![ENTSOG logo - european network of transmission system operators for gas]

Annex A Glossary

Spreadsheet 1 - Investment Project Main Info

This section lists all the main information of all the projects submitted to TYNDP 2020.

> <u>PRJ Code</u>: it indicates the common code of the "functional project" (PRJ) whose different submissions are part of;

> <u>PRJ Name</u>: it indicates the common name of the "functional project" (PRJ) whose different submissions are part of;

> <u>PRJ Status</u>: it is the maturity status of the "functional project". This is calculated as the minimum between the maturity status of the different investments composing the PRJ aggregation (e.g. if investment 1 is "FID" and investment 2 is "non-FID Less-Advanced", the PRJ aggregating the two submissions will be "non-FID Less-Advanced");

> <u>Code</u>: TYNDP code of each single TYNDP 2020 submitted investment;

> <u>Project Name</u>: TYNDP 2020 investment name;

> <u>Country</u>: hosting country where the investment will be built. In case of a single subject promoting an investment crossing more countries only the first country concerned is displayed;

> <u>Promoter</u>: the subject (being a private company, a ministry, etc.) promoting the investment;

> <u>Maturity status</u>: reflects the level of advancement of the submitted investments. An investment can be FID, non-FID Advanced or non-FID Less-Advanced[1];

> <u>PCI 3rd List</u>: indicate whether the submission is part of the latest available (3rd) Project of Common Interest (PCI) List (link),

> <u>PCI 3rd List Code</u>: the related PCI code as indicated in the PCI list;

> <u>Intention to Apply to 5th PCI List</u>: it represents only a declaration of intention to apply to the next PCI round and does not automatically translates into the application of the submission to the next PCI round. The PCI selection is in fact a process separated from the TYNDP process and under the responsibility of the TEN-E Regional Groups led by the European Commission. For submission which expressed intention to apply for 5th PCI list, ENTSOG runs the PS-CBA modelling.

> <u>Commissioning Year First and Last</u>: in case of investments bringing more than one capacity increment to a specific point, these fields indicate the commissioning year of the first capacity increment of the investment and that of the last capacity increment to be commissioned.

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[1] More details on the maturity status ("project status") definition are available in the ENTSOG Practical Implementation Document at this link

> Project CAPEX Confidential[2]: indicates the confidentiality status of the CAPEX as expressed by the promotor during the TYNDP 2020 project collection. As such, there are two different statuses possible:
> - Non-Confidential: means that the project promoter marked the CAPEX information as "non-confidential" so the CAPEX figure is published in the column "Project CAPEX";
> - Confidential: means that the project promoter marked the CAPEX as "confidential" so the CAPEX figure is not published in the column "Project CAPEX". However, in case of investments which expressed intention to apply for the 5th PCI round, an ALTERNATIVE CAPEX figure provided by the promoter and published in column "Project Alternative CAPEX";
> Project CAPEX (in million EUR): CAPEX information is published in case of investments whose CAPEX has been submitted for TYNDP 2020 as "non-confidential". For those whose CAPEX has been submitted as "confidential", the respective costs are not published.
> Project Alternative CAPEX (in million EUR): alternative CAPEX (only for submissions having indicated their intention to participate to the 5th PCI process and having marked their expected costs as confidential during the TYNDP 2020 project collection).
> Project OPEX Confidential[3]: indicates the confidentiality status of the OPEX as expressed by the promotor during the TYNDP 2020 project collection. As such, there are two different statuses possible:
> - Non-Confidential: means that the project promoter marked the OPEX information as "non-confidential" so the OPEX figure is published in the column "Project OPEX";
> - Confidential: means that the project promoter marked the OPEX information as "confidential" so the OPEX figure is not published in the column "Project OPEX". However, in case of submissions which expressed intention to apply for the 5th PCI

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[2] During the TYNDP 2020 Project Data Collection, promoters were asked to indicate whether the project CAPEX was confidential or not. Annex A displays the CAPEX provided by the promoters (as of June 2020, end of TYNDP 2020 project collection), unless declared confidential. The amounts provided can differ from the figures used by the project promoters in other contexts, where costs can be updated and/or evaluated using different methodologies or assumptions. For the purposes of Annex A, in case promoters identified their costs as confidential and indicated (as well during the TYNDP 2020 Project Data Collection) its intention to apply to the PCI process, ALTERNATIVE CAPEX has been provided by the promoter.

