



Ihr Zeichen, Ihre Nachricht vom

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oder 14-0

Bonn
01.06.2026

**Genehmigung von Änderungen der gemeinsamen Methode für ein Multiple NEMO
Arrangement der Übertragungsnetzbetreiber der Gebotszone Deutschland/Luxemburg
gemäß Artikel 45 und 57 CACM-VO**

In dem Verwaltungsverfahren

gegenüber

der 50Hertz Transmission GmbH, Heidestraße 2, 10557 Berlin, gesetzlich vertreten durch die
Geschäftsführung

– Antragstellerin zu 1 –

der Amprion GmbH, Robert-Schuman-Straße 7, 44263 Dortmund, gesetzlich vertreten durch die
Geschäftsführung,

– Antragstellerin zu 2 –

der Baltic Cable AB, Gustav Adolfs Torg 47, SE-2119 Malmö, Schweden, vertreten durch den
Vorstand

– Antragstellerin zu 3 –

der TenneT TSO GmbH, Bernecker Straße 70, 95448 Bayreuth, gesetzlich vertreten durch die
Geschäftsführung

– Antragstellerin zu 4 –

der TransnetBW GmbH, Osloer Str. 15 - 17, 70173 Stuttgart, gesetzlich vertreten durch die Geschäftsführung,

– Antragstellerin zu 5 –

wegen

Änderung an der gemeinsamen Methode für ein Multiple NEMO Arrangement der Übertragungsnetzbetreiber der Gebotszone Deutschland/Luxemburg gemäß Art. 9 Abs. 8 lit. d und Art. 9 Abs. 13 i.V.m. Art. 45 und 57 Verordnung (EU) 2015/1222 zur Festlegung einer Leitlinie für die Kapazitätsvergabe und das Engpassmanagement

hat die Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen, Tulpenfeld 4, 53113 Bonn, gesetzlich vertreten durch ihren Präsidenten Klaus Müller, am 1. Juni 2026 entschieden:

1. In Abänderung des Bescheids der Bundesnetzagentur vom 4. Oktober 2018 (Az. BK6-18-098) wird die gemeinsame Methode für ein Multiple NEMO Arrangement der Übertragungsnetzbetreiber der Gebotszone Deutschland/Luxemburg gemäß Art. 9 Abs. 8 lit. d und Art. 9 Abs. 13 i.V.m. Art. 45 und 57 Verordnung (EU) 2015/1222 zur Festlegung einer Leitlinie für die Kapazitätsvergabe und das Engpassmanagement wie in Anlage I dieses Bescheides niedergelegt genehmigt.
2. Eine Kostenentscheidung bleibt vorbehalten.

Gründe

A.

Das vorliegende Verwaltungsverfahren betrifft die Genehmigung eines Änderungsantrags aller Übertragungsnetzbetreiber (ÜNB) der Gebotszone Deutschland/Luxemburg (DE/LU) für ein Multiple NEMO Arrangement (MNA) der Übertragungsnetzbetreiber der Gebotszone DE/LU gemäß Art. 9 Abs. 8 lit. d und Art. 9 Abs. 13 i.V.m. Art. 45 und 57 Verordnung (EU) 2015/1222 zur Festlegung einer Leitlinie für die Kapazitätsvergabe und das Engpassmanagement in der Fassung der Durchführungsverordnung (EU) 2021/280 vom 22. Februar 2021 (CACM-VO).

Das Ziel der CACM-VO besteht in der Koordination und Harmonisierung der grenzüberschreitenden Kapazitätsberechnung und -vergabe in den grenzüberschreitenden Day-Ahead und Intraday-Märkten. Um dieses Ziel zu erreichen, regelt die CACM-VO u.a., dass die

ÜNB in den Gebotszonen, in denen mehr als ein NEMO¹ benannt wurde bzw. Handelsdienstleistungen anbietet, einen Vorschlag für die Vergabe zonenübergreifender Kapazität und sonstiger notwendiger Regelungen erarbeiten.

Am 1. Februar 2017 genehmigte die Bundesnetzagentur die initiale Methode für ein MNA gemäß Art. 45 und 57 CACM-VO unter dem Aktenzeichen BK6-16-017. Diesem war ein gemeinsamer Antrag der ÜNB der damaligen Gebotszone Deutschland/Österreich/Luxemburg vorausgegangen.

Die erste Änderung der Methode genehmigte die Bundesnetzagentur am 4. Oktober 2018 unter dem Aktenzeichen BK6-18-098. Die Änderung der Methode war aufgrund der zum 1. Oktober 2018 vollzogenen Gebotszonentrennung zwischen Deutschland/Luxemburg und Österreich notwendig geworden, um die neue Gebotszonenkonfiguration abzubilden.

Am 30. Januar 2026 haben die deutschen ÜNB der Gebotszone DE/LU den zwischen ihnen und dem luxemburgischen ÜNB Creos abgestimmten und auf den 22. Januar 2026 datierenden Antrag zu Änderungen der Methode für ein MNA der Bundesnetzagentur per E-Mail übermittelt. Die ÜNB haben den Entwurf des geänderten MNA mit den in der Gebotszone DE/LU tätigen NEMOs EPEX Spot SE, ETPA Holding B.V., EXAA AG und Nord Pool EMCO AS abgestimmt. Mit dem Antrag übermittelten die ÜNB die Stellungnahme des NEMOs Nord Pool EMCO AS und deren Bewertung durch die Antragstellerinnen.

Der luxemburgische ÜNB Creos hat den Antrag am 2. Februar 2026 bei der luxemburgischen Regulierungsbehörde ILR eingereicht.

Durch den eingereichten Änderungsantrag, soll der Interkonnektor Baltic Cable, der die Gebotszone DE/LU mit der Gebotszone Schweden 4 verbindet, in das MNA einbezogen werden. Zukünftig soll über das Baltic Cable, zusätzlich zu dem bereits existierenden Day-Ahead-Handel, auch die Intraday-Kapazitätsvergabe erfolgen. Dafür müssen spezielle Regelungen eingeführt werden. Zudem werden die Vorgaben zu Ausweichverfahren im Falle der Entkopplung eines, mehrerer oder aller NEMOs im Day-Ahead Zeitfenster angepasst. Es werden in Abschnitt 2.3 Ziffer 2 und 3 die Entkopplungsszenarien, teilweise und vollständige Entkopplung, genau beschrieben, da die Ausweichverfahren sich je nach Situation unterscheiden. Darüber hinaus werden die Regelungen für die teilweise Entkopplung geändert und klargestellt, dass keine lokalen Auktionen bei der teilweisen Entkopplung von den entkoppelten NEMOs als Ausweichverfahren durchgeführt werden dürfen. Zudem wird auch für den Fall der teilweisen Entkopplung festgelegt, dass es nur einen Preis pro Gebotszone gibt.

Des Weiteren sind allgemeine redaktionelle Änderungen enthalten sowie spezifische redaktionelle

¹ NEMO: Nominated Electricity Market Operator (Nominierter Strommarktbetreiber), vgl. Art. 2 Nr. 23 CACM-VO.

Änderungen, um die seit der letzten MNA-Änderung erfolgte Inbetriebnahme der Verbindungsleitung Alegro zwischen der Gebotszone DE/LU und Belgien abzubilden.

Der Änderungsantrag wurde am 5. Februar 2026 auf der Internetseite der Bundesnetzagentur veröffentlicht. Es wurde eine Frist zur Stellungnahme bis zum 19. Februar 2026 eingeräumt. Bei der Bundesnetzagentur sind keine Stellungnahmen eingegangen.

Am 6. Mai 2026 hat die Bundesnetzagentur gegenüber der luxemburgischen Regulierungsbehörde ILR per E-Mail der Annahme der Änderungen am MNA zugestimmt. Die luxemburgische Regulierungsbehörde ILR hat der Annahme der Änderungen am 13. Mai 2026 ebenfalls zugestimmt, so dass eine Einigung über die Annahme zustande gekommen ist.

Wegen der weiteren Einzelheiten wird auf den Inhalt der Akte, die vorangegangenen Entscheidungen der Bundesnetzagentur vom 1. Februar 2017 (Az. BK6-16-017) und vom 4. Oktober 2018 (Az. BK6-18-098) sowie auf das Positionspapier der Regulierungsbehörden der Gebotszone DE/LU vom 6. Mai 2026, Bezug genommen.

B.

Die beantragten Änderungen an dem MNA der ÜNB der Gebotszone DE/LU gemäß Art. 9 Abs. 8 lit. d und Art. 9 Abs. 13 i.V.m. Art. 45 und 57 CACM-VO werden nach Maßgabe der diesem Bescheid als Anlage I angehängten Methode genehmigt. Der Antrag ist zulässig und begründet.

I. Zulässigkeit

Der Antrag ist zulässig. Die bundes- und unionsrechtlichen Vorschriften über das Verfahren sind gewahrt.

1. Die Antragstellerinnen sind antragsbefugt. Gemäß Art. 9 Abs. 13 Satz 2 CACM-VO können die für die Ausarbeitung eines Antrags für Methoden zuständigen ÜNB bei den zuständigen Regulierungsbehörden Änderungen dieser Methoden beantragen. Dass es sich bei dem seitens der ÜNB der Gebotszone DE/LU eingereichten Vorschlags um einen verwaltungsrechtlichen Antrag handelt, wird bereits aus dem Umstand ersichtlich, dass dieser laut Art. 9 CACM-VO von den jeweils zuständigen Behörden zu genehmigen ist. Mit dem Eingang der bei der Bundesnetzagentur am 30. Januar 2026 eingereichten Unterlagen stellten die Antragstellerinnen einen entsprechenden Antrag.

2. Die Zuständigkeit der Bundesnetzagentur für die Genehmigung des Änderungsantrags ergibt sich aus § 56 Abs. 1 S. 1 Nr. 1 EnWG i.V.m. Art. 61 der Verordnung (EU) 2019/943 vom 5. Juni 2019 über den Elektrizitätsbinnenmarkt (EltVO) i.V.m. Art. 9 Abs. 13 Satz 2 i.V.m. Art. 9 Abs. 8 Buchst. d i.V.m. Art. 45 und 57 CACM-VO. Eine obligatorische Beschlusskammerzuweisung

besteht nicht, siehe § 59 Abs. 1 Satz 2 Nr. 14 EnWG. Die Zuständigkeit der Bundesnetzagentur ist auch nicht gemäß Art. 9 Abs. 11 CACM-VO an ACER übergegangen. Der Antrag wurde bei der luxemburgischen Regulierungsbehörde ILR am 2. Februar 2026 eingereicht. Dieser Antragseingang erfolgte nach der Antragseinreichung bei der BNetzA und setzte somit den Lauf der sechsmonatigen Genehmigungsfrist aus Art. 9 Abs. 10 und Abs. 13 CACM-VO in Gang. Die Regulierungsbehörden der Gebotszone DE/LU haben sich am 13. Mai 2026, mithin vor dem Ablauf der am 2. August 2026 endenden Frist, gemäß Art. 9 Abs. 10 und Abs. 13 CACM-VO auf die Genehmigung der Änderung der Methode geeinigt.

3. Die nach Art. 9 Abs. 13 Satz 3 i.V.m. Abs. 10 Satz 1 CACM-VO erforderliche Einigung zwischen den Regulierungsbehörden der Gebotszone DE/LU ist zustande gekommen. Mit der letzten Einigungsmitteilung am 13. Mai 2026 bekundeten die Vertreter der Regulierungsbehörden der Gebotszone DE/LU, die Änderung an der gemeinsamen Methode für ein MNA der ÜNB der Gebotszone DE/LU gemäß Art. 9 Abs. 13 i.V.m. Art. 45 und 57 CACM-VO genehmigen zu wollen.

II. Begründetheit

Der Antrag ist auch begründet. Die zur Genehmigung beantragten Änderungen des MNA erfüllen die Vorgaben aus Art. 45 und 57 CACM-VO und stehen im Einklang mit den Zielen der CACM-VO, insbesondere der Gewährleistung einer fairen und nichtdiskriminierenden Behandlung der NEMOs, Berücksichtigung der Notwendigkeit einer fairen und geordneten Preisbildung und der Schaffung gleicher Ausgangsbedingungen für die NEMOs.

Der Antrag wird nach Maßgabe der zwischen den Regulierungsbehörden der Gebotszone DE/LU gemäß Art. 9 Abs. 13 Satz 3 i.V.m. Abs. 10 Satz 1 CACM-VO getroffenen Einigung vom 13. Mai 2026 genehmigt.

Die Änderungen entsprechen den rechtlichen Anforderungen der CACM-VO und der EltVO.

Durch die Streichung der lokalen Auktionen gemäß Abschnitt 2.3 Ziffer 2f) der Methode als Ausweichverfahren findet kein Handel außerhalb der Day-Ahead-Marktkopplung statt und es gibt auch im Fall der teilweisen Entkopplung nur einen Preis pro Gebotszone. Diese Änderungen an den Day-Ahead Ausweichverfahren entsprechen den Vorgaben des Art. 7 Abs. 2 lit. ca) EltVO wonach Handel mit Day-Ahead-Produkten oder Produkten mit denselben Merkmalen nicht außerhalb der Day-Ahead-Marktkopplung organisieren werden darf.

