


“CableRisk” Joint Industry Project

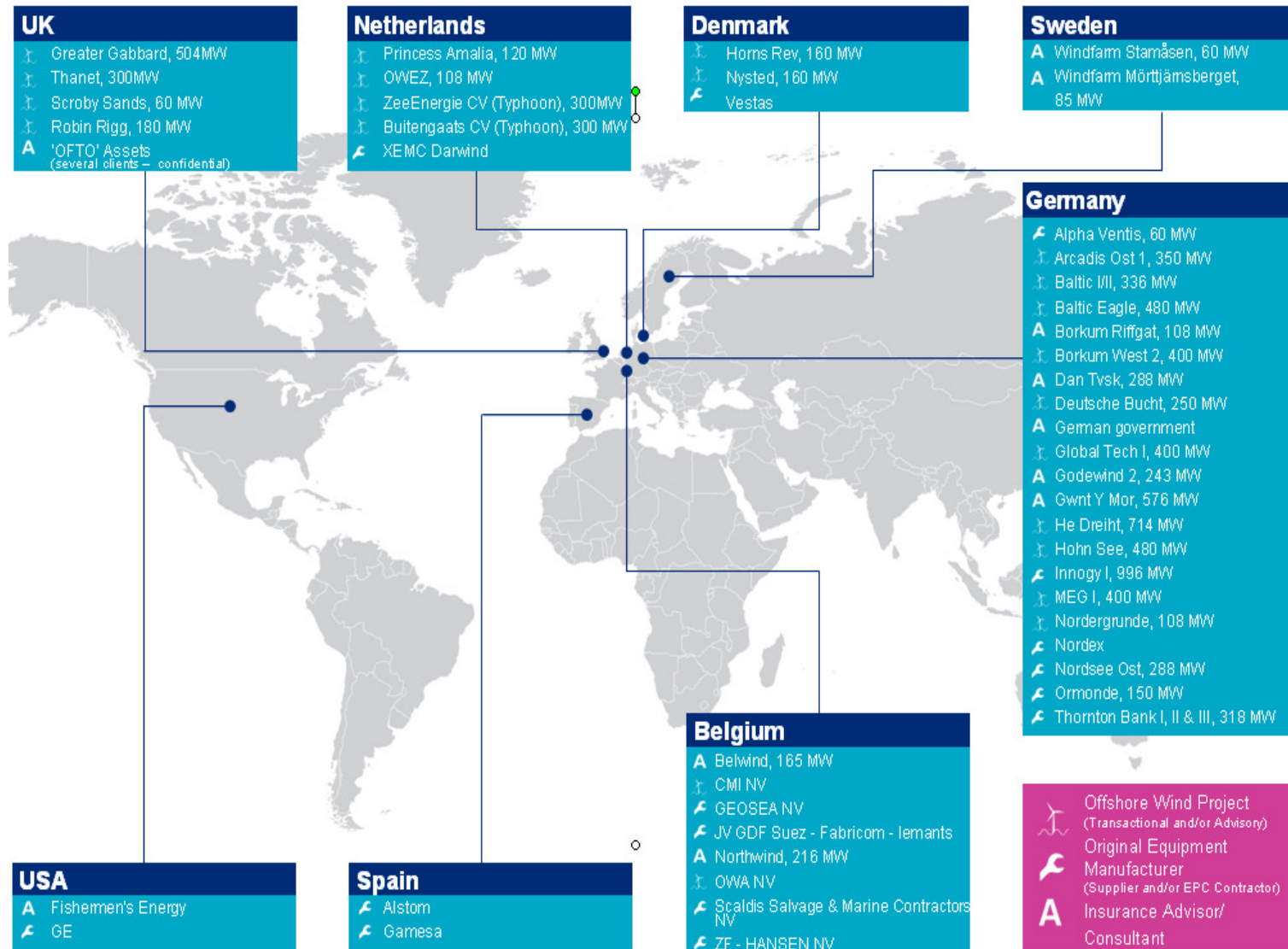
MARSH GERMANY

19th of February 2013



Hamburg
Dr. Jan Rögener
Lutz Weidtko

MARSH Offshore Experience



MARSH Hamburg Offshore Experience List



„In 2008 we started with Zero.“



Baltic 1	(Broker EnBW)
Baltic 2	(Broker EnBW)
Borkum Riffgat	(Insurance Adviser Bank)
Borkum West II	(Broker Trianel)
Dan Tysk	(Advisor SWM)
Global Tech I	(Broker Global Tech I)
Gwynt Y Mor	(Advisor SWM)
He dreiht	(Broker EnBW)
Hohe See	(Broker EnBW)
Nordergründe	(Broker Project)
Godewind 2	(Advisor)
German government	(Advisor & Coordinator)
Arcadis Ost 1	(Broker Nordex)
MEG 1	(Broker MEG 1)
Deutsche Bucht	(Broker Project)
Baltic Eagle	(Broker Project)
Nordsee Ost	(REpower)
Thornton Bank I,II,III	(REpower)
Alpha Ventus	(REpower)
Ormonde	(REpower)
Hohe See	(REpower)
Innogy I	(REpower)
Race Bank	(REpower)

MARSH Hamburg Offshore Preparing Clients for Project Finance



“With long term perspective Offshore Wind farms are likely to be project or equity financed, even if they will be built by utility companies first. Participants will succeed if they are able to fulfill the stronger requirements of the project and equity financiers. MARSH knows the necessary key issues to combine contractual and insurable risks. We are proud to serve Global Tech I and many other clients with their Wind Offshore Insurances ”



Fathers of Global Tech I © Windreich AG – Wind Project of the year

Jean Huby, Tim Kittelhake, Martin Rahtge, Anil Srivastava, Willi Balz, Edgar Scholz, Ralf Skowronnek, Jochen Körner
AREVA Windreich AG HOCHTIEF AREVA Windreich AG ALSTOM Marsh GmbH Marsh GmbH

Ralf Skowronnek
Head of Engineering and Renewable Energy Team
MARSH GmbH

*International Project Finance Award 2011
“Global Tech I Best Wind Deal Europe”.*

“Many thanks to MARSH Hamburg for their strong support.”

MARSH Hamburg Offshore

More Activities



