

EB SG

21 April 2021
Telco

Agenda

1. IGCC overview
 2. Accession planning
 3. Cross-platform activities, Next steps & effectiveness of IGCC
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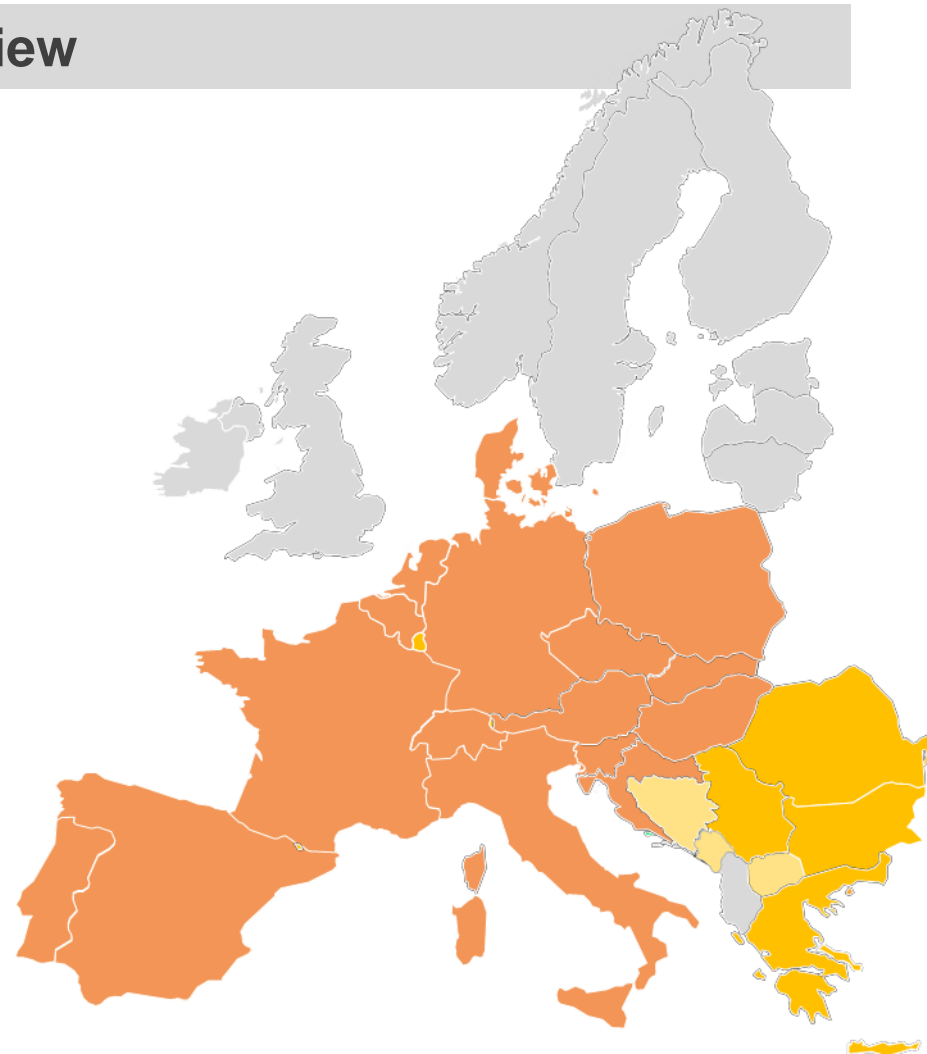
1. IGCC overview

IGCC has 27 members in total, out of which

- 19 are Operational Members
- 5 are non-operational and
- 3 are observers.

