

Ørsted

Co-creating a safety culture

Ørsted collaborates with contractors
on incident management to boost safety
for everyone on Ørsted's projects and sites





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Co-creating a safety culture with contractors

Ørsted cares about our employees and about our contractors' employees – everyone working on an Ørsted project or site must work in a safe environment. One way to ensure that is by having a close dialogue with contractors and collaborating on corrective actions after careful investigation of incidents.



Jesper Bagge Hansen
Head of HSE Assurance & Improvement, Ørsted Offshore

This publication is for Ørsted's contractors to find out more about the way Ørsted works with incident management and how we co-create safety with our contractors.

Jesper Bagge Hansen, Head of HSE Assurance & Improvement in Ørsted Offshore, who's behind initiatives such as inviting Ørsted's major contractors to join investigator forums and incident investigation courses, answers questions on how he sees this co-creation process.

Why do you think it's important to work closely with Ørsted's contractors on incident management?

Jesper Bagge Hansen: "Ørsted has a strong QHSE culture with a focus on continuous improvement, learning from incidents to prevent them from happening again. But it's not enough that we do it ourselves; we have to include our contractors in this way of dealing with safety, as our contractors have a significant amount of the work scope under Ørsted's operational control.

Even though Ørsted – and our contractors – prepare and plan extremely carefully to prevent incidents, things still happen. Instead of blaming the people involved, we want to draw on the in-depth knowledge that our contractors have of their fields and analyse the root causes together. That allows us to keep the employees on both sides safe in the long run."

What do you mean when you talk about co-creating safety?

Jesper Bagge Hansen: "Instead of Ørsted just stipulating rules, we're inviting our contractors in to discuss safety matters with us. Instead of having a 'them' and an 'us', we're working together to investigate when something goes wrong.

Together we learn much more and are much stronger, and together we can create corrective actions that prevent incidents from recurring – that's the essential part. Co-creating adds substance to our safety efforts and means that when we're investigating, we're not only solving problems but coming up with long-term solutions."

How do you collaborate with contractors?

Jesper Bagge Hansen: "Ørsted is keen to add transparency and value to the incident investigation process and to take a shared approach with our contractors.

We do that for instance by inviting contractors to join our incident investigation course, investigator forum meetings and working closely together on incident investigations."

Incident management – essential for continuously improving safety

In Ørsted, we want our employees and our contractors' employees to go home safe every day. By working together, we can learn from incidents and continuously improve. That's why we're opening our doors for contractors to collaborate on incident management.

In essence, incident management is about preventing the occurrence and recurrence of safety incidents and identifying opportunities for continuous improvement. The aspiration to learn from incidents must be the key objective of any investigation, regardless of the level of investigation. The aim is to ensure that the problem is not generic and to prevent it from happening again – while implementing sustainable changes.

Ørsted has as our ambition to perform Quality, Health, Safety and Environment (QHSE) at world-class level. To drive that and to continuously improve, we've taken on an approach called Plan Care Communicate. This is embedded within each and every employee – and it also applies to how we manage incidents.



Plan Care Communicate
– the way we pursue
world-class QHSE

Plan

We plan to avoid incidents, but if they do occur, we have strong control measures prepared to respond to them.

Care

We investigate incidents according to the risk. This means that we have responses and approaches that match the severity of the incident. Investigations require empathy, dialogue and collaboration with all stakeholders and caring about people.

Communicate

Not pointing fingers or assigning blame but communicating openly and transparently creates a strong safety culture. And it ensures that the contents of investigation reports are communicated, so that not only the stakeholders of the incident learn, but everyone involved has the possibility to improve.



Ørsted's methodology for incident investigation

The methodology we use to analyse the root causes of incidents is TapRoot® – a proven root cause analysis system which is used widely in the wind industry.

The concept of TapRoot® is quite simple: learning through thorough and credible root cause analysis. Thorough and credible are key words in our process, as we conduct objective investigation work and only present the facts relevant to the incident, keeping in mind that the outcome must add value to the business. This mindset is the approach that Ørsted invites contractors to learn at our incident investigation courses.

Root cause analysis

When incidents happen, the human mind is designed to want to either fix the problem, so that things can be brought back to the normal state, or to assign responsibility – in other words blame someone for what happened.

In Ørsted, we do neither. To understand the problem, we conduct a detailed investigation as well as an analytical review of the events and conditions leading up to the incident – a root cause analysis.

Root cause analysis has many different definitions, and in an environment governed by management systems, the understanding of a root cause is "the absence of best practice or the failure to apply knowledge that would have prevented the problem or mitigated the consequences."