[3] During the TYNDP 2020 Project Data Collection, promoters were asked to indicate whether the project OPEX was confidential or not. Annex A displays the OPEX provided by the promoters (as of June 2020, end of TYNDP 2020 project collection), unless declared confidential. The amounts provided can differ from the figures used by the project promoters in other contexts, where costs can be updated and/or evaluated using different methodologies or assumptions. For the purposes of Annex A, in case promoters identified their costs as confidential and indicated (as well during the TYNDP 2020 Project Data Collection) its intention to apply to the PCI process, ALTERNATIVE OPEX has been provided by the promoter.

round, an ALTERNATIVE OPEX figure provided by the promoter is published in column "Project Alternative OPEX";

> Project OPEX (in million EUR per year): OPEX information is published in case of investments whose OPEX has been submitted for TYNDP 2020 as "non-confidential". For projects whose OPEX has been submitted as "confidential", the respective costs are not published.

> Project Alternative OPEX (in million EUR): alternative OPEX (only for submissions having indicated their intention to participate to the 5th PCI process and having marked their expected costs as confidential during the TYNDP 2020 project collection).

> Project Website: provides a link to the website (if such website exists).

> Is part of NDP: indicates whether a submission is part of a National Development Plan (NDP) or not;

> NDP number: indicates the reference number or the name/label with which the promoter submission is identified in the NDP.

Spreadsheet 2 - Transmission

This section includes all the main technical information for pipeline (including compressor stations) submissions.

> Type: a submission can be (1) pipeline including CS, (2) LNG terminal, (3) Underground Storage (UGS) or (4) Energy Transition (ETR); For the purpose of this spreadsheet, all submissions are of type "pipeline including CS". Description of the different types can be found in the TYNDP 2020 Practical Implementation Document[4].

> Code: TYNDP code of each single TYNDP 2020 submitted investment;

> Project Name: TYNDP 2020 investment name;

> Promoter: the subject (being a private company, a ministry, etc.) promoting the investment;

> Maturity status: reflects the level of advancement of the submitted investment. An investment can be FID, non-FID Advanced or non-FID Less-Advanced;

> Section: the realisation of the same investment may be characterised by different sections/phases;

> Length, Diameter and Compressor Power: with reference to pipeline investments they indicate the length (in km) and the diameter (mm) while for compressor stations (CS) the installed compressor power (MW) is indicated.

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https://www.entsog.eu/sites/default/files/2019-05/TYNDP 2020_Practical_Implementation_Document_20190502_0.pdf

Spreadsheet 3 - LNG Terminals

This section includes all the main technical information for LNG terminal investments.

> Type: a submission can be (1) pipeline including CS, (2) LNG terminal, (3) Underground Storage (UGS) or (4) Energy Transition (ETR); For the purpose of this spreadsheet, all submissions are of type "LNG terminal".
> Code: TYNDP code of each single TYNDP 2020 submitted investment;
> Project Name: TYNDP 2020 investment name;
> LNG Facility: indicates the name/location of the LNG facility;
> Promoter: the subject (being a private company, a ministry, etc.) promoting the investment;
> Maturity status: reflects the level of advancement of the submitted investments. An investment can be FID, non-FID Advanced or non-FID Less-Advanced[5];
> Project Phase: the realisation of the same investment may be characterised by different phases;
> Reloading Ability: whether the LNG terminal investments will also have ship reloading;
> Project Yearly Volume: the expected increment in the maximum yearly volume that the terminal can regasify (in bcm/y); This represents also the capacity figure to be used for modelling purposes.
> Project Ship Size: the maximum size of the ship the terminal will be able to receive (in m3 LNG);
> Project Storage Capacity: the maximum size of the LNG terminal tank (in m3 LNG).

Spreadsheet 4 – Underground Storages

This section includes all the main technical information for UGS submissions.

> Type: a submission can be (1) pipeline including CS, (2) LNG terminal, (3) Underground Storage (UGS) or (4) Energy Transition (ETR); For the purpose of this spreadsheet, all submissions are of type "Underground Storage Facility".
> Code: TYNDP code of each single TYNDP 2020 submitted investment;
> Project Name: TYNDP 2020 investment name;
> UGS Facility: name/location of the UGS facility;
> Type: type of the storage facility;
> Promoter: the subject (being a private company, a ministry, etc.) promoting the investment;

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[5] More details on the maturity status ("project status") definition are available in the ENTSOG Practical Implementation Document at this link

> Maturity status: reflects the level of advancement of the submitted investment. An investment can be FID, non-FID Advanced or non-FID Less-Advanced;

> Project Phase: the realisation of the same investment may be characterised by different phases;

> WGV: working gas volume of the storage [mcm].

