



The closed distribution system connected to the Elia grid: specific operational processes associated with access

The rules governing access to the Elia grid change whenever a grid user connected to the Elia grid becomes the manager of a closed distribution system (CDS). According to the principle of third-party access, the manager of the CDS must enable users within his network to choose their own supplier and access responsible party (ARP). The access contract sets out the operational procedures related to access that the CDS manager must apply.

I. CDS actors

I. 1. What exactly is a closed distribution system?

A closed distribution system (or CDS)¹ is a network that distributes electricity within a geographically confined industrial, commercial or shared services site, for which:

- for specific technical or safety reasons, the operations or the production process of the users of that system are integrated; or
- that system distributes electricity primarily to the owner or operator of the network or their related undertakings.

The site of a grid user connected to the Elia grid may become a CDS as soon as the industrial processes taking place on the site are interdependent industrial processes organised with several legal entities or if the site hosts other economic activities associated with its own activities.

I.2. The CDS manager

The manager of the CDS is a physical or legal person officially appointed in that capacity by the competent² authority. This appointment does not prevent the Elia grid user from keeping its Elia grid user status.

These two statuses are separate in terms of both the operational tasks and the responsibilities involved.

- As an Elia grid user, the person in question is subject to a connection contract to the Elia grid to he is connected³ as well as an access contract with Elia⁴.

¹ Every closed distribution system directly connected to the Elia grid is functioning under the mode described in this product sheet, whatever name it has. At federal level, the Electricity Act speaks about 'industrial closed distribution systems', in Flanders, the electricity decree describes the closed distribution networks ('gesloten distributie netten') and in Wallonia, the electricity decree is organizing the professional closed distribution systems ('réseaux fermés professionnels').

² The competent authority is appointed via the CDS administrative recognition process. The process is regionalized and is fixed for each region and at federal level. The authority is generally the minister for energy.

³ This collaboration regarding managing access for CDS users only concerns CDSs directly connected to the Elia grid.

⁴ The access contract can designate another access holder than the Elia grid user, as long as no CDS user has chosen its own electricity supplier.



- Once appointed CDS manager, the person in question must also conclude a specific annex to the access contract with Elia. Annex 14 of the access contract sets out the practical details of the collaboration between Elia and the CDS manager on managing access for CDS users. As CDS manager, the person in question performs operational tasks to manage its grid and give access to the electricity market to its users.