Joining forces on incident investigations boosts safety

When an incident occurred on the Hornsea 1 offshore wind farm project, long-term contractor Siemens Gamesa Renewable Energy led the investigation in close collaboration with Ørsted.



In Ørsted Offshore, we're implementing an Embed in Business strategy. It involves developing QHSE competences outside the QHSE department to enable effective 'self-management' by all areas and layers in the business. This means that all employees take responsibility for QHSE – because they're the ones who are closest to the work performed.

In this spirit, we've trained a strong team of lead investigators with non-HSE backgrounds to take on the critical function of investigating incidents. These non-HSE investigators form an essential part of the general lead investigator team. They apply their in-depth knowledge of different fields, take ownership of investigating incidents and channel the learnings into the business.



Hasse Agernem Andreassen
Director, HSE, Ørsted Offshore

On the Hornsea 1 wind farm project, a cover for a transition piece was dropped during installation, which quickly raised concerns with Ørsted and contractor Siemens Gamesa. Although nobody was injured, the incident had to be investigated in-depth to prevent similar incidents in the future. Siemens Gamesa led the investigation in close collaboration with a lead investigator from Ørsted.

Here's how Siemens Gamesa and Ørsted investigators look at joining forces on incident investigations and how they see collaboration boosting safety:





David Williams
Senior HSE Specialist, Corporate HSE
Siemens Gamesa Renewable Energy

We're shifting away from a 'them and us' approach

David Williams is part of the corporate HSE team at Siemens Gamesa (SGRE). He's responsible for their investigation management system and acted as the investigation peer reviewer on the Hornsea 1 incident. David Williams is a strong supporter of collaborating with customers on investigations:

"On the Hornsea 1 incident investigation, the collaboration with Ørsted was a benefit because, rather than SGRE doing the investigation and then presenting it to Ørsted with the potential for disagreement on causal factors and root causes, we could discuss findings and conclusions along the way. This meant that we could set corrective and preventive actions that are effective for SGRE and supported by Ørsted," he says.

Building trust prevents recurrence

Historically, customers and contractors have had a tendency to keep each other at arm's length. That has shifted to a much more open and trustful dialogue, and David Williams says that, like Ørsted, SGRE is moving in the direction of working closely and openly with their customers and contractors, because ultimately a relationship based on trust means that everyone involved in a project goes home safe every day.

"Safety is my choice. Fundamentally, I work in safety because I care about people and see it as a responsibility to develop effective safety systems and foster a safe culture. To do that, we're moving towards transparency, collaboration and an inclusive approach and away from a 'them and us' approach. When we work closely with our customers, we can support each other to prevent incidents from recurring. After all, we're all in it for the same reason: building a successful wind farm where everyone is safe," David Williams says.

Including the customer as a functional part of the core investigation process and team strengthens relationships and builds trust, David Williams points out:

"We're dealing with people, and the more we can focus on positive relations and communication, the more trust we build, and the safer everyone will be. This transparency and collaboration with our customers on incident investigation really boosts safety."



Diane Yankam
Offshore Wind Turbine Generator (WTG)
Installation Specialist
Ørsted

Transparent incident investigation is a powerful tool

Apart from her work as Offshore WTG Installation Specialist in Ørsted, Diane Yankam acts as lead investigator on incidents within her field of expertise. She took on the role of customer lead in the Siemens Gamesa (SGRE) investigation, supporting their investigation team.

She supported the investigation by gathering information such as statements from the technician and the crane operator at the scene, requesting CCTV coverage, photos, data from the transition piece cover manufacturer etc.

Sharing a no-blame mindset

Diane Yankam shared her input as well as her recommendations for corrective actions with the SGRE investigation team, so that the investigation conclusions were aligned between Ørsted and SGRE.

"It's so important for both parties that we're transparent in how we handle incident investigations. The fact that we can share information without blaming anyone or pointing fingers means that we can align on what we find during our analyses and on the corrective actions," Diane Yankam says.

Diane Yankam adds that an essential part of every incident investigation is to learn from it to prevent the same incident from recurring on other projects:

"Every incident is a learning opportunity. No-one makes a mistake on purpose – a mistake is usually due to a weak process that we can improve next time. That's how the open, no-blame mindset helps us address the real issue and find solutions together. And it's what makes transparent incident investigation such a powerful tool," Diane Yankam says.

Contractors participate in investigator meetings and courses

Creating an atmosphere of trust, openness and collaboration with contractors doesn't happen just by talking about it. That's why Ørsted invites contractors to participate in their incident investigation training and selected contractors in investigator forum meetings.

