

DRAFT REPORT

Study on the evolution of the BRP Nominations

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Executive summary

Balance Responsible Parties currently submit different types of Nominations to Elia as part of their so-called Daily Balancing Program. These Nominations currently consist of:

- Nominations related to physical injections and offtakes in different locations of the grid (i.e., the so-called **Physical Nominations**). The Physical Nominations consist of **MW Schedules** of production units ≥ 25 MW submitted through a specific scheduling process in accordance with the Scheduling Agent (SA) contract (i.e., for units falling under the former CIPU contract) and the **Offtake and Injection Nominations** that currently cover all other offtakes and injections in the grid (e.g., demand facilities, decentralized generation, loads allocated to the BRP on the distribution grid, etc.).
- Nominations related to commercial transactions (i.e., the so-called **Commercial Trade Schedules**).
- **BRP_{FSP} Nominations** that have been introduced specifically in the context of the introduction of the Transfer of Energy mechanism for participation to day-ahead and intraday markets.

However, the **context in which the BRP submits these Nominations is changing**. A first relevant evolution is that it is foreseen that the roles of BRP and SA can be taken up by different parties in the future¹. For the **split between the roles of BRP and SA**, it is foreseen that the SA will become the sole responsible for the submission of MW Schedules and the current overlap regarding the responsibility for the submission of MW Schedules needs to be resolved. A second important evolution is that the **day-ahead balance obligation is being progressively relaxed**, implying that the Nominations provided by a BRP do no longer need to be fully balanced in day-ahead. In this changing context, questions are raised on the required evolutions of the Nominations submitted by the BRP, and Elia's needs for receiving certain type of Nominations.

In this context, **the objective of this study is to recommend a desired evolution of the Nominations submitted by the BRP-role** considering the above-mentioned evolutions while also considering Elia's current and future needs for receiving Nominations for effectively performing different operational processes (e.g., adequacy check or load flow calculations) as well for achieving an efficient and transparent market functioning (e.g., publication of indicators on day-ahead imbalances).

To this end, **the study**:

- **describes the possible and relevant evolutions of the different type of Nominations** (Section 3);
 - **provides an overview of the different processes currently using or planning to use (some of) the Nominations** (Section 4);
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¹ It must be noted that it will still be possible that the same party takes up the role of the BRP and the SA.

- **performs an assessment of the required evolutions of the Physical Nominations in the context of the foreseen split between the roles of BRP and SA (Section 5);**

Conclusions on the possibilities and needs for evolutions of the Nominations

There is a limited potential for evolutions of the Commercial Trade Schedules given the fact that these Nominations are directly used for calculating the imbalance of a BRP and hence for performing the imbalance settlement process. Therefore, the **study mainly focuses on the possible evolution of the Offtake/Injection Nominations and the BRP_{FSP} Nominations**. Note that today, the Offtake and Injection Nominations are restricted to the offtakes/injections not covered by the SA Contract (i.e., the offtakes/injections for which no MW Schedules are already submitted in accordance with the scheduling process). However, in this study, the term Offtake/Injection Nomination is used more broadly to refer to all Physical Nominations for which the submission is strictly (i.e., only) the responsibility of the BRP-role.

Three main conclusions are made **based on the current and planned use of the Nominations in the different processes**:

1. The **Offtake and Injection Nominations** (and BRP_{FSP} Nominations) form an important input for multiple processes (notably for the adequacy check and the publication of indicators on day-ahead imbalances) and hence **remain to be needed even in case of a future full removal of the day-ahead balance obligation**;
2. There are **opportunities for reducing the locational granularity of the Offtake and Injection Nominations** (that are currently provided per individual Access Point or distribution system) because all balancing-related processes only use the Offtake and Injection Nominations aggregated on the level of the Belgian zone. The single process that requires locational information relates to congestion management, where forecasts of the offtake of demand facilities (currently available via the Offtake Nominations submitted by the BRP per Access Point) are identified to be an important element for further increasing the efficiency of congestion-management processes.
3. The Offtake and Injection Nominations are currently only provided in day-ahead, but Elia considers that the **potential benefits of requesting intraday updates of these Offtake and Injection Nominations are not sufficient** at this point **to justify the high additional workload it would require from BRPs**.

In addition, **two changes in the nomination process** are found to be important for supporting a split between the roles of BRP and SA:

1. The currently existing **overlap with respect to the responsibility for the submission of MW Schedules should be removed** by assigning the responsibility solely to the SA (by adapting the nomination process described in the T&C BRP).
2. The Offtake and Injection Nominations are ideally changed **from gross Offtake/Injection Nominations** (i.e., excluding the offtakes/injections from units providing MW Schedules) **to Net Offtake/Injection Nomi-**

nations (i.e., including the offtakes/injections from units providing MW Schedules) such that the Nominations submitted by the BRP contain all offtakes/injections in his portfolio. This would have the benefit of less dependencies and hence a more clean split between both roles (e.g., the day-ahead imbalance of a BRP could then be calculated purely based on the Nominations provided by the BRP).

Proposed target design for the BRP Nominations

Based on the above conclusions, **Elia proposes to evolve towards a target design for the BRP Nominations**, in which:

- the **Scheduling Agent becomes the sole responsible for the submission of MW Schedules used in the scheduling process**;
- the **responsibility for providing information on the expected offtake of individual demand facilities is transferred from the role of the BRP to the role of the SA** (i.e., the information is to be provided by the SA in the form of MW Schedules instead of by the BRP in the form of Offtake Nominations per Access Point in line with the European regulatory framework);
- the **Offtake and Injection Nominations submitted by BRPs encompass all injections and offtakes and are simplified** by requesting the BRP to submit a single aggregated Total Offtake and a single aggregated Total Injection Nomination in day-ahead (instead of the current individual Offtake and Injection Nominations per Access Point / distribution system)²; and
- no intraday Offtake, Injection and BRP_{FSP} Nominations need to be provided by the BRP (this involves a change only for the BRP_{FSP} Nominations).

Implementation plan

The **implementation of the proposed target design for the Nominations to be submitted by the BRP necessitates two conditions**:

1. A **positive final evaluation of the impact of the relaxation of the day-ahead balance obligation**.² This final evaluation is planned for Q3 2023;
2. A **framework being put in place for allocating the responsibility of providing information on the expected offtake of demand facilities to the role of the SA** (i.e., the removal of the derogation of the obliga-

² Note that in case the day-ahead balance obligation would be restored following an observed negative impact resulting from the relaxation of the day-ahead balance obligation, individual Nominations per Access Point/distribution system (as today) would remain necessary to be able to perform the contractual check in the most accurate way

tion to submit schedules that is currently provided to demand facilities and a design and contractual framework for the provision of schedules by demand facilities would need to be put in place). Creating this framework is foreseen as part of phase 2 of the iCAROS project for which Elia is currently working on a more detailed planning that will be publically consulted. This public consultation is currently planned to start in Q4 2022.

Considering that (i) the proposed target design for the BRP Nominations (notably the evolution towards the aggregated Total Offtake and Total Injection Nominations) cannot be immediately implemented due to the above-mentioned conditions, and (ii) certain adaptations to the Nomination process are needed to enable the split between the roles of BRP and SA, **Elia proposes to implement the proposed target design for the BRP Nominations in two steps.**

In a **first step**, that can be performed during the next revision of the T&C BRP, Elia proposes to perform the **necessary amendments to the Nomination process** and the BRP Contract **so that** the SA would become the sole responsible for the submission of the MW Schedules for units ≥ 25 MW. For this step, two interim options for the Offtake and Injection Nominations have been presented (in both interim options the Offtake and Injection Nominations would remain on the level of the Access Point / distribution system). Elia proposes the interim option in which the Offtake and Injection Nominations would remain unchanged compared to today (i.e., the BRP submits the Offtake and Injection Nominations per Access Point / distribution system, and these Nominations exclude the information provided in the MW Schedules), but the submission of the MW Schedules would become the sole responsibility of the SA. This option is proposed mainly to avoid consecutive changes to the nomination process and the corresponding transitory implementation efforts for all involved parties as well as to avoid additional operational workload for BRPs related to parallel flows of information (i.e., to avoid that a MW Schedule and an Injection Nomination need to be submitted for the same unit).

In a **second step**, the responsibility to provide information on the expected offtake of demand facilities is transferred from the BRP to the SA and the **BRP would provide the aggregated Total Offtake and Total Injection Nominations**. The second step can only be implemented from the moment the two conditions discussed above are met.

Terminology

Access Point	As defined in Article 2 §1 (29) of the Federal Grid Code for an access to the transmission grid of ELIA. For an access to the ELIA Grid other than transmission grid, or to a Public Distribution Grid, or to a CDS: a point, defined by physical location and voltage level, at which access to the ELIA Grid other than transmission grid, or to a Public Distribution Grid, or to a CDS is granted, with a goal to injecting or taking off power, from an electricity generation unit, a consumption facility, a non-synchronous storage facility, connected to this grid.
Area Control Error	As defined in article 3(19) of SOGL.
Balancing Perimeter	As defined in Article 15 of the BRP Contract.
Balance Responsible Party or BRP	As defined in Article 2(7) of the EBGL.
BRP_{FSP}	The Balance Responsible Party appointed by a Flexibility Service Provider to take the balancing responsibility for an activation by this Flexibility Service Provider for the duration of the activation.
BRP_{FSP} Nomination	Day-ahead BRP _{FSP} Nomination and/or Intraday BRP _{FSP} Nomination.
BRP_{Source}	The Balance Responsible Party of the Access Point of the Grid User.
CDS	Closed Distribution System, as defined in Article 2 §1 3° of the Federal Grid Code.
CDS Access Point or Access Point on the CDS	Virtual point corresponding to the sum (per substation and per voltage level) of the physical offtake of a CDS user (based on metering configurations) used to calculate the cost of using the CDS.
DA	Day-ahead.
Daily Balancing Program or Daily Balancing Schedule	All of a BRP's Physical Nominations for its Balancing Perimeter, BRP _{FSP} Nominations and Internal and External Commercial Trade Schedules.
Daily Schedule or MW Schedule	The program of production of a Technical Unit (expressed in MW), given on a quarter-hourly basis, provided to Elia In day-ahead and updated in accordance with the rules of the SA Contract.
Day-ahead BRP_{FSP} Nomination	A table containing a series of data for each quarter-hour on a given Day D submitted by a BRP in its capacity as BRP _{FSP} to Elia and representing a quantity of Active Power activated by the FSP in connection with the DA/ID Flexibility Service for each quarter-hour during which said service is activated. The Day-ahead BRP _{FSP} Nomination is submitted by a BRP to Elia no later than Day D-1 in accordance with the provisions of the BRP Contract.

Day-ahead Imbalance	Difference, in absolute value and for a given quarter-hour, between the part of the Day-ahead Daily Balancing Schedule of a BRP relating to the Total Injection of its Balancing Perimeter and the part of its Day-ahead Daily Balancing Schedule relating to the Total Offtake from its Balancing Perimeter.
Day-Ahead Internal Commercial Trade	An Internal Commercial Trade for which the Internal Commercial Trade Schedule has been submitted to Elia by the Balance Responsible Parties by Day D-1, pursuant to the provisions of this BRP Contract.
Day-Ahead Physical Nomination	A table containing data such as the characteristics of physical access to the Elia Grid for a given Day D, including the quantity of Active Power per unit of time to be injected and/or taken off, representing a BRP's forecast of said Active Power either at an Access Point to the Elia Grid, or for all Injections and Offtake within its Perimeter in a Public Distribution System, or for all Market Access Points within its Perimeter in a CDS.
Delivery Point	As defined in article 2, §1, 30° of the Federal Grid Code.
Delivery Point DP_{PG} or DP_{PG}	Delivery Point for which ELIA does not receive Daily Schedules.
Delivery Point DP_{SU} or DP_{SU}	Delivery Point for which ELIA receives Daily Schedules (in MW), in accordance with the T&C Scheduling Agent.
Demand Facility	As defined in article 2(1) of the Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a Network Code on Demand Connection.
EBGL	Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.
Electricity Act	The Act of 29 April 1999 concerning the organisation of the electricity market, as amended where applicable.
Elia Grid	The electricity grid to which ELIA holds the property right or at least the right of using and operating it, and for which ELIA has been appointed as system operator.
Energy Storage Device or ESD	Device with the purpose of storing electrical energy that is to be injected into the system at a later time for the Grid User's own use, or as a service offered to the system operator for balancing or congestion management.
External Commercial Trade Schedule	As defined in the EU SOGL Guideline: a schedule representing the commercial exchange of electricity between market participants in different scheduling areas.
Federal Grid Code	The Royal Decree of 22 April 2019, as amended where applicable, establishing a grid code for operating and accessing the electricity transmission system. The current Federal Grid Code is in the process of being split into a new version of the Federal Grid Code and the Code of Conduct. In this study, the term Federal Grid Code refers to the current Federal Grid Code.