> Withdrawal Capacity: withdrawal capacity proposed by the investment [mcm/d]

> Injection Capacity: injection capacity proposed by the investment[mcm/d]

Spreadsheet 5 – ETR

Considering the recent EU trends in view of EU decarbonization following the Paris Agreement and the EU decarbonization target, ENTSOG takes a step forward and opens TYNDP 2020 for submission of energy transition investments.

This section includes all the main technical information for Energy Transition (ETR) investments.

> Type: a submission can be (1) pipeline including CS, (2) LNG terminal, (3) Underground Storage (UGS) or (4) Energy Transition (ETR); For the purpose of this spreadsheet, all submissions are of type "Energy Transition".

> Code: TYNDP code of each single TYNDP 2020 submitted investment;

> Project Name: TYNDP 2020 investment name;

> Promoter: the subject (being a private company, a ministry, etc.) promoting the investment;

> Project Type: type of the Energy Transition investment;

> Other Project Type: in case "Other type" is displayed in column "Project Type", there is provided an indication of the type of ETR investment;

> Project description: provides the description of the ETR investment;

> Maturity status: reflects the level of advancement of the submitted investment. An investment can be FID, non-FID Advanced or non-FID Less-Advanced;

> Section Name: the realisation of the same investment may be characterised by different phases;

> Technical Parameters: provides the technical parameters of the ETR investment.

Spreadsheet 6 – Time Schedule

This section provides the start and/or end date of the main investment activities/milestones.

> Type: a submission can be (1) pipeline including CS, (2) LNG terminal, (3) Underground Storage (UGS) or (4) Energy Transition (ETR);

> Code: TYNDP code of each single TYNDP 2020 submitted investment;

> Project Name: TYNDP 2020 investment name;

> Host Country: hosting country where the investment will be built. In case of a single investment crossing more countries only the first country concerned is displayed

> Promoter: the subject (being a private company, a ministry, etc.) promoting the investment;

> Maturity status: reflects the level of advancement of the submitted investment. An investment can be FID, non-FID Advanced or non-FID Less-Advanced;

> Pre-Feasibility Starts: date when the Pre-Feasibility Study[6] started or will start;

> Pre-Feasibility Ends: date when the Pre-Feasibility Study ended or will end;

> Pre-Feasibility Info Not Available: in case no data are available for the start and end of the activity, the reason is provided here;

> Feasibility Starts: date when the Feasibility Study[7] started or will start;

> Feasibility Ends: date when the Feasibility Study ended or will end;

> Feasibility Info Not Available: in case no data are available for the start and end of the activity, the reason is provided here;

> FEED Starts: date when Front End Engineering Design[8] started or will start;

> FEED Ends: date when Front End Engineering Design ended or will end;

> FEED Info Not Available: in case no data are available for the start and end of the activity, the reason is provided here;

> Permitting Phase Starts: date when the Permitting Phase started or will start;

> Permitting Phase Ends: date when the Permitting Phase ended or will end;

> Permitting Info Not Available: in case no data are available for the start and end of the activity, the reason is provided here;

> Supply Contracts Ends: date when the Supply Contracts ended or will end;

> Supply Contracts Info Not Available: in case no data are available for the end of the activity, the reason is provided here;

> FID Ends: date when the Final Investment Decision was or will be taken;

> FID Info Not Available: in case no data are available for the end of the activity, the reason is provided here;

> Construction Starts: date when construction works started or will start;

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[6] By Pre-Feasibility study we understand a preliminary study undertaken to determine if it would be worthwhile to proceed to the feasibility study stage and/or to determine, analyse, and select the best (technical and financial) business scenarios.

[7] By Feasibility study we understand an analysis and evaluation of a proposed project to determine if it (1) is technically feasible, (2) is feasible within the estimated cost, and (3) will be profitable.

[8] By FEED we understand the basic engineering 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.

> Construction Ends: date when construction works will end;
> Construction Info Not Available: in case no data are available for the start and end of the activity, the reason is provided here;
> Commissioning Starts: indicates the commissioning year of the first capacity increment of the investment;
> Commissioning Ends: indicates the commissioning year of the last capacity increment to be commissioned;
> Grant Obtention Date: date when a grant for studies/works has been obtained;
> Schedule Status: compared to TYNDP 2018 commissioning year, the investment can be now "on time", "ahead of schedule", "delayed" or "rescheduled":
> Delay Explanation: in case investment is delayed, here is the reason for the delay.

Spreadsheet 7 – Capacities

This section provides information related to the technical capacity increments assigned to the TYNDP 2020 investments.

