



NORTHSEAGRID

Offshore Electricity Grid
Implementation in the North Sea

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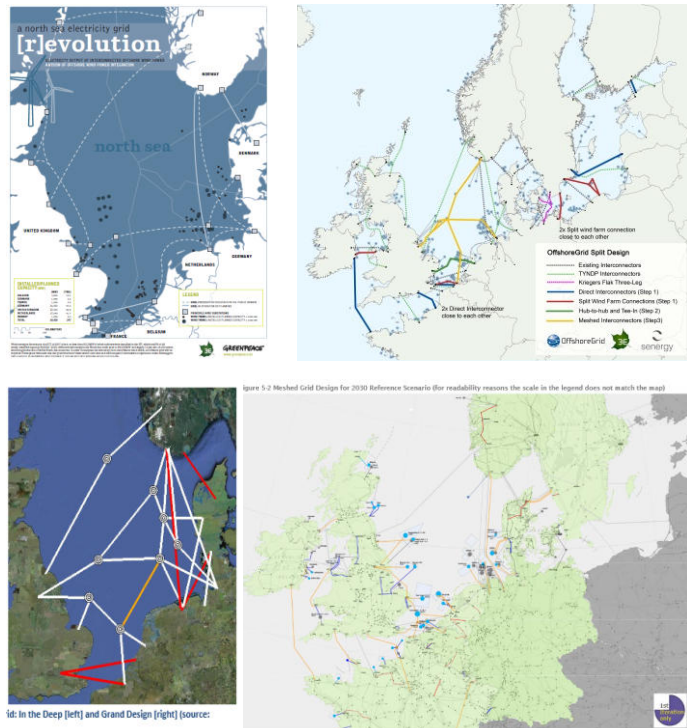
Project Introduction



NorthSeaGrid in a nutshell

- Content: technical, regulatory & financial analysis of practical case studies of building blocks for the development of an offshore grid
- Steering committee: project supported by NSCOGI
- Consortium: 6 European partners
- Duration: April 2013 – April 2015
- Budget: 1.4mio€, up to 75% funded by IEE
(Contract IEE/45/974/Si2.645927)

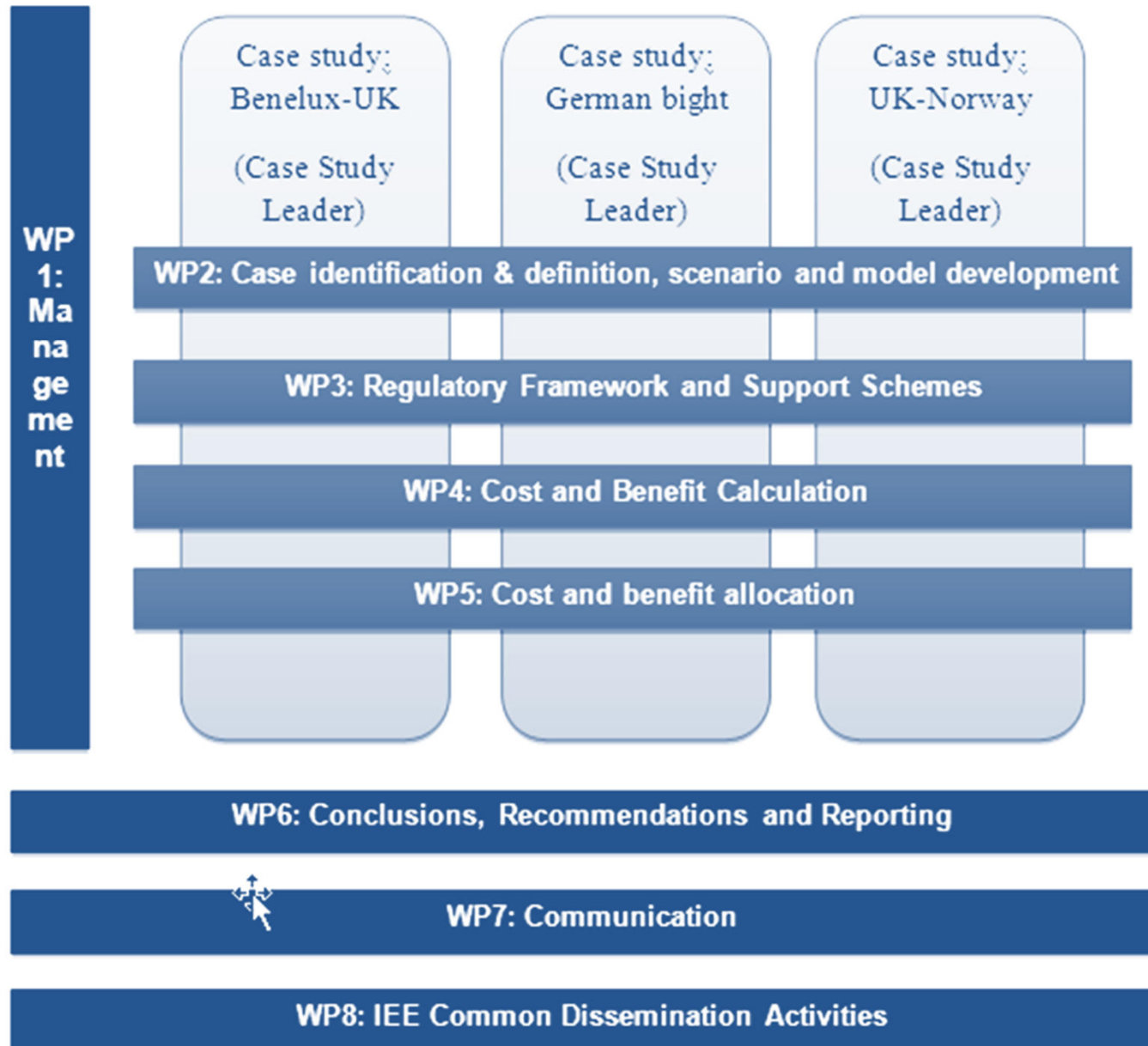
Towards the implementation of a North Sea offshore grid



- Starting point:
General acknowledgement, also at governmental level, that an offshore grid that integrates wind farms is beneficial
- Rationale:
However, while direct interconnections are built and planned, innovative solutions directly integrating offshore wind farms are not planned
- Status:
There are obviously many barriers to be removed before practical implementation

Practical cases to enable and remove barriers to the development of building blocks for a North Sea offshore grid

1. Outline, calculate and assess the primary financial barriers and risks to the implementation of selected projects
2. Investigate the current regulatory framework, specifically with regards to cost and benefit allocation across country borders to highlight shortcomings
3. Propose concrete recommendations and risk mitigation measures that are realistic and relevant to grid, financial and government stakeholders, especially NSCOGI



Expert consortium supported explicitly by NSCOGI

- Project coordinator: 3E
- Project partners:
ECN, ICON, DNV, CEPS, Deutsche WindGuard
- Steering committee:
Supported and followed by the North Sea Countries Offshore Grid Initiative



Concrete case results and recommendations

- A detailed cost inventory for each case study project, for different scenarios
- A calculation of the benefits of the interconnection analysed in each case study
- Different models for cost and benefit allocation to different countries and stakeholders such as project developer, TSO, etc.
- Identification of risk and the financial effects of this risk, with respect to each stakeholder
- Specific recommendations on policy, regulation, financial risk mitigation and how to overcome identified political barriers



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Thank you

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