Flexibility Service Provider or FSP	As defined in Article 2, 64° of the Electricity Act.
Grid User	As defined in Article 2 §1 (57) of the Federal Grid Code for a Grid User connected to the ELIA Grid or to a Public Distribution Grid; or as defined in Article 2 §1 (58) of the Federal Grid Code for a Grid User connected to a CDS.
ID	intraday
Intraday BRP_{FSP} Nomination	A table containing a series of data for each quarter-hour of a given Day D submitted by a BRP in its capacity as BRP _{FSP} to Elia and representing a quantity of Active Power activated by the FSP in connection with the DA/ID Flexibility Service for each quarter-hour during which said service is activated. The Intraday BRP _{FSP} Nomination is submitted by a BRP to Elia no later than Day D+1, in accordance with the provisions of the BRP Contract.
Internal Commercial Trade	A Commercial Trade within the Belgian Scheduling Area between 2 BRP's authorised by Elia to exchange energy on a bilateral basis and for which an Internal Commercial Trade Schedule must be submitted to Elia by said Balance Responsible Parties pursuant to the BRP Contract. Any reference to an Internal Commercial Trade refers to both Day-Ahead Internal Commercial Trade and Intraday Internal Commercial Trade.
Internal Commercial Trade Schedule	As defined in the EU SOGL Guideline: a schedule representing the commercial exchange of electricity within a scheduling area between different market participants.
Intraday Internal Commercial Trade	An Internal Commercial Trade for which the Internal Commercial Trade Schedule has been submitted to Elia by the Balance Responsible Party by Day D+1
Intraday Physical Nomination	A table containing data such as the characteristics of physical access to the Elia Grid for a given Day D, including the quantity of Active Power per unit of time to be injected either at an Access Point to the Elia Grid or for a Local Generation Unit covered by a CIPU Contract.
Market Access Point	A virtual point located within a CDS and used to calculate some or all of the active power injected into and/or taken from the CDS by a CDS user.
Market Situation with Transfer of Energy	As defined in section 8.1 of the Rules for the Organization of the Transfer of Energy.
Maximum Authorised Day-ahead Imbalance	Threshold, expressed in MW, indicating the maximum authorized value of a BRP's Day-ahead Imbalance.
Net Regulation Volume	As defined in Article 15 of the Balancing Rules.
Nomination	Physical Nomination, BRP _{FSP} Nomination and Internal and External Commercial Trade Schedules.
Physical Nomination	Day-Ahead and/or Intraday Physical Nomination.
Power-Generating Module or	As defined in article 2(5), article 2(9) and article 2(15) of the NC RfG.

PGM	
Public Distribution Grid	As defined in Article 2, 49° of the Federal Grid Code.
Rules for the Organization of the Transfer of Energy or ToE Rules	The set of rules governing the transfer of energy established by Elia after consulting the market players and approved by CREG after consulting the relevant regional authorities in accordance with the Electricity Act.
Scheduling Area	As defined in the EU SOGL Guideline: an area within which the TSOs' obligations regarding scheduling apply due to operational or organisational needs
SOGL	Commission Regulation (EU) 2017/1485 of August 2 nd , 2017, establishing a guideline on electricity transmission system operation.
System Imbalance	Is equal to the Area Control Error minus the Net Regulation Volume
T&C BRP	The terms and conditions applying to BRPs as referenced in the EU EBGL Guideline.
T&C Scheduling Agent or T&C SA	Terms and Conditions for scheduling agents pursuant to Article 46, Article 49 and Article 52 of SOGL and Article 249 of Federal Grid Code.
Technical Unit	A PGM, ESD or Demand Facility connected directly to the Elia grid or through a CDS or a Public Distribution Grid.
Transfer of Energy	As defined in Article 19bis section 2 of the Electricity Act.

1. Introduction

Currently, Balance Responsible Parties (BRPs) submit different types of Nominations to Elia as part of their so-called Daily Balancing Program. These Nominations consist mainly of:

- Nominations related to physical injections and offtakes in different locations of the grid (i.e., the so-called Physical Nominations)
- Nominations related to commercial transactions (i.e., the so-called Commercial Trade Schedules)

A distinction can be made between two categories of Nominations related to physical injections and offtakes. A first category are the MW Schedules. These MW Schedules are submitted in day-ahead and intraday and per Technical Unit $\geq 25\text{MW}^3$ in accordance with the Scheduling Agent (SA) contract (i.e., the former CIPU contract). For the submission of the MW Schedules, there is an historic overlap between the role of Scheduling Agent (SA) and the role of BRP in the sense that the obligation to submit these MW Schedules is currently described in both the SA Contract and the BRP Contract. A second category of Physical Nominations are the Offtake and Injection Nominations that currently cover all other offtakes and injections in the grid (e.g., demand facilities, decentralized generation, loads allocated to the BRP on the distribution grid, etc.). The Offtake and Injection Nominations are currently submitted by the BRP in day-ahead and per Access Point to the Elia Grid and per distribution system.

However, the role of the BRP and the context in which the BRP submits these Nominations are changing due to recent and upcoming evolutions. A first important evolution is that the roles of BRP and SA are foreseen to be split. Currently, the BRP also takes up the role of SA and is thus responsible for submitting the MW Schedules. With the split between the roles of BRP and SA, it is foreseen that the SA will become the sole responsible for the submission of the MW Schedules.⁴ This leads to question regarding how the Offtake and Injection Nominations submitted by the BRP should evolve. Note that today, the Offtake and Injection Nominations are restricted to the offtakes/injections for which no MW Schedules are submitted in accordance with the SA Contract. However, in the remainder of this study, the term Offtake/Injection Nomination is used more broadly to refer to all nominations related to physical injections/offtakes for which the submission is strictly (i.e., only) the responsibility of the BRP.

A second evolution relates to the ongoing progressive relaxation of the day-ahead balance obligation. In the past, the Nominations (including the MW schedules) submitted by each BRP needed to be balanced day-ahead, i.e., the offtakes nominated day-ahead needed to be balanced by injections and/or commercial trades nominated day-ahead,

³ Some exceptions exist with MW Schedules provided by units $< 25\text{MW}$

⁴ It must be noted that it will still be possible that the same party takes up the role of the BRP and the SA.

and this on a quarter-hourly basis. Since December 2021, this day-ahead balance obligation is being progressively relaxed⁵. Under the assumption of an evolution towards a full removal of the day-ahead balance obligation, this raises questions on the needs for Elia to receive these different Nominations and corresponding potential opportunities for simplifying the Nomination process. In this regard, it must be noted that the different types of Nominations submitted by BRPs are not solely used for checking the compliance of BRPs with respect to the (relaxed) day-ahead balance obligation, but also for certain operational processes (e.g., adequacy check and load flow calculations) and for publishing information to support an efficient and transparent market functioning (e.g. publication of indicators on day-ahead imbalances).

In this context, **the objective of this study is to recommend a desired evolution of the Nominations submitted by the BRP** considering the above-mentioned evolutions while also considering Elia's current and future needs for receiving Nominations for different operational processes as well as the information requirements for achieving an efficient and transparent market functioning.⁶

The remainder of this document is structured as follows:

- **Section 2** describes in detail the **current process for the submission of the different types of Nominations**;
- **Section 3** provides an **overview of the possible and relevant evolutions of the different type of Nominations** that are analyzed in detail in the following sections;
- **Section 4** describes the different **processes in which Elia** currently **uses** or is planning to use **the different types of Nominations** and derives the possibilities and/or needs for certain evolutions of the Nomination process.
- **Section 5** looks in into the **impact of the foreseen split between the roles of BRP and SA** on the Physical Nominations;
- **Section 6** describes the **recommended target design** for the Nominations;
- **Section 7** contains the **implementation plan** for the recommended target design of the Nominations;
- **Section 8** finally summarizes the main findings and **concludes** the study.

⁵ The process for the progressive relaxation of the day-ahead balance obligation is described in the **T&C BRP**. BRPs can take open positions in the day-ahead timeframe not exceeding a certain percentage of the size of their portfolio (i.e., the so-called Maximum Authorised Relative Day-Ahead Imbalance). This Maximum Authorised Relative Day-Ahead Imbalance is foreseen to be gradually increased, and the applicable value is published on the **Elia website**.

⁶ It must be noted that the study does not assess the design and evolutions related to the submission of MW Schedules by the SA. Possible future evolutions of the design for the submission of MW Schedules are to be discussed as part of the iCAROS project.

The present document is the first version of a report that will be submitted to the CREG by December 23, 2022. As such, the present public consultation is an opportunity to **collect stakeholders' views** on the conclusions and recommendations of the study. The stakeholders' feedback will be considered for the finalization of the study.

2. Current process for the submission of Nominations

The aim of this section is to provide an overview of the Nominations currently submitted by the BRPs. To this end, this section describes what each type of Nomination represents, when (and by who) it needs to be submitted and with which spatial and temporal granularity as well as in which format.

Type of Nomination		Moment of submission		Granularity			Format of submission
		DA	ID	Spatial	Temporal	Resolution	
Physical Nominations	MW Schedules (submitted in accordance with the SA Contract)	Before 15h D-1	Until 45 min before the start of the Qh	Per Delivery Point (linked to Technical Unit/Technical Facility) ⁷	Per Qh	0,1 MW	Scheduling tool ⁸
	Offtake and Injection Nominations (currently for offtakes/injections not covered by the SA Contract)	Before 14h30 D-1	/	Per Access Point to the Elia Grid / distribution system	Per Qh	0,1 MW	E-Nomination
Commercial Trade Schedules	Internal (“Hub Nominations”)	Before 14h D-1 ⁹	Before 14h D+1 ¹⁰	Per counterparty BRP	Per Qh	0,1 MW	E-Nomination
	External (“XB Nominations”)	Before 14h30 D-1	Nomination on behalf of the BRP after the ID cross-zonal gate closure time (D h-1)	Per border	Per Qh	0,1 MW	E-Nomination
BRP _{FSP} Nominations		Before 14h D-1	Before 14h D+1	Aggregated over possibly multiple Delivery Points	Per Qh	0,1 MW	E-Nomination

Table 1: Overview of the different types of Nominations

⁷ As of iCAORS phase 1.

⁸ The new Scheduling Tool will be used both for the day-ahead and intraday submission of the MW Schedules as of the go-live of phase 1 of the iCAROS Project.

⁹ In case of an external inconsistency, the BRP has the possibility to amend the concerning Day-Ahead Internal Commercial Trade Schedule until 14h30 on Day D-1. An external inconsistency occurs in case for a given Commercial Trade Schedule submitted by the BRP no corresponding Commercial Trade Schedule has been submitted (and been accepted) by the counterparty BRP or in case the corresponding Commercial Trade Schedule contains a different value for one of the quarter hours.

¹⁰ In case of an external inconsistency, the BRP has the possibility to amend the concerning Intraday Commercial Trade Schedule until 14h30 on Day D+1.

Table 1 provides the full overview of the different types of Nominations. It can be noted that all types of Nominations are provided per quarter hour and with a resolution of 0,1 MW.

Regarding the Physical Nominations, it can be observed that there are **two categories of Physical Nominations** that both represent the BRP’s forecast of the active power injected into or withdrawn at different locations of the grid¹¹, and this for each quarter hour of a given day D. Figure 1 provides a schematic overview of these different categories of Physical Nominations.

