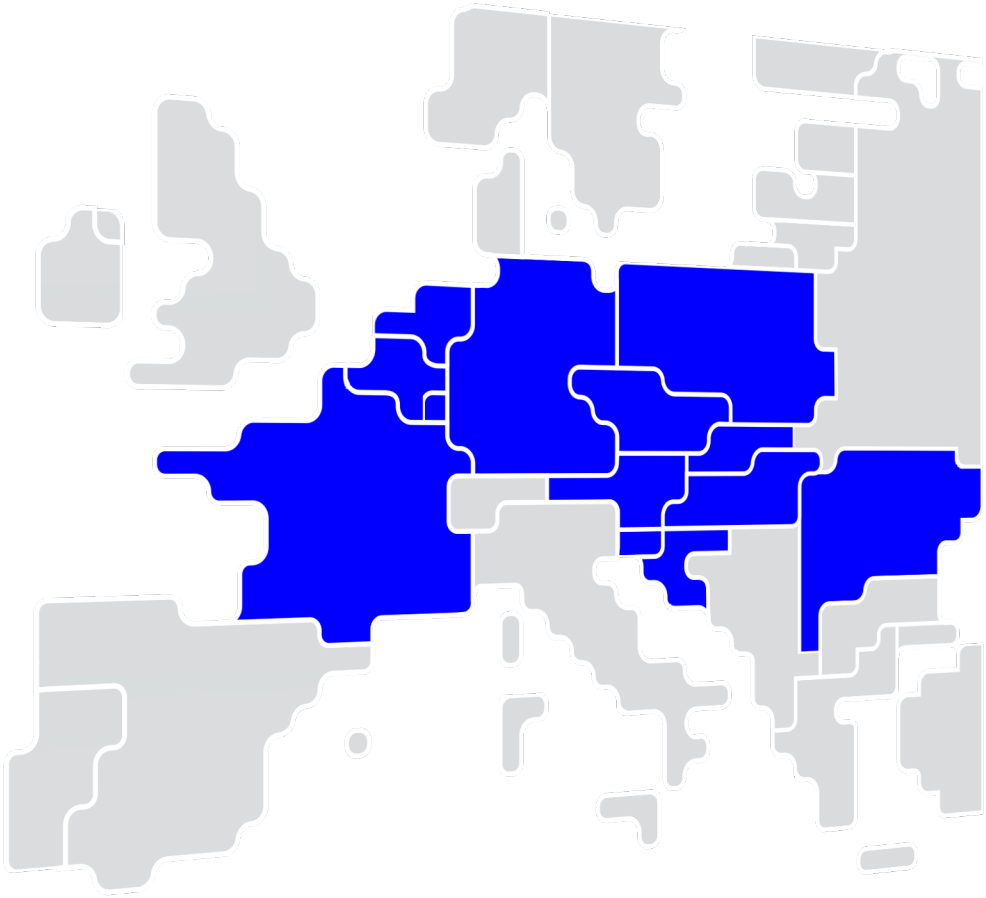
Core Consultative Group meeting

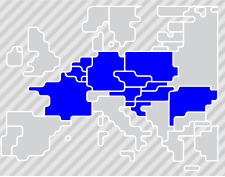
24th of June, 13:00 - 17:00

Conference call



1. Welcome and Introduction

List of participants



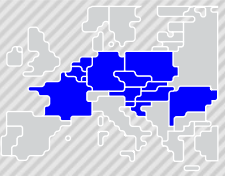
	PARTICIPANTS	REPRESENTING	COUNTRY
Market Parties	H. ROBAYE	Co-chair Core MPs (Eurelectric)	Belgium
	J. BAUER	AXPO	Switzerland
	M. HOREJSOVA	CEZ	Czech Republic
	R. TIMMER	Crossoptions	Netherlands
	O.VU DAC	Citadel	Belgium
	J. LE PAGE	EFET	EU
	Y. PHULPIN A. BERNARD	EDF	France
	G. MAES	Engie	Belgium
	E. WAGNER F. JUDEX	Energieallianz	Austria
	M. HAHN	ENERGIE AG	Austria
	R. OTTER	Energie Nederland	Netherlands
	J. STENPORT NORGAARD	Energinet	Denmark
	B. WALTER	ENWB	Germany
	H. HUBER	EVN	Austria
	M. VAN BOSSUYT	Febeliec	Belgium
	P. GORDON HELLER L. JAZBEC	GEN-I	Slovenia
	D. MARCIC	HEP	Croatia
	A. GUILLOU	MPP	EU
	R. NILSSON	Nordpool	Norway
	J. GUZIKOWSKI	PGE	Poland
	M. RAINER	Salzburg AG	Austria
	Y. LANGER	Smart Vision	Belgium
	M. WATSCHER D. WIBMER	TIWAG	Austria
	H. MARCIOT	UFE Electricite	France
	M. BONDE	Uniper Energy	EU
	S. MESSA	Wattsight	Norway