- Excellent contacts to Deutsche Bank, Unicredit, Societe Generale, HSH Nordbank, European Investment Bank, KfW and international financiers like Blackstone.
- Broker with the broadest network in Offshore Wind.
- Special Memberships:
 - Mediator and Consultant for the German Government.
Purpose: To solve the Offshore Grid Connection Problems (Tennet and 50Hertz)
 - Member of the Board of Trustees, Offshore Foundation for Windenergy, Berlin.
Purpose: To cultivate our relationship with the German Government, Associations, Research and Development, Utility Companies, Windfarm- and Grid- Operators.
 - Department of Norms for ship- and maritime Technologies of the DIN/ISO
Purpose: To implement high safety- and fire-protection standards with the aim of loss prevention due to fire, ship collisions and anchoring damages.
 - Member of the Executive Board „Cluster Renewable Energies Hamburg“ together with the northern CEO’s of Siemens, Vattenfall, Hamburg Energie, Hamburg Water
Purpose: To maintain our strong relationship with the Hamburg Government and the decision makers in the German and International Offshore Business, all located at Hamburg (Siemens, Vattenfall, Dong Energy, RWE, EnBW, Hochtief, Strabag, Trianel, Windreich AG).

MARSH Hamburg Offshore Insurance-, Contract-, Risk- and Claims- Management



- 6 Engineers
- 1 Physicist
- 3 Counsellors
- 3 Economists
- 8 Insurance Economists



Dr. Jan Rögener during a visit at the Goliath

MARSH Hamburg Offshore

Proactive Risk and Claims Management



- Broadest offshore claims experience in Germany:
 - Alpha Ventus, Baltic I, Borkum West II, Global Tech I, Thornton Bank
 - All DSU- and BI- Claims were mitigated successfully (below deductible) and to the favour of the client
 - Strict Risk and Claims handling procedures (24/7 availability)
 - **Leading Offshore Insurers and our clients confirm that MARSH save their income due to earliest involvement and excellent loss control**