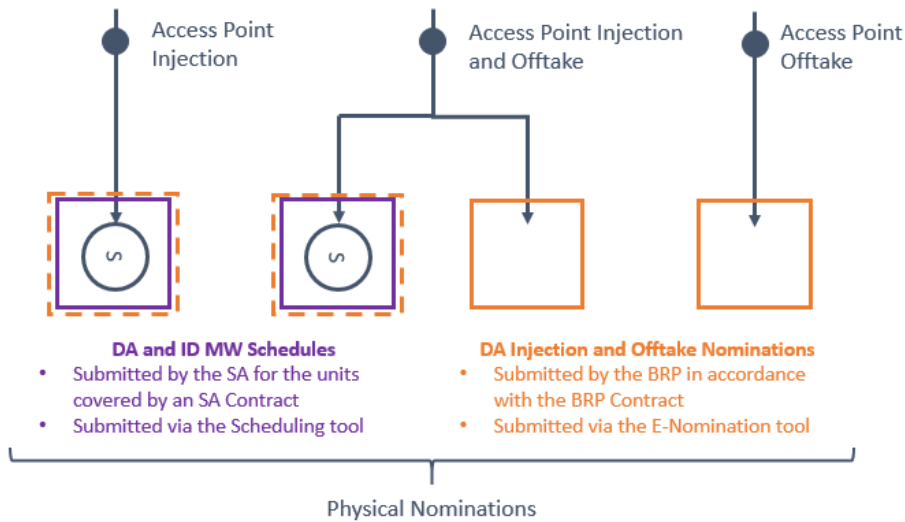


Figure 1: Overview of the current Physical Nominations¹²

A first category of Physical Nominations are the **MW Schedules** that are submitted in accordance with the Scheduling Agent (SA) contract (i.e., the former CIPU contract). These MW Schedules need to be submitted in day-ahead (before 15h) and need to be updated in ID each time there is a change in the MW schedule not triggered by an Elia activation (after 18h D-1 and until the scheduling deadline 45 minutes before the start of the quarter hours for which the schedule is adapted). In terms of locational granularity, these MW Schedules need to be submitted on the level of

¹¹ The Physical Nominations need to represent the actual Injection/Offtake at these point as close as possible. In case significant and/or systematic differences between the Physical Nominations and the actual values¹¹ are detected, and such differences continue to occur after Elia has notified the BRP of such differences, Elia can prohibit the BRP from using Intraday Internal Commercial Trade mechanisms for a certain period, as specified in Art. 24.3.6 of the BRP Contract.

¹² The references to the Scheduling tool reflects the situation as of the go-live of iCAROS phase 1.

an individual Delivery Point that is linked to a Technical Unit/Technical Facility, and this for units with a maximum power larger or equal to 25 MW (or smaller units providing MW Schedules on a voluntary basis)¹³. As mentioned in Section 1, there is currently an overlap between the role of the BRP and the role of the SA in terms of the responsibility for the submission of these MW Schedules. Indeed:

- The SA needs to submit MW Schedules in accordance with the SA Contract and Article 246§3 of the Federal Grid Code;
- The BRP needs to submit Physical Nominations in accordance with the BRP Contract and Article 210 of the Federal Grid Code. For injection points linked to units covered by an SA contract, the BRP Contract currently refers to modalities of the SA contract.

It must further be noted that in practice, the MW Schedules are submitted via a dedicated Scheduling tool, whereas all other Nominations are submitted by the BRP via the E-Nomination tool¹⁴.

A second category of Physical Nominations are the **Offtake and Injection Nominations** that currently cover all other injections or offtakes in the grid (e.g., demand facilities, decentralized generation, etc. that do not provide MW Schedules). These Offtake and Injection Nominations need to be submitted by the BRP per individual Access Point or distribution system (public or closed distribution system)¹⁵ and this solely in day-ahead (before 14h30 D-1). Note that, in case there is a Technical Unit that provides MW Schedules and that is located behind a certain Access Point, the Offtake/Injection Nomination for that Access Point currently provides the gross offtake/injection, i.e., excludes the injection/offtake related to the Technical Unit for which a MW Schedule is already provided (as illustrated in Figure 1). Further note that, although the Offtake and Injection Nominations are restricted today to the offtakes/injections not covered by the SA Contract, the term Offtake/Injection Nomination will be used more broadly in the remainder of the study to refer to all Physical Nominations for which the submission is strictly (i.e., only) the responsibility of the BRP.

Next to the Physical Nominations, there are also Nominations that reflect the commercial transactions performed by the BRP. These are the so-called **Commercial Trade Schedules**, which represent the quarter-hourly commercial exchange of electricity between the BRP and its counterparty BRP. A distinction can be made between:

- Internal Commercial Trade Schedules (also referred to as “Hub Nominations”), that represent commercial exchanges of electricity between market participants within the same Scheduling Area. The Internal Commercial Trade Schedules must be submitted in day-ahead (before 14h D-1⁹) and in intraday (or ex-post, before 14h D+1¹⁰)

¹³ Applicable as of iCAROS phase 1.

¹⁴ An exception exists for External Commercial Trade Schedules related to import or export on the BE-GB Border, which must be submitted on the RNP and not directly via Elia’s E-Nomination system (but can be consulted there).

¹⁵ The Injection/Offtake Nomination for a given public distribution system or closed distribution system represent the total injection/offtake aggregated over possibly multiple Access Points in that public distribution system or Market Access Points in that closed distribution system.

- External Commercial Trade Schedules (also referred to as “XB Nominations”), that represent commercial exchanges of electricity between market participants in different Scheduling Areas.¹⁶

For Internal Commercial Trade Schedules, The BRP must specify the counterparty BRP in order to enable Elia to verify that the trade is indeed confirmed by the counterparty BRP and that there is no external inconsistency. For similar reasons, the External Commercial Trade Schedules need to be submitted per border.

A final type of Nominations are the DA and ID **BRP_{FSP} Nominations**. These Nominations have been introduced with the implementation of the ToE mechanism for participation to the day-ahead and intraday markets, and should be seen as the planned deviation from the normal offtake/injection pattern of all Delivery Points used for the activation of the FSP in response to a day-ahead or intraday trade. As such, this Nomination has been introduced to enable a BRP_{FSP} to have a balanced portfolio in the DA/ID timeframe when selling/buying electricity in the day-ahead and/or intraday markets that is covered by realizing a deviation from the normal offtake/injection pattern of certain Delivery Points. In this regard, an analogy can be made between on the one hand the Injection and Offtake Nominations, that represent the expected injection/offtake within the portfolio of the BRP, and on the other hand the BRP_{FSP} Nominations, that represent a planned deviation from the normal offtake/injection pattern realized by the FSP.

In terms of the moment of submission, the DA BRP_{FSP} Nominations currently need to be submitted before 14h D-1 (in case an activation is planned by the FSP in response to a day-ahead trade) and the ID BRP_{FSP} Nominations need to be submitted before 14h D+1 (in case an activation is planned by the FSP in response to an ID trade). The BRP_{FSP} Nominations do not contain locational information of where the flexibility is activated¹⁷. A single BRP_{FSP} Nomination can thus represent the activation of flexibility via several Delivery Points.

¹⁶ Note that certain External Commercial Trade Schedules are incorporated by Elia into the Balancing Perimeter on behalf of the BRP and hence do not need to be submitted by the BRP.

¹⁷ Note that, in line with the ToE Rules and the FSP Contract DA/ID, the FSP does need to submit notifications to Elia close to real time that do contain information on the Delivery Points used for the activation. This information is used by Elia in order to inform the BRP_{source} on the expected impact on his perimeter.

3. Possible evolutions of the Nominations

This sections aims to provide an overview of the potential evolutions for each type of Nomination that will be further considered in the remainder of the study.

3.1 MW Schedules

As discussed in the previous sections, for the MW Schedules there is an historic overlap between the role of BRP and the role of SA in terms of who is responsible for the submission of the MW Schedules. With the upcoming split of roles between BRP and SA foreseen in the framework of iCAROS phase 2, it is foreseen that the SA becomes the role responsible for the submission of the MW Schedules.

Considering that the scope of this study is restricted to the Nominations submitted by the role of the BRP, the **design and possible evolutions of the provision of the MW Schedules within the framework of the T&C SA and the scheduling process fall out of the scope of this study**. The design and potential future evolutions of the MW Schedules are to be discussed as part of the iCAROS project and Task Force. However, this study does analyze how the Nominations (notably the Injection and Offtake Nominations) provided by the BRP should evolve in the context of the split of the roles between BRP and SA and the fact that the SA is foreseen to become the sole responsible for the submission of the MW Schedules.

3.2 Commercial Trade Schedules

When looking at the potential evolutions of the Commercial Trade Schedules, a key fact that needs to be considered is that both the Internal and External Commercial Trade Schedules are directly used for the BRP imbalance settlement. More specifically, the Commercial Trade Schedules form one of the elements of the BRP's Balancing Perimeter and are hence used for calculating the imbalance of the BRP. As discussed in Section 2, the Internal/External Commercial Trade Schedules need to be provided by a given BRP for each Counterparty BRP/border in order to be able to verify consistency between the Commercial Trade Schedules submitted by different BRPs.¹⁸ Taking this into consideration, there are **limited possibilities for evolutions of the Commercial Trade Schedules**.

The potential evolutions are restricted to changes with respect to the timing of the submission of the Commercial Trade Schedules. For the External Commercial Trade Schedules, there is no need for evolutions given that these Nominations are available at the earliest possible moment, i.e., directly after the gate closure time of the cross-border

¹⁸ Elia performs checks on the consistency of the Commercial Trade Schedules as described in Section 24 of the BRP Contract.

ID market which currently is one hour before real time (see Table 1 in Section 2). However, the Intraday Internal Commercial Trade Schedules can currently be submitted by the BRPs until 14h on D+1. This in order to allow BRPs to concentrate on trading in the intraday timeframe while and to limit the close-to-real-time administrative efforts for BRPs. However, there can be questions on whether it would be useful to request an earlier submission of the ID *Intra* Commercial Trade Schedules, for instance in order to allow following-up how the imbalance of a BRP evolves in the ID timeframe.

To answer this question, it is essential to obtain an overview of all processes that could potentially benefit from having an earlier submission of Intraday Internal Commercial Trade Schedules. This is discussed in detail in Section 4.

3.3 Offtake, Injection Nominations and BRP_{FSP} Nominations

In contrast to the Commercial Trade Schedules, the Physical Nominations are not used for the calculation of the imbalance of a BRP (and hence the imbalance settlement process). This because the Physical Nominations only reflect the *expected* injections and offtakes located in the perimeter of the BRP whereas the final imbalance of a BRP is calculated ex-post based on the measured offtakes/injections allocated to the perimeter of the BRP. Similarly, the BRP_{FSP} Nominations reflect the expected activated flexibility (expected/planned deviation from the normal offtake/injection pattern) but the final imbalance of a BRP is determined based on the actually delivered volume of flexibility that forms the basis for the perimeter correction in case of Market Situations with Transfer of Energy.

Since the Offtake, Injection and BRP_{FSP} Nominations are not used for the imbalance settlement, there are **more possible evolutions for these Nominations**. In particular in light of the ongoing relaxation of the day-ahead balance obligation, one could ask the three following questions:

- **Is there still a need for receiving the Offtake, Injection and BRP_{FSP} Nominations in case the day-ahead balance obligation will be fully removed?**
- **Is it needed to receive these Nominations with the current level of spatial granularity?**
- **Is there a need to receive intraday updates of these Nominations?**

To answer these questions, it is essential to obtain an overview of all processes that currently make use of these Nominations or are planned to make use of these Nominations and the corresponding requirements of these processes (e.g., timing of submission, locational information requirements). This is discussed in detail in Section 4.

In addition, in the context of the foreseen split between the roles of BRP and SA, the question needs to be answered on how the Offtake and Injection Nominations should evolve from the moment the SA (being possibly a different party than the BRP) becomes the sole responsible for submitting the MW Schedules. This is discussed in Section 5.

3.4 Conclusion

As schematically summarized in Figure 2, the remainder of the study will focus on the possible evolutions of the **Offtake, Injection and BRP_{FSP} Nominations**, and explore the need to request an earlier submission of the **Intraday Internal Commercial Trade Schedules**. To this end, Section 4 looks into detail into the different processes using these types of Nominations, and Section 5 will look into how the Offtake and Injection Nominations should evolve in the context of the foreseen split between the roles of BRP and SA.

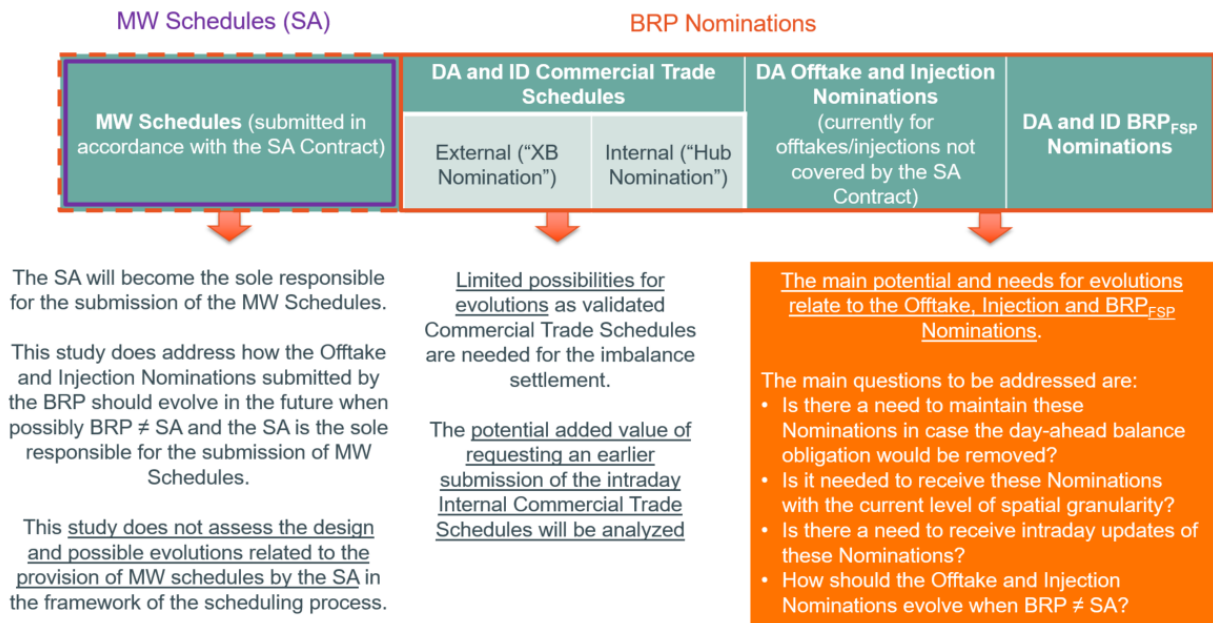


Figure 2: Schematic representation of possible evolutions of the different types of Nominations

4. Processes using the Nominations

This Section looks at the use of the different type of Nominations for the current and future operational processes as well as the processes for supporting market functioning. A specific focus is given to the Offtake, Injection and BRP_{FSP} Nominations, and the need for earlier submission of the intraday Internal Commercial Trade Schedules.

