

INT NC amendment for Gas Quality

Joint workshop ENTSOG-Energy Community

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Introduction

Madrid forum conclusions on gas quality harmonisation

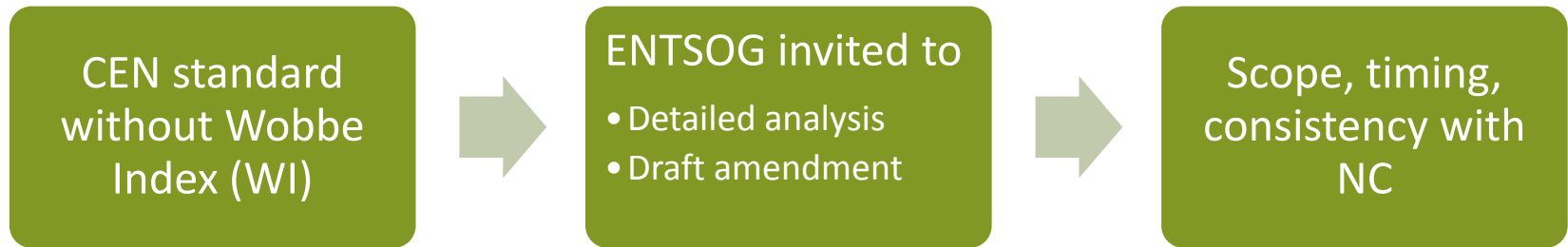
- > *Recognising the lack of support, EC announces it will not to pursue legally binding provisions for the CEN Standard EN 16726.*
- > *Nevertheless, the Forum invites ENTSG to finalise its assessment of the effects of the inclusion of the CEN Standard EN 16726 into the Network Code on Interoperability and Data Exchange Rules by the end of 2016.*
- > *The Forum confirms its support for CEN to carry on the work on finding an agreement on a band for the Wobbe Index, elaborating on the possibility of regional bands, to be included in an updated CEN standard while ensuring the integrity of the existing standard and calls on market participants to be constructively engaged in this process.*
- > *The Commission will reconsider further harmonisation activities in light of the outcome of the CEN revision work.*

In order to complete the detailed analysis, ENTSG will keep 2nd consultation open and the planned workshop on 16 November will take place.

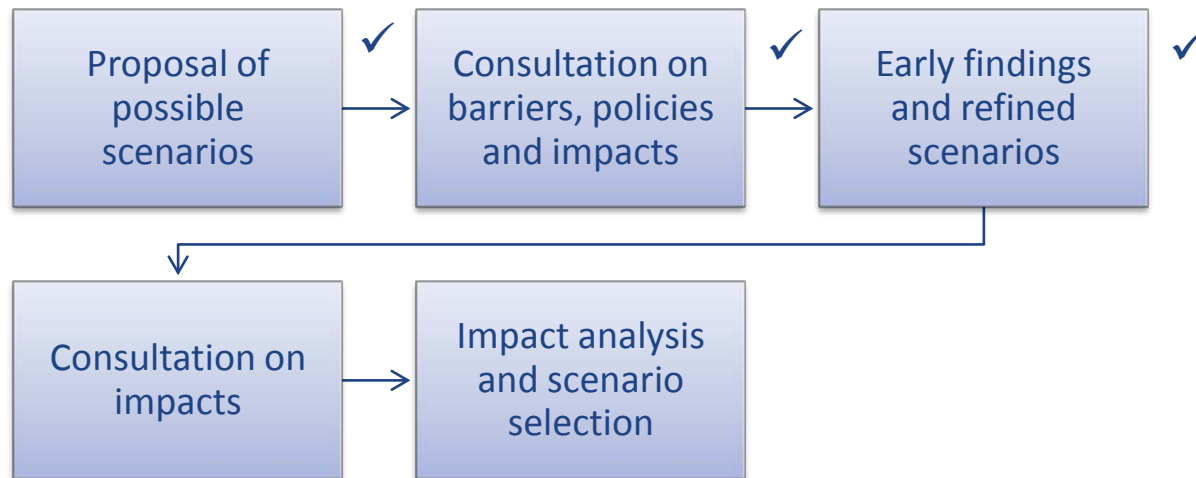


The ENTSOG process

Background



Detailed analysis on the whole EU gas value chain



INT NC: Cross-border trade restrictions

Article 15 Managing cross-border trade restrictions* due to gas quality differences

