



Open seasons between France
and neighboring countries

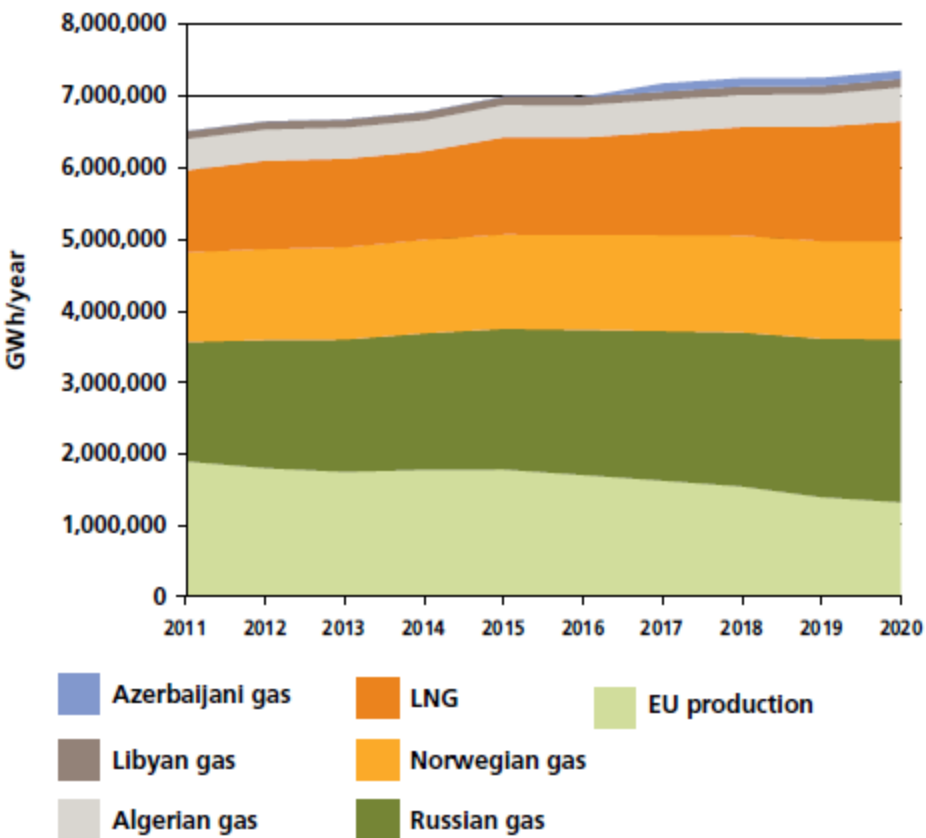




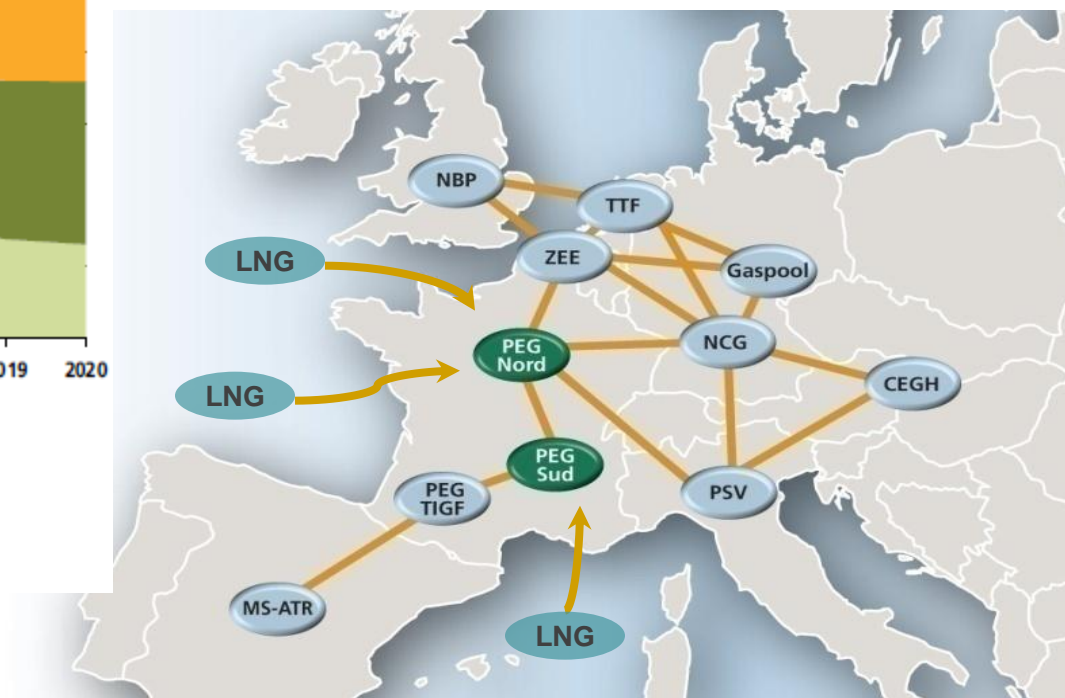
Content

- Assessment of the market needs
- ERGEG guidelines related to Open Seasons
- Open Seasons & improvements
 - France – Germany
 - France – Belgium
 - France – Spain