4.1 Current processes

Table 2 provides a global overview of the different processes currently using the different types of Nominations. More information with respect to the objective of each of these processes and the use of the different type of Nominations is provided in the sections below.

Use of different types of Nominations						
Process	Physical Nominations		Commercial Trade Schedules		BRP _{FSP} Nominations	Timing of the process
	MW Schedules (submitted in accordance with the SA Contract)	Offtake and Injection Nominations (for offtakes/injections not covered by the SA Contract)	External ("XB Nominations")	Internal ("Hub Nominations")		
BRP Imbalance settlement			✓	✓		Ex post
Check contractual compliance DA balance obligation	✓	✓	✓	✓	✓	D – 1
Publication of indicators on DA imbalances	✓	✓	✓	✓	✓	D – 1
Near real-time estimation of DSO Allocations (ENIGMA)		✓				Near real-time
Adequacy check	✓	✓	✓		✓	D – 1 and ID
Congestion forecasting	✓		✓			D – 1 and ID

Table 2: Overview of processes currently using the different types of Nominations

4.1.1 BRP Imbalance Settlement

To calculate the imbalance of a BRP, the various terms comprised in the BRP's Balancing Perimeter are summed. These different terms consist of:

- the measured offtakes and injections on Access Points connected to the Elia Grid (excluding Access Points that supply a CDS);

- Distribution and CDS Injection/offtake Allocations;
- transmission system losses;
- imports and exports;
- internal commercial trades; and
- where appropriate, modifications to the Balancing Perimeter as a result of an activation of flexibility

As discussed in Section 3.2 and described in Section 20.7 of the BRP Contract, the internal commercial trades and the imports/exports that are allocated to the Balancing Perimeter of a BRP correspond directly to the confirmed Internal/External Commercial Trade Schedules. For this reason, validated Commercial Trade Schedules are needed for this process. In terms of the timing, the BRP settlement processes is performed ex-post taking into account the time required for having validated metering data regarding the injections and offtakes in the grid. In this regard, there is no need for this process to have the Intraday Internal Commercial Trade Schedules available earlier than today.

As discussed in Section 3.3, the other type of Nominations (i.e., the Physical Nominations and the BRP_{FSP} Nominations) are not directly used for the calculation of the imbalance of a BRP and hence not needed for this process.

4.1.2 Check contractual compliance day-ahead balance obligation

Until December 2021, the Nominations and MW Schedules submitted by a BRP needed to be balanced on a quarter-hourly basis in the day-ahead timeframe. Following the conclusions of the study on the day-ahead balance obligation¹⁹, the day-ahead balance obligation is progressively being relaxed starting from December 2021. This with the objective of i) removing barriers to spot market improvements, ii) ensuring a level playing field between all BRPs and iii) safeguarding the quality of the information communicated to Elia. During the period of progressive relaxation, multiple phases are foreseen where in each phase, the maximum day-ahead imbalance that is allowed to be taken by BRPs is gradually increased. Multiple evaluation moments are foreseen in between the different phases with the goal of ensuring that there are no detrimental effects due to the relaxation and to determine whether or not to proceed to the next phase of the relaxation.

In order for Elia **to check the compliance of BRPs with respect to the (gradually relaxed) day-ahead balance obligation, Elia needs to calculate the day-ahead imbalance of a BRP. For this purpose, all day-ahead Nominations** currently provided by the BRP (including the MW Schedules) **are needed** and currently used. No intraday Nominations are used for this process.

4.1.3 Publication of indicators on day-ahead imbalances

¹⁹ The study on the day-ahead balance obligation of BRPs can be found on the [Elia website](#).

Together with the first phase of the relaxation of the day-ahead balance obligation, **Elia started publishing information regarding the aggregated day-ahead imbalance taken by BRPs**²⁰. More specifically, the following indicators are published for each quarter hour of a day D, and this on a daily basis after the end of the day-ahead procedure:

- **The day-ahead global imbalance;**²¹
- **The day-ahead positive imbalance;**²²
- **The day-ahead negative imbalance.**²³

These indicators aim to provide early signals to the market regarding the volume of the day-ahead imbalance. This because the day-ahead imbalance might have an impact on the possibilities of finding counterparties on the intraday market (in particular for BRPs that have open positions in day-ahead) and might provide relevant information on the opportunities for offering additional volumes in the intraday market.

Similar to the check on the compliance with the day-ahead balance obligation, the calculation of the indicators requires calculating the day-ahead imbalance of each BRP. For that purpose, **all types of day-ahead Nominations** (including the MW Schedules, the Commercial Trade Schedules, the Offtake/Injection Nominations and the BRP_{FSP} Nominations) **are needed** and no intraday Nominations are used for this process.

4.1.4 Adequacy check

Elia performs **adequacy checks** that **serve to detect potential adequacy issues and take according measures**. In the adequacy check, Elia verifies whether the nominated generation together with the nominated net imports and the available incremental and non-reserved capacity is sufficient to cover the forecasted load. In the day-ahead timeframe, the adequacy check primarily serves to trigger closer monitoring, to take preparatory actions for activating high-impact measures and to trigger alerts to inform the market of possible adequacy issues. In the intraday timeframe, the situation is monitored and the necessary actions are taken (e.g., performing emergency curtailments). Note that these actions would be taken in the intraday timeframe and only in case, based on the latest available information, there is a persisting and significant adequacy concern.

For the day-ahead adequacy check, Elia relies on the following data:

²⁰ The indicators on the aggregated day-ahead imbalance are published on the [Elia website](#).

²¹ The day-ahead global imbalance corresponds to the aggregated sum of all the Day-ahead nominations (including the MW schedules) received from all the BRPs for the given quarter-hour.

²² The day-ahead positive imbalance corresponds to the aggregated sum of all the Day-ahead nominations (including the MW schedules) received from the BRPs that, in Day-ahead, have a positive imbalance for the given quarter-hour.

²³ The day-ahead negative imbalance corresponds to the aggregated sum of all the Day-ahead nominations (including the MW schedules) received from the BRPs that, in Day-ahead, have a negative imbalance for the given quarter-hour.

- The MW Schedules (excl. schedules for wind and solar parks);
- The External Commercial Trade Schedules (“XB Nominations”);
- Elia’s own forecasts of the total load, the wind and solar generation and the generation from small non-wind and solar generation (together forming Elia’s residual load forecast);
- The Offtake and Injection Nominations.

The **Offtake and Injection Nominations** are used to i) compare Elia’s own day-ahead residual load forecast to that based on the Offtake and Injection Nominations submitted by the BRPs, and ii) to calculate the aggregated day-ahead imbalance. Both these elements **provide important contextual information for ensuring robustness of the day-ahead adequacy assessment.**

In terms of the required spatial granularity of the Offtake and Injection Nominations, it must be noted that Elia only looks at the total residual load constructed by aggregating all Offtake and Injection Nominations submitted by the BRPs. As such, for this process **it is not needed for Elia to receive individual Offtake/Injection Nominations per Access Point or distribution system.**

In the intraday timeframe, Elia relies on the last valid MW Schedules²⁴, the External Commercial Trade Schedules submitted in both the day-ahead and the intraday timeframe and Elia’s own intraday residual load forecasts. Considering that the Injection and Offtake Nominations are not updated in the intraday timeframe, these Nominations are of limited use for the intraday adequacy assessment. In case the Offtake and Injection Nominations would be updated in the intraday timeframe, they could be used to further enhance robustness of the intraday adequacy check in a similar way as for the day-ahead adequacy check. However, it must be noted that in the intraday timeframe, Elia’s own residual load forecasts become increasingly accurate and that high impacting measures are only taken in case of a clear and significant adequacy issues. For these reasons, **Elia considers that, looking only at the adequacy check, the benefits of requesting intraday updates of the Offtake and Injection Nominations are not sufficient at this point to justify the high additional workload for BRPs related to requesting intraday updates of the Offtake and Injection Nominations.**

4.1.5 Congestion Forecasting

Elia develops and uses an individual grid model (IGM) to detect possible congestions. The IGM is developed in day-ahead and updated each hour during the intraday timeframe. The IGM of the Belgian grid is also merged with the IGMs provided by different TSOs to form a common grid model (CGM) that is used for a coordinated security analysis. As such, the IGM forms the basis for the intraday capacity calculation process, the calculation of the Congestion

²⁴ Note that for the intraday adequacy assessment and congestion forecasting processes (discussed in Section 4.1.5), it is important for Elia to receive updates of the MW schedules as soon as possible.

Risk Indicators (CRI) and the planning of remedial actions. More detailed information regarding how the IGM is developed and used can be provided in the recent study on the improvement of the quality of input data for congestion management.²⁵

Elia currently uses the following data to construct the IGM:

- The MW Schedules submitted in accordance with the SA Contract
- The External Commercial Trade Schedules (“XB Nominations”)
- Elia’s own forecasts of the total load, the wind and solar generation and the generation from small non-wind and non-solar generation, and the repartition keys to distribute the load/generation across the different nodes of the IGM.

The Offtake, Injection and BRP_{FSP} Nominations as well as the Internal Commercial Trade Schedules are currently thus not used for congestion forecasting.

4.1.6 Near real-time estimation of DSO Allocations (ENIGMA)

Following a 2019 study²⁶ on the near-real time estimation of the distribution allocations (one of the elements of the perimeter of the BRP), Elia started to offer the possibility for interested BRPs to receive near-real time estimations of their DSO Allocations. The estimations are provided on a voluntary basis to the interested BRPs with the aim of facilitating BRPs in balancing their portfolio.

The near real-time estimations of the DSO Allocations of individual BRPs are made by machine-learning models based on several sources of input data (e.g., Elia’s total load and solar forecasts, near real-time measured infeed of Elia substations). One of the sources of input data that can be used for estimating the DSO Allocations for a given BRP are the day-ahead Offtake Nominations submitted by that BRP for each distribution system.²⁷

While this process of near real-time estimations of the DSO Allocations does make use of the Offtake Nominations (on the level of the distribution systems), **Elia considers that this process does not form an important factor for determining the evolutions of the Nominations that a BRP is *obliged* to submit.** This because the provision of near real-time estimations of the DSO Allocations is a *voluntary* service offered by Elia and that is not used by all

²⁵ The study has been publically consulted from 10th of June 2022 to 15th of July 2022; the consulted report is available on the [Elia website](#).

²⁶ The study on the near real-time estimation of the DSO Allocations is available on the [Elia website](#).

²⁷ Note that a single model is developed per BRP for estimating its DSO Allocations. Based on a periodic model calibration, Elia uses by default the set of input data that leads to the most accurate DSO Allocations. However, each BRP has the possibility to modify the set of input data used for the model estimating the DSO Allocations. As a result of these processes, the variables/input data that are effectively used can differ from model to model (BRP to BRP).

BRPs. Moreover, only a part of the BRPs receiving the near real-time estimations of the DSO Allocations currently use the Offtake Nominations per distribution system. For these reasons, this process is not considered in the remainder of the report.

However, in case the proposed evolutions of the Nominations would impact this process, Elia is open to further consider the possibilities for interested BRPs to submit the information regarding their expected offtake per distribution system on a voluntary basis. These Nominations would then be exclusively used for the estimation of the near real-time estimation of the DSO Allocations and would not be a contractual obligation integrated in the T&C BRP.