> Point Category: indicates the type of interconnection point to which the respective capacity increment is provided;
> Point: provides the name of the interconnection point to which the respective capacity increment is provided;
> From System: indicates the system which sends the respective capacity;
> To System: indicates the system which receives the capacity increment;
> Code: TYNDP code of each single TYNDP 2020 submitted investment;
> Project Name: TYNDP 2020 investment code;
> Promoter: the subject (being a private company, a ministry, etc.) promoting the investment;
> Status: reflects the level of advancement of each capacity increment (and not of the investment as a whole). Therefore, an investment can have several capacity increments with different maturity statuses. A capacity increment can be FID, non-FID Advanced or non-FID Less-Advanced;
> Operator: indicates the name of entity which will operate the capacity increment;
> Commissioning year: indicates the commissioning year of the capacity increment;
> Capacity: indicates the value of the capacity increment (in GWh/d) to be used for modelling (for LNG capacity please refer to "Project Yearly Volume" definition under Spreadsheet 3 LNG Terminals.

Spreadsheet 8 – Enablers

This section lists the investments which are considered enablers[9] and the enabled projects[10] when submitted by the same promoter.

> Enabler Project Type: an enabler project can be (1) pipeline including CS, (2) LNG terminal, or (3) Underground Storage (UGS);
> Enabler Code: TYNDP code of the enabler project;
> Enabler Project Name: name of the enabler project;
> Enabled Code: TYNDP code of the enabled project;
> Enabled Project Name: name of the enabled project;

Spreadsheet 9 – National Development Plan Info

This section includes the information related to the inclusion of the investment in the relevant National Development Plan (NDP).

> Code: TYNDP code of each single TYNDP 2020 submitted investment;
> Project Name: TYNDP 2020 investment name;
> Country: hosting country where the investment will be built. In case of a single investment crossing more countries only the first country concerned is displayed.
> Promoter: the subject (being a private company, a ministry, etc.) promoting the investment;
> Maturity status: reflects the level of advancement of the submitted investment. An investment can be FID, non-FID Advanced or non-FID Less-Advanced;
> PCI 3rd List: indicate whether the investment is part of the latest available (3rd) Project of Common Interest (PCI) List (link),
> PCI 3rd List Code: the related PCI code as indicated in the PCI list;
> Is Part of an NDP: indicates whether an investment is part of a National Development Plan (NDP) or not;
> NDP Number: indicates the reference number or the name/label with which the investment is identified in the NDP;

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[9] 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.

[10] 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.

> NDP Name or Reason for non-NDP inclusion: indicates the full NDP name or the reason the investment is not included in the latest approved NDP;
> NDP Website: indicates the URL/link of the NDP website;
> NDP Release Date: indicates the date when the NDP has been released.

Spreadsheet 10 – CBCA & CEF

This section provides information on any Intergovernmental Agreements concluded for the investment.

> Type: a submission can be (1) pipeline including CS, (2) LNG terminal, (3) Underground Storage (UGS) or (4) Energy Transition (ETR);
> Code: TYNDP code of each single TYNDP 2020 submitted investment;
> Project Name: TYNDP 2020 investment name;
> Host Country: hosting country where the investment will be built. In case of a single investment crossing more countries only the first country concerned is displayed
> Promoter: the subject (being a private company, a ministry, etc.) promoting the investment;
> PCI 3rd List Code: indicate whether the investment is part of the latest available Project of Common Interest (PCI) List (link);
> Previous PCI List: indicates if the investment was part of previous PCI lists (2013 or 2015)
> CBCA Decision: indicates if the investment received a Cross-Border Cost Allocation (CBCA) decision;
> CBCA Decision Date: indicates the date when the CBCA decisions was issued;
> CBCA decision website: indicates the website where the CBCA decision is available;
> Benefiting Countries: indicates the net benefiting countries of the investment as identified in the CBCA decision;
> Bearer Countries: indicates the net bearers countries of the investment as identified in the CBCA decision;
> CBCA Additional Comments: additional information on CBCA;
> Applied for CEF: indicates if the investment applied for financial support for studies and/or construction related works via the Connecting Europe Facility (CEF) programme which is a key EU funding instrument;
> Grant for studies: indicates if the investment applied for grants for studies under CEF;
> Amount received for studies: indicates the amount of money in Mln EUR that was granted for studies;
> Grant for works: indicates if the investment applied for grants for works under CEF;
> Amount received for works: indicates the amount of money in Mln EUR that was granted for works;

> Intention to apply for CEF: in case promoter has not applied yet for financial support from CEF, it indicates if the promoter plans to apply for CEF funds in the future;
> Financial support for other programs: indicates if the investment received financial grants via programmes other than CEF.
> CEF Additional Comments: additional information on CEF.

