

**Proposal of all TSOs of the LFC Block
TNG+TTG+AMP+50HZZT+EN+CREOS concerning ramping restrictions
for active power output in accordance with Article 137(3) and Article
137(4) of Commission Regulation (EU) 2017/1485 establishing a
guideline on electricity transmission system operation**

50Hertz Transmission GmbH (50HZZT), Amprion GmbH (AMP), Creos Luxembourg S. A. (CREOS), Energinet (EN), TenneT TSO GmbH (TTG), TransnetBW GmbH (TNG), taking into account the following

Whereas

- (1) This document is a common proposal developed by all Transmission System Operators of Danish-German-Luxembourg LFC Block (hereafter referred to as “TSOs”) regarding the ramping restrictions for active power output in accordance with Article 137 (3) and Article 137 (4) of Commission Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation (hereafter referred to as “SOGL”)
- (2) Article 6(3)(e)(i) of SOGL requires the approval by all regulatory authorities of the concerned region of the proposal by all TSOs of an LFC block concerning “[...] *ramping restrictions for active power output in accordance with Article 137(3) and (4)*”.
- (3) Article 137(3) of SOGL gives the right to all connecting TSOs of an HVDC interconnector “[...] *to determine in the LFC block operational agreement common restrictions for the active power output of that HVDC interconnector to limit its influence on the fulfilment of the FRCE target parameter of the connected LFC blocks by agreeing on ramping periods and/or maximum ramping rates for this HVDC interconnector. Those common restrictions shall not apply for imbalance netting, frequency coupling as well as cross-border activation of FRR and RR over HVDC interconnectors.*”
- (4) Article 137(3) of SOGL states: “*All TSOs of a synchronous area shall coordinate these measures within the synchronous area.*”
- (5) Article 137(4) of SOGL gives all TSOs of an LFC block the right “[...] *to determine in the LFC block operational agreement the following measures to support the fulfilment of the FRCE target parameter of the LFC block and to alleviate deterministic frequency deviations, taking into account the technological restrictions of power generating modules and demand units*”.
- (6) This proposal fulfils the requirements of the SOGL by defining the maximum gradient for the HVDC interconnectors in Article 4(1).
- (7) The TSOs do not propose to introduce ramping restrictions in accordance with Article 137(4) of SOGL.
- (8) The coordination between the TSOs of the synchronous area required by Article 137(3) of SOGL is part of the synchronous area operational agreement.
- (9) This proposal fulfils the objectives of Article 4(1) of SOGL as follows:
 - (a) The proposal determines common operational security requirements and principles for the ramping restrictions in the LFC block.

- (b) The proposal respects the responsibility assigned to the TSOs for system security by the national legislation.
- (c) The transparency is ensured by definition of the ramping restrictions of the proposal.
- (d) The proposal for ramping restrictions for HVDC interconnectors does not introduce limitations to the market.
- (e) The proposal promotes the coordination of system operation since this proposal is a joint proposal of all TSOs of the LFC block. The coordination on the synchronous area level is part of the synchronous area operational agreement.

SUBMIT THE FOLLOWING PROPOSAL TO THE REGULATORY AUTHORITIES OF DENMARK, GERMANY AND LUXEMBOURG:

Article 1

Subject matter, scope and responsibility structure

- (1) This proposal is based on the LFC block and LFC area structure proposed by all TSOs of the synchronous area CE in accordance with Article 6(3)(g) of SOGL establishing monitoring areas, LFC areas and LFC blocks in accordance with the following table:

Country	TSO (full company name)	TSO (short name)	Monitoring Area	LFC AREA	LFC Block
Germany	TransnetBW GmbH	TransnetBW	TNG	TNG	TNG+TTG+AMP+50HZT+EN+CREOS
	TenneT TSO GmbH	TenneT GER	TTG	TTG+EN	TNG+TTG+AMP+50HZT+EN+CREOS
	Amprion GmbH	Amprion	AMP	AMP+CREOS	TNG+TTG+AMP+50HZT+EN+CREOS
	50Hertz Transmission GmbH	50Hertz	50HZT	50HZT	TNG+TTG+AMP+50HZT+EN+CREOS
Denmark	Energinet	Energinet	EN	TTG+EN	TNG+TTG+AMP+50HZT+EN+CREOS
Luxembourg	CREOS	CREOS	CREOS	AMP+CREOS	TNG+TTG+AMP+50HZT+EN+CREOS

- (2) In accordance with (1), the proposal applies only for the part of Denmark which is synchronously connected to the synchronous area CE.
- (3) This proposal defines the ramping restrictions in accordance with Article 137(3) of SOGL and Article 137(4) of SOGL in the LFC block.

Article 2

Definitions and interpretation

- (1) For the purpose of the proposal, the terms used shall have the meaning given to them in Article 3 of SOGL.
- (2) ‘DE area’ means the LFC areas 50HZT, AMP+CREOS, TNG and the monitoring area TTG.
- (3) ‘DKW area’ means the monitoring area EN which is synchronously interconnected with the synchronous area CE.
- (4) ‘LFC block’ means the LFC block comprising the DE area and the DKW area.

Article 3
Ramping Restrictions for Active Power Output of HVDC Interconnectors
in Accordance with Article 137(3)

- (1) The gradient of active power output of each HVDC interconnector to the synchronous area NE shall not exceed ± 30 MW/min.
- (2) The ramping restrictions shall support the fulfilment of the FRCE target parameter of the LFC block defined in the synchronous area operational agreement in accordance with Article 128(1) of SOGL and Article 128(2) of SOGL.
- (3) The ramping restrictions of the DKW area shall support the fulfilment of the FRCE target parameter of the DKW area defined in accordance with Article 128(4) of SOGL and shall not decrease the FRCE quality of the DE area.
- (4) The ramping restrictions of the DE area shall support the fulfilment of the FRCE target parameter of the DE area defined in accordance with Article 128(4) of SOGL and shall not decrease the FRCE quality of the DKW area.

Article 4
Implementation Timescale

The TSOs shall implement the proposal with the entry into force of the LFC block operational agreement in accordance with the deadlines defined by Article 119(2) of SOGL.

Article 5
Language

The reference language for this proposal shall be English. For the avoidance of doubt, where TSOs need to translate the proposal into their national language(s), in the event of inconsistencies between the English proposal proposed by TSOs in accordance with Article 6 of the SOGL and any version in another language, the relevant TSOs shall be obliged to dispel any inconsistencies by providing a revised translation of the proposal to their relevant national regulatory authorities.