



RGNS Stakeholder Workshop
Bruxelles, 15. December 2011

NSCOGI 2030 - Ongoing Activities –

Antje Orths

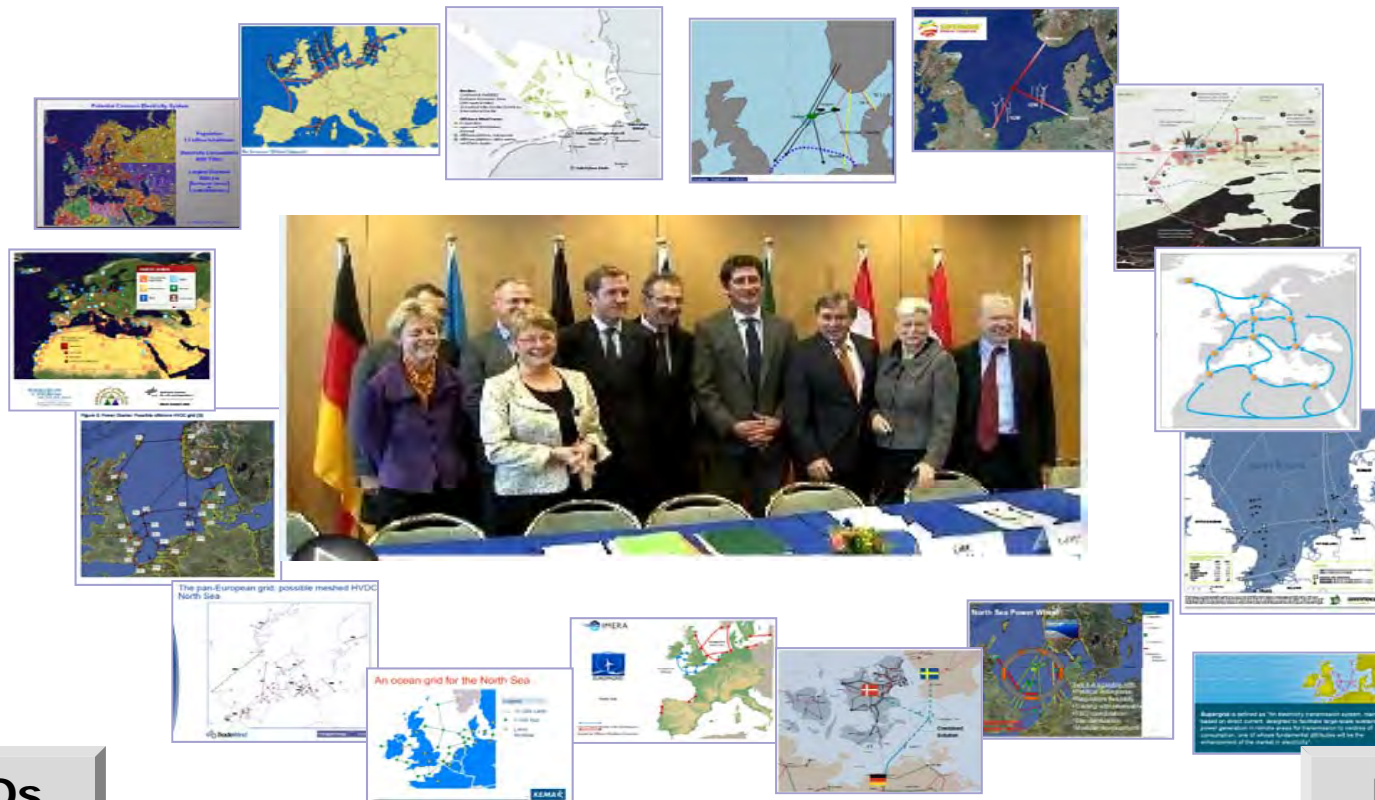
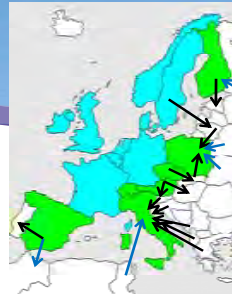
Antje Orths | RGNS + NSCOGI | 15 December 2011

entsoe
Reliable Sustainable Connected

North Sea Countries' Offshore Grid Initiative (NSCOGI)

