



european network  
of transmission system operators  
for gas

# **CBA methodology**

## **Scoping document for the Informal Public Consultation**

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# Structure of the Scoping Document

1. Background
2. Objective of the informal consultation
3. Approach to CBA
4. CBA methodology: objectives, main principles, Interactions with other CBAs
5. Challenges for the CBA development
6. CBA Development process: Informal/Formal Public Consultation, SJWSs
7. Document management
8. Responses to consultation
9. Annexes: A- TYNDP 2013-2022, Methodology Chapter; B- Glossary

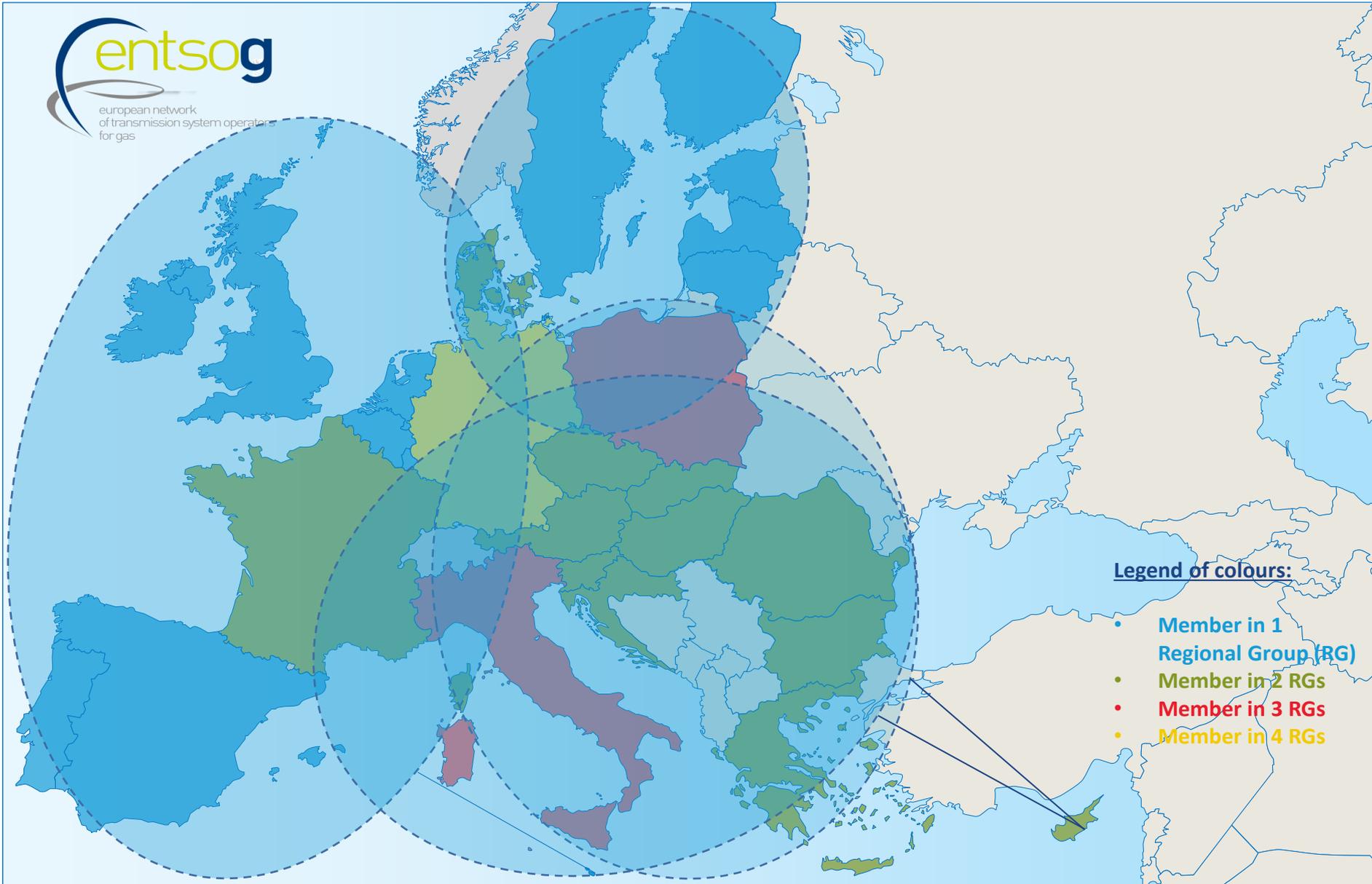
# Background

## ***Regulation establishes rules for identifying PCIs***

- > It defines 12 European energy priority corridors and establishes Regional Groups to assess PCI candidates project
