



# Security of Supply

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8<sup>th</sup> EU/US Roundtable

25-27 October 2010, Berlin

- Framework for Investment Planning and Security of Supply in the European Union
- Ten Year Network Development Plan
- European Energy Regulators approach towards investment planning
- Regulatory treatment of cross-border investments

# Investments in gas infrastructures

- NRAs are usually in charge of
  - Setting or approving a clear and stable TPA

**Investments in gas infrastructure result from private initiatives, in response to and anticipation of the needs of the market**

potentially receive a specific rate of return, or by deciding a special treatment for new large investments, on a case by case basis

# Legal Background - 1

- 3<sup>rd</sup> package (Gas Directive 2009/73/EC and Gas Regulation (EC) No 715/2009)
  - Obligations for individual Transmission System Operators (TSOs) based on the chosen unbundling model
  - Non-binding community-wide 10 year network development plan (10 YNDP)
  - No obligations for LNG System Operators and Storage System Operators
  - Possibility for exemption from parts of the regulated framework

# Legal Background - 2

- Further legal developments with respect to infrastructure development and Security of Supply (SoS) in the pipeline
  - New SoS Regulation (coming soon)
  - Investment Notification Regulation (coming soon)
  - Energy Infrastructure Package (to be tabled in 2010)



# Agenda

- Framework for Investment Planning and Security of Supply in the European Union
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- Regulatory treatment of cross-border investments

# 10 YNDP in the 3<sup>rd</sup> package - 1

**1<sup>st</sup> European Ten Year Gas Network  
Development Plan published in December 2009  
by European Network of Transmission System Operators for Gas  
([www.entsog.eu](http://www.entsog.eu))**

- Non-binding 10YNDP to be published every year  
(community-wide 10YNDP every two years)
- 10YNDP shall contain efficient measures to  
guarantee the adequacy of the system and SoS

# 10 YNDP in the 3<sup>rd</sup> package - 2

## The 10 YNDP shall, in particular:

- Indicate to market participants the main transmission infrastructure that needs to be built or upgraded over the next 10 years;
- Contain all investments already decided and identify new investments which have to be executed in the next 3 years; and
- Provide for a time frame for all projects.



# 10 YNDP in the 3<sup>rd</sup> package - 3

- **Contents of the 10 YNDP are**
  - Modelling of the integrated network,
  - Scenario development,
  - European supply adequacy report, and
  - Assessment of the resilience of the system
- **TSOs as well as ENTSOG will conduct extensive consultation processes.**
- **Consistency between EU-wide, regional and national plans.**

- **Role of the Agency**

- Provide a reasoned opinion and recommendations on the Plans.
- Monitor implementation of 10 YNDPs.
- Review national plans to assess their consistency with the EU 10 YNDP.

- **Role of NRAs**

- Monitor TSO plans and assess their consistency with the EU 10 YNDP.
- Differentiated powers depending on the unbundling model chosen (ITO, ISO, OU).

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# ERGEG's approach towards 10 YNDP

- A **key transparency tool** to provide European Commission, NRAs and network users with medium and long term visibility of the network development.

**The quality of the results will be proportional to the degree of commitment of all parties involved.**

and simulating supply disruption situations.

- A **collective task** where the highest involvement of all actors – MS, NRAs, operators and stakeholders – will be needed.

# ERGEG's recommendation for the gas 10 YNDP - 1

- **Scope of the 10 YNDP**

- All investments of European dimension,
- Requiring a high-level of coordination between TSOs,

**Need for a flexible approach.  
“Learning-by-doing” process.**

- **Methodology**

- A combination of top-down and bottom-up approaches,
- based on a permanent constructive dialogue between ENTSOG/TSOs and stakeholders.