**Restriction is understood as a lack of compliance of the gas with the specs of the receiving country resulting in a reduction of flows at the IP*

1. TSOs shall cooperate to avoid restrictions to trade due to gas quality. Standard operations may include swapping and co-mingling.
2. When a restriction cannot be avoided by TSOs and is recognised by NRAs, TSOs may be required to within 12 months:
 1. Develop options without changing specs (e.g. flow commitments, gas treatment).
 2. Cost benefit analysis with breakdown among parties
 3. Estimate implementation time
 4. Conduct a public consultation
 5. Submit a joint proposal for approval of concerned authorities
3. NRAs shall consult each other with the view to have a coordinated decision based on mutual agreement

If gas quality is identified as a restriction for cross-border trade it's managed locally by the parties involved.



EN16726:2015



Parameter	Unit	Min	Max
Relative density	-	0,555	0,700
Total sulfur	mg/m ³	-	20 (30*)
H ₂ S + COS	mg/m ³	-	5
Mercaptan sulfur	mg/m ³	-	6
Oxygen	mol/mol	-	10 ppm to 1%
CO ₂	mol/mol	-	2.5% to 4%
HC dew point	°C	-	-2
Water dew point	°C	-	-8
Methane number	-	65	-

This European standard specifies gas quality characteristics, parameters and their limits, for gases classified as group H that are to be transmitted, injected into and from storages, distributed and utilized.