Der NEMO Nord Pool hat eine Änderung von Abschnitt 2.3 Ziffer 2b) der Methode vorgeschlagen. Dort ist geregelt, dass alle im Day-Ahead Zeitbereich entkoppelten NEMOs gemäß den einschlägigen europäischen und/oder regionalen Betriebsverfahren vorgehen sollen. Nach Nord Pools Vorschlag soll festgelegt werden, dass die Betriebsverfahren jederzeit den darauffolgenden Ziffern 2c) bis 2f) dargelegten Grundsätzen entsprechen und diese gewährleisten müssen. Die ÜNB haben diese Änderung abgelehnt, da 2c) – 2f) bereits für die Betriebsverfahren gelten. Die

BNetzA teilt die Auffassung der ÜNB, dass die Ziffern für sämtliche Situationen der teilweisen Entkopplung immer gelten und kein entsprechender Zusatz in Ziffer 2b) erforderlich ist.

Darüber hinaus hat Nord Pool vorgeschlagen bei Abschnitt 2.3 Ziffer 2 f) zu ergänzen, dass entkoppelte NEMOs im Falle einer teilweisen Entkopplung anbieten können, dass zumindest einen Teil der Volumina auf ihrer/n Plattform/en mittels sog. Volume Allocation zum Single Day-Ahead-Preis abrechnen zu lassen. Die NEMOs haben sich darauf geeinigt, das Volume Allocation als Ausweichverfahren zu nutzen. Dennoch haben die ÜNB entschieden, dieses Verfahren in der MNA nicht ausdrücklich aufzunehmen. So bleibe das MNA für etwaige künftige Anpassungen der Ausweichverfahren offen. Des Weiteren mangle es an einer gesetzlichen Definition des Volume Allocation. Zudem wäre die von Nord Pool vorgeschlagene Ergänzung fakultativ und hätte somit keinen Mehrwert. Auch hier teilt die BNetzA die Auffassung der ÜNB, dass eine Ergänzung, dass das Volume Allocation als Ausweichverfahren genutzt werden kann, wegen der Freiwilligkeit und mangels Definition keinen zusätzlichen Nutzen entfaltet.

Die geplante Einführung der zonenübergreifenden Kapazitätszuweisung auf dem Baltic Cable im Intraday Zeitbereich innerhalb der Intraday-Markkopplung macht Änderungen des sog. physischen Shippings nötig. Unter physischem Shipping versteht man die physische Abwicklung der Energielieferung. Das Baltic Cable ist derzeit keiner Regelzone zugeordnet, so dass zwischen der angrenzenden deutschen Regelzone des ÜNB TenneT und der schwedischen Regelzone des ÜNB Svenska Kräfnät keine Regelzonengrenze existiert. Die Verbindungsleitung ist daher auch nicht als solche in den technischen Systemen der ÜNB abgebildet. Daraus ergibt sich, dass die etablierten Transportdienstleister (shipping agents), die das physikalische Shipping zwischen NEMOs durchführen, keine grenzüberschreitenden Fahrpläne nominieren und somit die Energie über diese Verbindungsleitung nicht grenzüberschreitend übertragen können. Daher sieht das Shippingmodel für das Baltic Cable vor, dass Baltic Cable selber als einziger grenzüberschreitender physischer Transportvermittler (single cross-border physical shipping agent) im kontinuierlichen Intraday-Zeitfenster fungiert. Die Änderungen an den sog. Shipping Arrangements des Baltic Cables sind sachgerecht.

Die weiteren Änderungen sind nicht zu beanstandende Aktualisierungen und redaktionelle Anpassungen.

III. Kosten

Hinsichtlich der Kosten ergeht ein gesonderter Bescheid nach § 91 EnWG.

Rechtsbehelfsbelehrung

Gegen diesen Bescheid kann innerhalb eines Monats nach Zustellung Beschwerde erhoben werden. Die Beschwerde ist bei dem Beschwerdegericht, dem Oberlandesgericht Düsseldorf (Hausanschrift: Cecilienallee 3, 40474 Düsseldorf), einzureichen.

Die Beschwerde ist zu begründen. Die Frist für die Beschwerdebegründung beträgt einen Monat. Sie beginnt mit der Einlegung der Beschwerde und kann auf Antrag von dem oder der Vorsitzenden des Beschwerdegerichts verlängert werden. Die Beschwerdeschrift und die Beschwerdebegründung müssen durch einen Rechtsanwalt unterzeichnet sein.

Die Beschwerde hat keine aufschiebende Wirkung (§ 76 Abs. 1 EnWG).

Bonn, 01.06.2026

Im Auftrag

Anlage I

Joachim Gewehr
(Referatsleiter)

22.01.2026 – Amendment for the inclusion of Baltic Cable AB in the MNA together with the new border DE/LU-SE4 and adaptation of the day-ahead fallback arrangements

Multiple NEMO Arrangement (MNA) in the Bidding Zone Germany/Luxem- bourg (DE/LU)

[22.01.2026]

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1 Introduction

This document includes the provisions of a second amendment of the multiple NEMO arrangement (MNA) in the Bidding Zone Germany/Luxembourg (DE/LU). The MNA dated 20 January 2017 was first approved by the Institut Luxembourgeois de Régulation (ILR) on 31 January 2017 (decision ILR/E17/3) and by the Bundesnetzagentur (BNetzA) on 1 February 2017 (decision BK6-16-017). The first amendment dated 6 April 2018 was approved by ILR on 2 October 2018 (ILR/E18/35) and by BNetzA on 4 October (BK6-18-098).

The planned introduction of intraday cross-zonal capacity allocation within the Single Intraday Coupling (SIDC) on the Bidding Zone Border between Germany/Luxembourg and Sweden 4 (DE/LU-SE4) as well as the changes introduced by Regulation (EU) 2024/1747 of the European parliament and of the Council of 13 June 2024 amending Regulation (EU) 2019/943 (the EU Regulation), in particular to its article 7(2), require amendments to the approved MNA pursuant to Articles 45 and 57 of the Commission Regulation (EU) 2015/1222 on establishing a guideline on Capacity Allocation and Congestion Management (GL CACM). Some editorial changes reflecting the operation of Alegro in Single Day-ahead Coupling (SDAC) and SIDC creating an additional border between Germany/Luxembourg and Belgium (DE/LU-BE) are also included.

This document is the common proposal of 50Hertz, Amprion, Baltic Cable AB, CREOS, TenneT GmbH, TransnetBW (the “TSOs”) to the BNetzA and ILR (the “NRAs”) to amend the current MNA for the involvement of more than one nominated electricity market operator (NEMO) in the SDAC and SIDC within the Bidding Zone Germany/Luxembourg (DE/LU).

In line with the GL CACM, this proposal is based on the cooperation with the NEMOs designated in the Bidding Zone DE/LU. The TSOs informed the currently designated NEMOs about the foreseen amendment of the MNA and consulted the contents with them.

For the avoidance of any doubt, the capitalised terms used in this document which have not been defined in the glossary (see paragraph 4) shall have the meaning set forth in the GL CACM.

1.1 Background and context

In line with Article 4 (NEMOs designation and revocation of the designation) of the GL CACM, several entities have been designated as NEMOs by the NRAs in the Bidding Zone DE/LU (<https://www.acer.europa.eu/sites/default/files/documents/en/Electricity/MARKET-CODES/CAPACITY-ALLOCATION-AND-CONGESTION-MANAGEMENT/Documents/NEMOs-list.pdf>)

1.2 Legal obligations

1.2.1 Legal obligation to implement Multiple NEMO Arrangements

The following GL CACM-provisions are the legal basis for the MNA for day-ahead (DA) and intraday (ID) within the Bidding Zone DE/LU:

- *Article 8: TSOs shall [...] establish cross zonal capacity allocation and other arrangements in accordance with Articles 45 and 57;*
- *Article 45, 57: TSOs [...] shall develop a proposal for cross-zonal capacity allocation and other necessary arrangements for such Bidding Zones [where more than one*

NEMO is offering trading services] in cooperation with concerned TSOs and NEMOs ... to ensure that the relevant NEMOs ... provide the necessary data and financial coverage for such arrangements.

- *Article 7: NEMOs shall [...] in accordance with Article 45 and 57, coordinate with TSOs to establish arrangements concerning more than one NEMO within a Bidding Zone and perform single day-ahead and/or intraday coupling in line with the approved arrangements.*

The notion MNA in this document refers to the obligations resulting from the articles listed above regarding “cross-zonal capacity allocation and other necessary arrangements”.

The legal provisions of Articles 45 and 57 are comparable; Article 45 defines them for the SDAC whereas Article 57 fixes the same provisions for the SIDC.

1.2.2 Legal obligations related to Clearing, Settlement, Scheduling and Shipping

Article 68(6) of GL CACM related to the Clearing and Settlement provides guidance in case a Shipping Agent is involved in the exchange of energy between Bidding Zones.

The final scheduled exchange calculation will to be in line with the methodologies developed and approved under Article 43 (DA) and 56 (ID).

In line with Article 7(1)(g), it is a NEMO-task to act as Central Counter Parties (CCPs) and according to its definition, it is a CCP's task to organise the exchange of energy resulting from SDAC and SIDC with other CCPs or Shipping Agents. In line with Article 8(2)(l) of GL CACM, it is a TSOs' task to act as Shipping Agents, where so agreed. Nonetheless based on Article 68(6), a Shipping Agent may act as a Counter Party between different CCPs for the exchange of energy, if the parties concerned conclude a specific agreement to that effect and this task is not performed according to Article 68(3) by the CCPs.

The Shipping solution for SDAC and SIDC (“Preferred Shipping Agent model”), proposed in this MNA, follows Article 7(1) (g). The option, establishing TSOs as Shipping Agents in the Bidding Zone DE/LU, is not taken by the TSOs.

1.3 Compliance of the MNA with the objectives of GL CACM

The proposed MNA in the Bidding Zone DE/LU contributes to fulfilling the achievement of the objectives of Article 3 of GL CACM.

The Regulation aims at:

(a) promoting effective competition in the generation, trading and supply of electricity;

The implementation of the MNA described in this document will enable several NEMOs to operate in the Bidding Zone DE/LU and promote the competition in the generation, trading and supply of energy.

(c) ensuring operational security;

By choosing a single data exchange point for pre- and post-coupling arrangements additional interfaces are minimized and potential risks of errors are reduced. Apart from that the proposal

foresees the possibility for each NEMO to download the Cross Zonal Capacities and Allocation Constraints from a single data exchange point and hence to serve as Back-up if the NEMO(s) responsible for the transfer of input and output data at the respective point in time is/are affected by technical issues.

Furthermore, the proposed solution for the Physical Settlement ensures the necessary operational security standards in line with the GL SO.

(d) optimising the calculation and allocation of cross-zonal capacity;

The MNA proposal allows for an efficient consideration of several NEMOs in one Bidding Zone without hampering the capacity calculation and allocation processes.

(e) ensuring fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants;

The TSOs consider the proposed solution as a fair, transparent, MNA, balancing interests of market parties, NEMOs and TSOs and facilitating NEMO-competition within the Bidding Zone DE/LU. To ensure this during the drafting process the feedback of the NEMOs has been evaluated by the TSOs and taken into account where reasonable.

(f) ensuring and enhancing the transparency and reliability of information;

Using one single data exchange point for the data exchange provides every NEMO with the possibility to have access to cross zonal capacities and allocation constraints which enhances transparency.

(h) respecting the need for a fair and orderly market and fair and orderly price formation;

The MNA is linked to the MCO function carried out jointly by all NEMOs. In this respect the present MNA foresees unrestricted price formation within the Bidding Zone. This requirement, together with the fallback solutions outlined in the document, enable a fair and orderly market and price formation.

(i) creating a level playing field for NEMOs;

In order to ensure a level playing field and non-discriminatory treatment of competitors, a flexible solution for MNA has been developed that ensures a fair and equal treatment of the NEMOs within the operational processes and facilitates their participation in the DA and ID market coupling on equal terms. The proposed solutions are extendible for additional NEMOs.

1.4 Basics principles valid for single intraday coupling and single day-ahead coupling

1.4.1 NEMO Hub

In each Scheduling Area of the Bidding Zone DE/LU the term NEMO Hub is defined as the NEMO market place in which a given NEMO receives the set of orders submitted by the market participants. A NEMO Hub is therefore defined by the operating NEMO and the Scheduling Area which hosts a balance group of its CCP that constitutes the place of physical fulfilment. A NEMO could operate NEMO Hubs in several Scheduling Areas. Several NEMO Hubs could be operated by different NEMOs in the same Scheduling Area.

1.4.2 Principles of the settlement of energy exchanges via Central Counterparties

Power Exchanges perform an anonymous matching of buy and sell orders without becoming a party of trades themselves. The volumes of all matched buy and sell orders therefore have to be balanced within each market time unit. It is of no significance whether a one-to-one matching of buy and sell orders is performed or even possible. The matching of an order with at least another order does not result in a trade between the bidders; instead a trade is concluded between each bidder and the clearing house(s) of the NEMO Hubs, which steps between the bidders and assumes the counterparty risk for the trade as a CCP.¹ For sake of simplicity one can assume that any bilateral or multilateral trades between market participants are split into trades with the CCP standing in between the parties. Instead of trades between buyers and sellers, trades between buyers and their CCPs and sellers and their CCPs are concluded.