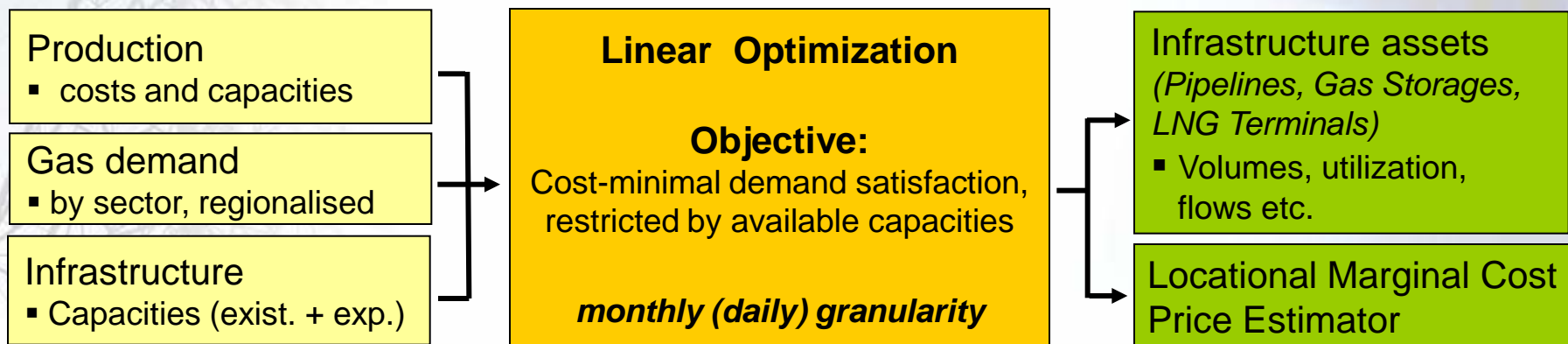
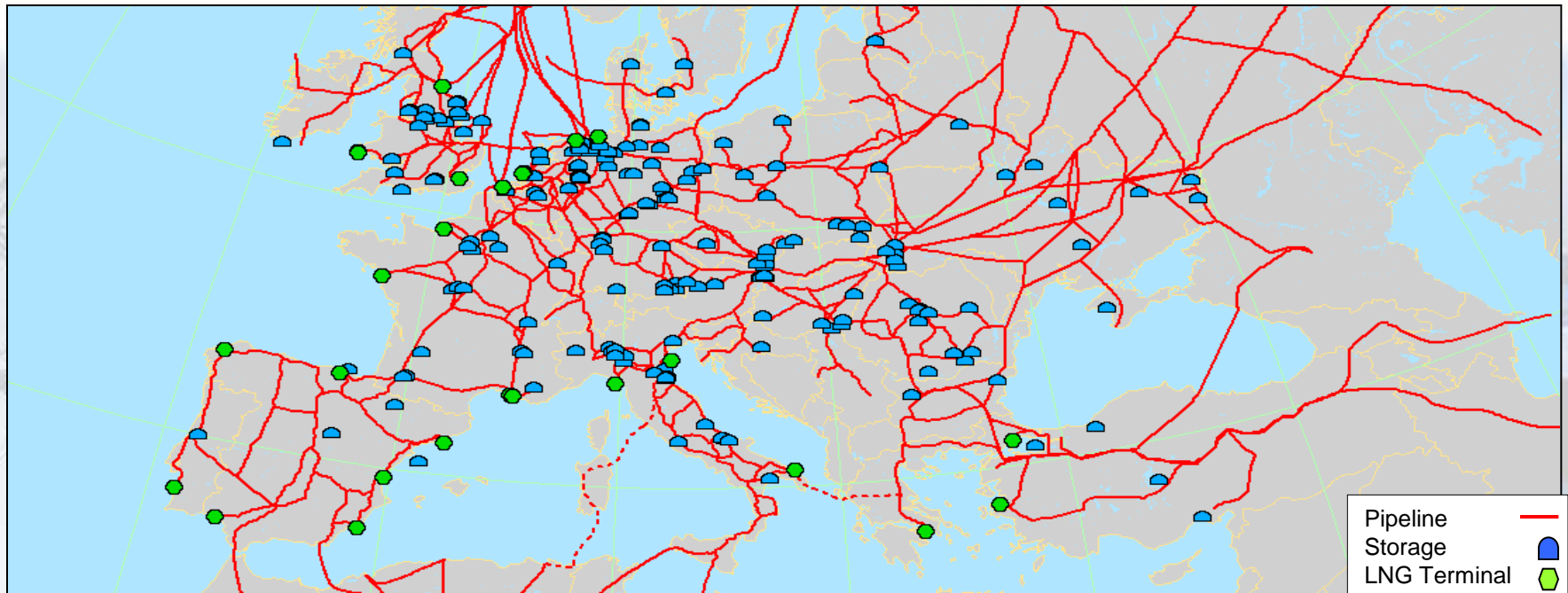
# ERGEG's recommendation for the gas 10 YNDP - 2

- **Contents of the plan**

- Selection of scenarios is of greatest importance.
- Map of gas flows and identification of bottlenecks and capacity gaps.
- Technical and economic features of projects, with indication of their degree of maturity.
- Monitoring report to track modifications.

