

luftpost

Newsletter Deutsche Windtechnik

Service in corona times

EDPR France interview

Lifetime extension

Service Servion WTG



WELL PROTECTED: The repair season is under way for our rotor blade teams.

RISING TO THE CHALLENGE, STAYING THE COURSE, ACHIEVING RESULTS

HOW SERVICE FOR WIND TURBINES KEEPS GOING IN TIMES OF CRISIS

The extensive contact and travel restrictions as well as the closing down of production and training facilities resulting from the coronavirus pandemic are forcing society and businesses to think in new ways and accept responsibility. Inevitably, even a company that provides services for wind turbines has to deal with the topic of the coronavirus. First, the good news: OEMs (original equipment manufacturers) and ISPs (independent service providers) both seem to be well positioned in the crisis – both in Germany and on an international level. Why is this the case and what do we need to bear in mind?

Generally speaking, services for wind turbines have been classified as 'systemically important' during the coronavirus pandemic, meaning the industry can draw from an expanded pool of options to maintain its operations. Nevertheless, in addition to the recommendations and regulations issued by authorities, there are also highly individualised conditions in different countries in terms of tasks, organisation and human resources,

including the personal situations of employees. Actions and reactions in the crisis call for a high degree of agility and dedication.

“Almost business as usual for onshore service.”

WHAT KEEPS THE TURBINE SERVICE GOING?

As with all companies, the primary goal of a service provider is to do billable work, i.e. to achieve its business objectives or, more specifically, to fulfil its contracts. While most office activities are now being carried out from home, it is almost business as usual for onshore service. Existing crisis strategies have been further developed and new measures rigorously implemented, including:

- Avoiding mixing of teams
- Suspending or reducing training and courses or switching to online alternatives
- Reducing travel activities as much as possible
- Avoiding/reducing contact related to service activities

LATEST NEWS

INGENIOUS LIFTING PLATFORM TECHNOLOGY: CLOSED WORKSHOP FOR TURBINE BLADE

Repairing major rotor blade damage during winter months previously meant dismantling the rotor blade, but that is now a thing of the past:

In 2020, Deutsche Windtechnik is starting the season with new lifting platform technology known as the type "Terra" of the company WP Systems. The 'floating workshop', which is aligned with the damaged blade, allows the work platform to be completely enclosed at the repair site.

This means that work can be carried out at height regardless of the weather, thereby reducing downtimes due to bad weather and extending the whole rotor blade work season.



INTERVIEW

EDITORIAL

THINKING OUT OF THE BOX

SERVICE COOPERATION BETWEEN EDPR AND DEUTSCHE WINDTECHNIK



Dear friends of wind energy!

The times we are living through have helped us to realise what words such as change, adaptability, dynamics and agility can mean. In this issue, we will be looking at a few aspects and effects of the coronavirus crisis. We understand that the effects of the crisis have been significantly different for different societies, companies and people. Our customers naturally have their own challenges to deal with, but they as well as we are both very interested in maintaining a stable service for wind turbines. As a result, we continue to carry out our work with high levels of motivation in all areas and offer you various topics to engage with in this issue. Nevertheless, this is also a time to show gratitude to the many people who are doing a great job in this crisis. We are also thankful that our operations have proven to be so crisis-resistant.

We look forward to a continuing future partnership with you and to exploring new paths, new media and new processes.

Best regards,

Matthias Brandt and Hendrik Bösch
Director at Deutsche Windtechnik and
General Manager at Deutsche Windtechnik

As a global leader of the renewable energy sector, EDPR is focused on development, construction and operation of wind energy. Deutsche Windtechnik and EDPR France Holding have been working closely together on further optimizing the performance of EDPR's wind farms for three years now. We asked Christophe Vincent, Head of EDPR O&M France & Belgium, which values are important for the success of the service cooperation.



CHRISTOPHE VINCENT, appreciates the benefits of working with independent service providers.

A 5-year forecast: What will the main developments on the French wind market be and what role will EDPR play?