	PARTICIPANTS	REPRESENTING	COUNTRY
Core TSOs	B.GENÊT	Co-chair Core TSOs (Elia)	Belgium
	G.VISAN	Chairman Core TSOs	Romania
	G.MEUTGEERT	Convener FBDA CC	Netherlands
	S.VAN CAMPENHOUT	Core TSO expert	Belgium
	L. WITT	Core TSO expert	Germany
	M.TURCIK	Core SG member	Slovakia
	E.REN	Core SG member	France
	C.ZIMMER	Core TSO expert	Germany
	S.RAHMAN	JAO	Luxembourg
ACER	T. QUERRIOUX	ACER	EU
Core NRAs	Z. KOESSLDORFER	E-Control (Lead Core NRA)	Austria
	N.SCHOUTTEET C.VERHELST	CREG (Lead Core NRA)	Belgium
	S.BOUSSETTA	CRE (Lead Core NRA)	France
PMO	A.VAN DER MARK	Magnus RED	Netherlands

1. Welcome and introduction

Agenda

B.GENET/
H.ROBAYE

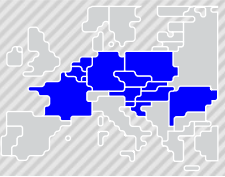


	SUBJECT	WHO	TIMING
1	**Welcome and Introduction**	B.GENET/ H.ROBAYE	13:00 – 13.10
2	**Transparency** • Status Transparency and publication solutions	S.VAN CAMPENHOUT	13:10 – 14:15
3	**Extended LTA inclusion** • The Extended LTA inclusion mechanism	S.VAN CAMPENHOUT	14:15 – 15:00
			break 15:00 – 15:30
4	**Core DA CCM amendment** • Changes in the CCM amendment	L.WITT	15:30 – 16:50
5	**AOB and Closure** • Next CCG meeting 07/10/2020 in Vienna	B.GENET/ H.ROBAYE	16:50 – 17:00

2. Transparency

Today's objective

S. VAN CAMPENHOUT

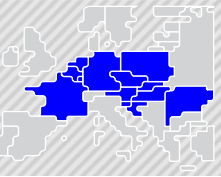


1. Update on the comparison of CWE vs. Core publication requirements to confirm 'no regression' approach
2. Feedback on the questions / requests raised during previous CG concerning CNEC data structure and RAs
3. Harmonization of publication names
4. Publication tool: generalities - roadmap – first Q&A

2. Transparency

1. Comparison Core and CWE transparency requirements - UPDATE

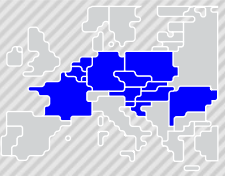
S. VAN CAMPENHOUT



During previous CG, a comparison table between Core and CWE was reviewed (see appendix), leading to some questions regarding data published in CWE but not present in the comparison table.

Core TSOs confirm that in CWE information is published which goes beyond Core CCM publication requirements. Core TSOs acknowledge this information – although not legally required – can be of added value for stakeholders and developed below proposal to maximally ensure there is no regression.

Not required by Core CCM	CWE	Proposal for Core
Congestion income	☑	Will be published
Price spread	☑	Will be published
ID ATC	☑	Will be published
ATC capacities *i.e. capacities available for market coupling on the HVDC borders external to Core and on ALEGrO (HVDC border internal in Core)*	☑	Will be published. Similar to CWE it concerns those borders for which JAO is used as publication platform by TSOs
FB parameters: virgin domain (initial computation)	☑	Will be published
FB parameters: virgin domain (final computation) *i.e. Final FB domain w/o LTA inclusion and w/o minRAM*	☑	Will **not** be published separately. The detailed breakdown of the final RAM contains the AMR and the LTAmargin parameters, allowing to deduce the virgin domain through post-processing
FB parameters: PTDFs (early publication) *i.e. the final PTDF values as these already known before the LTN shift takes place*	☑	Will be published



Publication of the attribute 'element name'

- In Core TSOs' view this is a 'nice to have'
  - The element name is an optional attribute in the grid model
  - It is not intended to act as 'identifier' of a CNE or contingency, which is the role of the EIC code
- Also, there is no 'quick win' to implement such change as the IT tooling has been set up from the start in such a way that the element name is fully embedded into the publication name
- In the best interest of ensuring a timely delivery of must-have requirements, Core TSOs do not see it reasonable to commit resources to this request

Contingency in case of tripod

- During previous CG, MPs raised the question how the publication of information will be managed when a contingency concerns multiple 'outages' at once
- Core TSOs understand this question as what will be published in case of the contingency being a tripod as indeed a tripod contains multiple branches (3 branches in case of a 'real' tripod, 2 branches in case of a tapped transfo situation)
- Core TSOs propose to multiply the data structure of the contingency such that each branch has its own columns in the publication. *An example is provided on the next slide.*

2. Transparency

2. Feedback on questions / requests raised during CG Apr 7th – CNEC data structure 2-2

Below screenshots provide a preliminary view on how the data items describing the CNECs would be structured in the new publication tool. The design of the publication tool is ongoing and hence the order of the columns, their labelling, and look and feel will further evolve.

