

## Action plans: Overview and main characteristics

Country	TSOs	Structural congestion report		Action plan		Relevant CCA	Bidding zone borders or CNECs	Point of linear trajectory in min MACZT % (= MACZTtarget)					Remarks	
		TSO report published	Date of NRA approval	Approval by Member State	Starting/end date of action plan			2020	2021	2022	2023	2024		2025
AT	APG	Yes, HOTSPOT BERICHT on E-Control's website [11]	24/09/2020 [12]	22/12/2020 [14]	01/01/2021 - 31/12/2025	CWE (from 9 June 2022: Core)	CWE CNECs (from 9 June 2022: Core CNECs)	NA	20.0%	28.7%	39.0%	49.4%	59.7%	
						AT-CZ_HU_SI (AT side) (from 9 June 2022: Core), Italy North	• APG's NTC bidding zone borders in Core: AT-CZ, AT-HU, AT-SI • APG's CNECs in Italy North	NA	18.4%					
DE	TenneT DE, Amprion, TransnetBW, 50Hz, Baltic Cable AB	Yes, 04/07/2019 [4]	28/11/2020 [5]	Sent to ACER 18/12/2019 [6] [7]	01/01/2020 - 31/12/2025	CWE (from 9 June 2022: Core)	• CWE CNECs (from 9 June 2022: Core CNECs) • ALEGrO	11.5% (and 20% minRAM)	21.3%	31.0%	40.8%	50.5%	60.3%	
						DE-CZ_PL (from 9 June 2022: Core)	• DE-PL • DE-CZ	11.5%	21.3%	31.0%	40.8%	50.5%	60.3%	
						DE-DK1_NO2 (DE side) (future Hansa)	DE-DK1	23.9% from linear trajectory based per CNEC [8]	31.6% from linear trajectory based per CNEC [8]	39.4% from linear trajectory based per CNEC [8]	47.0% from linear trajectory based per CNEC [8]	54.6% from linear trajectory based per CNEC [8]	62.3% from linear trajectory based per CNEC [8]	In addition to the action plan the TenneT 's commitment also applies [8]
						DE-DK2 (DE side) (future Hansa)	Kontek	70%	70%	70%	70%	70%	70%	No linear trajectory
						DE-DK1_NO2 (DE side) (future Hansa)	DE-NO2	0%	11.7%	23.3%	35.0%	46.7%	58.3%	
						DE-SE4 (DE side) (future Hansa)	DE-SE4	41.4%	46.2%	50.9%	55.7%	60.5%	65.2%	
HR	HOPS	Yes, September 2021 [16]	12/11/2021 [17]	25/02/2022	25/02/2022 - 31/12/2025	HR-HU (HR side), HR-SI (HR side) (from 9 June 2022: Core)	HR-HU, HR-SI	NA	NA	20.4%	32.8%	45.2%	57.6%	
HU	MAVIR	No	29/06/2021	16/12/2021	01/01/2022 - 31/12/2025	AT-HU (HU side), HR-HU (HU side), HU-RO (HU side), HU-SK (HU side) (from 9 June 2022: Core)	Oroszlány–Dunamenti	NA	NA	25.0%	36.25%	47.50%	58.75%	
						Oroszlány–Győr	25.0%			36.25%	47.50%	58.75%		
						Győr-Neusiedl	25.0%			36.25%	47.50%	58.75%		
						Győr-Vienna	25.0%			36.25%	47.50%	58.75%		
Paks–Sándorfalva		33.0%	42.25%	51.50%	60.75%									

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		TSO report published	Date of NRA approval	Approval by Member State	Starting/end date of action plan			2020	2021	2022	2023	2024	2025	
NL	TenneT NL	Yes, annex of NRA decision [1]	15/11/2019 [2]	Yes, published December 2019 [3]	01/01/2020 - 31/12/2025	CWE (from 9 June 2022: Core)	CWE CNECs (from 9 June 2022: Core CNECs)	min: 20%, max: 70%, mean: 26%, median: 20%	min: 28%, max: 70%, mean: 33%, median: 28%	min: 37%, max: 70%, mean: 41%, median: 37%	min: 45%, max: 70%, mean: 48%, median: 45%	min: 53%, max: 70%, mean: 55%, median: 53%	min: 62%, max: 70%, mean: 63%, median: 62%	MACZT target defined based on average MCCC for CWE. MNCC contribution not considered
						GB-NL (NL side) (future Channel)	NL-GB	70%	70%	70%	70%	70%	70%	No linear trajectory
						DK1-NL (NL side) (future Hansa)	NL-DK1	70%	70%	70%	70%	70%	70%	No linear trajectory
						NL-NO2	NL-NO2	70%	70%	70%	70%	70%	70%	No linear trajectory
PL	PSE	No	07/08/2019 [9]	17/12/2019 [10]	01/01/2020 - 31/12/2025	PL-CZ_DE_SK (from 9 June 2022: Core)	• PL- DE • PL-CZ • PL-SK	min: 0%, max: 29%	min: 12%, max: 36%	min: 23%, max: 43%	min: 35%, max: 52%	min: 47%, max: 58%	min: 58%, max: 64%	
						LT-PL (PL side) (future Baltic)	PL-LT	70%	70%	70%	70%	70%	70%	No linear trajectory
						PL-SE4 (PL side) (future Hansa)	PL-SE4	70% for SE4-PL 40% for PL-SE4	70% for SE4-PL 45% for PL-SE4	70% for SE4-PL 50% for PL-SE4	70% for SE4-PL 55% for PL-SE4	70% for SE4-PL 60% for PL-SE4	70% for SE4-PL 65% for PL-SE4	
RO	Transelectrica	Yes, as annex to NRA decision [13]	11/11/2020 [13]	28/07/2021 [15]	01/01/2021 - 31/12/2025	RO borders (from 9 June 2022: Core)	RO-HU	NA	33%	41%	48%	55%	63%	
						RO borders (South-East Europe, SEE)	RO-BG	NA	25%	34%	43%	52%	61%	

Notes referred to in the table:

- 1 <https://www.acm.nl/sites/default/files/documents/goedkeuring-structurele-congestierapport-tennet-tso-def.pdf>
- 2 <https://www.acm.nl/nl/publicaties/goedkeuring-structurele-congestierapport-tennet-tso>
- 3 <https://open.overheid.nl/repository/ronl-d8f4ee65-019a-4bb1-aa17-f883fd467966/1/pdf/Actieplan%20Verhoging%20beschikbaarheid%20zone-overschrijdende%20transportcapaciteit%20elektriciteitshandel.pdf>
- 4 [https://www.bundesnetzagentur.de/DE/Service-Funktionen/Beschlusskammern/BK04/BK4\\_91\\_Weiteres/Engpassbericht/190704\\_4\\_UENB\\_Engpassbericht\\_final\\_BA.pdf?\\_\\_blob=publicationFile&v=3](https://www.bundesnetzagentur.de/DE/Service-Funktionen/Beschlusskammern/BK04/BK4_91_Weiteres/Engpassbericht/190704_4_UENB_Engpassbericht_final_BA.pdf?__blob=publicationFile&v=3)
- 5 Bericht gemäß Artikel 14 Absatz 7 der Verordnung (EU) 2019/943 (bundesnetzagentur.de)
- 6 <https://www.bmwi.de/Redaktion/DE/Downloads/A/aktionsplan-gebotszone.html>
- 7 [https://www.bmwi.de/Redaktion/EN/Downloads/a/action-plan-bidding-zone.pdf?\\_\\_blob=publicationFile&v=6](https://www.bmwi.de/Redaktion/EN/Downloads/a/action-plan-bidding-zone.pdf?__blob=publicationFile&v=6)
- 8 In 2020 the starting point is 428 MW, but that might change with new lines. The minimum 1300 MW as "TenneT's commitment" from DG COMP applies in addition to the starting point.
- 9 <https://www.gov.pl/web/aktywa-panstwowe/plan-dzialania-przyjety-przez-kse>
- 10 Adopted for implementation on December 17, 2019 First page of [www.gov.pl/attachment/8f1ecd1b-e974-4562-8768-219f7051a8cf](http://www.gov.pl/attachment/8f1ecd1b-e974-4562-8768-219f7051a8cf)
- 11 <https://www.e-control.at/documents/1785851/0/Beilage+1+-+Hotspot+Bericht+gem+Art+14+Abs+7+EU+VO.pdf/cc107b19-4ad5-2404-1521-4afe3f268f1f?e=1601447284360>
- 12 [https://www.e-control.at/documents/1785851/0/V+ELBM+03\\_20+Bescheid\\_Hot+Spot+Bericht+Art.+14\\_7+final+1v0+20200922.pdf/359d1d42-2441-0da0-63ba-8bd563cca3ef?e=1601447251935](https://www.e-control.at/documents/1785851/0/V+ELBM+03_20+Bescheid_Hot+Spot+Bericht+Art.+14_7+final+1v0+20200922.pdf/359d1d42-2441-0da0-63ba-8bd563cca3ef?e=1601447251935)
- 13 <https://www.anre.ro/ro/energie-electrica/legislatie/coduri-paneuropene/1476186098/regulamentul-ue-nr-943-2019>
- 14 [https://www.bmk.gv.at/themen/energie/europ\\_int/eu/action\\_plan.html](https://www.bmk.gv.at/themen/energie/europ_int/eu/action_plan.html)
- 15 [https://www.transelectrica.ro/documents/10179/9534702/Plan+de+actiuni+-+final\\_30.03.2021.pdf/78972b81-ca90-4fab-ad4d-055f1c54b7f8](https://www.transelectrica.ro/documents/10179/9534702/Plan+de+actiuni+-+final_30.03.2021.pdf/78972b81-ca90-4fab-ad4d-055f1c54b7f8)
- 16 <https://www.hops.hr/page-file/LZxcHva9YQDRWJSRW45Zb6/podzakonski-akti/HOPS%20izvje%C5%A1%C4%87e%20o%20struktturnim%20zagu%C5%A1enijima.pdf>
- 17 [https://www.hera.hr/hr/docs/2021/Odluka\\_2021-11-12\\_02.pdf](https://www.hera.hr/hr/docs/2021/Odluka_2021-11-12_02.pdf)
- 18 In accordance with Commission Decision (EU) 2020/2123, the minimum value in percent is applied to the available transmission capacity after deducting the forecast feed-in from the offshore wind farms.