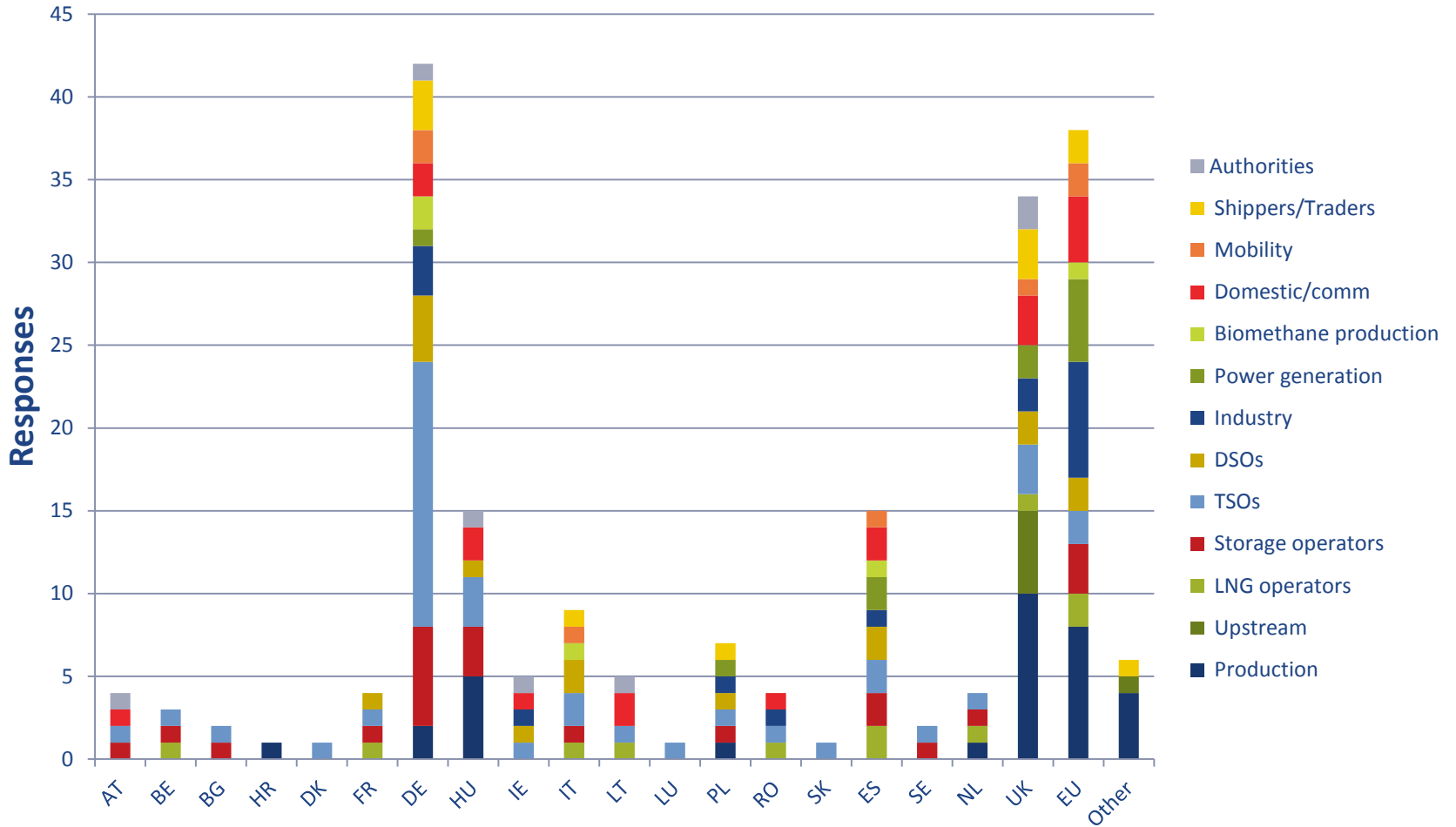
1st Public consultation results



Participants



Segment representation per country

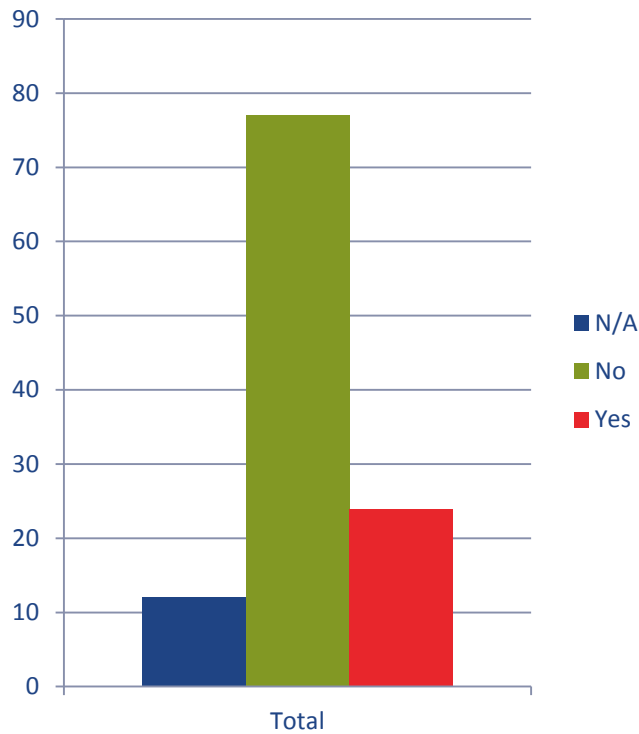




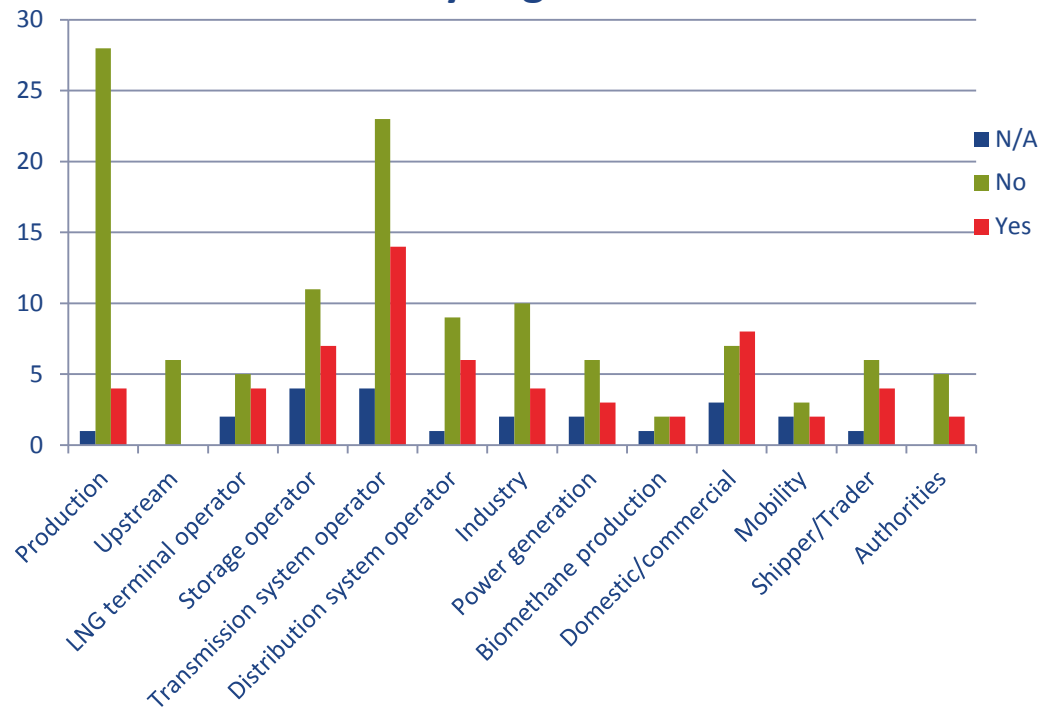
Public consultation input: barriers

Are you aware of any cross-border trade barrier related to gas quality at interconnection points or EU import points?

Overall



By Segment





Public consultation input: Impacts

Overview of reported potential impacts per country and parameter

Parameter	AT	BE	DK	DE	HU	IE	IT	LT	NL	PL	ES	UK	NO	RU
Relative density					P									
Total sulfur	S	I		M B	P		I D		L	P		L		
H2S					P									
Mercaptan sulfur														
O2		S	B	B	P					P		PL		P
CO2	S			B	P						I	P	P	
HC dew point					P					P				
Water dew point	S				P					P				
Methane number			P											
Unspecified parameters								F						

S: Storage
 I: Imports
 B: Biomethane
 M: Mobility
 D: Distribution
 L: LNG
 P: Production
 F: gas as Feedstock

Only countries reporting specific impacts are included



