LIMA Programme

ENG PI

22 September 2023
Nkejane Mofokeng

Munich RE

NOT IF, BUT HOW

Image: Munich Re

Agenda

01

Liability Insurance

02

SPPI

03

Future Outlook

Image: Munich Re

01

Liability Insurance

Liability Insurance

- In the ordinary course of business a company could cause damage to the property of others or injure people.

- As a result the company **may** become legally liable for the negligence or wrongful acts of the company's employees, directors, subcontractors, customers, suppliers

- If the company is at fault it might be **sued** for **Damages**

- Liability Policies have been designed to pay for these **Damages**

Liability Insurance

Munich RE

	Liability Insurance	Property Insurance
Coverage	abstract liability	specific property
Sum Insured	per event, in aggregate	specific value/active position
Parties Involved	Victim = plaintiff Insured = defendant Insurance Company	Insured = Owner Insurance Company
Form of Insurance	all risks (named exceptions)	named perils/losses (few exceptions)
Interests of Parties	Insurer and Insured against victim/plaintiff	Insurer and Insured are usually “opponents“
Loss	damage of third party	Own damage

Liability Insurance

Munich RE

General Third Party Liability

- Bodily Injury – Injury or death of a third party
- Property Damage – Damage to third party property

Professional Indemnity

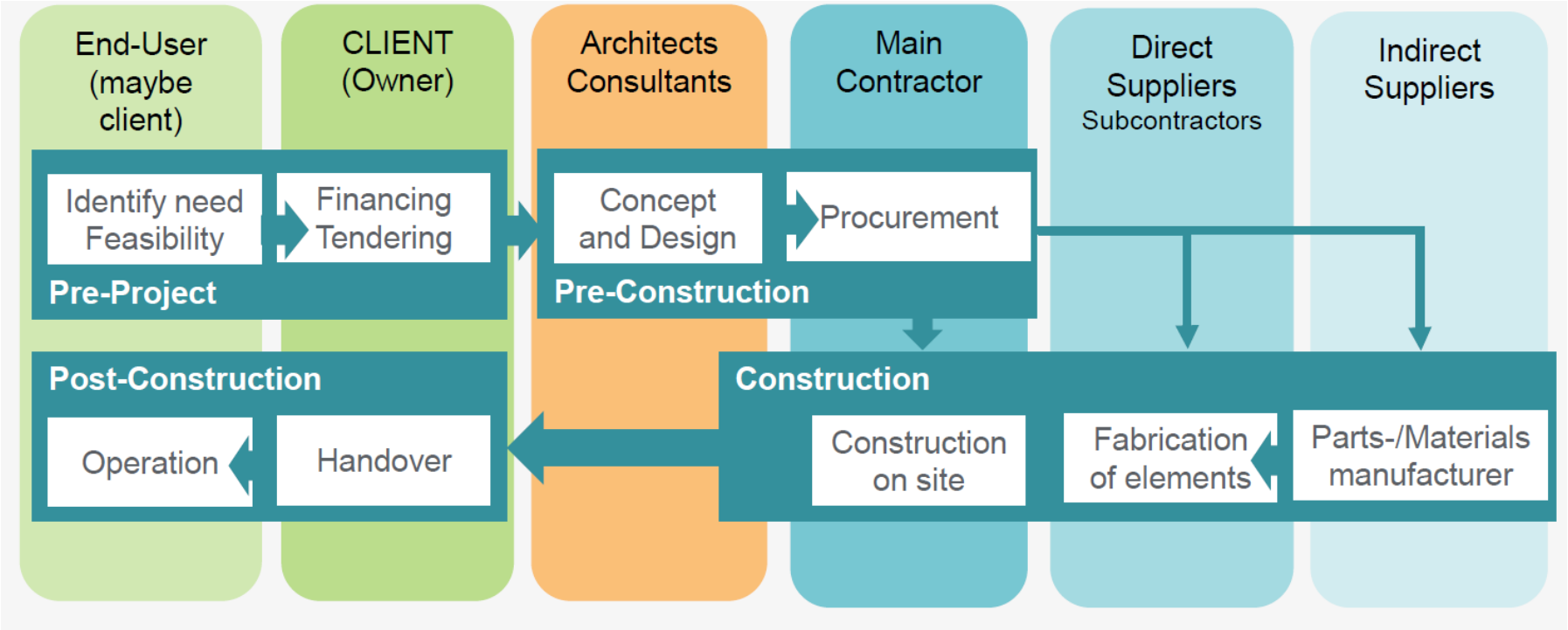
- Pure Financial Loss – Financial loss that is not caused by bodily injury or property damage