Governments

Regulators

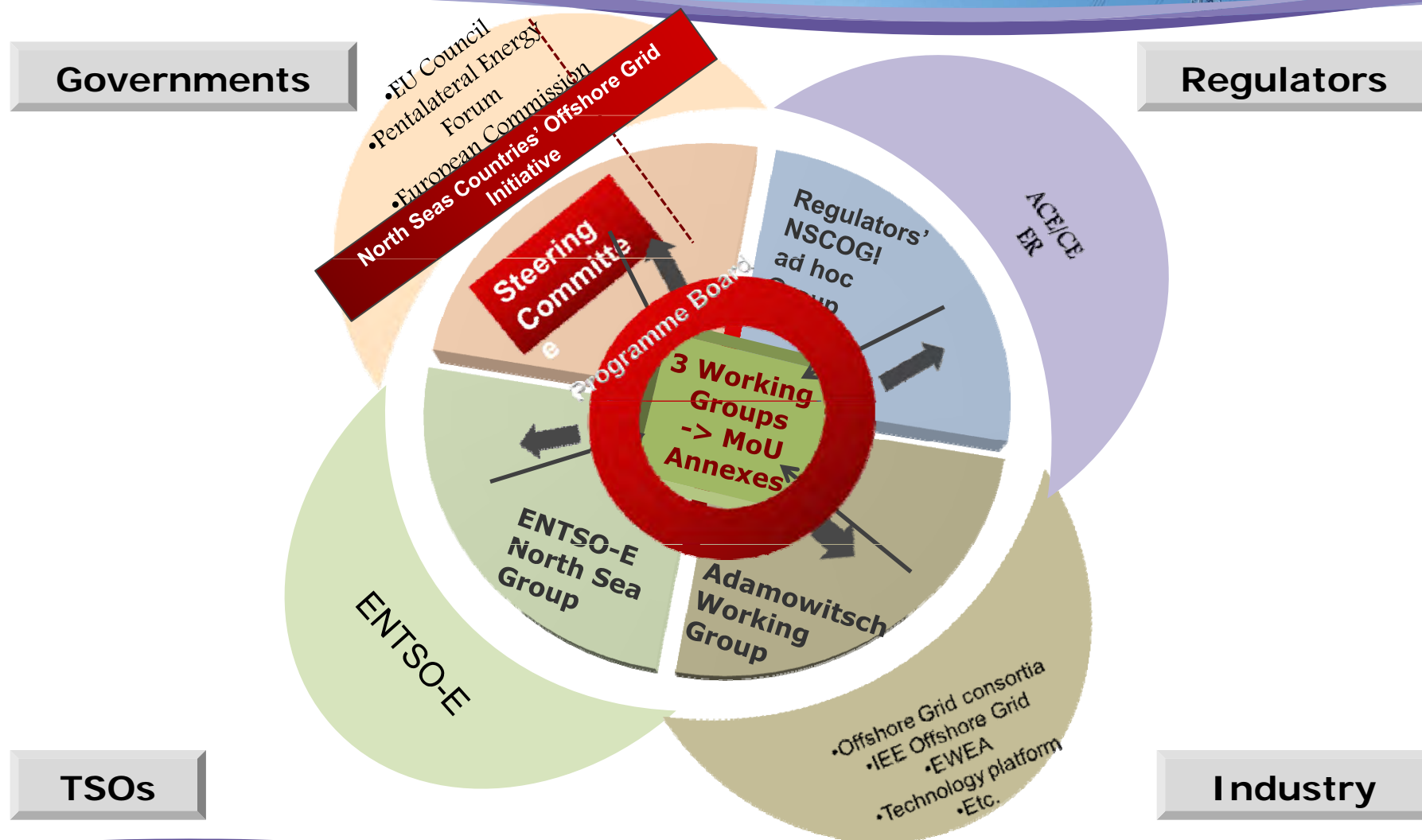


TSOs

Industry

Signing the MoU, December 2010

NSCOGI – Organisation



NSCOGI: Reporting Structure

Coordinated view on
North Seas' Offshore Grid

Ministers

Steering Committee

(Government officials & EC)

Programme

Board

- Governments
- Regulators
- TSOs (RGNS)
- Commission

3 Working Groups

(chaired by 2 Gov'ts)