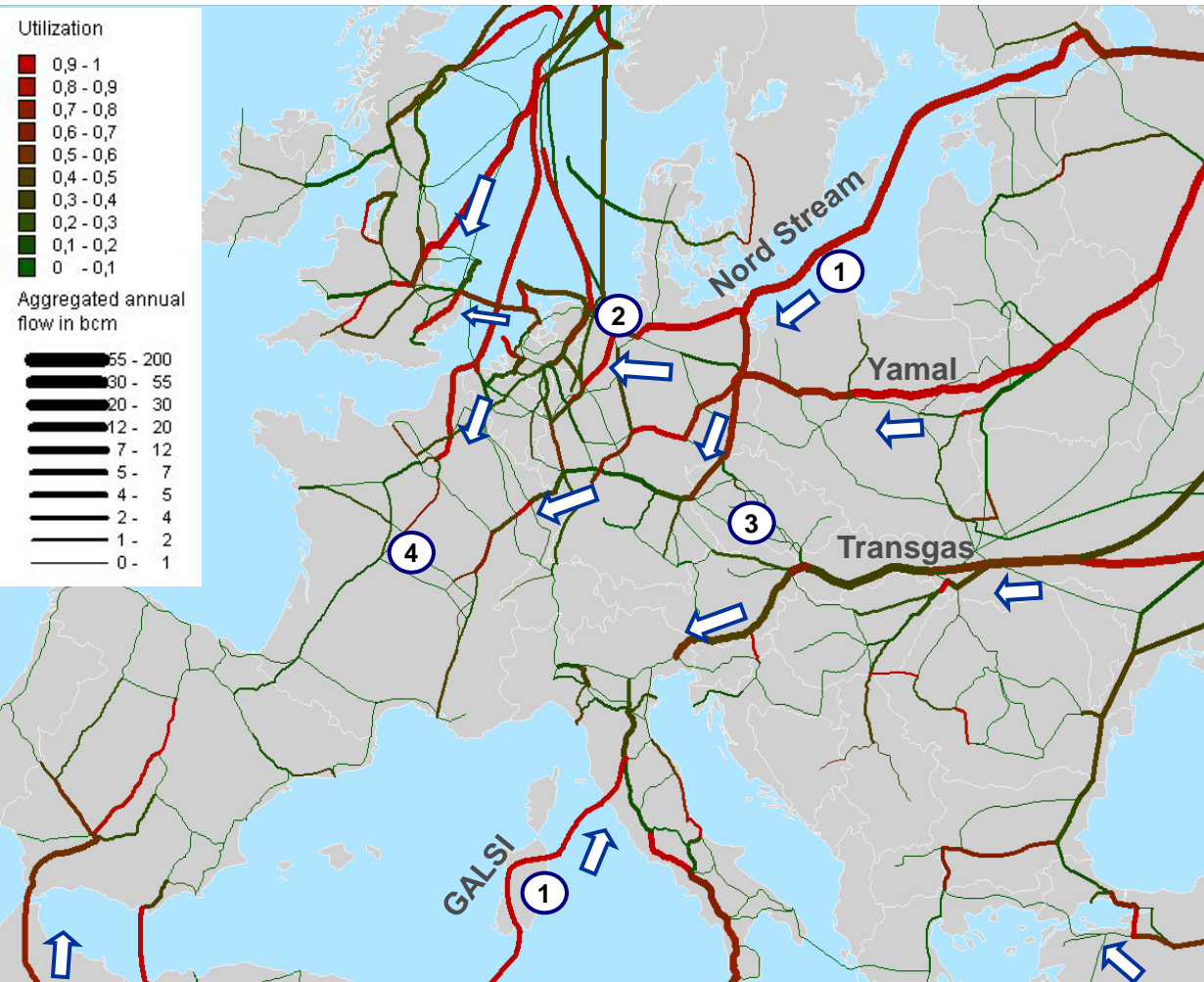
**→ High involvement of stakeholders in data collection and consultation processes.**

