ENTSOG

Professional Data warehouse System

Documentation

Glossary and Definitions

Contents

1. ARC

An arc designates a connection between two Gas Systems. An arc is directed, i.e. a capacity provided for an arc connecting Gas System 1 and Gas System 2 corresponds to the amount of gas that can flow from Gas System 1 to Gas System 2.

2. BALANCING ZONE

A Balancing Zone is an "entry-exit system, which may consist of more than one system, as defined in Article 2 (13) of the Gas Directive, to which a specific balancing regime is applicable. Distribution systems may be part of the balancing zone. The entries from storage and LNG into the transmission system as well as the exits from the transmission system into the storage are part of the balancing zone."
Source: ACER Framework Guidelines on Gas Balancing in Transmission System.

A Balancing Zone may have an EIC code. Please note that a Balancing Zone is not the same concept as a Gas System. Gas Systems are created by ENTSOG itself in order to model the European network as accurately as possible for use in its Network Modelling Tool. Balancing Zones are defined by TSOs and regulators. They do not play a specific role in the context of ENTSOG simulations, as they are indirectly modelled through Gas Systems. One Balancing Zone can span over multiple Gas Systems.

Example: The Balancing Zone BeLux consists of the Belgian H-Gas system and the Luxemburg Gas System.

3. COMMISSIONING DATE

The commissioning date of an Increment corresponds to the year during which the Increment will become effective. In the ENTSOG calculation models for the TYNDP, the increment's capacity is thus counted from the first day of the next year (the first full year of operation).

Example: If a Promoter indicates 2020 as a commissioning date for his Increment, ENTSOG will publish 2020 in the project information but, for modelling, will consider that the Increment's capacity is available from 2021 onwards, as the first full year of operation is 2021.

4. CREDENTIALS

The user name and password issued by ENTSOG for a Project Promoter, to access the ENTSOG Data Portal and submit, update or follow their Projects.

5. DATA PORTAL

ENTSOG Data Portal is the name of the online interface created by ENTSOG, to enable Promoters to submit planned Projects, keep the submitted information up-to-date and follow the impacts of the Projects on the ENTSOG network topology and capacities. The Portal is available under the following link. https://data.entsog.eu. To access the Portal, the Promoter has to dispose of credentials issued by ENTSOG.

6. ENERGY IDENTIFICATION SCHEME (EIC)

The energy identification scheme is an initiative of ENTSOE. It is a codification scheme whose purpose is to provide a European-wide register for uniquely identify commercial entities (the parties) and points (measurement points, or areas)

7. EXISTING CAPACITY

The Existing Capacity designates the firm technical capacity for a specific operator, point and flow direction available on the first gas day of the first year of the TYNDP (e.g. at 1st January 2018 in case of TYNDP 2018).

The Existing Capacity is a single figure. For the purposes of the TYNDP it is used as a constant baseline over all the years of the TYNDP period; any change (positive or negative) to the Existing Capacity can only come from an Increment or from a Capacity Modification submitted by a Promoter.

8. FACILITY

8.1. RELATED CONCEPTS

8.1.1. UNDERGROUND STORAGE FACILITY

The Underground Gas Storage Facility (UGS) is a type of gas infrastructure, with the purpose to store gas. The characteristics of a UGS include: type (salt cavern, rock cavern, mine, aquifer, depleted reservoir); working gas volume; injection rate; withdrawal rate, quantity of cushion gas and the feature of multi-cycle capability.

8.1.2. LNG TERMINAL FACILITY

An LNG Terminal Faciltiy (LNG) is a type of gas infrastructure, with the purpose to regasify liquefied natural gas arriving with marine cargo. The LNG Terminal can be onshore or offshore and its most important characteristics include: storage capacity, send out capacity, berth size and reloading capacity.

9. FLOW DIRECTION

A flow direction is a piece of information that qualifies the direction in which gas is flowing relatively to an operator. There are two possible directions:

> Entry: a capacity provided by an operator in the entry direction designates the amount of gas that can enter into the operator's system.

> Exit: a capacity provided by an operator in the exit direction designates the amount of gas that can exit from the operator's system.

10. GAS SYSTEM

A Gas System designates a set of infrastructure items, which can be used to transport, consume, or store gas.