- > Four corridors have been identified for gas projects: NSI-West Gas, NSI East Gas, Baltic Energy Market Interconnection Plan in Gas (BEMIP), Southern Gas Corridor
- > Structure of the Regional Groups:
  - EC, MSs, NRAs, TSOs, ACER, ENTSOs;
  - Project promoters could be invited when appropriate;
  - 3rd party representatives invited based on consensus
- > The EC shall adopt the Union-wide list through a delegated act
- > The first Union wide list-based on external methodology
- > The list is established every two years
- > For the following list: selection based on CBA methodology and inclusion of projects in TYNDP

*The Regulation is supposed to enter into force in May 2013*

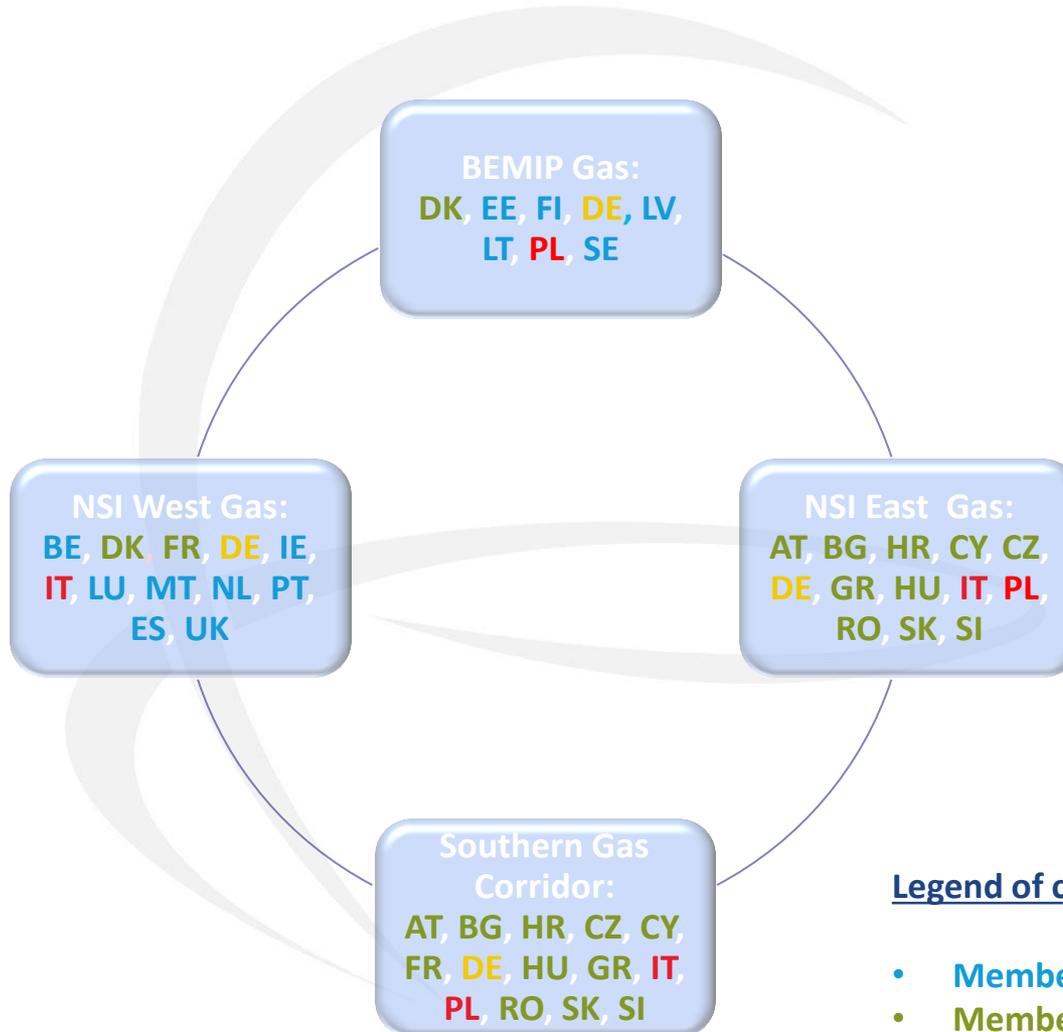
# Priority Gas Corridors – Regional Groups