- DK-NL **1 Grid Config & Integration**
- IE-UK **2 Market & Regulat Issues**
- DE-FR **3 Planning & Authorization**



"Adamowitsch
Working Group"

12.2010

12.2011

12.2012

The 3 Working Groups' Tasks

1. Grid Configuration & Integration

- North Seas Offshore & Onshore Grid Study, based on Government Policies and Grid Conditions, simulated in Market Simulations:
- Identification of Needs, Costs & Benefits

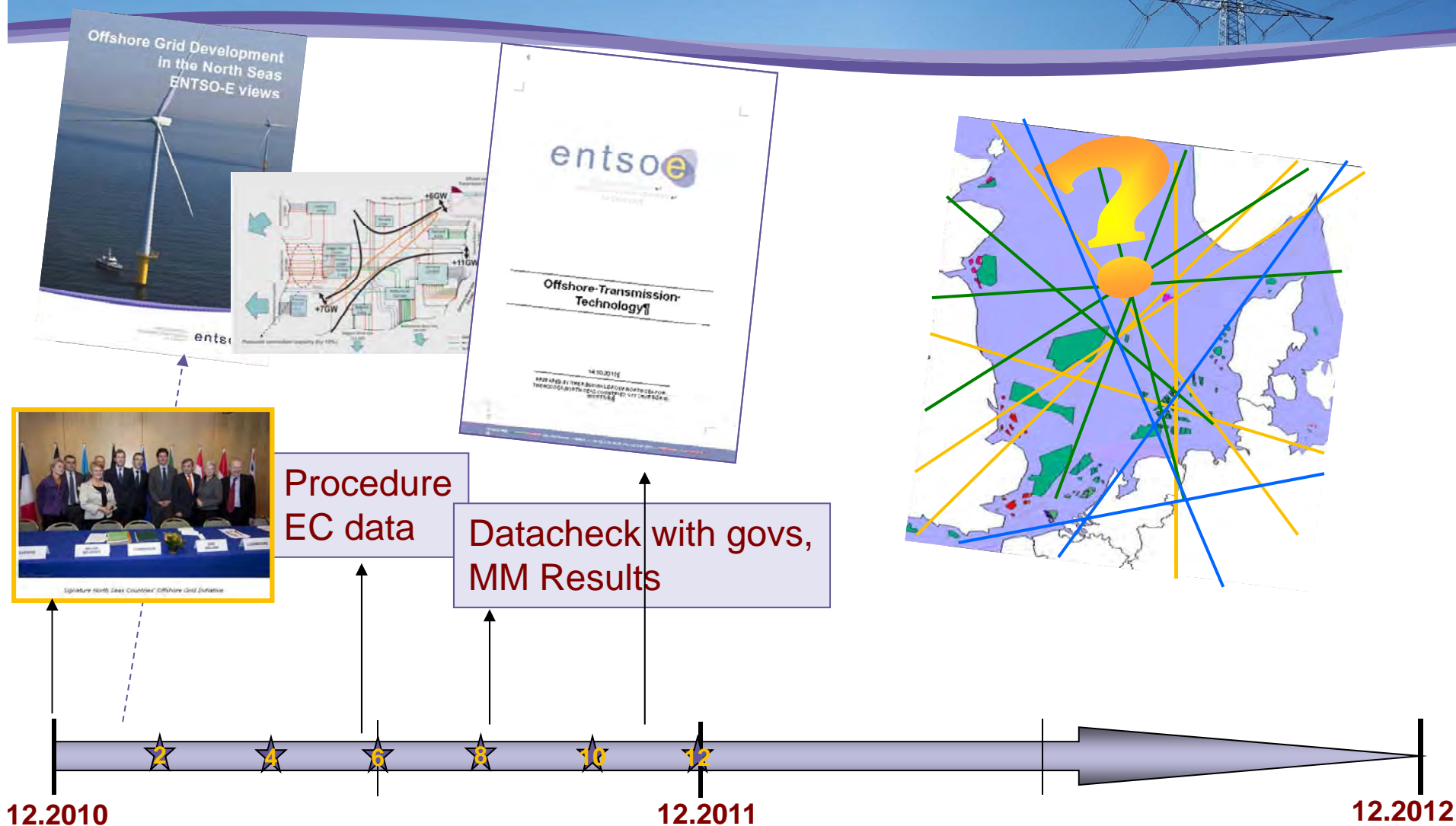
2. Market & Regulatory Issues

- Identification of Incompatibilities of national markets and regulatory regimes as Barrier to OFG
- Proposal on Cost –Benefit Sharing, Investment Incentives
- Proposal to Common Regulatory Approach to Anticipatory Investments, Risk sharing => cost efficient grid development
- Develop proposal for Market Mechanisms for both, increase RES & combination OWF+interconnectors, take national support schemes into account

