ENTSOG Communications < ENTSOG.Communications = entsog.eu@cmail20.com >

on behalf of ENTSOG Communications <ENTSOG.Communications@entsog.eu>

Sent: To: 14 October 2016 15:47

Subject:

ENER B1 SECRETARIAT

\* WEBINAR MATERIAL AVAILABLE \* Joint ENTSOs Webinar on Request for input:

Going from assumptions to data - Define with us the TYNDP 2018 scenarios



Personal Invitation

# \* WEBINAR MATERIAL AVAILABLE \* Joint ENTSOs Webinar on Request for input: Going from assumptions to data - Define with us the TYNDP 2018 scenarios

Dear Sir or Madam.

The ENTSO for gas and electricity have gathered significant feedback in the past 6 months from stakeholders on the assumptions and storylines of the 2030 and 2040 scenarios for the TYNDPs 2018.

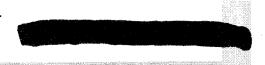
In a following step, the ENTSOs have invited stakeholders to express their views on how to interpret that feedback in recent weeks, through:

- 1. An online questionnaire where stakeholders could provide their views for all parameters for the three scenarios the ENTSOs chose to consider for the TYNDPs 2018
- 2. A webinar where the ENTSOs have:
- explained how the previous feedback from stakeholders was considered
- presented the chosen TYNDP 2018 scenarios
- gathered additional feedback directly in the webinar through polls
- explained the next steps in the scenario development process

This phase has now concluded and ENTSOG would like to thank all participants who have actively contributed to this process.

Here you can find the outcomes of the polls during the webinar and the presented material.

Results from the online questionnaire will be made soon available.



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For inquiries, please contact the ENTSOG Secretariat: info@entsog.eu

(ENER)

Sent:

25 August 2016 16:31

To:

ENER B1 GAS TEAM; ENER B1 ELECTRICITY TEAM;

(ENER)

Cc:

(ENER);

(ENER);

(ENER)

(ENER);

Subject: Scenario for 2018 TYNDPs - an update

#### **Dear Colleagues**

With the we met ENTSOs to follow up on the idea of having their 2018 TYNDP modelling aligned with the PRIMES [the "policy scenario", not the "reference" one].

The ENTSOs are keen to have an alignment but still to be seen what will be feasible. There seem to be two options: (a) one of the three scenario used in TYNDP would mirror our PRIMES policy scenario, or (b) all three scenario would use elements/input from PRIMES data but none of them would be reflecting PRIMES "one-to-one". We stressed that option (a) would be preferred, least to be able to see what infrastructure developments are most compatible with the Commission's vision.

ENTSOs will assess if one from one of the three now shortlisted scenarios ("Global climate action"; "Sustainable Transition"; "Distributed Generation") could be considered as mirroring the PRIMES policy scenario. To enable these analysis, Kostis will now provide an indication of how the Policy scenario would score against the criteria ENTSOs used to design the initial scenarios (see below).

ENTSOs will run a stakeholders workshop mid-October to further agree with the stakeholders on how the individual criteria should be measured. With this and on the basis of the data describing our Policy scenario one will be able to see if option (a) can be followed. In any case the ENTSOs will need the underlying (detailed) PRIMES data shortly after the October workshop (hopefully A4 will by that time have a green light to share the data). ENTSOs apparently have already used the reference scenario data kindly provided by A4 colleagues to assess if the data from PRIMES would be sufficient for their modelling [they are working on a report document] and it broadly seem compatible.

ENTSOs will want to issue the 2018 TYNDP scenario report by mid-2017 (for consultation and a then final version in Q3 2017)

Best regards





### Overview of the current story lines

Sci	enario	Global climate action	Subsidized Green Europe	Sustainable Transition	Behind Targets	Generation
aregory	Criteria			Park		
Œ	driven by	Global ETS	Global ETS & direct RES subsidies	EU ETS & direct RES :	Climate action	EU ETS
croeconomi Trends	2050 target?	Yes		Jagairy secure	_ehind	Yes
	Economic conditions	High growth	High growth	Moderate growth	Low growth	High growth
	Electric and hybrid vehicles	High growth	High growth	Moderate growth	Low growth	Very high growth
Fransport	Gas vehicles and thipping	High growth	High growth	Moderate growth	Low growth	Very lugh growth
	Demand flexibility	High growth	High growth	Moderate growth	Low growth	Very high growth
esidential	Electric heat pump	Moderate growth	Very high growth	Low growth	Low growth	Modesate growth
ommercial	Energy efficiency	Moderate growth	Very high growth	Moderate growth	Low growth	High growth
	Hybrid heat	Very high growth	Moderate growth	Moderate growth	Low growth	Very lugh growth
	electricity demand	Stable	Favourable development	Stable	Stable	Favourable development
Industry	gas demand	Stable	Reduction	Stable Stable	Stable	Reduction
	demand flexibility	Moderate growth	Low growth	Low growth	Low growth	Very high growth
	Merit order	Gas before coal	In par	Gas before coal	Coal before gas	Gas before coal
	Nuclear	Potential for growth	Stable	Minimum new usats	Reduction	Reduction
	Storage	Moderate growth	High growth	Low growth	Low growth	Very high growth
Power	Wind	High growth	Very high growth	Moderate growth	Low growth	High growth
	Solar	High growth	Very high growth	Moderate growth	Low growth	Very high growth
	ccs	Not significant	Not significant	Not rignificant	Not significant	Not agaificant
	Adequacy	Some surphis capacity	High suplus capacity	Some surplus capacity	Low surplus capacity	High surplus capacity
	Power-to-gas	High growth	High growth	Not significant	Not significant	High growth
Gas Supply	Shale Gas	Not significant	Not significant	High growth	Low growth	Not agaificant
	Bio Methan	High growth	High growth	High growth	Not significant	High growth

 $\underline{http://www.entsog.eu/public/uploads/files/publications/TYNDP/2016/ENTSOs\%20proposed\%202040\%20scenarios.}\\ \underline{pdf}$ 



**European Commission** 

DG Energy Unit B1 Networks & Regional Initiatives

Office DM Rue de Mot 24 B-1049 Brussels/Belgium

## Overview of the current story lines

Sce	nario	Global climate action	Subsidized Green Europe	Sustainable Transition	Behind Targets	Distributed Generation
Category	Calcula			Parameter		
	Climate action driven by	Global ETS	Global ETS & direct RES subsidies	EU ETS & direct RES subsidies	Climate action low	EU ETS
Macroeconomic Trends	EU on track to 2050 target?	Yes	Yes	Slightly behind	Behind	Yes
	Economic conditions	High growth	High growth	Moderate growth	Low growth	High growth
Transport	Electric and hybrid vehicles	High growth	High growth	Moderate growth	Low growth	Very high growth
	Gas vehicles and shipping	High growth	High growth	Moderate growth	Low growth	Very high growth
	Demand flexibility	High growth	High growth	Moderate growth	Low growth	Very high growth
Residential/	Electric heat pump	Moderate growth	Very high growth	Low growth	Low growth	Moderate growth
Commercial	Energy efficiency	Moderate growth	Very high growth	Moderate growth	Low growth	High growth
	Hybrid heat pump	Very high growth	Moderate growth	Moderate growth	Low growth	Very high growth
	electricity demand	Stable	Favourable development	Stable	Stable	Favourable development
Industry	gas demand	Stable	Reduction	Stable	Stable	Reduction
	demand flexibility	Moderate growth	Low growth	Low growth	Low growth	Very high growth
	Merit order	Gas before coal	In par	Gas before coal	Coal before gas	Gas before coal
	Nuclear	Potential for growth	Stable	Minimum new units	Reduction	Reduction
	Storage	Moderate growth	High growth	Low growth	Low growth	Very high growth
Power	Wind	High growth	Very high growth	Moderate growth	Low growth	High gowth
	Solar	High growth	Very high growth	Moderate growth	Low growth	Very high growth
1	CCS	Not significant	Not significant	Not significant	Not significant	Not significant
	Adequacy	Some surplus capacity	High surplus capacity	Some surplies expacity	Low surplus capacity	High surphis capacity
	Power-to-gas	High growth	High growth	Not significant	Not significant	High growth
Gas Supply	Shale Gas	Not significant	Not significant	High growth	Low growth	Not significant
	Bio Methan	High growth	High growth	High growth	Not significant	High growth