## Derogation requests for 2020: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request						
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Included minimum level of MACZT	Minimum level specified	Monitoring requirement (including frequency)	Includes a timeline for the adoption of the methodology	Includes a timeline for the projects	Alignment and harmonisation in Capacity Calculation Region (CCR)	Derogation request includes explanation why TSO cannot publish methodology
AT	APG	CWE, AT-CZ_HU_SI (AT side)	<ul style="list-style-type: none"> <li>• APG's CNECs in CWE</li> <li>• APG's NTC bidding zone borders in Core: AT-CZ, AT-HU, AT-SL</li> </ul>	<ul style="list-style-type: none"> <li>• Insufficient concepts and IT tools</li> <li>• Insufficient redispatch potential</li> <li>• Uncertainties due to external flows from 3rd countries</li> <li>• Loop flows and Phase Shifting Transformer (PST) flows</li> <li>• Uncertainties due to absence of common coordinated forecast process</li> </ul>	None	Approved by E-Control. Date of decision: 13/12/2019	1 year	Yes	For NTC borders (AT/CZ, AT/HU and AT/SI): Per border and direction the values that are at least on the same level (on average per border and per direction) as in the last three years. For the Flow Based (FB) border (AT/DE): 20% of Fmax per CNEC for cross-zonal trades within the CWE region and the currently applied process of the long-term capacity inclusion.	Yes, biannually	No	Yes, for Core FB Capacity Calculation Methodology (CCM): mid 2021	No	NA
		Italy North, AT-CZ_HU_SI (AT side)	APG's CNECs in Italy North	<ul style="list-style-type: none"> <li>• Insufficient concepts and IT tools</li> <li>• Insufficient redispatch potential</li> <li>• Uncertainties due to external flows from 3rd countries</li> <li>• Loop flows and PST flows</li> <li>• Uncertainties due to absence of common coordinated forecast process</li> </ul>	None	Approved by E-Control. Date of decision: 13/12/2019	1 year	Yes	NTC values that are at least on the same level (on average per direction) as in the last three years.	Yes, biannually	No	Yes, for development of new processes and tools: end 2020	Yes	NA
BE	Elia	CWE	Elia's CNECs in CWE	<ul style="list-style-type: none"> <li>• Loop flows</li> <li>• Lack of redispatching potential in case of planned outage for grid reinforcement</li> <li>• Development of new processes and tools</li> </ul>	None	Approved by CREG. Date of decision: 05/12/2019	1 year for loop flows and lack of redispatching potential, 3 months for development of new processes and tools	Methodology	<ul style="list-style-type: none"> <li>• MACZTmin = 70% - max(0; LFacalculated - LFacacceptable)</li> <li>• LFacacceptable is 30%-FRM for cross-zonal CNECs and 50% of (30%-FRM) for internal CNECs, all exchanges considered</li> <li>• Minimum 20% of Fmax in CWE</li> </ul>	Yes, no frequency specified	Yes, 01/04/2020	Yes, for process and tools: 01/04/2020	Partially in CWE	NA
BG	ESO EAD	BG-GR (BG side), BG-RO (BG side) (future SEE)	<ul style="list-style-type: none"> <li>• BG-GR</li> <li>• BG-RO</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of physical power flows with neighbouring non-EU countries</li> <li>• Current inability to apply SEE CCR methodology for coordinated capacity calculation</li> <li>• ESO EAD has no operational experience on the technical implications of conducting a re-dispatching action to increase cross-zonal capacity</li> <li>• Technical limitations of cross-zonal power flows</li> <li>• Projects for long-term solution - construction of new 400kV transmission lines</li> </ul>	None	Approved by EWRC. Date of approval: 28/10/2020	2 years from the date of approval (28/10/2020 to 28/10/2022)	No	NA	No	No	No	Yes	NA
CZ	CEPS	CZ borders (future Core)	Not defined	<ul style="list-style-type: none"> <li>• Absence of CACM-compliant CCM (cNTC or FB)</li> <li>• Loop flows</li> <li>• Development and testing of significant methodological changes in CCMs and Capacity Allocation Mechanisms (CAMs)</li> <li>• ACER Recommendation does not take interdependencies between bidding zone borders into account</li> <li>• Level of available capacity cannot be calculated</li> </ul>	None	Approved by ERO. Date of decision: 11/12/2019	1 year	No	NA	No	No	No	No	NA

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				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Included minimum level of MACZT	Minimum level specified	Monitoring requirement (including frequency)	Includes a timeline for the adoption of the methodology	Includes a timeline for the projects	Alignment and harmonisation in Capacity Calculation Region (CCR)	Derogation request includes explanation why TSO cannot publish methodology
ES	REE	ES- FR (ES side) and ES-PT (ES side) until 28/01/2020, SWE from 29/01/2020 onwards	<ul style="list-style-type: none"> <li>ES-FR</li> <li>ES-PT</li> </ul>	<ul style="list-style-type: none"> <li>Development of new tools for assess in a coordinated manner and validate the potential available remedial actions (considering the already existing grid and generation assets)</li> <li>Implementation of SWE CCM (go-live January 2020)</li> <li>Development and implementation of monitoring tools to better calculate margin</li> </ul>	None	Approved by CNMC. Date of decision: 17/12/2019	1 year	No	NA	Yes, quarterly	No	Yes, for development of SWE D-2 CCM: January 2020	Yes	NA
FR	RTE	CWE	RTE's CNECs in CWE	<ul style="list-style-type: none"> <li>Uncertainties due to external flows from neighbouring CCRs and 3rd countries</li> <li>Development of new processes and tools</li> </ul>	None	Approved by CRE. Date of decision: 12/12/2019	6 months (01/01/2020-30/06/2020)	Yes	20% of Fmax	Yes, every two months	No	Yes, until 30/06/2020	Partially in CWE	NA
			RTE's CNECs in CWE	The main driver for this derogation is the impact of Covid-19 into the technical roadmap targeted six months before.	None	Approved by CRE. Date of decision: 18/06/2020	6 months (01/07/2020-31/12/2020)	No	20% of Fmax	Yes, every month	No	Yes, until 01/01/2021	No	NA
		ES-FR (FR side) until 28/01/2020, SWE from 29/01/2020 onwards	FR-ES	<ul style="list-style-type: none"> <li>Development of new tools for assess in a coordinated manner and validate the potential available remedial actions (considering the already existing grid and generation assets)</li> <li>Implementation of SWE CCM (go-live January 2020)</li> <li>Development and implementation of monitoring tools to better calculate margin</li> </ul>	None	Approved by CRE. Date of decision: 12/12/2019	1 year	Yes	70% in 70% of the relevant hours of the year. No specific information on the scope of the 'relevant' hours is included.	Yes, every three months	No	Yes, for development of SWE D-2 CCM: January 2020	Yes	No
		Italy North	FR-IT	<ul style="list-style-type: none"> <li>Uncertainties on external flows from outside the coordination area and from 3rd countries</li> <li>Not enough experience in granting operational security with high cross border capacity and potential high request for remedial actions</li> <li>Development of new processes and tools both at TSO and Regional Security Coordinator (RSC) levels</li> </ul>	None	Approved by CRE. Date of decision: 12/12/2019	1 year	Yes	70% in 70% of the relevant hours of the year. No specific information on the scope of the 'relevant' hours is included.	Yes, every three months	No	No	Yes	No
GR	ADMIE (IPTO)	GR northern borders (future SEE)	GR-BG	<ul style="list-style-type: none"> <li>Absence of coordinated capacity calculation in SEE CCR</li> <li>Uncertainties in the capacity calculation process related to non-coordinated areas</li> <li>Insufficient redispatch potential to guarantee the 70% capacity criterion</li> <li>Insufficient IT-tools for capacity calculation and validation</li> <li>Absence of consideration of flows of 3rd countries in the capacity calculation</li> </ul>	None	Approved by RAE. Date of decision: 15/10/2020	1 year	No	NA	Yes, no frequency specified	No	Yes, SEE D-2 CCM to be implemented by the end of 2020	Yes	NA

