Editorial

I’m happy to welcome you to the first issue of our ECOWindS Newsletter, with the hope that it will wake your interest in our project. The intention of this newsletter is to keep all involved partners, regional authorities, and the industry well informed in a continuing series of six issues during the three-year project period.

The project ECOWindS (European Clusters for Offshore Wind Servicing) was initiated by seven partners from four European countries on 1 November 2012, with Offshore Center Danmark as lead partner. The project was kick-started on 14 November in Esbjerg. Please find the article about the project’s kick-off meeting in this issue.

The project is funded by the European Union under the Seventh Framework Programme and the seven partners themselves. During our first three months we have already made impressive progress with the active involvement of germanwind, Danish Technical University and Offshore Center Danmark. Six scheduled “deliverables” have been submitted, and I’d like to highlight the website, project flyer and consortium agreement signed by all partners. The other four partners will see to their primary tasks at a later stage in the project.

The objective is to increase the innovation capacity of the European offshore wind servicing (OWS) sector by establishing cross-regional cooperation and intensifying the relationship between research and the offshore wind sector.

Kind regards,
Hans A. Pedersen

Table of contents

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the project ECOWindS</td>
<td>2</td>
</tr>
<tr>
<td>Successful ECOWindS kick-off meeting</td>
<td>2</td>
</tr>
<tr>
<td>“Regional mapping” has started</td>
<td>3</td>
</tr>
<tr>
<td>Introduction of the partners</td>
<td>3</td>
</tr>
<tr>
<td>ECOWindS</td>
<td>9</td>
</tr>
</tbody>
</table>
About the project ECOWindS

ECOWindS (the European Clusters for Offshore Wind Servicing) is an EU-funded project which has been jointly initiated by the offshore wind clusters of South Denmark, East of England and North-West Germany and the offshore cluster Møre in Norway.

The objective of ECOWindS is to increase the innovation capacity of the European offshore wind servicing (OWS) sector by establishing cross-regional cooperation, intensifying the relationship between research and the offshore wind industry.

OWS is defined as a distinct sub-sector within the value chain of wind energy production and supply and encompasses the processes of assembly, installation, operation and maintenance of offshore wind turbines.

Successful ECOWindS kick-off meeting

On Wednesday, 14 November 2012, the seven project partners and their project officer, representing the European Commission, gathered to kick-start the newly approved ECOWindS project. Offshore Center Danmark, represented by Project Manager Hans A. Pedersen, was the lead partner hosting and facilitating the meeting, which was held in Esbjerg.

As ECOWindS’ top representative, Managing Director Peter Blach from Offshore Center Danmark welcomed all partners and expressed his expectations for cooperation and the results planned. All partners presented their contributions and voiced their expectations of the project and of the other partners. This process helped to facilitate a common understanding and contributed to building team spirit.

Project Officer Ralitsa Atanasova presented an overview of the programme and its practical aspects, including guidelines and recommendations. The participants agreed on a “code of conduct” describing how to cooperate, how to interact and what procedures, documents and terminology to use. Everyone expressed their commitment to ECOWindS and the cooperation.

The next meeting of the Project Steering Group (PSG) will be held in Ålesund on 21 May 2013. It was agreed that subsequent PSG meetings will be held each November and May in following years. Meetings will alternate between the partners.
“Regional mapping” has started

Analysis of the state-of-the-art in regional offshore wind clusters is ECOWindS’ first task – stakeholders from industry, science and administration are involved

Work has begun on ECOWindS’ initial work package called “Regional Mapping”, expected to take up the first year of the project. Regional mapping involves the identification and analysis of the strengths and weaknesses of participating clusters, their research and development capacities, business needs and the demand for innovation. Regional mapping will provide a basis for identifying cross-cluster correlations and synergies as starting points for a joint action plan (JAP) to define measures for enhancing the innovation capacity of Europe’s offshore wind servicing (OWS) sector.

germanwind in Bremerhaven is the manager of this work package and responsible for preparing a detailed analytical framework as the basis for comparatively analysing each of the participating offshore wind clusters. germanwind is supported by the Department of Management Engineering at the Technical University of Denmark (DTU), which is contributing expertise in innovation analysis.

