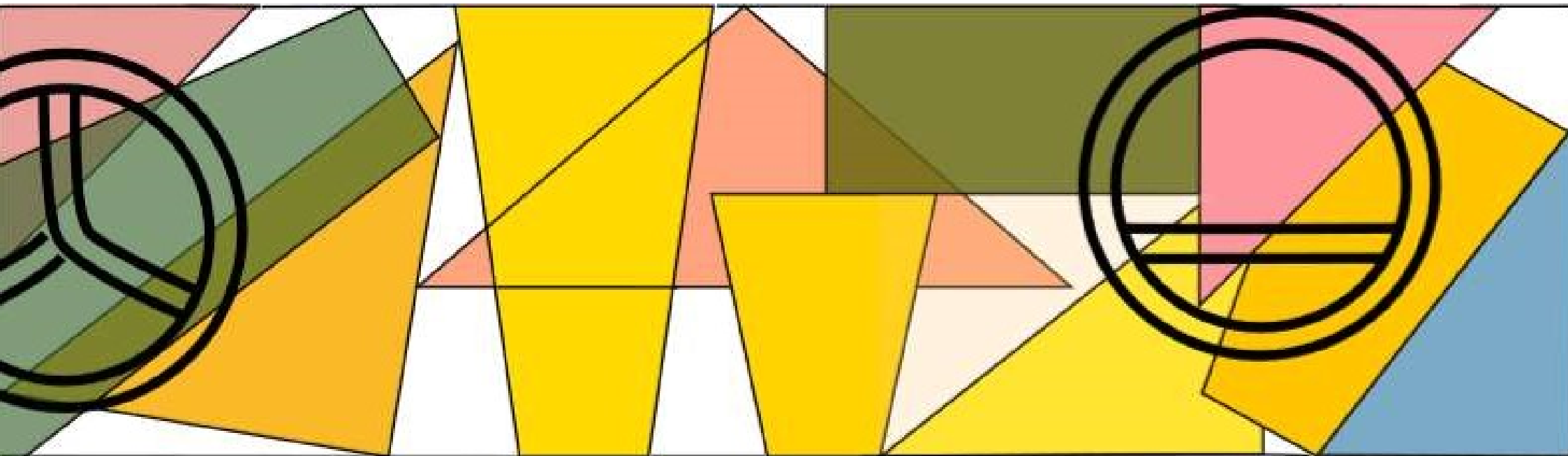




Skowronnek & Bechnak
International Risk Advisors
Authorized Insurance Experts
Hamburg



Workshop In Cooperation with
MARSH
International Insurance Brokers



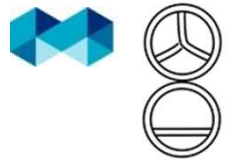
Renewable Energy Hamburg Workshop
Brazil Offshore Wind Insurance

Hamburg 23 May 2019



Renewable Energy Hamburg Workshop, Brazil Offshore Wind Insurance

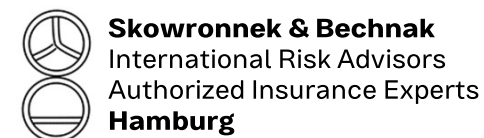
The importance of proper risk and insurance management
for the Levelized Costs of Energy (LCoE)



Agenda

- 1) Company Introductions
- 2) Insurance as part of the Levelized Cost of Energy (LCoE) of a supply chain
- 3) Examples of misalignment between contracts and insurance policies:
 - a) Three times premium paid. Insurers rejected the claim
 - b) Different series loss clause in O&M contract and insurance. Contractor and Insurer rejected the claim
- 4) The role of the insurance advisor and insurance broker during the project life time





Insurance advisor to the 1st non-recourse financed offshore wind farm
(Princess Amalia Wind Farm)

Risk-, Claims- Engineer and Broker to Project Finance International's 'Best Europe Wind Deal of the Year 2011'
(Global Tech 1)

Advisor to 15GW of offshore grid connections (OFTOs)
(UK and Germany)

Government adviser with respect to offshore grid connection issues
(Germany)

Client relationships with 8 of the top 15 turbine manufacturers
(Confidential)

Largest Renewable Energy Insurance Broker in Brazil.