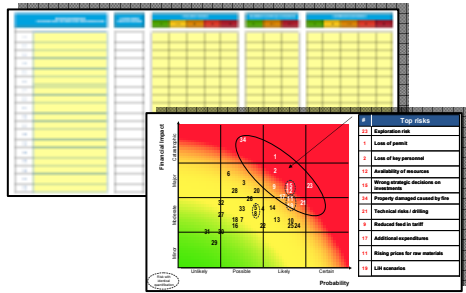
Fit for Offshore:

Lutz Weidtke und Dr. Jan Sebastian Rögner

Approach

Systematic Business Risk Assessment

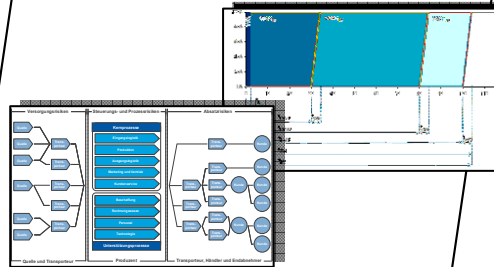
- Assessment of existing risk methodology, processes and information and risk tolerance
- Identification and quantification of further risks affecting the business by conducting overall workshops with client and Marsh professionals



- ➔ Business-wide risk register
- ➔ Prioritization of risks

Processing of TOP Risks

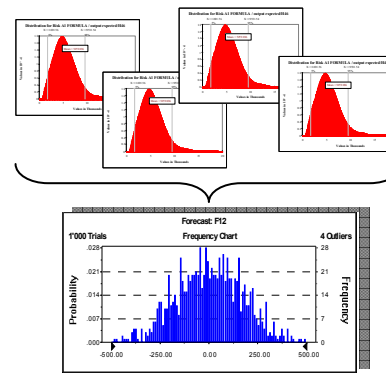
- Mapping of correlations and dependencies as well as possible transfer capacities
- Development of scenarios and calculation of corresponding losses of margin
- Continuative quantification by using stochastic techniques



- ➔ Knowledge of band-width of TOP risks by description with adequate probability distributions

Quantification of Risk Exposure

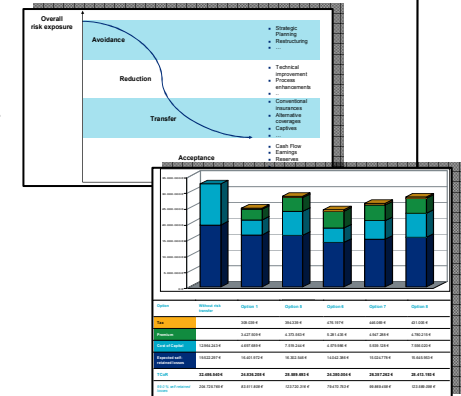
- Development of an business-wide model considering all assessed risk information
- Overall simulation of scenarios and identification of overall risk exposure



- ➔ Illustration of full range of individual TOP risks and of the overall risk exposure

Evaluation of Control and Mitigation Measures

- Integration of possible control and mitigation measures into the model
- Calculation of Total Cost of Risk for different measures



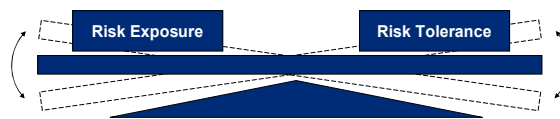
- ➔ Recommendations based on corresponding costs and based on client's risk tolerance

Underlying Information

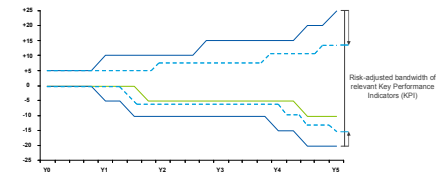
- Existing risk information (risk guidelines and risk register of Enterprise Risk Management of client, technical risk information Quality Management, etc.)
- Financial information in terms of planning, margins, costs, etc.
- Expertise of industry professionals (client and Marsh)
- Industry benchmarks

Benefits

- + Comprehensive transparency on current risk situation
- + Well-grounded information base for sound decision-making
- + Developing of sustainable balance of risk exposure and risk tolerance



- + Active control of risks and risk measures in order to reduce range of deviations