In the future, French wind farms will have lower tariffs. Everyone will be taking a closer look at costs and reducing them as much as possible. As all operators, EDPR will expect more flexibility from its service providers it works with. EDPR is certainly not just waiting for proposals from service providers to improve wind farm performance.

What are the positive aspects of collaborating with an independent service provider (ISP)?

In the past, original equipment manufacturer (OEM) were used to having no competition. There was no pressure to reduce costs or to adapt their services to different customer needs. ISPs have opened up the service market. As they have less restrictions and are not required to defend a particular manufacturer, they can have a different view and be more open-minded. OEM's offerings are most suitable for customers who are willing to

delegate full control over their assets. EDPR wants to keep that control. We decided to work with Deutsche Windtechnik because this allows us to achieve more inclusion and adaptation, compared to cooperating with a big OEM.

“We work with ISPs because we want to keep control.”

Could you describe the cooperation? Were there unforeseen incidents?

For Deutsche Windtechnik, the customer's needs are key. Together, we evaluate the learning curves and improve them. Most of the managed turbines run well with proper preventive maintenance. We also have a number of more complex wind turbines in our portfolio. We have already implemented a number of improvements in these cases, but further steps may still be necessary. Last year, there were also major corrections that we needed to carry out. The teams of Deutsche Windtechnik reacted quickly, professionally and without any compromises regarding HSE. EDPR has its own stock of large components, but working with an ISP which is able to deliver within short times is a big plus.

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– Strengthening and expanding protective measures and equipment, etc.

One key advantage is the relatively remote location of wind turbines. This means that there is no risk of infection. However, organising operations often involves more work now. Not just for larger deployments with several teams, but also for standard operations. If an overnight stay is necessary, employees have to be provided with all necessities. What these necessities include may depend on how remote the location is. It is often impossible to provide important support functions from a home

office, such as spare parts management and remote data monitoring. In addition to hygiene and protective measures, other models must be applied here, such as working in shifts, being divided into groups (with no contact between them), separation of work areas, remote material transfers, etc.

OFFSHORE CHALLENGES

There are a number of factors that cause more issues for the offshore service, including the need for travelling by sea, staying overnight on boardship, using larger teams and travelling across borders. Necessary border crossings,

for example, could be made possible by individual official permits. There is also frequent communication with other authorities, such as employer's liability insurance associations, e.g. regarding the extension and definition of certificates, including in the area of training. All of these measures help to ensure that Deutsche Windtechnik as well as other service providers can maintain almost the same level of availability as before the crisis. Cases in which force majeure has needed to be invoked have almost been eliminated. However, the dynamic and sensitive development of the crisis calls for continued commitment.

SYSTEM ENGINEERING

OVER 100 SENVION WIND TURBINES UNDER NEW SERVICE CONTRACT – TECHNICAL SUPPORT EXTENDED

Since the start of the year, service contracts have been signed for 110 additional wind turbines at 32 wind farms, ranging from the Senvion MM92 to the 6.2M series. Deutsche Windtechnik's overall portfolio of Senvion wind turbines comprises 2.446 MW (as of May 2020). All of the wind turbines have already been seamlessly integrated into Deutsche Windtechnik's Europe-wide service network, most of them under full maintenance criteria. Forty-one of the wind turbines that are now covered by new contracts are located in the UK, the rest in Germany, Belgium and France.

Deutsche Windtechnik's technical service expertise covers all of the Senvion turbine types, including the recently launched Next Electrical System (NES) full converter system and the multi-megawatt turbines installed offshore. In addition, demand has increased in recent months for spare parts to be supplied to all regions of the world. Many of the employees have technical and operational expertise from their many years of professional experience and they also receive advanced training on a regular basis using the turbines at our in-house Training Center.

PERSONNEL NEWS

NEW COUNTRY MANAGER FOR TAIWAN

Marcel Meins joined Deutsche Windtechnik nearly five years ago. His career began in sales at the offshore unit in Germany. Since 1st May, he has been the Country Manager of Deutsche Windtechnik Co. Ltd. in Taiwan. Marcel Meins is looking forward to the new challenges in



MARCEL MEINS, brings new impetus to Taiwan as Country Manager.