 - France – Luxembourg
 - France – Switzerland
- Conclusions

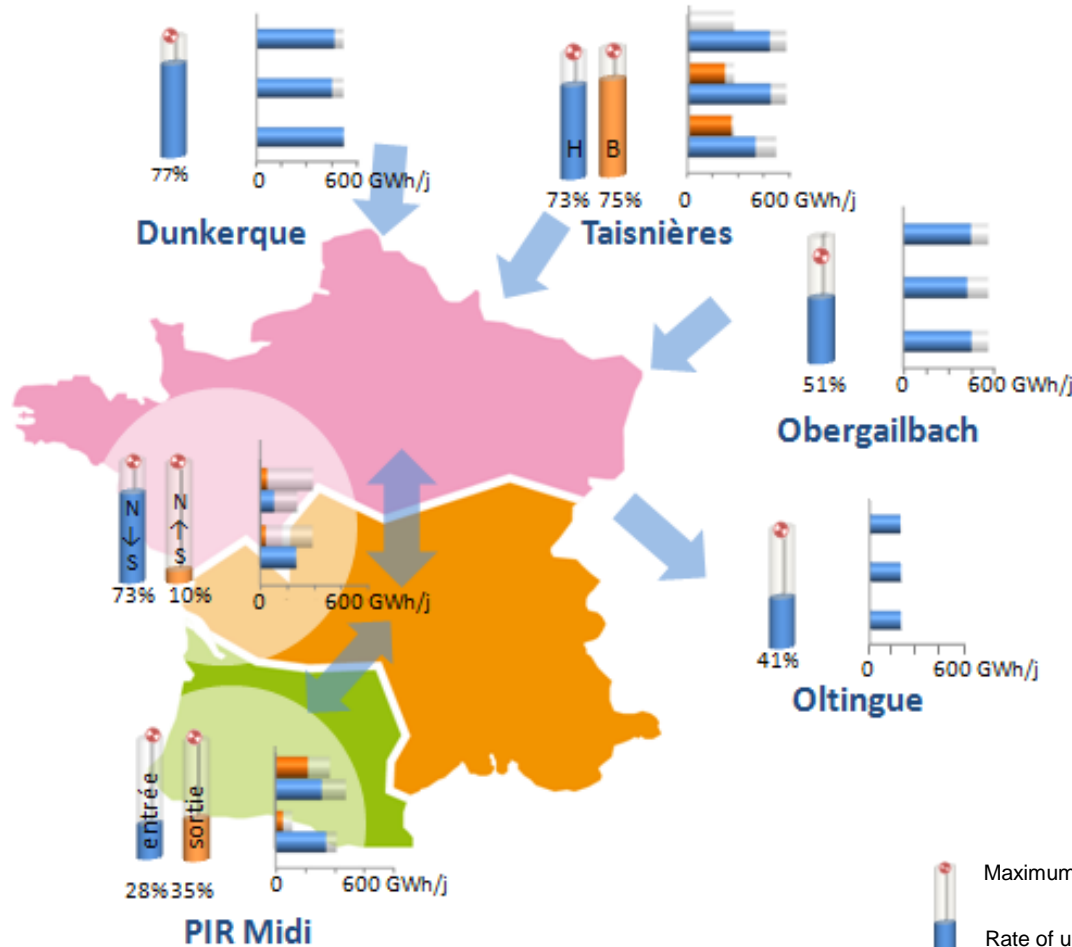
A need for additional investments in a “hub to hub” model



- Securing LT importation needs
- ST arbitrage between hubs






Assessing the need for additional capacity : the national TYNDP (1/2)