I.3. CDS users

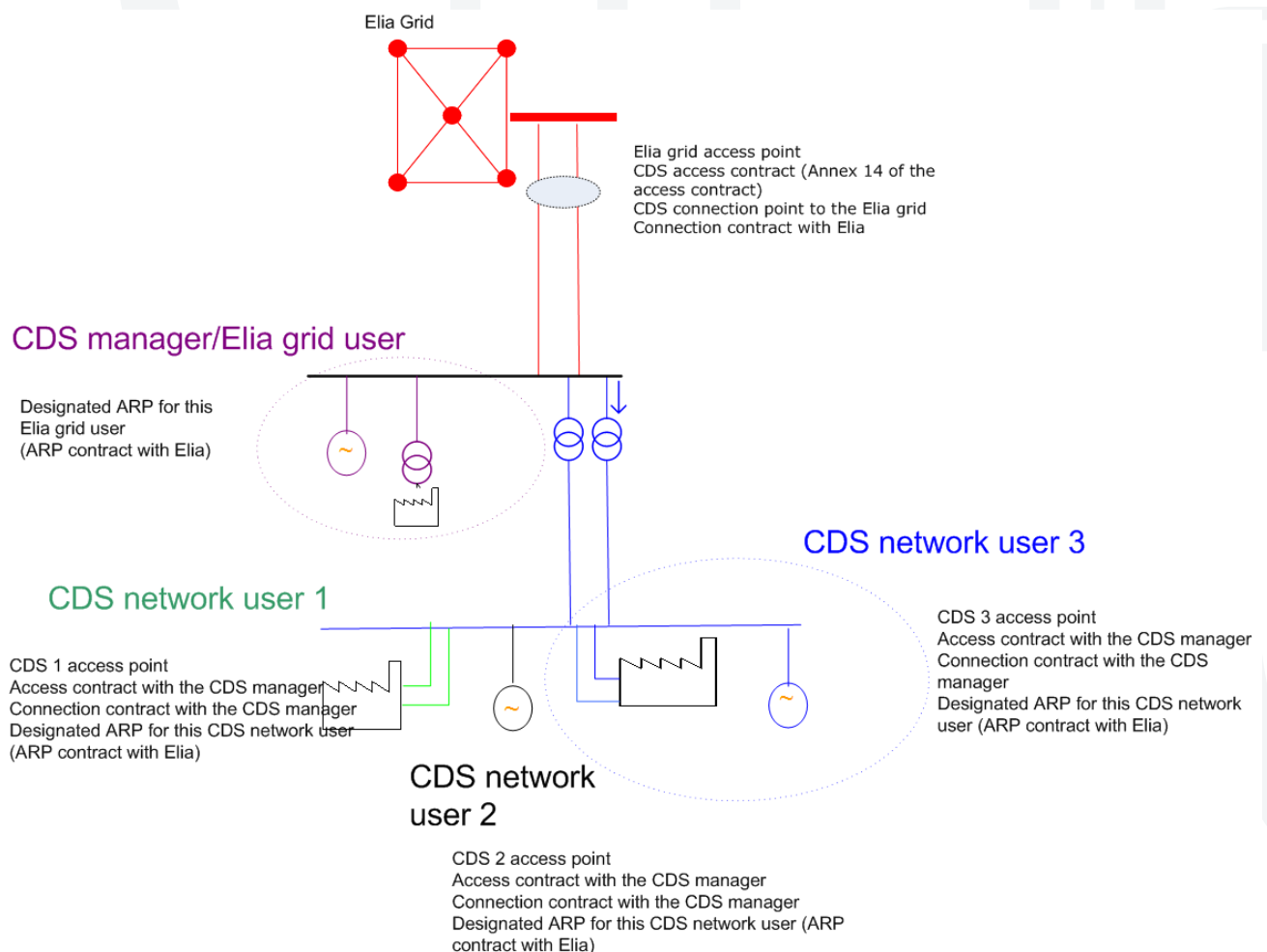
CDS users are end users or generators located within a CDS; they are either served by this network or supply it. They conclude contracts with the CDS manager to set out their connection and access to the CDS system. As such, they do not have any contractual relationship with Elia, except if they offer services to the transmission system (e.g. CIPU⁵, interruptibility services...).

Every CDS user has an access point to the CDS network (CDS access point). This may be a single physical injection or offtake point with a set voltage or a set of several loads and/or generation lines belonging to a single CDS user.

CDS users can choose a supplier and directly conclude an energy supply contract with a supplier of their choice. Each CDS user who has chosen his own supplier is listed in the perimeter of the access responsible party (ARP) designated by that CDS user (thus rendering this ARP 'active' within the CDS).

II. Contractual relations with Elia

Relations between Elia and the CDS manager are governed by the existing access and connection contracts. Relations between Elia and the ARPs active within the CDS are governed according to the existing ARP contracts.



⁵ See product sheet 'The CIPU contract: a set framework for taking part in the high-voltage grid management'.

II.1. New status of the access point to the Elia grid

Elia is notified of the change in status of the access point to the Elia grid when the CDS manager and its network are officially recognised by the competent authority.

The access contract that sets out access to the Elia grid from this point cannot or can no longer concurrently govern other users' access to the Elia grid. In contrast, this access contract may set out access for several CDSs located in Belgium if they all depend on the same Elia grid user.

II.2. Who is the access holder for the access point to the Elia grid?

As soon as a supplier different from the original CDS supplier becomes active within the CDS after being chosen by a CDS user, the CDS manager must become the access holder. In fact, no supplier active within the CDS can occupy a privileged position regarding the management of the CDS and cannot have access to CDS users' data. This would be the case if it could be or continue to be the access holder for the access point to the Elia grid.