## Legend of colours:

- Member in 1 Regional Group (RG)
- Member in 2 RGs
- Member in 3 RGs
- Member in 4 RGs

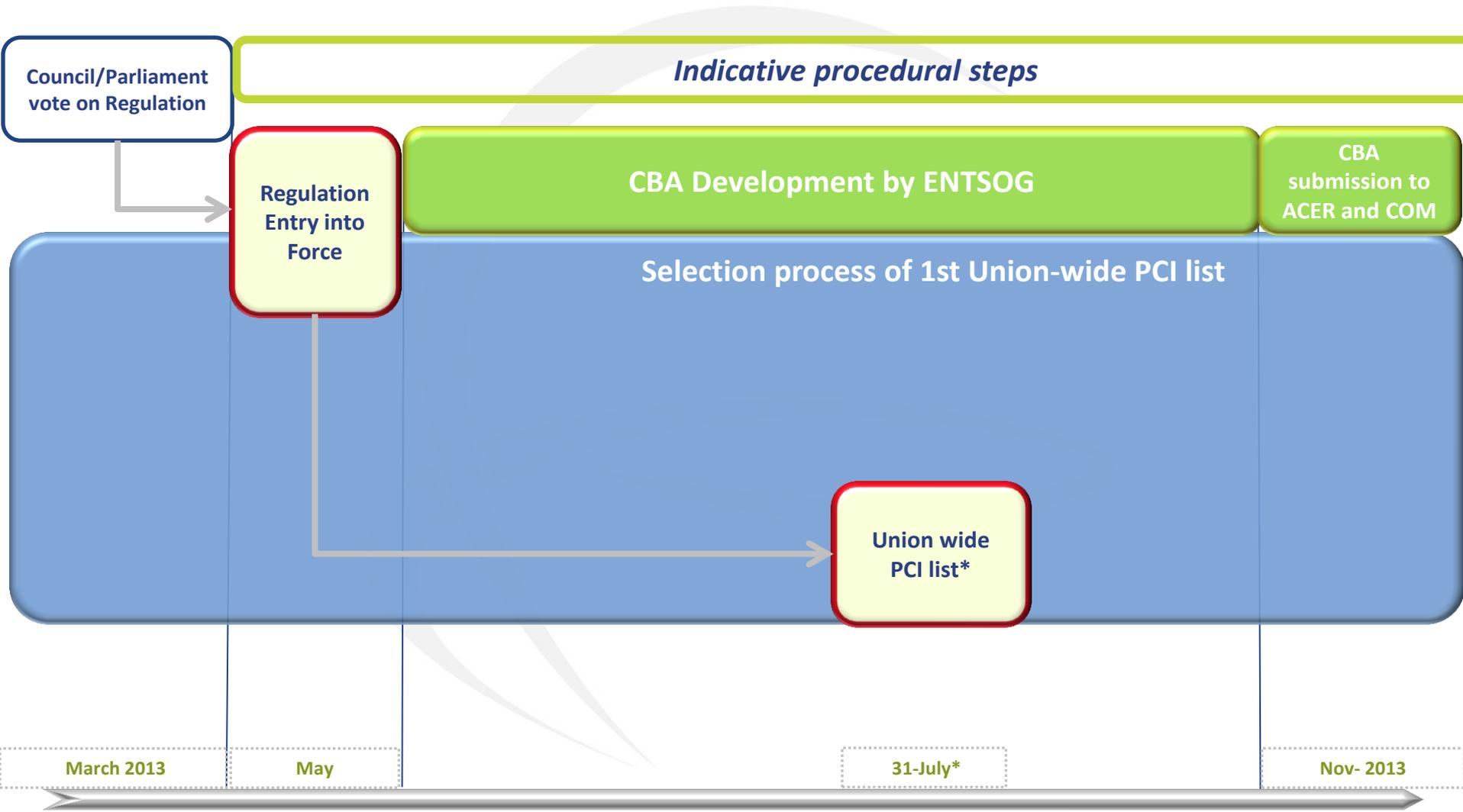
# Priority Gas Corridors



## Legend of colours:

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- Member in 4 RGs

# Indicative Timeline of Legislation



\* according to the text of the Regulation as approved by the EP Plenary

# Objective and scope of the Public Consultation

## ***Informal public consultation***

- > Provide broadest opportunity for stakeholders feed-back and engagement prior to the entry into force of the Regulation