■ Analysing capacity sold at existing interconnection points:

- Booked capacity / technical capacity
- Rate of utilization of booked capacity (average & maximum)

 Maximum rate of use in 2010
 Rate of use in 2010

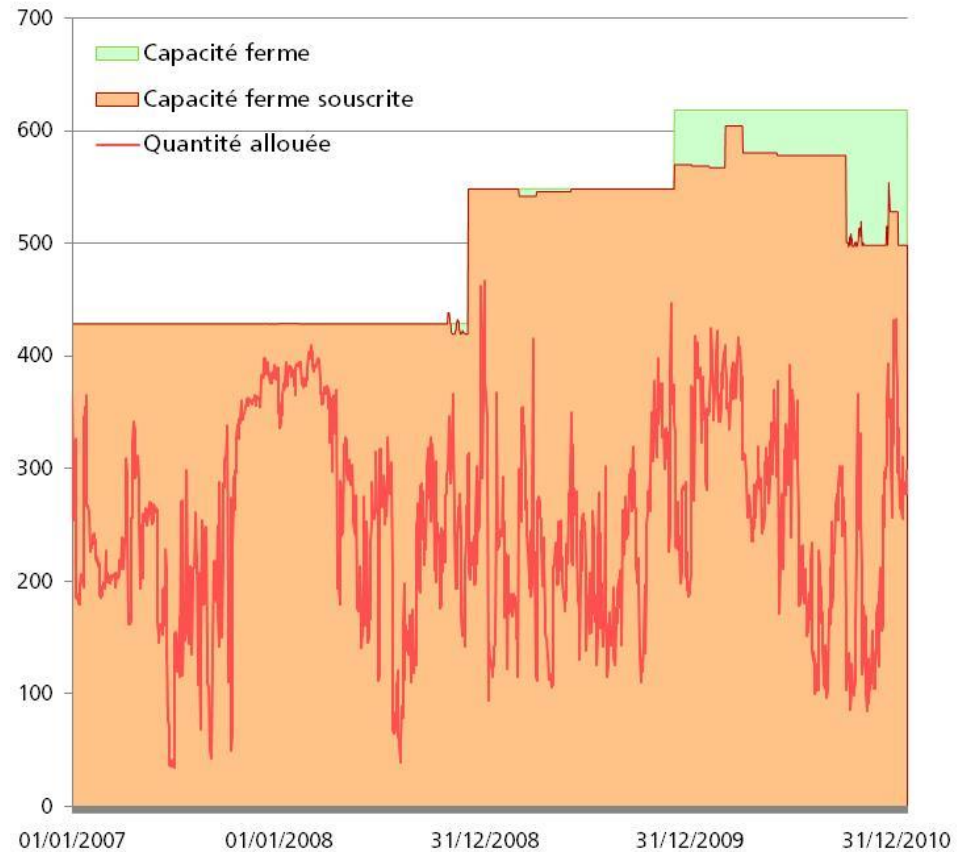
 2020
 2015
 2011
 Subscribed capacity / Technical capacity

GWh/j = GWh/d



Assessing the need for additional capacity : the national TYNDP (2/2)

- Assessment through a market consultation launched end of 2005 at the German border:
 - 152 GWh/d of firm entry capacity allocated to 3 successful shippers,
 - 190 GWh/d of firm entry capacity created in 2 steps (2008 / 2009)