A	B	C	D	E	F	G	H	I	J	K	L	M
			Information on the CNE									
FileId	DeliveryDate	Period	TSO	CNE_Name	EIC_Code	Direction	Hub From	Hub To	Substation From	Substation To	ElementType	FmaxType
0	20200610	1	D4	Eichstetten - Vogelgruen ge	XXXXXXXX	DIRECT	D4	FR	Eichstetten	Vogelgruen	Tie-Line	FIXED
						OPPOSITE						SEASONAL
						DIRECT						DYNAMIC

INFORMATION ON THE CONTINGENCY								
TSO	Contingency Name	BranchName1	EIC_Code_Branch1	Hub From	Hub To	Substation From	Substation To	ElementType
D4	Dellmensingen-Goldshoefe-Niederstotzingen	Y-Dellmensingen	11T0-0000-1010-I	D4	D4	Y Dellmensingen	Dellmensingen	Line

ADDITIONAL INFORMATION ON CONTINGENCY FOR USE CASE MULTIPLE BRANCHES													
BranchName2	EIC_Code_Branch2	Hub From_Branch2	Hub To_Branch2	Substation From_Branch2	Substation To_Branch2	ElementType_Branch2	BranchName3	EIC_Code_Branch3	...	...	...	...	...
Y-Goldshoefe	11T0-0000-1009-W	D4	D4	Y-Dellmensingen	Goldshoefe	line	Y-Niederstotzingen	11T0-0000-1008-Z					

2. Transparency

2. Feedback on questions / requests raised during CG Apr 7th – RAs

Based on the exchange during previous CG, Core TSOs categorize the request from MPs in 2 levels.

Level 1
Pragmatic implementation of daily publication requirements

Core TSOs will describe the **RAs used by the NRAO** in such way that is made clear what the RA does

- Type of RA: PST, topological, complex,…
- Location of RA: which line being opened/closed etc.
- Whether the RA is curative or preventive
- In case of curative RA, which CNECs are associated to it
- In case of PSTs: initial tap position and new tap position

Link daily publication and static grid model supported through a harmonized naming convention

Level 2
Holistic view on RAs usage throughout the CC process linking them to the grid model

Every 6 months a static grid model[1] is to be published. Yet publishing daily CGMs with RA settings before/after NRAO is clearly out of scope of Core CCM requirements.

Annual report(s) will however provide an overview of the RAs that each Core TSO has made available to the capacity calculation process.

[1] Core TSOs will work out the details of these static grid models, likely to be inspired on the approach from CWE.

2. Transparency

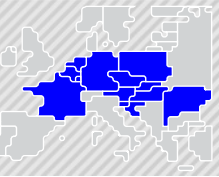
3. Harmonization of publication names 1-2

Context

- To maximize consistency and transparency, Core TSO have defined
  - Naming conventions for CNECs and Remedial Actions
  - These names are also used in the static grid models, allowing stakeholders to make the link between these static grid models and the daily publication of CNEC & RA data
- The implementation of these naming conventions will start during summer
- If this implementation reveals the need for updates, then Core TSOs will communicate this
- The aim is to have the implementation stabilized at the latest by the start of the EXT //-run

Naming conventions for CNECs

- Line: "AVELGEM-HORTA 380.101“
- PST: “PST ZANDVLIET 1”
- Tripod line: “Y-DELLMENSINGEN-HOHENECK-VÖHRINGEN rot”, where
  - The Y stands for the node connecting all three branches of the tripod.
  - The firstly mentioned substation after the Y defines the branch of the tripod that is monitored i.e. Dellmensingen to the Y-node in this case
  - Similar to the approach applied in CWE
- TSOs harmonize the descriptive name of cross-border network elements with their neighbors



Naming conventions for remedial actions - PST

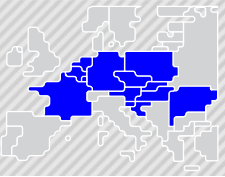
- PST_SubstationName_Enumeration (enumeration as in the static grid model)
- Examples: PST_DIELE_441; PST_VANYK_2

Naming conventions for remedial actions – topological

- Opening a line: TOP_OPEN_SubstationA_SubstationB_ElementIdentifier ➔ Example: TOP_OPEN_Mercator_Horta_73
- Closing a line: TOP_CLOSE_SubstationA_SubstationB_ElementIdentifier ➔ Example: TOP_CLOSE_Mercator_Horta_73
- Split in multiple nodes: TOP_#NODES_Substation ➔ Examples: TOP_2N_Dellmensingen; TOP_3N_VIGY
- Complex action
  - TOP_COMPLEX_SubstationA_SubstationB_SubstationC_...
  - Example: TOP_COMPLEX_GYOR_LITR_GABC
  - Core TSOs will also provide a description of what the complex RA does in terms of opening/closing lines between the different substations
- Some TSOs include an optional suffix '_PRA' or '_CRA' in case the RA is specifically designed to be applied only as PRA or CRA. The above example is such a case and should read "TOP_COMPLEX_GYOR_LITR_GABC_CRA"

Naming conventions for remedial actions – miscellaneous

- Special protection scheme: use prefix 'SPS' ➔ Example: SPS1_Pleinting_St. Peter Tr3



2. Transparency

4. Publication tool - generalities

The aim is to develop a modern website-based solution supporting web services.