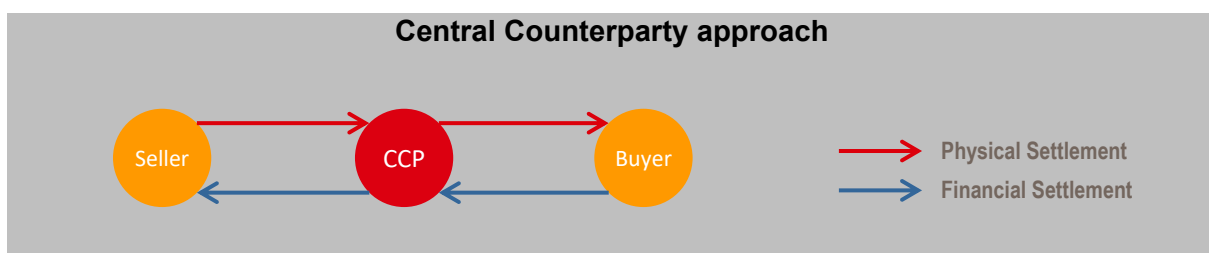


Figure 11: Central Counterparty approach

The settlement of any trade requires the delivery of the good (in this case energy for a particular market time unit) and the transfer of the agreed amount of money.² Trades between market participants and their CCP are always settled within the Scheduling Area of the CCP, which is the place of delivery of a specific NEMO Hub. An accepted bid entitles the market participant to receive the amount of energy by means of an Internal Commercial Trade Schedule from the CCP's balance group to its own balance group within the same Scheduling Area in exchange of money. An accepted offer obliges the respective market participant to deliver the respective energy by means of an Internal Commercial Trade Schedule from its own balance group to the CCP's balance group within the same Scheduling Area in exchange of money.

1.4.3 Shipping

In case of multiple NEMO Hubs being coupled, the CCPs of all buyers and sellers are not necessarily identical, in such cases additional bilateral trades are conducted between the respective CCPs. The trades between the CCPs are hereafter referred to as Shipping.

Within the scope of this document a CCP is defined per NEMO Hub. For the avoidance of doubt, a trade between two NEMO Hubs being served by the same legal entity acting as CCP is also considered as Shipping, although the financial settlement could probably be omitted in

¹ In case of an auction like in the Single Day-ahead Coupling, a one-to-one relationship between matched sell and matched buy orders can not necessarily be made and any matched order directly results in a trade with the CCP.

² Throughout this document, the terms delivery, delivering, receiving as well as source and sink refer to the physical part of a transaction (i.e. energy) in the context of shipping and settlement. In contrast, payments are performed in the opposite direction (i.e. from receiving to delivery party).

that case or is just a matter of internal accounting respectively. However, the physical settlement generally still involves at least two balance groups, except if one entity is serving more than one NEMO Hub within the same Scheduling Area as a CCP.

1.4.4 Shipping Links / Physical Settlement Links

Between the following Scheduling Areas in Table 11 direct exchange of energy via 1:1 nomination is possible without any capacity restrictions³:

Intra-Zonal Shipping Links	
50Hertz	Amprion
50Hertz	TenneT GmbH
50Hertz	TransnetBW
Amprion	TenneT GmbH
Amprion	TransnetBW
Creos	Amprion
TenneT GmbH	TransnetBW

Table 11: Intra-Zonal Shipping Links

Between the following cross-zonal Scheduling Areas in Table 22 exchange of energy via 1:1 nomination is possible with capacity restrictions:

Border	Cross-Zonal Shipping Links	
FR-DE/LU	Amprion	RTE
	TransnetBW	RTE
DE/LU-AT	<i>Amprion</i>	APG
	<i>TenneT GmbH</i>	APG
	<i>TransnetBW</i>	APG
BE-DE/LU	Creos	Elia
BE-DE/LU	Amprion	Elia
NL-DE/LU	Amprion	TenneT BV
	TenneT GmbH	TenneT BV
PL-DE/LU	50Hertz	PSE
CZ-DE/LU	TenneT GmbH	CEPS
	50Hertz	CEPS
CH-DE/LU ⁴	Amprion	Swissgrid
	Transnet BW	Swissgrid
DK1-DE/LU	TenneT GmbH	Energinet.dk
DK2-DE/LU	50Hertz	Energinet.dk
NO2-DE/LU	Statnett	TenneT GmbH
DE/LU-SE ⁴	Baltic Cable AB	

Table 22: Cross-Zonal Shipping Links

³ 1:1 nomination refers to the nomination of an External Commercial Trade Schedule between two balance groups associated to the same entity identified by identical EIC.

⁴ Currently day-ahead market coupling is not implemented on these borders. This has to be taken into account when using the document (e.g. Figure 9).

1.5 Approval requests to BNetzA and ILR

The implementation and operation of the MNA in the Bidding Zone DE/LU needs binding provisions, formally approved by BNetzA and ILR.

This document contains descriptive sections that support the understanding of the specific MNA provisions. Provisions requiring formal approval are marked as “**Provision**”. For these provisions the TSOs request formal approval.

2 Single Day-Ahead Coupling

PROVISION SDAC_1: Sufficiently high capacity between NEMO Hubs within the Bidding Zone DE/LU for SDAC

The NEMOs shall ensure an unrestricted price formation between the NEMO Hubs within the Bidding Zone DE/LU in the Single Day-ahead Coupling taking into account unlimited transmission capacity. "Sufficiently high" means that no restrictions are applied for the exchange via Intra-Zonal Shipping Links.

2.1 Data exchange with the MCO-function

The SDAC algorithm is hosted by the Market Coupling Operator (MCO-) function. As TSOs are not directly connected to the MCO-function, input and output data need to be transferred via the NEMO trading systems. Regarding the data exchange for the pre- and post-coupling arrangements, the TSOs suggest to implement a centralised approach: the input and output data will be transferred through one single data exchange point provided and owned by the TSOs. TSOs will specify details of this single data exchange point in the implementation phase. NEMOs shall organize themselves to transfer the input and output data between the single data exchange point and the MCO-function. TSOs shall organize themselves to transfer the input and output data between the single data exchange point and their individual systems. The exchange point shall be accessible to all NEMOs on equal terms.

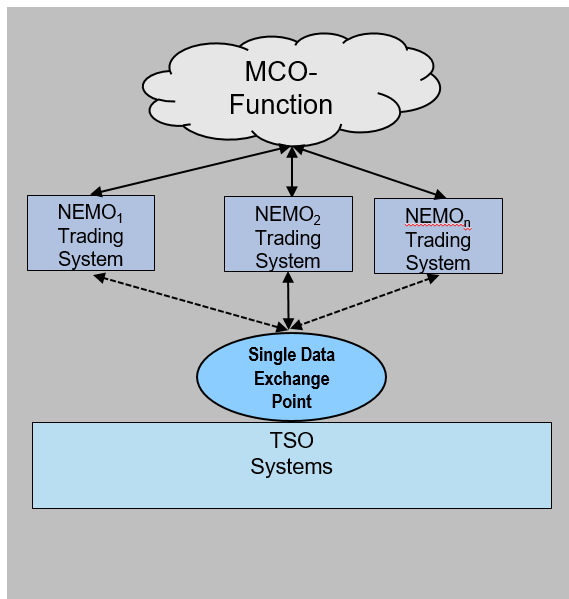


Figure 22: Data exchange for SDAC

In normal circumstances, the following general steps shall take place:

- TSOs shall calculate cross-zonal capacities and allocation constraints (if applicable) and send them to the single data exchange point.
- At least one NEMO (the coordinator) shall be in charge of transferring the input and output data of relevance for the TSOs on a given day to the MCO-function. The NEMOs shall organize themselves (main coordinator and its back-up) and inform the TSOs

subsequently. Should the NEMOs not agree two months after one of the NEMOs declared a date when it is ready to start operations, the following rule shall apply: monthly rotations of the NEMOs starting in alphabetical order of the company names of the NEMOs.

- The coordinator(s) shall retrieve the input data from the single data exchange point and forward them to the MCO-function for a given day.
- The coordinator(s) shall retrieve the output data from the MCO-function and forward them to the single data exchange point (e.g. to allow for the necessary validation of results).
- The TSOs do not assume any liability for data inconsistency at the coordinator(s). In case data inconsistency is caused by a/the TSOs, a/the TSO(s) will be liable.

Details on the different steps as well as back-up circumstances will be specified during the implementation phase.

PROVISION SDAC_2: Data exchange with the MCO-function

For the SDAC, the data exchanges between TSOs and the MCO function relating to input and output data will be done according to the existing MCO architecture, which is to say that the data will be transferred via the NEMO trading systems of the coordinator(s).

PROVISION SDAC_3: One single data exchange point on TSO side

TSO will use one single data exchange point to exchange data with the MCO-function in the pre- and post-coupling phase. The exchange point shall be accessible to all NEMOs on equal terms. Technical details will be specified by TSOs in the implementation phase.

PROVISION SDAC_4: Transfer of input and out data of relevance for the TSOs

At least one NEMO shall transfer the input and output data from the TSOs single data exchange point to the MCO-function.

PROVISION SDAC_5: Provision of the Net Position by NEMOs

The NEMOs shall provide the net position for each NEMO Hub of each Scheduling Area of the Bidding Zone DE/LU to the TSOs as part of the SDAC results.

2.2 Shipping arrangement for day-ahead

2.2.1 General principles

Shipping is a two-part transaction consisting of:

1. **Physical Settlement:** The settlement of energy delivery among CCPs per Market Time Unit based on the Net Positions resulting from the Single Day-Ahead Coupling, this by means of Internal and External Commercial Trade Schedules among the CCPs' and Shipping Agents' Balance Groups in each Scheduling Area.
2. **Financial Settlement:** The settlement of payments in exchange for the exchanged energy among the CCPs based on the Market Clearing Price per Market Time Unit of the receiving CCP's NEMO Hub resulting from the Single Day-Ahead Coupling .

Distinction of Physical Settlement

With multiple NEMOs operating in the Scheduling Areas of the Bidding Zone DE/LU the Shipping will be performed on different layers. While the Financial Settlement could abstract from these layers, the Physical Settlement has to be distinguished for the following layers:

1. **Intra-Scheduling Area:** Physical settlement between NEMO Hubs within the same Scheduling Area,
2. **Intra-Zonal:** Physical settlement between NEMO Hubs of different Scheduling Areas within the Bidding Zone DE/LU,
3. **Cross-Zonal:** Physical settlement between NEMO Hubs of adjacent Bidding Zones.

The settlement of energy exchanges within each NEMO Hub remains the same irrespectively whether one or more NEMOs are active in the Scheduling Area. With multiple NEMOs today's buy and sell-processes will remain the same:

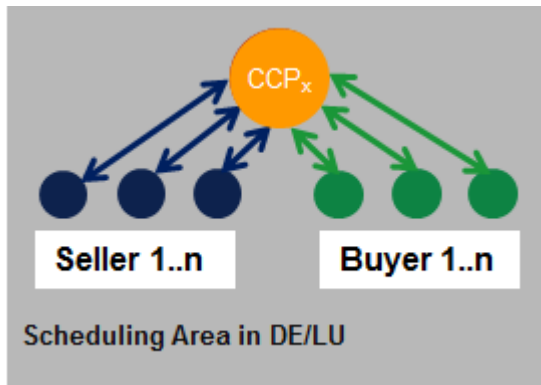


Figure 33: Scheduling Area in DE/LU

For the time being, there will be no NEMO being active in LU. The special handling of orders in LU is described below if necessary.

2.2.2 Preferred Shipping Agent model

Within the Bidding Zone DE/LU the designated Shipping approach for the Single Day-Ahead Coupling is the "Preferred Shipping Agent" model. It introduces the Preferred Shipping Agent (pSA) of the delivering CCP acting as an intermediary between two CCPs delivering energy in exchange for money. The Shipping between two CCPs is split-up in two transactions: On the one side between the delivering CCP and its pSA and on the other side between the pSA and the receiving CCP. If the delivering CCP performs the pSA task itself, the first transaction is omitted.

The financial and Physical Settlement involves the same parties and their directions are inversed.

The key property of the "Preferred Shipping Agent" model is that the delivering CCP is in charge of and liable for the shipping to the receiving CCP.

The Preferred Shipping Agent model is visualized as following:

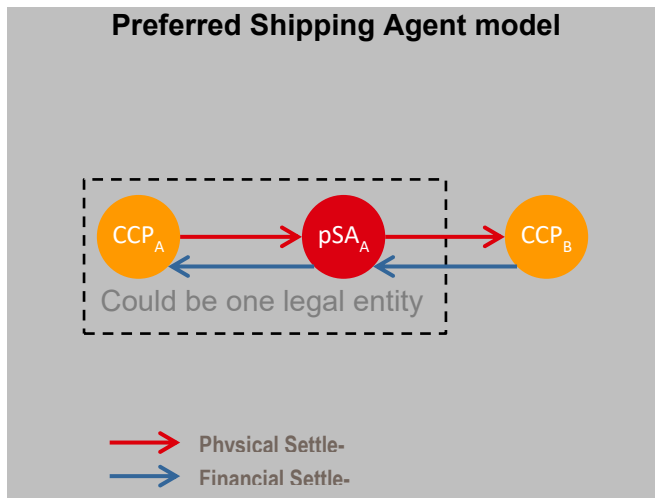


Figure 44: Preferred Shipping Agent model

2.2.3 Scheduled Exchange Calculation

The scheduled exchange are calculated as set forth in the Methodology for Calculating Scheduled Exchanges resulting from single day-ahead coupling in accordance with Article 43 of the GL CACM and managed according to the operational European and regional procedures in production.