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				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Included minimum level of MACZT	Minimum level specified	Monitoring requirement (including frequency)	Includes a timeline for the adoption of the methodology	Includes a timeline for the projects	Alignment and harmonisation in Capacity Calculation Region (CCR)	Derogation request includes explanation why TSO cannot publish methodology	
HR	HOPS	HR-HU (HR side), HR-SI (HR side) (future Core)	<ul style="list-style-type: none"> <li>HR - SI</li> <li>HR - HU</li> <li>All critical elements of the transmission network</li> </ul>	<ul style="list-style-type: none"> <li>Absence of CACM-compliant CCM (cNTC or FB)</li> <li>Insufficient redispatch potential</li> <li>Lack of redispatching potential in case of planned outage for grid reinforcement</li> </ul>	None	Approved by HERA. Date of decision: 17/12/2019	1 year	No	NA	No	No	No	No	No	NA
HU	MAVIR	HU-RO (HU side), HU-SK (HU side), AT-HU (HU side), HR-HU (HU side) (future Core)	<ul style="list-style-type: none"> <li>HU-HR</li> <li>HU-AT</li> <li>HU-RO</li> <li>HU-SK</li> </ul>	<ul style="list-style-type: none"> <li>Absence of CACM-compliant CCM (cNTC or FB)</li> <li>Consideration of cross-zonal trade over non-EU borders</li> <li>Absence of CACM-compliant redispatching and countertrading (+ cost sharing) methodologies</li> <li>Absence of regional impact</li> </ul>	None	Approved by MEKH. Date of decision: 11/12/2019	1 year	No	NA	Yes, 6 weeks after end of quarter	No	No	No	No	NA
IT	Terna	Italy North	All Italy North borders	<ul style="list-style-type: none"> <li>Uncertainties on external flows from outside the coordination area and from 3rd countries</li> <li>Not enough experience in granting operational security with high cross border capacity and potential high request for remedial actions</li> <li>Development of new processes and tools both at TSO and RSC levels</li> </ul>	None	Approved by ARERA. Date of decision: 19/12/2019	1 year	No	NA	Yes, quarterly	No	No	Yes	NA	
		IT internal borders	<ul style="list-style-type: none"> <li>NORD-CNORD</li> <li>CNORD-CSUD</li> <li>CSUD - SUD</li> <li>SUD - ROSN</li> <li>ROSN-SICI</li> <li>CNORD-SARD</li> <li>SARD - CSUD</li> </ul>	<ul style="list-style-type: none"> <li>Alignment with new Bidding-Zone Review (BZR) configuration entering into force in 2021</li> <li>Implementation of proper CCM foreseen in 2020</li> </ul>	None	Partially approved by ARERA for current constraints only. Date of decision: 28/01/2020	1 year	No	NA	Yes, periodically	No	Yes, updated CCM foreseen in the course of 2020	No	NA	
NL	TenneT NL	CWE	TenneT's CNECs in CWE	<ul style="list-style-type: none"> <li>Loop flows</li> <li>Lack of redispatching potential in case of planned outage for grid reinforcement</li> <li>Development of new processes and tools</li> </ul>	None	Approved by ACM. Date of decision: 19/12/2019	1 year	Methodology	<ul style="list-style-type: none"> <li>MACZTmin = MACZTarget - max(0; LFcalculated - LFacceptable)</li> <li>LFacceptable is 30%-FRM for cross-zonal CNECs and 50% of (30%-FRM) for internal CNECs, only CWE exchanges considered</li> <li>Minimum 20% of Fmax in CWE</li> <li>MACZTarget is 70% or action plan levels per CNEC</li> </ul>	Yes, monthly	Yes, 01/04/2020	Yes, for development of new processes and tools: 01/04/2020 and a report detailing methodologies and projects: 01/07/2020	Partially in CWE	NA	

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				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Included minimum level of MACZT	Minimum level specified	Monitoring requirement (including frequency)	Includes a timeline for the adoption of the methodology	Includes a timeline for the projects	Alignment and harmonisation in Capacity Calculation Region (CCR)	Derogation request includes explanation why TSO cannot publish methodology
PL	PSE	PL-CZ_DE_SK (future Core)	<ul style="list-style-type: none"> <li>PL-DE</li> <li>PL-CZ</li> <li>PL-SK</li> </ul>	<ul style="list-style-type: none"> <li>Development of new processes and tools</li> <li>Loop flows</li> <li>Uncertainties due to transit flows from cross-zonal trade outside of PL</li> </ul>	None	Approved by URE. Date of decision: 30/12/2019	<ul style="list-style-type: none"> <li>Development of new processes and tools - 6 months (01/01/20 - 30/06/20)</li> <li>Loop flows and uncertainties due to transit flows from cross-zonal trade outside of PL - 1 year</li> </ul>	Methodology	<ul style="list-style-type: none"> <li>MACZTmin is 70% or action plan levels per CNEC</li> <li>L<sub>Acceptable</sub> is (100%-MACZTmin)*F<sub>max</sub> -FRM for cross-zonal CNECs and 10% of (100%-MACZTmin)*F<sub>max</sub> -FRM for internal CNECs</li> <li>MNCC is equal to MNCC<sub>CGM</sub> + MNCC<sub>margin</sub>, where MNCC<sub>margin</sub> is accounting for uncertainties</li> </ul>	No	NA	Yes, for development of new processes and tools: 30/06/2020	No	No
		PL-SE4 (PL side) (future Hansa)	PL-SE4	Development of new processes and tools	None	Approved by URE. Date of decision: 30/12/2019	6 months (01/01/2020-30/06/2020)	No	NA	No	NA	Yes, for development of new processes and tools: 30/06/2020	No	NA
PT	REN	ES-PT (PT side) until 28/01/2020, SWE from 29/01/2020 onwards	PT-ES	<ul style="list-style-type: none"> <li>Development of new tools for assess in a coordinated manner and validate the potential available remedial actions (considering the already existing grid and generation assets)</li> <li>Implementation of SWE CCM (go-live January 2020)</li> <li>Development and implementation of monitoring tools to better calculate margin</li> </ul>	None	Approved by ERSE. Date of decision: 19/12/2019	1 year	No	NA	No	No	Yes, for development of SWE D-2 CCM: January 2020	Yes	NA
RO	Transelctrica	RO borders (future Core)	RO-HU	<ul style="list-style-type: none"> <li>Absence of CACM-compliant CCM (cNTC or FB)</li> <li>Consideration of cross-zonal trade over non-EU borders</li> <li>Lack of operational experience and software tools for applying redispatch to increase cross-zonal capacity</li> </ul>	None	Approved by ANRE. Date of decision: 20/12/2019	1 year	No	NA	No	No	No	No	No
		RO borders (future SEE)	RO-BG											
SE	SvK	DK1-SE3 (SE side), DK2-SE4 (SE side), NO1-SE3 (SE side) (future Nordic)	<ul style="list-style-type: none"> <li>SE3-NO1</li> <li>SE3-DK1</li> <li>SE4-DK2</li> </ul>	<ul style="list-style-type: none"> <li>Structural congestion at the West Coast Corridor</li> <li>Currently using the NTC capacity calculation approach, which does not efficiently and precisely define the limiting network elements as only a FB representation of the network can achieve. Data that can be utilised for defining the starting point of a linear tractor in a future action plan, to reach CEP 70% requirement, is not in hand yet</li> <li>Lack of downregulation volumes makes SvK unable to meet the CEP 70% requirement from 2020 without endangering operational security in a N-1 situation.</li> </ul>	None	Approved by Ei. Date of decision: 19/12/2019	1 year	No	NA	Yes, no later than five days after the interconnection capacity for a single hour has been less than 70% on any of the interconnections	No	No	No	NA
		DE-SE4 (SE side), PL-SE4 (SE side) (future Hansa)	<ul style="list-style-type: none"> <li>SE4-DE</li> <li>SE4 -PL</li> </ul>											
		LT-SE4 (SE side) (future Baltic)	SE4-LT											
SK	SEPS	CZ-SK (SK side), HU-SK (SK side), PL-SK (SK side) (future Core)	Not defined	Absence of CACM-compliant CCM (cNTC or FB)	None	Approved by URSO. Date of decision: 20/12/2019	1 year	No	NA	No	No	No	No	NA