All project partners will be involved in actual data collection and an analysis of the state-of-the-art of their own cluster based on the analytical framework prepared beforehand. The first step will involve a detailed analysis of the OWS sector’s structure. The next steps will aim to analyse the functioning of innovation systems in order to build up a thorough understanding of each cluster’s internal dynamics.

A vital task will be the subjective evaluation of each cluster’s performance. Therefore it will be essential to involve stakeholders from industry, science and administration. Selected representatives will be invited to contribute to evaluating cluster performance. Altogether four stakeholder workshops will be organised – one in each of the participating clusters.

Introduction of the partners

- Offshore Center Danmark 4
- Technical University of Denmark 5
- OrbisEnergy - NWES Property Services Ltd 5
- germanwind GmbH 6
- Ålesund Kunnskapspark AS 6
- NORWEGIAN CENTRE OF EXPERTISE - MARITIME (NCE) 7
- Ålesund University College (AUC), Norway 8
- OrbisEnergy – Nautilus Associates Ltd 9
Offshore Center Danmark

Offshore Center Danmark is the official national competence and innovation centre for the Danish offshore industry. On behalf of its 250+ member companies and institutions, Offshore Center Danmark pushes development with the aim of growth within the Danish offshore industry. Focus areas are oil and gas, offshore wind, the offshore maritime area and wave energy. These areas are managed in two divisions: Oil & Gas and Renewables.

Renewables
Since the world’s first offshore wind farm was erected in Denmark in 1991 in the southern part of the country, a significant industry has emerged that is involved in renewable energy. Operators, producers, sub-suppliers of products and services, plus a range of research and educational institutions, are involved in a very active and focused way in this sector. Offshore Center Danmark - Renewables is the connecting link and a catalyst that supports continuing expansive development both in a technological sense and in relation to the market.

Oil & Gas
Denmark was the first country to discover oil in the North Sea and is today the only oil-exporting country in the EU. Around 600 companies are involved in the Danish oil and gas sector, which includes oil companies, suppliers, specialists, researchers and educational establishments. Offshore Center Danmark - Oil & Gas is the connecting link and catalyst in the sector and ensures that the Danish offshore oil and gas sector keeps developing and becoming even more internationalised.
Technical University of Denmark

The Technical University of Denmark (DTU) is among the leading technical universities in Europe. According to Leiden Ranking's list of the world's 500 largest universities, DTU is ranked #1 in the Nordic region and #7 in Europe in terms of Web of Science publications in the period 2005–2009. DTU has international educational exchange programmes with over 200 universities around the globe, and enjoys close research collaborations with its partners in addition to building research and educational programmes in the Nordic Five Tech and EuroTech Universities alliances, and with Rensselaer in the United States, Nanyang in Singapore, and KAIST in South Korea. DTU has approximately 4,500 staff members, of which more than half are academic staff including 1,050 Ph.D. students. DTU has approximately 6,500 bachelor and master level students. Each year, 850 international students are enrolled in the university's English language education programmes.

DTU’s Department of Management Engineering has 279 employees consisting of which 68 are Ph.D. students. More than 20% of employees are from abroad and altogether 38 different nationalities are represented in the department. The department is divided into five divisions and two centre with different disciplinary perspectives: Production and Service Management, Management Science, Technology and Innovation Management, DTU Executive School of Business, Quantitative Sustainability Assessment, System Analysis, and the UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC) that supports the United Nations Environment Programme (UNEP). The latter three units are primarily active with energy and environment research.

DTU's Department of Wind Energy has a staff of more than 230 employees consisting of 150 academic staff, and almost 60 Ph.D. students. The department consists of 8 sections: Fluid Mechanics (Composite Mechanics), Meteorology, Aeroelastic Design, Wind Turbines, Wind Energy Systems, Test and Measurements, Composite and Materials Mechanics, and Materials Science and Characterisation. Furthermore, the department operates a large wind turbine test site at Østerild in the northwestern part of Denmark.