Newly acceded TSOs in 2020

Terna	– 27/01
PSE	– 18/02
Mavir	– 10/03
SEPS	– 13/05
REE	– 21/10
REN	– 16/12



IGCC operational member
(participating TSO)

IGCC non-operational member

IGCC Observer
(participating TSO)

2. IGCC accession planning

IN-Platform Accession Roadmap		2020				2021				Accession date
Country	TSO	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Germany	50 Hertz									May 2010
Greece	ADMIE									Q2 2021
Germany	Amprion									May 2010
Austria	APG									Apr 2014
Czech republic	ČEPS									Jun 2012
Slovenia	ELES									Feb 2019
Belgium	Elia									Oct 2012
Serbia	EMS									
Denmark*	Energinet									Oct 2011
Bulgaria	ESO									
Croatia	HOPS									Feb 2019
Hungary	MAVIR									Mar 2020
Poland	PSE									Feb 2020
Spain	REE									Oct 2020
Portugal	REN									Dec 2020
France	RTE									Feb 2016
Slovakia	SEPS									May 2020
Switzerland	Swissgrid									Mar 2012
Netherlands	Tennet NL									Feb 2012
Germany	Tennet GmbH									May 2010
Italy	Terna									Jan 2020
Romania	Transelectrica									Q2 2021
Germany	TransnetBW									May 2010

IN Platform Go-live deadline

* Denmark is already operational through the German control block
Denmark plans to become a separate LFC area and its own dedicated communication to the IGCC platform in the 2nd quarter of 2021

	National implementation
	Interoperability tests between TSO and IN-Platform
	Operational tests
	TSO connection to IN-platform / Go-live

- Accession plan for ESO: ongoing discussion with its NRA for granting derogation

3. Cross-platform activities, Next Steps, effectiveness of IGCC

Cross-platform activities

- PICASSO and IGCC are collaborating to utilise the same IT optimisation system (IGCC functionalities to be integrated in the new IT system within Q3-Q4 2021).