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request						
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Included minimum level of MACZT	Minimum level specified	Monitoring requirement (including frequency)	Includes a timeline for the adoption of the methodology	Includes a timeline for the projects	Alignment and harmonisation in CCR	Derogation request includes explanation why TSO cannot publish methodology
AT	APG	CWE, AT-CZ_HU_SI (AT side)	<ul style="list-style-type: none"> <li>• APG's CNECs in CWE</li> <li>• APG's NTC bidding zone borders in Core: AT-CZ, AT-HU, AT-SI</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing work on IT concepts and implementation</li> <li>• Secondly systematic issues (e.g. loop flows and PST flows, margin for uncoordinated transits and absence of 3rd country flows in the CCM)</li> </ul>	None	Approved by E-Control. Date of decision: 21/12/2020	1 year (2021)	Methodology	<ul style="list-style-type: none"> <li>• <math>MACZT_{min} = MACZT_{target} - \max(0, LF_{calculated} - LF_{acceptable})</math></li> <li>• <math>LF_{acceptable}</math> is 30%-FRM for cross-zonal CNECs and 30% of (30%-FRM) for internal CNECs, all exchanges considered</li> <li>• Minimum 20% of <math>F_{max}</math> in CWE</li> <li>• <math>MNCC</math> is equal to <math>MNCC_{CGM} + MNCC_{margin}</math> where <math>MNCC_{margin}</math> is accounting for uncertainties</li> </ul>	Yes, report deviations, no frequency	Yes, Q2 2021	Yes, Q2 2021 for IT tools	Partially with BE and PL	NA
		Italy North, AT-CZ_HU_SI (AT side)	APG's CNECs in Italy North	<ul style="list-style-type: none"> <li>• Not finished development and testing of the necessary IT-Tools for the calculation of the <math>MACZT_{min}</math> criterion (defined in the action plan) in the capacity calculation area</li> <li>• Not finished development and testing of the necessary IT-Tools for the validation of the calculated capacities under consideration of the <math>MACZT_{min}</math> criterion (defined in the action plan)</li> </ul>	None	Approved by E-Control. Date of decision: 21/12/2020	6 months (01/01/2021 - 30/06/2021) and another 6 months (01/07/2021 - 31/12/2021)	Yes	Minimum level is specified as the same level (on average per direction) as in the last 3 years.	No	No	Yes, end of Q2 2021	Yes	NA
BE	Elia	CWE	Elia's CNECs in CWE	Loop flows	None	Approved by CREG. Date of decision: 22/10/2020	1 year (2021)	Methodology	<ul style="list-style-type: none"> <li>• <math>MACZT_{min} = 70\% - \max(0, LF_{calculated} - LF_{acceptable})</math></li> <li>• <math>LF_{acceptable}</math> is 30%-FRM for cross-zonal CNECs and 50% of (30%-FRM) for internal CNECs, all exchanges considered</li> <li>• Minimum 20% of <math>F_{max}</math> in CWE</li> </ul>	Daily, reporting deviations on loopflow derogation every trimester	NA	Yes, 01/07/2021 Report detailing methodologies and projects	Partially with NL	NA
BG	ESO EAD	BG-GR (BG side), BG-RO (BG side) (future SEE)	<ul style="list-style-type: none"> <li>• BG-GR</li> <li>• BG-RO</li> </ul>	See derogation request 2020, approved on 28/10/2020 for a duration of 2 years (until 28/10/2022)										
CZ	CEPS	CZ borders (future Core)	Not defined	<ul style="list-style-type: none"> <li>• Reliability margins to cover uncertainties and inaccuracies, loop flows and internal flows exceed 30% of the transmission capacity</li> <li>• Inexistent regional coordinated calculation and transmission capacity allocation</li> <li>• Inexistent operational agreements with the neighbouring transmission system operators</li> <li>• Transmission capacity calculation cannot be additionally improved for further transmission capacity increases</li> </ul>	None	Approved by ERO. Date of decision: 17/12/2020	1 year (2021)	Yes	<ul style="list-style-type: none"> <li>• In export direction – at least 60% of the transmission capacity during no less than 90% of business hours</li> <li>• In import direction – at least 40% of the transmission capacity during no less than 90% of business hours</li> </ul>	No	No	No	No	No
ES	REE	SWE	<ul style="list-style-type: none"> <li>• ES-FR</li> <li>• ES-PT</li> </ul>	The temporary lack of a remedial action validation tool	None	Approved by CNMC. Date of decision: 19/11/2020	1 year (2021)	Yes	Yes, 70% capacity for 70% of the relevant hours	Yes, regularly	No	No	Yes	No
FR	RTE	SWE	FR-ES	The temporary lack of a remedial action validation tool	None	Approved by CRE. Date of decision: 26/11/2020	1 year (2021)	Yes	Yes, 70% capacity for 80% of the relevant hours. No specific information on the scope of the 'relevant' hours is included.	Yes, monthly	No	No	Yes	No

