

ENTSOG Professional Data Warehouse System Documentation Glossary and Definitions

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. EUROPEAN UNION AGENCY FOR THE COOPERATION OF ENERGY REGULATORS (ACER)

ACER is an independent body, created to foster the integration and completion of the European Internal Energy Market for electricity and natural gas.

3. 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 ENTSG 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 ENTSG 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 Luxembourg Gas System.

4. CROSS-BORDER COST ALLOCATION (CBCA)

Cross-Border Cost Allocation deals with distribution of costs among all the countries which are affected positively and/or negatively by a gas infrastructure project having cross-border impact. A CBCA decision is issued by the relevant NRA or ACER following an investment request submitted beforehand by the project promoter.

5. COMMISSIONING DATE

The commissioning date of an Increment corresponds to the year during which the Increment will become effective. For modelling purposes in the TYNDP 2024 System assessment and PS-CBA, the increment's capacity is thus counted from the first full year of operation.

Example: If a Promoter indicates 2026 as a commissioning date for the project capacity increment, ENTSOG will publish 2026 in the project information but, for modelling, will consider that the Increment's capacity is available from 2027 onwards, as the first full year of operation is 2027.

6. CONNECTING EUROPE FACILITY (CEF)

A key EU funding instrument for studies and/or construction related works.

7. CREDENTIALS

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

8. 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.pdws.entsog.eu/DataCollectionPortals>. To access the Portal, the Promoter has to dispose of credentials issued by ENTSOG.

9. ENERGY IDENTIFICATION SCHEME (EIC)

The energy identification scheme is an initiative of ENTSG. 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)

10. 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 2024 in case of TYNDP 2024).

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.

11. FACILITY

11.1. UNDERGROUND STORAGE FACILITY

The Underground Gas Storage Facility (UGS) is a type of gas infrastructure, with the purpose to store gas (e.g. natural gas, hydrogen or any hydrogen blends). 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.

11.2. LNG AND HYDROGEN RECEPTION TERMINAL FACILITY

Terminal Facilities are designed to handle and distribute specific gases within networks. Both LNG and Hydrogen reception terminals share many similarities. The main purpose of an onshore or offshore LNG Terminal Facility (LNG) is to regasify liquefied natural gas arriving with marine cargo, while Hydrogen reception terminals purpose is to import liquified hydrogen or hydrogen embedded in other liquid hydrogen carriers (such as ammonia, methanol or LOHC) and inject hydrogen it into the network.

12. FINAL INVESTMENT DECISION (FID)

The decision taken at the level of an undertaking to definitively earmark funds towards the investment phase of a project, the investment phase meaning the phase during which construction or decommissioning takes place and capital costs are incurred. The investment phase excludes the planning phase, during which project implementation is prepared and which includes, where appropriate, a feasibility assessment, preparatory and technical studies, obtaining licences and authorisations and incurring capital costs.

13. 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.

14. FRONT END ENGINEERING DESIGN (FEED)

A phase of the project which comes after the Feasibility study. During this phase, the engineering documentation of enough quality and depth is produced to adequately define the project requirements for detailed engineering, procurement and construction of the facility and to support an accurate project cost estimate. This project phase is typically also used to support the final investment decision (FID) for the project.

15. GASIFICATION

Gasification describes a development where a country or on isolated area of a country not yet reached by gas get access to gas. It can also means that gas gets accessible for a specific sector and replaces other fuels.

16. 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.
Reception Terminals	The Gas Systems contains one or several reception Terminals.
Storages	The Gas Systems contains one or several underground storages.
Production	The Gas Systems contains one or several production facilities.
Distribution	The Gas Systems contains one or several distribution systems.
Final Consumers	The Gas Systems contains one or several final consumers (e.g. power plants, industrial facilities....).

16.1. RELATED CONCEPTS

16.1.1. 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

16.2. 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.

16.3. NODE

A Node is a synonymous with a Gas System.

17. GEOGRAPHICAL PERIMETER (HOST COUNTRY)

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

18. GUIDELINES FOR PROJECT INCLUSION (GPI) for TYNDP 2024

The GPI provides guidance to the project promoters on the procedural steps, and administrative and technical requirements, that promoters and projects have to meet to be included in the TYNDP 2024 (link: [TYNDP 2024 Guidelines for Project Inclusion \(entsog.eu\)](https://www.entsog.eu/tyndp2024-guidelines-for-project-inclusion)).

19. EU CROSS-BALANCING ZONE IMPACT

In addition to being developed within the Geographical Perimeter, a Project submitted for inclusion in the ENTSG 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).

20. 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.

21. 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.

22. IDEM 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.

23. 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.

24. NATIONAL NETWORK DEVELOPMENT PLAN (NDP)

An NDP identifies a concrete and sustained physical transport requirement at national level.

25. NATIONAL REGULATORY AUTHORITY (NRA)

A national regulatory authority designated in accordance with Article 39(1) of Directive 2009/73/EC or a regulatory authority at national level designated in accordance with Article 57 of Directive (EU) 2019/944.