2.2.4 Intra-Scheduling Area Shipping

The NEMOs operating NEMO Hubs in specific Scheduling Areas of the Bidding Zone DE/LU are responsible to enable Shipping between all NEMO Hubs in this Scheduling Area by means of their CCPs and pSAs.

Fundamentals:

- All CCPs have to designate their individual pSA
- The pSA of the delivering CCP performs the Shipping
- The Physical Settlement requires the following actions
 - An Internal Commercial Trade Schedule from the Balance Group of the delivering CCP to the Balance Group of its pSA within the Scheduling Area
 - An Internal Commercial Trade Schedule from Balance Group of the pSA to the Balance Group of the receiving CCP within the Scheduling Area⁵
- The Financial Settlement requires the following actions
 - A bank transfer from the receiving CCP to the pSA (of the delivering CCP)

⁵ If a CCP and its pSA make use of the same balance group both Internal Commercial Trade Schedules are replaced by one Internal Commercial Trade Schedule from the commonly used balance group of the delivering CCP and its pSA to the balance group of the receiving CCP.

- A bank transfer from the pSA (of the delivering CCP) to the delivering CCP⁶

The following figure explains the principle of Physical Settlement for three CCPs and their respective pSAs, however it is extension proof for additional NEMOs.

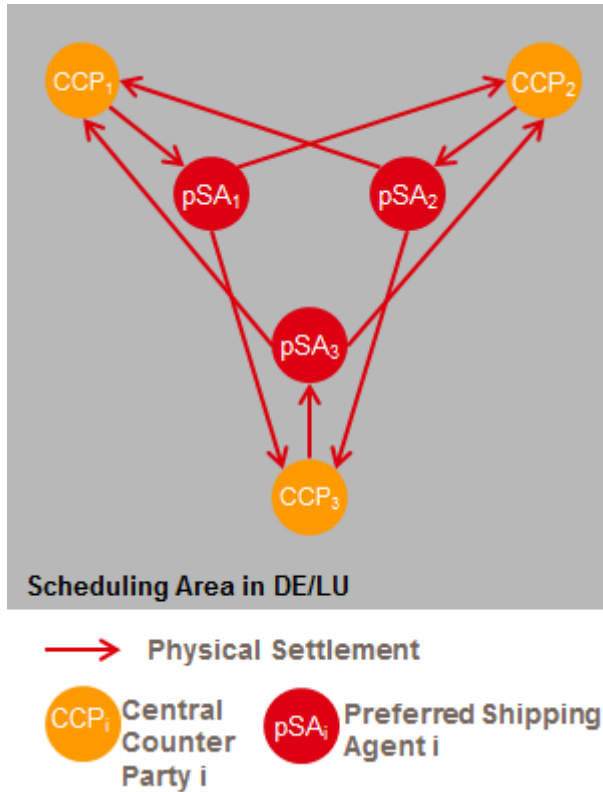


Figure 55: Physical Settlement of Intra-Scheduling Area Shipping in DE/LU

The overall Intra-Scheduling Area Shipping (Physical and Financial Settlement) is presented below:

⁶ If a CCP and its pSA make use of the same bank account (e.g. being the same legal entity) both bank transfers are replaced by one from the bank account of the receiving CCP to the commonly used bank account of the delivering CCP and its pSA.

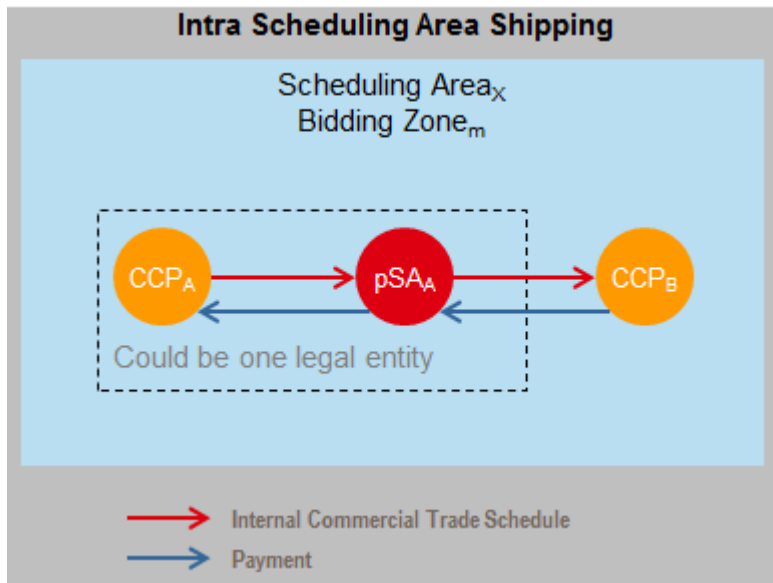


Figure 66: Intra-Scheduling Area Shipping

2.2.5 Intra-Zonal Shipping

The NEMOs operating NEMO Hubs in specific Scheduling Areas of the Bidding Zone DE/LU are responsible to enable Shipping between all NEMO Hubs of the Bidding Zone DE/LU by means of their CCPs and pSAs.

Fundamentals (Items in *italics font* are identical to Intra-Scheduling Area Shipping, items in **bold font** are specific for Intra-Zonal Shipping):

- *All CCPs have to designate their individual pSA*
- *The pSA of the delivering CCP performs the Shipping*
- *The Physical Settlement requires the following actions*
 - *An Internal Commercial Trade Schedule from the Balance Group of the delivering CCP to the Balance Group of its pSA within the **source** Scheduling Area*
 - **An External Commercial Trade Schedule between the Balance Groups of the pSA in both Scheduling Areas by 1:1 Nomination⁷**
 - *An Internal Commercial Trade Schedule from Balance Group of the pSA to the Balance Group of the receiving CCP within the **sink** Scheduling Area*
- *The Financial Settlement requires the following actions*
 - *A bank transfer from the receiving CCP to the pSA (of the delivering CCP)*
 - *A bank transfer from the pSA (of the delivering CCP) to the delivering CCP*

These principles are depicted in the Figure 77 hereafter:

⁷ 1:1 nomination refers to the nomination of an External Commercial Trade Schedule between two balance groups associated to the same entity identified by identical EIC (Energy Identification Code).

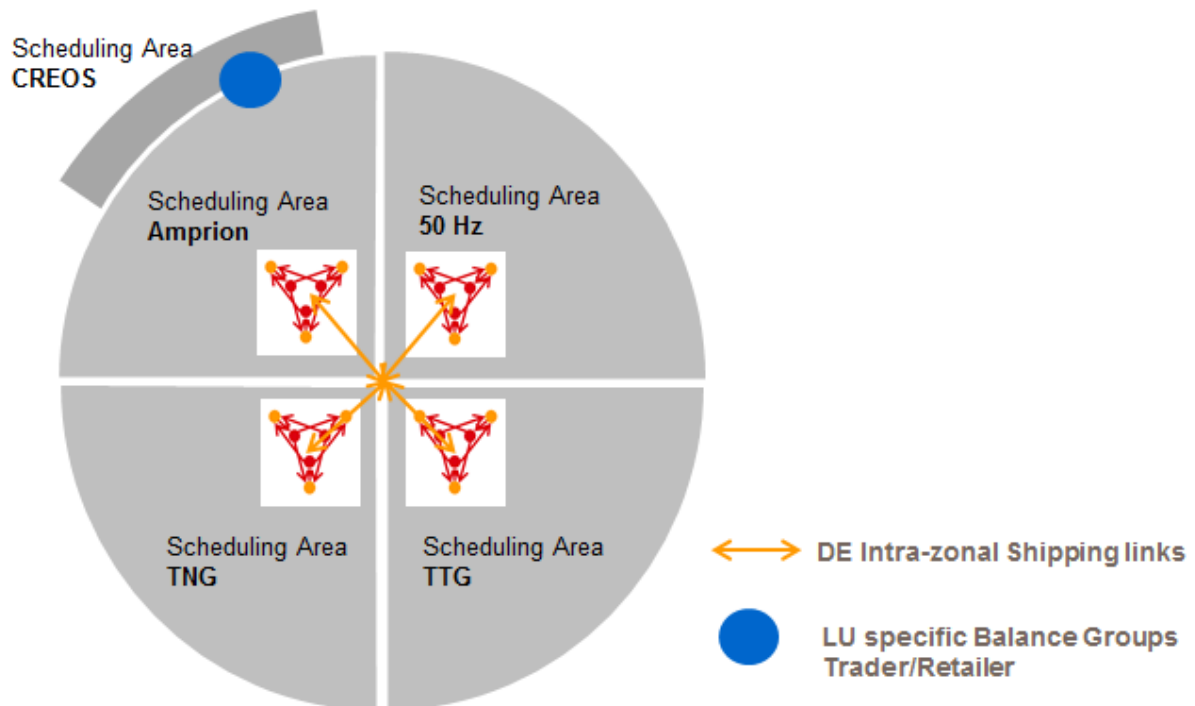


Figure 77: Intra-Zonal Shipping

The logic of Intra-Zonal Shipping Links (identical to the Cross-Zonal ones) is explained in the figure below.

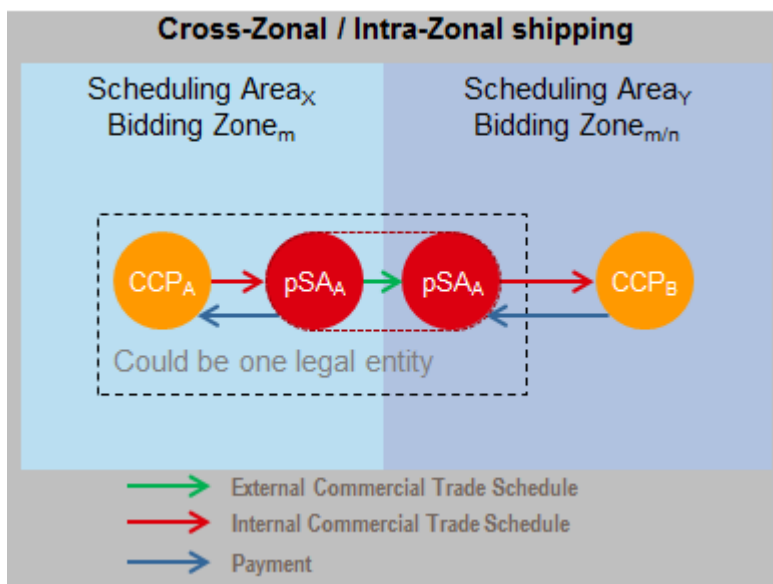


Figure 88: Cross-Zonal / Intra-Zonal shipping

Related to Intra-Zonal Shipping it has to be noted:

- LU-volumes, resulting from Single Day-Ahead Coupling, will be exchanged via a LU specific Balance Groups retailer/trader via external commercial trade schedules between the Balance Groups of each balancing responsible party in Amprion and Creos Scheduling Areas by 1:1 nomination.

Examples for Intra-Zonal Shipping:

- CCP1 @ Amprion → pSA1 @ Amprion → pSA1 @ TNG → CCP2 @ TNG
- “CCP1 @ TTG → pSA1 @ TTG → pSA1 @ Amprion → CCP1 @ Amprion → Balance Groups(Retailer/Trader) @ Amprion → Balance Groups(Retailer/Trader) @ Creos”

2.2.6 Cross-Zonal Shipping

The NEMOs operating NEMO Hubs in specific Scheduling Areas of the Bidding Zone DE/LU are responsible to enable Shipping between all NEMO Hubs of the Bidding Zone DE/LU and adjacent Bidding Zones.

For the Bidding Zone DE/LU, Cross-Zonal Shipping becomes relevant for the borders listed in **Table 22**, as far as these are operational in the Single Day-ahead Coupling.

The fundamentals of Intra-Zonal Shipping (bullet points in 2.2.5) remain the same and are also valid for Cross-Zonal Shipping. Furthermore also Figure 77 and Figure 88 apply for Cross-Zonal Shipping.

In case of Cross-Zonal Shipping between two adjacent Bidding Zones for which capacity is allocated implicitly, the delivering CCP shall pay the arithmetic product of the shipped amount of energy at the sink Scheduling Area in MWh and the difference in the Market Clearing Prices of the corresponding NEMO Hubs minus – if applicable – the arithmetic product of the loss and the Market Clearing Price of the NEMO Hub where the loss is accounted (source or sink Scheduling Area) per Market Time Unit to the entity responsible for the distribution of the Congestion Income in exchange for the Transmission Rights granted by the TSOs of the interconnector.