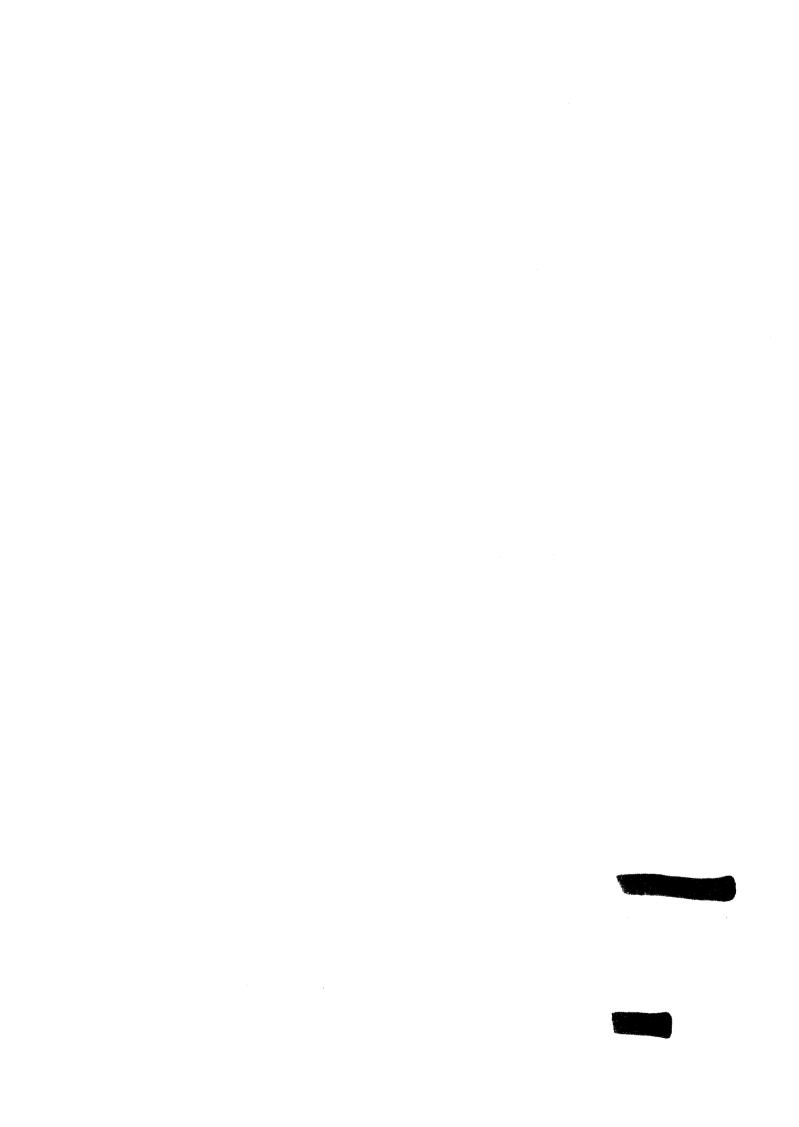
 $\frac{http://www.entsog.eu/public/uploads/files/publications/TYNDP/2016/ENTSOs\%20proposed\%202040\%20scenarios.}{pdf}$ 



**European Commission** 

DG Energy Unit B1 Networks & Regional Initiatives

Office DM Rue de Mot 24 B-1049 Brussels/Belgium



From: ENTSOG General Manager < General

ENTSOG General Manager <General-Manager=entsog.eu@cmail20.com> on behalf

of ENTSOG General Manager < General-Manager@entsog.eu>

**Sent:** 07 January 2016 19:27

To: ENER B1 REGIONAL GROUPS

**Subject:** \*REMINDER & PRESENTATIONS AVAILABLE \* 11th TYNDP/CBA Workshop and 1st

SJWS for TYNDP 2017





# \* REMINDER & PRESENTATIONS AVAILABLE \* 11th TYNDP/CBA Workshop and 1st SJWS for TYNDP 2017

Dear Sir and Madam,

The European Network of Transmission System Operators for Gas (ENTSOG) is pleased to invite you to participate to a 2-day event dedicated to TYNDP 2017 on **12 and 13 January 2016** in Brussels:

- 11th TYNDP/CBA Workshop (rescheduled from 25 November) on day 1
- 1st Stakeholder Joint Working Session (SJWS#1) for TYNDP 2017 on day 2

In the 11th TYNDP/CBA Workshop, the European Commission and ACER will provide their feedback on TYNDP 2015, along with their recommendations for TYNDP 2017 and ENTSOG will present the foreseen directions for improvement for TYNDP 2017.

Presentation are available here.

The venue for this event is the **Thon Hotel EU**, **Rue de la Loi 75**, **1040 Brussels**. **Lunch will be provided at 12.00** 

An agenda is available in the Agenda Area.

We are looking forward to your participation to this event.

To register for the event, please fill in the registration form here. In case you are not attending both days please inform Mirsada Spaho: mirsada.spaho@entsog.eu

The deadline for the registration is 8th January 2016.

The event will be webcasted, in order to participate please register **here**. Please note that you should register either for physical attendance or webcast.

Please note that as part of the TYNDP 2017 Stakeholder Engagem Stakeholder Joint Working Sessions will take place on the following dates:

- SJWS#2 on 26 January in Brussels (focus: supplies and introduction to modelling)
- SJWS#3 on 9 February in Vienna
- SJWS#4 on 23 February
- SJWS#5 on 1 March

Yours sincerely,





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For inquiries, please contact the ENTSOG Secretariat: info@entsog.eu

From: ENTSOG Communications <ENTSOG.Communications=entsog.eu@cmail19.com>

on behalf of ENTSOG Communications <ENTSOG.Communications@entsog.eu>

Sent: 28 October 2016 15:20

**ENER B1 REGIONAL GROUPS** To:

Subject: \* PRESS RELEASE \* Explore the map of the TYNDP 2017-projects and learn more

about the related scenarios

Follow Up Flag:

Follow up Flag Status: Flagged



Press Release

### Explore the map of the TYNDP 2017-projects and learn more about the related scenarios

Explore the map of the TYNDP 2017-projects and learn more about the related scenarios

(Brussels, 28 October 2016, PR0119-16) In December this year, ENTSOG will publish the full TYNDP 2017. In line with ENTSOG's strong commitment to high transparency in its development stakeholders were presented with all TYNDP input data including scenarios and projects information as early as July this year. A new map showing the TYNDP 2017 projects is now available on ENTSOG's web site!

Before the integrated network is modelled and TYNDP is published, developing a comprehensive scenario and defining the data are essential. Starting in January this year, stakeholders engaged in five working sessions organised by ENTSOG to discuss the necessary information. In April ENTSOG launched the project data collection.

In July stakeholders were presented with all the related data. ENTSOG has now complemented this information with a new map showing the TYNDP 2017 projects. As part of TYNDP, these projects will be assessed against the three retained scenarios which all represent possible paths to achieving the EU targets. To visualise the TYNDP 2017 projects and learn more about the TYNDP 2017 scenarios, go to: Link to ENTSOG homepage.

Jan Ingwersen, ENTSOG General Manager, said, "All scenarios used for modelling in the TYNDP are fully in line with the EU climate targets. ENTSOG has now increased its transparency and, for the first time, depicted all projects on an electronic map. With this map ENTSOG is contributing to a transparent PCI selection process."

Should you require any further information, please contact Stefan Greulich (+32 2 894 5106,

#### stefan.greulich@entsog.eu).

Stakeholders interested in the development of the European gas infrastructure can still order the ENTSOG System Development Map available online following this link (http://maps.entsog.eu/nl/dynamicform).

#### **Editorial notes**

- > ENTSOG was founded on 1 December 2009 in line with Regulation (EC) 715/2009. The current number of Members, Associated Partners and Observers can be found at this link.
- > In line with Articles 6, 7 and 8 of the Regulation (EC) 715/2009, ENTSOG has the task of formulating network codes in a number of areas and of adopting various communications: a non-binding community-wide Ten-Year Network Development Plan on biennial basis; Winter and Summer Supply Outlooks; common network operation tools; recommendations relating to the coordination of technical cooperation between community and third-country-TSOs; annual work programmes and annual reports.