4.2 Future evolutions

This section looks at future evolutions with respect to the processes discussed above as well as new processes that are expected to make use of the Nominations.

4.2.1 Check contractual compliance day-ahead balance obligation

As discussed before, the day-ahead balance obligation is currently in the process of being progressively relaxed. Although the relaxation process is ongoing, the future of the day-ahead balance obligation depends on the results of the different evaluation moments that follow the different phases of the progressive relaxation of the day-ahead balance obligation, as described in the Terms and Conditions for BRPs (T&C BRP).

Under the assumption that the day-ahead balance obligation would be removed following the end of period of the progressive relaxation, there would no longer be a check on the day-ahead imbalance of BRPs and hence no longer a need to have Offtake, Injection and BRP_{FSP} Nominations for this process.

In contrast, in case the evaluation would identify that the relaxation of the day-ahead balance obligation would have a negative impact on the System Imbalance, there might be a need to restore the day-ahead balance obligation in Belgium. In that case, the Offtake/Injection and BRP_{FSP} Nominations would remain to be needed for this process. Moreover, although the check on the day-ahead balance is performed on the level of the portfolio of the BRP, individual Nominations per Access Point/distribution system (as today) would in this case remain necessary to be able to perform the contractual check in the most accurate way.

4.2.2 Publication of indicators on day-ahead imbalances

The relevance of the publication of the indicators related to the day-ahead imbalances taken are foreseen to be evaluated together with the evaluation of the impact of the relaxation of the day-ahead balance obligation. Hence, the need for the Offtake, Injection and BRP_{FSP} Nominations depends on whether these publications are to be maintained. However, at the moment, Elia assumes these publications will be maintained as market parties expressed a desire for maintaining these publications in the first evaluation moment of the relaxation of the day-ahead balance obligation.

In addition to the publication of the indicators on the day-ahead imbalances, it could be considered to extend such indicators to the intraday timeframe. Compared to the current situation, this would require:

1. BRPs to submit intraday updates of the Offtake and Injection Nominations (as presented in Section 2, these Nominations are currently only provided in the day-ahead timeframe); and
2. BRPs to submit their Internal Commercial Trade Schedules earlier than today. More specifically, the Internal Commercial Trade Schedules would need to be provided shortly after the trade is performed (and hence before real-time, i.e. the start of the quarter hour for which electricity is traded). This in contrast to the current situation where BRPs can submit their intraday Internal Commercial Trade Schedules until 14h on D+1, as presented in Section 2) in order to limit the administrative workload in real time. It must be noted that the intraday Internal Commercial Trade Schedules would only be needed for the calculation of the indicators on the intraday positive imbalance and the intraday negative imbalance but not for the calculation of the indicator on the intraday global imbalance. This because the day-ahead global imbalance is not impacted by the Internal Commercial Trade Schedules.²⁸

As such, an extension of the indicators to the intraday timeframe would require significant efforts from the BRPs and Elia (both in terms of operations and in terms of implementation).

In addition to the required efforts, an extension of these indicators to the intraday timeframe could create risks, for instance in case the indicators published in the intraday timeframe would be based on inaccurate intraday Nominations and in case the published indicators would be used close to real-time for reactive balancing purposes^{29,30}. This while Elia believes the potential added value of extending these indicators to the intraday timeframe would be limited considering that the intraday prices and traded volumes form alternative and more robust indicators regarding the possibilities and opportunities for balancing the portfolio in the intraday timeframe. For these reasons, **Elia is of the opinion that any potential benefits from extending the publication of these indicators to the intraday timeframe do not weigh up to the related risks created and the additional efforts required.**

4.2.3 Congestion Forecasting

²⁸ For instance, a Hub Nomination reflecting an intraday transaction where a BRP_A buys 10 MWh from BRP_B will result in a change of the imbalance of BRP_A with +10MWh and a change of the imbalance of BRP_B with -10MWh, but will not have an impact on the imbalance of the Belgian zone (global imbalance).

²⁹ In this regard, it must be noted that the indicators on the day-ahead imbalances were intended to give an early indication to BRPs regarding possible difficulties/opportunities for balancing their portfolio in the intraday timeframe, but these indicators were never intended to support reactive balancing. In contrast, for supporting reactive and portfolio balancing, Elia intends to start publishing close-to-real-time forecasts of the System Imbalance (see Section 4.2.4).

³⁰ Further note that this risk is significantly less in the day-ahead timeframe considering that the day-ahead indicators are not likely to be used for taking close-to-real-time balancing decisions.

As discussed in Section 4.1.5, the Offtake and Injection Nominations are currently not used as inputs for constructing the individual grid model (IGM) that is used (as input) for congestion forecasting. However, in the context of the ongoing Elia study on the improvement of the quality of input data for congestion management²⁵, **Elia has identified opportunities to improve the IGM by using** bottom-up³¹ forecasts of the offtake at Access Points corresponding to demand facilities. The study in particular shows that industrial loads have a significant impact on grid congestions while Elia's current prediction errors are relatively high (due to the top-down approach), and that the highest improvements are realized by using directly **the Offtake Nominations**.

Based on these findings, Elia considers that **receiving information regarding the expected offtake of individual demand facilities is an important element for** further improving the day-ahead and intraday IGM and hence **increasing the efficiency of congestion management processes**. In light of the expected electrification of industrial loads and the more flexible operation of these loads, Elia considers this information to become increasingly important in the future. A question that remains is whether it should be the BRP that provides this information via the Offtake Nominations, or whether it should rather be the SA that provides this information (which would then be called MW Schedules). A recommendation on this point is provided in Section 6.

4.2.4 System Imbalance Forecasting (Simplify)

In 2021, Elia performed a study on **forecasting the System Imbalance (SI) in the ongoing and upcoming quarter hours** using machine-learning models. The SI forecasts aim to **improve the overall decision-making process for the activation of mFRR balancing energy bids**. In addition, SI forecasts are foreseen to be published on the Elia Open Data Portal with the aim of **increasing transparency** on the main drivers of the SI **and enable a stronger implicit reaction**.

In the study, a machine-learning model has been developed that forecasts the SI based on several sources of input data (e.g., the SI and NRV in the past minutes/quarter hours, wind, solar and load forecasts and measurements). In the model developed in the 2021 study, no Nominations have been used as model inputs. However, in line with the implementation plan of the study, Elia has been assessing multiple ways to further improve the accuracy of the SI forecasts, including the possibility to include/use additional data sources. In this regard, recent analyses have shown that using the (aggregated) XB Nominations and the **aggregated day-ahead Offtake and Injection Nominations result in an improvement of the SI forecasts**. Therefore, **Elia foresees to use the aggregated Offtake and Injection Nominations as one of the input data for the SI forecasts**. However, it must be noted that **this process only requires the aggregated Offtake and the aggregated Injection Nominations**.³² Regarding the potential

³¹ i.e., direct forecasts of the offtake at the Access Point instead of top-down forecasts based on allocating the forecasted total load across the different Access Points.

³² Elia has assessed using the individual Nominations per Access Point or distribution system but found that this did not improve the SI forecasts.

added value of having intraday Offtake and Injection Nominations, no conclusions can be drawn considering that such intraday Offtake and Injection Nominations are not available and hence the added value cannot be evaluated. Elia will provide more information regarding the planned publication of the system imbalance forecasts during the WG Balancing Meeting and the CCMD Workshop organized on 15th of September 2022.

4.3 Overview and conclusions

Table 3 provides an overview of the foreseen future use of the Offtake, Injection and BRP_{FSP} Nominations in the different processes discussed above. In addition, this table provides an overview of the potential added value of receiving the intraday Internal Commercial Trade Schedules before real time.

Process	Offtake, Injection and BRP _{FSP} Nominations			Intraday Internal Commercial Trade Schedules
	Are the Offtake, Injection and/or BRP _{FSP} Nominations planned to be used in the future for this process?	What is the required locational granularity of the Nominations for this process?	Is there a clear added value of receiving intraday updates of the Offtake, Injection and BRP _{FSP} Nominations?	Is there a clear added value of receiving intraday Internal Commercial Trade Schedules before real time?
BRP Imbalance settlement	No	/	No	No
Check contractual compliance DA balance obligation	Uncertain ³³	Uncertain ³⁴	No	No
Publication of indicators on DA imbalances	Uncertain ³⁵	Aggregated on the level of the Belgian zone	No	No
System Imbalance forecasting (Simplify)	Yes (Offtake and Injection Nominations) ³⁶	Aggregated on the level of the Belgian zone	Uncertain ³⁷	No
Adequacy check	Yes	Aggregated on the level of the Belgian zone	Yes	No
Congestion forecasting	Yes (Offtake Nominations for industrial demand facilities) ³⁸	Per Access Point	Yes	No

Table 3: Overview of the use of the Offtake, Injection and BRP_{FSP} Nominations for the different processes

³³ Whether or not this process remains depends on the foreseen evaluation of the impact of the relaxation of the day-ahead balance obligation.

³⁴ As discussed in Section 4.2.1, the required locational granularity depends on the future of the day-ahead balance obligation. In the case the day-ahead balance obligation is fully removed, the Nominations would not be used for this process and hence the locational granularity of the Nominations would not matter. However, in case the evaluation would identify that the relaxation of the day-ahead balance obligation would have a negative impact on the System Imbalance, there might be a need to restore the day-ahead balance obligation in Belgium. In that case, requiring individual Nominations per Access Point/distribution system (as today) would remain necessary to perform the contractual check in the most accurate way.

³⁵ The relevance of these publications is foreseen to be evaluated together with the evaluation of the impact of the relaxation of the day-ahead balance obligation.

³⁶ At the moment, the BRP_{FSP} Nominations are not foreseen to be used as one of the input variables for the model forecasting the system imbalance.

³⁷ As discussed in Section 4.2.4, no conclusions can be drawn regarding the potential added value of having intraday Offtake, Injection or BRP_{FSP} Nominations considering that such intraday Nominations are not available and hence the added value cannot be evaluated.

³⁸ As discussed in Section 4.2.3, receiving information regarding the expected offtake of individual demand facilities is an important element for increasing the efficiency of congestion management processes. A question that remains is

Based on this overview, the **following conclusions** are drawn:

1. **Offtake, Injection and BRP_{FSP} Nominations maintain** to be an important input for different processes and hence remain **to be needed**, even in case of a full removal of the day-ahead balance obligation.
2. **For all balancing related processes, the required locational granularity of the Offtake, Injection as well as the BRP_{FSP} Nominations is that of the Belgian zone.** Therefore, it would suffice for these processes that Elia receives a single Injection Nomination, a single Offtake Nomination and a single BRP_{FSP} Nomination per BRP and per quarter hour.³⁹ For the Offtake/Injection Nominations, such a “Total Offtake”/“Total Injection” Nomination would reflect the expected total (aggregated) offtake/injection located in the Belgian zone and in the portfolio of the BRP in a given quarter hour. For the BRP_{FSP} Nominations, already today a single Nomination is foreseen per BRP and per quarter hour.
3. The only process where Elia requires nominations with more precise locational information relates to congestion management. More specifically, to **enable more accurate congestion forecasting, it becomes increasingly important for Elia to receive forecasts of the expected offtake of individual demand facilities.** Such forecasts could be provided by the BRP in the form of Offtake Nominations (as today) but could also be provided by the SA (and called MW Schedules).
4. Elia considers that the **potential benefits of requesting intraday updates of the Offtake and Injection Nominations are at this point not sufficient to justify the high additional workload it requires from BRPs.** A similar conclusion holds for the ID BRP_{FSP} Nominations.
5. **Elia does currently not see a –clear benefit from requesting a submission of the Intraday Internal Commercial Trade Schedules** before real time considering that this would come with a significant additional workload for BRPs while the value this information could potentially provide is highly limited.

whether it should be the BRP that provides this information via the Offtake Nominations, or whether it should rather be the SA that submits schedules.

³⁹ Note that in case the day-ahead balance obligation would be restored following an observed negative impact resulting from the relaxation of the day-ahead balance obligation, individual Nominations per Access Point/distribution system (as today) would remain necessary to be able to perform the contractual check in the most accurate way.

5. Impact of splitting the roles of BRP and SA

As described in detail in Section 2 and illustrated in Figure 1, the BRP currently takes up the role of the SA and there is an overlap in the responsibilities for submitting MW Schedules between both roles. In addition, the calculation of the day-ahead imbalance of a BRP is based on both the MW Schedules and the other types of Nominations. However, a split between the roles of BRP and SA is foreseen, such that different parties could take up these two distinct roles.