26. 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 handle several types of facilities, as follows:

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.
Hydrogen facility Operator	H2O	The Operator operates one or several dedicated H2 facilities (Production, Terminal, Injection, Transport, etc.).
Biomethane Facility Operator	BFO	The Operator operates one or several biomethane production facilities.
Transport – Refuelling Operator	TRO	The Operator operates one or several refuelling stations.
Distribution System Operator	DSO	The Operator operates one or several distribution systems.
Other operator	OTO	The operator is responsible for facilities/systems not named above.

27. 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.

28. 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.

29. 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.

30. 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.

30.1. RELATED CONCEPTS

30.1.1. 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.

30.1.2. CROSS-BORDER POINT

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

30.1.3. OPERATIONAL POINT

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

30.1.4. 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.

30.1.5. 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.

30.1.6. IMPORTANT POINT

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

30.1.7. 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.

30.1.8. VIRTUAL POINT

A virtual point is an aggregation of several physical points.

30.1.9. 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 2024 calculates all the existing capacities from a reference date of 1/1/2024. As such, any Physical Point which has been virtualized after or on the 1st of January 2024 will not be considered in the TYNDP calculations.

31. PROJECT

A Project designates any initiative, event or development that either:

- > creates new capacities or
- > modifies existing capacities or
- > aims at creating the necessary infrastructure for enabling such capacity changes or
- > aims to produce, integrate or provide low carbon and renewable gas for end use supply or
- > facilitates the decarbonization of different sectors like energy or transport

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
- > Hydrogen import points
- > Hydrogen reception terminal entry point

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 with the Data Portal by a Promoter (see below its definition).

31.1. RELATED CONCEPTS

31.1.1. 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 ENTSG 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 behaviour
- 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.

31.1.2. 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 a Entry/Exit point.

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.

31.1.3. ENHANCER PROJECT

An Enhancer Project is a Project that would allow the main project to operate at higher rate than when main project operates on its own basis, increasing the benefits stemming from the realisation of the main investment. An enhancer, unlike an enabler, it is not strictly required for the realisation of the main project.

31.1.4. 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**.

31.1.5. PROJECT GROUP (PRJ GROUP)

An aggregation of investments submitted by different promoters. The PRJ groups for the upcoming TYNDP are:

- > Interconnector of two (or more) countries
- > Terminal (and connection to the transmission grid)
- > Storage (and connecting pipe)
- > Hydrogen production (and connecting pipe)
- > Other functional related projects

31.1.6. PROJECT OF COMMON INTEREST (PCI)

A project which is part of the latest approved Union list of Projects of common interest (commonly referred to as The PCI List)

31.1.7. PROJECT OF MUTUAL INTEREST (PMI)

A project promoted by the Union in cooperation with third countries pursuant to letters of support from the governments of the directly affected countries or other non-binding agreements, which falls under one of the energy infrastructure categories set out in the revised TEN-E regulation, which contributes to the Union's 2030 targets for energy and climate and its 2050 climate neutrality objective and which is on the latest approved Union list.

31.1.8. IMPORTANT PROJECT OF COMMON EUROPEAN INTEREST (IPCEI)

A project which is part of the Important Projects of Common European Interest list for hydrogen projects.

31.1.9. ADVANCED NON-FID PROJECT

ENTSOG has defined a rule which will govern which infrastructure Projects are considered in the "Advanced Non-FID" infrastructure level. Advanced maturity status is defined in the section of 5 of TYNDP 2024 GPI.

31.1.10. 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.

31.1.11. 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](#)).

31.1.12. PROJECT FICHE or PS-CBA

A project fiche is a standardised document, meant to display all relevant results of the Project-Specific Assessment or Cost-Benefit Analysis (PS-CBA), especially the benefit and economic performance indicators. This ensures a level playing field and a transparent assessment towards all stakeholders, in a harmonised, synthetic and comparable manner. Project fiches are produced and published for PCI and PMI candidate projects in the framework of the TYNDP.

31.1.13. 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](#)).

31.1.14. COST-BENEFIT ANALYSIS METHODOLOGY (CBA METHODOLOGY)

The CBA methodology is based on a multi-criteria analysis, combining monetised and non-monetised elements to measure the achievement of relevant EU energy and climate policy targets.

It also contains interlinkages with the electricity infrastructure. This methodology reflects the specific provisions from the TEN-E Regulation and aims to ensure their consistent application by all parties involved.

31.1.23. PROJECT UNDER CONSIDERATION

According to the concept used in the ENTSG Practical Implementation Document for developing the TYNDP 2024, a project Under Consideration is a project at an early stage and which has not yet completed the phase of a feasibility study.

31.1.24. PROJECT UNDER DESIGN & PERMITTING, CONSTRUCTION

According to the concept used in the GPI, a project Under Design & Permitting, Construction is a project which has completed the phase of a feasibility study.

32. 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 ENTSG data collection procedure.

33. SIMULATION/MODELLING

The exercise ENTSOG is undertaking to assess the functionality of the European 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.

34. THE REVISED TRANS-EUROPEAN NETWORKS FOR ENERGY (TEN-E)

The TEN-E is a policy that is focused on linking the energy infrastructure of EU countries. The revised TEN-E refers to Regulation (EU) 2022/869 of the European Parliament and of the Council of 30 May 2022 on guidelines for trans-European energy infrastructure.