III. Operational process related to access: the tasks of the CDS manager

The CDS manager is considered as a distribution system operator for tasks related to the access for users located within the CDS. The CDS manager's tasks include metering, management of his access register, energy allocation, invoicing, and sending data to suppliers and ARPs.

At the same time, the CDS manager autonomously manages his industrial electricity network. His roles and responsibilities with respect to system operations and the tariffs to charge CDS users are specified by the competent authorities.

The Elia access contract only describes the collaboration between Elia and the CDS manager for organising CDS user access.

III.1. One operational process, three actors

The tasks involved in ensuring that every CDS user has access to the electricity market are divided between the CDS manager, Elia and the involved ARPs.

| | CDS manager | Elia | ARP |
|----------------------------|--|---|---|
| Metering | Manage meters within the CDS | Specific case: manage Elia's meters, if some are situated within the CDS | |
| Access register | Maintain the access register | | |
| ARPs active within the CDS | Send Elia the list of ARPs active within the CDS | Update the perimeter of ARPs active within the CDS | |
| Allocation | Divide the energy taken off/generated between the corresponding ARPs Send allocation data | | |
| Allocation control | | Check that the allocated volumes correspond with energy offtakes/injections on the Elia grid | |
| Invoicing | Send invoices to CDS users | Invoice imbalances regarding ARPs active within the CDS Invoice access to the Elia grid (to the CDS manager) | |
| Data exchange | Send metering data to the market players involved Every month, send the results to the market players involved (suppliers and ARPs) | Pass on metering data gathered by Elia to CDS manager and market players involved | |
| Nominations | | | Responsibility of ARPs active in the CDS, depending on the perimeter of their activity in the CDS |

III.2. ARPs active within the CDS

When a CDS user chooses a supplier and/or ARP or decides to change of supplier and/or ARP, the CDS manager ensures that this ARP has an ARP contract with Elia. The list of ARPs active within the CDS is sent to Elia and updated every time a new ARP becomes active in the CDS.

The ARP nominates the injections and offtakes at every access point within the CDS for which it is responsible⁶. In practice, the ARP makes individual nominations for the position of the CDS users for which Elia needs an **individual nomination** (generation unit with CIPU contract, consumer providing an interruptibility service...) and **global nomination** regarding the balance of its position within the CDS (overall ARP position minus the position of special cases).

III.3. Metering and metering data

The CDS manager alone manages the meters on his network. Except in special cases (see below), Elia does not need these detailed measurements; all it needs is the share-out of the total energy injected and/or taken off at the access points to Elia's grid between all ARPs active in the CDS.

In contrast, the CDS manager has to pass on the metering data for any CDS access points as well as all other data/aggregations necessary for the smooth operation of the market and/or required by the regulators to the relevant actors (i.e. suppliers and ARPs), applying UMI⁷ standards or a format agreed with the users, suppliers, ARPs and/or related regulators.

Elia is entitled to install any meters needed to invoice its tariffs. Any generation unit above 1 MW located within the CDS, when the CDS's total installed capacity exceeds 25 MW, must have individual metering for invoicing of gross energy after compensation, as described in the grid access tariffs. The same applies when Elia concludes offtake interruption service contracts or CIPU contracts with users located within the CDS. Every of these CDS users must have one specific CDS access point. Elia sends these metering results to the CDS manager.

III.4. Loads offering an interruptibility service and generation units subject to the CIPU

Interruptibility contracts are concluded between Elia and the CDS user offering the load interruptibility. The CDS manager may oppose this, for operational reasons that would prevent the provision of such a service, for example his network's configuration. Elia must meter this load. The specific CDS access point must be attributed to a given ARP.

If a generation unit within the CDS is subject to the CIPU contract, the standard rules and operational procedures of the CIPU⁸ apply. The CDS access point associated with this generation unit must be at the level of that unit. The ARP must also be in charge of monitoring this machine.

IV. Allocation by the CDS manager

The CDS manager performs the monthly allocation of all energy taken off and/or injected by his CDS based on the topology of his network, the meters⁹ of users within his network and the duration of the contracts with their suppliers.

⁶ See product sheet 'Nominations: principles and methods – E-Nomination: a tool that makes submitting nominations easier for ARPs'.