In this context, Elia considers that a clean split between both roles would require following changes to the nomination process for BRPs:

1. The overlap in terms of the responsibility for the submission of the MW Schedules is to be removed by assigning this responsibility exclusively to the role of SA (in line with the SOGL)⁴⁰.
2. The Physical Nominations provided by the BRP is to be adapted to ensure that the day-ahead imbalance of a BRP is calculated solely based on Nominations provided by this BRP (and hence not based on the MW Schedules submitted by the SA). This can be realized by adapting the Offtake and Injection Nominations such that they cover all offtakes/all injections in the portfolio of the BRP. This in contrast to the current situation where the Offtake and Injection Nominations only include the injections or offtakes not covered by units providing MW Schedules. The advantages of incorporating all offtakes and injections in the Offtake and Injection Nominations submitted by the BRP are that:
 - the calculation of the day-ahead imbalance of a BRP would be independent from the information submitted by the SA, and that
 - less coordination would be required between the BRP and SA (and GU) in order for the BRP to submit correct Offtake/Injection Nominations. This because in case the Offtake/Injection Nominations only include the injections/offtakes not covered by assets providing MW Schedules, the BRP would need to be informed by the GU/SA regarding for which assets MW Schedules are submitted. This could be particularly relevant from the moment units between 1 and 25 MW can choose between providing MW Schedules or ON/OFF schedules. In contrast, in case all offtakes/injections would be incorporated in the Offtake/Injection Nominations, the BRP would not necessarily need to know for which assets MW Schedules are submitted.

⁴⁰ In practice, this would mean that the nomination process in the T&C BRP is adapted to remove the reference to the SA contract

6. Recommended target design for the Nominations submitted by the BRP

This section provides an overview of the proposed target design for the BRP Nominations and the evolutions this target design entail with respect to the current Nomination process. The proposed target design is based on the conclusions of Sections 3, 4 and 5. Note that this section restricts itself to the proposed design. The steps that need to be taken for the implementation of the proposed design and a corresponding planning is discussed in Section 7.

6.1 Proposed target design for the BRP Nominations

Elia proposes to evolve over time towards a **target design** for the BRP Nominations that involves the following changes compared to the current nomination process:

- the **Scheduling Agent becomes the sole responsible for the submission of MW Schedules** (in line with the SOGL)⁴¹;
- the **responsibility for providing information on the expected offtake of demand facilities is transferred from the role of the BRP to the role of the SA**⁴², in accordance with the European regulatory framework⁴³;
- the **Offtake and Injection Nominations submitted by BRPs are simplified** by requesting BRPs to submit a single day-ahead Total Offtake and a single day-ahead Total Injection Nomination (instead of individual Nominations per Access Point / distribution system)⁴⁴; and
- no intraday Offtake, Injection and BRP_{FSP} Nominations need to be provided by the BRP (this involves a change only for the BRP_{FSP} Nominations).

⁴¹ In practice, this would mean that the nomination process in the T&C BRP is adapted to remove the reference to the SA contract.

⁴² i.e., the information is to be provided by the SA and called MW Schedules instead of by the BRP in the form of Offtake Nominations. Note that the design and requirements for MW Schedules for demand facilities will be further discussed as part of the iCAROS project and corresponding taskforce.

⁴³ Art. 52 of the SOGL specifies that TSO-connected demand facilities are by default obliged to deliver schedules of the active power in the day-ahead and intraday timeframe, unless an exemption is provided by the TSO. Article 110(3) of the SOGL further specifies that each owner of a facility subject to scheduling requirements shall appoint or act as Scheduling Agent. In the Belgian context, an exemption is currently provided for demand facilities (cfr. Article 246§2 of the Federal Grid Code). However, considering the new findings of the study on the improvement of the quality of input data for congestion management and the expected further electrification of industrial loads, Elia proposes to remove the exemption for demand facilities in the future and accordingly transfer the obligation to provide forecasts of the offtake of demand facilities from the role of the BRP to the role of the SA.

⁴⁴ Recall that in case the day-ahead balance obligation would be restored following an observed negative impact resulting from the relaxation of the day-ahead balance obligation, individual Nominations per Access Point/distribution system (as today) would remain necessary to be able to perform the contractual check in the most accurate way.

A more detailed overview of the proposed evolutions for each type of Nomination are schematically represented in Figure 3 below.

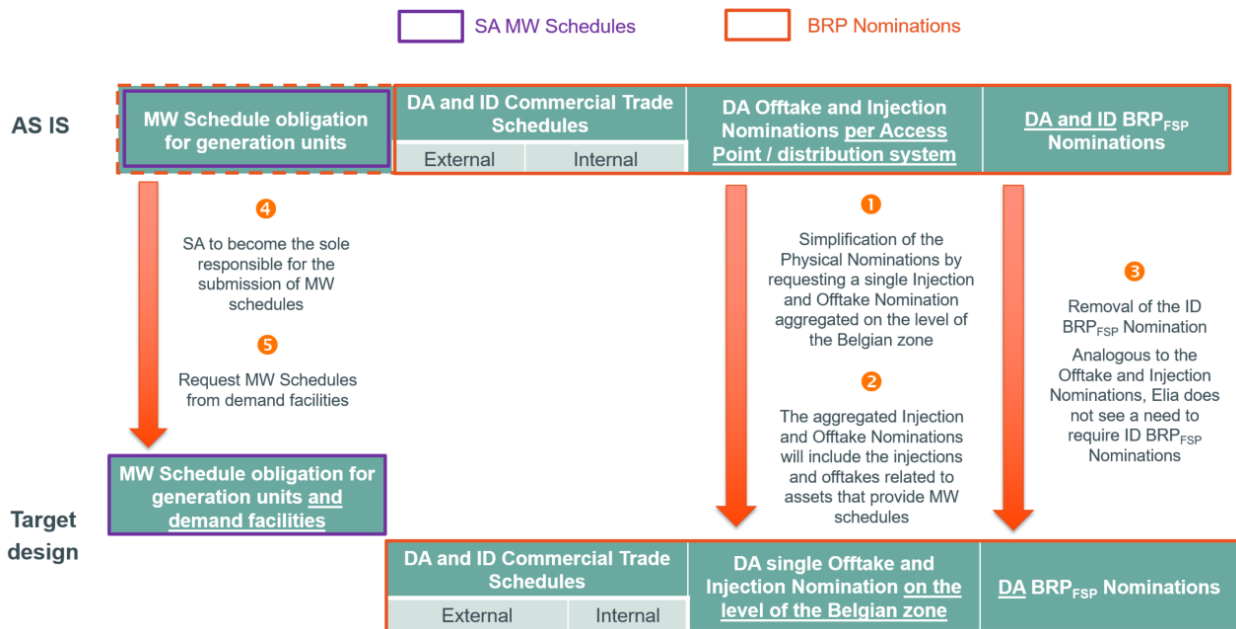


Figure 3: Schematic overview of the recommended evolutions for all type of Nominations

6.2 Illustration of the proposed target design

Assume a given BRP has three Access Points to the Elia Grid in his portfolio

- Behind AP 1 is generation unit 1
- Behind AP 2 is demand facility 1 and generation unit 2
- Behind AP 3 is demand facility 2

In addition, the BRP has loads located in distribution systems 1 to 3.

For a given quarter hour, the expected offtake/injection of the generation units and loads is presented in Figure 4, leading to a net offtake of 300 MW. To balance his portfolio, the BRP accordingly buys 300 MW on the day-ahead market for the concerning quarter hour.

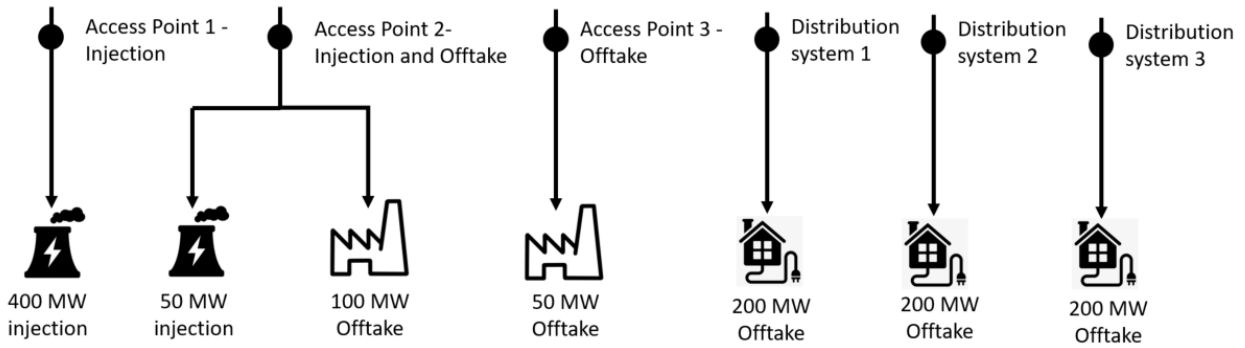


Figure 4: Schematic representation of the portfolio of the BRP

Figure 5 shows the resulting Nominations in the current situation and for the proposed target design (only shown for the concerning quarter hour). Note that for this illustration, we take the assumption that demand facilities 1 and 2 would in the future be required to provide MW Schedules⁴² and that the same SA provides the schedules for all as-sets.

AS IS		Target design	
	BRP (=SA)		BRP
MW schedule generation unit 1	400 MW	Total Injection	450 MW
MW Schedule generation unit 2	50 MW	Total Offtake	-750 MW
Offtake Nomination Access Point 2	-100 MW	Hub Nomination	+300 MW
Offtake Nomination Access Point 3	-50 MW	Day-ahead imbalance	0 MW
Offtake Nomination Distribution system 1	-200 MW		
Offtake Nomination Distribution system 2	-200 MW		
Offtake Nomination Distribution system 3	-200 MW		
Hub Nomination	+300 MW		
Day-ahead imbalance	0 MW		
			SA
		MW schedule generation unit 1	400 MW
		MW Schedule generation unit 2	50 MW
		MW schedule demand facility 1	-100 MW
		MW Schedule demand facility 2	-50 MW

Figure 5: Nominations in the current design and the proposed target design

7. Implementation plan

The **implementation of the** in Section 6 **proposed evolutions for the BRP Nominations necessitates two conditions to be met:**

1. A **positive final evaluation of the impact of the relaxation of the day-ahead balance obligation**. As indicated in Section 4, in case the day-ahead balance obligation would be restored following an observed negative impact resulting from the relaxation of the day-ahead balance obligation, individual Nominations per Access Point/distribution system would remain necessary to be able to perform the contractual check on the day-ahead balance obligation in the most accurate way.
2. **An extension of the obligation for demand facilities to provide MW Schedules via the SA**. This is needed to ensure the availability of information regarding the planned offtake of demand facilities as required for further increasing the efficiency of congestion management processes.

Regarding the evaluation of the impact of the relaxation of the day-ahead balance obligation, the final evaluation of the impact of the day-ahead balance obligation is planned for Q3 2023 (earliest timing assuming there are no delays in the different phases of the progressive relaxation of the day-ahead balance obligation).

The **extension of the schedule obligation to demand facilities** is more complex and requires taking a number of steps. First of all, the extension of the schedule obligation to demand facilities requires **amendments to the Federal Grid Code and the regional grid codes**. Specifically, Article 246§2 of the Federal Grid Code⁴⁵ needs to be adapted as this article contains the derogation to provide MW Schedules currently granted to demand facilities. Secondly, the design and modalities for the schedules provided by demand facilities need to be elaborated. This will be done as part of phase 2 of the iCAROS project and discussed with stakeholders in the corresponding taskforce.⁴⁶ Once the design is established, the **T&C SA needs to be amended** to describe the conditions for the provision of MW Schedules by demand facilities. Finally, **IT developments might be required, and this both at Elia side and at the side of the SA**.

Regarding iCAROS phase 2, Elia is currently working on a more detailed planning that describes the different evolutions foreseen and the corresponding planning (possibly consisting of consecutive releases). This planning will also consider the evolution of the extension of the schedule obligation to demand facilities. The planning of the different evolutions foreseen in iCAROS phase 2 will be publically consulted in order to provide more visibility and to allow

⁴⁵ This refers to the Federal Grid Code before the split between Federal Grid Code and the Code of conduct is realized.

⁴⁶ It was already foreseen to propose a solution for scheduling and redispatching for demand facilities in Icaros phase 2 (albeit on a voluntary basis).

a transparent discussion on the priorities. This consultation is foreseen to start in Q4 2022 (simultaneous with the public consultation of the amendments to the T&C SA for iCAROS phase 1). As such, more details on the planning of the extension of the schedule obligation for demand facilities will be provided during the public consultation. In the planning of the extension of the schedule obligation to demand facilities, Elia will consider that (i) Elia currently has the information required to increase the efficiency of the congestion management processes available via the Offtake Nominations provided by the BRP and that (ii) the proposed simplification of the Nomination process for BRPs are a positive element but is not expected to drastically change the market.