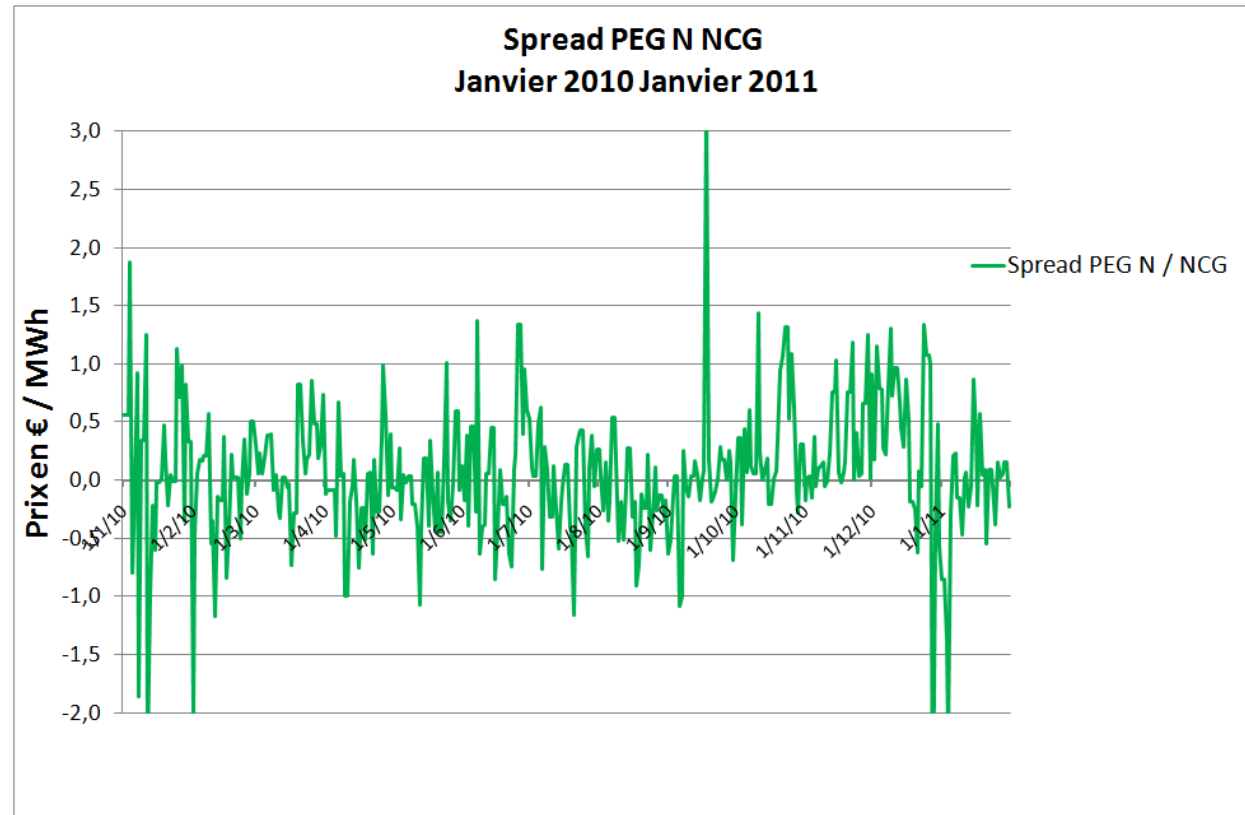


Assessing short term market value of interconnection capacity

Price convergence in NW Europe:

- Low spreads in average,
- High volatility

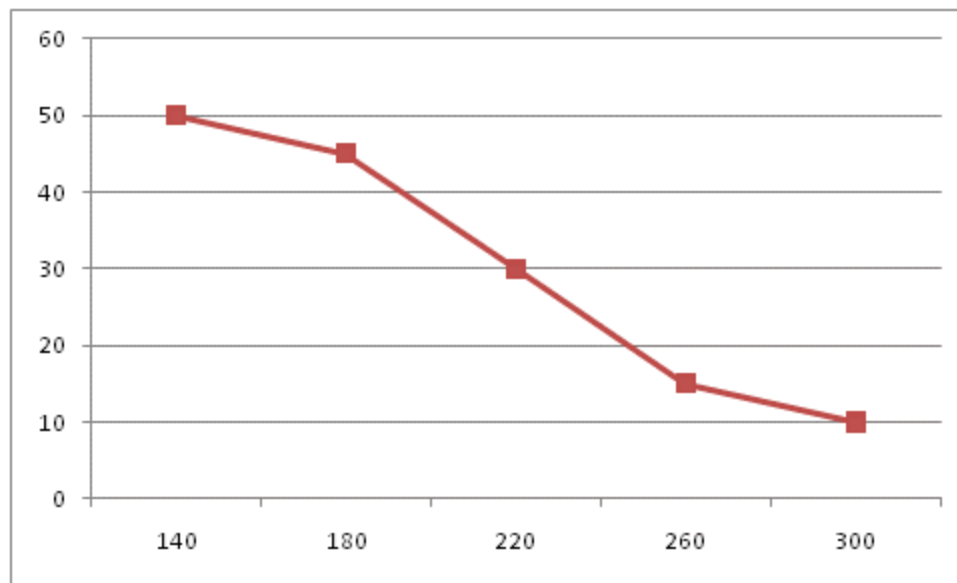
➤ Short Term needs can hardly be used for developing interconnection capacities