The TSOs jointly operating a Cross-Zonal Shipping Link are responsible to issue a Transmission Right (i.e. Programming Authorization) in favour of the nominating pSA.

These principles of Cross-Zonal Shipping are depicted in the

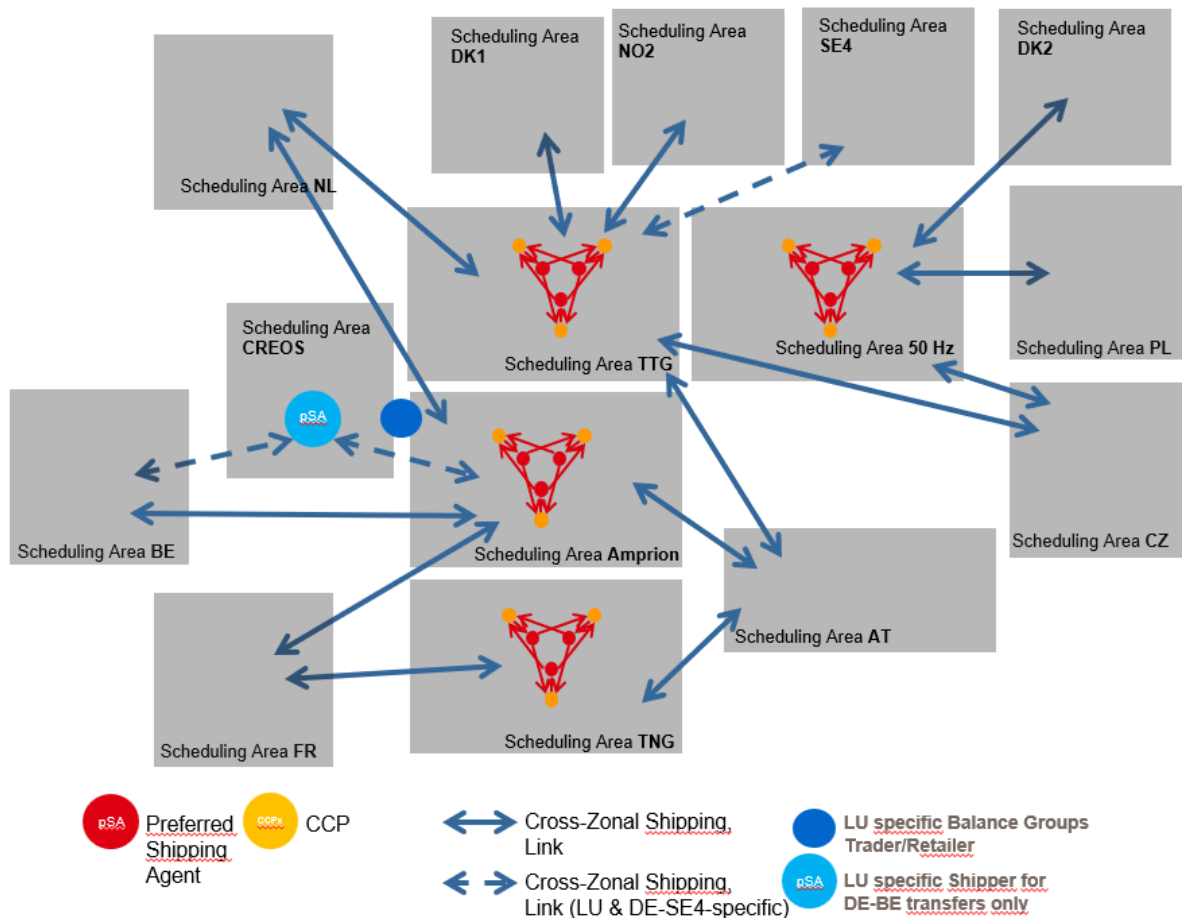


Figure 99 hereafter:

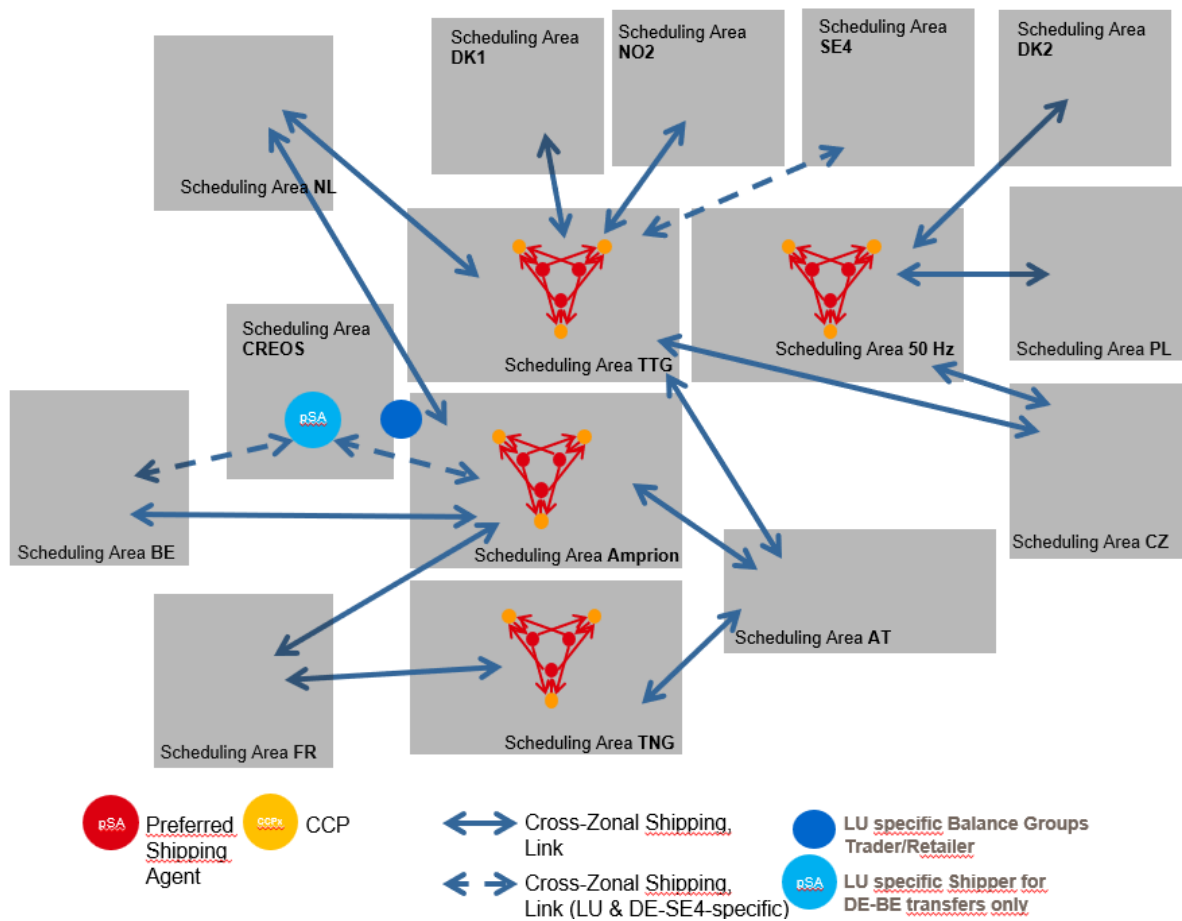


Figure 99: Cross-Zonal Shipping principles

Related to Cross-Zonal Shipping it has to be noted:

- External Commercial Trade Schedules across all/any Bidding Zone Borders require
 - A Cross-Zonal Shipping Link
 - A Transmission Right (i.e. Programming Authorization) in favour of the nominating pSA.
 - A Cross-Zonal process between the adjacent TSOs to validate the consistency of the nominated External Commercial Trade Schedules and the Transmission Right
- LU-specific Cross-Zonal Shipping Link, because of no active NEMO/CCPs in LU

Examples for Physical Settlement from Bidding Zone DE/LU to NL:

- CCP3 @ TNG → pSA3 @ TNG → pSA3 @ Amprion → pSA3 @ Tennet_NL → CCP2
- CCP3 @ TNG → pSA3 @ TNG → pSA3 @ TTG → pSA3 @ Tennet_NL → CCP2

The Preferred Shipping Agent model is extendible for additional NEMOs/CCPs in the Bidding Zone DE/LU. It is a harmonized approach within NL, BE, FR, DE, AT, LU and therefore interoperable.

The regional harmonized approach will be made interoperable in case of specific Central Shipper approaches in line with Article 8 (2) (I) of GL CACM will be applied in other Bidding Zones with SDAC (possible candidates: DK, PL, CZ). The coordination needed will be processed in the upcoming implementation projects.

PROVISION SDAC_7: NEMO obligations for Shipping

NEMOs shall organize and perform Shipping among their CCPs.

The Shipping shall comply with the “Preferred Shipping Agent” model, this introduces the Preferred Shipping Agent (pSA) of the delivering CCP acting as an intermediary between two CCPs delivering energy in exchange for money.

NEMOs, CCPs, pSAs require standard balance group-contracts for Physical Settlement purposes. Due to equal treatment, for shipping between NEMOs no priority for nominations will be applied in case of mismatches except if agreed so by the respective NEMO.

PROVISION SDAC_8: The TSOs obligations for facilitating NEMOs’ SDAC Shipping

TSOs shall apply standard rules and processes related to Physical Settlement, in particular with regard to nomination deadlines.

2.3 Fallback arrangements

This fallback applies in the event that the SDAC process is unable to produce results. In this case of a decoupling of one, more or all DE/LU NEMO Hubs from the SDAC, regardless of whether SDAC remains coupled with regard to the other NEMO Hubs partially or fully decoupled on the level of Bidding Zones, the following fallback arrangement shall be applied to the decoupled NEMO Hubs within the Bidding Zone DE/LU:

1. Given that different coupling or decoupling cases can occur leading to different consequences, a clear description of the possible decoupling cases for the Bidding Zone DE/LU and their consequences is necessary.
2. A “partial decoupling”-situation occurs - when Bidding Zone DE/LU is decoupled on at least one (but not all) of its Bidding Zone Borders or when at least one (but not all) NEMO Hubs in the Bidding Zone DE/LU is decoupled from the SDAC, in such case:
 - a) All NEMOs coupled with the SDAC shall proceed as set forth in Chapters 2.1 and 2.2 and in the relevant European and/or regional operational procedures in production.
 - b) All NEMOs decoupled from the SDAC shall proceed as set forth in the relevant European and/or regional operational procedures in production.
 - c) The price for the Bidding Zone DE/LU will be the Single Day-Ahead Price (SDAC Price) for this Bidding Zone;
 - d) In the situation that at least one (but not all) NEMO Hub in the Bidding Zone DE/LU is decoupled from the SDAC, all cross-zonal capacity is allocated in the SDAC via the coupled NEMOs in the Bidding Zone DE/LU;
 - e) NEMOs in the Bidding Zone DE/LU are responsible for ensuring access to the market coupling process for their exchange members. They must perform best efforts to avoid side effects of a technical issue within one NEMO in the Bidding Zone DE/LU preventing other NEMOs in the Bidding Zone DE/LU to participate to the SDAC; and
 - f) The NEMO(s) in the Bidding Zone DE/LU decoupled from the SDAC shall not organize local auctions according to article 7(2) of the EU Regulation.

3. A “full decoupling”-situation occurs (from the perspective of the Bidding Zone DE/LU and the NEMO Hubs in the Bidding Zone DE/LU) when the SDAC auction is cancelled for the Bidding Zone DE/LU, and thus the Bidding Zone DE/LU is decoupled on all of its Bidding Zone Borders and no NEMO Hub in the Bidding Zone DE/LU is coupled within the SDAC; in such case NEMOs in the Bidding Zone DE/LU shall proceed as described in the relevant European and regional procedures in production.

Day-Ahead Price Reference:

1. For the day-ahead timeframe each NEMO in the Bidding Zone DE/LU is responsible for its price publication.

2. Except in case of a “full decoupling”-situation as defined under this Chapter, the only price in the Bidding Zone DE/LU for the day-ahead timeframe is the Single Day-Ahead Price for the Bidding Zone DE/LU .

3. In case of a “full decoupling”-situation:

(a) The TSOs will calculate a Bidding Zone Reference Day-Ahead Price for the Bidding Zone DE/LU for each market time unit, unless and until NEMOs and TSOs agree on a fallback solution which provides for a single day-ahead price also in a “full decoupling”-situation.

(b) The Bidding Zone Reference Day-Ahead Price is calculated as the volume weighted average price of the prices of the NEMO Hubs in the Bidding Zone DE/LU.

4. The Bidding Zone Reference Day-Ahead Price will be published by TSOs and used by the TSOs to fulfil their obligations (e.g. as the case may be for monitoring, transparency, reporting...) and more general wherever a Bidding Zone Reference Day-Ahead Price is required.

5. For the day-ahead timeframe each NEMO in the Bidding Zone DE/LU shall provide the TSOs with the data from its NEMO Hub, required for the determination of the Bidding Zone Reference Day-Ahead Price for the Bidding Zone DE/LU.

PROVISION SDAC_9: Fallback SDAC

NEMOs have to implement the local fallback mechanism for SDAC as described in this Chapter 2.3.