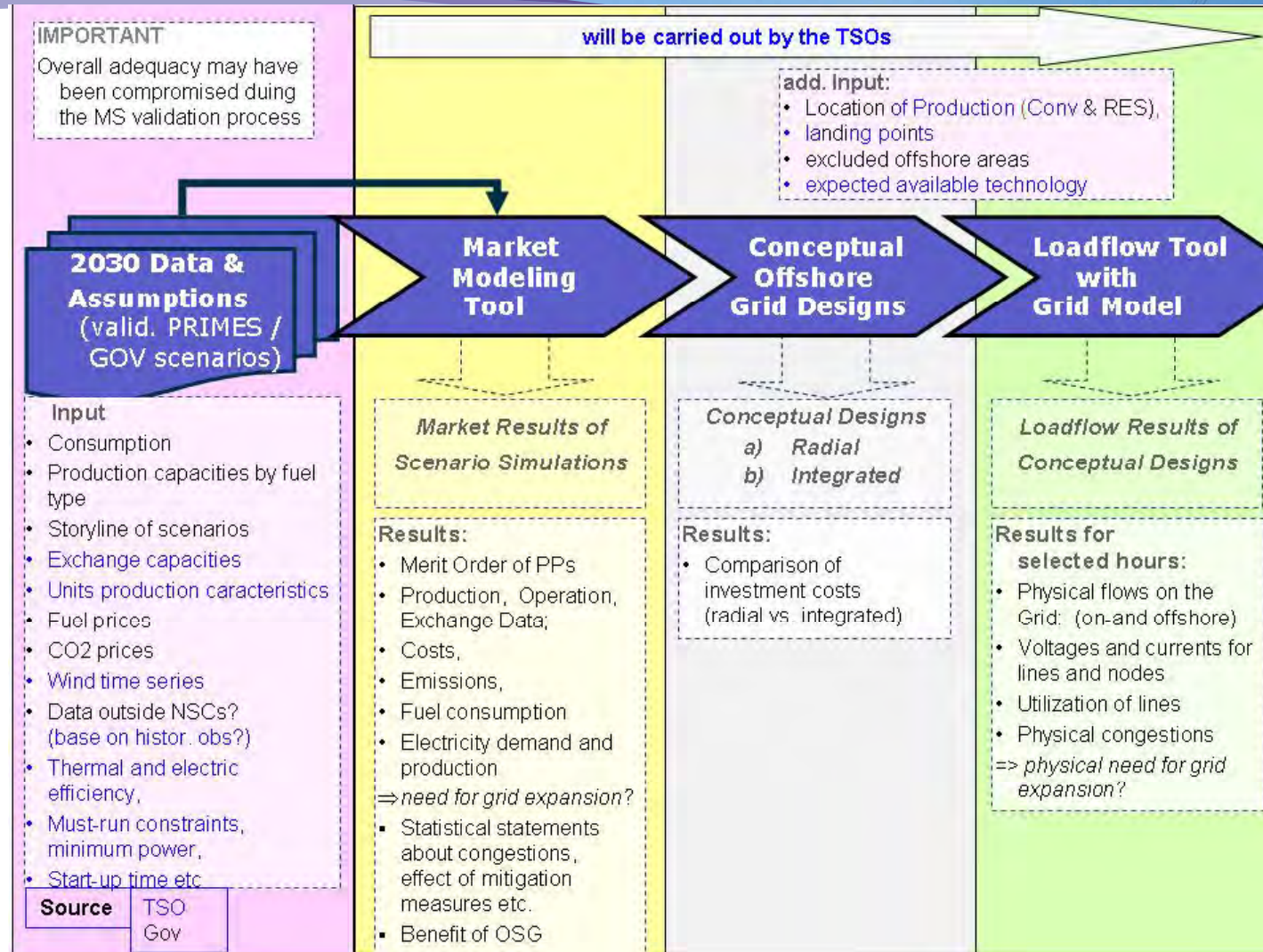
3. Planning & Authorization Procedures

- identify Incompatibilities in national regimes on authorization as barriers to OFG
- develop recommendations to accelerate decision making procedures both, for on- and offshore grid planning