Assessing long term market value of additional capacity

- Assessment through the open season process

demand

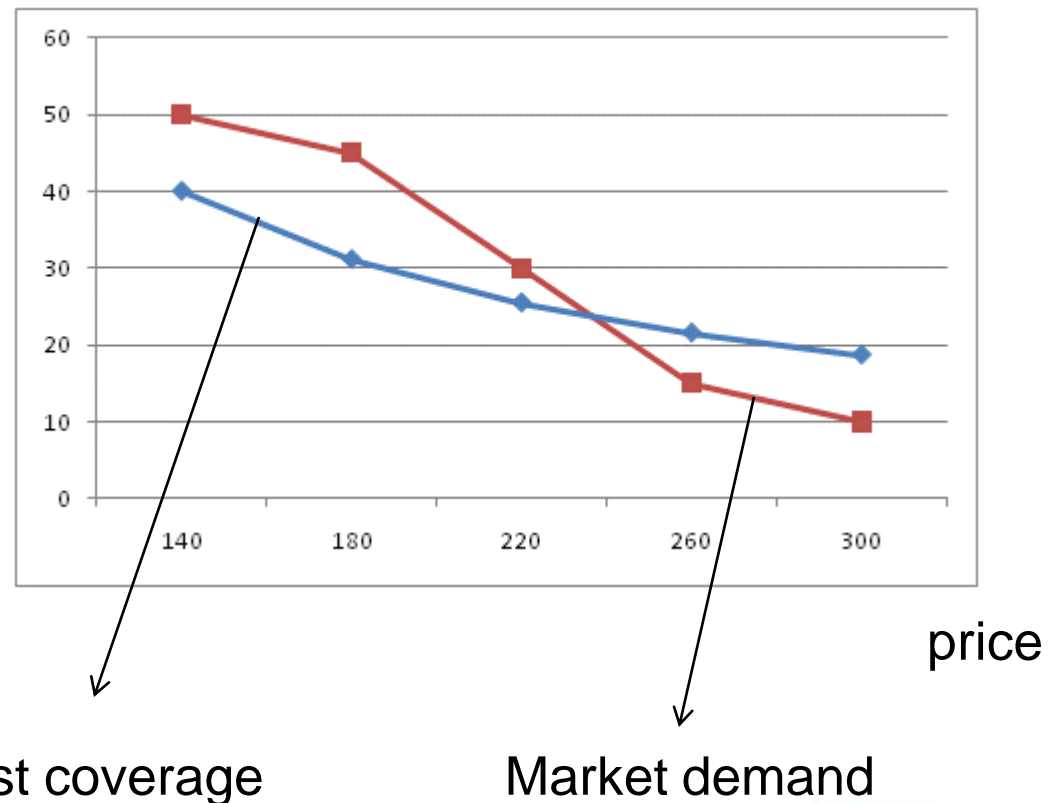


price

Investments costs coverage

- Assessing the level of demand according different price levels increase the chance to decide the investments.
- Allocation of capacity according to a clearing price close to CAM network code

demand



Cost coverage

Market demand

Impact of FID & non FID projects: the ENTSOG TYNDP (1/2)