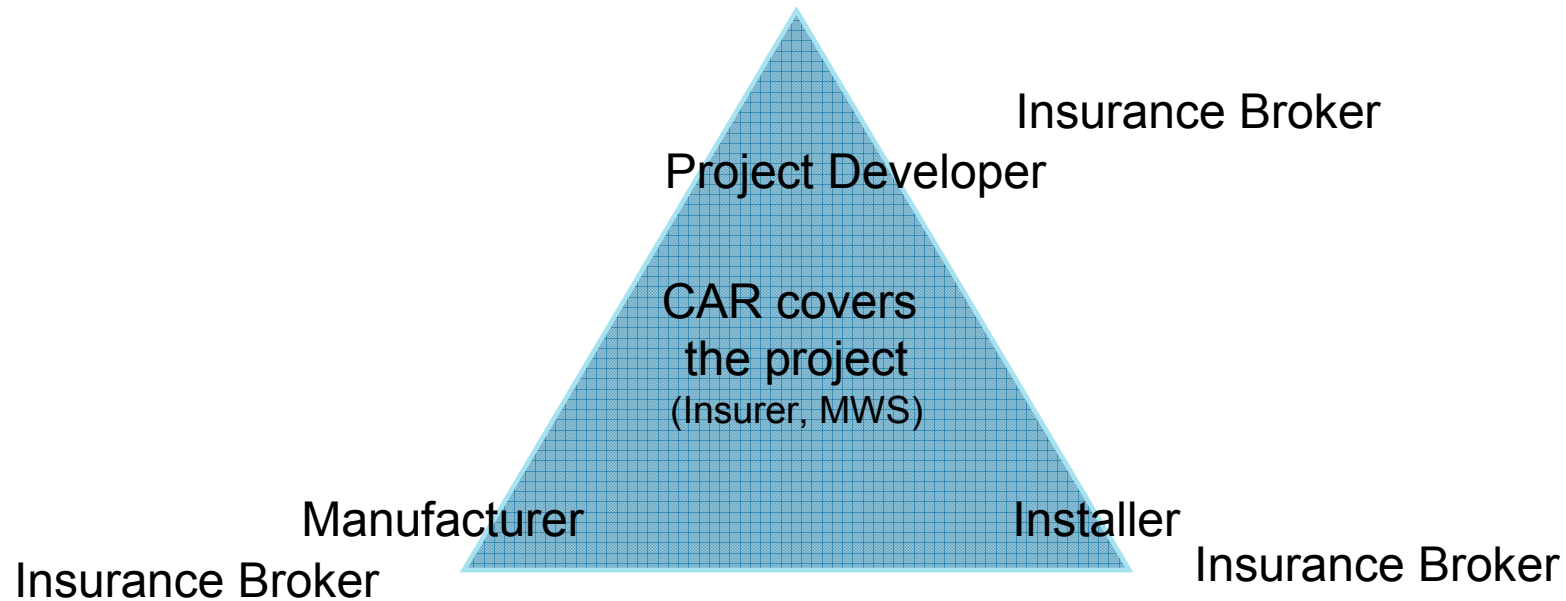
- + Basis for establishing of a systematic and ongoing risk management process

MARSH Hamburg Offshore

Our service



- Risk assessment and advisory
 - to recommend our clients to spend more money in risk prevention than in insurance
 - to derisk our clients supply-, erection- and maintenance-contracts before insurances are placed
 - to allocate the risk to the responsible party (project, manufacturer, warranty, penalties, LD's)
 - to derisk the contractors marine spread and installation procedures
 - to implement the Insurers Marine Warranty Surveyor at a very early stage (before contracts are signed)
 - to be there before the loss happens (risk advisory and management)
- Insurance as one way of risk mitigation
 - to tailor insurance cover to your needs and risk appetite (wording, deductible)
 - provide all insurers with excellent risk information (plausible, structured)
 - tender insurance (insurer consortium, price, conditions)
 - only work with experienced leading offshore insurers for the sake of the participating insurers
 - to maintain the insurance cover, inform on project changes
 - management and communication with the Marine Warranty Surveyor / Contractor / Project
 - to control the process in case a loss should happen (claims management).
 - derisk clients, insurers and our company by the way we are working.