WG1 - Exemplary Results from 2011

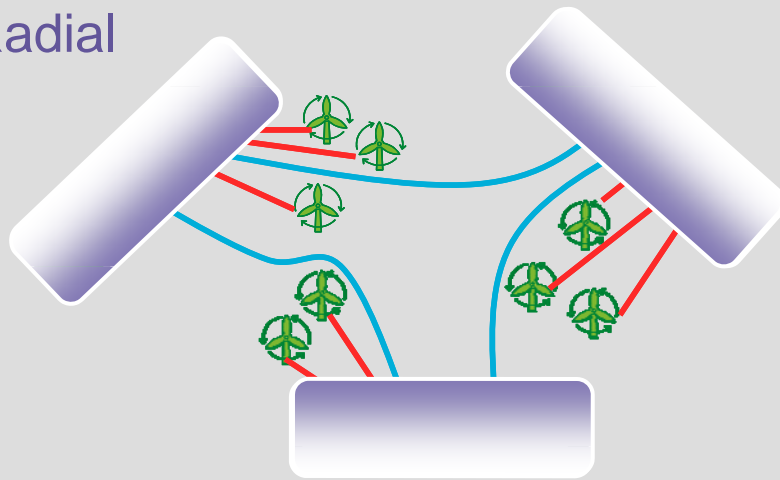


Procedure WG1

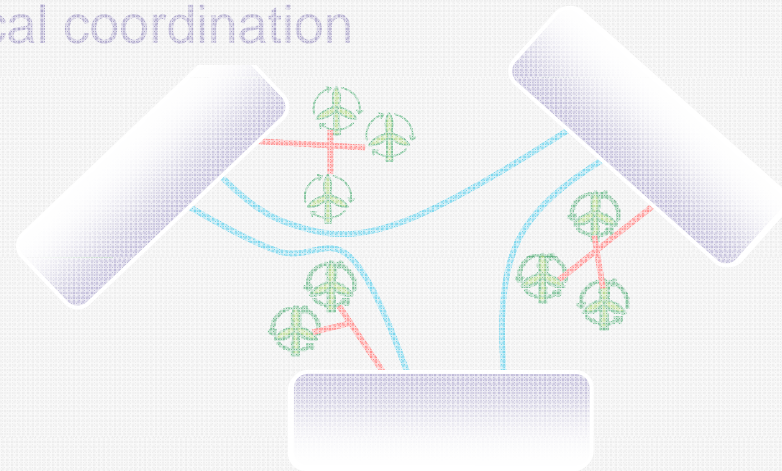


New Technology and Stepwise Development

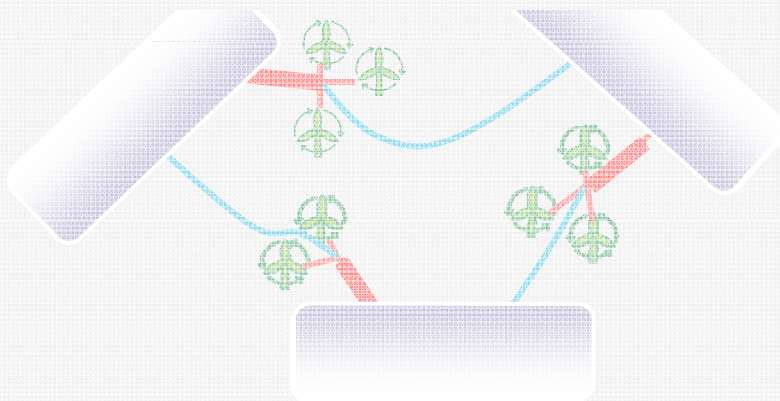
Radial



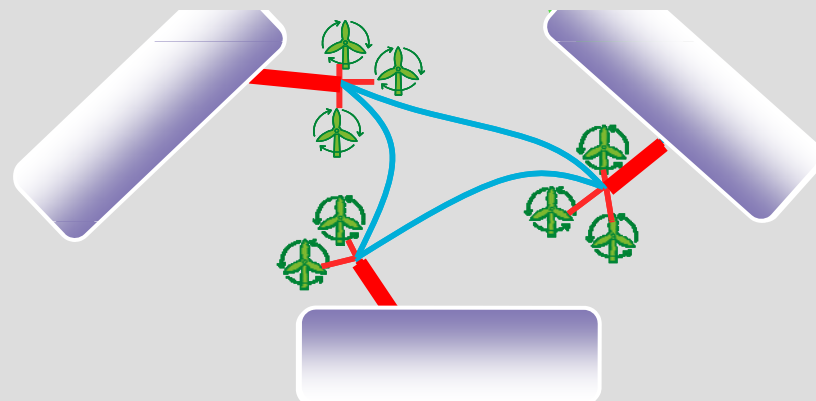