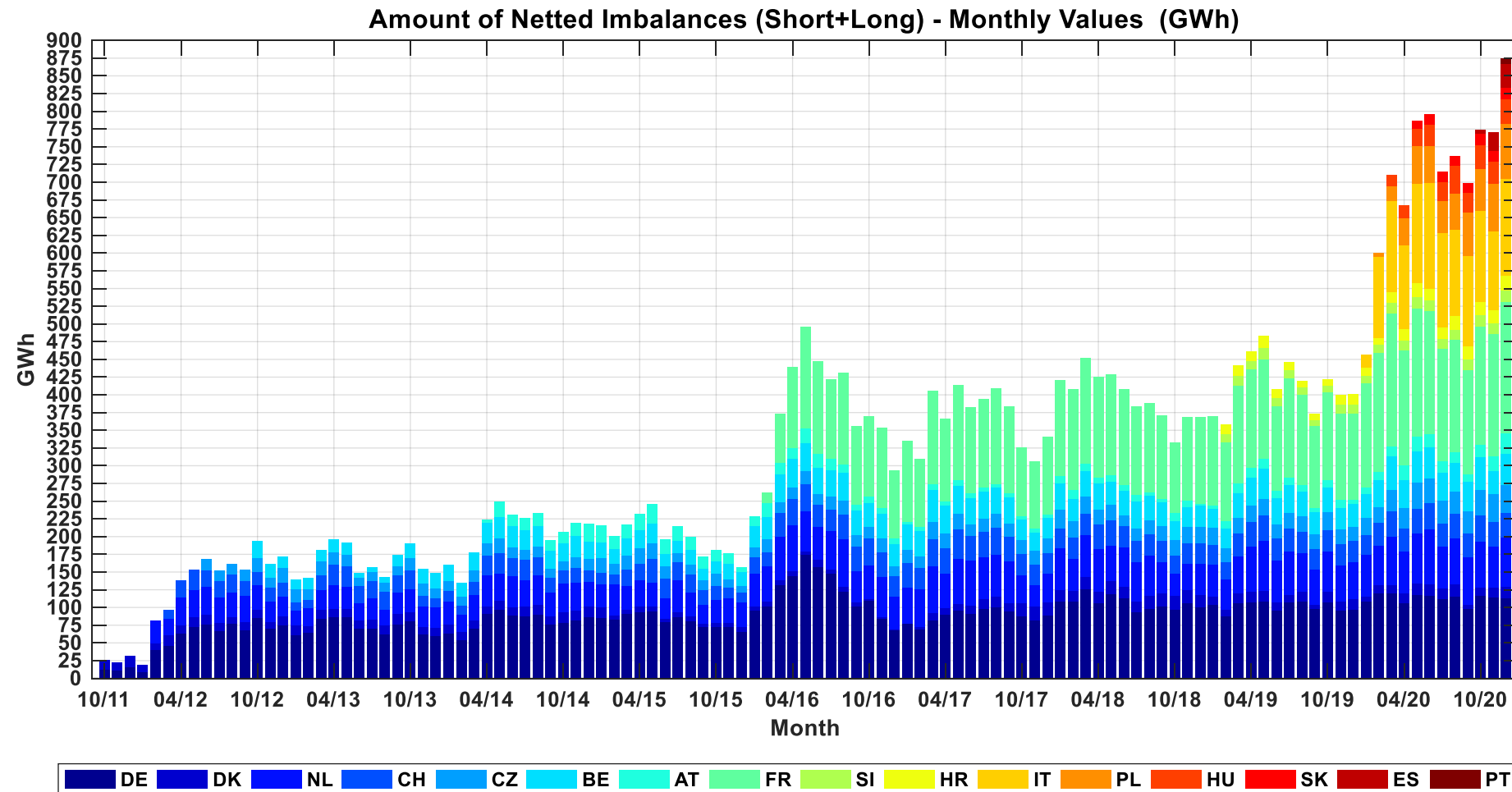
Next steps

- Focus on the implementation of the publication requirements in the Transparency Platform.
- Accession of
 - ADMIE
 - Transelectrica