In addition to the two boundary conditions that need to be met before the target design of the BRP Nominations can be implemented, the **implementation of the target design of the BRP Nominations itself also requires taking a number of steps**. First, an **amendment might be required to Article 210 of the Federal Grid Code**⁴⁷. In addition, Section XIII (Daily Balancing Schedule) of the **T&C BRP needs to be amended** in order to (i) remove the overlaps with the T&C SA for the submission of the MW Schedules, (ii) describe the provision of Total Injection and Total Offtake Nominations (i.e., aggregated on the level of the Belgian zone), and (iii) remove the ID BRP_{FSP} Nomination⁴⁸. Finally, **IT developments are required at Elia side** in the nomination tools in order to evolve from Offtake and Injection Nominations per Access Point / distribution system to aggregated Offtake and Injection Nominations. In addition, adaptations are needed in the nomination tool and related tools due to the fact that the Offtake and Injection Nominations will now include the offtakes and injections from units providing MW Schedules. As such, the interpretation of the Offtake and Injection Nominations is different and it should be avoided that certain flows are considered twice (e.g., the calculation of the day-ahead imbalance used to be based on both the MW Schedules and the Offtake and Injection Nominations, but should in the future be purely based on the Total Offtake and Total Injection Nominations). Similarly, **IT developments will also be needed at BRP side** to evolve from the current Offtake and Injection Nominations per Access Point / distribution system to the aggregated Total Offtake and Total Injection Nominations.

Possible Implementation of the target design for the BRP Nominations in two steps in order to enable different parties to take up the roles of BRP and SA in the short term

As discussed in Section 5, an adaptation of the nomination process is needed to enable the role of SA to be taken up by a different party than the BRP. However, the target design for the BRP Nominations proposed in Section 6 cannot be immediately implemented due to the dependencies with other projects discussed above (evaluation relaxation

⁴⁷ Art. 210 of the Federal Grid Code specifies that every physical Injection/offtake in the grid requires a prior submission of a Nomination.

⁴⁸ Note that no amendments are needed in the ToE Rules or the FSP Contract DA/ID for the removal of the ID BRP_{FSP} Nominations.

day-ahead balance obligation, extension of the schedule obligation to demand facilities in iCAROS phase 2). Following interactions with the CREG, Elia is investigating the possibilities for enabling different market parties to take up the role of BRP and SA already before the full target design for the BRP Nominations (and iCAROS phase 2) can be implemented. It must be noted that, in addition to the adaptation of the nomination process, other hurdles would need to be taken in order to enable different market parties to take up the role of BRP and SA. These other hurdles fall strictly out of the scope of this study and will be discussed as part of the iCAROS project.⁴⁹ With respect to the nomination process, Elia sees the possibility to implement the proposed target design for the BRP Nominations in two steps:

1. In a **first step**, Elia proposes to perform the **necessary amendments to the nomination process** and the BRP Contract **to enable the GU to take up the role of SA or appoint a third party different from its BRP** to take up this role (for the units covered by an SA Contract conform the iCAROS implementation plan). The possible amendments to the nomination process in this first step are discussed in detail below. However, it is important to note that the Offtake and Injection Nominations remain on the level of the Access Point / distribution system in this step. This first step would also involve removing the intraday BRP_{FSP} Nominations.
2. In a **second step**, the **proposed target design with the aggregated Offtake and Injection Nominations** is fully implemented. As discussed, the proposed target design for the BRP Nominations can only be implemented from the moment the two boundary conditions described in the beginning of this section are met.

For the first step, the minimal required amendments to the T&C BRP are the following:

- all (implicit) references to the MW Schedules need to be removed from the T&C BRP (in order to make clear that the SA is the only responsible for the submission of the MW Schedules);
- it should be clarified whether or not the Offtake and Injection Nominations include the offtakes/injections from the units for which MW Schedules are provided by the SA, and how the day-ahead imbalance of the BRP is calculated.

⁴⁹In particular, a first issue that need to be addressed relates to the responsibility for taking up the role of Scheduling Agent at the moment the BRP would no longer necessarily take up this role. A second issue, that is also relevant for this study, relates to the impact on the perimeter of a BRP in case a redispatch bid submitted by the SA (which could be a different party from the BRP) is activated. The appropriate design for dealing with the possible impact on the perimeter of the BRP will be studied in detail in a 2023 incentive study related to BRP perimeter corrections, but one possibility to mitigate this impact on the BRP perimeter and to already enable an SA different from the BRP in the short term would be to require the BRP and SA to sign a specific agreement to handle potential imbalances created (similar to the Opt-out agreement between BSPs and BRP/Suppliers used today). In the plan for the implementation of the evolutions of the BRP Nominations presented here, Elia takes the assumption that, in case the possibility to assign an SA different from the BRP would be allowed before the implementation of the go-live of iCAROS phase 2, it would involve requesting an agreement between the BRP and the SA.

In this regard, Elia considers that there are two possibilities to enable an SA different from the BRP in the first step, with the difference being whether or not the Offtake and Injection Nominations submitted by the BRP include/englobe also the data currently provided through MW Schedules.⁵⁰ Both options for the first step of the implementation of the proposed evolutions to the BRP Nominations require an amendment of the T&C BRP and could be foreseen at the earliest during the next revision of the T&C BRP.⁵¹

The **first option** is visualized schematically in Figure 6. This option **aims to** enable a SA different than the BRP while limiting as much as possible the changes to the BRP nomination process in order to **avoid significant transitory implementation efforts for the BRP and Elia only valid for a limit period of time** (i.e., to avoid that significant implementation efforts are needed both in step 1 and in step 2 of the implementation of the proposed evolutions for the BRP Nominations).

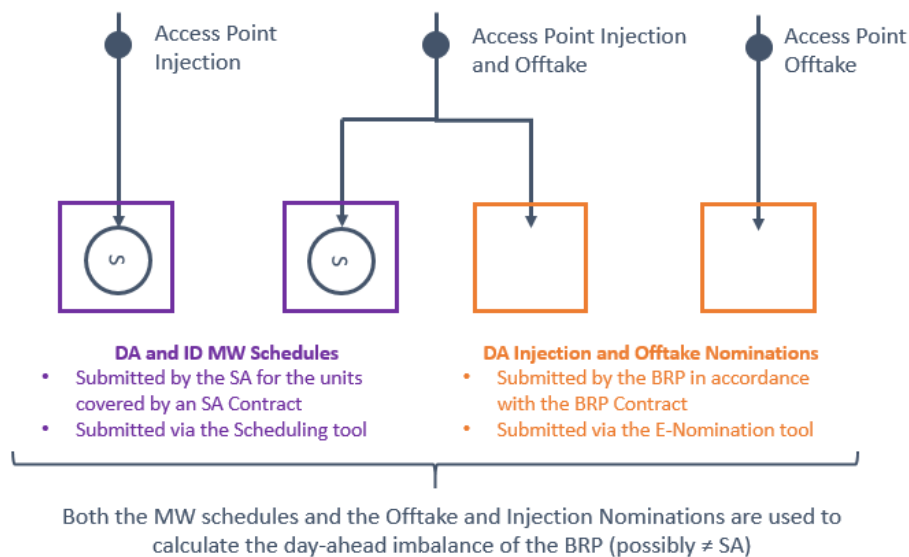


Figure 6: Schematic of the first option for the first step of the adaptation of the Nomination process

⁵⁰ Both options are presented here, but it must be noted that the legal acceptability for both options (notably option 1) has not been verified.

⁵¹ Two additional evolutions are foreseen in the coming year that require an amendment of the T&C BRP:

- 1) The adaptations following the final conclusions after the evaluation at the end of the period of the progressive relaxation of the day-ahead balance obligation:
- 2) Enabling the designation of multiple BRPs per Access Point (following the conclusions from the 2021 study on the designation of multiple BRPs on an Access Point; the study is available on the [Elia website](#)). The go-live of this scheme was originally planned 6 months after the go-live of iCAROS phase 1, but Elia is investigating the possibility to bring forward the go-live of the scheme for designating multiple BRPs per Access Point.

In this first option, the Offtake and Injection Nominations would remain unchanged compared to today (i.e., the BRP submits the Offtake and Injection Nominations per Access Point / distribution system, and these Nominations exclude the information provided in the MW Schedules), but the submission of the MW Schedules becomes the sole responsibility of the SA (i.e., the nomination process in the T&C BRP is adapted to remove the reference to the MW Schedules and the SA contract). The main **drawback** of this solution **is that the calculation of the day-ahead imbalance of a BRP would be partially based on the MW Schedules submitted by the SA**, which could be a different party. Nevertheless, Elia believes a priori that this forms a feasible temporary option considering that i) coordination between the SA and the BRP (via the GU) is needed in any case⁵², and ii) it is assumed here that on the short term the BRP and SA would need to have an agreement to handle the impact of redispatch activations on the perimeter of the BRP (if the role of SA is taken up by a different party than the BRP).⁴⁹ This agreement between the BRP and the SA could then also cover the responsibilities and liabilities between the SA and the BRP related to the nomination/scheduling process⁵³.

The **second option** is visualized schematically in Figure 7. In this second option, the submission of the MW Schedules also becomes the sole responsibility of the SA, but this second option **additionally involves adapting the Offtake and Injection Nominations from gross** (i.e., excluding the quarter hourly information provided in MW Schedules) **to net Nominations** (i.e., including the quarter-hourly information provided in MW Schedules). This second option has as main **advantage** that the calculation of the day-ahead imbalance of the BRP would be completely independent from the MW Schedules submitted by the SA, leading to a more **clean split of these roles** (note that an agreement between BRP and SA would still be needed to handle the impact of redispatch activations on the perimeter of the BRP). However, a first important **disadvantage** of this solution is that it **requires implementation efforts**, and changes in operational process for both at BRP and at Elia side, and the implementations would **only serve for a temporary period before the full target design for the BRP Nominations (with aggregated Total Injection and Total Offtake Nominations) would be implemented** (which would again lead to implementation needs). For the required amendments of the Nomination tools used by Elia, it must be noted that these tools also need to be adapted in the upcoming period for other projects with a high priority level set at European level, such as CORE ID and ROSC (CORE platform for congestion management) and therefore might be influenced by the planning of those projects. In addition, the developments required will impact the planning of other projects (e.g., iCAROS) given that the IT re-

⁵² Different situations can be envisioned. Either the BRP determines the planned generation based on his portfolio's needs and the SA is responsible for the submission of the schedule to Elia (note that this scenario seems the most realistic for big production units active on the DA/ID markets), or (in more exceptional cases), the GU could determine the planned generation and provides this information to the BRP and SA. In both situations, coordination would be needed regardless of the nomination process.

⁵³ In addition, depending on the evaluation of the impact of the day-ahead balance obligation, the day-ahead balance obligation might be fully removed, therefore removing possible risks for BRPs related to potentially incorrect MW Schedules submitted by the SA.

sources needed to develop, test and release the required amendments to the tools are not available for other projects. A **second disadvantage is that it leads to additional workloads for BRPs** as parallel information flows are created for the Access Points that correspond to the Delivery Point for which MW Schedules are provided (e.g., for the Access Points behind which there is a single Technical Unit that provides MW Schedules, both a day-ahead Injection Nomination and the MW Schedule would need to be provided).