OrbisEnergy - NWES Property Services Ltd

OrbisEnergy is a leading UK centre of excellence for offshore renewable energy sector innovation and supply chain development. OrbisEnergy is owned by Suffolk County Council and managed and operated by NWES Property Services Ltd, part of the NWES Group which is one of the UK’s largest and most successful enterprise agencies.

NWES Property Services is a specialist in supporting business growth, acceleration and incubation within 22 centres across the east of England. It provides the infrastructure and conditions for businesses to thrive and works closely with local and national government bodies on economic development.

OrbisEnergy is an iconic innovation centre in an area of Lowestoft that has special UK government status supporting business investment, and is being developed as an offshore technology park. Once fully developed, the site will play home to a significant proportion of the supply chain for offshore technologies such as offshore wind, allowing for manufacturing, operations and asset management, business incubation and skills training.
germanwind GmbH

germanwind GmbH (GW) was founded in 2009 as a subsidiary of the Wind Energy Agency WAB. Its tasks are to foster innovation and help WAB members design their go-to-market strategy. GW therefore sets up research and development projects related to wind energy, supports project implementation, and arranges cooperation between businesses and research and development institutes in the region. Other tasks include market analysis and the promotion of training and qualification programmes in the wind energy sector. GW is partly funded by the State of Bremen.

The Wind Energy Agency WAB is the network of the wind energy industry in Germany’s northwest region and serves as a nationwide contact for the offshore wind industry. Since 2002, more than 350 companies and research and development institutes have become WAB members. Both germanwind and WAB are co-funded by the State of Bremen and thus have experience with the management of public funding. WAB is involved in the development of (offshore) wind energy in Germany and the promotion of repowering in the northwest region. It boosts cooperation between industry and science, trains professionals and managers for the wind industry, acts as a national and international representative for its members (including lobby work) and supports the industry with market analyses. WAB organises the annual WINDFORCE conference (which attracts about 800 participants every year) and, since 2012, the biannual offshore wind trade fair in Bremen/Bremerhaven.

Ålesund Kunnskapsspark AS

Ålesund Knowledge Park AS – a key knowledge and innovation hub (ÅKP)

Ålesund Kunnskapsspark represents the world-leading maritime cluster of Møre and is the owner of the Norwegian Centre of Expertise Maritime project. Today the companies in the maritime cluster in Møre build, equip, and operate the largest and most advanced offshore vessels in the world. Together, these companies and NCE Maritime have developed a strategy that prioritizes three important strategic fields: research and education, innovation, and reputation-building. Ålesund Kunnskapsspark, through the NCE Maritime project, implements and stimulates triple helix mechanisms in the cluster. ASP will be contributing to all work packages in the ECOWindS project, and will assure close cooperation with business, science and regional authority members of NCE Maritime.

“We expect that the knowledge and experience that companies in the NCE Maritime Cluster have developed related to advanced offshore operations and the maintenance of oil rigs under extreme weather conditions in the North Sea and the Arctic will be an important contribution to achieving the goals of ECOWindS.”

Per Erik Dalen, CEO, Ålesund Kunnskapsspark

The innovation company Ålesund Knowledge Park AS (ÅKP) was established in 2000 and is owned jointly by private businesses and local authorities. ÅKP has a turnover of NOK 20 million, and contributes to economic development in the region thanks to a series of ground-breaking initiatives established in close cooperation with new and older companies, local governments, and national authorities.

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ÅKP works to develop business potential in knowledge-driven and innovative businesses, whether they are new or more established, larger corporations working in the region’s key industries. The company has 10 dedicated employees with broad network and in-depth knowledge of the Norwegian economy. Ålesund Knowledge Park is located in the Norwegian Maritime Competence Center, right next to Ålesund University College, with which it cooperates closely.

ÅKP works together with regional, national, and international knowledge and research centres, and is up-to date on all available development packages and support programmes for innovation and economic development.

ÅKP participates in a range of national and international projects and programmes, and has been awarded the management of three important initiatives, which, together with other projects, today constitute the main part of ÅKP’s activities: Incubator ÅKP, Omegaland and the Norwegian Centre of Expertise – Maritime.