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From: ENTSOG Communications <ENTSOG.Communications=entsog.eu@cmail20.com>

on behalf of ENTSOG Communications <ENTSOG.Communications@entsog.eu>

14 October 2016 11:31

To: ENER B1 REGIONAL GROUPS

**Subject:** \* PRESS RELEASE \* European natural gas system ready for the winter 2016/17



Sent:

Press Release

#### European natural gas system ready for the winter 2016/17

(Brussels, 14 October 2016, PR0117-16) ENTSOG adopted its Winter Supply Outlook 2016/17 and the accompanying Winter Review 2015/16.

European natural gas infrastructures and storage levels on October 1st offer high enough flexibility to cover the demand over a cold winter and to supply Ukraine with significant volumes of gas.

ENTSOG also assessed the capability of the European natural gas system to cope with high demand situations such as a peak day or a 2-week cold spell.

In the hypothetical case of a transit disruption through Ukraine under a high demand situation, South-Eastern Europe would be strongly impacted.

ENTSOG cooperates with ENTSO-E to assess the possible impact of such a disruption on the gas and electricity systems, through their respective Winter Outlooks.

ENTSOG Winter Supply Outlook is published annually following Article 8(3)(f) of Regulation (EC) 715/2009, to provide a valuable overview of the European natural gas transmission network for the upcoming winter.

Jan Ingwersen, ENTSOG General Manager, said:

"The Winter Supply Outlook 2016/17 shows that, thanks to the gas infrastructure, shippers are able to meet high demand situations in every country under various supply conditions."

The Winter Supply Outlook 2016/17 is available here.

Should you require any further information please contact Arturo de Onís (+32 2 894 5114) or Louis Watine (+32 2 894 5115) or e-mail to **media@entsog.eu**.

#### **Editorial notes**

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ENTSOG Communications < ENTSOG.Communications = entsog.eu@cmail20.com >

on behalf of ENTSOG Communications <ENTSOG.Communications@entsog.eu>

Sent: To: 20 December 2016 13:01 ENER B1 SECRETARIAT

Subject:

\* PRESS RELEASE \* ENTSOG publishes TYNDP 2017 and opens consultation



Press Release

#### **ENTSOG publishes TYNDP 2017 and opens consultation**

(Brussels, PR0122-16) Today ENTSOG publishes TYNDP 2017 which confirms that the current gas infrastructure is close to achieving the infrastructure-related element of the internal gas market. In the specific areas where persistent long-term investment needs are identified, the necessary projects are shown to be included in the TYNDP 2017. From today, TYNDP 2017 is open for a 6-week public consultation.

TYNDP 2017 looks at the next twenty years. It assesses the European supply adequacy and the resilience of the system. It identifies if and where investment gaps remain, and how submitted projects mitigate these gaps.

The European gas infrastructure shows high resilience and is well equipped to support Europe in achieving its energy and climate ambitions. It is connected to diversified low-carbon energy sources, benefits from large storage capabilities, high cross-border energy transmission and peak-demand management capabilities and is highly interconnected across most of Europe. Its integration with the power, heat and mobility infrastructure will support the decarburization of the European energy system.

In the specific areas where further investments are needed, the projects addressing these needs are part of this TYNDP 2017. Most of them are already at an advanced stage of development. The investment costs required to complete the integration of the European gas infrastructure are estimated to be below 20 bn€. Together with a limited number of large-scale import projects, these investments will bring secure, affordable, diversified and competitive low carbon energy to all European citizens. They will provide the stimulus for further development of the gas market and will be able to complement the renewable energy development.

Jan Ingwersen, ENTSOG General Manager, said, "It is paramount that the European gas infrastructure is considered in the perspective of the completion of the Internal Energy Market as well as the contributions it can bring to the European climate and energy policy."

Publication of ENTSO-E TYNDP 2016 and ENTSOG TYNDP 2017 are taking place on the same day. Both TYNDPs will play a key role in the 3rd PCI selection process recently initiated by the

European Commission. The TYNDPs assesses the gas and electricity infrastructure under scenarios which represent different paths towards achieving the EU targets. These scenarios have been established in close dialogue between the ENTSOs.

Learn more on TYNDP 2017 by reviewing the whole package, composed of the Executive Summary, Main Report and Annexes, at this link on ENTSOG website.

Involvement and transparency towards stakeholders is a key feature of developing TYNDP. You are now welcome to take part to the online public consultation on the TYNDP report, opened from today until 3 February, at this link.

ENTSOG also invites you to join its TYNDP presentation day on 23 January 2017.

Your feedback, together with ACER Opinion, will support ENTSOG for publishing the final version of TYNDP 2017 in April 2017 and developing the next TYNDP edition to be published in the second half of 2018.

Should you require any further information please contact Celine Heidrecheid (+32 2 894 5130 or media@entsog.eu).

#### Editorial notes

- > ENTSOG was founded on 1 December 2009 in line with Regulation (EC) 715/2009. The current number of Members, Associated Partners and Observers can be found at this link.
- > In line with Articles 6, 7 and 8 of the Regulation (EC) 715/2009, ENTSOG has the task of formulating network codes in a number of areas and of adopting various communications: a non-binding community-wide Ten-Year Network Development Plan on biennial basis; Winter and Summer Supply Outlooks; common network operation tools; recommendations relating to the coordination of technical cooperation between community and third-country-TSOs; annual work programmes and annual reports.

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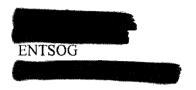
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# EUROPEAN COMMISSION DIRECTORATE-GENERAL FOR ENERGY

Directorate B - Internal Energy Market The Director

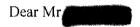
Brussels, 18 July 2016 ENER.B1/MM/la Ares s(2016)4183317



Subject:

DG Energy's request for CBA modelling by ENTSOG in support of

the PCI identification



In the framework of Regulation 347/2013 setting guidelines for trans-European energy infrastructure (the "Regulation") a clear process is established ultimately leading to the identification of the "Projects of Common Interest" ("PCIs"). In particular the promoters of a project potentially eligible for being identified as PCI (the "Project Promoters") are expected to submit the relevant application to the Regional Group including, inter alia, "for projects having reached a sufficient degree of maturity, a project-specific cost-benefit analysis based on the methodologies developed by the ENTSOs". The Regional Groups evaluate the applications and the decision-making body of the Group adopt a regional list of proposed PCIs. On the basis of the regional lists, the Commission adopts the Union list of PCIs in a form of a delegated act, part of the Regulation.

The cost-benefit analysis of PCI candidates is an essential element of the PCI identification process and hence the importance of ensuring the quality and consistency of the analysis in case of all the candidates. The ENTSOs, with their particular expertise, have an important role to play here. In line with Article 11 of the Regulation each ENTSO develops and publishes methodology for a harmonised energy system-wide cost-benefit analysis at Union level (the "CBA"). The CBA should be applied for the preparation of each subsequent ten-year network development plan developed by the ENTSOs. ENTSOG in particular published the CBA methodology on 13 February 2015.

Indeed already for the second round of the PCIs identification ENTSOG was entrusted with providing the necessary CBA modelling results to Project Promoters. This was necessary due to the technical complexity of the modelling approach but also the short time available to run the assessment. Taking into account the methodological complexity

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of this modelling, we would like ENTSOG to drive the process in the forthcoming, third PCIs identification round and to provide the modelling results to each Project Promoter and the Commission. When required by the process, the Commission would make these results available to the Regional Groups. In particular the results depicting benefits per individual Member State will be important to determine the cross-border relevance and impact of the proposed projects.

In order to facilitate the PCI identification it is essential that the project specific results are presented in a way that Project Epomoters and other members of Regional Groups can easily derive the beautiful projects. It is also important that the results can be meaningfully compared with the costs of the underlying projects. In this context, ENTSOG and the costs of the underlying within Regional Groups, the monetary value of the benefits represented by the CBA indicators. Furthermore, for each PCI candidate ENTSOG should quantify the total amount of monetised benefits (welfare gains) under one or several specific configuration discussed with the Regional Groups. This will serve as a basis for verification if the costs outweigh the expected benefits.