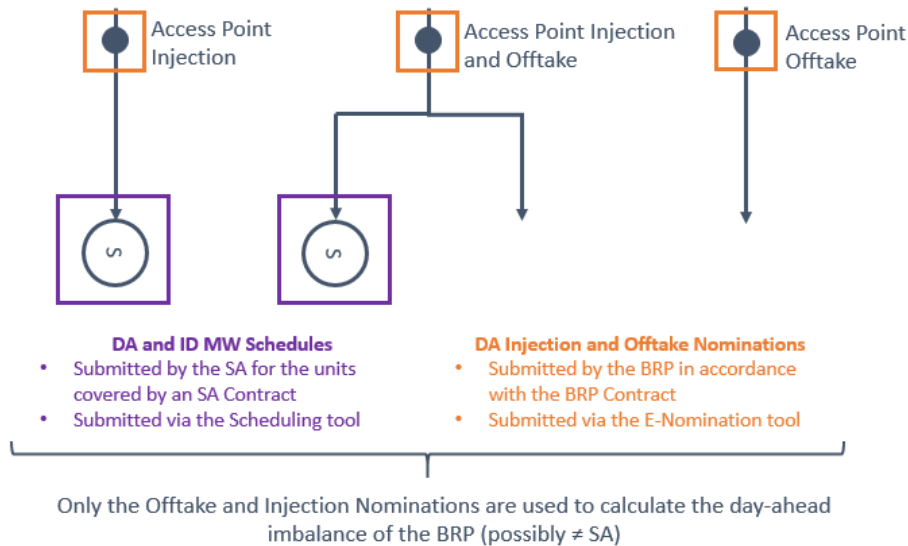
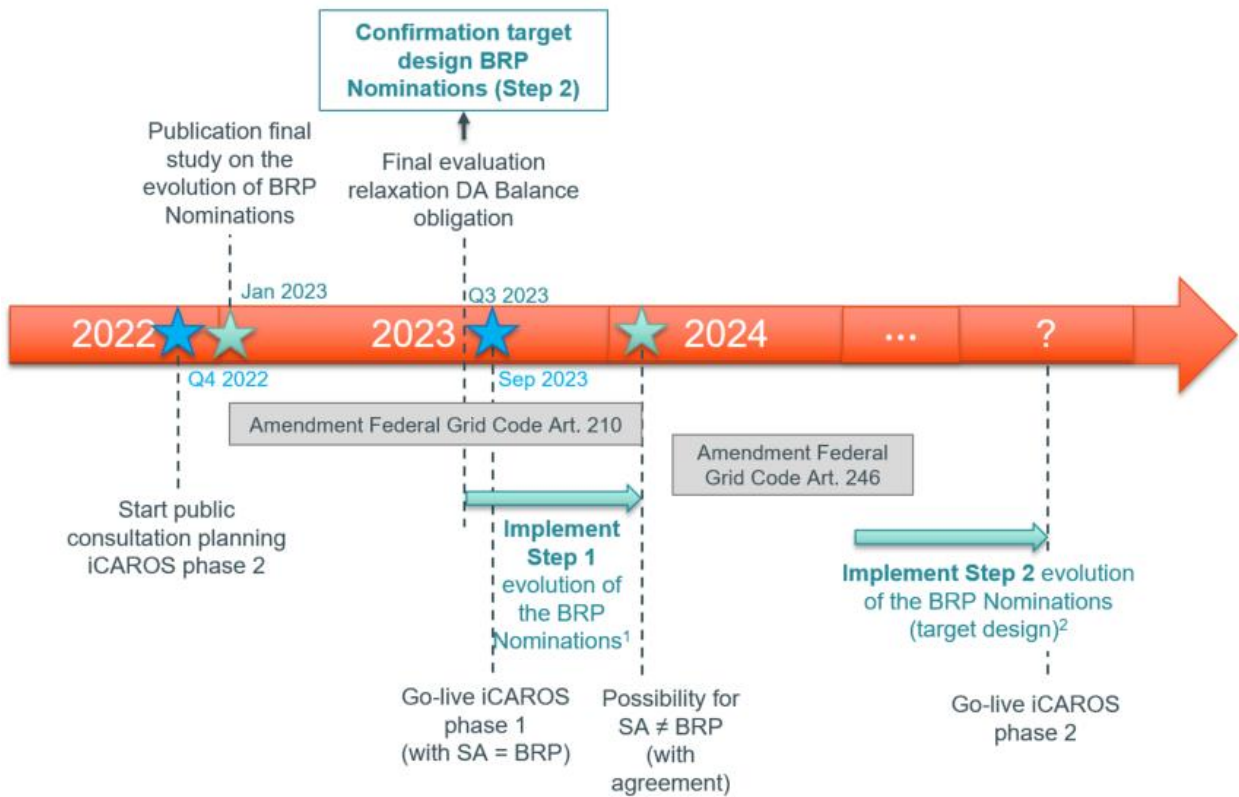


Figure 7: Schematic of the second option for the first step of the adaptation of the Nomination process

Based on the above, **Elia proposes the first option for the first step of the implementation of the proposed evolutions for the BRP Nominations** (in line with Figure 6) in order (i) to avoid consecutive changes to the nomination process and the corresponding transitory implementation efforts for all involved parties, and (ii) to avoid additional operational workload for BRPs related to parallel flows of information (MW Schedule and Injection Nomination for the same unit) and (iii) to avoid unnecessary grid security risks that could result from a poor implementation by any involved party. This while Elia is convinced that for the majority of cases (in particular for the large production units/energy storage devices currently providing MW Schedules), the role of the BRP and SA will be taken up by the same party. In addition, for the cases where the role of the SA would not be taken up by the BRP, both options for the BRP Nominations facilitate the split between BRP and SA in a similar way in the sense that an agreement between the BRP and the SA is needed regardless of the chosen option for the BRP Nominations in order to handle the impact of redispatch activations on the perimeter of the BRP.

This leads to the global planning of the implementation of the proposed target design for the BRP Nominations in two steps as depicted in Figure 8.



¹ The timing is indicative. The first step of the evolution of the BRP Nominations will be foreseen during the next revision of the T&C BRP to benefit from synergies with other amendments of the T&C BRP (day-ahead balance obligation, designation multiple BRPs per Access Point) and depends on the time required for implementation and the planning of other projects requiring adaptations to the nomination tools (CORE ID, ROSC).

² The timing is indicative. The second step of the evolution of the BRP Nominations will be foreseen together with the release of iCAROS phase 2 that involves the extension of the schedule obligation to demand facilities. A public consultation regarding the planning of the different evolutions foreseen in iCAROS phase 2 is foreseen to start in Q4 2022.

Figure 8: Overview of the proposed two-step implementation of the evolution of the BRP Nominations

Elia would like to invite market parties to provide feedback on the two-step implementation plan proposed by Elia, and in particular on:

*a) Elia's proposal for the first of the two presented options for adapting the Nomination process in the first step of the implementation to enable the split between BRP and SA;
and*

b) the proposed timing of the implementation of the full target design for the BRP Nominations (i.e., step 2 of the implementation), which is foreseen together with the release of iC-AROS phase 2 containing the schedule obligation for demand facilities.

8. Summary and conclusions

Balance Responsible Parties submit different types of Nominations to Elia as part of their so-called Daily Balancing Program. However, the context in which the BRP submits these Nominations are changing. A first relevant evolution is the foreseen split between BRP and SA, where it will become possible that the roles of SA and BRP will be taken up by different parties⁵⁴. As a result, the current overlap regarding the responsibility for the submission of MW Schedules needs to be resolved and in the future, the SA will become the sole responsible for the submission of MW Schedules. A second important evolution is that the day-ahead balance obligation is being progressively relaxed, implying that the Nominations (including the MW schedules) provided by a BRP do no longer need to be fully balanced in day-ahead. In this changing context, questions are raised on the required evolutions of the Nominations submitted by the BRP, and Elia's needs for receiving certain type of Nominations. **The objective of this study is to analyze the current and future needs for evolutions of the different types of Nominations and to provide recommendations on their desired evolutions.** A specific focus is given to the Physical Nominations (notably, the Offtake and Injection Nominations) provided by the BRP.

To this end, the **study provides a detailed overview of the different processes currently using or planning to use (some of) the Nominations.** These processes include both operational processes performed by Elia (e.g., and the adequacy check) as well as processes to support a transparent and efficient market functioning (e.g., publication of certain indicators relevant for the market functioning). In addition, the **study contains an assessment of how the Offtake and Injection Nominations should evolve in the context of the foreseen split between the roles of BRP and SA.**

A **first conclusion** is that, even in case of a full removal of the day-ahead balance obligation, the **Offtake and Injection Nominations** (and BRP_{FSP} Nominations) **maintain an important input for different processes** (notably for the adequacy check and the publication of indicators on day-ahead imbalances).

A **second conclusion** is that **for all balancing related processes, the required granularity for the Offtake and Injection Nominations corresponds to the level of the Belgian zone.** This would allow simplifications to the Offtake and Injection Nominations in the sense that it would suffice for Elia to receive a single Total Offtake and Total Injection Nomination, representing the total offtake and total injection in the portfolio of the BRP that is located in the Belgian zone, instead of the current individual Offtake and Injection Nominations per Access Point or distribution system. The **single exception where locational information is required relates to congestion management.** Specifically, for constructing the grid model used for load flow calculations and the identification of possible congestions,

⁵⁴ It must be noted that it will still be possible that the same party takes up the role of the BRP and the SA.

Elia currently uses the MW Schedules for the larger generation units and its own load forecasts. However, in a study taking place in parallel⁵⁵, **Elia has identified opportunities to further improve the grid model** (and hence increase the efficiency of congestion management) **by using the Offtake Nominations provided by the BRPs for demand facilities** (at the level of the Access Point) directly as nodal load forecasts.

A **third conclusion** relates to the timing of the submission of the Offtake, Injection, BRP_{FSP} Nominations and the intraday Internal Commercial Trade Schedules. Currently, the Offtake and Injection Nominations are only submitted in day-ahead whereas the BRP_{FSP} Nominations need to be submitted in day-ahead and/or intraday. Based on the assessment performed, Elia considers that the **potential benefits of requesting intraday updates of the Offtake and Injection Nominations are at this point not sufficient to justify the high additional workload it requires from BRPs**. A similar conclusion holds for the intraday BRP_{FSP} Nominations currently requested. Regarding the intraday Internal Commercial Trade Schedules (intraday Hub Nominations), these are currently allowed to be submitted ex-post (until 14h on D+1), but Elia does currently not see a need clear benefit from requesting the submission of the Intraday Internal Commercial Trade Schedules before real time.

Finally, **for realizing the decoupling between the role of BRP and the role of SA, Elia considers that there are two elements that would (ideally) be adapted in the nomination process**. **First**, the currently **existing overlap** that exists **with respect to the responsibility for the submission of MW Schedules should be removed** by assigning the responsibility solely to the SA (by adapting the nomination process described in the T&C BRP). **Second**, the **Offtake and Injection Nominations would ideally be adapted from gross Offtake/Injection Nominations** (i.e., excluding the offtakes/injections from units providing MW Schedules) **to Net Offtake/Injection Nominations** (i.e., including the offtakes/injections from units providing MW Schedules) such that the Nominations submitted by the BRP contain all offtakes/injections in his portfolio. As such, the day-ahead imbalance of a BRP can be calculated purely based on the Nominations provided by the BRP and would not be calculated (partially) based on the MW Schedules provided by the SA.

Considering the above conclusions regarding the use of the Nominations in different processes and the required evolutions for splitting the roles of BRP and SA, **Elia proposes to evolve over time towards a target design for the BRP Nominations** that involves the following changes compared to the current nomination process:

- the **Scheduling Agent becomes the sole responsible for the submission of MW Schedules**;
- the **responsibility for providing information on the expected offtake of demand facilities is transferred from the role of the BRP to the role of the SA** (i.e., the information is to be provided by the SA in the form of MW Schedules instead of by the BRP in the form of Offtake Nominations);

⁵⁵ The study on the improvement of the quality of input data for congestion management. The study report is available on the [Elia website](#) and has been publically consulted from 10th of June 2022 to 15th of July 2022.

- the **Offtake and Injection Nominations submitted by BRPs are simplified** by requesting BRPs to submit a single day-ahead Total Offtake and Total Injection Nomination (instead of individual Nominations per Access Point / distribution system); and
- no intraday Offtake, Injection and BRP_{FSP} Nominations need to be provided by the BRP (this involves a change only for the BRP_{FSP} Nominations).

Elia proposes to implement the proposed target design for the BRP Nominations in two steps. In a **first step**, that can be performed during the next revision of the T&C BRP, Elia proposes to perform the **necessary amendments to the Nomination process** and the BRP Contract **to enable the GU to take up the role of SA or appoint a third party different from its BRP** to take up this role. In this step, the SA would become the sole responsible for the submission of the MW Schedules, and two interim options for adapting the Nomination process have been presented, where in both options the Offtake and Injection Nominations would remain on the level of the Access Point / distribution system. Elia proposes the interim option in which the Offtake and Injection Nominations would remain unchanged compared to today (i.e., the BRP submits the Offtake and Injection Nominations per Access Point / distribution system, and these Nominations exclude the information provided in the MW Schedules), but the submission of the MW Schedules would become the sole responsibility of the SA. This option is proposed mainly to avoid consecutive changes to the nomination process and the corresponding transitory implementation efforts for all involved parties as well as to avoid additional operational workload for BRPs related to parallel flows of information (i.e., to avoid that a MW Schedule and an Injection Nomination need to be submitted for the same unit).

In a **second step**, the responsibility to provide information on the expected offtake of demand facilities is transferred from the role of the BRP to the role of the SA and the **BRP would provide the aggregated Total Offtake and Total Injection Nominations**. The second step can only be implemented from the moment the final evaluation of the impact of the relaxation of the day-ahead balance obligation has been performed. In addition, the possible timing of implementation is strongly linked to the planning of phase 2 of the iCAROS project which will be publicly consulted starting in Q4 2022 (simultaneous with the public consultation of the amendments to the T&C SA for iCAROS phase 1).