2.4 Contractual architecture

Pursuant to Article 7 (1) of GL CACM, NEMOs shall in cooperation with TSOs operate the single day-ahead coupling (SDAC).

All European NEMOs and all European TSOs have concluded agreements stipulating the respective rights and obligations regarding the establishment, update and further development of the SDAC as well as its operation, which cannot reflect all national MNA aspects.

It is therefore suggested that all NEMOs within the Bidding Zone DE/LU conclude a contract to confirm their commitment to the MNA of DE/LU, the delivery commitment towards each other and towards NEMOs of other Bidding Zones and their cooperation in good faith. In this respect all NEMOs shall grant each other access to their CCP to perform the delivery of energy and to process the respective payments on the basis of equal terms and conditions. However,

the establishment of shipping links between CCPs resp. pSAs towards each other might require additional contracts potentially involving respective TSOs.

In the course of establishing, updating or further developing the SDAC as well as operating it, the necessity might occur to develop and conclude further contracts and agreements. In case, the Bidding Zone DE/LU is or might be affected, all NEMOs and/or all TSOs in the Bidding Zone DE/LU shall actively contribute to the development of the respective contracts and agreements and each NEMO and/or each TSO shall be a signatory to them.

All contracts and agreements shall be based on the principles of non-discriminatory fair and equal treatment and shall allow for the adherence of further NEMOs and/or further TSOs in case such a necessity occurs.

3 Single Intraday Coupling (SIDC)

3.1 Multiple NEMO Arrangements

The Single Intraday Coupling (SIDC) allows for multiple NEMOs operating intraday markets in the same Bidding Zone and even the same Scheduling Area. The Single Intraday Coupling therefore includes the arrangement for more than one NEMO offering trading services in the same Bidding Zone as required by Article 57 of GL CACM. No separate solution for MNAs will be needed. Each NEMO has to adhere to the Single Intraday Coupling, for which an adherence procedure is available.

Hence access of new NEMOs can easily be implemented.

Thereby, each NEMO is connected to the interfaces for relevant data exchange, involved in the relevant procedures and included in the respective contracts.

The Single Intraday Coupling and the assumed shipping solution, is described in the following with regard to the MNAs.

3.2 General setup of the Single Intraday Coupling

3.2.1 Coupling of continuous markets

The Single Intraday Coupling couples continuous intraday markets of participating NEMOs (referred to as NEMO Hubs) by matching individual energy bids and offers entered in the order books of the NEMO Hubs with simultaneous consideration of the Cross-Zonal Capacity on a single trade basis. Each trade is a unique pair of matched buy and sell orders.

3.2.2 Shipping Links for SIDC

Relevant Shipping Links, also called “Shipping-Interconnectors” in the framework of SIDC-implementation and operation, can be found in Table 11 and Table 22.

NEMO Hubs of the same Scheduling Area are connected by sufficiently high transmission capacity. Scheduling Areas are connected to each other by Shipping-Interconnectors. Shipping-Interconnectors are declared by TSOs operating adjacent Scheduling Areas having a physical connection. However within Germany, Shipping-Interconnectors also exist between all German TSOs although no direct interconnection-line(s) exist(s) (e.g. between TNG-50Hertz). Shipping-Interconnectors of Scheduling Areas located in the same Bidding Zone are per definition equipped with sufficiently high transmission capacity. Shipping-Interconnectors of Scheduling Areas located in different Bidding Zones are equipped with Cross-Zonal Capacity, calculated and provided by the TSOs of the associated Capacity Calculation Region.

PROVISION SIDC_1: Sufficiently high capacity between NEMO Hubs within the Bidding Zone DE/LU for SIDC

The NEMOs shall ensure unrestricted price formation between the NEMO Hubs within the Bidding Zone DE/LU in the Single Intraday Coupling taking into account unlimited transmission capacity. “Sufficiently high” means that no restrictions are applied for the exchange via Intra-Zonal Shipping Links.

3.3 Data exchange with the continuous trading matching algorithm

The SIDC system provides a central interface for TSOs to provide Cross-Zonal Capacities referred to as Capacity Management Module.

The SIDC system provides a central interface for TSO, Scheduled Exchange Calculators and shipping agents to get the allocated capacity and other relevant results referred to as Shipping Module.

3.4 Shipping

3.4.1 Preferred Shipping Agent (pSA) model

The Single Intraday Coupling assumes a Preferred Shipping Agent (pSA) model where the shipping between CCPs is organized among all CCPs by means of Preferred Shipping Agents. Each CCP designates its unique Preferred Shipping Agent, which could be the CCP itself or a separate legal entity. The pSA of the delivering CCP performs the shipping into the balance group of the receiving CCP. In contrast to the Single Day-ahead Coupling, delivering and receiving CCP could be located in remote Scheduling Areas not directly adjacent to each other. In this case, the pSA has to perform the Physical Settlement through the intermediate Scheduling Areas for the entire shipping path. The preferred shipping agent of the receiving CCP is not involved in the shipping. In case the preferred shipping agent of a CCP is a separate legal entity, the preferred shipping agent of the delivering CCP steps between the two CCP and assumes the legal counterparty risk for the shipping. The shipping between the CCPs is split into two transactions⁸, with the preferred shipping agent of the delivering CCP standing in between the CCPs. The transaction between the delivering CCP and its preferred Shipping Agent is an internal trade, which is settled like the trades between market participants and their CCP, and remains unaffected by the following distinctions. If the delivering CCP performs the pSA task itself, the transaction between the delivering CCP and its pSA is omitted. The transaction between the pSA and the receiving CCP, which constitute the actual shipping, is a two-part transaction consisting of:

- **Physical settlement:** The settlement of energy delivery among CCPs per Market Time Unit based on the transactions resulting from the Single Intraday Coupling, by means of Internal and External Commercial Trade Schedules among the CCPs' and Shipping Agents' Balance Groups in each Scheduling Area.

- **Financial Settlement:** The settlement of payments in exchange for the exchanged energy among the CCPs based on the value of the transaction resulting from the Single Intraday Coupling by means of wired bank transfer.⁹

The Physical Settlement is further to be distinguished in

- **Intra-Scheduling Area:** Physical settlement between NEMO Hubs within the same Scheduling Area,

⁸ A transaction in the shipping process could be based on a single trade or an aggregation of several trades involving the same pair of CCPs. The aggregation could include the whole intraday market timeframe or dedicated sub-periods. This will be defined by the Single Intraday Coupling project and reflected in the All-TSO Scheduled Exchange Calculation (SEC) methodology. Aggregations per market time unit over the whole market timeframe and all pairs of CCP constitute the CCPs' net positions.

⁹ The value of transaction is total of the arithmetic products of volume and price of each included trade in case of aggregation of several trades into a transaction.

- **Intra-Zonal:** Physical settlement between NEMO Hubs of different Scheduling Areas within the Bidding Zone DE/LU,
- **Cross-Zonal:** Physical Settlement between NEMO Hubs of adjacent Bidding Zones.

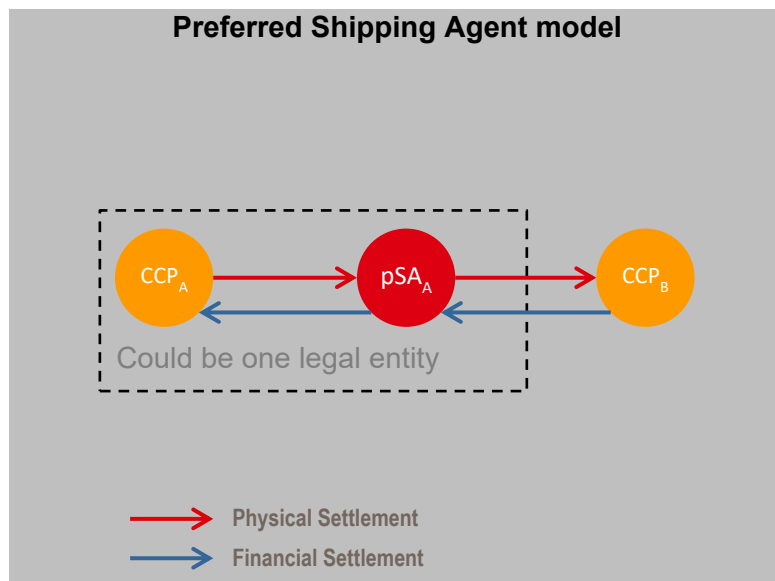


Figure 1010: Preferred Shipping Agent model

3.4.2 Scheduled Exchange Calculation

The scheduled exchange are calculated as set forth in the Methodology for Calculating Scheduled Exchanges resulting from single intraday coupling in accordance with Article 56 of the GL CACM and managed according to the operational European and regional procedures in production.

3.4.3 Intra-Scheduling Area shipping

The NEMOs operating NEMO Hubs in specific Scheduling Areas of the Bidding Zone DE/LU are responsible to enable Shipping between all NEMO Hubs in this Scheduling Area by means of their CCPs and pSAs.

Fundamentals:

- All CCPs have to designate their individual pSA
- The pSA of the delivering CCP performs the Shipping
- The Physical Settlement requires the following actions
 - An Internal Commercial Trade Schedule from the Balance Group of the delivering CCP to the Balance Group of its pSA within the Scheduling Area
 - An Internal Commercial Trade Schedule from Balance Group of the pSA to the Balance Group of the receiving CCP within the Scheduling Area¹⁰
- The Financial Settlement requires the following actions
 - A bank transfer from the receiving CCP to the pSA (of the delivering CCP)

¹⁰ If a CCP and its pSA make use of the same balance group both Internal Commercial Trade Schedules are replaced by one Internal Commercial Trade Schedule from the commonly used balance group of the delivering CCP and its pSA to the balance group of the receiving CCP.

- A bank transfer from the pSA (of the delivering CCP) to the delivering CCP¹¹

The following figure explains the principle of Physical Settlement for three CCPs and their respective pSAs, however it is extension proof for additional NEMOs.

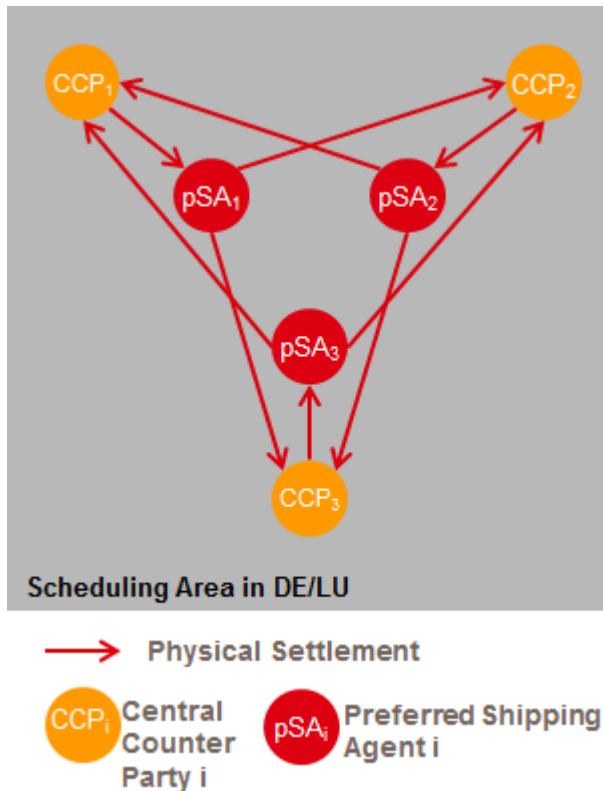


Figure 1111: Scheduling Area in DE/LU

The overall Intra-Scheduling Area Shipping (Physical and Financial Settlement) is presented below:

¹¹ If a CCP and its pSA make use of the same bank account (e.g. being the same legal entity) both bank transfers are replaced by one from the bank account of the receiving CCP to the commonly used bank account of the delivering CCP and its pSA.

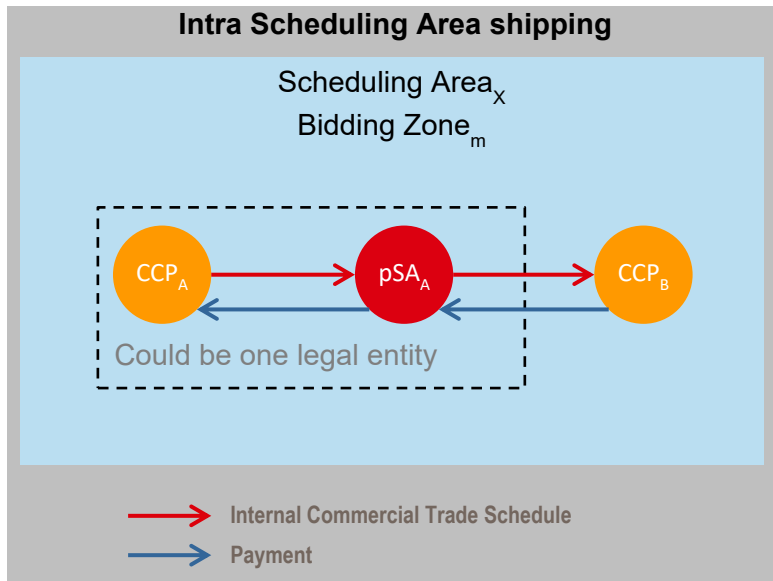


Figure 1212: Intra-Scheduling Area shipping

3.4.4 Intra-Zonal shipping

The NEMOs operating NEMO Hubs in specific Scheduling Areas of the Bidding Zone DE/LU are responsible to enable Shipping between all NEMO Hubs of the Bidding Zone DE/LU by means of their CCPs and pSAs.