*The Questionnaire for the informal public consultation is targeting a relevant feedback for the main issues and identified sensitive areas*

## ***Formal public consultation***

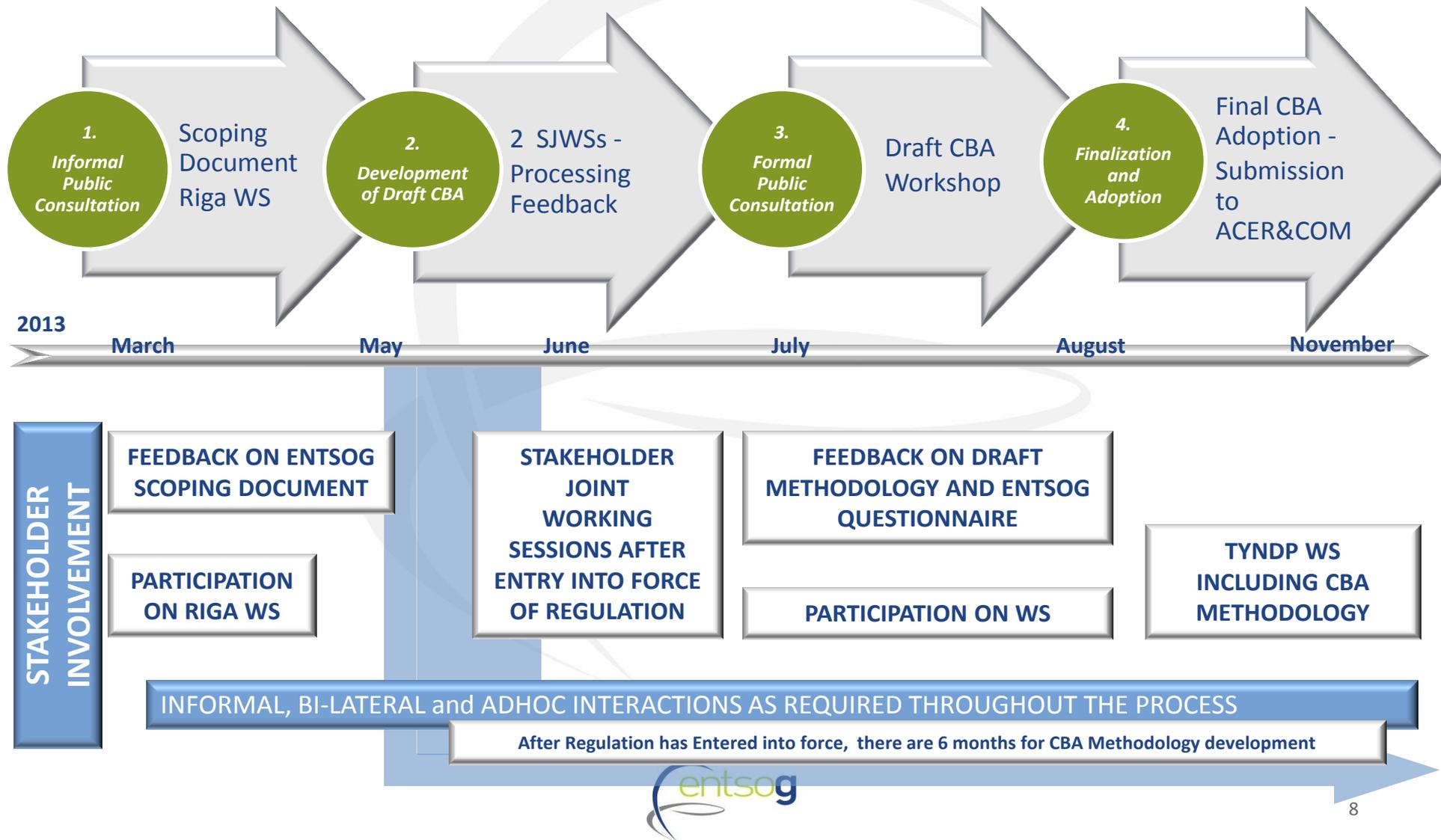
- > Will consist of two parts: Stakeholder Joint Working Sessions (2 sessions) and the Formal Public Consultation

