

Financial institutions
Energy
Infrastructure, mining and commodities
Transport
Technology and innovation
Life sciences and healthcare



Tenders for offshore wind-power: Analysis of contractual risks

Anne Lapierre
Partner
Norton Rose Fulbright LLP

18 December 2013



International



*associate office

The speaker



Anne Lapierre

Partner, Norton Rose Fulbright LLP

Anne Lapierre is a project banking lawyer. She is Head of our Paris and Casablanca energy practices and leads our activities in the energy sector in francophone Africa.

Anne is top ranked by French and international legal directories for Energy, natural resources and international projects. She has been recognised in the 2012 and 2013 editions of Expert Guides as one of the world's leading women in business law. In 2013, she has also been selected as a leading energy lawyer in France by the US legal publication Best Lawyers.

Anne is a member of Enerplan and chairperson of the Economics group of France Energie Eolienne (FEE).

INTRODUCTION

- ✓ Despite France' favourable geographical conditions of France, France is still behind the curve.
- ✓ Target of sourcing 23% its final energy consumption from Renewable Energy Sources by 2020 (level of installed capacity for offshore wind farms to reach 6GW by 31 December 2020).
- ✓ In 2004, a tender was launched for 500 MW installed capacity but only a tranche of 105MW installed capacity was actually awarded to the German developer Enertrag and this project is not economic.
- ✓ In 2011, a new tender ("Round 1") was launched for 3GW offshore wind farm on five zones.
- ✓ On November 2013, bidders had to submit their bid for Round 2 offshore wind farm.
- ✓ On 22 January 2013, the French Government announced that it is considering launching a new call for tender, but no specific information was disclosed.
- ✓ Commissioning of the Round 1 project by 2020 will be very challenging and the commissioning of the Round 2 project within this deadline seems even less likely.
- ✓ For France to see national "champions" emerging, necessity to have a clear and ambitious investment multiannual program (PPI).

OFFSHORE CALL FOR TENDER – ROUND 1 – HOW DOES THIS WORK ?

Award of four zones for the «Round 1»