The new tool will have far greater performance stability when compared to the existing Excel based Utility Tool in CWE.

Main functionalities:

- Web based solution
- Download/export functionality (csv etc.)
- Supporting web services

The new tool will avoid data being repeated to the extend possible, whereas in the Utility Tool from CWE such situations occur as the tool has organically grown over the years (for example, the sheets PTDF and Final FB domain contain redundant information).

2. Transparency

4. Publication tool - roadmap

Overview of key dates

- Vendor selection : June 2020
- Planned internal delivery of publication tool: October 2020

The focus will be to follow an iterative methodology by developing and deploying the pre-coupling operational data publication sections - development of post-coupling and other additional flow publications will follow suit.

This ensures that publication of pre-coupling flows can be tested earlier than the post-coupling (and other additional flows) in time to facilitate the external parallel run.

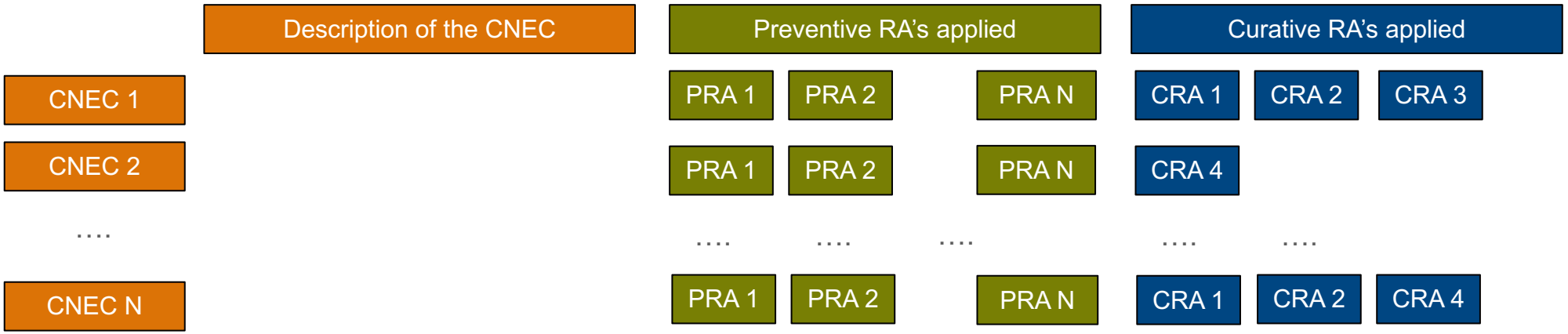
Further detailed development and implementation dates of the publication tool will be shared after further alignment with vendor.

2. Transparency

4. Publication tool – first Q&A

Question to MPs: for the publication of RAs one option is to structure the data as a mapping between the CNECs and both the preventive RAs and curative RAs.

What is MPs feedback on such approach?

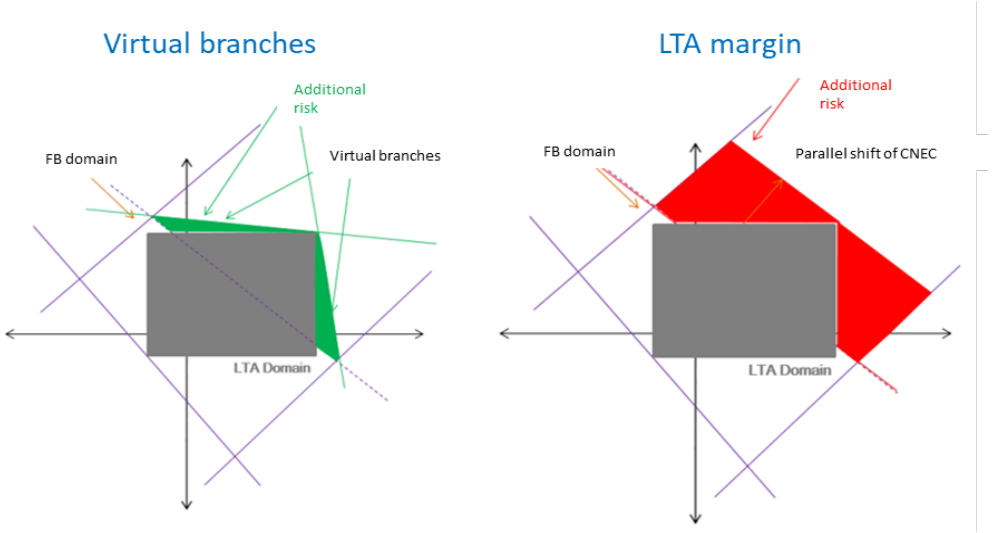


3. Extended LTA inclusion

From CWE to Core

Following the DE-AT split and the introduction of the ALEGrO interconnector, the lack of scalability of the CWE system and the performance challenge for Euphemia became apparent.

- This is a direct consequence of the so called “virtual branch” methodology used in CWE to perform LTA inclusion.
- Consequently a more rough method for LTA inclusion, the LTA margin approach, has been depicted in the Core CCM, which at the time of writing the Core CCM was the only known option.