## ***The approach in developing CBA methodology aims to ensure:***

- > **Equitability:** equal treatment and objective methodology for all the projects
- > **Consistency:** Project Specific CBA (PS CBA) builds on the Energy System Wide CBA (ESW CBA) based on a uniform use of the input data
- > **Robust and justifiable analysis:** consistent use of the modelling, relevant indicators, and relevant results, avoid double accounting; performing sensitivity analysis
- > **Efficient and reflective:** enable the understanding and applicability of the PS CBA and reflection of the societal value of the projects



# Stakeholder Engagement Plan for the CBA Methodology Development Process



# Stakeholder Roles of Participation

Prime Movers *	Active SJWS Participants *	Consultant Respondent	Observers
<ul style="list-style-type: none"><li>• Committed to work on bilateral basis</li><li>• Dedicate resources</li><li>• Most engaged in methodology development on bilateral basis</li></ul>	<ul style="list-style-type: none"><li>• Attend all SJWSs</li><li>• Play active role during the intensive SJWS discussions</li><li>• Read, review and prepare SJWS documents</li></ul>	<ul style="list-style-type: none"><li>• Detailed answer received for the Questionnaire</li></ul>	<ul style="list-style-type: none"><li>• No active contribution expected</li><li>• Participation on TYNDP Workshops</li><li>• Oral commentary during Ws possible</li></ul>

*Stakeholders shall inform ENTSOG about their role in the process according to the above categories*

\* stakeholders are invited to identify themselves as soon as possible

# General and specific criteria

+ **Urgency** to meet EU Energy Policy targets

+ **Number of MSs** affected and equal opportunities for projects involving peripheral MSs

## General criteria

- The project is necessary for at least one of the priority corridors and areas identified in the Regulation and
- The potential overall benefits of the project outweigh its costs including on longer term and
- The project has cross-border impact

## Specific criteria

Market Integration

Competition

Sustainability

Security of Supply

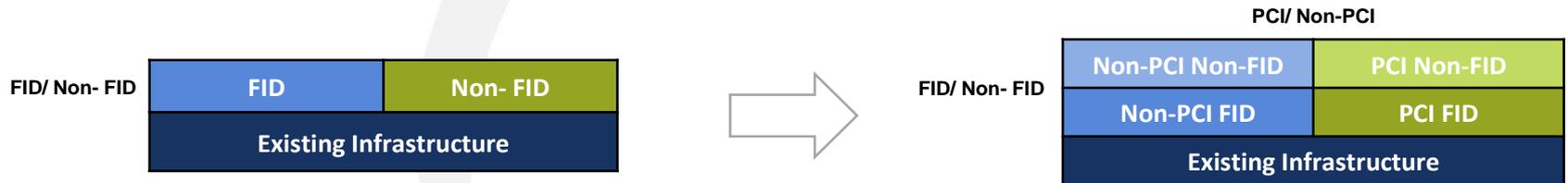
+ **Complementarity** with regard to other proposed projects

+ **Contribution to Territorial Cohesion**

# CBA methodology- main principles (1)

## ***Energy System Wide CBA ( ESW CBA)***

- > The ESW CBA will build on the TYNDP methodology
- > Additional clusters need to be introduced to reflect the PCI impact



- > The ESW CBA will include:
  - Description of the network model applied by ENTSOG
  - Definition of scenarios and cases for n+5, n+10, n+15 and n+20 year time horizons, where n is the year of the analysis
  - Extrapolations for n+20 year time horizon, based on the TYNDP 10-year data and executed specifically for the scope of the CBA,
  - Definition of variables for the Sensitivity analysis
  - Definition of indicators

# CBA methodology- main principles (2)

## ***Project Specific CBA (PS CBA)***

- > To enable Project promoters to carry out a detailed analysis of their projects according to a robust and agreed methodology, ensuring consistency between results and between the project and the TYNDP ESW
- > To assess the foreseeable impact of the project on the European gas infrastructure system, along the criteria requested by the Regulation
- > Criteria are interlinked, therefore the infrastructure indicators are not to be bundled with a specific criteria