Local coordination



International coordination



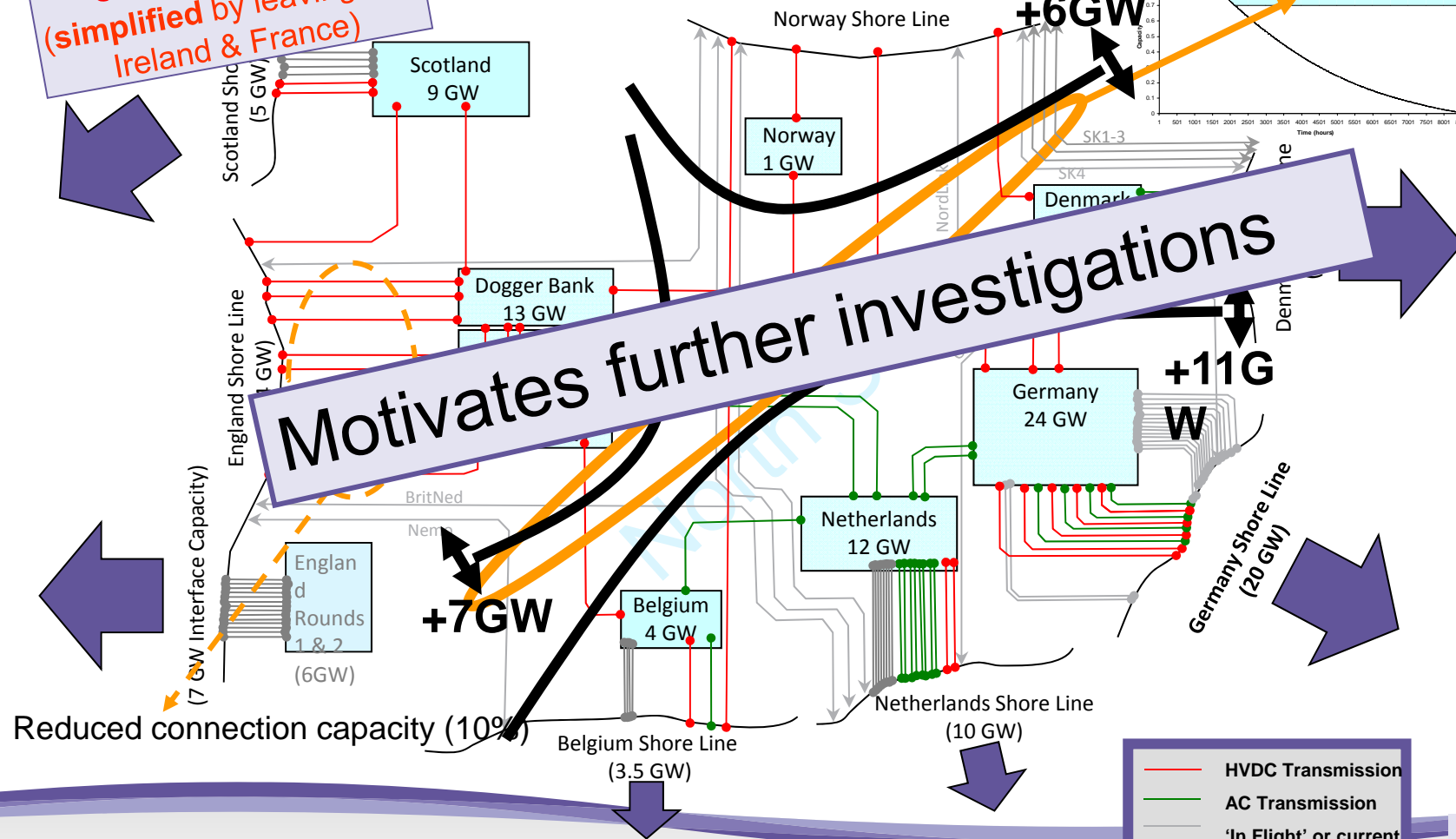
Fully integrated solution



This development and the information from the "Technology Report" will be used for the designs to be developed