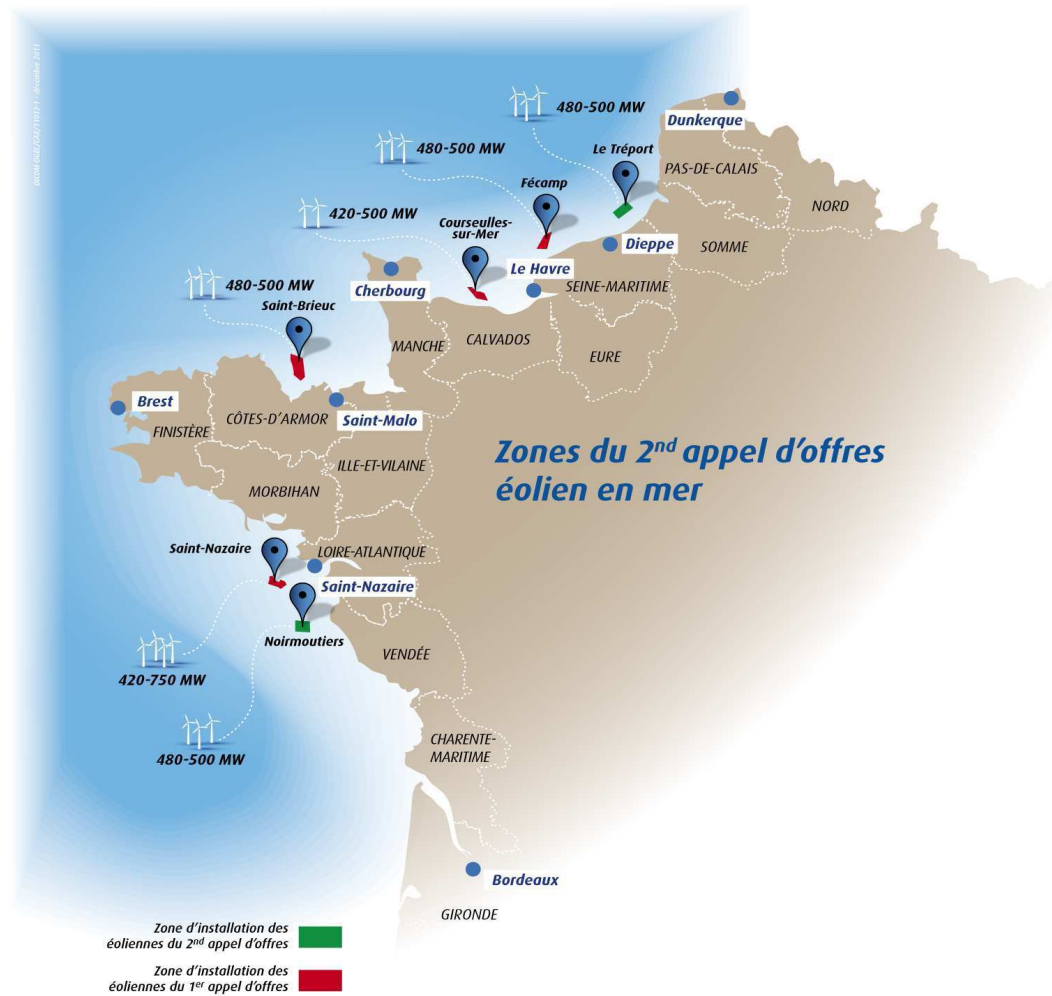
Zones of 1st call for tenders of 2011

- ✓ Fécamp (Seine-Maritime, capacity 498 MW), successful bidder: Eolien Maritime France (EDF-EN/DONG Energy/Alstom);
- ✓ Courseulles-sur-Mer (Calvados, capacity 450 MW), successful bidder : Eolien Maritime France (EDF-EN/DONG Energy/Alstom);
- ✓ Saint-Nazaire (Loire-Atlantique, capacity 480 MW), successful bidder: Eolien Maritime France (EDF-EN/DONG Energy/Alstom);
- ✓ Saint-Brieuc (Côtes d'Armor, capacity 500 MW),successful bidder: Ailes Marines SAS (Iberdrola/Eole RES/Areva)

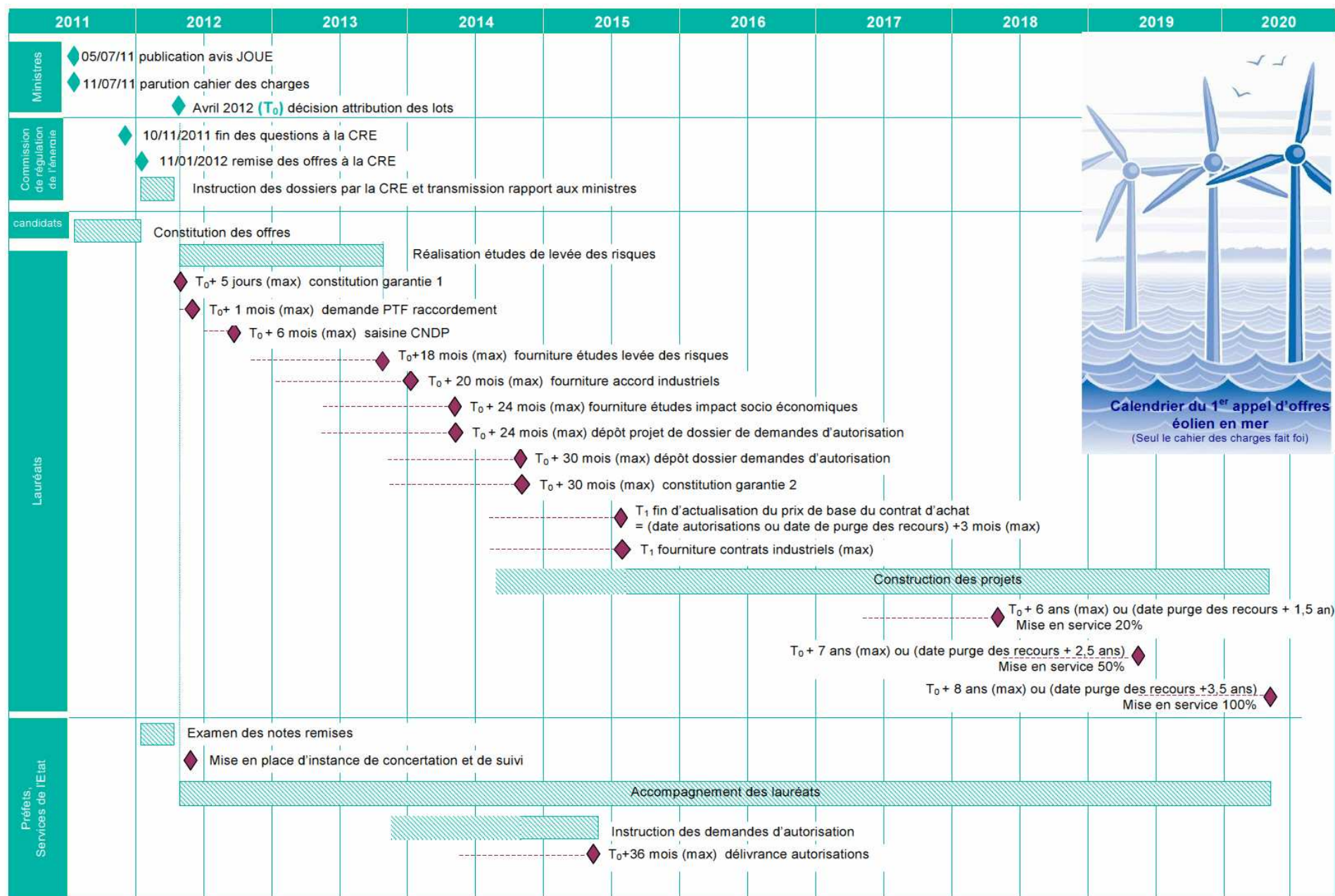
Zones of 2nd call for tenders (bids submitted on 29 November 2013)