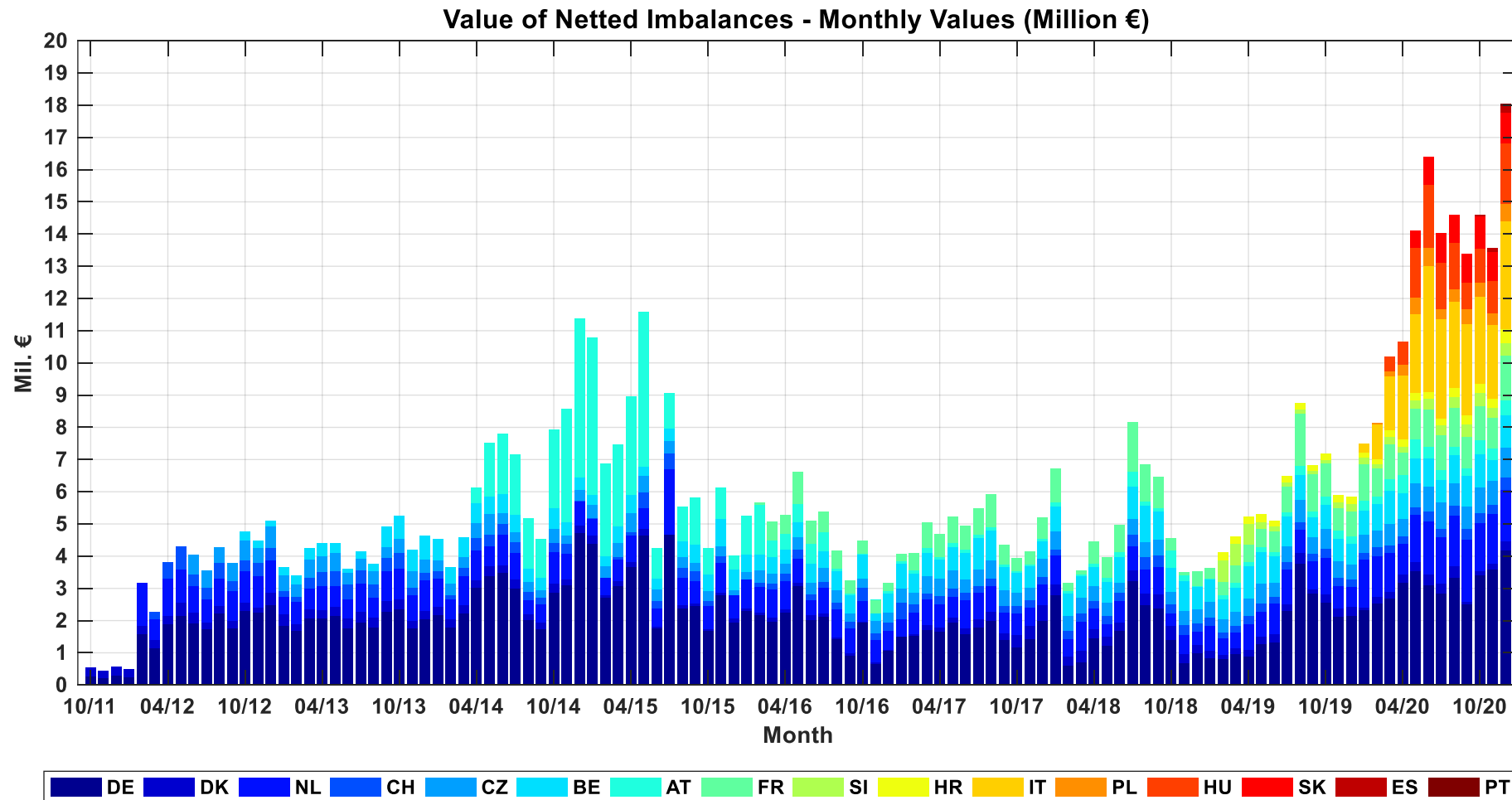
Effectiveness of IGCC

- The IGCC is proceeding to implement the IN-platform in time.
- The monthly energy savings have surpassed 875 GWh.
- After the accession of the Member TSOs in 2020, the value of monthly savings has reached 18 mil. €.