## ***When a PS CBA is required?***

- > Upon entering the PCI selection process, for projects having reached a sufficient degree of maturity (Annex III 2)
- > Cross border cost allocation (art.13 4.a)
- > Request for financial assistance (art.15 2.a)

# CBA methodology- main principles (3)

## ***ENTSOG methodology will cover at least the following sections:***

- > Identification of the project's objectives, according to the criteria described by the Regulation
- > Economic analysis that reflects the benefits for the society instead of expressing just the benefits of the investor, as within the financial analysis
- > Sensitivity analysis of the main parameters
- > Guidance on discount rates to be used for the analysis

# CBA methodology- Reflection of benefits

*Gives a monetary/quantitative view on the value of the project and on the level a project fulfils the objectives and specific criteria requested by the Regulation*

**Cost benefit analysis as a classical method**

- Based on the cash flow forecast ( financial and economic)
- Performance indicators results (with focus on: Economic Net Present Value -ENPV, Economic Internal Rate of Return- EIRR, Benefit Cost Ratio- B/C)

**Quantitative assessment is applied where the monetisation of benefits cannot be done**

- Specific infrastructure indicators
- Target values for the specific infrastructure indicators
- Differential approach: value of the indicators without and with the project

**Combined CBA with quantitative/qualitative assessment, considered to be the most reflective method**

- Check the criteria suitable for the CBA or quantitative assesment
- Check the specific infrastructure indicators reflecting criteria
- Identify the areas which could be monetised and enhance the quantitative reflection of the benefits based on specific infrastructure indicators with the qualitative assessment

# Challenges

## Legislative- and Lack of Data issues:

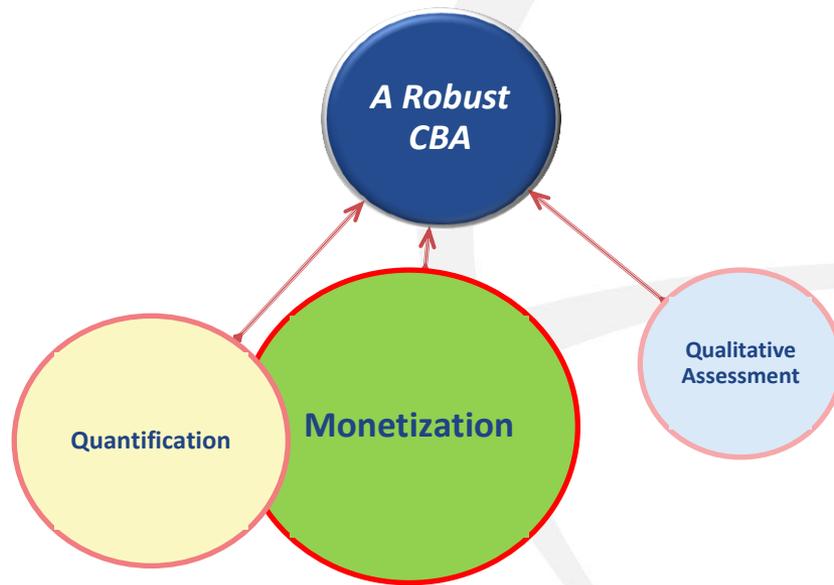
- Maturity of the project- not clarified yet
- Significant impact- not clarified yet
- Cost of disruption
- Commercially sensitive data
- N-1 at Regional level
- HHI index calculated at capacity level:
  - Allocation of capacity between users at the respective IP
  - Concentration of Entry Capacities

## Controversial issues:

- Social Discount Rate (SDR) is a controversial issue even within the academic area
- The level of SDR has a significant impact on the value of economic performance indicators and different SDRs could hinder the equitability and distort the results
- SDR should be settled either at the level of each Regional Group or as a unique SDR

# How to avoid the trap of quantification ...?

*The combination of the 3 approaches...*



> The combination of the three seems at this stage to be the most promising approach to a robust methodology

> In any case, the value of the methodology will depend on how the challenge of comprehensive, accurate input data and assumptions is resolved



# Thank You for Your Attention

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