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request						
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Included minimum level of MACZT	Minimum level specified	Monitoring requirement (including frequency)	Includes a timeline for the adoption of the methodology	Includes a timeline for the projects	Alignment and harmonisation in CCR	Derogation request includes explanation why TSO cannot publish methodology
GR	ADMIE (IPTO)	GR northern borders (future SEE)	GR-BG	<ul style="list-style-type: none"> <li>Absence of consideration of flows of 3rd countries in the capacity calculation and the margin available for cross-zonal trade</li> <li>Insufficient potential for remedial actions to guarantee the 70% capacity criterion</li> <li>Insufficient IT-tools for capacity calculation process embedding the 70% threshold (in line with the regulation 2019/943)</li> </ul>		Approved by RAE. Date of decision: 22/07/2021	1 year (2021)	No	NA	Yes, no frequency specified	No	Yes, for the implementation of the SEE CCM: July 2021	No	NA
HR	HOPS	HR-HU (HR side), HR-SI (HR side) (future Core)	<ul style="list-style-type: none"> <li>HU-HR</li> <li>HR-SI</li> </ul>	<ul style="list-style-type: none"> <li>Time necessary to build the required tools to adequately take into account power flows within and outside the Core CCR</li> <li>Limited redispatching activation potential</li> <li>Long-term planned network element disconnections</li> </ul>	None	Approved by HERA. Date of decision: 24/11/2020	1 year (2021)	Yes	20% of Fmax	Yes, no frequency specified	Yes, 30/04/2021	Yes, 30/04/2021	No	No
HU	MAVIR	HU-RO (HU side), HU-SK (HU side), AT-HU (HU side), HR-HU (HU side) (future Core)	<ul style="list-style-type: none"> <li>HU-HR</li> <li>HU-AT</li> <li>HU-RO</li> <li>HU-SK</li> <li>HU-SI (from end 2021)</li> </ul>	<ul style="list-style-type: none"> <li>Absence of CACM-compliant CCM (cNTC or FB)</li> <li>Consideration of cross-zonal trade over non-EU borders</li> <li>Absence of CACM-compliant redispatching and countertrading (+ cost sharing) methodologies</li> <li>Absence of regional impact</li> <li>Operational security problems coming from uncertainties and assumptions in the coordinated (mostly bilateral) CC</li> </ul>	None	Approved by HEA. Date of decision: 10/12/2020	1 year (2021)	Yes	75% of hours, including 3rd country flows: <ul style="list-style-type: none"> <li>SK-HU border/import direction: 10%</li> <li>AT-HU border/import direction: 25%</li> <li>HR-HU border/import direction: 10%</li> </ul>	No	No	No	No	No
IT	Terna	Italy North	All Italy North borders	<ul style="list-style-type: none"> <li>Ongoing work on IT concepts to compute margins and adjust the minimum capacity accordingly</li> <li>The presence of allocation constraints related to voltage and stability constraints for the Italian system</li> </ul>		Approved by ARERA. Date of decision: 15/12/2020	1 year (2021)	No	NA	Yes, daily (on a centralized web-platform) and quarterly (directly)	No	Yes, for development of new processes and tools: S1 2021 Dedicated study for allocation constraints: June 2021	No	NA
NL	TenneT NL	CWE	TenneT's CNECs in CWE	<ul style="list-style-type: none"> <li>Loop flows</li> <li>Lack of redispatching potential in case of (i) unplanned outages and (ii) planned outages for grid reinforcement</li> </ul>	None	Approved by ACM. Date of decision: 16/11/2020	1 year (2021)	Methodology	<ul style="list-style-type: none"> <li>MACZTmin = MACZTtarget - max(0; LFCalculated - LFAcceptable)</li> <li>LFAcceptable is 30%-FRM for cross-zonal CNECs and 50% of (30%-FRM) for internal CNECs, only CWE exchanges considered</li> <li>Minimum 20% of Fmax in CWE</li> <li>MACZTtarget are action plan levels per CNEC</li> </ul>	Daily, reporting deviations on loop flows derogation, monthly	NA	Yes, 01/07/2021 Report detailing methodologies and projects	Partially with BE	NA
		GB-NL (NL side) (future Channel)	NL-GB	Lack of redispatching potential in case of (i) unplanned outages and (ii) planned outages for grid reinforcement	None			No	No	Yes, monthly in case of reduction	No	No	No	NA
		DK1-NL (NL side) (future Hansa)	NL-DK1	Lack of redispatching potential in case of (i) unplanned outages and (ii) planned outages for grid reinforcement	None			No	No	Yes, monthly in case of reduction	No	No	No	NA



Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation			Content of derogation request							
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Included minimum level of MACZT	Minimum level specified	Monitoring requirement (including frequency)	Includes a timeline for the adoption of the methodology	Includes a timeline for the projects	Alignment and harmonisation in CCR	Derogation request includes explanation why TSO cannot publish methodology
PL	PSE	PL-CZ_DE_SK (future Core)	<ul style="list-style-type: none"> <li>PL-DE</li> <li>PL-CZ</li> <li>PL-SK</li> </ul>	<ul style="list-style-type: none"> <li>Loop flows</li> <li>Uncertainties of the non-coordinated transit flows</li> </ul>	None	Approved by URE. Date of decision: 21/12/2020	1 year (2021)	Methodology	<ul style="list-style-type: none"> <li>MACZTmin is 70% or Action Plan levels per CNEC</li> <li>LFacceptable is (100%-MACZTmin)*Fmax -FRM for cross-zonal CNECs and 10% of (100%-MACZTmin)*Fmax -FRM for internal CNECs</li> <li>MNCC is equal to <math>MNC_{CCGM} + MNCC_{margin}</math>, where <math>MNCC_{margin}</math> is accounting for uncertainties</li> </ul>	No	NA	No	Partially with AT	NA
PT	REN	SWE	ES-PT	The temporary lack of a remedial action validation tool	None	Approved by ERSE. Date of decision: 22/12/2020	1 year (2021)	Yes	Yes, 70% capacity for 70% of the relevant hours	Yes, regularly	No	Description of the projects for 2021	Yes	No
SE	SvK	DK1-SE3 (SE side), DK2-SE4 (SE side), NO1-SE3 (SE side) (future Nordic)	<ul style="list-style-type: none"> <li>SE3-NO1</li> <li>SE3-DK1</li> <li>SE4-DK2</li> </ul>	<ul style="list-style-type: none"> <li>Operational security</li> <li>Congestion in the West Coast Corridor, inside bidding zone SE3, in combination with the lack of downregulation volumes makes SvK unable to meet the CEP 70% requirement in 2021 without endangering operational security in a N-1 situation</li> </ul>	None	Approved by Ei. Date of decision: 17/12/2020	1 year (2021)	No	NA	Yes, no later than five days after the interconnection capacity for a single hour has been less than 70% on any of the interconnections	No	Yes, Q4 2022 - Q1 2023 for Nordic FB	No	NA
		DE-SE4 (SE side), PL-SE4 (SE side) (future Hansa)	<ul style="list-style-type: none"> <li>SE4-DE</li> <li>SE4 -PL</li> </ul>		None	Approved by Ei. Date of decision: 17/12/2020	1 year (2021)	No	NA	Yes, no frequency specified	No	Yes, between 2021 and 2023	No	NA
		LT-SE4 (SE side) (future Baltic)	SE4-LT											
SK	SEPS	CZ-SK (SK side), HU-SK (SK side), PL-SK (SK side) (future Core)	<ul style="list-style-type: none"> <li>SK-CZ</li> <li>SK-PL</li> <li>SK-HU</li> <li>SK-UA (3rd country)</li> </ul>	Operational security of the connected systems	None	Approved by URSO. Date of decision: 15/12/2020	1 year (2021)	Yes	<ul style="list-style-type: none"> <li>30 % for CZ-SK import</li> <li>30 % for SK-CZ export</li> <li>30 % for PL-SK import</li> <li>30 % for SK-PL export</li> <li>30 % for HU-SK import</li> <li>30 % for SK-HU export of transmission capacities no less than in 80 % of hours</li> </ul>	No	No	No	No	No

## Derogation requests for 2022: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
AT	APG	CWE, AT-CZ_HU_SI (AT side)	<ul style="list-style-type: none"> <li>• APG's CNECs in CWE</li> <li>• APG's NTC bidding zone borders in Core: AT-CZ, AT-HU, AT-SI</li> </ul>	<p>Systemic issues</p> <ul style="list-style-type: none"> <li>• Usage of CNEC capacity &gt; threshold by loop flows and PST flows (lack of cross-CCR coordination)</li> <li>• Margin for uncoordinated transits (unreliable forecasts)</li> <li>• Absence of consideration of 3rd country flows in the capacity calculation</li> </ul>	None	Approved by E-Control. Date of decision: 16/12/2021	1 year (2022)	Yes, methodology	Updated methodology	<ul style="list-style-type: none"> <li>• <math>MACZT_{min} = MACZT_{target} - \max(0; LF_{calculated} - LF_{acceptable})</math></li> <li>• <math>LF_{acceptable}</math> is 100%-FRM - <math>MACZT_{min}</math> before LF for cross-zonal CNECs and 10% of (100%-FRM - <math>MACZT_{min}</math> before LF) for internal CNECs, all exchanges considered</li> <li>• Minimum 20% of <math>F_{max}</math> in CWE/Core</li> <li>• <math>MNCC</math> is equal to <math>MNCC_{CGM} + MNCC_{margin}</math>, where <math>MNCC_{margin}</math> is accounting for uncertainties</li> </ul>	Yes, and report deviations. No frequency specified	No	Partially with BE and PL
BE	Elia	CWE/Core	Elia's CNECs in CWE/Core	Loop flows	None	Approved by CREG. Date of decision: 02/12/2021	1 year (2022)	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li>• <math>MACZT_{min} = 70\% - \max(0; LF_{calculated} - LF_{acceptable})</math></li> <li>• <math>LF_{acceptable}</math> is 30% - FRM for cross-zonal CNECs and <math>0.5 * (30\% - FRM)</math> for internal CNECs, all exchanges considered</li> <li>• Minimum 20% of <math>F_{max}</math> in CWE/Core</li> </ul>	Yes, reporting deviations every trimester	High-level timeline for DA CCM, DA CCM coordinated validation, Core SOGL76 and CACM35, CACM74	Partially with other countries (for methodological approach to loop flow derogation)
BG	ESO EAD	BG-GR (BG side), BG-RO (BG side) (future SEE)	<ul style="list-style-type: none"> <li>• BG-GR</li> <li>• BG-RO</li> </ul>	See derogation request 2020, approved on 28/10/2020 for a duration of 2 years (until 28/10/2022)									