- ✓ Le Tréport (Haute Normandie) – 110 km² 480/500MW;
- ✓ Iles d'Yeu et de Noirmoutier (Pays de la Loire) – 79 km² - 480/500MW

ZONES OF BOTH CALLS FOR TENDERS LAUNCHED BY THE CRE



TIMELINE OF THE CALL FOR TENDERS «ROUND 1»



◆ Jalons fermes ◆ Dates « au plus tard »

WHAT MAKES THE SETTING UP AND FINANCING OF OFFSHORE WIND FARMS SO DIFFERENT?

- ✓ Extremely complex and long process
- ✓ Hostile environment
- ✓ Engagement on a fixed tariff without having performed the relevant studies
- ✓ Securization of the tariff through the signature of PPAs late in the process
- ✓ Non proven technology - Technology specificity (leap of technology)
- ✓ Significant costs/investments

WHAT MAKES THE SETTING UP AND FINANCING OF OFFSHORE WIND FARMS SO DIFFERENT?

Three types of risks emerge:

- ✓ Industrial risk
- ✓ Economic risk
- ✓ Legal risk

Four agreements are mainly concerned:

- ✓ Consortium agreement
- ✓ O&M agreement
- ✓ PPA
- ✓ Concession to occupy the public domain

Two main periods:

- ✓ From submission of the bids to the execution of PPAs
- ✓ Operating period

INSECURITY PERIOD FROM SUBMISSION OF THE BIDS TO THE EXECUTION OF PPAs

SELECTION CRITERIA

Criteria	Maximum mark
Price	40
Industrial Program	40
Existing activities and environment	20
	100

INSECURITY PERIOD FROM SUBMISSION OF THE BIDS TO THE EXECUTION OF PPAs

A FIXED LONG-TERM TARIFF SECURED LATE IN THE PROCESS

Pre-defined area	Purchase price (min)	Purchase price (max)
Fécamp	115 €/MWh	175 €/MWh
Courseulles-sur-Mer	115 €/MWh	175 €/MWh
Saint-Brieuc	140 €/MWh	200 €/MWh
Saint-Nazaire	140 €/MWh	200 €/MWh
Le Tréport	140 €/MWh	220 €/MW or the median, plus 20% of the offer prices of all the bidders on the same lot
Iles d'Yeu et Noirmoutier	140 €/MWh	220 €/MW or the median, plus 20% of the offer prices of all the bidders on the same lot

NB: The price range difference between the zones takes into account the depth of the zone and the distance from shore.

INSECURITY PERIOD FROM SUBMISSION OF THE BIDS TO THE EXECUTION OF PPAs

A FIXED LONG-TERM TARIFF SECURED LATE IN THE PROCESS:

- ✓ PPAs are long term contracts (20 years as from commissioning of each of the three tranches) i.e. at the earliest 2018.
- ✓ Uncertainty up to the signing of the PPA as the State could tend to rely upon three main grounds to withdraw and avoid signing the PPA:
 - ❑ General possibility of the State to withdraw;
 - ❑ Questioning of the CSPE;
 - ❑ New potential guidelines from the Commission on support schemes.
- ✓ This situation raises a concern as to the securing date of the tariff and the financing of such projects.