Monthly Volumes of Netted Imbalances



Monthly Value of Netted Imbalances

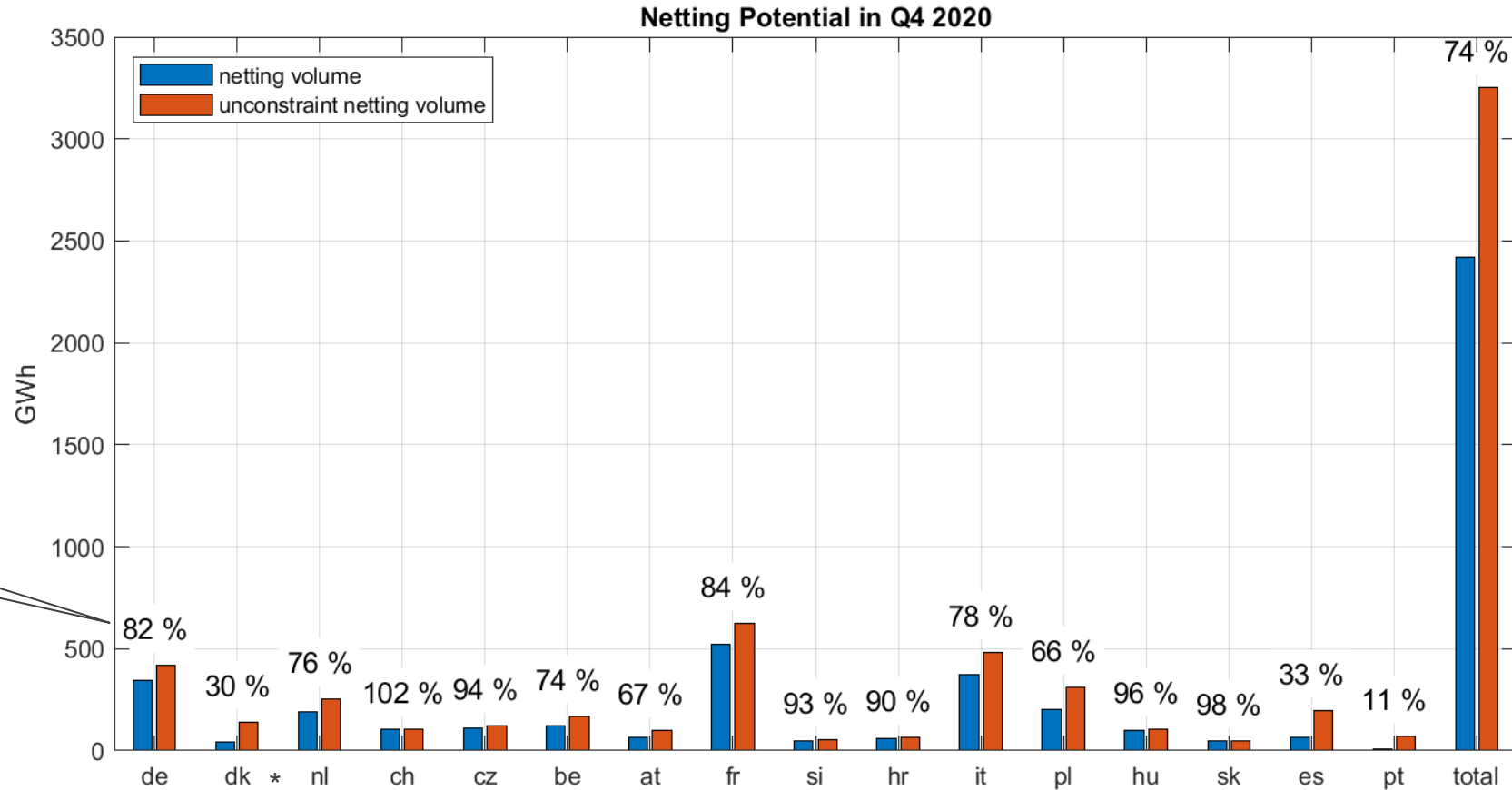


IGCC-Settlement – Basic Principle

(Methodology applied from 01/02/2016)

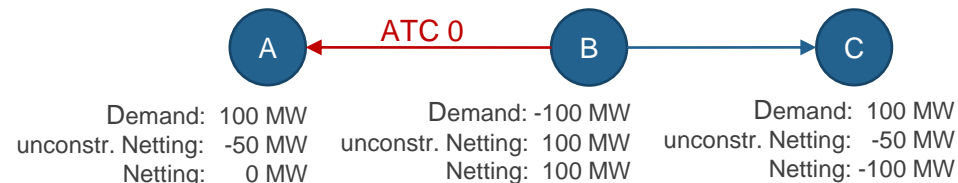
Opportunity Prices for Imbalance Netting	<div> <div>without IGCC</div> <div> $\text{SCE}_{\text{before IGCC}} [\text{MWh}] \times \text{SCE price}_{\text{before IGCC}} [\text{€/MWh}]$ </div> </div> <div>→</div> <div> <div>with IGCC</div> <div> <div>IGCC exchange</div> $\text{SCE}_{\text{after IGCC}} [\text{MWh}] \times \text{SCE price}_{\text{after IGCC}} [\text{€/MWh}]$ </div> </div> <div>→</div> <div> <div>Opportunity Price = Opportunity Value/IGCC Volume</div> $\frac{[(\text{SCE}_{\text{before IGCC}} * \text{SCE price}_{\text{before IGCC}}) - (\text{SCE}_{\text{after IGCC}} * \text{SCE price}_{\text{after IGCC}})]}{\text{IGCC exchange}}$ </div>
IGCC Initial Settlement Price	<ul style="list-style-type: none"> IGCC Initial Settlement Price (P_{IGCC}): Energy weighted ($E_{\text{Imp},i}$ and $E_{\text{Exp},i}$) average of the opportunity prices ($C_{\text{Imp},i}$ and $C_{\text{Exp},i}$) Symmetric price for IGCC imports and exports $P_{\text{IGCC}} = \frac{\sum_{i=1}^n (C_{\text{Imp},i} E_{\text{Imp},i} + C_{\text{Exp},i} E_{\text{Exp},i})}{\sum_{i=1}^n (E_{\text{Imp},i} + E_{\text{Exp},i})}$
IGCC Settlement Ex-post Adjustment	<ul style="list-style-type: none"> In case of negative individual benefits for one or more IGCC Members but positive overall benefit of the IGCC, an ex-post adjustment of settlement is performed in order to guarantee TSO neutrality. IGCC adjusted settlement prices (P'_{IGCC}) which may vary from member to member depending on their benefit before the adjustment

