

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

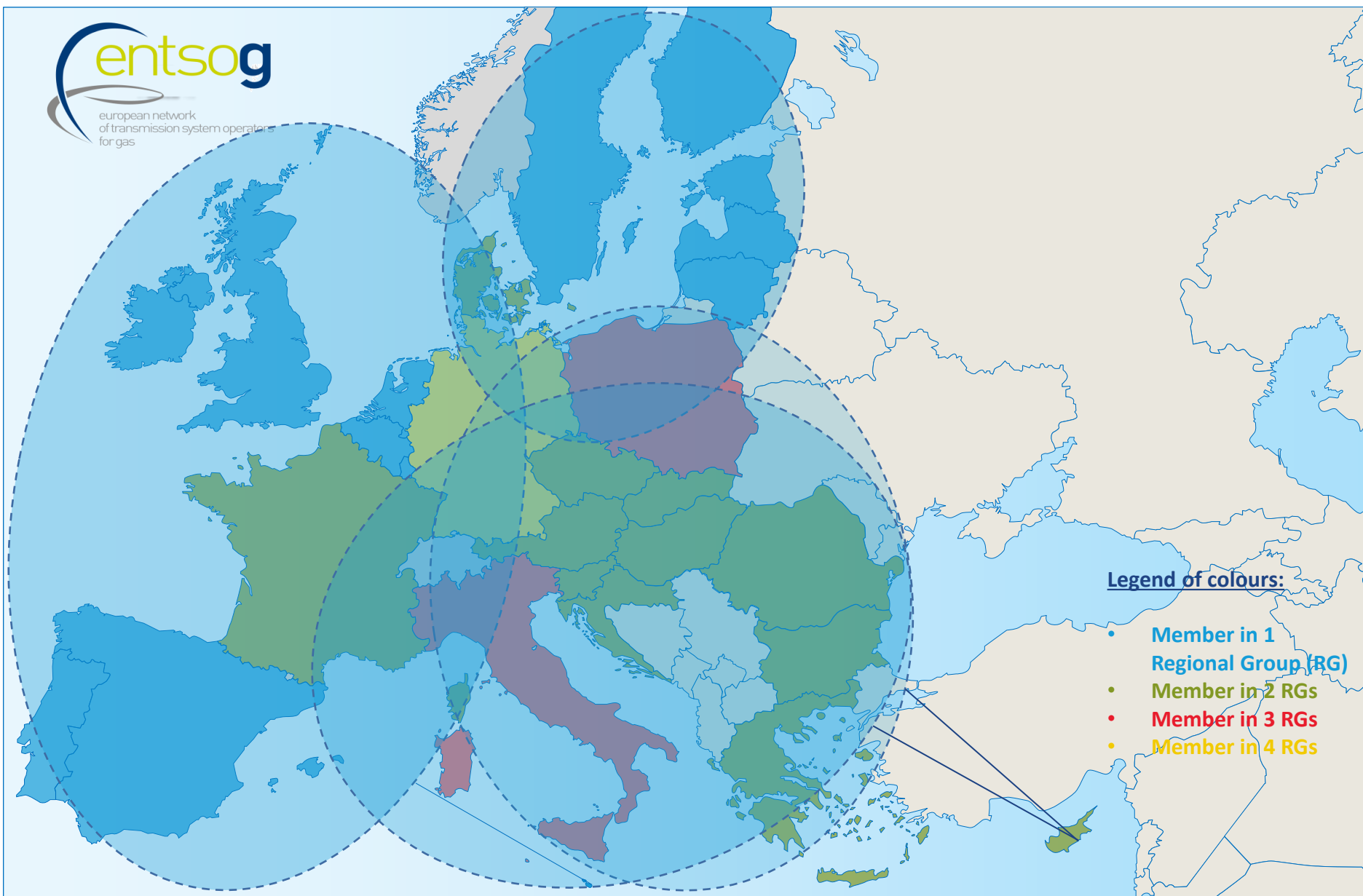
Background

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

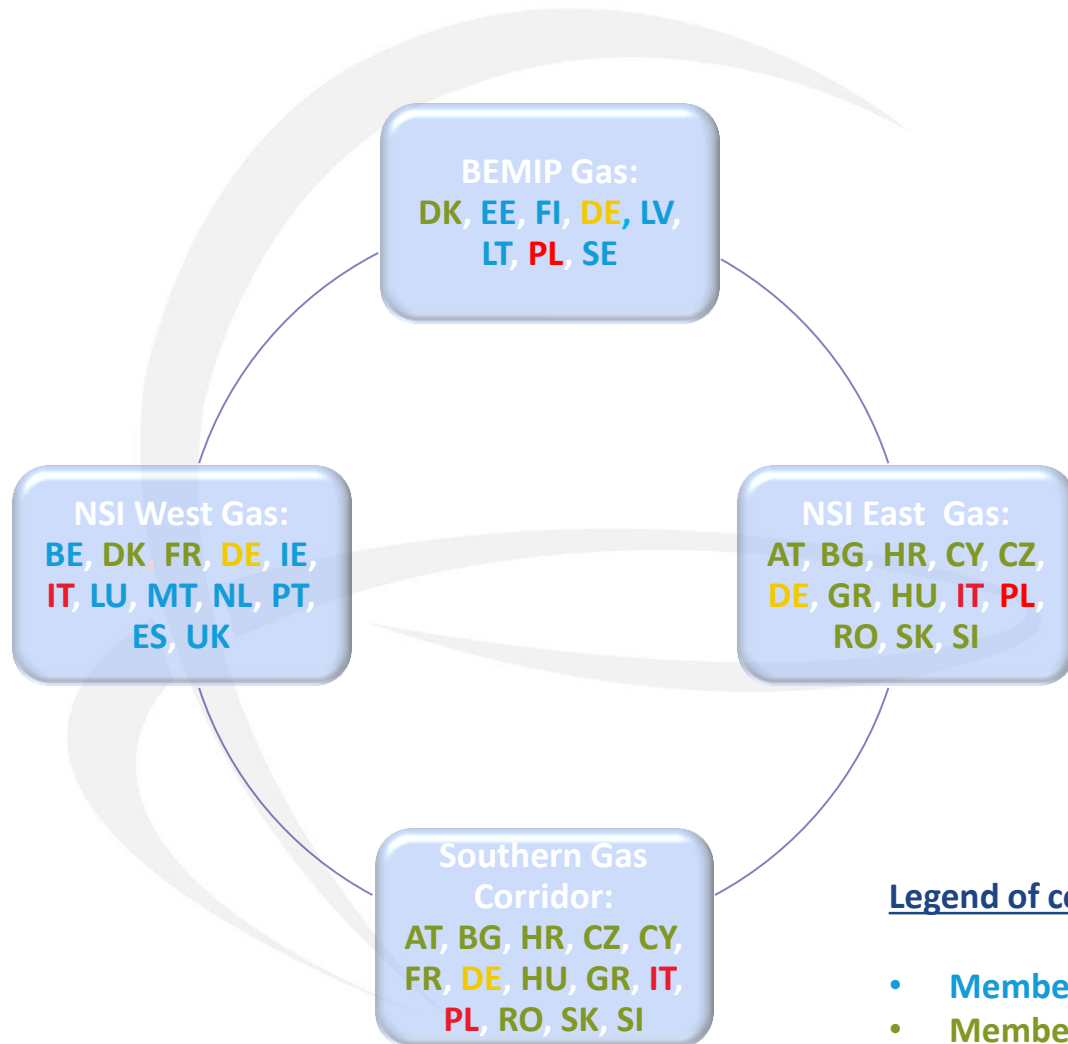
Priority Gas Corridors – Regional Groups



Legend of colours:

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

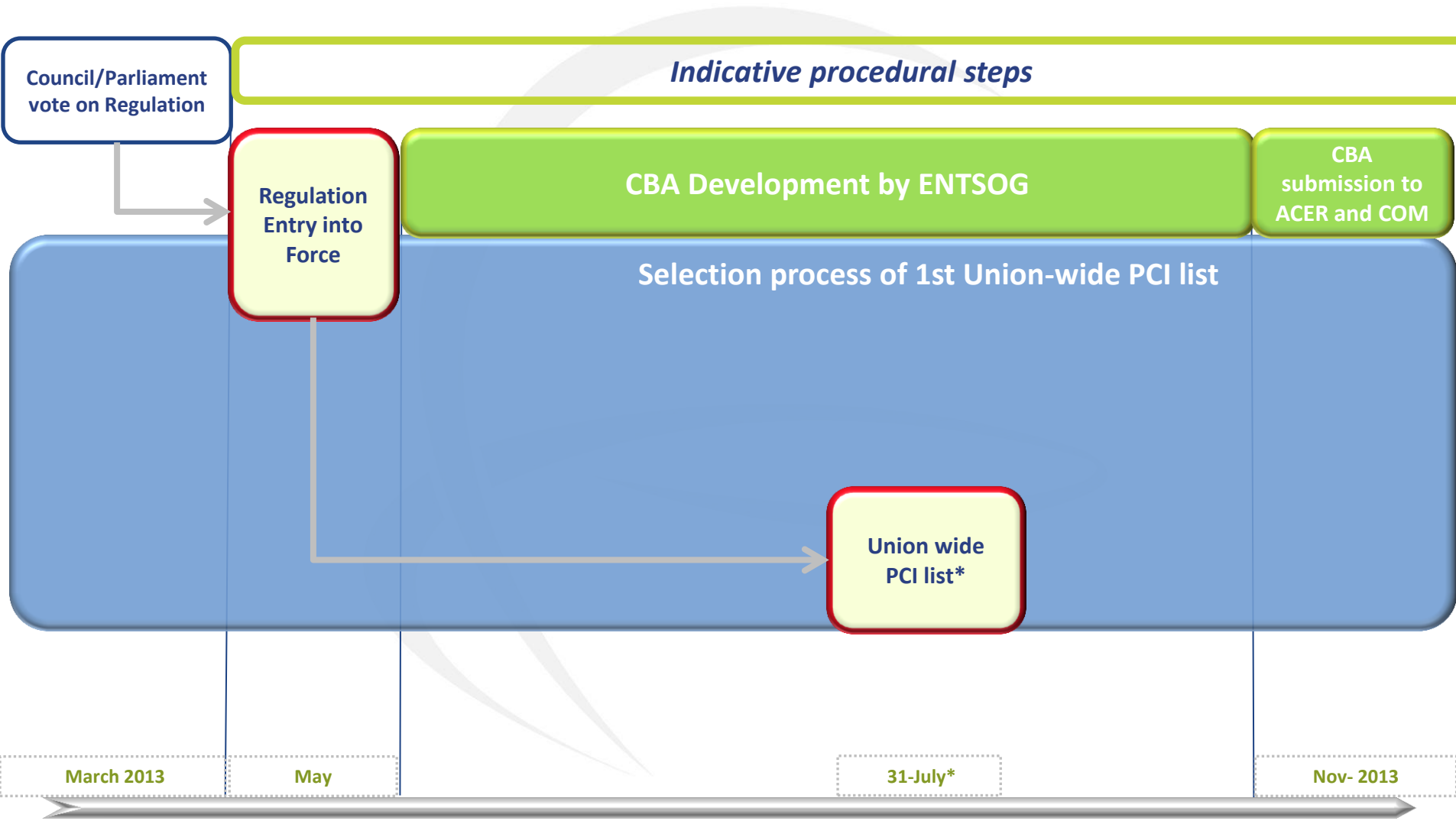
Priority Gas Corridors



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