Norwegian gas

Reference case 2011 FID

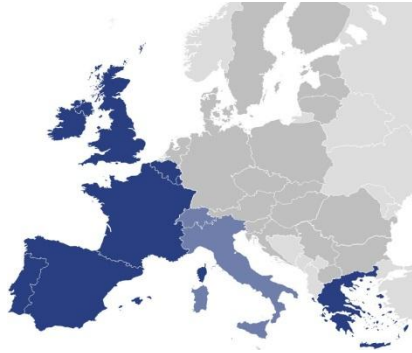


Reference case 2020 non-FID

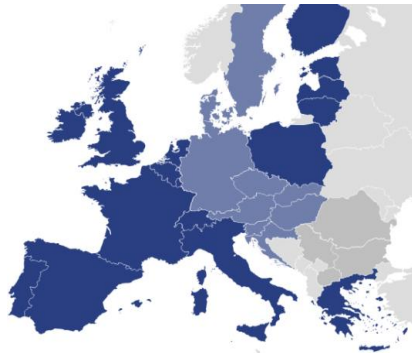


LNG

Reference case 2011 FID



Reference case 2020 non-FID



Russian gas

Reference case 2011 FID

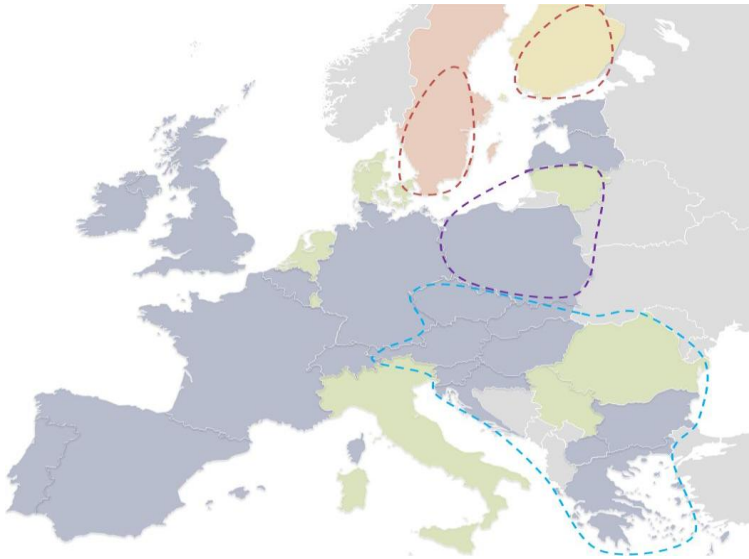


Reference case 2020 non-FID



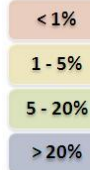
Impact of FID & non FID projects: the ENTSOE TYNDP (2/2)

Impact on the Security of Supply of Member states



Reference case 2011 FID

Remaining flexibility



Areas lacking of flexibility



Reference case 2020 non-FID

Open season procedures: ERGEG Guidelines (2007)

- Target: to assess the capacity needed for an interconnection and to allocate it on a transparent and non-discriminatory basis
- First step: assessment of the market's need
 - Preparatory phase
 - Open season notice
 - Non-binding bids
- Second step:
 - Final allocation
 - Binding agreements
- Coordination with adjacent system operators
- Coordination between regulatory authorities

Open seasons & improvements

2005

2006

2007

2008

2009

2010

2011

...

France / Germany

Belgium / France

France / Spain

France / Belgium

France/ Luxembourg

Switzerland / France

■ A need for technical cooperation (Final Investment Decisions)

- To reduce the risk of stranded assets
- To ensure technical consistency (capacity developed / pressure / investment planning...)

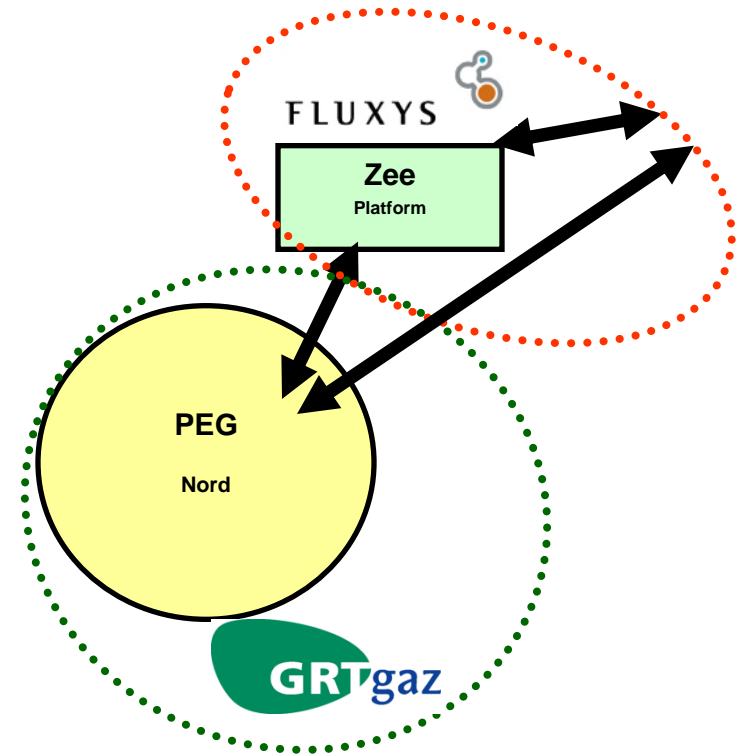
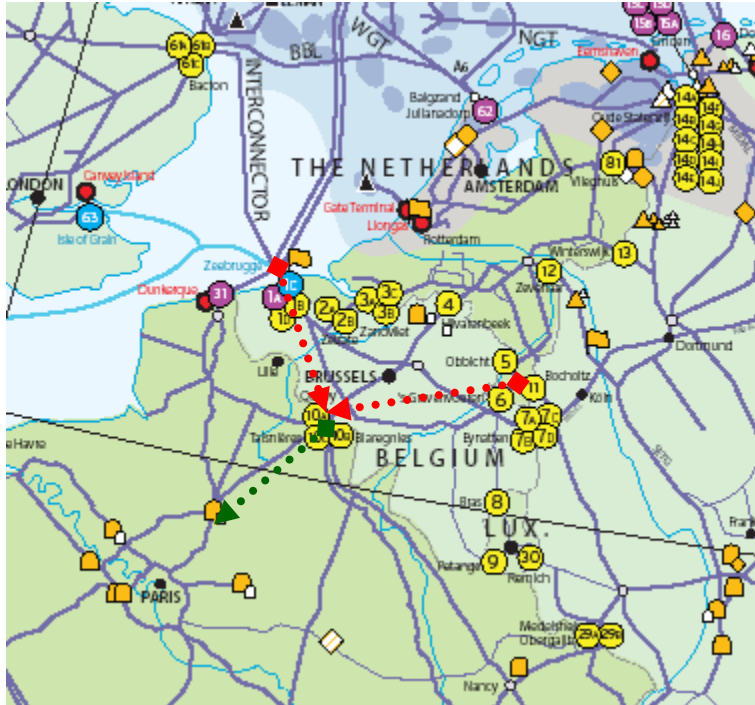
■ A need for commercial cooperation