INSECURITY PERIOD FROM SUBMISSION OF THE BIDS TO THE EXECUTION OF PPAs

INDUSTRIAL PROGRAM: SETTING UP OF PARTNERSHIPS

- ✓ Call for tender specifications are compliant with EU public procurement rules.
- ✓ Call for tender specifications call for partnerships.
- Bidders need to explain the different partnerships they want to build and the cluster of companies set up for the project.
- ✓ Additional example:
 - “The agreements contemplated with first rank and second rank sub-contractors, including a certain percentage reserved to SME”;*
 - “The means by which the bidder will contribute to the development of companies in all the sectors connected with the development of the offshore wind farm (components, [...] ports activities, storage, transport [...].) indicating the geographical location of such activities”;*
 - “Action plan to adapt the industrial capacity and the supply chain to ensure, in view of completion of the project, availability of components and services necessary to the project”.*

INSECURITY PERIOD FROM SUBMISSION OF THE BIDS TO THE EXECUTION OF PPAs

INDUSTRIAL PROGRAM: SETTING UP OF PARTNERSHIPS

✓ A real need to engage in long-term partnerships with:

- Equity investors
- Turbines manufacturers
- Offshore services companies
- Building companies

✓ Need to partnership for two main reasons:

- Seek complementary competences (ideally acquired in the North Sea)
- Seek financial support.

✓ To engage in a long term partnership, there is a need to ensure:

- The will of the partner to achieve the project;
- Stability/Strength of the partner (ex: Thanet)

✓ Need to partnership for a long period and to share the same view as partnership cannot be limited to the tender process.

INSECURITY PERIOD FROM SUBMISSION OF THE BIDS TO THE EXECUTION OF PPAs

INDUSTRIAL PROGRAM: SETTING UP OF PARTNERSHIPS

- ✓ Partnership at an early stage despite the absence of proven technology

For example:

- ❑ GDF/Areva: 8 MW;
 - ❑ EMF/Alstom: Haliades 150 - 6 MW.
-
- ✓ Additionally, a leap of technology is to happen.

INSECURITY PERIOD FROM SUBMISSION OF THE BIDS TO THE EXECUTION OF PPAs

INDUSTRIAL PROGRAM: LINKED BIDS

- ✓ Possibility for bidders to submit linked bids.
- ✓ Bidders such as EMF had submitted linked bids for the 4 zones but have only been awarded 3 of them.
- ✓ Need to readjust EMF's bid and in particular the commitment to construct a certain number of factories.

INSECURITY PERIOD FROM SUBMISSION OF THE BIDS TO THE EXECUTION OF PPAs

CONSTRUCTION PERIOD

- ✓ Comparing to the scale of the project, EPC contracts are not very long contracts. However, EPC contracts still last around three years and are absolutely crucial;
- ✓ A number of risks can be identified with respect to construction of offshore wind farms:
 - Procurement Strategy
 - Design Issues
 - Design Interface
 - Physical Interface
 - HSE Risks
 - Vessel Availability / Risk
 - Site Condition Risk
 - Cables
 - Grid connection



DIVISION OF LABOUR – “MULTI- CONTRACTING”

	Developer	Turbine Supplier	Electricals	Foundations	Transition Pieces	Cables			
	Foundations	Transition	Offshore Electrical	Turbines	Array Cabling	Export Cabling	Onshore Electrical	Vessels	
Survey	Various subcontractors	X	X						
Design	External designer								
Manufacture									
Transport	Developer chartered Osprey barges		Using SHL Stanislav Yudin					Osprey A2SEA IHC Hydrohammer MPI Seaway Heavy Lift Divers Personnel vessels Guard vessels Tug support	
Installation	Developer chartered A2SEA And IHC Hydrohammer	Developer chartered MPI Resolution 2009 Charter		MPI Resolution 2010 Charter					

Developer

Turbine Supplier

Electricals

Foundations

Transition Pieces

Cables

	Foundations	Topside / Transition	Offshore Electrical	Turbines	Array Cabling	Export Cabling (German Grid)	Onshore Electrical	Port	Vessels										
Survey	Developer	Foundations	Electricals	Turbine Supplier	Developer	X	X	Foundations	Electricals	Turbine Supplier	Foundations	Electricals	Turbine Supplier	Foundations	Electricals	Turbine Supplier	Foundations	Electricals	Turbine Supplier
Designs	Foundations	Foundations	Foundations	Foundations	Foundations	X	X	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations
Manufacture	Foundations	Foundations	Foundations	Foundations	Foundations	X	X	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations
Transport	Foundations	Foundations	Foundations	Foundations	Foundations	X	X	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations
Installation	Foundations	Foundations	Foundations	Foundations	Foundations	X	X	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations	Foundations