Driven by the need to find a solution for CWE, an R&D track with N-SIDE under SDAC governance successfully elaborated a more performant way by doing the LTA inclusion directly in Euphemia, called **extended LTA inclusion**

- Extended LA inclusion will be used in CWE from the introduction of Euphemia 10.5 onwards.

The development of extended LTA inclusion is considered very promising by the Core TSOs as it implies less virtual enlargement compared to the LTA margin approach (hence leading to a more secure domain) while still allowing market trades within the LTA Domain.

3. Extended LTA inclusion

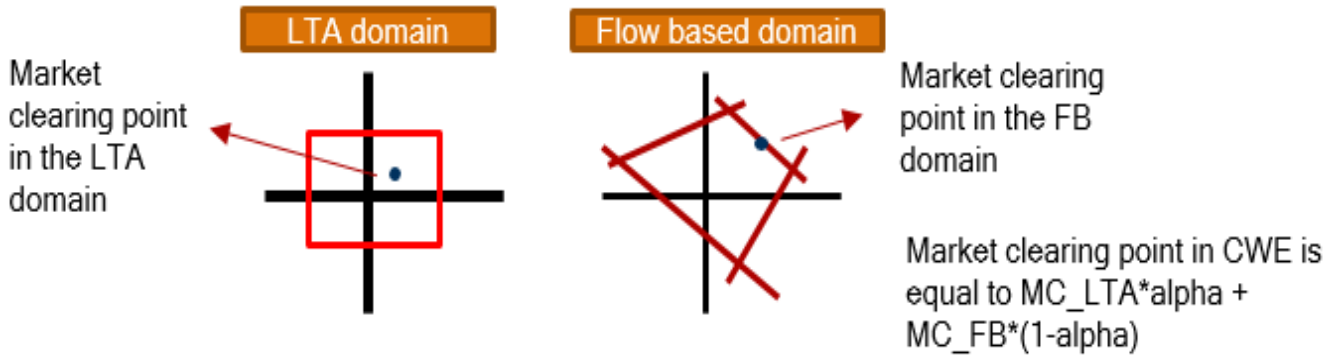
The Balas formulation

In the extended LTA inclusion approach, the market coupling algorithm Euphemia receives two domains as input from the capacity calculation process:

1. A “virgin” flow-based domain, with minRAM inclusion yet without LTA inclusion
2. The LTA domain as a set of bilateral exchange restrictions covering the previously allocated cross-zonal capacities

Euphemia does not create an LTA included domain. Instead of performing the complex mathematical action of creating the union of the virgin FB domain and the LTA domain, Euphemia “chooses” which combination of both domains creates most social welfare.

- An optimization variable alpha defines the optimal share of the LTA domain (alpha) versus the optimal share of virgin FB domain (1 – alpha)
- This optimization is called the “Balas formulation”
- Mathematical formulation can be found in the enclosed document LTA_inclusion_description_202004.pdf

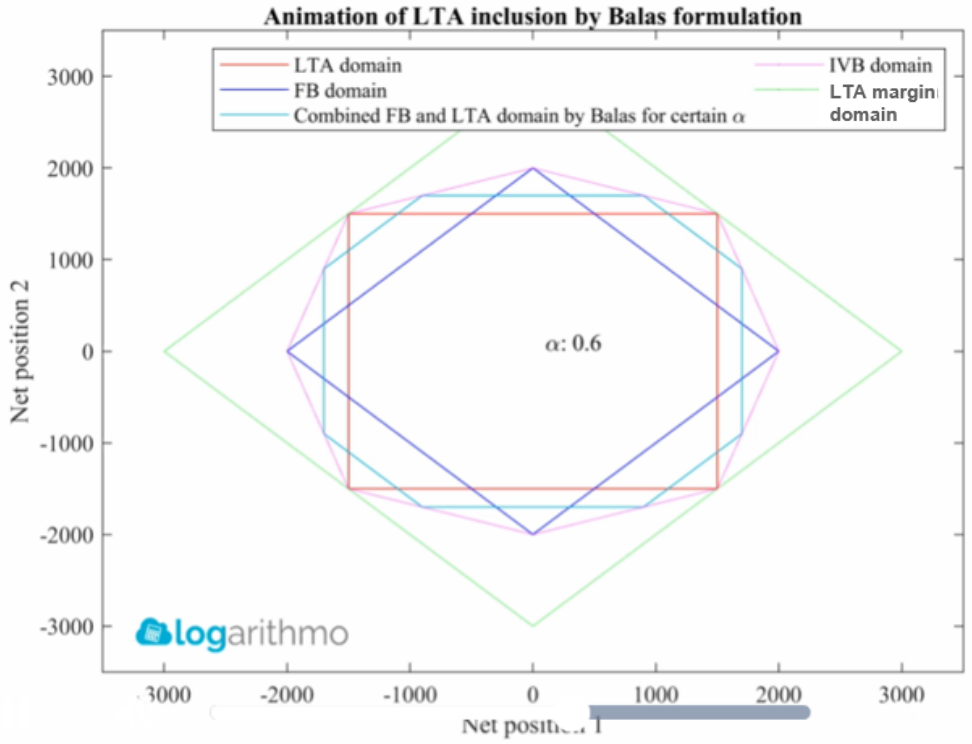


3. Extended LTA inclusion

Illustration of the Balas formulation

Video exemplifying the extended LTA inclusion method

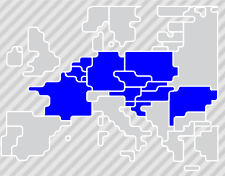
- https://fileserver.logarithmo.de/s/dJNRbzsDQjcKLi6