Results of Preliminary Study Feb 2011: Optimised Integrated Offshore Grid Development

Scope of the **preliminary** outlook from 02/2011:
Central North Sea:
(simplified by leaving out:
Ireland & France)

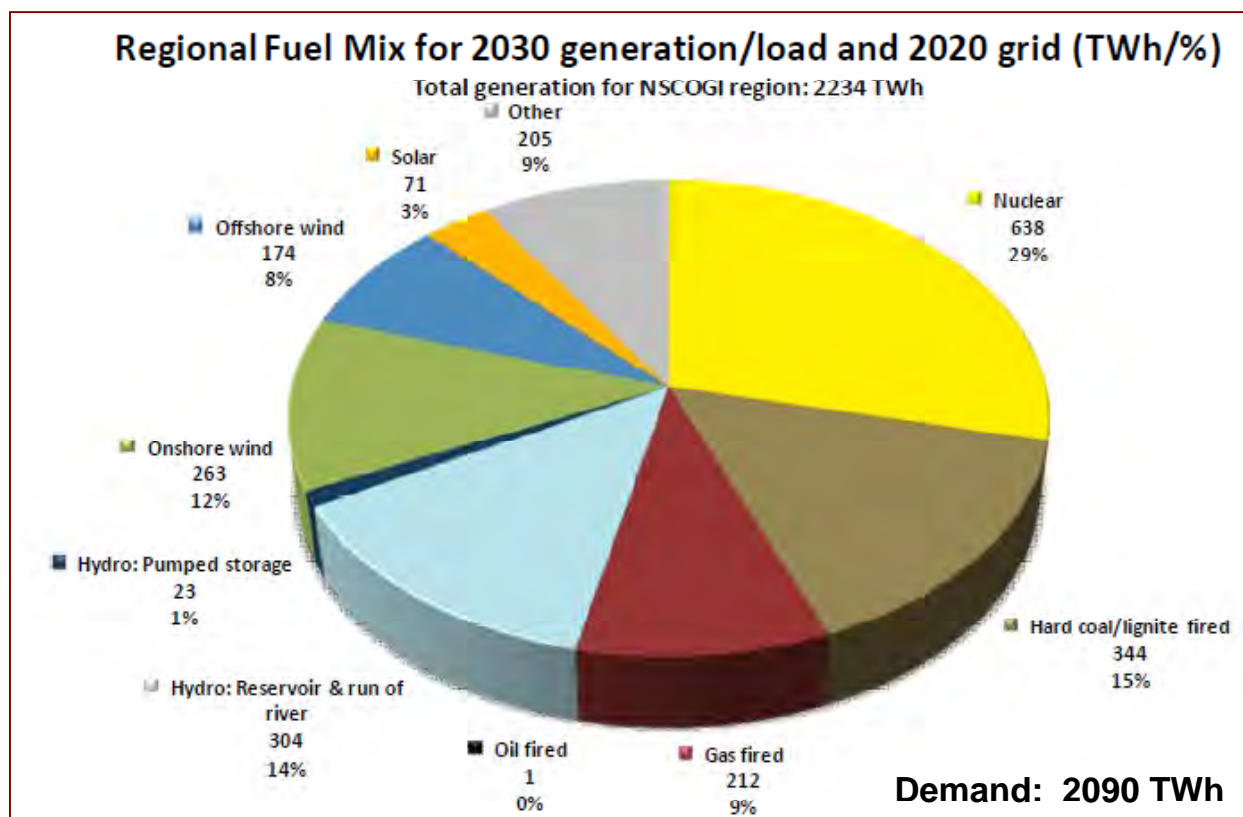
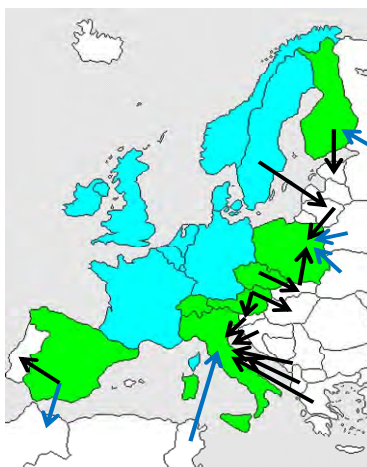