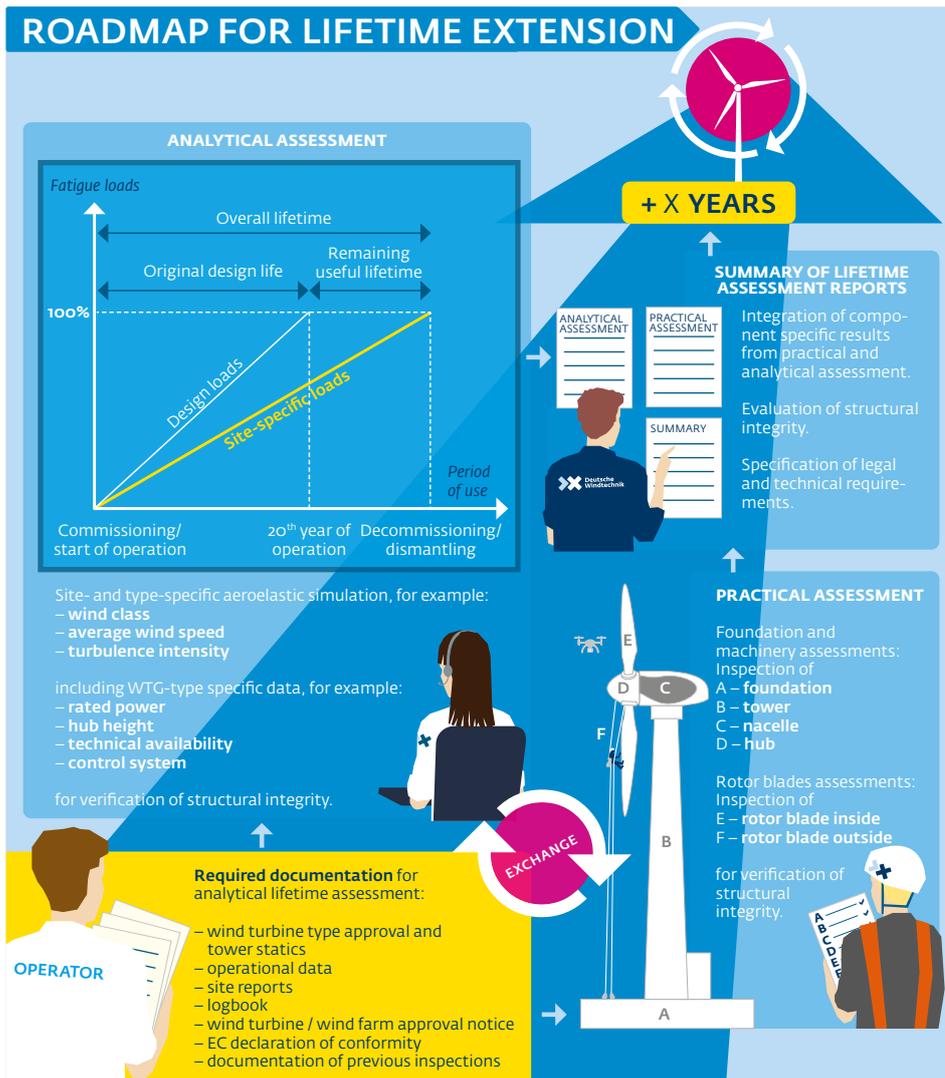
both the professional and personal areas of his life. In addition to trouble-free maintenance at the Yunlin offshore wind farm, his main focus will be on acquiring further offshore projects in Taiwan.

PARTNER

SUCCESSFUL COOPERATION – MANUFACTURER AND ISP

Five years of operation have confirmed it once again: the Butendiek offshore wind farm is still one of the most economical and safest offshore wind projects in the North Sea. There are many who contributed to the achievement of such positive overall results, in particular the investors and management of the Butendiek offshore wind farm, Siemens Gamesa (turbine service) and Deutsche Windtechnik (asset management and Balance of Plant).