A Gas System has a specific infrastructure type. Following infrastructure types are possible:

Type	Description
Transmission	The Gas System contains one or several transmission networks.
LNG Terminals	The Gas System contains one or several LNG Terminals
Storages	The Gas System contains one or several underground storages
Production	The Gas System contains one or several production facilities
Distribution	The Gas System contains one or several distribution networks
Final Consumers	The Gas System contains one or several final consumers (e.g. power plants, industrial facilities…)

10.1. RELATED CONCEPTS

10.1.1. GAS SYSTEM GEOGRAPHY

A Gas System is always attached to a specific geographical area. This geographical area can be

> An entire country

> Or just a part of a country

10.2. GAS SYSTEM LOCATION

> A specific geographical location at which several pipelines are converging.

> An interconnector.

> An internal bottleneck, i.e. a constraint internal to a transmission system which limits the ability of the transmission system operator to circulate gas between different parts of its transmission system.

10.3. NODE

A Node is synonymous with a Gas System.

11. GEOGRAPHICAL PERIMETER (HOST COUNTRY)

The geographical perimeter designates the list of EU-28 countries as well as Switzerland, Bosnia and Herzegovina, Serbia and FYROM.

12. EU CROSS-BALANCING ZONE IMPACT

In addition to being developed within the Geographical Perimeter, a Project submitted for inclusion in the ENTSOG TYNDP shall directly or indirectly lead to the increase of an Entry Capacity into a Balancing Zone, or be an Enabler Project to such Project.

Consequently, the Project has to be developed in an EU-28 country and have a Cross-Balancing Zone impact or has to be developed in a non-EU country, and directly relate to a Point with an EU country (Exit towards EU).

13. INCREMENT

An Increment is an information delivered by a Promoter which states that

> At a specific Point

> In a specific Flow Direction

> For a specific Operator

> On a given Commissioning Date

> In the context of a specific Variant

the capacity will be increased by a certain amount which represents the Increment value. This amount has to be provided in GWh/d.

14.   INTERCONNECTOR

An Interconnector is a pipeline which is not connected to any consumption sites of real significance, be it distribution systems or final consumer systems. Interconnectors are used mainly for transporting gas between other Gas Systems and Balancing Zones. As such, they usually have their own Balancing Zones and are separated from the remaining national network of the country they are crossing.

Examples include the YAMAL pipeline in Poland, or the OPAL pipeline in Germany.

15.   ITEM IDENTIFIER

An item identifier is a code used by a TSO to identify a specific Operator Point Direction when reporting data to ENTSOG's Transparency Platform. It can be an EIC, but it can also be a TSO-managed code.

16.   LESSER-OF-RULE

The rule applied, to ensure consistent and conservative available firm capacity values on the modelled Points in the network modelling exercise. The rule means, that on a Point with Entry and Exit capacities, the minimum of the two values will be considered as the firm capacity available for use.

Example: Promoter A submits an Exit capacity on Point P in the value of 100. Promoter B submits an Entry capacity on the other side of the Point P, in the value of 200. After the application of the rule, the firm capacity considered for modelling will be 100.

17.   OPERATOR

An Operator is a commercial entity in charge of ensuring the operation of a gas infrastructure. The country where the gas infrastructure is situated is assumed to be the country of the operator. The type of the operator is defined by the type of the gas infrastructure it operates.

An operator can only have one type.

Type	Acronym	Description
Transmission System Operator	TSO	The Operator operates one or several transmission systems.
LNG System Operator	LSO	The Operator operates one or several LNG Terminals.
Storage System Operator	SSO	The Operator operates one or several Underground storages.
Production System Operator	PSO	The Operator operates one or several production facilities.
Distribution System Operator	DSO	The Operator operates one or several distribution systems.

18.   OPERATOR POINT

The combination of a point and an operator, which expresses the fact that the operator does have the means to either physically operate the point by controlling the gas flow going through the point, or to execute commercial transactions at the point.

19. OPERATOR POINT TRANSFER

An operator point transfer expresses the shift of a data reporting obligation by an operator from one point to another point. This shift can be done within the operator's network, i.e. the data publication obligation remains assigned to the operator; this can happen for instance when the operator virtualizes a point and reports commercial transactions at the virtual point instead.

Alternatively, the data publication obligation can be fully outsourced, meaning that it is assigned to another operator. For instance, when an operator point is pipe-in-pipe, there is a twin operator point where the actual physical gas flow measurement is taking place. The operator of this twin point is tasked with reporting the physical gas flow, freeing the operator of the pipe-in-pipe point of this obligation.