MARSH Energy:

- 3bn USD annual gross premium
- 12.500 MW offshore wind power
- 40bn USD CAPEX offshore wind
- 50.000 MW onshore wind power
- 75bn USD CAPEX onshore wind

Broker to Project Finance Magazine's European Offshore Wind Deal of the Year 2012
(Northwind)

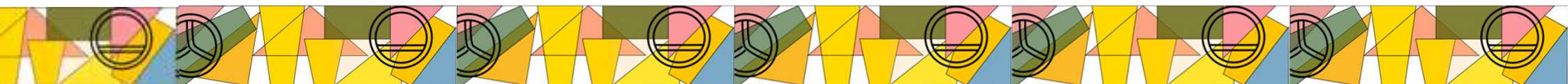
Broker to Project Finance Magazine's European Offshore Wind Deal of the Year 2016
(Veja Mate)

Insurance advisor to Germany's 1st commercial wind farm
(Baltic 1)

Insurance consultant to the largest offshore wind farm in 2015
(Gwynt y Môr)

Insurance adviser to Scotland's first offshore wind farm and the first under the UK OFTO scheme
(Robin Rigg)

Insurance adviser to Taiwanese and Japanese Offshore Wind Projects
(Confidential)





Ralf Skowronnek
53 years
Energy Expert since 1993

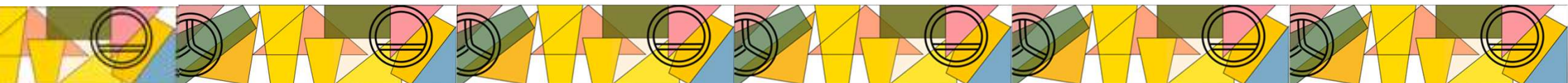
Languages:
German mother tongue
English negotiation level

Education: M.Eng. (Foundry and Metallurgy)
M.B.A (Insurance)

Activity: Freelancer

License: Independent Insurance Advisor under Art 34 d para 2 GewO
Arbitrator in insurance matters under Art 2 para 3 Nr. 1 and 2 Legal Services Act (RDG)

Experience: With industry since 1985, turbine millwright and engineer
26 years industrial insurance experience, underwriter und broker (major risks), loss adjuster and claims manager (major claims), risk and fire protection engineer
23 years onshore wind and 15 years offshore wind experience
Major risks and projects insurance expert
Authorized insurance expert for banks and investors
Insurance broker for bankruptcy administrator
Renewable Energy Practice Leader Marsh Europe
Claims Practice Leader Marsh Germany
Board Member of the Renewable Energy Cluster Hamburg e.V.
Member of the German Offshore Wind Foundation
Coordinator of the working group “liability” as part of the working group “Acceleration of German Offshore Wind Network Connection” contracted by the Federal Government in 2011 and 2012
Advisor and authorized insurance expert for international projects, contractors and suppliers
Speaker at some 50 international conferences in the last 10 years
Author of two insurance relevant publications (Handbook Offshore Wind and Wind Energy)
Guest lecturer at the Technical College of Kiel, Technical College of Arnheim and Nimwegen, Copenhagen Business School, and Technical College of Bremerhaven





Barbora Bechnak
42 years
Energy Expert since 2005

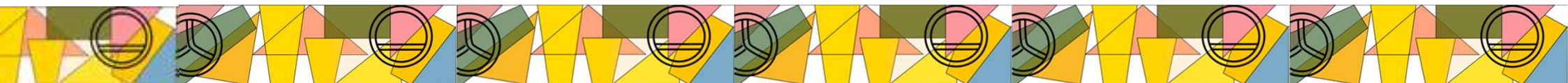
Languages:
Slovak mother tongue
English expert level
German negotiation level
French negotiation level
Spanish negotiation level
Portuguese negotiation level

Education: B.Sc. University of Bratislava, Economics
LL.M. University of London, Insurance & Marine insurance law