Carrying out the CBA modelling by ENTSOG on behalf of Project Promoters appears to be the most practicable approach currently available. This approach was presented and received positively by participants of the Cross-regional Group meeting on 4 Feb. 2016.

In this context, I invite ENTSOG to perform for projects being candidates to the PCI status the calculation of CBA results relating to benefits. For that NTSOG should use the data from the TYNDP 2017.

The results will in particular be sent by ENTSOG to each Project Promoter for its own project(s) in order to let them finalise the Project Specific Step of the CBA methodology. It will be vital for the quality of the final outcome that ENTSOG remains available to assist Project Promoters also at this stage of the process. Furthermore, considering that the results stemming from the modelling is an important input to the PCI identification, ENTSOG shall: (a) propose a good method for interpreting the results of individual indictors against the criteria from Article 4 of the Regulation, and (b) propose an economically sound mechanism for the valuation of the specific results for the indicators in order to make the comparison of results feasible for the Regional Groups. This should be done under one or several specific configuration as discussed with the Regional Groups.

As experienced in the 2<sup>nd</sup> PCI identification process, clustering of PCI candidates is an important factor for the results of CBA. It is therefore imperative to ensure that there is a consistent approach applied in case of all PCI candidates that expect to be clustered and assessed together with other candidates. I invite ENTSOG to draw on its experience with TYNDP projects and to propose rules for clustering to be subsequently discussed with the Regional Groups.

Finally, it is worth highlighting that the outcome of the CBA, including the elaboration that Project Promoters will perform based on ENTSOG results will be an important input to the PCI identification process but arriving at definite results in relation to the PCI label will require further work in the format of the Regional Groups. I would much welcome ENTSOG continued support and assistance to this work. The success of the PCI identification exercise is important for all of us and I am confident that the existing good and close cooperation between ENTSOG and DG Energy will continue throughout this process.

Yours sincerely,

Klaus-Dieter Borchardt

Cc: Mrs Mr Mr ENER)

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Sent:

(ENER) 23 February 2016 16:53

To: ENER B1 GAS TEAM; (ENER)

Subject: key take outs from the stakeholders' workshop on TYNDP by ENTSO G

I went to one session of ENTSOG stakeholders' workshop for TYNDP this morning the TYNDP assessment and individual indicators.

and were explaining

You can access the (good) slides used at:

http://www.entsog.eu/public/uploads/files/publications/Events/2016/TYNDP039 160223 SJWS 4 Part 3 Outputs Vol. Final.pdf

Some interesting/important information that transpired during the session:

- Three demand scenarios assumed for assessment (Green, Blue, Slow) but ENTSOG still to decide if all three
  will be factored in. In the end they may run analysis for one demand scenario only (hopefully not the Slow
  Progression...).
- A remark from a stakeholder: "even the Green Revolution scenario (which corresponds to the Commission's
  energy and climate target) falls short from what agreed in Paris". It seems to be a valid point implications
  of COP21 on EU infra needs should at least be considered in our reflections on infra needs. [I'll check with A4
  if it might have been already modelled]
- ENTSO proposed a methodology for calculating the value of lost load (for supply disruption and lack of flexibility=> demand not satisfied). In TYNDP2015 they applied a mathematical value of 105 000 EUR/GWh. Now they approximate that the value of 1 GWh lost for economy (on average across the EU) by dividing the total GDP by gross inland energy consumption. This way 1GWh lost amounts to ca 670 000 EUR loss from GDP perspective. ENTSOG stressed that the approach is far from perfect but suggested to keep for its simplicity and similarity to what e.g. EIB uses in due diligence. The regulators seemed not convinced and will still revert to ENTSOG but in general it seems to be a step in right direction (useful assumption for monetising benefits)
- Some good news: ENTSOG intends to factor in the price differential on a given import route i.e. recognising that e.g. Slovakia pays more for RU gas than Germany. With this the CBA would value projects that increase diversification/competition in case of countries with high dependence on a single source. Their PPT on this issue at:

http://www.entsog.eu/public/uploads/files/publications/Events/2016/TYNDP039 160223 SJWS 4 Import spread configuration Final.pdf

I did not stay in the afternoon when they were actually to discuss the price differential hence I do not know (yet) the reactions of stakeholders. I'll check with ENTSOG if there would have been unexpected reactions

Best regards

Control of the contro

Policy Coordinator



**European Commission**DG Energy
Unit B1 Networks & Regional Initiatives

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Sent:

ENTSOG General Manager < General-Manager = entsog.eu@cmail19.com > on behalf

of ENTSOG General Manager < General-Manager@entsog.eu>

9 January 2017 15:43

To:

**ENER B1 REGIONAL GROUPS** 

**Subject:** Javitation to the presentation of TYNDP 2017





Personal Invitation

#### **Invitation to the presentation of TYNDP 2017**

Dear Sir and Madam,

ENTSOG is pleased to invite you to the presentation of its TYNDP 2017 on 23 January 2017 (13.30 – 17.00).

The event will take place at the ENTSOG premises, Avenue Cortenbergh 100, 1000 Brussels.

On 20 December ENTSOG published its TYNDP 2017 package, available at this link, which has already triggered a number of reactions.

If you want to learn more about what the current gas infrastructure already achieves, how ENTSOG developed TYNDP 2017 in line with the EU 2030 energy and climate targets, which are the specific areas of Europe where investment gaps remain and how projects submitted to TYNDP mitigate these gaps, **join us and interact with us on 23 January 2017.** 

For further questions please contact James Gudge at james.gudge@entsog.eu.

If you want to attend the meeting in person, please fill in the registration form in the Registration area, available **here**.

This event will be webcasted. In order to follow this live please register via Webcast Area here. The deadline for the registrations is 19 January 2017.

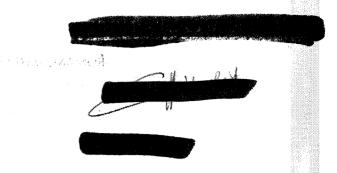
For any questions regarding registrations and logistics please contact Mirsada Spaho: mirsada.spaho@entsog.eu.

We are looking forward to your participation.

We would also like to remind you that you are welcome to take part to the online public consultation on the TYNDP 2017 report, which is open until 3 February 2017.

Yours sincerely,





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For inquiries, please contact the ENTSOG Secretariat: info@entsog.eu

(ENER)

Sent:

28 October 2016 18:15

To:

**ENER B1 GAS TEAM** 

Cc:

(ENER)

Subject:

Finally, the map has arrived!

**Attachments:** 

TYNDP053-161021\_ENTSOG\_TYNDP2017-Map\_A0\_1189x841.pdf

Follow Up Flag:

Follow up

Flag Status:

Flagged

Dear Colleagues,

Finally! ENTSOG has just published the TYNDP 2017 map which provides projects with both the PCI status and the TYNDP number (attached).

This will simplify things for us, RG members and stakeholders in the selection process of PCIs for the third Union list.

At the next visit at ENTSOG we should take paper copies...some of us have it already on the wall but in a draft format only!