An investigator forum meeting in August 2019 was the first to open its doors to five of Ørsted's major contractors – but certainly not the last. The meeting successfully established a close dialogue and collaboration.

Understanding and analysing incidents in order to avoid them was on the agenda at the first meeting, as was a high-level discussions of the vision for collaborating with contractors to boost the safety culture.

Jesper Bagge Hansen, Head of Ørsted Offshore HSE Assurance & Improvement, says that going from cooperation to collaboration is a significant step in creating a strong safety culture:

"By including our contractors in Offshore's investigator forum, we get the opportunity to present our processes and methodology to them. More importantly, we get the opportunity to learn how we can improve our framework for incident management by working together. Co-creating the safety culture with contractors allows two-way communication and improves safety," Jesper Bagge Hansen says.

Jesper Lykke Carstensen, Head of HSE at MHI Vestas Offshore Wind, participated in the first investigator forum meeting that invited major contractors. He says that MHI Vestas Offshore Wind applauds the openness and sharing of methods:

"A strong collaboration between partners – with the common goal of reducing and avoiding recurrence of incidents – sets new standards in the offshore industry. The first investigator forum meeting we participated in set the scene for advanced investigations, and subsequently we've completed an investigation that we presented to Ørsted senior management. The collaboration also means that we're more likely to reach out to our partner if we need clarification."



→ Incident investigation training in Boston

At an incident investigation training course at Ørsted's office in Boston, participants learned about topics such as planning to prevent incidents, using Ørsted's methodologies for incident investigations and setting corrective actions. Some of Ørsted's contractors participated in the course, and two of them outline their experience here.



Gabriela Duarte
QHSE Advisor
Fugro

"It was great to understand our customer's perspective on incident investigations, and I'm sure the course will help me provide a better service in the long run. I found it especially interesting to learn about avoiding the use of judgmental language and understanding the perspective of the involved persons.

Something new I learned was the Efficiency Thoroughness Trade Off principles, and I'll definitely apply them going forward. We also discussed how cultural aspects have an impact on interactions and safety, and we focused on thinking outside the box.

Overall, the training was very interesting, and I can recommend to other contractors to join this course."



Miguel Rivas
HSE Manager
Alpine Ocean Seismic Survey Inc.

"When we were invited to join Ørsted's incident investigation training, we discussed it with Alpine's top management, who were positive about this new approach. The collaboration aspect is new and really adds value to us and Ørsted.

Attending the training gave me an opportunity to understand what our customer, Ørsted, requires and how they think, and also the opportunity to engage with key Ørsted people. The mindset in Ørsted's investigation process is very applicable to Alpine's way of working.

Although I have extensive experience in HSE and incident investigation, I learned a lot of new things at the course, and I certainly recommend other contractors to take this course."

Co-create safety with Ørsted — join the training

Ørsted regularly conducts courses for operatives who work with incident investigation. We've opened up the courses and invite our contractors to participate. The aim is to strengthen collaboration through shared methods and open dialogue.

Ørsted invites our contractors to participate in incident investigation courses. Joining an Ørsted incident investigation course will boost your understanding of incident investigation and mature your skills to the highest level in the industry.

The course gives participants the personal competence and understanding of how to handle investigations and act on findings. More importantly, it enables the person driving the investigation to see the perspective of the people involved in the incident, rather than analysing in hindsight.



→ Effective incident investigation course

Contents

The course introduces you to Ørsted's methodology and requirements for incident management. You will be trained in incident investigation techniques and learn to determine causes and effects of incidents.

The training enables participants to correctly differentiate between problems and incidents, investigate the influencers in the incident and conduct cause and effect analyses. The course focuses on avoiding bias, fosters a learning environment and integrates human and organisational factors in cause and effect analyses.

On the agenda is:

- Understanding incidents
- Setting up the investigation
- Processing data and findings
- Interview techniques
- Using Ørsted's "Simple Investigation Method" template
- Practical exercises

Dates and duration

Courses are held on a regular basis. The course is a three-day course.

To sign up for a course and find out more about dates, price and location, please contact Jesper Bagge Hansen on jesbh@orsted.dk.



Course instructor
Søren Christian Rossé Segel



Participants

The courses are held for Ørsted incident investigators and representatives from our contractors. We aim for a 50/50 balance between the number of Ørsted/contractor participants. Your level can be anything between inexperienced to very experienced in incident investigation.

Course instructors

At the course you will meet Søren Christian Rossé Segel from Ørsted, who has substantial experience in safety training and is an industry-recognised trainer.

The training is supported by Christian Bjursten Carlsson from Tapora, an external supplier to Ørsted and co-creator of the training course.