Fundamentals (Items in *italics font* are identical to Intra-Scheduling Area Shipping, items in **bold font** are specific for Intra-Zonal Shipping):

- *All CCPs have to designate their individual pSA*
- *The pSA of the delivering CCP performs the Shipping*
- *The Physical Settlement requires the following actions*
 - *An Internal Commercial Trade Schedule from the Balance Group of the delivering CCP to the Balance Group of its pSA within the **source** Scheduling Area*
 - **An External Commercial Trade Schedule between the Balance Groups of the pSA in both Scheduling Areas by 1:1 Nomination¹²**
 - *An Internal Commercial Trade Schedule from Balance Group of the pSA to the Balance Group of the receiving CCP within the **sink** Scheduling Area*
- *The Financial Settlement requires the following actions*
 - *A bank transfer from the receiving CCP to the pSA (of the delivering CCP)*
 - *A bank transfer from the pSA (of the delivering CCP) to the delivering CCP*

These principles are depicted in the figure hereafter:

¹² 1:1 nomination refers to the nomination of an External Commercial Trade Schedule between two balance groups associated to the same entity identified by identical EIC (Energy Identification Code).

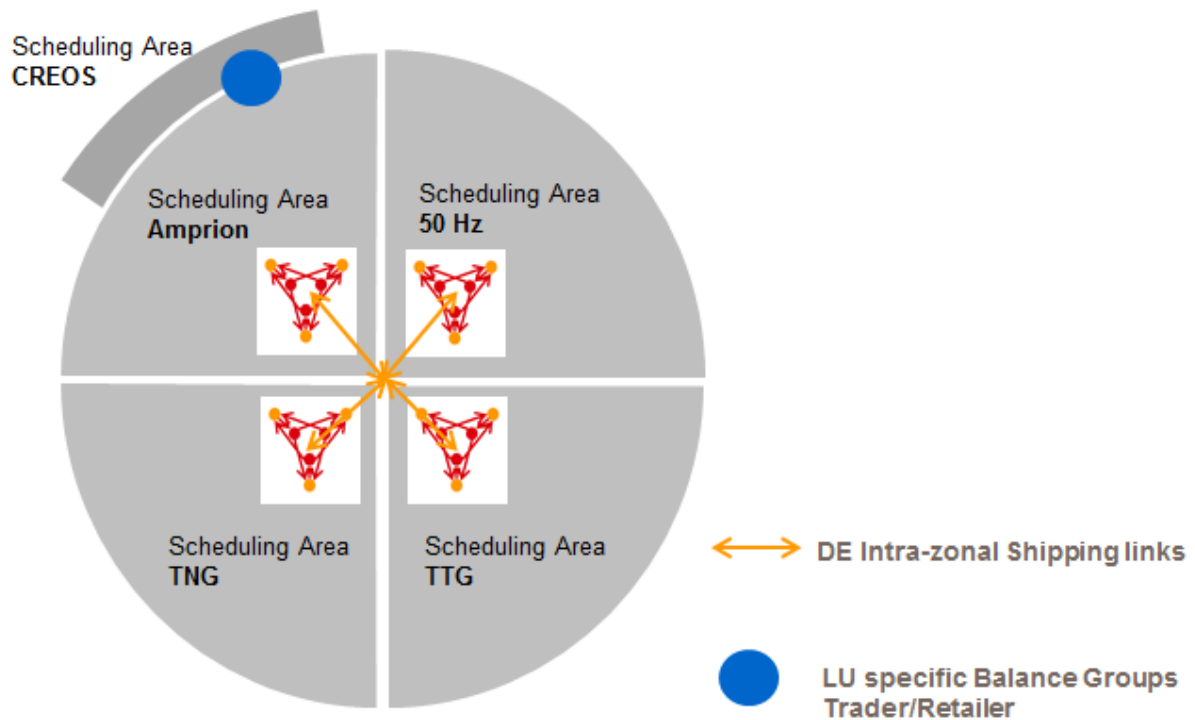


Figure 1313: Intra-Zonal Shipping

The logic of Intra-Zonal Shipping Links (identical to the Cross-Zonal ones) is explained in the figure below.

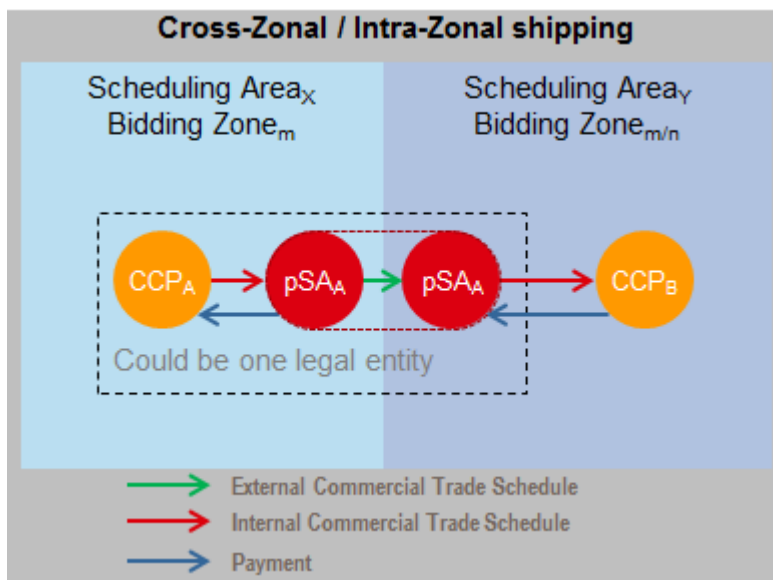


Figure 1414: Cross-Zonal / Intra-Zonal shipping

Related to Intra-Zonal Shipping it has to be noted:

- LU-volumes, resulting from Single Intraday Coupling, will be exchanged via a LU specific Balance Groups retailer/trader via external commercial trade schedules between the Balance Groups of each balancing responsible party in Amprion and Creos Scheduling Areas by 1:1 nomination.

Examples for Intra-Zonal Shipping:

- CCP1 @ Amprion → pSA1 @ Amprion → pSA1 @ TNG → CCP2 @ TNG
- “CCP1 @ TTG → pSA1 @ TTG → pSA1 @ Amprion → CCP1 @ Amprion → Balance Groups(Retailer/Trader) @ Amprion → Balance Groups(Retailer/Trader) @ Creos”

3.4.5 Cross-Zonal shipping

The NEMOs operating NEMO Hubs in specific Scheduling Areas of the Bidding Zone DE/LU are responsible to enable Shipping between all NEMO Hubs of the Bidding Zone DE/LU and adjacent Bidding Zones. For the Bidding Zone DE/LU, Cross-Zonal Shipping becomes relevant for the borders listed in **Table 22**, as far as these are operational in the Single Intraday Coupling:

The fundamentals of Intra-Zonal Shipping (bullet points in 3.4.4) remain the same and are also valid for Cross-Zonal Shipping, and Figure 14 and Figure 15 apply for Cross-Zonal Shipping except for the bidding zone border DE/LU-SE4 in the intraday continuous timeframe.

On the bidding zone border DE/LU-SE4 Baltic Cable acts as the single cross-border physical shipping agent in the intraday continuous timeframe. The physical settlement requires the following actions:

- An internal commercial trade schedule from the Balance Group of the pSA of the delivering CCP to the Baltic Cable Balance Group within the scheduling area on the exporting side of the Bidding Zone Border (i.e. if energy needs to be scheduled from DE/LU to SE4 this internal commercial trade schedule will be within the scheduling area of TTG).
- An internal commercial trade schedule from the Baltic Cable Balance Group to the Balance Group of the pSA of the delivering CCP within the scheduling area on the importing side of the bidding zone border (i.e. if energy needs to be scheduled from DE/LU to SE4 this internal commercial trade schedule will be within the Scheduling Area SE4). The displayed principle shall be similarly applied for the case when DE/LU is importing.

The principles of Cross-Zonal Shipping on the bidding zone border DE/LU-SE4 are depicted in Figure 16:

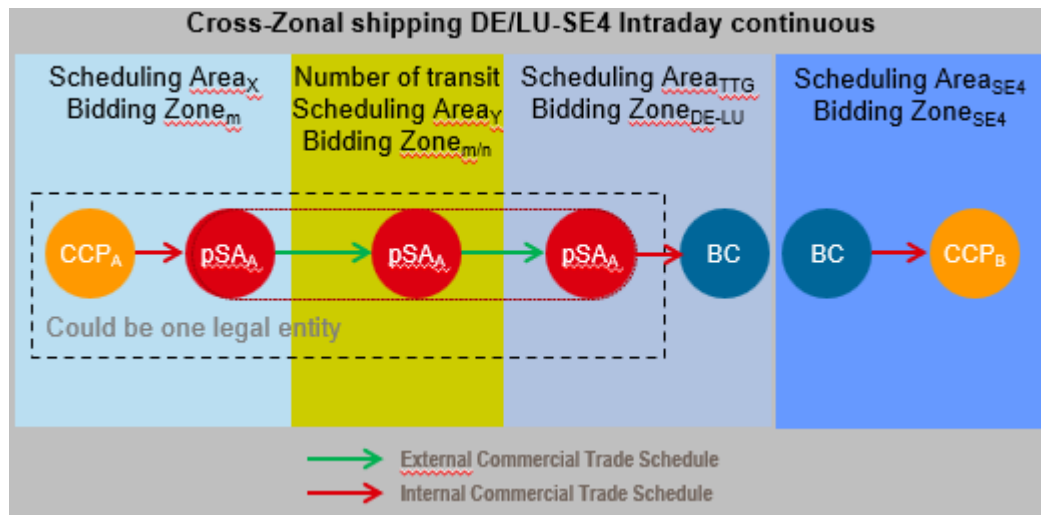


Figure 1515: SIDC Cross-Zonal shipping with the single shipping arrangement on DE/LU-SE4 (BC= Baltic Cable)

In case a trade between two NEMO Hubs located in different Bidding Zones has to be settled, the external commercial trade schedule passing the Bidding Zone Border requires a transmission capacity right by means of a rights document according to ECAN standard proving the associated capacity allocation to this trade. The TSOs jointly operating a Cross-Zonal Shipping Link are responsible to issue a Transmission Right (i.e. Programming Authorization) in favour of the nominating pSA.

Since the pSA has to schedule the energy from the source Scheduling Area to the sink Scheduling Area, the scheduling path could pass several Scheduling Areas or even Bidding Zones and therefore require several External Commercial Trade Schedules.

For shipping between two Bidding Zones which are not adjacent to each other, the principle is shown in the following **Fehler! Verweisquelle konnte nicht gefunden werden.:**

These principles of Cross-Zonal Shipping are depicted in the figure hereafter:

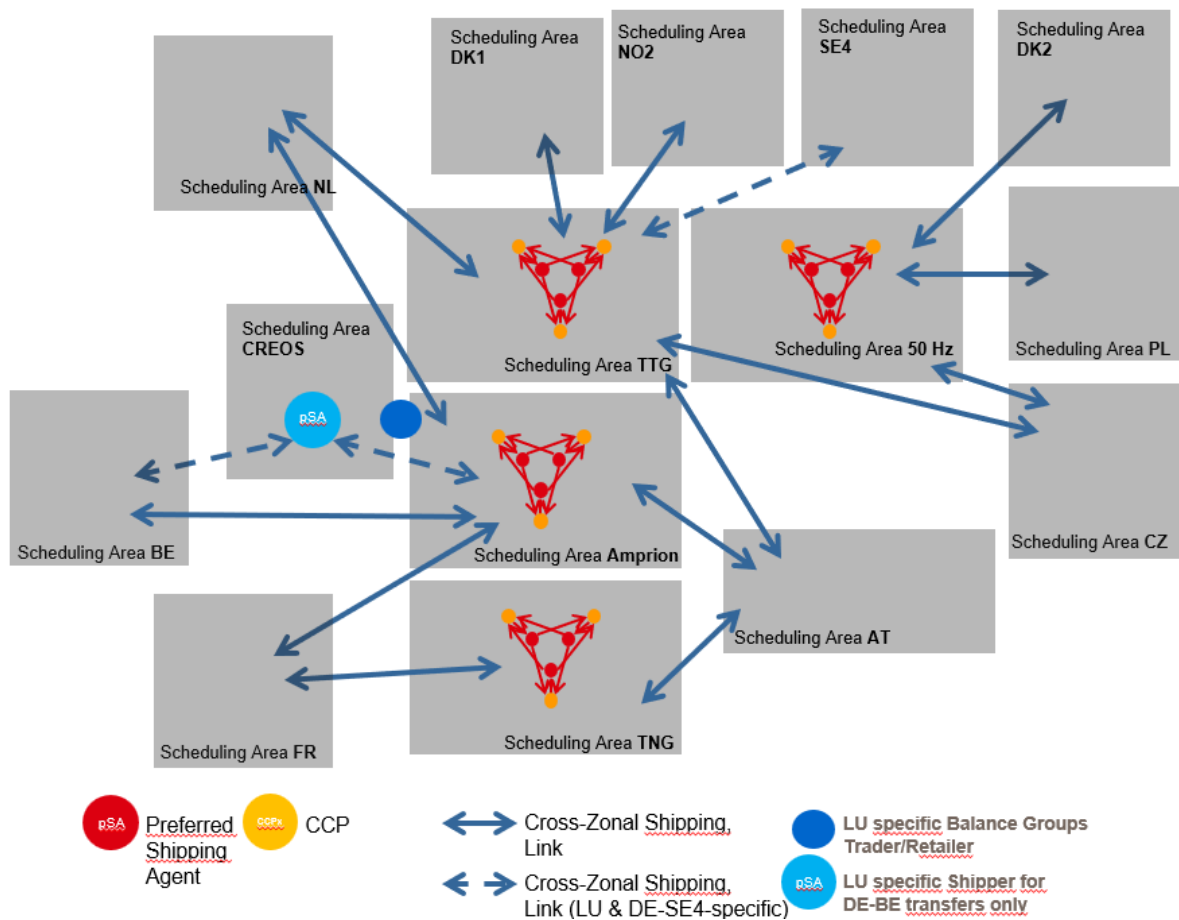


Figure 1616: Cross-Zonal Shipping principles

In Figure 1616 all possible Cross-Zonal Shipping links are illustrated, however in SIDC an “Leading interconnector concept” will be implemented, means:

Shipping-Interconnectors of Scheduling Areas located in different Bidding Zones are equipped with Cross-Zonal Capacity, calculated and provided by the TSOs of the associated Capacity Calculation Region. If at least two Interconnectors commonly constitute a Bidding Zone Border (e.g. Amprion-TTN & TTN-TTNG --> NL-DE/LU) and they share a common value of Cross-Zonal Capacity, the cross-zonal capacity has to be assigned to one of the Shipping-interconnectors while the other Shipping-interconnectors have no transmission capacity.

Related to Cross-Zonal Shipping it has to be noted:

- External Commercial Trade Schedules across Bidding Zone Borders require
 - A Cross-Zonal Shipping Link
 - A Transmission Right (i.e. Programming Authorization) in favour of the nominating pSA.
 - A Cross-Zonal process between the adjacent TSOs to validate the consistency of the nominated External Commercial Trade Schedules and the Transmission Right
- LU-specific Cross-Zonal Shipping Link, because of no active NEMO/CCPs in LU

Example for Physical Settlement from Bidding Zone DE/LU to NL:

CCP3 @ TNG → pSA3 @ TNG → pSA3 @ TTG → pSA3 @ Tennet_NL → CCP2

The Preferred Shipping Agent model is extendible for additional NEMOs/CCPs in the Bidding Zone DE/LU. It is a harmonized approach and therefore interoperable.

The approach will be made interoperable in case of specific Central Shipper approaches in line with Article 8 (2) (I) of GL CACM in other countries. The coordination needed will be processed in the upcoming implementation projects.

Provision SIDC_3: NEMO obligations for SIDC-Shipping

NEMOs are responsible to ensure the Shipping among their CCPs.

The Shipping shall comply with the “Preferred Shipping Agent” model, which introduces the Preferred Shipping Agent (pSA) of the delivering CCP acting as an intermediary between two CCPs delivering energy in exchange for money.

CCPs and their pSAs require standard balance group contracts for Physical Settlement.

Provision SIDC_4: The TSOs obligations for facilitating NEMOs’ SIDC-Shipping

TSOs shall apply standard rules and processes related to Physical Settlement, in particular with regard to nomination deadlines.

3.5 Fallback arrangements

This fallback applies in cases one or some of the NEMOs have technical issues to join common/ central SIDC processes. In case of a decoupling of one, more or all DE/LU NEMO Hubs from the SIDC, regardless of whether SIDC remains coupled with regard to the other NEMO Hub or is partially or fully decoupled on the level of Bidding Zones the following fallback arrangement shall be applied to the decoupled NEMO Hubs within the Bidding Zone DE/LU:

- Each NEMO has to be able to match orders of the order books from all its NEMO Hubs in der Bidding Zone DE/LU, which are decoupled from SIDC.
- Individual Net Positions for these NEMO Hubs have to sum up to zero per associated NEMO in each Market Time Unit (i.e no cross-zonal exchanges and no exchanges with other NEMOs).
- Each NEMO has to enable its CCP and pSA to settle the results of the fallback by means of Intra-Zonal Shipping.

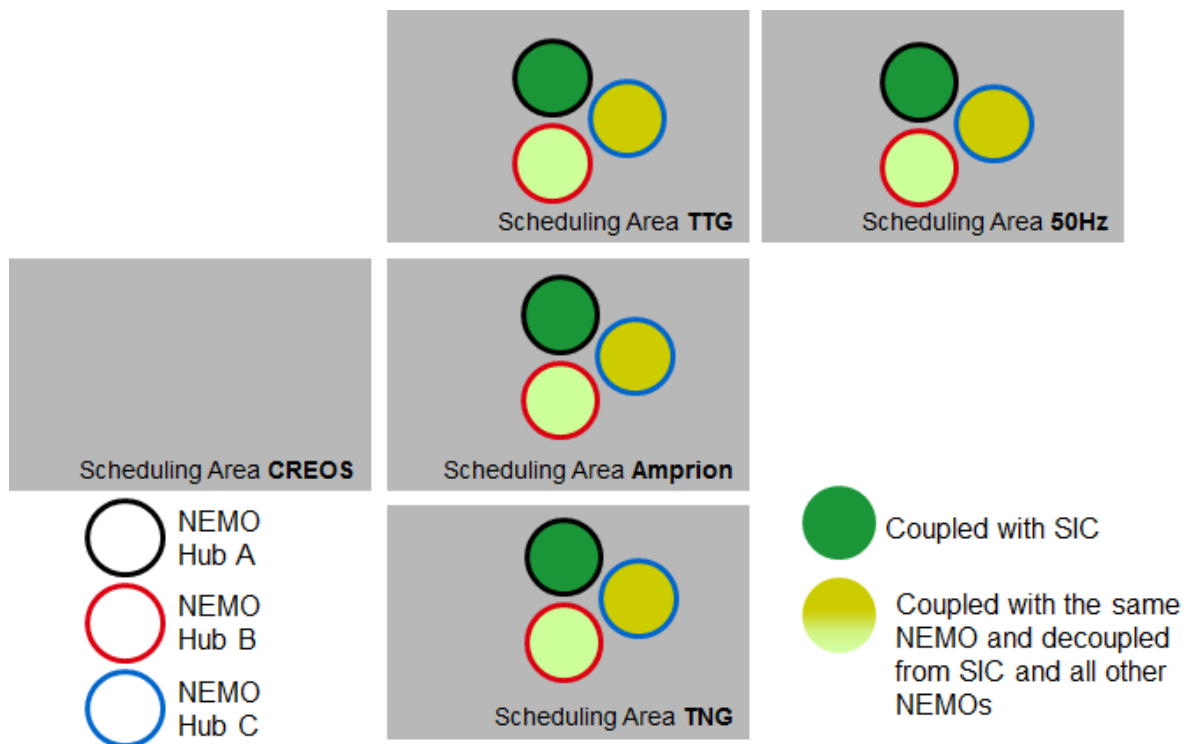


Figure 1717: SIDC fallback NEMO Hub decoupling

PROVISION SIDC_5: Fallback SIDC

NEMOs have to implement the local fallback mechanism for SIDC as described in this Chapter 3.5.

3.6 Contractual architecture

Pursuant to Article 7 (1) of GL CACM, NEMOs shall in cooperation with TSOs operate a SIDC (single intraday coupling).

All European NEMOs and all European TSOs have concluded agreements stipulating the respective rights and obligations regarding the establishment, update and further development of the SIDC as well as its operation, which cannot reflect all national MNA aspects.

It is therefore suggested that all NEMOs within the Bidding Zone DE/LU have concluded a contract to confirm their commitment to the MNA of DE/LU, the delivery commitment towards each other and towards NEMOs of other Bidding Zones and their cooperation in good faith. In this respect all NEMOs shall grant each other access to their CCP to perform the delivery of energy and to process the respective payments on the basis of equal terms and conditions. However, the establishment of shipping links between CCPs resp. pSAs towards each other might require additional contracts potentially involving respective TSOs.

In the course of establishing, updating or further developing the SIDC as well as operating it, the necessity might occur to develop and conclude further contracts and agreements. In case, the Bidding Zone DE/LU is or might be affected, all NEMOs and/or all TSOs in the Bidding

Zone DE/LU shall actively contribute to the development of the respective contracts and agreements and each NEMO and/or each TSO shall be a signatory to them.

All contracts and agreements shall be based on the principles of non-discriminatory fair and equal treatment and shall allow for an adherence of further NEMOs and/or further TSOs in case such a necessity occurs.

4 Glossary

Abbreviation	Full name	Definition
50Hertz	50Hertz Transmission GmbH	
	Aggregated Netted External Schedule	Definition according to the draft of GL SO: 'a schedule representing the netted aggregation of all external TSO schedules and external commercial trade schedules between two Scheduling Areas or between a Scheduling Area and a group of other Scheduling Areas'
Amprion	Amprion GmbH	
	Article	Refers to article of GL CACM
	Bidding zone	Definition according to regulation (EU) 2013/543: 'Bidding Zone' means the largest geographical area within which market participants are able to exchange energy without capacity allocation;
BEC	Bilateral Exchange Calculation	
Baltic Cable	Baltic Cable AB	
BNetzA	Bundesnetzagentur	
CCP	Central Counter Party	has the meaning set forth in Article 2 of the GL CACM.
CMM	Capacity Management Module	has the meaning set forth in Article 2 of the GL CACM.
	cross-border	Refers to the crossing of a Scheduling Area border.
	cross-zonal	Refers to the crossing of a Bidding Zone border.
	Control Area	Definition according to regulation (EU) 2013/543: 'control area' means a coherent part of the interconnected system, operated by a single system operator and shall include connected physical loads and/or generation units if any;
DA	Day Ahead	
DE	Germany	
DK1/2	Denmark West/ Ost	
ECAN	ENTSO-E Capacity Allocation and Nomination	
EIC	Energy Identification Codes	
	External Commercial Trade Schedule	Definition according to the draft of GL SO:

Abbreviation	Full name	Definition
		'external commercial trade schedule' means a schedule representing the commercial exchange of electricity between market participants in different Scheduling Areas
EU Regulation	Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity as amended by Regulation (EU) 2024/1747	
GL CACM	Commission Regulation (EU) 2015/1222 of 24 th July 2015 establishing a guideline on capacity allocation and congestion management	
	Internal Commercial Trade Schedule	Definition according the draft of GL SO: 'internal commercial trade schedule' means a schedule representing the commercial exchange of electricity within a Scheduling Area between different market participants
ID	Intraday	
ILR	Institut Luxembourgeois de Régulation	
LU	Luxembourg	
MC	Market Coupling	
MCO	Market Coupling Operator	
MNA	Multiple Nemo Arrangement	The obligations resulting from Articles 7, 8, 45 and 57 from GL CACM regarding cross zonal capacity allocation and other necessary arrangements.
MRC	Multi Regional Coupling	
MTU	Market Time Unit	Market time period of 1 hour
NEMO	Nominated Electricity Market Operator	Has the meaning set forth in GL CACM
	Net Position	Definition according GL CACM: 'Net Position' means the netted sum of electricity exports and imports for each market time unit for a Bidding Zone;
NRA	National Regulatory Authority	
pSA	Preferred Shipping Agent	As defined in this document

Abbreviation	Full name	Definition
	MCO function	has the meaning set forth in Article 2 of the GL CACM.
PX	Power Exchange	
	Shipping Agent	has the meaning set forth in Article 2 of the GL CACM.
	Schedule	Definition according to the draft of SO GL: 'schedule' means a reference set of values representing the generation, consumption or exchange of electricity for a given time period
	Scheduling Agent	Refer to article of SO GL
	Scheduling Area	Definition according to the draft of SO GL: 'Scheduling Area' means an area within which the TSOs' obligations regarding scheduling apply due to operational or organisational needs In this context each control area of 50 Hertz, APG, Amprion, CREOS, TenneT, TransnetBW equals a Scheduling Area.
SDAC	Single Day-ahead Coupling	has the meaning set forth in Article 2 of the GL CACM.
	Shipping	Physical and Financial Settlement of net positions (SDAC) or transactions (SIDC) between CCPs
SIDC	Single Intraday Coupling	has the meaning set forth in Article 2 of the GL CACM.
SEC	Scheduled Exchange Calculator	has the meaning set forth in Article 2 of the GL CACM.
SM	Shipping Module	
GL SO	Guideline on System Operation	
SOB	Shared Order Book	
TenneT TSO	TenneT TSO GmbH	
TransnetBW	TransnetBW GmbH	
TSO	Transmission System Operator	
XBID	Cross Border Intraday	

Table 33: Glossary