 $\textbf{From:} \ ENTSOG \ Communications \ [\underline{mailto:ENTSOG.Communications = entsog.eu@cmail 19.com]} \ \textbf{On Behalf Of}$ 

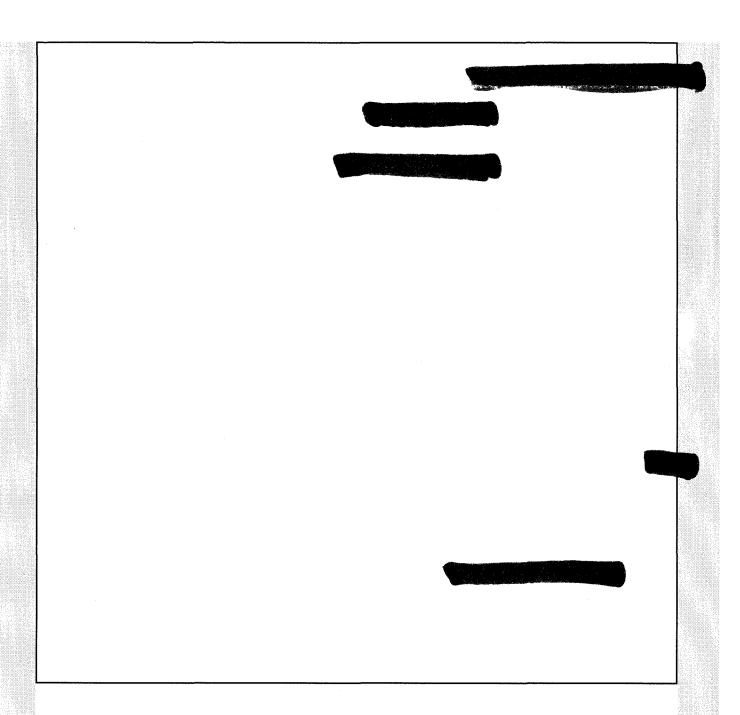
**ENTSOG Communications** 

Sent: Friday, October 28, 2016 3:20 PM

To:

Subject: \* PRESS RELEASE \* Explore the map of the TYNDP 2017-projects and learn more about the related

scenarios



# Explore the map of the TYNDP 2017-projects and learn more about the related scenarios

Explore the map of the TYNDP 2017-projects and learn more about the related scenarios

(Brussels, 28 October 2016, PR0119-16) In December this year, ENTSOG will publish the full TYNDP 2017. In line with ENTSOG's strong commitment to high transparency in its development stakeholders were presented with all TYNDP input data including scenarios and projects information as early as July this year. A new map showing the TYNDP 2017 projects is now available on ENTSOG's web site!

Before the integrated network is modelled and TYNDP is published, developing a comprehensive scenario and defining the data are essential. Starting in January this year, stakeholders engaged in five working sessions organised by ENTSOG to discuss the necessary information. In April ENTSOG launched the project data collection.

In July stakeholders were presented with all the related data. ENTSOG has now complemented

this information with a new map showing the TYNDP 2017 projects. As part of TYNDP, these projects will be assessed against the three retained scenarios which all represent possible paths to achieving the EU targets. To visualise the TYNDP 2017 projects and learn more about the TYNDP 2017 scenarios, go to: **Link to ENTSOG homepage**.

Jan Ingwersen, ENTSOG General Manager, said, "All scenarios used for modelling in the TYNDP are fully in line with the EU climate targets. ENTSOG has now increased its transparency and, for the first time, depicted all projects on an electronic map. With this map ENTSOG is contributing to a transparent PCI selection process."

Should you require any further information, please contact Stefan Greulich (+32 2 894 5106, stefan.greulich@entsog.eu).

Stakeholders interested in the development of the European gas infrastructure can still order the ENTSOG System Development Map available online following this link (http://maps.entsog.eu/nl/dynamicform).

#### **Editorial notes**

- > ENTSOG was founded on 1 December 2009 in line with Regulation (EC) 715/2009. The current number of Members, Associated Partners and Observers can be found at this link.
- > In line with Articles 6, 7 and 8 of the Regulation (EC) 715/2009, ENTSOG has the task of formulating network codes in a number of areas and of adopting various communications: a non-binding community-wide Ten-Year Network Development Plan on biennial basis; Winter and Summer Supply Outlooks; common network operation tools; recommendations relating to the coordination of technical cooperation between community and third-country-TSOs; annual work programmes and annual reports.

3

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\*

For inquiries, please contact the ENTSOG Secretariat: info@entsog.eu

不過智慧的大學大學科學公司不再主義權力國際的議論

ESCHIVI TOMENY

alandari (1907) da karantari da k

NER)

Sent:

12 September 2016 14:21

To:

ENER B1 GAS TEAM;

Subject:

correspondence between PCI and TYNDP Gas projects

Attachments:

Working document - Correspondence TYNDP code - PCI label.xlsx

ENER)

Follow Up Flag:

Follow up

Flag Status:

Flagged

#### Colleagues

Please see attached a very useful overview of how the definition of the concrete gas PCI has been evolving over time.