- You can find in blue and in red respectively the FB domain and the LTA domain given as inputs to the market coupling
- The pink domain represents the domain when applying virtual branches to do LTA inclusion (CWE method)
- The green (outer) domain represents the domain when applying LTA margin to do LTA inclusion (current Core method)
- As you can see in the animation, the cyan domain is the linear combination of the blue and the red domain considering different values of alpha. *The cyan domain is added for illustration purpose only, Euphemia does not produce this domain*

3. Extended LTA inclusion

Next steps



To prepare decision-making on the implementation (if and when) of the extended LTA inclusion approach for Core, Core TSOs are developing the necessary technical and regulatory dimensions.

Technical: Core TSOs are performing a feasibility analysis to

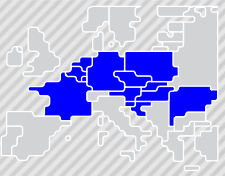
- Confirm the proper functioning of extended LTA approach using Core domains as input for Euphemia
- Assess the gain in terms of reduction of congestion risk

Technical: Core TSOs have performed an impact analysis on the capacity calculation and post-coupling processes and are evaluating solutions to enable a design with extended LTA inclusion. The most notable impacts are related to

- Individual validation, which revolves around selecting one or more market clearing points ('MCPs') which are on the FB domain and validate their feasibility
- ATC extraction for Shadow Auctions and for ID
- In this respect there is a **key difference between CWE and Core**: whereas in CWE for the purpose of validation, ATC extraction, FB domain publication etc., the LTA included domain continues to be created using the virtual branches, this is simply not an option in Core due to the higher dimensionality of the Core setting (unsolved mathematical challenge of creating a convex hull in high dimensions)

Regulatory: Core TSOs include the extended LTA inclusion as **an option** in their proposal for amendment of the Core CCM

Break 15:00 - 15:30



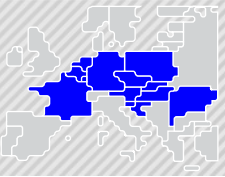
Core TSOs will submit a proposal for amendment of the Core DA CCM, reflecting the different discussions and outcomes Core TSOs had in alignment with Core Regulators in the last months as well as including the third country approach, the extended LTA inclusion approach and the updated Core FB DA go-live timing.

The main scope foreseen for this amendment is described below

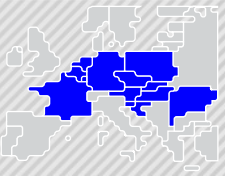
- **Reporting requirements, post Go-live studies and some ad-hoc topics**
- **Extended LTA inclusion**
  - The possibility to deliver the capacity calculation process according to the extended LTA inclusion approach (separating the LTA domain from the FB domain) is added
- **Third country integration** - describing the technical approach to include third countries.
  - The actual utilisation of the related provisions will be made conditional to a contractual agreement among all involved parties, setting the rights and obligations of the parties
  - In any case, actual implementation will be done after to Go-live of the Core DA CCM.
- **Core CCM adjustment regarding the Go-live timing**
  - In order to provide clarity to the market participants by reflecting correctly the communicated Go-live window.

- The proposal for amendment will include the updated articles or paragraph, a track change version will be attached to the explanatory document for informative purpose.
- Public Consultation is supposed to start beginning of July 2020.

Today Core TSOs would like to share an overview on content to be included in the proposal for amendment.