## Derogation requests for 2022: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
CZ	CEPS	CZ borders (future Core)	Not defined	<ul style="list-style-type: none"> <li>Reliability margins to cover uncertainties and inaccuracies, loop flows and internal flows exceed 30% of the transmission capacity</li> <li>Inexistent regional coordinated calculation and transmission capacity allocation</li> <li>Inexistent operational agreements with the neighbouring transmission system operators</li> <li>Transmission capacity calculation cannot be additionally improved for further transmission capacity increases</li> <li>The derogation granted for year 2021 represents a technical maximum</li> </ul>	None	Approved by ERU. Date of decision: 22/11/2021	1 year (2022)	Only in the "normal" network configuration i.e. no relevant outage	No	In case of relevant outage: no target. In absence of relevant outage: <ul style="list-style-type: none"> <li>In export direction – at least 60% of the transmission capacity at least 90% of hours</li> <li>In import direction – at least 40% of the transmission capacity at least 90% of hours</li> </ul>	No	No	No
ES	REE	SWE	ES-FR	<ul style="list-style-type: none"> <li>Lack of practical experience in applying the necessary remedial actions.</li> <li>Temporary lack of a remedial action validation tool</li> </ul>	None	Approved by CNMC. Date of decision: 22/12/2021	1 year (2022)	Yes	Yes, increase	70% capacity for 75% of the hours, but the TSO consider fulfilled the hours when in the concerned border and direction the commercial exchange program is smaller than the corresponding NTC value	Yes, reporting to the NRA (no frequency)	Description of the projects for 2022.	Partially with PT
GR	ADMIE (IPTO)	GR northern borders	BG-GR	<ul style="list-style-type: none"> <li>Absence of consideration of flows of 3rd countries in the capacity calculation and the margin available for cross-zonal trade</li> <li>Insufficient potential for remedial actions to guarantee the 70% capacity criterion</li> <li>Insufficient IT-tools for capacity calculation process embedding the 70% threshold (in line with the regulation 2019/943)</li> </ul>	None	Approved by RAE. Date of decision: 22/12/2022	1 year (2022)	No, only best effort to offer NTC values that are at least on the same level (on average per direction) as in the last three years	No	NA	Yes, reporting to the NRA (no frequency)	No	Partially with BG

## Derogation requests for 2022: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
HR	HOPS	HR-SI and HR-HU (future Core)	HR-SI and HR-HU	<ul style="list-style-type: none"> <li>Time necessary to build the required tools to adequately take into account power flows within and outside the Core CCR</li> <li>Limited redispatching activation potential</li> <li>Long-term planned network element disconnections</li> <li>Time needed adopting an action plan</li> </ul>	None	Approved by HERA on 29/12/2021	1 year (2022), or to the date of approval of the action plan, whichever comes first	Yes	No	No less than the minimum capacity allocated for each market unit in the period 2019 to 2021, and no less than the capacity that corresponds to 20% of the load for each CNEC	Yes, reporting to the NRA (no frequency)	No	No
IT	TERNA	Italy North	All Italy North borders	<ul style="list-style-type: none"> <li>The presence of allocation constraints related to voltage and stability constraints for the Italian system</li> <li>The export capacity is not currently computed through a proper coordinated capacity calculation process</li> </ul>	None	Approved by ARERA on 21/12/2021	1 year (2022)	No	No	NA	Yes, daily (on a centralized web-platform) and quarterly to the NRA	For the tools needed for the capacity calculation process in the export direction: S1 2023	No
NL	TenneT NL	CWE	TenneT's CNECs in CWE	<ul style="list-style-type: none"> <li>Loop flows</li> <li>Lack of redispatching potential in case of (i) unplanned outages and (ii) planned outages for grid reinforcement</li> <li>Methodologies of DA capacity calculation, SOGL 76, and CACM 35 not yet implemented, leading to uncertain levels of remedial actions</li> </ul>	None	Approved by ACM. Date of decision: 01/12/2021	1 year (2022)	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li>MACZT<sub>min</sub> = MACZT<sub>target</sub> - max(0; LF<sub>calculated</sub> - LF<sub>acceptable</sub>)</li> <li>LF<sub>acceptable</sub> is 30%-FRM for cross-zonal CNECs and 50% of (30%-FRM) for internal CNECs, only CWE exchanges considered</li> <li>Minimum 20% of F<sub>max</sub> in CWE</li> <li>MACZT<sub>target</sub> are action plan levels per CNEC</li> </ul>	Daily, reporting deviations on loop flows derogation, monthly	On 01/07/2022 report detailing methodologies and projects	Partially with BE
		GB-NL (NL side) (future Channel)	NL-GB	Lack of redispatching potential in case of (i) unplanned outages and (ii) planned outages for grid reinforcement			1 year (2022)	No	No	NA	Yes, monthly in case of reduction	No	No
		DK1-NL (NL side) (future Hansa)	NL-DK1	Lack of redispatching potential in case of (i) unplanned outages and (ii) planned outages for grid reinforcement				1 year (2022)	No	No	NA	Yes, monthly in case of reduction	No

## Derogation requests for 2022: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
PL	PSE	PL-CZ_DE_SK (future Core)	<ul style="list-style-type: none"> <li>PL-DE</li> <li>PL-CZ</li> <li>PL-SK</li> </ul>	<ul style="list-style-type: none"> <li>Loop flows</li> <li>Uncertainties of the non-coordinated transit flows</li> </ul>	None	Approved by URE. Date of decision: 29/11/2021	1 year (2022) for loop flows  1 year (2022) or until Core DA CCM is implemented, whichever is sooner	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li>MACZTmin is 70% or Action Plan levels per CNEC</li> <li>L<sub>Facceptable</sub> is (100%-MACZTmin)*F<sub>max</sub>-FRM for cross-zonal CNECs and 10% of ((100%-MACZTmin)*F<sub>max</sub>-FRM) for internal CNECs</li> <li>MNCC is equal to MNCCCGM + MNCCmargin, where MNCCmargin is accounting for uncertainties</li> </ul>	Yes, reporting to the NRA (no frequency)	For the derogation on uncertainties of the non-coordinated transit flows: implementation of Core DA CCM	Partially with AT
PT	REN	SWE	ES-PT	<ul style="list-style-type: none"> <li>Lack of practical experience in applying the necessary remedial actions.</li> <li>Temporary lack of a remedial action validation tool</li> </ul>	None	Approved by ERSE. Date of decision: 28/12/2021	1 year (2022)	Yes	Yes, increase	70% capacity for 75% of the hours	Yes, reporting to the NRA (no frequency)	Description of the projects for 2022	Partially with ES
RO	Transelectrica	RO-HU (future Core)	RO-HU	<ul style="list-style-type: none"> <li>Key methodologies from the Regulation (EU) 2015/1222 and Regulation (EU) 2017/1485 are not implemented</li> <li>Lack of the regional coordinated processes for capacity calculation and security analysis</li> <li>Lack of the redispatching and countertrading processes implemented at regional level pursuant to Article 35 and 74 of Regulation (EU) 2015/1222</li> <li>Lack of the consideration of the non-EU countries power flows in capacity calculation</li> <li>Lack of the coordination between capacity calculation regions with impact on the power flows through critical network elements</li> <li>Margin for uncoordinated transits (unreliable forecast)</li> </ul>	None	Approved by ANRE. Date of decision: 02/02/2022	1 year (2022)	Yes	Same as the previous year	In 2022, Transelectrica SA shall maintain the minimum target capacity available for cross-zonal trade established by the national Action Plan for 2021 on Romania – Hungary border: 800 MW representing 33% from the transmission capacity	Yes, reporting to the NRA (quarterly and yearly, according to the action plan)	No	No