Activity: Freelancer

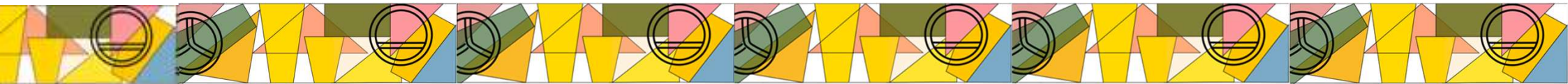
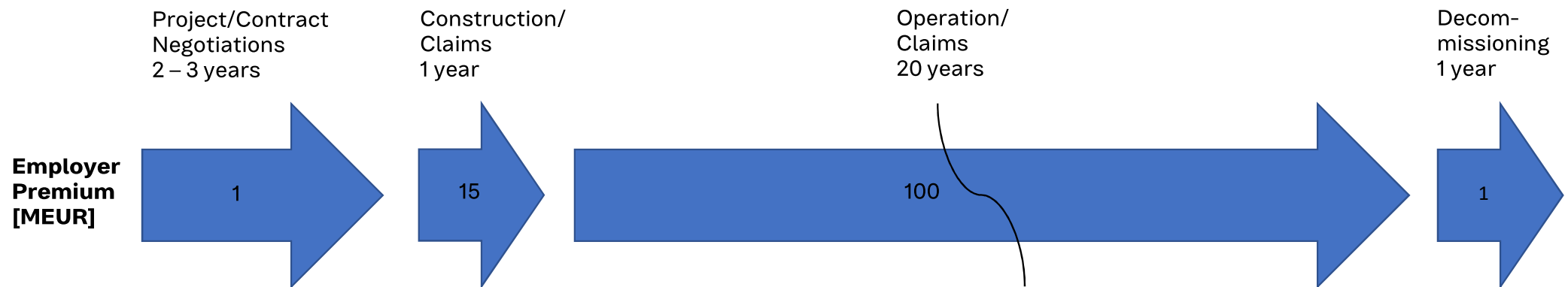
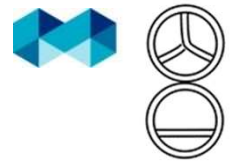
License: Independent Insurance Advisor under Art 34 d para 2 GewO

Experience: With insurance industry since 2004
12 years Claims Advocacy expertise
10 years Contractual Advisory expertise
Lenders Insurance Advisor (LIA) offshore wind projects expertise
LIA renewable energy projects expertise
Due Diligence offshore and onshore wind projects expertise
Broker (major risks) energy and financial lines
Major risks and project insurance expert
Authorized insurance expert for banks and investors
Senior Client Advisor, Offshore Wind, Marsh Germany
Renewable Energy Practice Leader Marsh Central and Eastern Europe & CIS
Former expert on nuclear liability regime and insurance (ELINI, EMANI)
FINPRO Claims Advocacy Trainee Marsh London
FINPRO Practice Leader for Marsh Eastern Europe
Advisor and assessor for international projects, banks, investors, contractors and suppliers
Speaker at international conferences in Hamburg, London and Belgrade focused on renewable energy, offshore wind and risk allocation/contractual advisory



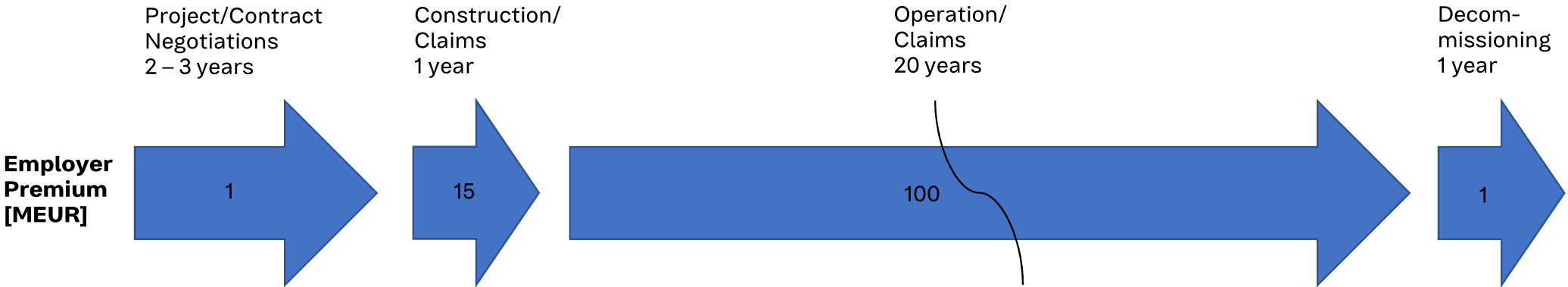
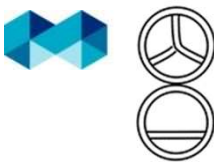
Renewable Energy Hamburg Workshop, Brazil Offshore Wind Insurance

The importance of proper risk and insurance management
for the lifetime Levelized Cost of Energy (LCoE)