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

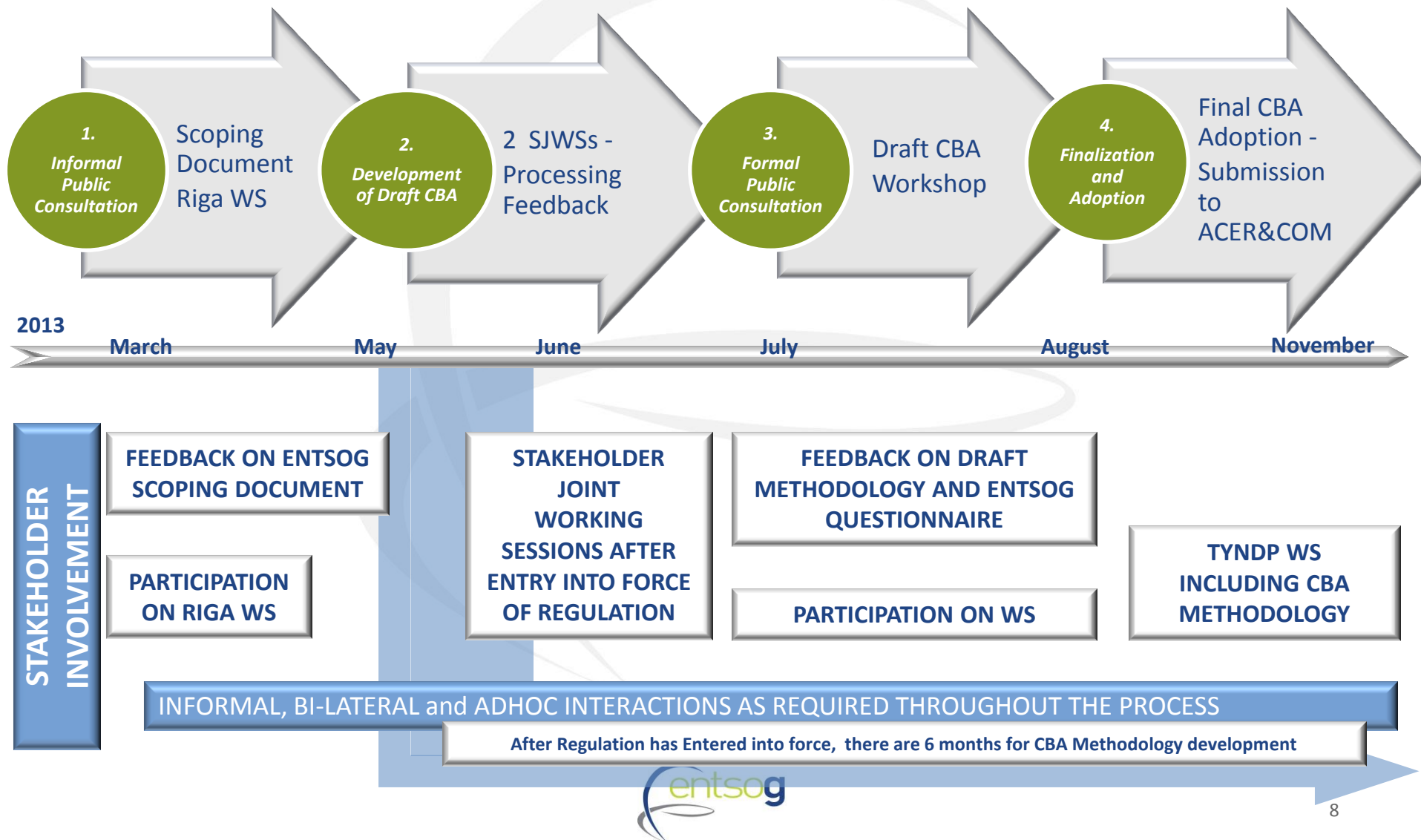
- > Will consist of two parts: Stakeholder Joint Working Sessions (2 sessions) and the Formal Public Consultation