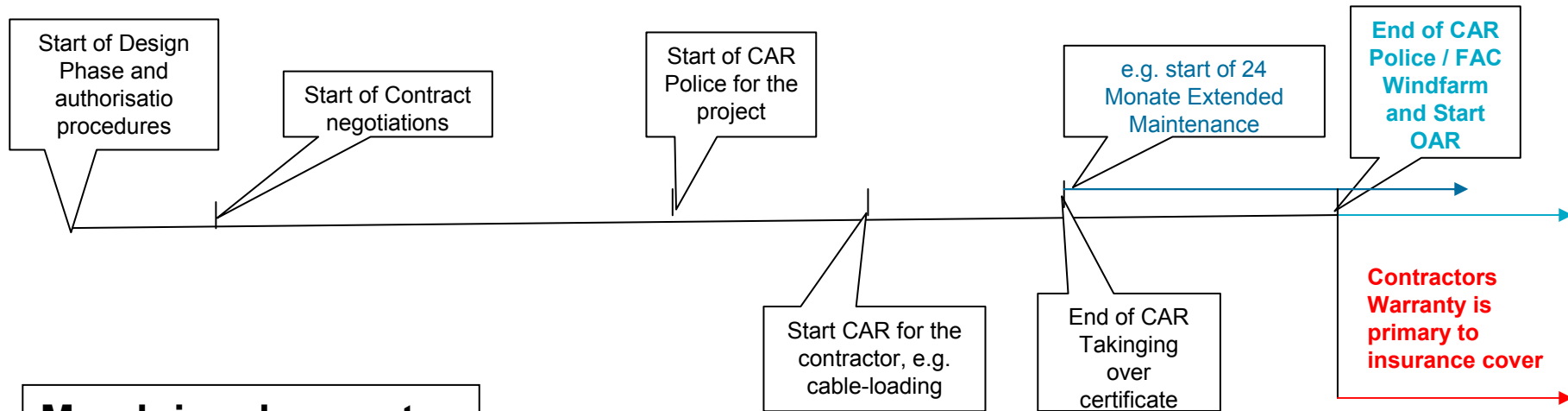
CAR does not cover

- before inception date of policy
- before taking over of risk
- warranty
- penalty, LDs
- ...

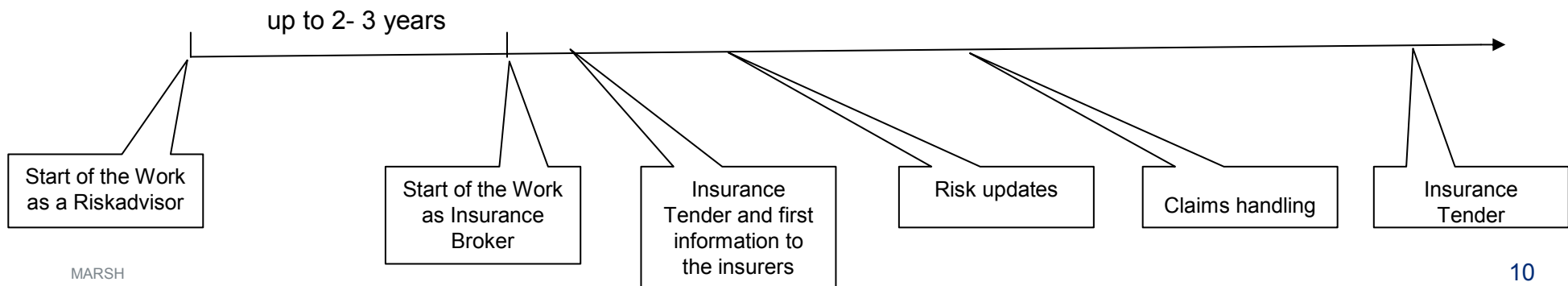
MARSH Hamburg Offshore Involvement of Riskadvisor and Insurance Broker



Project-Timeline



Marsh involvement



MARSH Hamburg Offshore

What documents do we need



- contracts; before signing
- project plan
- design study
- surveys
- method description
- approval of MWS
- insurance policies
- any of importance for risk

The sooner we receive the document the better we can advise, but you are the customer.