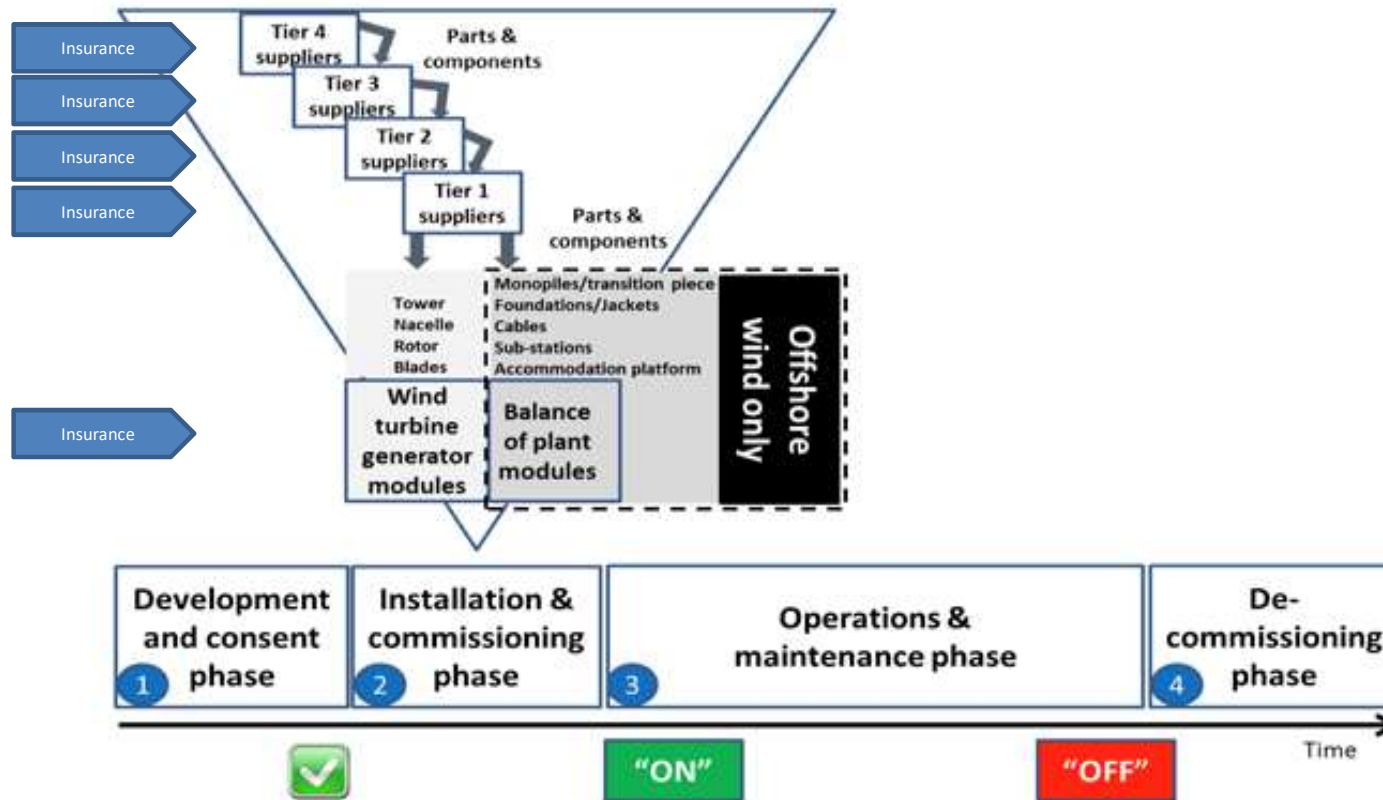
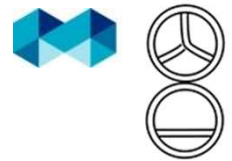
Renewable Energy Hamburg Workshop, Brazil Offshore Wind Insurance

The importance of proper risk and insurance management
for the lifetime Levelized Cost of Energy (LCoE)



Renewable Energy Hamburg Workshop, Brazil Offshore Wind Insurance

The importance of proper risk and insurance management for the lifetime Levelized Costs of Energy (LCoE)



Supplier:

- corporate insurance
- additional insurance

Contractor:

- corporate insurance
- additional insurance

Employer:

- Project insurance

Risks:

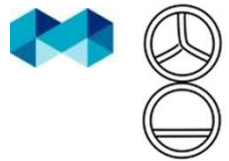
- double or triple premium
- coverage gaps
- claims problems

Source: WindSCM Thomas Poulsen PhD

Renewable Energy Hamburg Workshop, Brazil Offshore Wind Insurance

Contractual Risks and Insurance Provisions Alignment

Case Study 1: „Three times the premium...”