- To maximize the market demand thanks to commercial coordination (allocation process, advertisement...)
- Toward bundled products (assessment of the market value of the interconnection)

■ A need for cooperation with NRAs and Ministries in charge of Energy

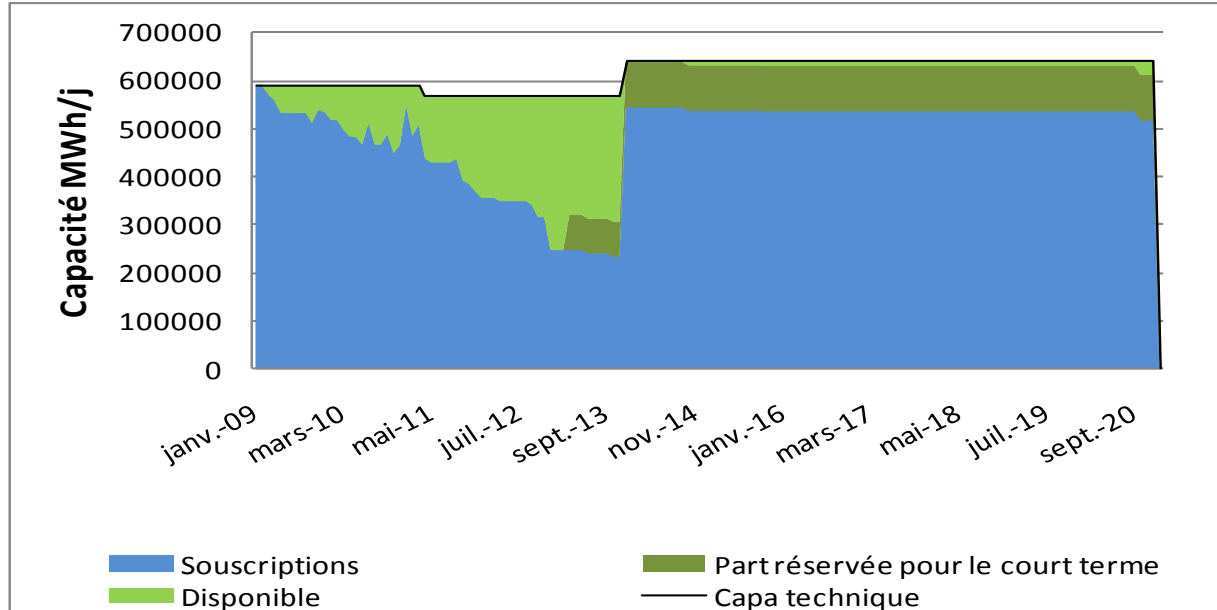


Belgium / France – Taisnières H



Belgium / France – Taisnières H

- Open season held in 2007 and 2008, 50 GWh/d additional capacity available in 2013
 - A 2nd development step cancelled (+303 GWh/d) because of a lack of coordination between France, Belgium and Netherland interconnections