The file prepared by ENTSOG



Policy Coordinator

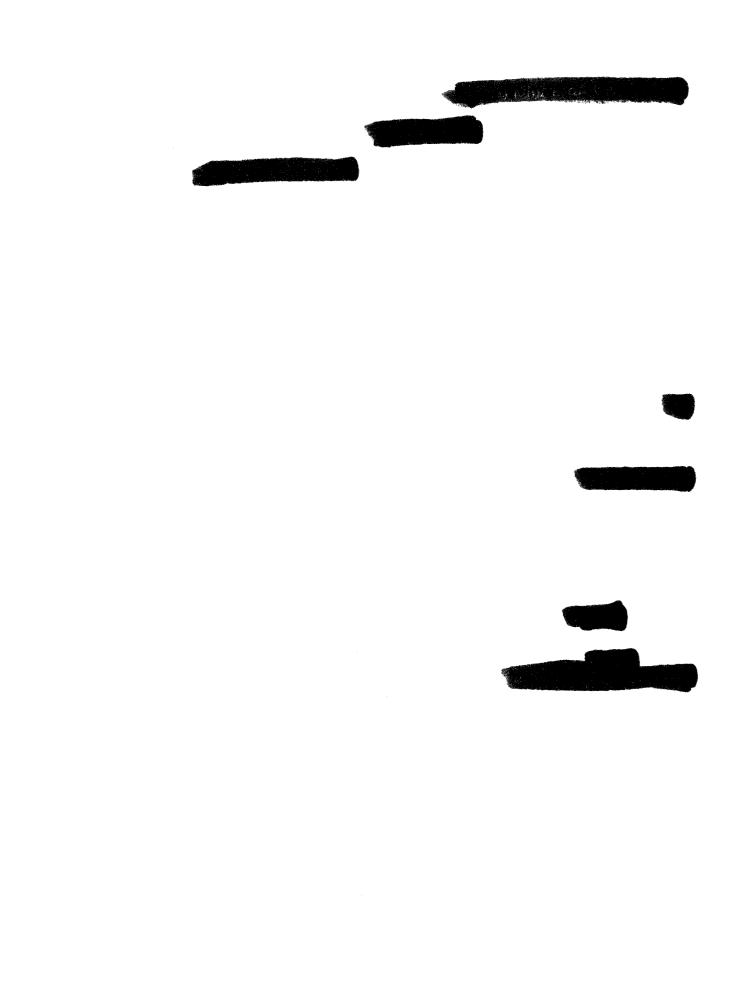


**European Commission** 

DG Energy

Unit B1 Networks & Regional Initiatives

Office DM Rue de Moc 24 B-1049 Brussels/Belgium +32 229



Working document

5.11

5.19

TRA-F-214

19

5.11

as			project not in PCI List but in TYNDP2017				
		_		2			
2nd PCI List			2nd PCI List - DESCRIPTION	TYNDP 2017 - ENTSOG CODE	TYNDP 2017 - PCI CODE	TYNDP 2017 - PROJECT NAME	TYNDP 2017 - PROMOTER
	TRA-N-059	5.1.1	5.1.1 Physical reverse flow at Moffat interconnection point (IE/UK)	TRA-N-829	PCI 5.1.1/Tran-N-059	PCI 5.1.1 Physical Reverse Flow at Moffat interconnection point (IE/UK)	GNI (UK) Limited
				TRA-N-1064	TRA-N-532	Moffat Physical Reverse Flow	National Grid Gas plc
5.1			5.1.2 Upgrade of the SNIP (Scotland to Northern Ireland) pipeline to accommodate physical reverse flow				
2.1	TRA-N-027	5.1.2	between Ballylumford and Twynholm	TRA-N-027	5.1.2	Physical reverse flow from Northern Ireland to Great Britain and Republic o	Premier Transmission Limited
			5.1.3 Development of the Islandmagee Underground Gas Storage (UGS) facility at Lame (Northern		_ E 4		
	UGS-N-294	5.1.3	(reland)	UGS-N-294	5.13	Islandmagge Gas Storage Facility	Islandmagee Storage Limited
5.3	LNG-N-030	5.3	Shannon LNG Terminal and connecting pipeline (IE)	LNG-N-030	Project Code 5.3 under Commission Delegated Regulation (EU) No 1391/2013	Shannon LNG Terminal and Connecting Pipeline	Shannon LNG
	TRA-N-168	5.4	3rd interconnection point between Portugal and Spain	TRA-N-168	5.4	Interconnection ES-PT (3rd IP) - 1st phase	Enagás Transporte, S.A.U.
	TRA-N-283	5.4	0	TRA-N-283	5.4	3rd IP between Portugal and Spain (pipeline Celorico-Spanish border)	REN-Gasodutos, S.A.
5.4	TRA-N-284	5.4	O ###	TRA-N-284	5.4	3rd IP between Portugal and Spain (Compressor Station)	REN-Gasodutos, S.A.
				TRA-N-729	5.4	Interconnection ES-PT (3rd IP) - 2nd phase	Enagás Transporte, S.A.U.
	TRA-N-285	5.4	0	TRA-N-285	5.4	3rd IP between Portugal and Spain (pipeline Cantanhede-Mangualde)	REN-Gasodutos, S.A.
			Eastern Axis Spain — France — interconnection point between Iberian Peninsula and France at Le				
			Perthus, including the compressor stations at Montpellier and St. Martin de Crau (currently known as	l			
5.5	TRA-N-161	5.5	"Midcat"]	TRA-N-161	5.5	New interconnection between Spain and France - Name TBD	Enagas Transporte, S.A.U.
3.3	TRA-N-252	S.5	0	TRA-N-252	5.5	New Interconnection between France and Spain - Name TBD	TIGF
				TRA-N-727	5.5	Iberian-French corridor: Eastern Axis - Midcat Project	Enagás Transporte, S.A.U.
	TRA-N-256	5.5	0	TRA-N-256	5.5 - 5.8	Iberian-French corridor: Eastern Axis-Midcat Project	GRTgaz and TIGF
5.6			Reinforcement of the French network from South to North - Reverse flow from France to Germany at				
2.0	TRA-N-047	5.6	Obergalibach/Medelsheim Interconnection point (FR)	TRA-N-047	5.6	Reverse capacity from France to Germany at Obergailbach	GRTgaz
	TRA-N-043	5.7.1	5.7.1 Val de Saône pipeline between Etrez and Voisines (FR)	TRA-F-43	5.7	Val de Saône project	GRTgaz
5.7	TRA-N-331	5.7.2	5.7.2 Gascogne-Midi pipeline (FR)	TRA-F-331	5.7.2	Gascogne Midi	TIGF - GRTgaz
	TRA-N-391	5.7,2	Gascogne-Midi: adaptation of stations in Cruzy and St Martin	TRA-F-391	5.7	Gascogne-Midi: adaptation of stations in Cruzy and St Martin	GRTgaz
						*	
				1			
5.10	TRA-N-208	5.10	Reverse flow interconnection on TENP pipeline in Germany	TRA-F-208	510	Reverse How TENP Germany	Fluxys TENP GmbH & Open Grid Europe GmbH

support to the North West market and bidirectional cross-border flows

Snam Rete Gas S.p.A.

Reverse flow interconnection between Italy and Switzerland at Passo Gries interconnection point.

Connection of Mail to to the European Gas network — piceline interconnection with Italy at Gela and/or offshore Robinston UNS Storage and Regalization Unit (TSRU).

Gas Ripetine connecting Algeria to Italy (via Sardinia) [currently known as "Galsi" pipetine]. LNG-N-211 and/or TRA-N-031 TRA-N-012 Connection of Malta to the European Gas Network - Pipelines GALSI Pipeline Project TRA-N-031 TRA-N-012 Office of the Prime Minister (Energy) Galsi S.p.A. 5.20 6. NSI East Gas