Benefits of planning a coordinated, integrated offshore grid (as identified in feb 2011)

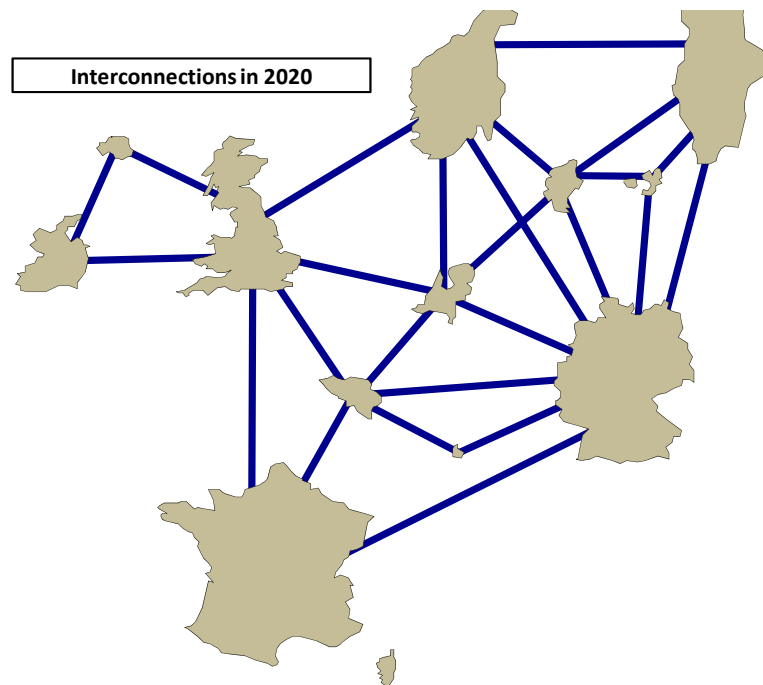
- **Maximising utilisation of the large scale assets** required to connect the offshore wind farms
- Improved **security of energy supply** (SoS) through flexible, controllable routes from offshore wind to demand centres/greater access to renewable generation
- Increased ability for **cross-border trade and balancing/market integration**
- Potential for **reduced offshore infrastructure construction costs**
- **Responsible use** of limited **natural and manufactural resources**
- **Improved standardisation and deliverability** by reducing supply chain pressures
- **But also: more complex than usually thought**

Starting Point: Market Simulations June 2011

- EC -> TSO: **Data on 2030**
- TSOs + national Governments adapted these data
=> new dataset “**NSCOGI-2011-R**” is checked



Next Steps until end 2012



- Information on Production by Fuel Type, Production Costs, Im- and Exports, Emissions.
- Identification of needs for grid expansion based on market flows
- Design Offshore Grid variants
- Simulate Physical Power Flows on- and Offshore
- Identification of Interaction with onshore grid
- Cost-Benefit evaluation

Summary

- A **longer term international coordinated plan** is the only way to deliver benefits related to the integration of large international offshore wind generation
- **NSCOGI is an efficient forum for preparing related decisions**
- ENTSO-E is committed to working closely with the NSCOGI to **overcome the barriers to the development of an optimum integrated grid in the North Seas.**
- Preliminary investigations have shown:
potential for responsible use of natural and manufactural resources, // cost saving potential, // Improvement of SoS,
-> although the grid solution is expected to be **more complex** than the classical solutions



Thank you!