

LFC Block	LFC Area	Country	Proposal status	Forecasted approval date	Transparency platform (According to Art. 183 ff)	Available Online?	Explanatory note available?	Comments
Nordic	NO1-5,SE1-4, EN,FG	Norway, Sweden, Finland, Denmark-East	Approved		Propoposal is available	Yes, on TSOs website	Yes	
OST	OST	Albania	?		No	No		
APG	APG	Austria	Approved		Propoposal is available	Yes		
SHB	NOS BIH, HOPS,ELLES	Bosnia&Herzegovina,Croatia, Slovenia	Approved		Propoposal is available	Yes		Slovenia LFC Block Monitor
ESO	ESO	Bulgaria	?		No	No		
SG	SG	Switzerland	?		No	No		
CEPS	CEPS	Czech Republic	Approved		Not whole LFC Block Operational Agreements but relevant parts are already provided. The updated version of LFCBOA is expected in 3Q/2020	https://www.ceps.cz/cs/so-gh	NO	
Germany	TNG+TTG+AMP+50HzT+EN+CRE OS	Germany	Approved		LFC Block is not available and no data is provided. However, this is expected to be updated soon.	Yes, Regelleistung.net	Yes, Regelleistung.net	Denmark west will be a separate LFC area expected within 1 year
REE	REE	Spain	Approved		Proposal available	YES; https://www.cnmec.es/sites/default/files/2711779_0.pdf	No	
RTE	RTE	France	Approved		Proposal available	Yes, on Transparency platform	No	
IPTO	IPTO	Greece			LFC Block is not available and no data is provided			
MAVIR	MAVIR	Hungary	Approving is in progress by NRA	not determined	LFC Block is not available and no data is provided	Yes	Not yet	Expected approval by NRA is during 2020 Q1.
TERNA	TERNA	Italy			Country is there but no data is available			
SMM	CGES, MEPSO, EMS	Serbia, Montenegro and FYRM			Country is there but no data is available			Serbia LFC Block Monitor
TTB	TTB	The Netherlands			Country is there but no data is available			
Elia	Elia	Belgium	Approved	N.A	Country is there but no data is available	Available on Elia Website: https://www.elia.be/en/electricity-market-and-system-services/keeping-the-balance	Available on Elia Website: https://www.elia.be/en/electricity-market-and-system-services/keeping-the-balance	A new version is currently under public consultation (expected to be approved before 2020)
PSE	PSE, western WPS	Poland			LFC Block is not available and no data is provided			
REN	REN	Portugal			LFC Block is not available and no data is provided			
TEL	TEL	Romania			LFC Block is not available and no data is provided			
SEPS	SEPS	Slovak Republik			LFC Block is not available and no data is provided			
TEIAS	TEIAS	Turkey			LFC Block is not available and no data is provided			
Baltic	Baltic	Estonia, Latvia, Lithuania			LFC Block is not available and no data is provided			? LFC Block Monitor
GB	NGESO	Great Britain			LFC Block is not available and no data is provided			
EirGrid+SONI	EirGrid+SONI	Ireland and Northern Ireland			LFC Block is not available and no data is provided	Yes	Yes	EirGrid LFC Block Monitor