Public consultation input: A-deviations

Summary of potential conflicts of the standard with national legislation

Parameter	AT	BE	HR	DK	DE*	FR	HU*	IE	IT	LT	NL*	PL	ES	UK
Relative density	Grey	Grey	Grey	Grey	Grey	Grey	Yellow	Grey	Yellow	Grey	Yellow	Grey	Grey	Grey
Total sulfur	Red	Yellow	Red	Grey	Red	Yellow	Grey	Grey	Yellow	Yellow	Diagonal	Yellow	Yellow	Yellow
H2S	Yellow	Yellow	Grey	Grey	Grey	Yellow	Yellow	Grey	Grey	Yellow	Grey	Yellow	Grey	Grey
Mercaptan sulfur	Yellow	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Yellow	Grey	Yellow	Grey	Yellow
O2	Grey	Grey	Yellow	Diagonal	Yellow	Grey	Yellow	Grey	Yellow	Diagonal	Diagonal	Yellow	Grey	Yellow
CO2	Red	Grey	Yellow	Grey	Grey	Grey	Yellow	Grey	Yellow	Red	Red	Grey	Grey	Yellow
HC dew point	Yellow	Grey	Grey	Grey	Grey	Grey	Yellow	Grey	Grey	Grey	Diagonal	Yellow	Yellow	Yellow
Water dew point	Yellow	Grey	Grey	Grey	Grey	Yellow	Yellow	Grey	Red	Red	Grey	Yellow	Yellow	Yellow
Methane number	Grey	Grey	Grey	Yellow	Grey	Grey	Grey	Grey	Grey	Grey	Yellow	Grey	Yellow	Grey