20. OPERATOR POINT DIRECTION (OPD)

An operator point direction defines whether an operator point can be used to deliver and/or receive gas, from the point of the view of the operator. In other words, if an operator, at one of these points, is able to accept gas into its system, then an "entry" operator point direction can be defined. If the operator is able to deliver gas to another system from this point, then an "exit" operator point direction can be defined.
A point which has two directions for an operator is called bidirectional for this operator.

21. POINT

A point is a physical or virtual unit at which a transfer of gas between two parties and /or two Gas systems can take place. The transfer of gas can be physical, or virtual. A physical exchange of gas means that gas is flowing from a Gas System to another Gas System, and is measured by a metering device(s). Measurements can determine how much gas has been transferred (physical gas flow), or various parameters related to the gas quality (gross calorific value (GCV), or Wobbe Index).

A virtual exchange of gas means that, although no physical gas transfer is done, an ownership change takes place: one operator is transferring to another operator rights of ownership over a gas quantity.

21.1. RELATED CONCEPTS

21.1.1. CAM-RELEVANT POINT

A CAM-Relevant point is a point, which has been included in the list of CAM-Relevant Points defined by the System Operations department of ENTSOG. This list defines whether the CAM Network Code obligations are applicable at the point.

21.1.2. CROSS-BORDER POINT

A cross-border point is a point that connects at least two Gas Systems belonging to distinct countries.

21.1.3. OPERATIONAL POINT

An operational point is a point that is in operation at the time the observation is made.

21.1.4. PLANNED POINT

A planned point is a point that is not yet in operations at the time the observation is made. No gas can physically transit through the point, and no commercial transactions can be conducted. The commissioning date of the point may be known, or not known.

21.1.5. POINT MAP NUMBER

A Point may be included on ENTSOG's Transmission Capacity Map. In this case, ENTSOG assigns a Map Number to the Point.

21.1.6. IMPORT POINT

An Import Point is a Point at which gas can be delivered by an external gas producer to the EU.

21.1.7. PHYSICAL POINT

A Physical Point is a Point which is a direct representation of a physical infrastructure, i.e. one or several metering stations between Balancing Zones / Gas Systems.

21.1.8. VIRTUAL POINT

A virtual point is an aggregation of several physical points.

21.1.9. VIRTUALIZED POINT

A virtualized Point is a physical point which has been merged into a Virtual Point from a certain date onwards.

In the context of the TYNDP calculation of capacities, virtualized Physical Points will be ignored if their virtualization has taken place before the reference start date of the TYNDP. For example, the TYNDP 2018 calculates all the existing capacities from a reference date of 1/1/2018. As such, any Physical Point which has been virtualized before or on the 1st of January 2018 will not be considered in the TYNDP calculations.

22. PROJECT

A Project designates any initiative, event or development that:

> creates new capacities

> or modifies existing capacities

> or aims at creating the necessary infrastructure for enabling such capacity changes.

At points of the following types:

> Cross-Border Points between Transmission Systems

> Cross-Balancing Zone Points between Transmission Systems

> LNG Entry Points

> Storage Entry-Exit points

Such Projects do have to be submitted to ENTSOG in order for ENTSOG to take into account the induced changes to the existing capacities.

All Projects submitted to ENTSOG are listed in the Annex A of the TYNDP.

A Project is submitted by one Project Promoter.

A Project can fall into two specific categories :

> Project with Associated Investment is a Project which requires financial investment and actual construction works will take place

> Capacity Modification is a "Project-like" data submission within the Data Portal by a Promoter (see below its definition).

22.1. RELATED CONCEPTS

22.1.1. CAPACITY MODIFICATION

Capacity Modification is a "Project-like" data submission within the Data Portal by a Promoter. Capacity Modification is any capacity change (positive or negative) on a modelled Operational Point, whereby no actual physical work or financial investment is necessary to carry out the capacity modification. Consequently, it is not considered as an actual Project but as a Capacity Modification and will be labelled accordingly in ENTSOG publications, including TYNDP annexes. Capacity Modifications can be the result of the following actions:

- Change in future demand assumptions, leading to capacity recalculations
- Dynamic storage behavior
- Shifting of capacity between IPs
- Decrease of capacity due to degradation of the transmission system
- Decrease of capacity due to gas depletion
- Technical Agreements between TSOs
- Etc.

In case the Project Promoter indicates when submitting the data that the submission is a Capacity Modification, the submitted data will not be labelled as a Project but as a Capacity Modification.