Proposal methodology

Incident size [MW] POS(+)/NEG(-)	Probabilistic approach used?	Ratio between aFRR nad mFRR	Minimum duration for imbalance covered [%] POS(+)/NEG(-)	Additional comments related to SOGL Art. 157	Are the RR requirements Art. 160 relevant for your LFC block? How do you assure to fulfil those requirements
mFRR: 1410 MW aFRR: 300	Now: deterministic Goal: Probabilistic approach. Will be developed later in close cooperation with stakeholders and NRAs	Now: mFRR 15 times more than aFRR. Goal: The same. The needed reserves will be assessed on an ongoing basis. The share of aFRR will likely increase	Now: 99% is the goal Goal: the same		
POS (incident=696 MW; probabilistic=270 MW)=696 MW NEG (incident=220 MW; probabilistic=289 MW)=289 MW	Yes, according to Article 157 of SOGL	aFRR+ / mFRR=0,274 aFRR- / mFRR=1,032	99% according to Article 157 of SOGL		NO. There is no RR implemented in our CB.
Positive reference incident + 1100 MW + statistical analysis = 1200 MW Negative reference incident - 500 MW (statistical analysis)	NO	Positive aFRR+ / mFRR+ = 0,43 Negative aFRR- / mFRR- = 1,44	99% according to SOGL Art. 157 h) i)		The process of RR implementation is ongoing. As currently RR process will be used only through so called free bids (without balancing capacity reservation), there are not expected any impacts on current dimensioning.
A)Germany: *Imbalances determine the size of reserves and not the incident *The reference incident is +1410, -1060 MW *Tendering at the time of review (Last week of October 2019): mFRR: +1080, -1905 MW aFRR: +1800, -1900 MW B)DKW: Defined by the dimensioning incident	A)Germany: *Now Probabilistic *Goal: Soon Probabilistic and dynamic dimensioning on daily basis B) DKW: *Now: Deterministic *Goal: Probabilistic	Calculated based on an estimation, which parts of the imbalances will be covered by mFRR.	*Now: At least 99%, (+/-) *Goal: The same		
The incident size will be the biggest imbalance in the system due to an instant variation of the active power of a power module, or a demand facility or an HVDC interconnector, or AC tie line in the LFC block, and is equal to the installed capacity of the biggest thermal unit in the Spanish electrical system.	Yes	aFRR: +500 MW -400 MW mFRR (upward) capacity = reference incident + 2% forecasted demand mFRR (downward) capacity = 40-100% upward mFRR	99% of the historical imbalances		
Dimensioning Incident : -1500 MW; +1000 MW	YES for RR, mFRR and aFRR global dimensioning need (margin requirement) Deterministic for aFRR additional need	aFRR : minimum -500 and + 500. mFRR : +1000 MW contracted + available free offers. Downward mFRR : only free offers to cope with dimensioning incident	RTE determines the required positive and negative reserve capacity on FRR & RR in order that it is sufficient to cover at least the positive and negative historic LFC block imbalances for 99.0% of the time in line with Articles 157(2)h and 157(2)i) of the SOGL, and dimensioning incident for FRR	aFRR additional requirement is determined in day ahead through deterministic approach	
Dimensioning Incident :+500 MW ;	YES, Deterministic & Probabilistic approach in parallel	Determination of ratio is based on the	99% according to SOGL Art. 157 h) i)	Reserve dimensioning methodology and process is confirmed	NO
The reference incident is +600 MW -300 MW	At the moment we are using deterministic approach. The goal is to use deterministic and probabilistic approach in parallel.	mFRR ±140 MW; aFRR: +460 MW – 160 MW.	At the moment EMS has derogation on this request due to KOSTT permanent deviations		
- for the positive dimensioning incident based on the highest value of available power of a generating unit (taking into account maintenances and firm maximum capacity modifications known at the time of the day-ahead dimensioning) or the predicted schedule of the HVDC-interconnector with Great-Britain (taking into account unavailability and capacity reductions known at the time of the day-ahead dimensioning) ; (currently around 1039MW determined by largest nuclear generation unit) - for the negative dimensioning incident based on the predicted schedule of the HVDCinterconnector with Great-Britain taking into account unavailability and firm capacity reductions known at the time of the day-ahead dimensioning). (currently 1026MW)	Deterministic & Probabilistic approach in parallel	The aFRR needs are determined based on a yearly probabilistic analysis of the historic 15 min. Si-variations. Based on this method, the aFRR needs are currently determined at 145 MW. The mFRR needs are determined as : mFRR needs = FRR needs - aFRR needs	ELIA determines the required positive and negative reserve capacity on FRR in order that it is sufficient to cover at least the positive and negative historic LFC block imbalances for 99.0% of the time in line with Articles 157(2)h and 157(2)i) of the SOGL	The new version of the LFCBOA (foreseen to enter into force in February 2020) will implement a new dimensioning methodology based on a daily calculation of the FRR reserve capacity for the next day based on the foreseen system conditions of that day.	No
will be the largest single infeed or outfeed		EirGrid and SONI do not operate an aFRR process; consequently all FRR in the load frequency control block is mFRR (manual)			