



The intraday hub: energy exchanges between ARPs to deal with unforeseen circumstances

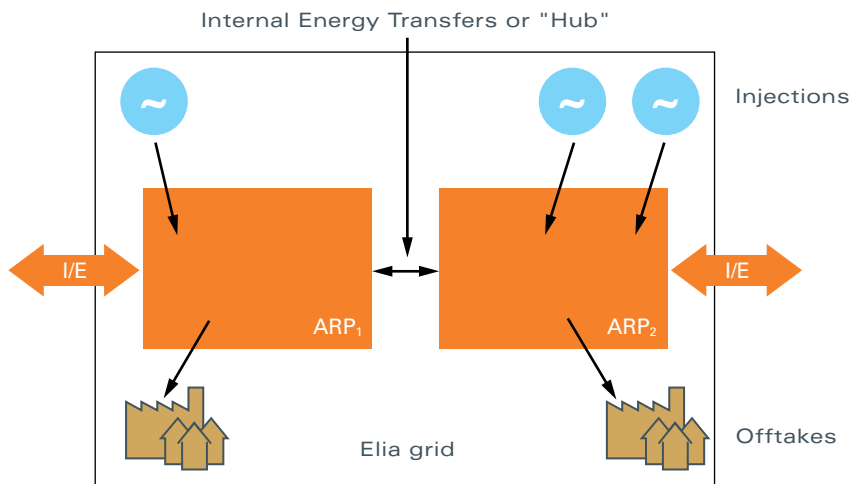
ARPs can deal with unforeseen circumstances by exchanging energy in real time with other ARPs in the Elia control area. These exchanges must be submitted to Elia via intraday HUB nomination which can be sent till day D+1 at the latest.

I. The intraday hub: principles

After day-ahead activities have closed (see sheet: "The Day-Ahead Hub"), an ARP may be faced with unforeseen circumstances or new opportunities, such as a production unit breaking down, a change in the renewables forecast (affecting the level of wind or solar power production), a production unit that was being overhauled returning to service sooner than expected, disruption to a grid user's consumption (breakdown) and so on.

Confronted with modifications of this type, the ARP has a number of ways of managing its balance in real time:

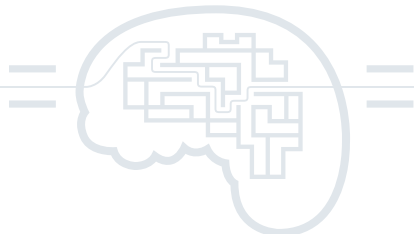
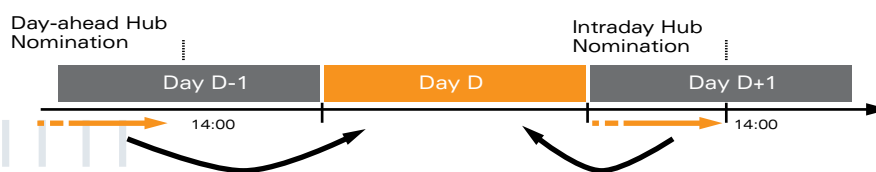
- modifying the production units for which it is responsible (see sheet: "The CIPU contract");
- modifying the offtake of the grid users for which it is responsible;
- exchanging energy with other ARPs or with the local power exchange on an intraday basis;
- making additional imports or exports across the border (see sheets: "intraday allocations at the French-Belgium border" and "Intraday allocations at the Dutch-Belgium border").



One of the possibilities the ARP has to adjust his real time balance is to make intraday energy transfers between two ARPs in the Elia control area.

Such transfers take place on the Elia intraday hub, an electronic platform, free of charge, designed for exchanges between ARPs. The exchanges are carried out on a quarter-hourly basis, with an accuracy of 0.1 MW.

The characteristics of the quarter-hourly exchanges made on the intraday hub is that they can start after the confirmation of the day-ahead hub nominations (3.30 pm) and may even take place in real time;



I.1. Day-ahead and intraday: separate transactions

Energy exchanges on the intraday hub and energy exchanges on the day-ahead hub are two separate transactions. In fact, the intraday transaction does not modify the nominations submitted in Day-ahead but is added to the ARP's portfolio. In other words, the intraday hub operation is not a new version of the day-ahead transaction.

The intraday hub nomination is sometimes known as ex-post nominations because the nomination to Elia can be sent after the real energy transfer.

I.2. Nominations submitted subject to conditions

To be able to transfer energy between two ARPs via the intraday hub, both ARPs have to submit a nomination to Elia via the E Nominations application. The intraday hub nomination that is submitted to Elia specifies only the volumes of the energy exchange, leaving the ARPs to arrange amongst themselves how the transfer will be carried out (type of operation, financial details, etc.).