**→ Coherence with regional and national network plans.**



# Exemplary Results of EWI study

## Annual Gas Flows 2018 – Nord Stream II (EWI/ER GEG Demand)



- (1) Additional import routes change gas flows in Europe
- (2) In Germany: increased East-to-West transit (Nord Stream replaces some imports from North and West)

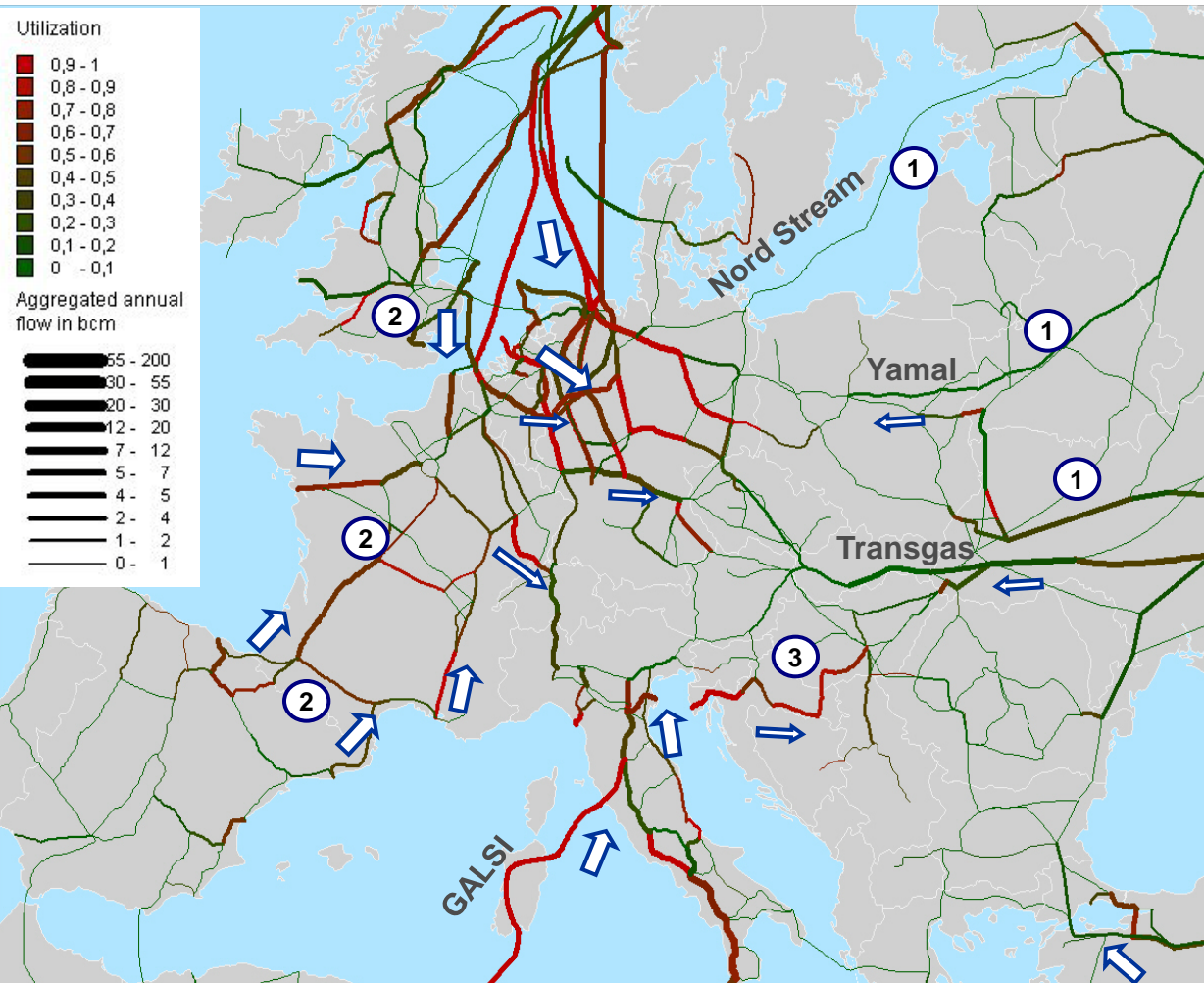
With 2<sup>nd</sup> Nord Stream line:

- (3) Physical gas flows from Transgas to Germany and Western Europe (via Czech Republic) largely cease
- (4) Only small impact on gas flows in Western Europe



# Exemplary Results of EWI study

## Annual Gas Flows 2018 – LNG Glut (EWI/ER GEG Demand)



Assumption of temporally low LNG prices and option to reduce contract minimum take obligations to zero (maximum LNG import scenario):

- (1) Significant reduction in pipeline imports, especially from Russia
- (2) LNG imports in Spain, France, UK increase and LNG volumes transported to Central Europe where possible
- (3) Also high utilization of Krk LNG terminals, supplying HR, HU, CS

- EC Proposal on the notification of investment projects
  - Notification by Member States to the EC of data and information on investment projects - **reporting every 2 years.**
  - **No duplication of requests** – exemption in cases where a “specific body is entrusted with the preparation of a multi-annual investment plan in energy infrastructure at Community level” specific body shall notify all relevant data to the EC.
  - Concerning gas, the 10 YNDP will largely cover the regulation’s scope.



- EC proposal for a Gas-SoS Regulation
  - **Obligatory emergency plans and risk assessments** based on scenarios on national and regional level
  - **Monitoring tasks of SOS**
  - **Supply standards:** supply for protected consumers guaranteed for 60 days according to the 1 out of 20 rule.
  - **Infrastructure standards:** N-1 rule, reverse flows at all Interconnection Points.
  - Infrastructure & supply standards will feed the 10 YNDP; synergies concerning risk assessment.

# GRI SSE position on cost allocation of reverse flow investments

## Allocation of costs for reverse flow investments in gas infrastructure:



- Two options have been consulted within GRI SSE



# Market-based investments benefiting SOS

- ▶ Investing TSO should tender the reverse flow capacity
  - in a transparent procedure (Open Season procedure)
  - to all interested parties (including up- and downstream system operators and suppliers/shippers or even the Member States themselves)
  
- ▶ In case of sufficient demand, the reverse flow capacity is allocated by the TSO to interested shippers
  - capacity booked by the market allows for cost recovery through the applicable tariffs

# Non market-based investments benefiting SOS

- ▶ Principle applies if costs incurred in one MS contribute to enhancement of SOS in another/several MS
- ▶ Where no market demand exists (bookings by shippers), the **national regulatory authorities of the MS concerned shall jointly decide on the allocation of the costs incurred based on the request of the investing TSO** (eg. multi-lateral mechanism) - Article 8(1) of Regulation (EC) No.713/2009 shall apply
  - Proportion to which each MS benefits from the infrastructure investments with regard to security of supply shall be taken into consideration





# Example: Who could benefit from TAG reverse flow investment





# Agenda

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# Regulatory treatment of cross-border investments - 1

- Key issues to promote the development of new gas infrastructure from the NRA perspective are:
  - Promoting close contact and communication between all market participants.
  - Guaranteeing a high transparency of investment process.
  - Ensuring appropriate incentives to invest efficiently in infrastructure and to respond to market needs and signals.
  - Ensuring a clear and stable regulatory framework to give guidance to stakeholders.

# Regulatory treatment of cross-border investments - 2

- Harmonization / co-ordination of regulatory practices to facilitate the development of the internal energy market.
- Consultation with other NRAs, sharing experiences and identifying best practices at European level in order to:
  - Promote and facilitate inter-regional projects,
  - Carefully consider available instruments to balance the need, for new investments and the development of competition,
  - Ensure that there is a level playing field for investors.



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# Regulatory treatment of cross-border investments - 3

- Promoting the development of 10 YNDPs.
- Facilitating the identification of physical congestion.
- Ensuring
  - Effective unbundling to avoid conflicts of interest when making investment decisions,
  - Sufficient transparency of e.g. flows and available capacities,
  - Transparent, non-discriminators and market oriented capacity allocation mechanisms,
  - Effective congestion management procedures.
- Promoting the development of wholesale markets to provide price transparency.

# Concluding Remarks

- 3<sup>rd</sup> Package provides for a new instrument which allows the assessment of investments in infrastructure.
- We need a flexible approach.
- It is a learning-by-doing process.
- Involvement of all stakeholders needed.
- Regulators need to assure a suitable framework for infrastructure investments.



Thank you for your attention!

[www.energy-regulators.eu](http://www.energy-regulators.eu)