Legislation is more strict

Legislation is less strict or not specific



Public consultation input: summary

- > The existence of barriers is questioned by producers and traders while among operators and users there are divided views, with many seeing differences in specs across borders as a risk.
- > There are many segments and Member States which could be adversely impacted by a strict application of the CEN standard.
- > Many respondents questioned the value of a gas quality standard without Wobbe Index and several challenged the adequacy of the requirements currently included.
- > Scenarios were ranked in order of preference by respondents as follows:
 1. “Voluntary adoption” (53 stakeholders put this as their first choice)
 2. “Whole chain” (30 stakeholders put this as their first choice)
 3. “IPs only” (10 stakeholders put this as their first choice)
 4. “Transmission networks” was the least supported and considered as the least feasible.(4 stakeholders put this as their first choice)
- > A number of issues (scope, responsibilities, off-spec gas, flexibility, subsidiarity, A-Deviations, standard revision management) require further clarity before a decision is made on the scenarios.
- > Many stakeholders expected no benefit from gas quality harmonisation while others believed that it would bring more certainty
- > Costs and timing have been detailed only in a few cases.

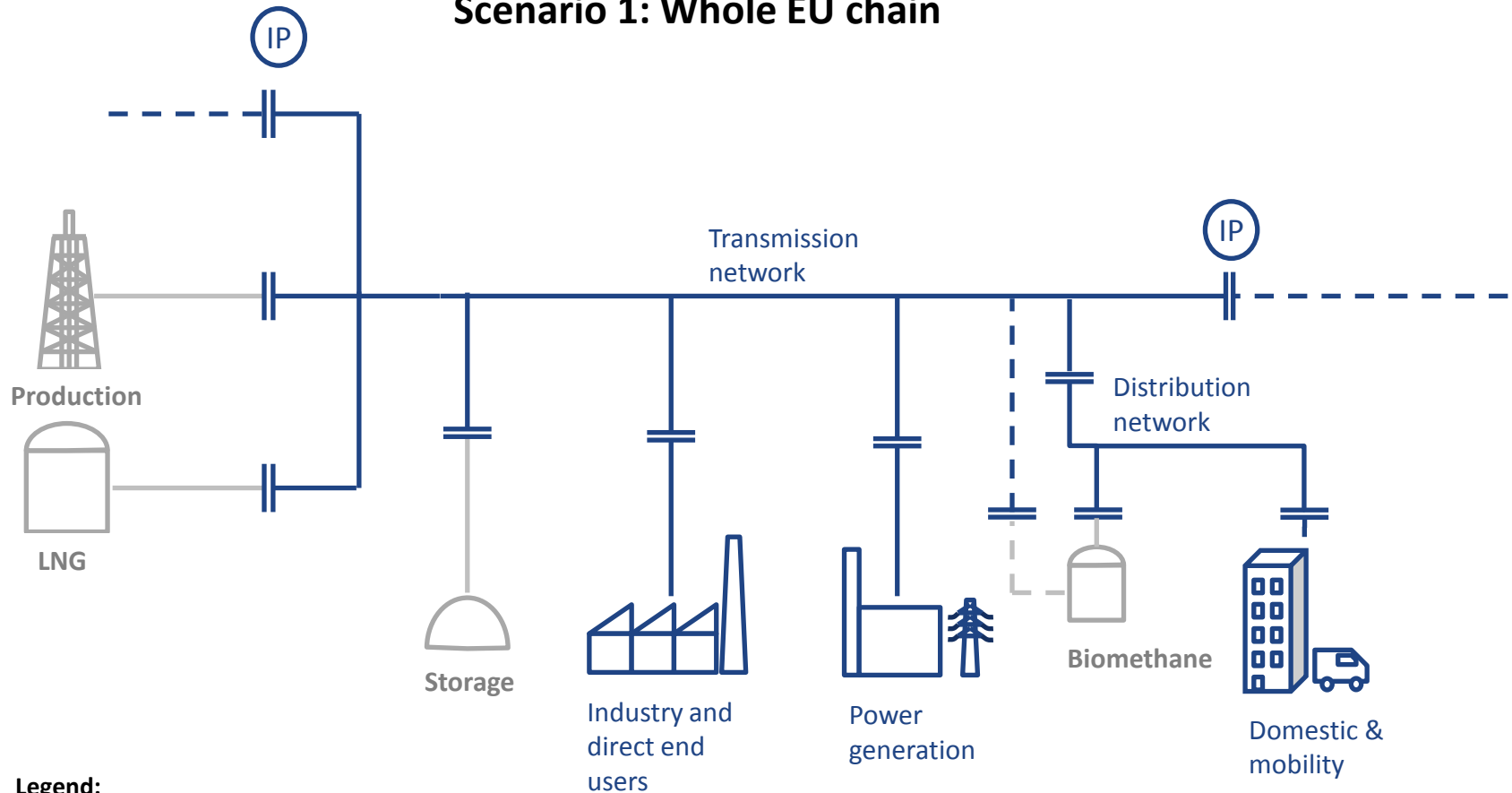


Next steps



Refined scenarios for 2nd consultation

Scenario 1: Whole EU chain



Legend:

In scope

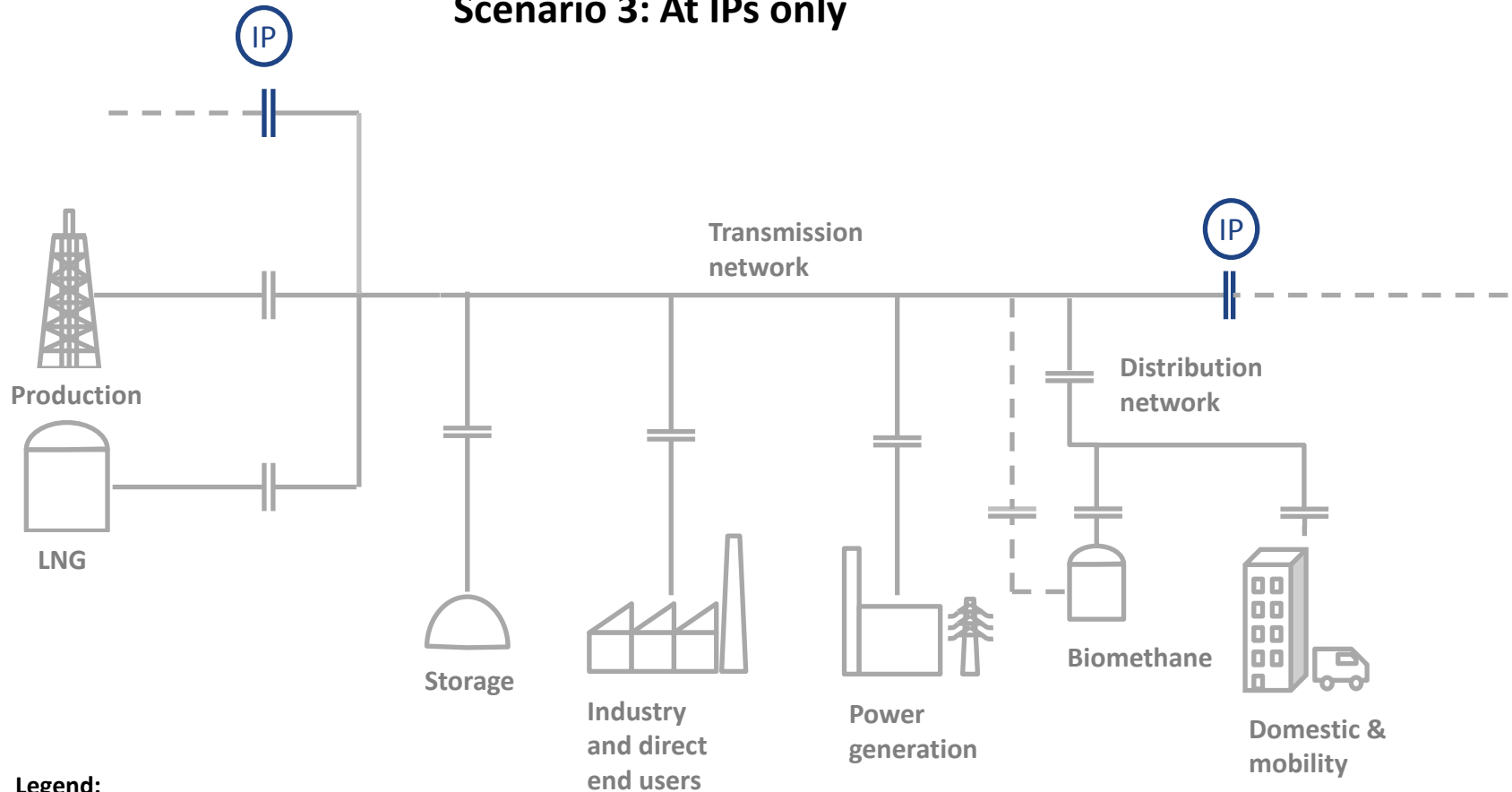
Out of scope

Description: parties injecting gas in gas networks need to ensure compliance of the gas with the CEN standard.



Refined scenarios for 2nd consultation

Scenario 3: At IPs only



Legend:

In scope

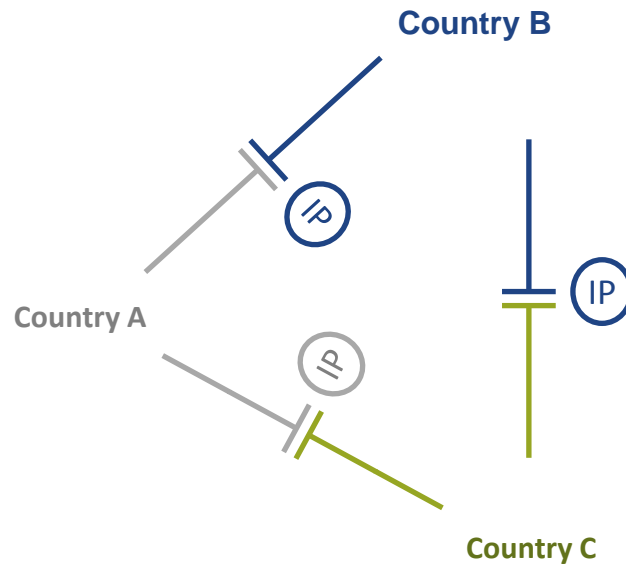
Out of scope

Description: only when a restriction is found, TSOs will analyse, via Article 15, adoption of EN16726:2015 as potential solution.



Refined scenarios for 2nd consultation

Scenario 4: Voluntary adoption



Legend:

EN 16726

National spec A

National spec C

Description: This scenario represents the status quo,

If there is any cross-border trade restriction due to gas quality, Article 15 will be applied.



Next steps



2nd Public consultation (open until 21st October) questions:

- Scenario preference
- Scenario assessment (impacts, benefits/savings, costs, implementation time, feasibility).
- Possible adjustments to the refined scenarios proposed by ENTSOG
- Potential improvements of the CEN standard

Public workshop on 16 November

- Results of 2nd public consultation
- Draft conclusions of the detailed analysis

Detailed analysis to be published end of 2016

The impact of gas quality standards

Safety

Is safety covered in the standard?

Obligations in NC without prejudice to MS competence

Security of supply

Diverse supplies, diverse qualities

Are gas quality specs limiting existing/new sources?

Sustainability

Are specs ready for renewable gases?

Are they consistent with environmental requirements?

Competitiveness

Different users, different needs

Is gas treatment proportionate/affordable?

Which gas quality variations could be expected at user side?



Gas quality and interoperability

- Is the application of the standard always the optimal solution for every restriction?
- To which extent can end users be impacted by NC provisions?
- Is quality monitoring short/long term part of the solution?
- Is the network code as it is enough?



Thank You for Your Attention

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