Speaking about cooperation at the Butendiek offshore wind farm, Saskia Lissowski, Operation Manager at Siemens Gamesa, said: "All in all, the project has been very successful. Butendiek was one of the first offshore wind farms to commission an SOV (service operation vessel), the 'Faraday'. But the project is also convincing from a technical point of view, as is evidenced by its high availability." Her experience with the staff at Deutsche Windtechnik has always been collegial and characterised by mutual respect, even though the two companies are competitors. "Last year, Deutsche Windtechnik's service technicians increasingly spent the night on the 'Faraday' and benefited from the higher level of independence from the weather provided by the SOV. We have also started to combine our service with Deutsche Windtechnik's Balance of Plant work on the same turbines."



TO KEEP THEM RUNNING OR NOT – that is the question faced by more and more operators who are thinking about whether to continue operating their turbines beyond the end of their 20-year design life.

GETTING ACQUAINTED

CAN THE TURBINE CONTINUE TO RUN?

Marc Weißenborn, Deputy Head of the Survey & Inspection Body, deals with these and similar questions about lifetime extension in his everyday work. After studying wind energy technology, the 32-year-old wrote his Master's thesis at Deutsche Windtechnik – and joined the team straightaway.

What makes your job so fascinating?

Working on turbine types from different manufacturers brings new challenges and a lot of variety every day, along with activities ranging from providing consultation to customers to the evaluation and assessment of individual wind turbines.

How many turbines in Germany are currently affected by the issue of lifetime extension?

There are around 6,000 wind turbines whose EEG (Renewable Energy Act) subsidy will run out by the end of 2020. By 2025, this figure will be approximately 1,600 per year. This corresponds to installed power of 2,300 – 2,400 MW being lost from energy generation annually. If you look at the current number of new installations, you can see why lifetime extension is relevant.

Is the assessment for lifetime extension complicated?

The analytical part alone makes evaluation and assessment more complex than a periodic inspection, which could be covered by a technical inspection. In addition, legal



MARC WEISSENBORN, often recommends a preliminary assessment before lifetime extension testing.

requirements for structural stability must be included. In order to find solutions that are applicable throughout the whole of the industry, we share ideas in working groups.

Is such a procedure always worthwhile?

That depends on the site and the type or design of the turbine. For many sites, we recommend a preliminary assessment to determine the potential and trends based on certain site and design parameters.

ON THE RADAR

KEEPING IN TOUCH: NEW "LIEFERSERVICE" WEBINAR



The sensible restrictions implemented due to the COVID-19 pandemic have led to large and small events being cancelled nationwide and made on-site meetings impossible, plus this situation is still ongoing. As your independent service provider in the wind energy industry, we would like to keep in touch with you on a regular basis to discuss current topics, address problems, present approaches to solutions and develop forward-looking methods of maintenance. In our view, this was sufficient incentive for us to set up the Deutsche Windtechnik "LieferSERVICE"!

Every two weeks, we will be bringing together specialists from a particular field of expertise to take part in a webinar with other participants to investigate current issues relating to the maintenance of wind turbines. These will include the following topics: ONM solutions, lifetime extension, IT flexibility, offshore service during and after the pandemic, ground-based winch system for (dis)assembly of rotor blades and blade bearings and much more.

So far, the webinars have mainly been held in German, but we set up English sessions, too. If you are interested in the recording of the last English webinar entitled "On the move in new markets - retrofits and technical services on a global scale", please scan the QR-Code:



ASSESSING LIFETIME EXTENSION

"PE-20+" APP CALCULATES INITIAL SUITABILITY FOR LIFETIME EXTENSION

Documentation for older turbines is not always complete and reconstructing missing documents can cause a lot of work. For this reason, Deutsche Windtechnik has brought a well-known partner, PE Concepts GmbH, on board for the analytical part of the lifetime extension test. The engineering firm is active in developing wind turbines and tower statics and is a proven specialist in the field of turbine

and load simulation as well as measurement technology.

PE Concepts developed the "PE-20+" app, which is used to calculate individual suitability for lifetime extension after entering a few framework conditions.

p-e-c.com/en/products/pe-20-app

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