TRA-F-214

2nd PCI List	2nd PCI List - ENTSOG CODE	had not the not come	A APRILLA PRESIDENTIAL				
ZNO PCI LIST	Znd PCI OR - ENISOR CODE	Zna PCI USt - PCI CODE	6.1.1 Poland — Czech Republic Interconnector [currently known as "Stork II"] between Libhoší — Haf	TYNDP 2017 - ENTSOG CODE	TYNDP 2017 - PCI CODE	TYNDP 2017 - PROJECT NAME	TYNDP 2017 - PROMOTER
	TRA-N-136	0		TRA-N-136	6.1.1. 6.1.12	Delevis Cont. Dec. at Cont. Cont.	lucrease .
6.1	TRA-N-273	0	(CZ/PL) – Kędzierzyn (PL)	TRA-N-136	6.1.1, 6.1.2	Poland-Czech Republic Interconnection (CZ)	NET4GAS, s.r.o.
	TRA-N-247	6.1.1	10	TRA-N-2/3	6.1.2	Poland - Czech Republic interconnection (PL section)  North - South Gas Corridor in Western Poland	GAZ-SYSTEM S.A.
	TRA-N-190	6.2.1	6.2.1 Poland - Slovakia interconnector	TRA-N-247	6.2.1		
6.2	TRA-N-275	6,2,2	6.2.2 Yransmission infrastructure projects between Rembelszczyzna and Strachocina (PL)			Poland - Slovakia Interconnection	eustream, a.s.
0.2	TRA-N-245	6.2.3	6.2.3 Transmission infrastructure projects between Remeiszczyzna and strachocina (PL)	TRA-N-275 TRA-N-245	6.2.1, 6.2.3 6.2.2	Poland - Slovakja Interconnection (PL section)	GAZ-SYSTEM S.A.
	IIA-N-243	0.2.3	PCI Bidirectional Austrian — Czech interconnection (BACI) between Baumgarten (AT) — Reinthal (CZ/AT) —	1 KA-N-245	6.2.2	North - South Gas Corridor in Eastern Poland	GAZ-SYSTEM S.A.
6.4	TRA-N-021	6.4	Brečlav (CZ)	TRA-N-021		Children and the section of the sect	GAS CONNECT AUSTRIA GmbH
u	TRA-N-133	6.4	0	TRA-N-133	6.4	Bidirectional Austrian-Czech Interconnector (BACI, formerly LBL project)  Bidirectional Austrian Czech Interconnection (BACI)	NET4GAS, s.r.o.
	LNG-N-082	6.5.1.	6.5.1 LNG Phased development of a LNG terminal in Krk (HR)	LNG-N-082	6.5.1.	LNG terminal Krk	
6.5	TRA-N-075	6.5.2.	6.5.2 Gas pipeline Zlobin – Bosiljevo – Sisak – Kozarac – Slobodnica (HR)	TRA-N-075	6.5.2.		LNG Hrvatska d.o.o. za poslovanje ukapljenim prirodnim pli
	110414-073	0.3.2.	6.8.1 Interconnection Greece - Bulgaria [currently known as IGB] between Komotini (EL) - Stara Zagora	1/04-14-075	10.5.2.	LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac	Plinacro Ltd :
	TRA-N-378	6.8.1	(BG) (BG)	TRA-F-378	6.8.1	D (000)	
	TRA-N-378	6.8.1	(Ba)	I KA-1-378	6.8.1	Interconnector Greece-Bulgaria (IGB Project)	ICGB a.d.
	TRA-N-298	6.8.2.	6.8.2 Necessary rehabilitation, modernization and expansion of the Bulgarian transmission system	TRA-N-298	6.8.2.		
6.8	11W-W-296	6.8.2.	6.8.2 Necessary renabilitation, modernization and expansion of the Bulgarian transmission system	KA-N-298	b.8.2.	Rehabilitation, Modernization and Expansion of the National Transmission Sy	Bulgartransgaz EAD
	TRA-N-379	6.8.4	6.8.4 Gas pipeline aiming at expanding the capacity on the interconnection of the Northern ring of the Bulgarian and Romanian gas transmission networks	TRA-N-379	6.8.4	L	
	LNG-N-062	6.9.1	6.9.1 LNG terminal in Northern Greece	TRA-N-379 LNG-N-062	6.9.1	A project for the construction of a gas pipeline (pipelines) aiming at exp	Bulgartransgaz EAD
6.9	TRA-N-063	6,9,1	6.9.1 LNG terminal in Northern Greece	TRA-N-063		LNG terminal in northern Greece / Alexandroupolis - LNG Section	Gastrade S.A.
0.9	TRA-N-128	6.9.3	D CONTROL OF THE CONT		6.9.1	LNG terminal in northern Greece / Alexandroupolis - Pipeline Section	Gastrade S.A.
6.10	TRA-N-128	6.9.3	6.9.3 Gas compressor station at Kipi (EL)	TRA-N-128	6.9.3, 7.1.2 and 7.4.1	Compressor Station Kipi	DESFA S.A.
6.10	TRA-N-137	6.10.	PCI Gas interconnection Bulgaria — Serbia (currently known as "IBS")	TRA-F-137	6.10.	Interconnection Bulgaria - Serbia	Ministry of Energy
6.15	TRA-N-139	1	interconnection of the national transmission system with the international gas transmission pipelines and				
	TRA-N-159	6.15	reverse flow at Isaccea (RO) Previously 6.15.1 and 6.15.2	TRA-N-139	6.15	Interconnection of the national transmission system with the international	SNTGN Transgaz SA
6.18	UGS-N-138	6.18	Adriatica pipeline (IT)	TRA-N-007	6.18	Development for new import from the South (Adriatica Line)	Snam Rete Gas S.p.A.
		6.20.2	6.20.2 Chiren UGS expansion	UGS-N-138	6.20.2.	UGS Chiren Expansion	Bulgartransgaz EAD
6.20	UGS-N-233	6.20.4	6.20.4 Depomures storage in Romania	UGS-N-233	6.20.4	Depomures	Engle Romania SA
	UGS-N-366	6.20,5	6.20.5 New underground gas storage in Romania	UGS-N-366	6.20.5	New undergound gas storage in Romania	Societatea Națională de Gaze Naturale ROMGAZ S.A.
	UGS-N-371	6.20.6	6.20.6 Sarmasel underground gas storage in Romania	UGS-N-371	6.20.6	Sarmasel undeground gas storage in Romania	Societatea Națională de Gaze Naturale ROMGAZ S.A.
					1	1	
6.23	TRA-N-112	6.23	Hungary – Słovenia interconnection (Nagykanizsu — Tornyiszentmiklós (HU) — Lendava (SI) – Kidričevo)	TRA-N-112	6.23	R15/1 Pince - Lendava - Kidričevo	Plinovodí d.o.o.
	TRA-N-325	5.23	0	TRA-N-325	6.23	Slovenian-Hungarian interconnector	FGSZ Ltd.
					1		
	TRA-N-126	6.24.1	6.24.1 Romanian-Hungarian reverse flow: Hungarian section 1st stage CS at Csanádpaiota (1st phase)	TRA-N-286	6.24.1	Romanian-Hungarian reverse flow Hungarian section 1st stage	FGSZ Ltd.
			6.24.2 Development on the Romanian territory of the National Gas Transmission System on the Bulgaria				
			Romania Hungary Austria Corridor transmission pipeline Podişor Horia GMS and 3 new				
	TRA-N-358	5.24.2	compressor stations (Jupa, Bibești and Podișor) (1st phase)	TRA-N-358	Stage I: 6.24.2 Stage II: 6.24.7	Development on the Romanian territory of the NTS on the Bulgaria - Romania	SNTGN Transgaz S.A.
	TRA-N-423	5.24.3	6.24.3 GCA Mosonmagyarovar CS (development on the Austrian side) (1st phase)	TRA-N-423	6.24,3	GCA Mosonmagyaróvár	GAS CONNECT AUSTRIA GMbH '''
	TRA-N-018	6.24,4	6.24.4 Városföld-Ercsi- Győr pipeline (HU) (2nd phase)	TRA-N-018	6.24.4.	Városföld-Ercsi-Győr	FGSZ Ltd.
6.24	TRA-N-061	5.24.5	6.24.5 Ercsi-Százhalombatta pipeline (HU) {2nd phase}	TRA-N-061	6.24.5	Ercsi-Szazhalombatta	FGSZ Ltd.
	TRA-N-123	6.24.6	6.24.5 Városfőld compressor statíon (HU) (2nd phase)	TRA-N-123	6.24.6.	Városfóld CS	FGSZ Ltd.
	1		6.24.2 Development on the Romanian territory of the National Gas Transmission System on the Bulgaria				
	1	1	- Romania - Hungary - Austria Corridor - transmission pipeline Podi sor - Horia GMS and 3 new				1
	TRA-N-358	6.24.2	compressor stations (Jupa, Bibești and Podișor) (1st phase)	TRA-N-358	Stage I: 6.24.2 Stage II: 6.24.7	Development on the Romanian territory of the NTS on the Bulgaria - Romania	SNTGN Transgaz S.A.
			6.24.9 Romanian-Hungarian reverse flow: Hungarian section 2nd stage Csanádpalota or Algyő (HU)(2nd				
	TRA-N-377	6.24.9	phase)	TRA-N-377	6.24.9.	Romanian-Hungarian reverse flow Hungarian section 2nd stage	FGSZ Ltd.
	TRA-N-362	6.24.8	6.24.8 Black Sea shore — Podişor (RO) for taking over the Black sea gas	TRA-N-362	6.24.8	Development on the Romanian territory of the Southern Transmission Corridor	SNTGN Transgaz SA
	TRA-N-654	6.25.1	6.25.1 Pipeline system from Bulgaria to Slovakia (currently known as "Eastring")	TRA-N-654	6.25.1	Eastring - Bulgaria	Bulgartransgaz EAD
	TRA-N-655	6.25.1	0	TRA-N-655	6.25.1	Eastring - Romania	SNTGN Transgaz SA
	TRA-N-656	6.25.1	Eastring	TRA-N-656	Not Defined yet	Eastring - Hungary	FGSZ Ltd.
	TRA-N-528	6.25.1	lo .	TRA-N-628	6.25.1	Eastring - Slovakia	Eastring B.V.
	TRA-N-631	6.25.2	5.25.2 Pipeline system from Greece to Austria (currently known as "Tesia")	TRA-N-631	6.25.2	Greek part of Tesla project	DESFA S.A.
	TRA-N-582	6.25.2	io .	TRA-N-582	TRA-N-582	Macedonian part of Tesla project	GA-MA joint stock company Skopje
			pipeline system from Greece to Austria (currently known as TESCA)				
	TRA-N-585	6.25.2	oipeline system from Greece to Austria (currently known as TESLA)	TRA-N-585	6.25.2.	Hungarian section of Tesla project	FGS7 Ltd
6.25	100-11-363	V-6	pipeline system from Greece to Austria (correnity mown as TESA)	Inversor	V. E	Louise and record of residencies	Park tout
			6.24.2 Development on the Romanian territory of the National Gas Transmission System on the Bulgaria				
	1	1	Romania — Hungary — Austria Corridor — transmission pipeline Podisor — Horia GMS and 3 new				1
	TRA-N-358	6.24.2			1	L	L
	TRA-N-358 TRA-N-592	6.24.2 6.25.4	compressor stations (Jupa, Bibești and Podisor) (1st phase)  6.25.4 infrastructure to allow the development of the Bulgarian gas hub	TRA-N-358 TRA-N-592	Stage I: 6.24.2 Stage II: 6.24.7	Development on the Romanian territory of the NTS on the Bulgaria – Romania Looping CS Valchi Dol - Line valve Novi Iskar	SNTGN Transgaz S.A. Bulgartransgaz EAD