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

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

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

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

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

Specific criteria

Market Integration

Competition

Sustainability

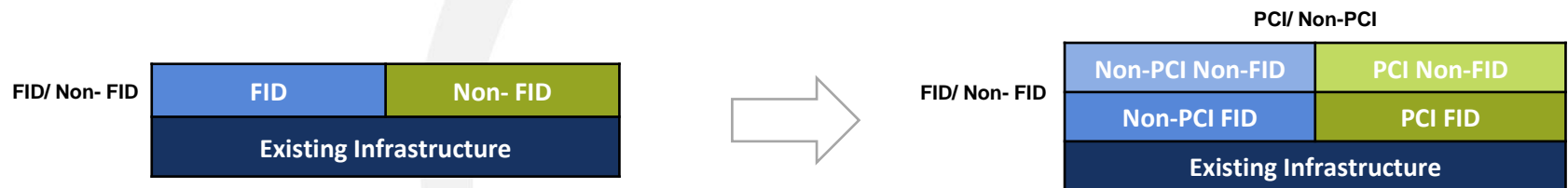
Security of Supply

+ **Contribution to Territorial Cohesion**

CBA methodology- main principles (1)

Energy System Wide CBA (ESW CBA)

- > The ESW CBA will build on the TYNDP methodology
- > Addiditonal 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:

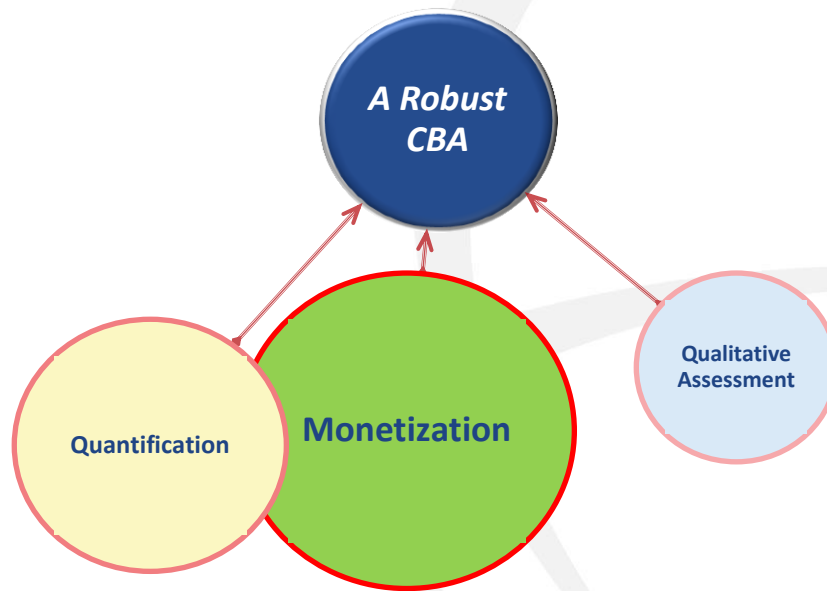
- Maturity of the project- not clarified yet
- Significant impact- not clarified yet
- Cost of disruption
- Commercially sensitive data
- N-1 at Regional level
- HHI index calculated at capacity level:
 - Allocation of capacity between users at the respective IP
 - Concentration of Entry Capacities

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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