Employer's CAR insurance covers:

- Permanent works, materials, including those supplied free to the Project by or on behalf of the Principal, provided the value is included in the Contracts Works Sum Insured.
- An ITEM is included in the above, because it is classifiable as materials included in the Sum Insured.
- **Premium paid** by the Employer.

Contractors/Supplier's CAR covers:

- Works and materials in care, custody and control of the Contractor/ Supplier.
- An ITEM – the same as insured under 1. – is included in the above, because it is classifiable as materials which are or at certain point pass under the care, custody and control.
- **Second premium added** to the contractual price and invoiced to the Employer.

Supplier's Marine Cargo + temporary storage:

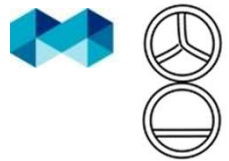
- “Owner reserves the right to delay the shipping of all or part of the Works deliverables. In this case the Supplier is committed to keeping the Works deliverables at its premises or at third party premises and to preserve it until approval for delivery is received.”
- An ITEM – the same as insured under 1. or 2., or eventually under both 1. and 2...?
- **Third premium added** to the contractual price and invoiced to the Principal.



Renewable Energy Hamburg Workshop, Brazil Offshore Wind Insurance

Contractual Risks and Insurance Provisions Alignment

Case Study 1: „...but zero coverage.“



A loss occurs:

- A loss due to theft occurs BUT is not detected at the time and is not duly reported to the Police. All insurers deny coverage due to the “unexplained shortage” exclusion in the insurance policies.
- In spite of the ITEM being insured under the
 - Employer’s CAR insurance and/or
 - Contractor’s/Supplier’s CAR / PD insurance for goods under care, custody and control and/or
 - Supplier’s Marine Cargo (+ temporary storage) insurancethere will be **no recovery under the insurance policy in spite of the premium(s) being paid THREE TIMES.**

➤ **Who is responsible?**

- the insurance broker insured the item according to the insurance clause in the contract
- the lawyer drafted the insurance clause to include the requirement to insure the item

➤ **Solution** to save insurance costs and receive indemnification:

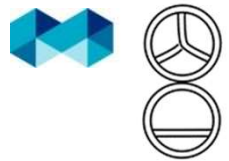
- Early and clear definition of the insurance regime in the contractual cascade (**Insurance Advisor**)



Renewable Energy Hamburg Workshop, Brazil Offshore Wind Insurance

Contractual Risks and Insurance Provisions Alignment

Case Study 2: „Serial Loss and Serial Defect...”



The Turbine Supply Agreement (TSA) states: “Serial Defect” means a Defect:

- of the same or similar type;
- that occurs in a minimum of ten percent (10%) of the same part or parts of a Major Component;
- and that arises from the same root cause
- after which the turbine supplier has to inspect all parts or Major Components at its own cost

In a windfarm with 80 turbines a serial defect occurs with the rotor blades

- In the TSA “Serial Defect” is defined after the 25th (10%) defective rotor blade

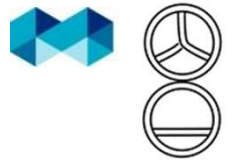
Versicherungsvertragsgesetz (VVG) – German Insurance Code – similar to Brazilian Insurance Code

- Insured’s obligation to prevent the property loss or damage latest after he becomes aware of the second identical defect
 - a) by inspecting and replacing defective parts without undue delay
 - b) in case of upcoming major losses or damage: shutdown of a wind farm
- Who bears the inspection costs and loss of revenue in cases between the 3rd and the 25th defective rotor blade?
- Solutions:
 - to limit the Serial Defect clause in the contract to “second identical defect” (**Insurance Advisor**)
 - to clarify the definition of the series loss clause in the insurance policy (**Insurance Broker**)



Renewable Energy Hamburg Workshop, Brazil Offshore Wind Insurance

The importance of proper risk and insurance management
for projects and the supply chain