48	TRA.N.503	A 25 A	Marca Occabone des cipalina feinalina sotto a lacato of 202 kg 044 kg)	TO A AL END	A 20 A		245
2 4	COCALANI.	0.23.4		15A-N-093	B, 25,4	Varna-Oryanovo gas pipeline	Bulgartransgaz EAU
45	1KA-N-594	6.25.4	Construction of a looping CS Provadia-Rupcha village, jpipeline with a length of 383 km 50 km≈	TRA-N-594	6.25.4	Construction of a Looping CS Provadia – Rupcha village	Bulgartransgaz EAD
20	TRA-N-094	6.26.2	6.26.2 CS Kidričevo, 2nd phase of upgrade (SI)	TRA-N-094	6.26.2	CS Kidničevo, 2nd phase of upgrade	Plinovodi d.o.o.
51	TRA-N-334	5.26.3	6.26.3 Compressor stations at the Croatian gas transmission system	TRA-F-334	6.24.3	Compressor station 1 at the Croatian gas transmission system	Pinacro Ltd
	5.25 TRA-N-361	6.26.4	6.26.4 GCA 2014/04 Murfeld (AT)	TRA-N-361	6.26.4	GCA 2015/08: Entry/Exit Murfeld	GAS CONNECT AUSTRIA GribH
		6.26.5	6.26.5 Upgrade of Murfeld/CerSak interconnection (AT-SI)	TRA-N-389	6.26.5	Upgrade of Murfeld/Ceršak interconnection (M1/3 Interconnection Ceršak)	Rinawadi da.o.
z	TRA-N-390	6.26.5	6.26.5 Upgrade of Rogatec interconnection	TRA-N-390	6.26.6	Ungrade of Rosates interconnection (M1A/1 Interconnection Rosates)	Pinowniidoo
55	TRA-N-086	6.26.1	Interconnession Croatia - Slovenia (Lucko - Zabok - Rogatec)	TRA-F-86	6.26.1	Interconnection Croatia/Slovenia (Lučko - Zabok - Rosatec)	Pinacro Itd
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A DIEZ ON		OF THE POTTER - POTTER		TYNDP 2017 - ENTSOG CODE TYNDP 2017 - PCI CODE	NYNDP 2017 - PCI CODE	TYNDP 2017 - PROJECT MAME	TYNDP 2017 - PROMOTER
			7.1.1 task pipeline to the EU from Liftmentstan and Azerbaijan, via decripa and Lifthey, (currently known lat the combination of "Transal Parising" Shelling "Everagion of the South-Decrease Desirue".				
7	TRA-F-221 (TANAP)	7.1.1	(SCP-FRX) and "Trans Anatolian Natural Gas Phother" (TANAP)	TRA.5.233	231	TANAB. Trans Assessing Matrices Con Bineline Becker	COCAD (The State Oil Consesses of the Anadralian Boundalla)
			CCD EVX - interests of the avieting stratifies are transmissing which the frequency of Francis are transmission	-		AND THE PROPERTY OF THE PROPER	Control I i is a rate of company of the Acet capal reputation
2	TRA-F-395	7.1.1	with thoushout capacity of 5 Rem/a by 2022	TRA.N.1148	*/Zz	47728	*/***
m	TRA-N-339	733	Trans, Carolan Bheline	TRA M 230	V/N®	Trans. Darian	March Caroling Nonline Comment 144
7	TRA-N-128	603	5 O Si Che commence en since at Vini (E1)	TBA 10 100	200040-044	- 171	Washington Themas Company and
,	2.1		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	10404-128	C.7.2, 7.1.2 dR 7.41.1	COMPRESSOR STATION NO	UESPA S.H.
	TRA-F-051	713	C.L.S des pipellie from Greece to raily de Amarka and the Monaco Sea journently known as Firsts-Admatic Popeline* (TADI)	T9A.E.051	7 + 3	Transfer Mainten	Trans. Addition Disselson AC
. 4	0.0 2 401		The state of the s	200 1401		Halls Author ripente	Trains Moriague Ciperine Ma
	INA-N-DIO	1.1.4	7.1.4 test piperine from Greece to Italy journerity known as "Posedon Pipeline".	TRA-N-010	7.1.4	Poseidon Pipeline	Natural Gas Submarine Interconnector Greece-Italy Poseidon S.A.
	TRA-N-512	7.1.6	7.1.6 Meterine and Segulating Stations for the connection of the Greek transmission system with TAP	TR6-N-941	932	Meterine and Resulptine station at Nea Messimuria	OPERED S
			7.1.6 Meterine and Regulatine Stations for the connection of the Greek transmission sestem with TAP				
	TRA-N-512	7.1.6	INTERNATIONS & LIGHT CONTRACTOR OF THE PROPERTY OF THE PROPERT	TRA-N-940	7.1.6	Meterine and Regulating station at Komotini	DESTASA
	TPA.M.OTA	717	7.4.7 Promotivi - Therecards alreading (F1.1	TDA N. OAA	2.1.2		Control of the Contro
	tron and	(40)	V.1.7 Actionis — Hespitale physics [c.f.	108-N-024	(1.1.)	Komotini-Ilizsprotia pipeline	UESFA S.A.
6	7.5 TRA-N-330	7.3.1	[7.3.1 Pipeline from offshore Cyprus to Greece mainland via Crete [currently known as "EastMed Pipeline"]	TR4-N-330	7.3.3	East/Med Pipeline	Natural Gas Submarine Interconnector Greece-Italy Poseidon S.A.
			7.3.2 Removing internal bottlenecks in Cyprus to end isolation and to allow for the transmission of gas				
70	N/A	7.3.2	from the Eastern Mediterranean region	TRA-N-1146	#N/A	Cyprus2Eu	Cyprus Ministry of Energy
	7.4 TRA-N-128	6.9.3	6.9.3 Gas compressor station at Kipi (EL)	TRA-N-128	6.9.3, 7.1.2 and 7.4.1	Compressor Station Kipi	DESFASA.
		7.4.2	7.4.2 Interconnector between Turkey and Bulgaria (currently known as "ITB")	TRA-N-140	7.4.2.	Interconnection Turkey-Bulgaria	Bulgartransgaz EAD
8. BEMIP							
No 2nd PCI Ust	CILLS 2nd PCI List - ENISOG CODE	T:	Zwd PCI List - PCI CODE   Zwd PCI List - DESCRIPTION   TY	TYNDP 2017 - ENTSOG CODE	TYNDP 2017 - PCI CODE	TYNDP 2017 - PROJECT NAME	TYNDP 2017 - PROMOTER
7	TRA-N-023	8.1.1	8.1.1 Interconnector between Estonia and Finland (currently known as "Baiticconnector") and	TRA-N-928	81.1	Balticconnector Finnish part	Baltic Connector Oy
2	RA-N-072	8.1.1	Q	TRA-N-895	8.1.1	Balticconnector	Elering AS
m	LNG-N-079	8.1.2.2	8.1.2.2 Paldiski LNG (EE)	LNG-N-079	8.1.2.2	Paldiski LNG Terminal	Bath Gaas pic
-	LNG-N-146	8.1.2.3	(8.1.2.3 Tallinn UNG (EE)	LNG-N-962	81.23	Yallinn LNG	Vopak E.O.S. AS / Vopak LNG Holdings B.V/, Port of Tallinn AS
5	TRA-N-342	8.2.1	8.2.1 Enhancement of Latvia Lithuania Interconnection	TRA-N-342	8.2.1	Enhancement of Latvia-Lithuania interconnection (Lithuania's part)	AB Amber Grid
9	F TRA-N-382	8.21		TRA-N-382	8.2.1	Enhancement of Latvia-Lithuania interconnection (Latvian part)	JSC "Latvijas Gaze"
,	TRA-N-084	8.2.2	8.2.2 Enhancement of Estonia — Latvia interconnection	TRA-N-915	8.2.2	Enhancement of Estonia-Latvia interconnection	Elering AS
80	UGS-N-374	8.2.4	8.2.4 Enhancement of Inčukalns Underground Gas Storage (LV)	UGS-N-374	8.2.4	Enhancement of Incukains UGS	JSC "Latvijas Gaze"
	o 2 TRA-N-271	88	Poland-Denmark interconnection [currently known as "Baltic Pipe"]	TRA-N-271	8.3	Poland - Denmark interconnection (Baltic Pipe) - PL section	GAZ-SYSTEM S.A.
		8.3	S.	TRA-N-428	[8.3	((Mirror) Battic Pipe	Energinet.dk
	R 3 TRA-N-212	8.5	Poland-Lithuania interconnection [currently known as "GIPL"]	TRA-N-212	8.5	Gas Interconnection Poland-Lithuania (GIPL) - PL section	GAZ-SYSTEM S.A.
12		8.5	0	TRA-N-341	8.5	Gas Interconnection Poland-Lithuania (GIPL) (Lithuania's section)	AB Amber Grid
	8.4 LNG-N-032	8.6	Sothenburg LNG terminal in Sweden	CEU-N-9N1	98	Project GOALNG 1NG terminal Gothenburg	Swedpeas AB