Spreadsheet 11 – Intergovernmental Agreements

This section provides information on any Intergovernmental Agreements proposed for the investment.

> Project Type: a submission can be (1) pipeline including CS, (2) LNG terminal, (3) Underground Storage (UGS) or (4) Energy Transition (ETR);
> Code: TYNDP code of each single TYNDP 2020 submitted investment;
> Project Name: TYNDP 2020 investment name;
> Promoter: the subject (being a private company, a ministry, etc.) promoting the investment;
> Agreement: the type/name of agreement proposed for the investment;
> Signed: indicates if the agreement is signed by the involved parties;
> Signature Date: indicates the date of the signature, if the case;
> Description: provides a description of the agreement.

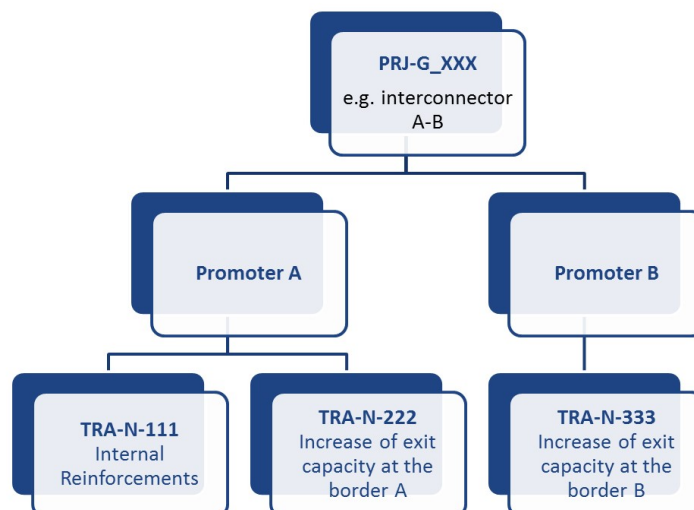## Spreadsheet 12 – Third-Party Access Exemptions

This section provides information on the third-party access exemptions related to the investment according to the Regulation 715/2009 on conditions for access to the natural gas transmission networks.

> Project Type: a submission can be (1) pipeline including CS, (2) LNG terminal, (3) Underground Storage (UGS) or (4) Energy Transition (ETR);
> Code: TYNDP code of each single TYNDP 2020 submitted investment;
> Project Name: TYNDP 2020 investment name;
> Promoter: the subject (being a private company, a ministry, etc.) promoting the investment;
> Applied For Exemption: indicates if promoter applied for third-party access exemption;
> Exemption Granted: indicates if the exemption requested was granted;
> Exemption Stage Reached: as the exemption has a scheduled expiry date, this field indicates the stage the exemption has reached;
> Exempted % Entry: indicates the percentage of the exempted capacity in the entry direction;

> Exempted % Exit: indicates the percentage of the exempted capacity in the entry direction;

> Tariff Regime: indicates the type of tariff that corresponds to the investment;

> TPA Regime Comments: additional information provided on the Third-Party Access regime;

Spreadsheet 13 - PRJ Groups Main Info

Often, a number of functionally-related investment items need to be implemented for their benefit(s) to materialise. For example, in case of an interconnector connecting two (or more) countries, two different promoters are usually involved in realising the two sections of the same interconnector. It is clear in this case that the two sections of the interconnector are meant to be built and used unequivocally together. To facilitate ENTSOG task in identifying these investments, promoters were asked to indicate whether their submission is part of one common "functional project" like in the example below.

> PRJ Code: indicates the common code of the "functional project" (PRJ) whose different submission are part of;

> PRJ Name: indicates the common name and of the "functional project" (PRJ) whose different submission are part of;

> PRJ Status: is the maturity status of the "functional project" (PRJ). This is calculated as the minimum between the maturity status of the different investments composing the PRJ aggregation (e.g. if investment 1 is "FID" and investment 2 is "non-FID Less-Advanced", the PRJ aggregating the two submissions will be "non-FID Less-Advanced");

> PRJ Commissioning Year First and Last: they respectively indicate the commissioning year of the first investment part of the PRJ to be commissioned and of the last investment part of the PRJ to be commissioned;

> PRJ Group Description: indicates the description of the "functional project" (PRJ);

> Code of Individual Projects: TYNDP code of each single investment composing the PRJ aggregation;
> Project Name: TYNDP 2020 name of the single investment part of the PRJ aggregation;
> Project Promoter: the subject (being a private company, a ministry, etc.) promoting the single investment part of the PRJ aggregation;
> Host Country: hosting country where the single investment part of the PRJ aggregation will be built. In case of a single investment crossing more countries only the first country concerned is displayed