MARSH Hamburg Offshore

Balance of risk



- Balance of Risk
 - Take over
 - UXO
 - Gurantee and Maintenance
 - Insurance cover
 - Deductibles
 - Installation / Operation
 - External / internal perils
 - Force Majeure

- The insurer shall not indemnify the insured for loss or damage occurring during offshore transport, positioning and installation works which are a direct consequence of disregarding of reasonable recommendations of a warranty surveyor.

- technical: complex, innovative, new vessels and tools
- volatile business: companies, consortia, staff, MWS
- Loss is insured: *deductible commercially not important?*
- Many Claims based on peoples skills / communication
- External advisors are necessary for OWP erection, because claims persist
- More or less experienced cable layer and MWS exist at the same time.

From our perspective the following trends on insurance can be identified:

- high level insurability for new technologies is feasible, depending on the balance of risk and warranty of the contractor/supplier
- repairfriendliness and standardization will be the key factors for the future development of the loss ratio
- Projects with appropriate risk allocation between project and supplier will reach a better insurability and financing
- Quality of insurability and financing depends on early and detailed contract advisory (incl. Comments and recommendations during the negotiation process)
- The technical insurance broker with his engineers and insurance experts will work in the future more and more as a multifunctional platform for regular exchanges between the project and their advisers and the insurers and their Marine Warranty Surveyor to achieve a most possible smoothly project execution and to secure the full insurance cover for the whole project



CVs WIND OFFSHORE EXPERTS

November 2012



Insurances for Offshore Windfarms

Marsh Team CV's



Ralf Skowronnek (Dipl.-Ing./Dipl.-Wirt.-Ing.) **Head of Engineering and Renewable Energy Team**

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Fax: ++49 40 37692 379

Email: ralf.skowronnek@marsh.com

Location: 20457 Hamburg, Cremon 3

Experience:

Educated and employed in the early part of his career as a turbine millwright and industrial engineer, Ralf has 20 years experience in insurance, encompassing underwriting, loss adjusting, risk consulting and insurance broking.

As Head of Engineering & Renewable Energy Team with Marsh Hamburg, Ralf's core responsibilities include advising clients in relation to:

- Risk and claims management (contracts and claims) during the construction, turnover and operation of industrial plants, especially in the energy sector
- Similarly advising finance providers during the erection, turnover and operation of power plants (conventional and renewable energy).
- Development and realization of new solutions for the benefit of the energy business on national and international insurance markets.
- Offshore wind farm risk- and insurance assessment and interdependency analysis.

Ralf leads a team of engineering and renewable energy insurance specialists and is also responsible for the client services Marsh provides for the WTG-manufacturers. Furthermore he is well known as member of the management board of "Erneuerbare Energien Hamburg" together with Siemens and Vattenfall and to many investors and finance institutes (EIB, KfW, Societe Generale, NIBC, HSH Nordbank, Nord LB, Commerzbank, Allianz Capital, Macquarie)

Insurances for Offshore Windfarms

Marsh Team CV's



Dr. Jan Rögener Senior Client Adviser Renewable Energies

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Email: jansebastian.roegerer@marsh.com

Location: 20457 Hamburg, Cremon 3

Experience:

Educated and employed in the early part of his career as a diplom physicist with phd in physics, 5 years of experience in research plus 3 years working experience as engineer in special purpose machinery, Jan later gained 5 years experience in technology- und risk analysis for renewable energy projects.

Jan joined Marsh in the summer 2011 as a senior client adviser. As a member of the Engineering & Renewable Energy Team, Jan's core responsibilities include advising clients in relation to:

- Preparing risk information for insurance placements
- Risk and claims management during the construction, turnover and operation of geothermal and wind farm projects
- Risk analysis and insurability for German Offshore-Grid connections (Utilities)

Jan works in the standardization body (DIN-NSMT) for Offshore Wind procedures and the Offshore Code of Practice group (OcOP). Jan is also active Adviser and Mediator as well as consultant for the German Government with the purpose to solve the Grid Connection Problems (Tennet and 50Hertz).