57

INSECURITY DURING THE OPERATING PERIOD

Main issues are:

- ✓ maintenance to take place in a hostile environment (corrosion, stream, weather conditions)
- ✓ vessels availability
- ✓ in case of accident or breakdown, risk of impact on power production



SECURING FINANCING

- ✓ Growing appetite for offshore wind, foreseeable competition between actors in a stable and reliable environment
- ✓ An estimated total investment of EURO 80 billions for the forthcoming decade
- ✓ A limited number of key players involved in almost all the transactions (Rabobank, ASN, KfW, EKF and BEI)
- ✓ Available volumes:
 - EUR 100 million exposure per year and per bank, shared on 1 to 3 transaction
 - 15 to 20 banks currently active in the offshore wind farm market
 - Around EURO 2 billion per year on the commercial banks' debt market
 - DFI's can contribute as much as commercial banks in a transaction
 - Together, they can make available funds which would be sufficient to finance on a yearly basis 3 to 5 industrial projects (400 MW each)

WHAT NEEDS TO BE DONE SHORTLY

- ✓ Give visibility to successful bidders with guaranteed investments and a secured price that reflects real costs.
 - ✓ A strong political support combined with a strategic long-term planning of the maritime space
 - ✓ Simplifying legal and regulatory framework ensuring stability:
-
- ❑ Reducing the number of authorisations to be granted and limiting the corresponding number and timeframe for recourse, shall the selected bidder be granted all authorisations to construct and operate.

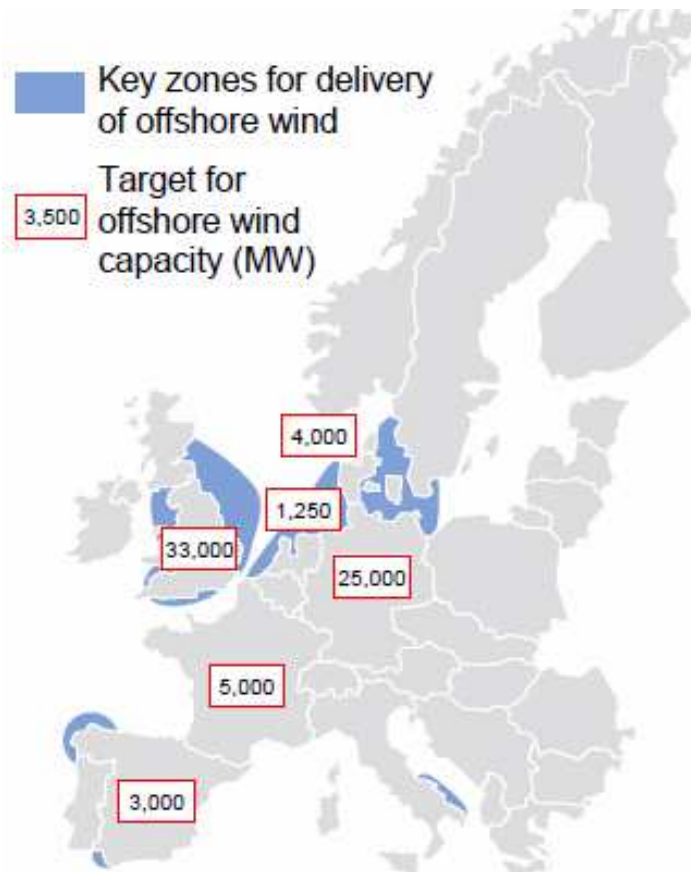
 - ❑ Reviewing the termination condition for general interest at the State's convenience of the public domain concession.

 - ❑ Setting up the full legal framework for the development of offshore windfarm in exclusive economic zone.

WHAT NEEDS TO BE DONE SHORTLY

- ✓ Limiting financial risks:
 - ❑ Striving to reduce investment costs and environmental risks through the performance by the Government of an assessment of the zone's characteristics (bathymetry..)
 - ❑ Pre-signed PPA
 - ❑ Flexibility to be obtained as to progressive commissioning of wind turbines and corresponding implementation of the PPAs to optimise investments
 - ❑ Grid connexion: IRR 7,25% - Interesting for infrastructure funds.
- ✓ Ensuring necessary port infrastructure and skilled labour force and appropriate vessels.

