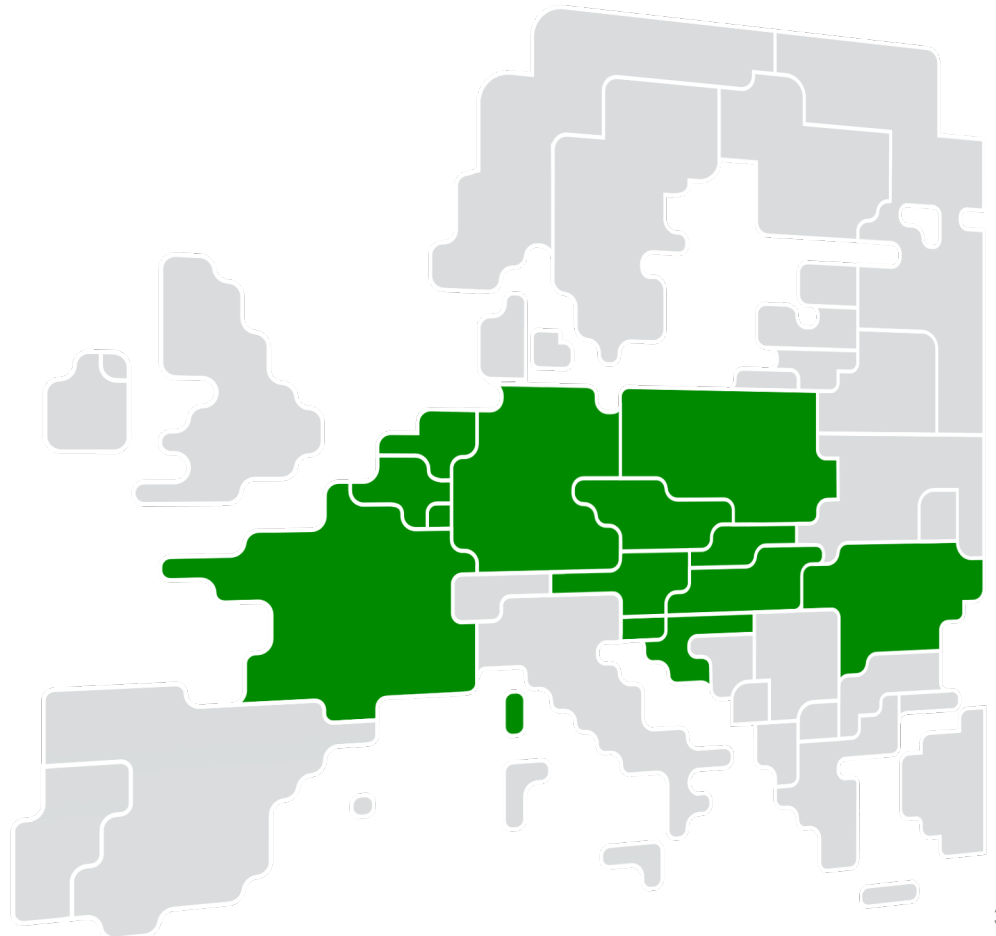- Link: https://www.entsoe.eu/network_codes/ccr-regions/#core
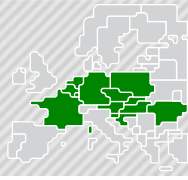
ENTSO-E newsletter

- Regular updates on the different CCRs (e.g., submitted methodologies, launch of public consultations)
- Subscription via https://www.entsoe.eu/contact/

Q&A forum on JAO website

- Provides space to Market Participants to ask questions about the External Parallel Run and other relevant topics:
- Link: http://coreforum.my-ems.net/

APPENDIX

Appendix

Glossary

ACER	Agency for the Cooperation of Energy Regulators
AHC	Advanced Hybrid Coupling
BZ	Bidding Zone
CACM	Capacity Allocation and Congestion Management
CC	Capacity Calculation
CCR	Capacity Calculation Region
CGM	Common Grid Model
CGMES	Common Grid Model Exchange Standard
CNEC	Critical Network Element with a Contingency
CS	Cost Sharing
CSA	Coordinated Security Analysis
CSAM	Coordinated Security Analysis Methodology
CROSA	Coordinated Regional Operational Security Assessment
DA	Day-Ahead
ENTSO-E	European Network of Transmission System Operators for Electricity
FAT	Final Acceptance Test
FIT	Functional Integration Test
FB	Flow Based
GSK	Generation Shift Key
GLSK	Generation Load Shift Key
IDCC	Intraday Capacity Calculation

IGM	Individual Grid Model
IVA	Individual Validation Adjustment
KPI	Key Performance Indicator
LF-SA	Load Flow Security Analysis
NRA	National Regulatory Authority
NRAO	Non-costly Remedial Action Optimization
RA	Remedial Action
RAO	Remedial Action Optimizer
RFI	Request for Information
RFP	Request for Proposal
ROSC	Regional Operational Security Coordination
RD&CT	Redispatching and Countertrading
RSC	Regional System Operator
TSO	Transmission System Operator
SHC	Simple Hybrid Coupling
SO GL	System Operation Guideline
SAT	Site Acceptance Testing
SIT	System Integration Testing
V1/V2	Version 1/ Version 2
XNE	Cross-border element