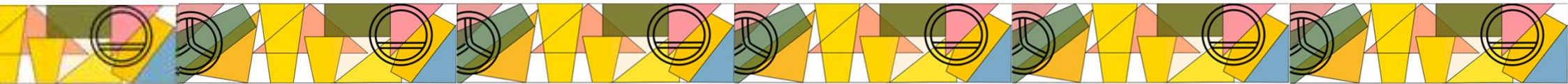
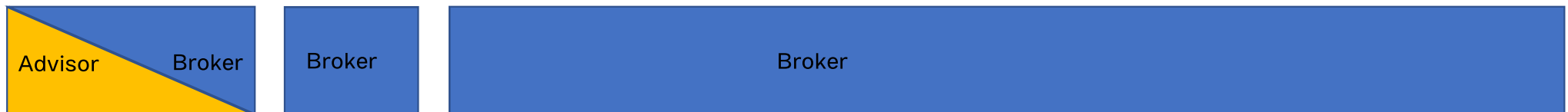
Conclusions:

Contractual insurance and risk advisory is an ideal addition to the activities provided by an insurance broker

- reduction of Total Cost of Risk (premium and claims)
- avoidance of double or triple insurance
- minimization of GAPs between contract and insurance policy
- provision of services an insurance broker is not permitted by law to deliver

Early involvement of both insurance advisor and insurance broker during the development and consent phase is the ideal solution

- for project companies
- for local suppliers or contractors.

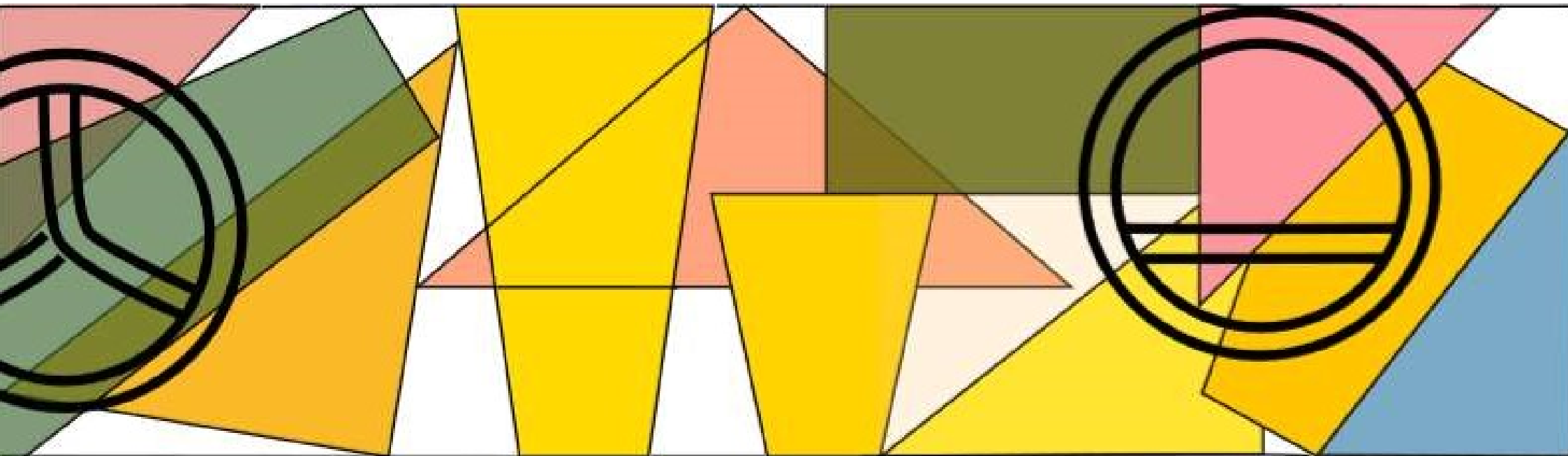




Skowronnek & Bechnak
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Authorized Insurance Experts
Hamburg



Workshop In Cooperation with
MARSH
International Insurance Brokers



Renewable Energy Hamburg Workshop
Brazil Offshore Wind Insurance

Hamburg 23 May 2019





Ralf Skowronnek
International Risk Advisor
Authorized Insurance Expert
Hamburg

Information Obligation under Art. 15 VersVermV

Company Owner:

Ralf Skowronnek
M.Eng./M.B.A.
International Risk Advisor
Authorized Insurance Expert
Eppendorfer Weg 98
20259 Hamburg
Tel. +49 (0)173 450 4881
Email: ralf.skowronnek@stbadvisors.de
www.stbadvisors.de
VAT-ID: DE322180484

Registered as:

Independent Insurance Advisor under Art. 34
§, para 2 Trade Regulations (GewO) with the
relevant licensing authority – the Chamber of
Commerce of the City of Hamburg,
Agency number: D-D42E-YKZS-95.