⁷ See www.atrias.be

⁸ See product sheet 'The CIPU contract: a set framework for taking part in the high-voltage grid management'.

⁹ The CDS manager is not bound to install meters if another distribution of energy is accepted by the suppliers and/or involved ARPs.

In practice, the CDS manager splits, on a quarter-hourly basis, all energy taken off and/or injected by the CDS, between the entire ARPs active within the CDS, where including grid losses. Every CDS user is included in the perimeter of the ARP designated by this CDS user (ARP 'active' in the CDS). Allocations are sent to Elia according to UMI standards.

IV.1. The allocation process

The first step entails grouping together for each CDS user all the daily quarter-hourly values of his metering data.

The CDS manager then allocates these quantities of energy per quarter of an hour between the ARP(s) responsible for monitoring the energy at that particular CDS access point, based on the information in the CDS access register¹⁰.

The CDS manager must have a fully closed allocation for the total energy taken off by the CDS. He must take account of all the volumes of energy in his CDS:

- energy consumed by CDS users who have chosen a supplier (so-called 'active' users);
- the value of the balance of offtake and/or injected energy of the CDS: this is equivalent to the total of all the energy of the CDS users who have not chosen a supplier ('non-active' users), after deducting the energy offtaken and/or injected by the 'active' users of the CDS, including any losses.

IV.2. Monthly communication of allocation data

Once the energy has been allocated, the CDS manager sends these results on a monthly basis to the market players concerned, i.e. suppliers, ARPs and Elia. He then makes the validated allocation data per ARP available to Elia for the month M-1 by the month M + 15 working days at the latest, in line with UMI standards.

IV.3. Control of allocation and correction when needed

Elia controls the allocation data and checks that volumes allocated on a quarter-hourly basis actually correspond to offtakes/injections on the Elia grid.

In case of discrepancy, the CDS manager identifies the source of the problem as quickly as possible and determines its magnitude. He passes this information on to Elia. The problem will either be corrected in a new allocation process or attributed to the ARP in charge of monitoring non-allocated energy. If there is a new allocation, the CDS manager must make the new allocation data available to Elia and the market players.

In any event, the source of the problem must be corrected as quickly as possible (before the following allocation) so that it has no repercussions on the months for which data has not yet been provided and so that the market is disrupted as little as possible.

IV.4. The ARP on charge of monitoring non-allocated energy

The ARP in charge of monitoring non-allocated energy in the CDS plays a key role when an allocation error is spotted or when it is not known to whom energy within the CDS should be attributed. In practice, his role is extremely limited because, in principle, his perimeter equals 0 MW.

The access holder officially appoints him for a specific period. This appointment applies to the entire site. This specific role may be combined with that of the ARP responsible for losses or any other role done by an ARP within the CDS.

¹⁰ There is also an energy allocation per supplier, which is not sent to Elia.

V. Legal and contractual bases

The regime of collaboration between Elia and the CDS manager is governed by annex 14 of the access contract.

The Electricity Act (article 18bis) sets out the federal system of industrial closed distribution systems. In Flanders, the technical regulation governing regional transmission sets out the regional system for a closed distribution system coupled with Elia. The Walloon electricity decree (article 15ter) has fixed general rules for CDS in Walloon legislation. The Brussels-Capital Region has not organised any rules relating to CDS's.

Managing CDS access in 5 key points

- The CDS manager is the access holder for the access point to the Elia grid as soon as a CDS user has chosen its own electricity supplier.
- The Elia access contract only sets out access management between the CDS access point and the Elia grid, i.e. between Elia and the CDS manager. It does not cover access within the CDS, between the CDS users and the CDS manager.
- The CDS manager organises the access of users within his network. The manager's tasks include metering, management of his access register, energy allocation, and sending data to suppliers and ARPs.
- Once dealt with, the energy allocation is transmitted to Elia in line with UMX standards.
- The ARP active in the CDS nominates injections and offtakes at every access point in the CDS for which it is responsible. It generally nominates the balance of its position within the CDS (ARP global position minus the individual nomination of specific cases).