France / Spain



- 4 Transmission System Operators involved:
 - GRTgaz
 - TIGF
 - Enagas
 - Naturgas Energia
- Assessment of the demand for 3 Interconnection Points in both direction
 - ENAGAS – TIGF
 - TIGF – PEG Sud
 - PEG Sud – PEG Nord

France / Spain

- Open season held in 2009 and 2010, capacity available in 2013 and in 2015
 - Technical coordination:
 - Memorandum of Understanding
 - Joint project defined by the TSOs
 - Commercial coordination: one joint allocation office
 - Joint handling of capacity requests and allocation of capacity
 - Regulatory coordination:
 - Regulatory adjustments by Spanish and French Authorities
 - Close supervision by both Regulators
 - Economic test in order to approve investments
 - Publication of Information Memorandum, Allocation rules, and clear contractual framework (product, prices)

France / Spain

■ Results

- 2013: increase of the interconnection capacity at Larrau from 110 to 165 GWh/d and from TIGF zone to PEG Sud zone from 80 to 255 GWh/d (sud → nord)
- 2015 : increase of the interconnection capacity at Biriadou from 5 to 60 GWh/d
- Lack of long term demand supporting the last development step (Midcat project – Artère du Rhône project)
- Cancellation of the development of the PEG Nord – PEG Sud interconnection depending on the previous project
- Non-binding demand much higher than the real need
- Competition between the proposed capacity products for supplying the southern part of France
- Complexity resulting from coordination of several IPs (see. virtual test case developed in NW GRI)

France – Luxembourg: Indicative timeframe

- Non binding-phase :
 - Publication of Information Memorandum : 26th November 2010
 - End of non-binding phase : 31st January 2011
- Binding phase adjusted according to shippers expectations :
 - Publication of documents : expected early summer 2012
 - Shippers meetings : in the following month
 - Final allocation expected end of 2012
- Commissioning : Q4-2017 or Q1-2018 – to be confirmed

France – Luxembourg: Project description

- Shippers are consulted on 2 scenarios:
 - 9 GWh/d (35 000 m³(n)/h) - DN300 - 15 km in France + 2 km in Luxembourg + metering and regulation station,
 - 40 GWh/d (160 000 m³(n)/h) - DN500 - 45 km in France + 2 km in Luxembourg + metering and regulation station
- Joint allocation office performed a non-binding stage – to be performed jointly for final allocation
- For various levels of prices, shippers will be asked about the volume they are interested in
- For each price proposal, a total demand will be computed

Switzerland – France

- Creation of physical reverse flow capacity, enabling shipper to have gas transported from PSV to PEG Nord via Swiss network (Transitgas)
- 3 TSOs involved GRTgaz (FR) ; FluxSwiss (CH) ; SNAM RG (IT).
- Around 100 GWh/d South-North new capacity by 2018
- Lack of commercial coordination, from GRTgaz point of view
 - Making it more difficult for shipper to handle the whole route
 - Increasing risk for shippers
 - failing to attract newcomers

Information Memorandum

1/2

■ Context :

- Market integration
- Security of Supply

■ Products :

- Bundled / hub to hub products ?
- Physical capacities to be developed
- Capacities to be marketed
- Date
- Long Term commitments (> 10 years ?)
- Price : regulated price / auction ?

Information Memorandum

2/2

- Allocation Rules :
 - Priority Rules (date of commitment, duration of the engagement)
 - Pro-rata rule / auctions to be agreed by regulators
- Economic test : to be defined by regulators
- Tariff Visibility : to be defined by regulators
- Requirements to participate in the OS
- Joint Allocation Office

Conclusions (1/2)

- TSOs coordination is required to provide appropriate services
 - Technical coordination: joint project with several development steps whenever possible
 - Commercial coordination: consistency in order to avoid the risk of mismatches, be compliant with the CAM network code on bundled products
- Regulators input is also necessary
 - To provide tariff visibility
 - To clarify, when needed, the market structure and the products which are proposed
 - To ensure correct profitability for new investments



Conclusions (2/2)

- Open seasons are “long term” oriented. Long term commitments are supporting long term investments. 10 to 20 % of technical capacity can be dedicated to short term booking.
- European harmonisation in progress - still different approaches for investments approval by NRAs and lack of regional coordination (national open seasons / market consultations).

For more information: www.grtgaz.com

**Thank you
for your attention !**