Ralf Skowronnek advises his Clients as an in-
dependent advisor and insurance expert. He is
remunerated on a fee basis exclusively by his
Clients. Remuneration by insurers is not per-
mitted.

Ralf Skowronnek has neither direct nor indi-
rect property rights participation at an insur-
ance company. Vice versa, no insurance com-
pany or insurance mother company has either
direct or indirect property rights participation
at Ralf Skowronnek.

Common registration authority under Art. 11 a, para 1 GewO:

Deutscher Industrie- und Handelskammertag
(DIHK) e.V.
Breite Strasse 29, 10178 Berlin
Tel. +49 (0)180 920 1810
(From Germany per landline: € 0,20/utd; per mobile net:
€ 0,40/utd)

The register can be consulted under [www.stb-
ombudregister.info](http://www.stb-
ombudregister.info)

Arbitration and Dispute Resolution under Art. 214 VVG

Versicherungsombudsmann e.V.
P. O. Box 08 06 32, 10006 Berlin

Ombudsmann Private Kranken- und Pflege-
versicherung
P. O. Box 06 02 22, 10052 Berlin

Consumer Arbitration and Dispute Resolution
Procedure under Art. 36 VSBG:
Ralf Skowronnek is obliged under Art. 17 para
4 VersVermV to adhere to the Dispute Resolu-
tion Procedure of the following Consumer Ar-
bitration:

Versicherungsombudsmann e.V.
P. O. Box 08 06 32, 10006 Berlin

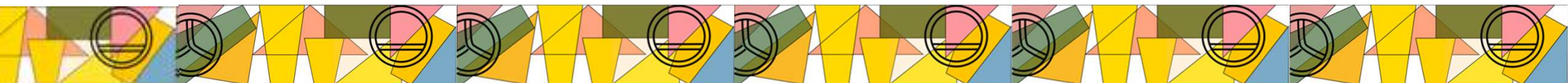
Ombudsmann Private Kranken- und Pflege-
versicherung
P. O. Box 06 02 22, 10052 Berlin

Online Dispute Resolution under Art. 14, para 1 Consumer Online Dispute Resolu- tion Regulation (ODR-VO)

The European Commission provides Online
Dispute Resolution Platform (OS-Platform)
which consumers can find under
<http://ec.europa.eu/odr/main/>

Consumers can use this platform for resolu-
tion of disputes arising from contractual obli-
gations.

In this respect, please refer to the email ad-
dress: ralf.skowronnek@stbadvisors.de





Barbara Bechnak
International Risk Advisor
Authorized Insurance Expert
Hamburg

Information Obligation under Art. 15 VersVermV

Company Owner:

Barbara Bechnak
LL.M.
International Risk Advisor
Authorized Insurance Expert
Eppendorfer Weg 141d
20253 Hamburg
Tel: +49 (0)173 460 4880
Email: barbara.bechnak@sbadvisors.de
www.sbadvisors.de
VAT-ID: DE 322 719 117

Registered as:

Independent Insurance Advisor under Art. 34
sl, para 2 Trade Regulations (GewO) with the
relevant licensing authority – the Chamber of
Commerce of the City of Hamburg.
Agency number: D-HTM1-OT4GH-30.

Barbara Bechnak advises her Clients as an in-
dependent advisor and insurance expert. She
is remunerated on a fee basis exclusively by
her Clients. Remuneration by insurers is not
permitted.

Barbara Bechnak has neither direct nor indi-
rect property rights participation at an insur-
ance company. Vice versa, no insurance com-
pany or insurance mother company has either
direct or indirect property rights participation
at Barbara Bechnak.