22.1.2. ENABLER PROJECT

A Project can be considered as an Enabler Project, when it is necessary for another Project (the Enabled Project) to realize its full capacity potential.

An Enabler Project can take place inside a Balancing Zone, with no direct access to another Balancing Zone or Entry/Exit Point (e.g. compressor station, transmission Project solving internal bottleneck, etc.). An Enabler Project shall be realized without a capacity increment on a Point.

An Enabler Project can enable a single Project or multiple Projects as well to realize its/their full potential(s).

In case the Enabler Project **enables a single Project**, it shall be submitted along the Enabled Project, as a single Project submission, which has a direct impact on an Entry/Exit Point. The single Project Description shall also include the description of the Enabler Project and the joint incremental capacity impact as well.

In case the Enabler Project **enables more than one Project**, the Enabler Project shall be submitted independently, only once. The Enabler Project shall be mentioned in the Project description of all the Enabled Projects.

22.1.3. ENABLED PROJECT

An Enabled Project is a Project, which cannot realize its incremental capacity potential partially or fully within an Entry/Exit system at an Entry/Exit point (IP point; UGS Entry/Exit Point; LNG Entry/Exit Point) without an Enabler Project.

For further information, check Enabler Project.

22.1.4. PROJECT OF COMMON INTEREST (PCI)

Means a Project, which is part of the latest approved Union list of Projects of common interest (commonly referred to as The PCI List) referred to in Article 3 of the Reg. 347/2013.

22.1.5. ADVANCED NON-FID PROJECT

ENTSOG has defined a rule which will govern which infrastructure Projects are considered in the "Advanced Non-FID" infrastructure level.

According to this rule, a project will be considered as Advanced if, and only if:

> The project is commissioned by the 31st of December 2024 at the latest.

   ▪ In case such a project also includes increments commissioned after 2022, such increments will not be included in the Advanced infrastructure level.

> **AND**

   ▪ Permitting phase of the project has started before the 31st of January 2018 close-of-business.

      OR

   ▪ FEED has started or the project has been selected for receiving CEF grants for FEED before the 31st of January 2018 close-of-business. **In case the Project has been selected for receiving such CEF grants for FEED, then the Promoter should enter in the data portal the date at which the CEF grants were decided as the FEED start date.**

22.1.6. PROJECT HOST COUNTRY

A Project's host country is the country where the majority of the development activities (e.g. pipeline construction, compressor station reinforcement, etc.) related to the Project will take place.

22.1.7. PROJECT CAPEX

Capital expenditure, or CAPEX, are funds used by the Project Promoter to acquire or upgrade productive assets such as pipeline, compressor station, valves, equipment, etc. They are used to undertake the submitted Project and are invested in long-term assets (with a financial life longer than one year). For further definition please refer to the Cost-Benefit Analysis Methodology (link).

22.1.8. PROJECT OPEX

The Project Promoter's Operating Expenses, or OPEX, are the Promoter's ongoing expenses for the production of services related to the submitted Project. Examples of operating expenses include wages, maintenance, etc. Operating expenses do not include taxes, debt service, or other expenses not related to the services provided by the submitted Project. For further definition please refer to the Cost-Benefit Analysis Methodology (link).

22.1.9. PROJECT MATURITY

Please see Advanced Non-FID Project section.

22.1.10 PROJECT UNDER CONSIDERATION

According to the concept used in the ENTSOG Practical Implementation Document for developing the TYNDP 2018, a project Under Consideration is a project at an early stage and which has not yet completed the phase of a feasibility study.

22.1.11 PROJECT UNDER DESIGN & PERMITTING, CONSTRUCTION

According to the concept used in the ENTSOG Practical Implementation Document for developing the TYNDP 2018, a project Under Design & Permitting, Construction is a project which has completed the phase of a feasibility study.

23.   PROJECT PROMOTER

A Project promoter is a registered legal entity, which has the capacity to undertake legal obligations and assume financial liability in order to realize the Project it promotes and submits during the course of the ENTSOG data collection procedure.

24.   SIMULATION/MODELLING

The exercise ENTSOG is undertaking to assess the functionality of the European natural gas infrastructure with the ENTSOG Modelling Tool. The term modelled/simulated Project means that, the Promoter has provided sufficient amount of information (category and detail of the information is sufficient) so that the Project can be implemented into the modelled/simulated topology and the modelling/simulation can run.