The nominations have to meet a number of conditions:

- they must be submitted by no later than 2 p.m. on day D+1 (i.e. the day after the electricity has been delivered), after this deadline no further modifications can be made to a validated and consistent nomination;
- they must give the name of the two ARPs concerned as well as the exchange program, on a quarter-hourly basis;
- the two ARPs taking part in the transaction must submit consistent nominations.

The screenshot shows the 'e-Nominations' web application interface. At the top, there is a navigation bar with the Elia logo, the title 'e-Nominations', the date 'Today: 21/12/2011', and links for 'Home', 'Extranet', 'Contact us', and 'Help'. Below the navigation bar, there are several tabs: 'Global Position', 'Day-Ahead International', 'Day-ahead Internal', 'Offtake', 'Injection', 'Intra-Day International', and 'Intra-Day Internal'. The 'Intra-Day Internal' tab is selected. The main content area is titled 'New Intra-day Internal Nomination for ARP'. It includes a form with the following fields: 'Execution Date' (set to 22/12/2011), 'Buy From' (dropdown), 'Sell To' (dropdown), and 'Version' (set to 1). There are also 'Set date' and 'Clear' buttons. On the right side, there is a 'Last refresh: 15:46:57' and an 'Actions' menu with options for 'Refresh' and 'List of nominations'. Below the form, there is a table with columns for time intervals (0-1h to 23-24h) and rows for quarter-hourly periods (00-15min, 15-30min, 30-45min, 45-60min). The 'Total MWh' is displayed as 0.0. At the bottom, there are 'Submit', 'Submit & Create New', and 'Cancel' buttons.

I.3. Inconsistencies under control

The values submitted by the two ARPs taking part in a transaction must be the same. However, it may be that, during the process, only one of them submits its nomination or there is a discrepancy between their respective nominations. This is known as an "inconsistency".

The E-Nominations platform is based on the principle of double nomination (see sheet: "Nominations: principles and methods"). This enables the ARPs to detect these inconsistencies in real time. The nomination status enables the ARP to find out how each of its transactions is progressing. This makes it easy to identify transactions where a correction needs to be submitted or where the ARP that is counterparty to the transaction needs to be contacted.

Furthermore, whilst no further modifications can be made to a consistent nomination after 2 p.m. on day D+1, an ARP may correct any accidental inconsistencies in a nomination up to 2.30 p.m. on day D+1. After 2.30 p.m. on day D+1, any inconsistency that has not been corrected can lead either to the reject of the nomination or to an inconsistency invoice.

II. Benefits of the intraday hub

The intraday hub system provides its users with multiple benefits:

- the intraday hub enables the market players to make energy transfers in real time, while having flexibility to send the nomination to Elia after the real transfer;
- this facility is user-friendly and access is provided free of charge;
- Elia allows the ARPs to immediately identify and correct any intraday nomination errors on the E-nominations platform;
- the intraday hub, amongst other things, enables the ARP to find a solution in the event of unforeseen circumstances, or to take advantage of new opportunities: a production unit or an industrial process breaking down, an unexpected fluctuation in consumption, a change in the renewables forecast, and so on;
- It gives more ways of controlling the real-time balance in an ARP's portfolio with real offtakes and/or injections.

III. Legal and contractual basis

Any ARP (i.e. any party that has concluded an ARP contract with Elia) can in the first instance exchange energy with any other ARP on the intraday hub without the need for an additional contract.

However, as the objective of the intraday hub is to allow unscheduled corrections to be made to a day-ahead position, not respecting the day-ahead obligations may lead to a ban on using the intraday hub mechanism for a period of 30 days.

This applies if:

- an ARP repeatedly submits on a day-ahead basis nominations that do not respect the quarter-hourly balance obligation. "Repeatedly" means not balancing day-ahead nominations on three consecutive days or on five days in a single month.
- Elia finds that there is a major systematic discrepancy between the real offtakes and the respective nominations, and that this situation persists despite Elia notifying the ARP concerned.

The intraday hub in 5 key points

- Elia provides the ARPs with a platform allowing them to transfer energy in real time and with submission deadline for these transactions at the latest on day D+1.
- To carry out such energy transfers, the two ARPs taking part in the transaction have to submit nominations. The values in the two nominations must be the same. Nominations are defined on a quarter-hourly basis with an accuracy of 0.1 MW.
- The double-nomination system enables ARPs, via the E Nominations service, to identify and correct any inconsistencies between the two nominations submitted for a single transaction. If the inconsistency is not corrected, either Elia cancels the nomination or sends an inconsistency invoice.
- The intraday hub allows ARPs to deal with unforeseen circumstances or take advantage of new opportunities that arise on the day of transmission.
- If an ARP does not respect its day-ahead obligations, an ARP can be prevented from accessing the intraday hub for a month.