Insurances for Offshore Windfarms

Marsh Team CV's



Lutz Weidtké Key Client Adviser Renewable Energies

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Location: 20457 Hamburg, Cremon 3

Experience:

Lutz started his career at a German Insurer for which he worked 18 years. During this time he successfully completed a three years' training as an insurance salesman and as a Graduated Business Administration in the field of insurance. After leaving the Insurer Lutz worked 3 years as a client executive and key client adviser for an insurance broker specialized in Renewable Energies and Offshore Wind. During this time he successfully completed a training as technical underwriter.

Lutz joined Marsh in 2010 as a key client adviser specialized in Renewable Energies, especially for wind farms offshore as well as for windturbine manufacturers (on- and offshore).

He has more than 5 years experience regarding

- Risk and claims management (contracts and claims) during erection + operation of industrial plants
- International offshore-contracting and insurance placement + support in contractual negotiations
- Presentation of new technologies on the insurance market
- Support of offshore wind industry throughout Germany.

Lutz is part of the engineering and renewable energy team.

Insurances for Offshore Windfarms

Marsh Team CV's



Martin Grentzinger Key Client Executive Renewable Energies

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Email: Martin.Grentzinger@marsh.com

Location: 20457 Hamburg, Cremon 3

Experience:

Martin started his career at a German Insurer for which he worked 9 years. During this time he successfully completed a three years' training as an insurance salesman. After leaving the Insurer Martin worked 9 years as a client executive for an insurance broker specialized in Renewable Energies.

Martin joined Marsh in 2007 as a Senior Client Executive specialized in Renewable Energies, especially for wind farms on- and offshore as well as photovoltaic projects.

He has more than 15 years experience regarding

- Risk and claims management (contracts and claims) during erection + operation of industrial plants
- Presentation of new technologies on the insurance market
- Support of offshore wind industry throughout Germany.

Martin is part of the engineering and renewable energy team.

Insurances for Offshore Windfarms

Marsh Team CV's



Olaf Weidemann Senior Client Executive Renewable Energies

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Location: 20457 Hamburg, Cremon 3

Experience:

Olaf started his career in 1989 at one of the leading German Insurers as a client advisor in the Engineering Lines. After 7,5 years of experience as a member of the industrial client team, he left the insurer taking a new opportunity on the insurance broker site.

Olaf worked for 2,5 years as a client executive for a small Insurance Broker, highly specialized in Renewable Energies. In the year 1999, Olaf changed to Aon. In the next 12,5 years Olaf worked as an expert in the field of the Engineering Lines and Account Management.

Olaf joined Marsh in 2012 as a Senior Client Executive specialized in all kind of Renewable Energies.

He has more than 22 years experience in the field of Engineering Lines, particularly

- Risk and claims management (contracts and claims)
- Risk analysis for technical risk (especially for business interruption insurance)
- Presentation of new technologies on the insurance market
- Client management for industrial clients

Olaf is part of the engineering and renewable energy team in Hamburg.

Insurances for Offshore Windfarms

Marsh Team CV's



Dieter Schimana Senior Advisor (Freelancer for MARSH)

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Fax: ++49 46 51 9429 047

Email: dschimana@aol.com and dieter.schimana@marsh.com

Location: Via Marsh GmbH 20457 Hamburg, Cremon 3

Experience:

Educated as Marine Engineer on turbine and motor driven ships followed by 8 years loss adjuster and surveyor with Allianz, Cologne, especially for utilities. 1990 to 2011 working with Marsh, responsible for utility clients and heading the Marsh Industry Practice Power & Utility including renewable energy and offshore.

Last years before his retirement he was Member of the Executive Board of North-West Germany including our Renewable Energy Team. Part of his profession were:

- Risk and Claims Management (contracts and claims) during erection and operation of renewable energy project
- Supports offshore wind industry throughout Germany
- Leads and supports due diligence teams
- Presentation to the insurance market on new technology / new risks
- Business interruption analyses in regard to the deregulated electricity market.

Dieter is continuing to work as consultant on dedicated projects and is personally involved within Due Diligence projects for the offshore industry and serves several clients out of the renewable energy (operators and manufacturers).