## Derogation requests for 2022: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
SE	SvK	DK1-SE3 (SE side), DK2-SE4 (SE side), NO1-SE3 (SE side) (future Nordic)	<ul style="list-style-type: none"> <li>SE3-NO1</li> <li>SE3-DK1</li> <li>SE4-DK2</li> </ul>	<ul style="list-style-type: none"> <li>Congestion in the West Coast Corridor, inside bidding zone SE3, in combination with the lack of downregulation volumes</li> </ul> <p>In addition, for SE3-NO1 and SE3-DK1:</p> <ul style="list-style-type: none"> <li>Higher flows from east to west loading elements that were previously not affecting capacity calculation</li> </ul>	Yes: - DUR (DK) - EV (FI)	Not approved by ACER (Decision 17/2022). Date of decision: 26/10/2022	1 year (2022)	No	NA	NA	Yes, reporting to the NRA (no frequency)	No	No
		DE-SE4 (SE side), PL-SE4 (SE side) (future Hansa)	<ul style="list-style-type: none"> <li>SE4-DE</li> <li>SE4 -PL</li> </ul>	Congestion in the West Coast Corridor, inside bidding zone SE3, in combination with the lack of downregulation volumes									
		LT-SE4 (SE side) (future Baltic)	SE4-LT										
		SE3-FI (future Nordic)	SE3-FI										
		Internal bidding-zone borders (future Nordic)	<ul style="list-style-type: none"> <li>SE2-SE3</li> <li>SE3-SE4</li> </ul>	Higher flows from east to west loading elements that were previously not affecting capacity calculation									
SK	SEPS	CZ-SK (SK side), HU-SK (SK side), PL-SK (SK side) (future Core)	<ul style="list-style-type: none"> <li>SK-CZ</li> <li>SK-PL</li> <li>SK-HU</li> <li>SK-UA (3rd country)</li> </ul>	Operational security of the interconnected systems	None	Approved by URSO. Date of decision: 13/12/2021	1 year (2022)	Yes	Yes, increase	<ul style="list-style-type: none"> <li>40 % for CZ-SK import</li> <li>40 % for SK-CZ export</li> <li>40 % for PL-SK import</li> <li>40 % for SK-PL export</li> <li>40 % for HU-SK import</li> <li>40 % for SK-HU export</li> </ul> <p>of transmission capacities no less than in 80 % of hours. For the period of the year 2022 when the FB CC method is used, SEPS will offer at least 30 % or 40% of capacity for the lines for minimum 80 % of hours</p>	No	Yes, timeline for the launch of the Core Flow-Based Market Coupling	No

## Derogation requests for 2023: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
AT	APG	Core	APG's CNECs in Core	<p>Systemic issues</p> <ul style="list-style-type: none"> <li>Usage of CNEC capacity &gt; threshold by loop flows and PST flows (lack of cross-CCR coordination)</li> <li>Margin for uncoordinated transits (unreliable forecasts)</li> <li>Absence of consideration of 3rd country flows in the capacity calculation</li> </ul>	None	Approved by E-Control. Date of decision: 15/12/2022	1 year (2023)	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li>MACZTmin = <math>\max(0; LF_{\text{calculated}} - LF_{\text{acceptable}})</math></li> <li>LFacceptable is 100%-FRM - MACZTmin before LF for cross-zonal CNECs and 10% of (100%-FRM - MACZTmin before LF) for internal CNECs, all exchanges considered</li> <li>Minimum 20% of Fmax in Core</li> <li>MNCC is equal to <math>MNCC_{\text{CGM}} + MNCC_{\text{margin}}</math>, where <math>MNCC_{\text{margin}}</math> is accounting for uncertainties</li> </ul>	Yes, and report deviations. No frequency specified.	No	Partially with BE, NL and PL
BE	Elia	Core	Elia's CNECs in Core	Loop flows	None	Approved by CREG. Date of decision: 24/11/2022	1 year (2023)	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li>MACZTmin = <math>70\% - \max(0; LF_{\text{calculated}} - LF_{\text{acceptable}})</math></li> <li>LFacceptable is 30% - FRM for cross-zonal CNECs and <math>0.5 * (30\% - FRM)</math> for internal CNECs, all exchanges considered</li> <li>Minimum 20% of Fmax in Core</li> </ul>	Yes, reporting deviations every trimester	High-level timeline for DA CCM, DA CCM coordinated validation, Core SOGL76 and CACM35, CACM74	Partially with AT, NL and PL
GR	ADMIE (IPTO)	GR northern borders	BG-GR	<ul style="list-style-type: none"> <li>Absence of consideration of flows of 3rd countries in the capacity calculation and the margin available for cross-zonal trade</li> <li>Insufficient potential for remedial actions to guarantee the 70% capacity criterion</li> <li>Insufficient IT-tools for capacity calculation process embedding the 70% threshold (in line with the regulation 2019/943)</li> </ul>	None	Approved by RAE. Date of decision: 27/04/2023	1 year (2023)	No, only a minimum level of MCCC (15% of Fmax)	No	NA	Yes, reporting to the NRA (no frequency)	No	No

## Derogation requests for 2023: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
IT	TERNA	Italy North	All limiting CNECs in Italy North CCA	<ul style="list-style-type: none"> <li>The presence of allocation constraints related to voltage and stability constraints for the Italian system</li> <li>The export capacity is not currently computed through a proper coordinated capacity calculation process</li> </ul>	None	Approved by ARERA. Date of decision: 20/12/2022	1 year (2023)	No	No	NA	Yes, daily (on a centralized web-platform) and on a half yearly basis to the NRA	For the tools needed for the capacity calculation process in the export direction: end of October 2023	No
NL	TenneT NL	Core	TenneT's CNECs in Core	<ul style="list-style-type: none"> <li>Loop flows</li> <li>Methodologies of DA capacity calculation, SOGL 76, CACM 35 and CACM 74 not yet (fully) implemented, leading to uncertain levels of remedial actions</li> </ul>	None	Approved by ACM. Date of decision: 22/12/2022	1 year (2023)	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li><math>MACZT_{min} = MACZT_{target} - \max(0; LF_{calculated} - LF_{acceptable})</math></li> <li><math>LF_{acceptable}</math> is 30%-FRM for cross-zonal CNECs and <math>0.5 * (30\% - FRM)</math> for internal CNECs, only Core exchanges considered</li> <li>Minimum 20% of <math>F_{max}</math> in Core</li> <li><math>MACZT_{target}</math> are action plan levels per CNEC</li> </ul>	Reporting deviations from the formulas used to calculate loop flows, frequency not specified	<ul style="list-style-type: none"> <li>High-level timeline for DA CCM, DA CCM coordinated validation, Core SOGL76 and CACM35, CACM 74</li> <li>By 01/07/2023, report detailing methodologies and projects</li> </ul>	Partially with AT, BE and PL
PL	PSE	Core	PSE's CNECs in Core	Loop flows	None	Approved by URE. Date of decision: 09/12/2022	1 year (2023)	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li><math>MACZT_{min}</math> is 70% or Action Plan levels per CNEC</li> <li><math>LF_{acceptable}</math> is <math>(100\% - MACZT_{min}) * F_{max} - FRM</math> for cross-zonal CNECs and 10% of <math>((100\% - MACZT_{min}) * F_{max} - FRM)</math> for internal CNECs</li> </ul>	Yes, reporting to the NRA (no frequency)	High-level timeline for DA CCM, DA CCM coordinated validation, Core SOGL76 and CACM35, CACM 74	Partially with AT, BE and NL



## Derogation requests for 2023: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
PT	REN	SWE	ES-PT	<ul style="list-style-type: none"> <li>Lack of operational experience in applying the necessary remedial actions</li> <li>Migration of the capacity calculation tool</li> </ul>	None	Approved by ERSE. Date of decision: 28/12/2022	1 year (2023)	Yes	Yes, increase	70% capacity for 82.5% of the hours	Yes, reporting to the NRA (no frequency)	Description of the projects for 2023	No
RO	Transelectrica	Core	RO-HU	<ul style="list-style-type: none"> <li>Lack of the regional coordinated processes for capacity calculation and security analysis</li> <li>Lack of the redispatching and countertrading processes implemented at regional level pursuant to Article 35 and 74 of Regulation (EU) 2015/1222</li> <li>Lack of the consideration of the non-EU countries power flows in capacity calculation</li> <li>Lack of the coordination between capacity calculation regions with impact on the power flows through critical network elements</li> <li>Margin for uncoordinated transits (unreliable forecast)</li> </ul>	None	Approved by ANRE. Date of decision: 28/12/2022	1 year (2023)	Yes	Same as previous year	In 2023, Transelectrica SA shall maintain the minimum target capacity available for cross-zonal trade established by the national Action Plan for 2021 on Romania – Hungary border: 800 MW representing 33% from the transmission capacity.	Yes, reporting to the NRA (quarterly and yearly, according to the Action Plan)	No	No
SK	SEPS	Core	<p>Following CNEs with relevant contingencies:</p> <ul style="list-style-type: none"> <li>V425 Križovany – Veľký Ďur</li> <li>V440 Veľké Kapušany – Mukacheve (UA)</li> <li>V477 Lemešany – Krosno-Iskrzynia (PL)</li> <li>V478 Lemešany – Krosno-Iskrzynia (PL)</li> <li>V490 Veľký Ďur – Levice</li> <li>V491 Veľký Ďur – Levice</li> </ul>	<ul style="list-style-type: none"> <li>Operational security violations (N-1)</li> <li>FRM reduction leading to reduced resilience against unforeseen operational issues</li> <li>Excessive loop and transit flows</li> </ul>	None	Approved by URSO. Date of decision: 22/12/2022	1 year (2023)	Yes	Yes, increase	50% capacity for 80% of the hours	No	Yes	No