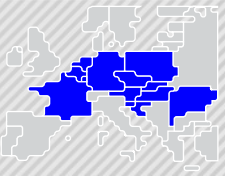


Article	AMENDMENT ITEM	DIRECTION OF CHANGE
Art. 05(8)c	**Post Go-Live study on CNEC Selection**	The two bullet points "reconfiguration of bidding zones" and "network investment" shall be left out.
Art. 08(3)	**FRM assessment**	A lower and an upper bandwidth for conducting the FRM assessment and allow for fixation of FRM based on computation of bandwidth.
Articles 2, 18,19,20, 21,22,23 and 25	**Extended LTA Inclusion**	Several Articles to be amended to reflect extended LTA inclusion approach in the Core DA CCM. → See more details in the next slide
Articles 2, 4, 11, 14 and 20	**Third country integration**	Third countries outside Core who have an agreement can also include some additional CNECs in the process, and they are subject to the same conditions than Core TSOs. → See more details in the next slide
Art. 20(13)(i)	**Quarterly report-Coordinated/Individual Validations**	This reporting measures to avoid similar reductions in the future shall be removed, as they are part of an action plan / derogation
Art. 20(13) (e), (f)	**Quarterly report-Coordinated/Individual Validations**	This reporting requirement on forecasted flows in the CGM, D-1 CGM and realized flows shall be removed. In Art. 20(13)(f) reference in this requirement to the part where it refers to "(e)" shall be removed.
Art. 20(6)	**Validation of FB parameters**	Description of PTDF value of these additional CNECs is added: • PTDF values from the initial FB computation must be used to determine if the PTDF of the additional CNEC is above the PTDF threshold. • Yet, the PTDF value from intermediate FB computation is considered for the application of the additional CNEC during the final flow-based computation
Art. 22	**Fallback procedure**	Article adjusted to re-use outcomes of initial computation to run the final FB computation instead of following the fallback procedure.
Art. 22 (b)	**Default flow-based parameters**	Article shall be amended to use bilateral exchange restrictions.
Art. 25(2)(d)(xiii)	**Computation of Core NPs per BZ instead of per Core TSO**	Computation per TSO will be left out.
Art. 25(2)(e), Art. 27(5)(d)	**Flows resulting from net positions resulting from SDAC**	Articles amended to include this obligation in the quarterly reports, so it can be computed outside the operational system and avoid having to create new and additional interfaces.
Art. 28	**Go-live change**	Reflecting the latest moment of the Go-Live-Window (Sept. 30 2021) Core TSOs communicated in July 2019



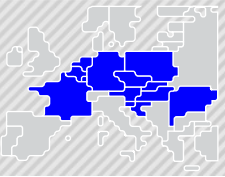
Description of changes for third country integration

Article	AMENDMENT ITEM	DIRECTION OF CHANGE
Art. 2	**Third country integration**	New definitions of: • A 'technical agreement' among Core TSOs and a third party TSO on the technical consideration of the third party TSO's network in Core DA capacity calculation; • A 'technical counterparty', a TSO who is not a Core TSO and who has signed a technical agreement with all Core TSOs
Art 20(6a.)	**Third country integration**	Inclusion of a paragraph granting a technical counterparty the right to add a network element with a specific contingency to the final list of CNECs under specified conditions
Art. 4	**Third country integration**	Inclusion of paragraph explaining that technical counterparties will also provide input data to the DA CC process in order to execute the right pursuant to (new) Article 20(6a.), but that this input provision will be regulated separately
Art 11	**Third country integration**	Inclusion of paragraph explaining the PTDF calculation steps applied by the CCC for the network elements and contingencies from technical counterparties pursuant to (new) Article 20(6a.)
Art. 14	**Third country integration**	Inclusion of paragraph explaining that the steps described in paragraphs 14 (1-3) are applied for network elements and contingencies from technical counterparties pursuant to (new) Article 20(6a.)



Description of changes for extended LTA inclusion

Article	AMENDMENT ITEM	DIRECTION OF CHANGE
Whereas (24)	**Extended LTA inclusion**	Introduce the objective of ensuring previously-allocated cross-zonal capacities can be accommodated and how this is playing out for extended LTA inclusion.
Art. 2	**Extended LTA inclusion**	Added definitions for ‘cross-zonal capacity’ and ‘LTA domain’
Art 18	**Extended LTA inclusion**	Introduce the optionality to perform LTA inclusion with new formula’s detailing • how the FB parameters prior to validation are calculated • how the validation is performed
Art 19	**Extended LTA inclusion**	
Art 20	**Extended LTA inclusion**	
Art 21	**Extended LTA inclusion**	Added a requirement to publish the LTA domain on top of the final FB parameters, its relevancy for both the adapted default flow-based parameter approach as well as the extended LTA inclusion approach
Art 22	**Extended LTA inclusion**	Clarification what the LTA domain contains when default flow-based parameters are triggered and Extended LTA inclusion approach is applied
Art 23	**Extended LTA inclusion**	Paragraph added to stipulate that in case extended LTA inclusion approach is applied the ATCs for SDAC fallback procedure are set equal to LTAs for each Core oriented bidding zone border – *this solution may be revised should ongoing feasibility analysis conclude an alternative solution is possible*
Art 25	**Extended LTA inclusion**	Minor clarification that the publication of LTA margin as part of CNEC breakdown is conditional, eg. in case of extended LTA inclusion approach it is not applicable

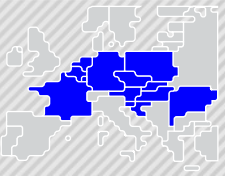


Next Core Consultative Group meeting

- Date: October 7th
- Location: Vienna or conf call. To be decided.
- Agenda items
  - Overall Core CCR project status update
  - FB DA
    - Transparency
    - LTA
  - FB Day Ahead Market Coupling
    - Status
    - Core MC Ext//run and member testing

1. Transparency

Comparison Core and CWE transparency requirements



Please find in the following slides the comparison between Core and CWE, taking the Core publication requirements as listed in Art 25 of Core CCM as reference.

