



WINDEAcare adopts a holistic approach to deliver medical care to the offshore wind industry

Collaboration between six organisations maximises care while minimising costs

WINDEAcare, the winner of the International SOS Foundation's 2017 Duty of Care Award in the category Partnership, brings together six specialist German service providers to deliver comprehensive medical care, ranging from treating minor ailments to life threatening conditions, for mobile workers in the offshore wind industry in the North and Baltic Seas.

A patient on an offshore platform both needs, and has the right to, the same level of medical treatment as those onshore. But this remote environment can pose significant challenges when providing medical care. It is time consuming and costly to transport patients ashore for treatment.

To address these challenges an holistic approach was taken. WINDEAcare is a unique partnership between six German organisations representing expertise in medicine (including telemedicine), emergency services, nautical sciences, aviation and wind energy. Through close collaboration, they bridged the medical supply gap at offshore wind farms in the North and Baltic Seas.

Creating a Collaboration

WINDEAcare consists of two non-profit organisations (Johanniter-Unfall-Hilfe and Klinikum Oldenburg) and four commercial companies (IQ. medworks, Northern HeliCopter, **EMS Maritime Offshore and** WINDEA Offshore). Each partner specialises in one element of medical offshore response and fully understands the specific needs of offshore wind farms.

As Katja Rehage, Project Manager, WINDEA Offshore explains:

"While emergency medical services are straightforward onshore, being located miles off the coast presents major challenges for delivering medical care. The holistic WINDEAcare concept allows us to provide appropriate assistance - from minor ailments that can be diagnosed and treated via telemedicine, to life-threatening diseases, injuries and difficult rescue operations."

To achieve this six key elements were identified:

On-site paramedic

Johanniter-Unfall-Hilfe e.V. provides first-aider training and highly experienced paramedics to sites offshore. First-aiders enable workers to seek assistance at any time. Paramedics provide a further layer of non-emergency and preventative care, permanently on-site, and close the gap to provide professional medical care, especially in lifethreatening emergencies. At any time, paramedics can seek advice from an emergency physician based onshore via telemedical consultation. This enables them to continue necessary treatment until a rescue team arrives.

Telemedicine Support

Klinikum Oldenburg and AöR IQ. medworks GmbH have established a 24/7 centre at a maximum care hospital to provide telemedicine support. Physicians receive real-time, audio-visual and vital signs data from the patient offshore. They use this to assess the patient and make therapeutic decisions which they communicate directly to the offshore first-aider or paramedic.

Helicopter Emergency Medical Services (HEMS)

When a patient needs treatment onshore time can be critical. Northern HeliCopter GmbH provides state-of-the-art helicopters dedicated to offshore patient transport. The helicopters are fully equipped with emergency medical equipment and the medical crew is specially trained

to work in this environment, also in procedures of rescue with a winch from heights.

Rescue by Ship

Where helicopter rescue is not possible due to poor weather, rescue by ship is the alternative. **EMS Maritime Offshore GmbH** as an experienced shipping company is able to provide this specialist service.



Above Providing professional medical care offshore

Their fleet of five crew transfer vessels can carry the MEDICbox, a large offshore container similar to an ambulance, equipped with telemedicine and data transmission devices linked to the telemedicine centre.

A CENTRAL POINT OF CONTACT

VENTUSmedic offers an operational overview of all these activities. It maintains contact with the wind farm operational centres, and is the first point of contact for emergency calls. It oversees the response and dispatch of medical support, and maintains an overview of the situation as it unfolds. The centre co-ordinates communications with relevant authorities and other wind farms. VENTUSmedic is operated by Johanniter-Unfall-Hilfe.

Product Management, Sales and Marketing Activity

WINDEA Offshore GmbH & Co. KG is responsible for the general product management, all PR and marketing and sales support.

Measuring Success

WINDEAcare is widely recognised by the offshore wind industry. As Katja Rehage summarises: "Due to the level of health care performed by the paramedic offshore, calls for helicopter rescue flights have been reduced, resulting in considerable cost savings. This, in turn, has led to an increase in the sense of wellbeing and security for mobile workers. WINDEAcare offers excellent medical standards and continuous consultation to deliver high levels of care for mobile workers. That is the essence of WINDEAcare: 'Providing Help. Saving Lives'."

Long-term Impact

Offshore wind energy is becoming increasingly important in the German energy market. Further expansion in Europe and beyond is expected. There is significant potential for the WINDEAcare concept in these areas. The model could also reap benefits at onshore wind farms and in areas with a weak infrastructure where standards of medical care are often compromised.

All members of the partnership have participated in the research project "Rettungskette Offshore Wind" by BG Klinikum Hamburg and provided their expertise to develop the recommendations "Erste Hilfe in Offshore-Windparks" by DGUV, 12th December 2016. [http://www.dguv.de/medien/fberstehilfe/de/documents/info offshore.pdf]

KEY ELEMENTS

WINDEAcare's holistic approach to providing medical support for offshore wind farms brings together the following elements:

On-site paramedic

Helicopter Emergency Medical Services (HEMS)

Rescue by ship

Single point of contact

Product management, marketing and sales activity

For information on the 2017 Duty of Care Awards winners in all categories, go to www.dutyofcareawards.org.