NORWEGIAN CENTRE OF EXPERTISE - MARITIME (NCE)

In spite of its small size, the region of Møre on the west coast of Norway boasts an impressive constellation of maritime companies and training, research and finance institutions. Fifteen ship design companies, 14 shipyards, 165 equipment suppliers, and 19 shipping companies design, build, equip, and operate the lion’s share of the largest and most advanced offshore vessels in the world. These companies employ over 22,000 people in the region and in 2011 had a combined turnover of NOK 50 billion (EUR 6.5 billion).

In order to promote the future development of the maritime cluster in Møre, the Norwegian government awarded it with the status of Norwegian Centre of Expertise (NCE). NCE is a label of excellence given only to the most internationally competitive regional clusters in Norway. A not-for-profit organisation, NCE Maritime has been set up in the town of Ålesund, and has been appointed the role of facilitator for the maritime cluster in the region. NCE Maritime’s main goal is to further strengthen the cluster’s position in its core activities, i.e., advanced marine operations.
Ålesund University College (AUC), Norway

Ålesund University College (AUC) has about 2,000 students and 200 staff members. It offers a wide range of study programmes in business management, engineering, health care, fisheries and maritime trade.

Knowledge hub in an innovative region

Ålesund University College has a strong profile and identity which reflects its close collaboration with business and industry in the region. This close contact makes AUC unique in a national perspective. It aims to be close to the field of practice and to focus on innovation in interplay with business and industry, a joint platform which provides direction for the development of study programmes and research. Today AUC has broad expertise in the field of simulation and visualisation, identified as a multidisciplinary area of commitment.

Geographically, AUC is situated in a region characterised by a strong industrial base and a varied economy. Here are maritime and marine clusters of international format, export-based and vital to the national economy. The maritime cluster in the region around AUC plays a pivotal role in maritime technology and operations, and is characterised by having a complete production chain in offshore shipping activities which operate in a global market. The maritime cluster has taken a step up from being an industrial cluster to becoming a knowledge hub. Over many years, business and industry in the region has been able to recruit highly qualified engineers from the University College, and more recently the College has developed into one of the leading educational environments in Norway in maritime education and course activity.

Companies in the marine industry are internationally oriented and highly dependent on exports. Companies engaged in industrial research in offshore oil production marine oils for human consumption lead the world in their field. Ålesund University College collaborates closely with the maritime industry in research and development. The number of jobs in the trade and service sector will increase in the years ahead, and here Ålesund University College will be an important source of know-how to the region.

The Faculty of Maritime Technology and Operations (AMO) aims to be an international knowledge and innovation hub in the field of maritime operations. This involves education and research in ship design and marine equipment as well as in the operation of vessels. Maritime operations can be regarded as the interplay between technology, human factors and business. In many cases it is in the interface between these areas where inspiration arises to innovate and create new solutions.

Western Norway is a world leader in the maritime industry. The development of offshore oil and gas fields has meant that the industry has doubled its turnover in the space of just a few years. In spite of the global financial crisis, the industry is on the rise with a high demand for labour. The vision is to conduct industrial research and development and educate candidates whose qualifications are customised for that industry.
OrbisEnergy – Nautilus Associates Ltd

Nautilus Associates is specialist consultancy in the low carbon and offshore renewables industry across the UK and Europe. It provides specialist services in the areas of business strategy, innovation and technology commercialisation, supply chain management, cluster development and high growth sector support.

Nautilus has an extensive track record in supporting offshore renewables research and technology development. It has previously been a member of the successful FP6 DOWNVIND project and the Beatrice Offshore Wind demonstration project and is currently a consortium member of the FP7 NORSEWinD project.

Nautilus is a strategic delivery partner for OrbisEnergy and NWES, and its core team is based within OrbisEnergy itself.

ECOWindS

For further information on the ECOWindS project, please visit:
- www.ecowinds.eu
- www.ecowinds.eu/flyer

Sign up for the ECOWindS Newsletter (six issues in three years) at:
- http://ecowinds.eu/newsletter

ECOWinds – The European Clusters for Offshore Wind Servicing