Netting Potential

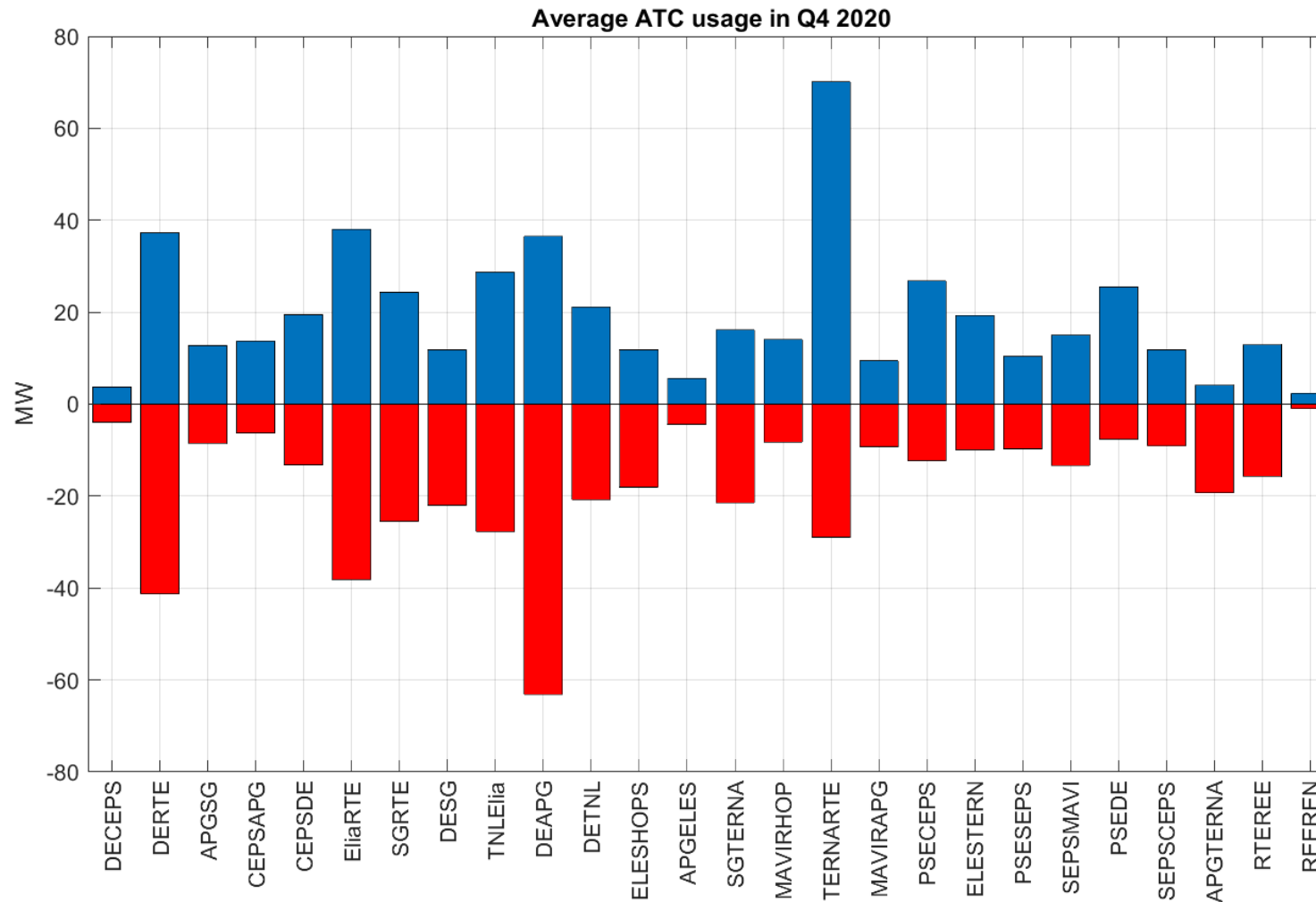


*Netting Potential of Denmark cannot be fully used before Denmark becomes an LFC area

Due to the proportional distribution of netting potential and maximization of netting, network constraints can lead to a netting volume that is larger than the unconstrained netting (see LFC area C in the example)

