



## Project Summary

### DISTANT OFFSHORE WINDFARMS WITH NO VISUAL IMPACT IN DEEPWATER

#### DOWNVInd

**Action Line:** Cost-effective supply of renewable energies

**Contract Type:** Integrated projects

**Activity area:** Wind Energy

#### Coordinator:

**Organisation:** Talisman Energy (UK) Limited  
Talsiman House, 163 Holburn Street  
AB10 6BZ Aberdeen  
UK

**Contact Person:** [Allan MacAskill](#)

#### Project details

<b>Reference:</b>	Wind/503202/2003	<b>Start Date:</b>	14/09/2004
<b>Status:</b>	Execution	<b>End Date:</b>	14/09/2009
<b>Project Cost (€):</b>	29.992.986	<b>Duration (months):</b>	60
<b>Project Funding (€):</b>	6.000.000		

#### Summary

##### BEATRICE OFFSHORE DEEPWATER WIND FARM INTEGRATED PROJECT

Talisman Energy is co-ordinator of the BEATRICEWINDENERGY multidisciplinary consortium of European stakeholders whose objective is to lead in the global market of installing and operating deepwater offshore windfarms.

The consortium considers it feasible, albeit with substantial risk, to develop a "new generation" of wind turbine installation suited to offshore operations by making step change improvements in existing components design and utilising new approaches to manufacture, installation and "life of file" maintenance.

However, to realise this aim a reduction on present day capital costs in the order of 20% will need to be achieved.

The objective of the Beatrice Offshore Deepwater Wind Farm Integrated Project is to meet or exceed this cost reduction target by RTD and innovation in the following four main areas:

##### Technology:

Design suitable modifications to existing 5MW wind turbine generator (WTG) enabling appropriate marine transportation and installation in deepwater.

Develop new generation WTG and power distribution systems.

Develop new generation wind turbine peripheral sub-systems, processes and procedures for easy installation and maintenance.

Develop and validate offshore wind turbine generator (WTG) mass production methodology. Establish parameters for multi WTG installations and tie-in to national grids.

##### Economic and Social:

Develop and validate the generic multi WTG offshore installation approach (or model) for:

- Economics and planning

- Environment and Improvement of social acceptance.

Contribute to establishment of codes, standards and regulations for construction and operation.

##### Demonstration:

Prove the feasibility of fast track development and installation and then economic operation of offshore windfarms in deepwater by installing a 2x5MW turbine "windfarm" in the Beatrice oilfield applying the "new generation" technology, processes and procedure.



## Partners

1	Talisman Energy (UK) Limited	GB
2	SSE Generation Ltd	GB
3	Electricité de France	FR
4	E.ON Vindprojectering Sverige AB	SE
5	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	GB
6	T.G. Teknikgruppen AG	SE
7	Hammarlund Energy Consulting AB	SE
8	Platform Brokers v.o.f.	NL
9	Risoe National Laboratory	DK
10	Energy Research Centre of the Netherlands	NL
11	Kungliga Tekniska Högskolan	SE
12	Stokholms universitet	SE
13	University of Strathclyde	GB
14	Lunds universitet	SE
15	REpower Systems AG	DE
16	Germanischer Lloyd WindEnergie GmbH	DE
17	NAUT	GB