Common registration authority under Art. 11a, para 1 GewO:

Deutscher Industrie- und Handelskammertag
(DIHK) e.V.
Breite Strasse 29, 10178 Berlin
Tel: +49 (0)180 620 5850
(From Germany per landline: € 0.20/call; per mobile max.
€ 0.60/call)

The register can be consulted under [www.vda-
mitlerregister.info](http://www.vda-
mitlerregister.info)

Arbitration and Dispute Resolution under Art. 214 VVG

Versicherungsombudsmann e.V.
P. O. Box 08 06 32, 10006 Berlin

Ombudsmann Private Kranken- und Pflege-
versicherung
P. O. Box 06 02 22, 10052 Berlin

Consumer Arbitration and Dispute Resolution
Procedure under Art. 36 VSBG.
Barbara Bechnak is obliged under Art. 17 para
4 VersVermV to adhere to the Dispute Resolu-
tion Procedure of the following Consumer Ar-
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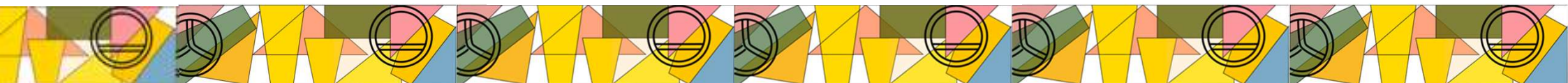
Versicherungsombudsmann e.V.
P. O. Box 08 06 32, 10006 Berlin

Ombudsmann Private Kranken- und Pflege-
versicherung
P. O. Box 06 02 22, 10052 Berlin

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The European Commission provides Online
Dispute Resolution Platform (OS-Platform)
which consumers can find under
<https://webgate.ec.europa.eu/odr/main/>

Consumers can use this platform for resolu-
tion of disputes arising from contractual obli-
gations.
In this respect, please refer to the email ad-
dress: barbara.bechnak@sbadvisors.de





INFORMATION OBLIGATIONS

DETAILS OF THE INFORMATION OBLIGATIONS UNDER SECTION 11 OF THE REGULATION OF INSURANCE MEDIATION (VERSVERMV) AND SECTION 12 OF THE REGULATION OF FINANCIAL INVESTMENT BROKERAGE (FINVERMV)

Management:

Marsh GmbH
Lyoner Strasse 36
60528 Frankfurt am Main
tel.: +49 (0) 69 66 76 0
fax: +49 (0) 69 66 76 422
www.marsh.de
info@marsh.de

Managers:

- Siegfried Fährig (Chairman)
- Dr. rer. Georg Heucke
- Oliver Doliner
- Bernd Knoll

Registered as:

- insurance broker pursuant to Section 34 (1) of the Trade Regulation Act (GewO) under the registration number D-4 752 9WHDX 25
- financial investment broker pursuant to Section 34 (1) No. 1, 2 and 3 of the Trade Regulation Act (GewO) under the registration number D-F 125 NYOM 26

at the regulatory authority, the Chamber of Commerce and Industry (IHK) of Frankfurt am Main.

Marsh offers advice services to its clients.

Marsh shall receive an agreed remuneration – this could be a fee payable to Marsh by the client, a commission included in the applicable insurance premium or a combination of a fee and a commission. In addition

to these kinds of remuneration, Marsh shall also be entitled to separate remuneration from insurance companies for services rendered to them.

Marsh does not hold any direct or indirect investment of more than ten percent of the voting rights or capital of any insurance company. Similarly, no insurance company or parent company of an insurance company holds any direct or indirect investment of more than ten percent of the voting rights or capital of Marsh.

joint registrar pursuant to § 11a para. 1 Trade Regulation Act (GewO):

Deutscher Industrie- und Handelskammertag (DIHK) e.V.
Industriestraße 29
10178 Berlin, Germany
tel.: +49 (0) 30 60 50 50 50
e-mail: info@diht.de
website: www.diht.de

The register can be inspected under: www.commissionregister.de

Arbitration bodies – for the out-of-court settlement of disputes – pursuant to § 214 VVG:

Versicherungsombudsman e.V.
Postfach 08 06 32
10006 Berlin

Ombudsmann Private Kranken- und Pflegeversicherung
Postfach 06 02 22
10052 Berlin

Consumer arbitration bodies – dispute settlement procedure pursuant to § 36 VSBG:

We are willing to take part in dispute settlement procedures at the following consumer arbitration bodies:

Versicherungsombudsman e.V.
Postfach 08 06 32
10006 Berlin

Ombudsmann Private Kranken- und Pflegeversicherung
Postfach 06 02 22
10052 Berlin

Online Settlement of disputes pursuant to Art. 14 para 1 Regulation on Consumer Online Dispute Resolution (ODR-VO)

The European Commission provides a platform for consumer clients to settle disputes online which can be found here: <https://webgate.ec.europa.eu/odr/main/>. Consumer clients have the possibility to use this platform for the out of court settlement of their disputes concerning contractual obligations.