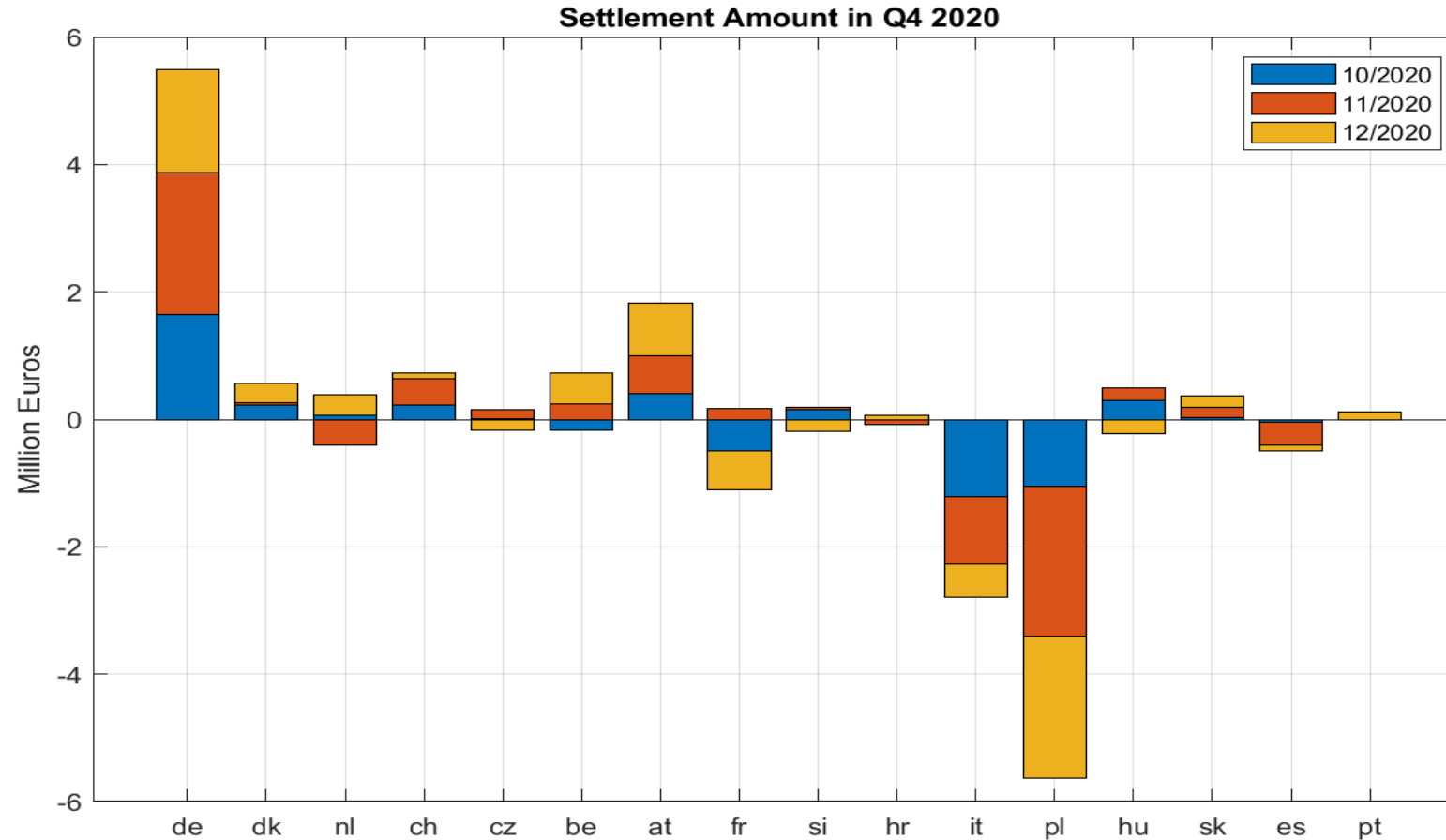


ATC usage



For technical reasons, the aFRR interchange as result of the German/Austrian aFRR cooperation is included in this evaluation.

Settlement amount



Disclaimer:

The data is to be taken for information only. No conclusion can be drawn in terms of the contribution to the total benefit of the cooperation. The results depend on stochastic factors such as the availability of transmission capacity and the imbalance positions (long/short) of the individual control areas.