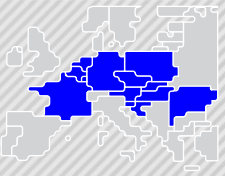
- GREEN → Core will & CWE publish the parameter
- GREY → Core will publish the parameter, not applicable to CWE / CWE FB DA as it does not have this parameter
- ORANGE → Core will publish the parameter, CWE does not publish the parameter

CORE CCM Obligation	CWE	Comment
FB parameters before long term nominations (no later than 8:00 market time of D-1)	☑	
Long term nominations for each Core BZ border where PTRs are allocated	☑	
Final FB parameters	☑	
Max and Min NP of each BZ	☑	
Max possible bilateral exchanges between all pairs of Core BZs	☑	
ATCs for SDAC fallback procedure	☑	
Names of CNECs (with geographical names of substations where relevant and separately for CNE and contingency) and external constraints of the final flowbased parameters before pre-solving and the TSO defining them	☑	information can be withheld if justified (replaced by anonymous identifier); TSO identifier codified
For each CNEC of the final flow-based parameters before pre-solving, the EIC of CNE and Contingency	☑	information can be withheld if justified (replaced by anonymous identifier)
For each CNEC of the final flow-based parameters before pre-solving, the method for determining Imax	☒	

* The information should be published no later than 10:30 market time of D-1, if not stated otherwise

1. Transparency

Comparison Core and CWE transparency requirements

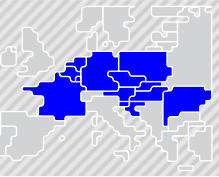


Detailed breakdown of RAM for each CNEC of the final flow-based parameters before pre-solving:		
Imax	☑	included in static grid model
U	☑	included in static grid model
Fmax	☑	
FRM	☑	
Fref,init (reference flow calculated during initial FB computation)	☑	
Fnrao (expected flow change due to non-costly remedial actions optimisation)	☒	
Fref	☑	
F0,Core (flow per CNEC without commercial exchanges within Core)	☑	if there are just FTRs, F0,CWE = Fref', Fref' is published.
F0,all (flow per CNEC without any commercial exchange)	☒	
Fuaf (flow per CNEC assumed to result from commercial exchanges outside Core CCR)	☒	
AMR	☑	
LTAmargin (flow margin for LTA inclusion)	☒	
CVA (coordinated validation adjustment)	☒	coordinated validation does not exist in CWE
IVA (individual validation adjustment)	☑	Can be interpret as FAV/AMR in CWE
FLTN (expected flow after LTN)	☑	Publication of minRAM Factor and minRAMFactor Justification fulfill this requirement in CWE

* The information should be published no later than 10:30 market time of D-1, if not stated otherwise

1. Transparency

Comparison Core and CWE transparency requirements

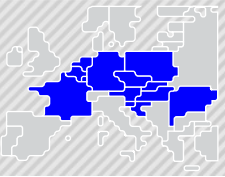


Detailed breakdown of the RAM for each CNEC before pre- solving:		
Fmax	☑	
FLTN	☑	Can be interpret as Fref' in CWE
Indication of whether spanning and/or default flow-based parameters were applied	☑	
Indication of whether a CNEC is redundant or not	☑	
Information on validation reductions:		
Identification of the CNEC	☑	Individual validation reduction can be interpret as FAV/AMR in CWE
In case of reduction due to individual validation, the TSO invoking the reduction;	☑	With the new IT release, MPs can see on which TSOs CNEC the FAV/AMR is applied
The volume of reduction (CVA or IVA);	☑	Can be interpret as FAV/AMR in CWE, no CVA in CWE
The detailed reason(s) for reduction in accordance with Article 20(5), including the operational security limit(s) that would have been violated without reductions, and under which circumstances they would have been violated;	☑	AMR justification gets published, FAV justification is send to NRAs, no CVA in CWE
If an internal network elements with a specific contingency was exceptionally added to the final list of CNECs during validation: (i) a justification of the reasons of why adding the internal network elements with a specific contingency to the list was the only way to ensure operational security, (i) the name or identifier of the internal network elements with a specific contingency	☒	

* The information should be published no later than 10:30 market time of D-1, if not stated otherwise

1. Transparency

Comparison Core and CWE transparency requirements



For each RA resulting from the NRAO:		
Type of RA	☒	currently no RA published in CWE
Location of RA	☒	
Whether RA was curative or preventive	☒	
If curative a list of CNEC identifiers describing the CNECs to which the RA was associated	☒	
The forecast information contained in the CGM:		
Vertical load for each Core bidding zone and each TSO;	☑	D2CF in CWE
Production for each Core bidding zone and each TSO;	☑	
Core net position for each Core bidding zone and each TSO;	☑	
Reference net positions of all bidding zones in synchronous area Continental Europe and reference exchanges for all HVDC interconnectors within synchronous area Continental Europe and between synchronous area Continental Europe and other synchronous areas	☒	not all NPs available, for HVDC no refprog
For each CNEC and external constraint of the final FB parameters:		
Shadow prices (published no later than 14:00 market time of D-1)	☒	Joint Nemo Level
Flows resulting from the NPs resulting from the SDAC (published no later than 14:00 market time of D-1)	☒	Joint Nemo Level
Miscellaneous		
Publication of an up to date static grid model by each TSO	☑	
Tool which enables MPs to evaluate interaction btw CZ capacities and CZ exchanges	☑	

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