## Derogation requests for 2024: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
AT	APG	Core	APG's CNECs in Core	Systemic issues • Usage of CNEC capacity > threshold by loop flows and PST flows (lack of cross-CCR coordination) • Margin for uncoordinated transits (unreliable forecasts) • Absence of consideration of 3rd country flows in the capacity calculation	None	Approved by E-Control. Date of decision: 15/12/2023	1 year (2024)	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li>• <math>MACZT_{min} = MACZT_{target} - \max(0; LF_{calculated} - LF_{acceptable})</math></li> <li>• <math>LF_{acceptable}</math> is 100%-FRM - <math>MACZT_{min}</math> before LF, for cross-zonal CNECs, and 10% of (100%-FRM - <math>MACZT_{min}</math> before LF) for internal CNECs, all exchanges considered</li> <li>• Minimum 20% of <math>F_{max}</math> in Core</li> <li>• <math>MNCC</math> is equal to <math>MNCC_{CGM} + MNCC_{margin}</math> where <math>MNCC_{margin}</math> accounts for forecast uncertainties</li> </ul>	Yes, daily through the JAO Publication Tool	No	Partially with BE, NL and PL
BE	Elia	Core	Elia's CNECs in Core	Excessive loop flows	None	Approved by CREG. Date of decision: 07/12/2023	1 year (2024)	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li>• <math>MACZT_{min} = 70\% - \max(0; LF_{calculated} - LF_{acceptable})</math></li> <li>• <math>LF_{acceptable}</math> is 30% - FRM for cross-zonal CNECs and 0.5*(30% - FRM) for internal CNECs, all exchanges considered</li> <li>• Minimum 20% of <math>F_{max}</math> in Core</li> </ul>	Yes, daily through the JAO Publication Tool	High-level timeline for DA CCM coordinated validation, Core SOGL76 and CACM35, Core CACM 74	Partially with AT, NL and PL
GR	ADMIE (IPTO)	SEE	BG-GR	<ul style="list-style-type: none"> <li>• Absence of consideration of flows of 3rd countries in the capacity calculation and the margin available for cross-zonal trade</li> <li>• Insufficient potential for remedial actions to guarantee the 70% capacity criterion</li> <li>• Insufficient IT-tools for capacity calculation process embedding the 70% threshold (in line with the regulation 2019/943)</li> </ul>	None	Not yet approved.	1 year (2024)	Yes	Yes, increase	60% (including third country flows)	No	No	No

## Derogation requests for 2024: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
IT	TERNA	Italy North	All limiting CNECs in Italy North CCR	<ul style="list-style-type: none"> <li>The presence of allocation constraints related to voltage and stability constraints for the Italian system in import direction.</li> <li>The capacity in export direction is not yet computed through a coordinated capacity calculation process</li> </ul>	None	Approved by ARERA. Date of decision: 12/12/2023	1 year (2024)	No	No	NA	Yes, information published daily and reported on a yearly basis to the NRA	Implementation of the capacity calculation process in the export direction planned for Q1 2024, to be triggered only under certain conditions. In the long-term, a joint flow-based capacity calculation methodology for the day-ahead timeframe will be developed for the Central Europe CCR.	No
NL	TenneT NL	Core	TenneT's CNECs in Core	Loop flows	None	Approved by ACM. Date of decision: 14/11/2023	1 year (2024)	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li>MACZTmin = MACZTarget - max(0; LFcalculated - LFacceptable)</li> <li>LFacceptable is 30%-FRM for cross-zonal CNECs and 0.5*(30%-FRM) for internal CNECs, only Core exchanges considered</li> <li>Minimum 20% of Fmax in Core</li> <li>MACZTarget are action plan levels per CNEC</li> </ul>	Yes, daily through the JAO Publication Tool + Reporting deviations from the formulas used to calculate loop flows, frequency not specified	High-level timeline for DA CCM coordinated validation, Core SOGL76 and CACM35, Core CACM 74	Partially with AT, BE and PL
PL	PSE	Core	PSE's CNECs in Core	Loop flows	None	Approved by URE. Date of decision: 21/12/2023	1 year (2024)	Yes, methodology	Same methodology	<ul style="list-style-type: none"> <li>MACZTmin is 70% or Action Plan levels per CNEC</li> <li>LFacceptable is (100%-MACZTmin)*Fmax -FRM for cross-zonal CNECs and 10% of ((100%-MACZTmin)*Fmax -FRM) for internal CNECs</li> </ul>	Yes, daily through the JAO Publication Tool	High-level timeline for DA CCM coordinated validation, Core SOGL76 and CACM35, Core CACM 74	Partially with AT, BE and NL
PT	REN	SWE	ES-PT	On-going definition, development and implementation of new tools enabling the fulfilment of Article 16(8) while ensuring operational security	None	Approved by ERSE. Date of decision: 14/12/2023	1 year (2024)	Yes	Yes, increase	70% capacity for 85.0% of the hours	Yes, reporting to the NRA (no frequency)	High level description of the implementation projects for 2024	No

## Derogation requests for 2024: Overview and main characteristics

Country	TSOs	Relevant CCA	Respective bidding zone borders or CNECs	Procedural aspects of derogation				Content of derogation request					
				Reasons for derogation	Formal disagreement to the derogation request	NRA approval	Duration of derogation	Includes minimum level of MACZT	Changes in the minimum level of MACZT increased since the previous year?	Minimum level specified	Monitoring achievement of the target (including frequency of reporting)	Includes a timeline for the projects	Alignment and harmonisation in CCR
RO	Transelectrica	Core, SEE	Transelectrica's CNECs in Core, RO-BG in SEE CCR	<ul style="list-style-type: none"> <li>Lack of the regional coordinated processes for capacity calculation, capacity validation and security analysis (redispatching and countertrading processes)</li> <li>Lack of the consideration of the non-EU countries power flows in capacity calculation</li> <li>Lack of the coordination between capacity calculation regions</li> <li>Margin for uncoordinated transits (unreliable forecast)</li> </ul>	None	Approved by ANRE. Date of decision: 20/12/2023	1 year (2024)	Yes	No, same as previous year	33% for RO-HU, 43% for RO-BG	Yes, reporting to the NRA (quarterly and yearly, according to the Action Plan)	High-level timeline for DA CCM coordinated validation, Core SOGL76 and CACM35, Core CACM 74 + Grid investment projects	No
SK	SEPS	Core	Following CNEs with relevant contingencies: <ul style="list-style-type: none"> <li>V477 Lemešany – Krosno-Iskrzynia (PL)</li> <li>V478 Lemešany – Krosno-Iskrzynia (PL)</li> <li>V490 Velký Ďur – Levice</li> <li>V491 Velký Ďur – Levice</li> </ul>	<ul style="list-style-type: none"> <li>Significant increase of frequency of operational states of the system when the basic N-1 safety criterion was not respected.</li> <li>Limitation of the SEPS options to dynamically react to the adverse operational states in the system.</li> </ul>	None	Approved by URSO. Date of decision: 14/12/2023	1 year (2024)	Yes	Yes, increase	<ul style="list-style-type: none"> <li>V477 Lemešany – Krosno-Iskrzynia (PL): 60 % MACZT during minimum 80 % of MTUs.</li> <li>V478 Lemešany – Krosno-Iskrzynia (PL): 60 % MACZT during minimum 80 % of MTUs.</li> <li>V490 Velký Ďur – Levice: 50 % MACZT during minimum 80 % of MTUs.</li> <li>V491 Velký Ďur – Levice: 50 % MACZT during minimum 80 % of MTUs.</li> </ul>	Yes, daily through the JAO Publication Tool	Yes, both grid developments and operational processes.	No