OFFSHORE WIND IN EUROPE: GOVERNMENT INCENTIVES



Offshore Tariff Analysis				
	Total Price (€/MWh unless noted)	Support Length (yrs)	Typical Load Factor	Relative Value Index
Tradable Certificates				
UK	151.6 £/MWh	20 Indexed	40	1.38
Italy	189.8	15 Not Indexed	33	1.23
Sweden	90	15 Indexed	40	1.00
Feed-in Tariff				
Spain (Variable)	134	20 Indexed	37	1.23
France	130	20 Indexed	35	1.13
Germany	150	12 + 8 Not Indexed	35	1.10

Source: RBC Capital Markets – French Round 1 and 2 not included in the above table.

OFFSHORE WIND IN EUROPE: THE GERMAN APPROACH

- ✓ Article 3 of the Offshore Installations Ordinance (Seeanlagenverordnung): the Applicant has a legal claim to a permit unless:
 - threat to marine environment,
 - threat to safety of shipping traffic,
 - not in compliance with aims of spatial planning or
 - overriding public interest.

- ✓ One Stop Shop (transparency of approval requirements, bundling of information, facilitation of conflict resolution, coordinating body during enforcement process and construction)

- ✓ BSH-Standards: Guidance for certain problems (monitoring, design, ground investigation) in the approval and enforcement process

OFFSHORE WIND IN EUROPE: THE GERMAN APPROACH

- ✓ Selection criteria linked to the (i) environmental project and (ii) track record and competencies of the consortia (no reference to production location, no involvement of the turbines manufacturers at the bidding stage)
- ✓ Strong political support with a specific policy on Offshore Wind Energy to overcome barriers such as grid connection and financing
- ✓ Real knowledge on maritime areas (FINO platforms, preparatory phase of Germany's Offshore strategy started in 2003)
- ✓ Research tests fields (Alpha Ventus) provides a good basis for companies to test the special conditions on sea (information on environment shared between market players)
- ✓ Financing support via KfW program «Offshore windenergie » - €5 billion at market conditions for the first 10 offshore wind farms
- ✓ Revenues generated by the offshore industry are now higher than what has been invested to support the industry

OFFSHORE WIND IN EUROPE: THE BRITISH APPROACH

- ✓ Criteria for selecting the successful bidders in Round 3 were all based around which bidder was best placed to deliver the development of the zone:
 - Bidder's organisation – 20%
 - Financial strength – 20%
 - Experience and capacity – 20%
 - Health and Safety – 25%
 - Zone delivery plan

- ✓ Although the Crown Estate did ask for detailed information as regards how the zone development plans would be implemented (including ability to secure the supply chain, construction methodology, port base, etc), no explicit requirements for local content

OFFSHORE WIND IN EUROPE: THE BRITISH APPROACH

- ✓ Direct Government funding to develop some of the UK's port infrastructure so that the ports have the necessary facilities to enable turbine manufacturers have sufficient load-out surfaces
- ✓ Uncertainty on the level of tariff (volatility of market prices and as well as ROCs)
- ✓ German tariff considered as more suitable to get project financing

The logo for Norton Rose Fulbright, featuring a gold chevron symbol above the text "NORTON ROSE FULBRIGHT" in red, uppercase, sans-serif font.

NORTON ROSE FULBRIGHT

Disclaimer

Norton Rose Fulbright LLP, Norton Rose Fulbright Australia, Norton Rose Fulbright Canada LLP, Norton Rose Fulbright South Africa (incorporated as Deneys Reitz Inc) and Fulbright & Jaworski LLP, each of which is a separate legal entity, are members (“the Norton Rose Fulbright members”) of Norton Rose Fulbright Verein, a Swiss Verein. Norton Rose Fulbright Verein helps coordinate the activities of the Norton Rose Fulbright members but does not itself provide legal services to clients. References to “Norton Rose Fulbright”, “the law firm”, and “legal practice” are to one or more of the Norton Rose Fulbright members or to one of their respective affiliates (together “Norton Rose Fulbright entity/entities”). No individual who is a member, partner, shareholder, director, employee or consultant of, in or to any Norton Rose Fulbright entity (whether or not such individual is described as a “partner”) accepts or assumes responsibility, or has any liability, to any person in respect of this communication. Any reference to a partner or director is to a member, employee or consultant with equivalent standing and qualifications of the relevant Norton Rose Fulbright entity. The purpose of this communication is to provide information as to developments in the law. It does not contain a full analysis of the law nor does it constitute an opinion of any Norton Rose Fulbright entity on the points of law discussed. You must take specific legal advice on any particular matter which concerns you. If you require any advice or further information, please speak to your usual contact at Norton Rose Fulbright.