Image: Munich Re

02 Single Project Professional Indemnity

Construction Process and “internal” stakeholders

Munich RE



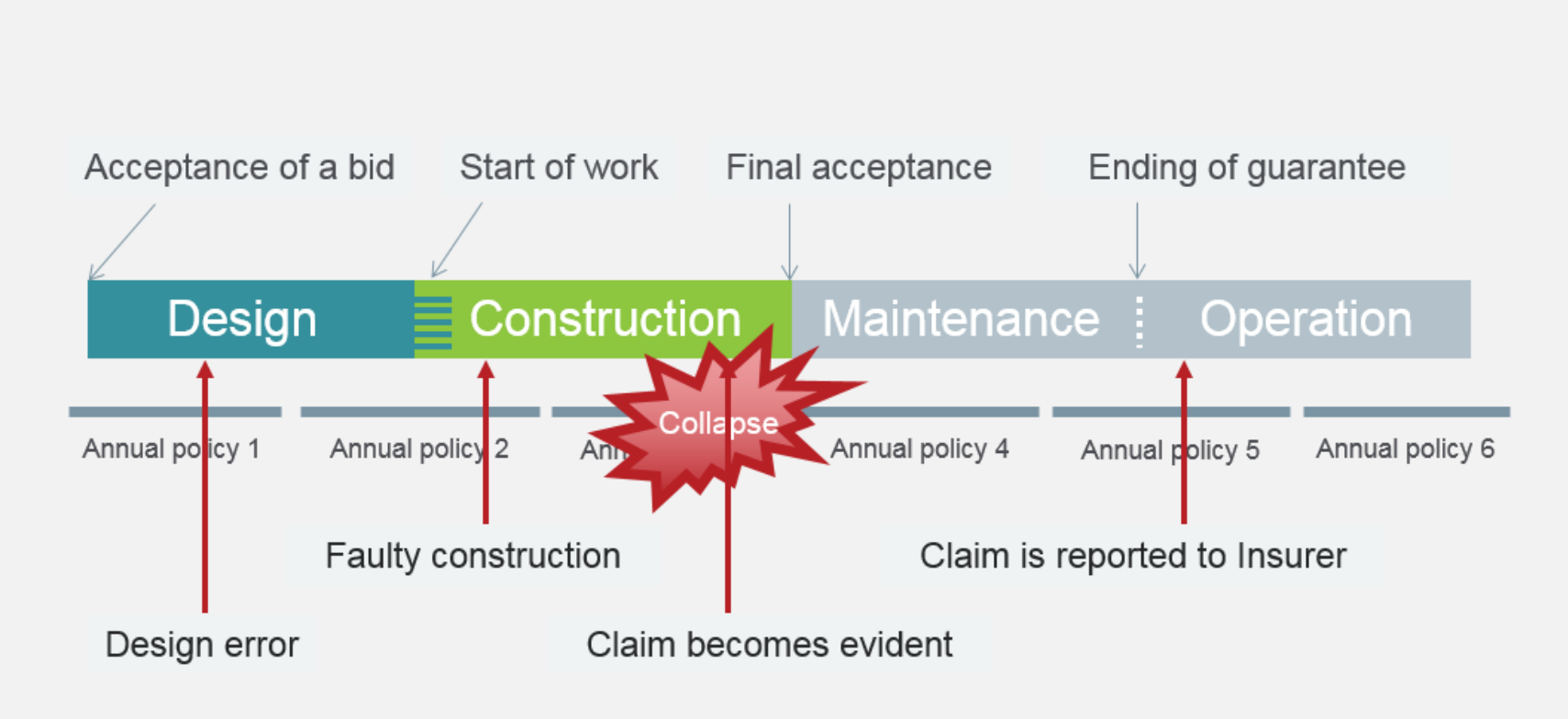
Source: adopted from Cox and Ireland 2001

SPPI

Munich RE

- **Professional indemnity** cover provided for the **entire lifecycle of a construction project**
- This type of coverage is **tailored for the specific project requirements**
- Cover usual provided for **large civil construction and heavy engineering projects**
- Cover provided for **higher project values** and projects with **complexity of risk and construction**
- The insurance is usually **purchased by the project developer** and **includes all contractors and sub-contracts under one policy**
- Cover includes **pre-construction work such as early design work** and extended to include the maintenance period

SPPI


Acceptance of a bid
Start of work
Final acceptance
Ending of guarantee
Design
Construction
Maintenance
Operation
Collapse
Annual policy 1
Annual policy 2
Annual policy 4
Annual policy 5
Annual policy 6
Faulty construction
Claim is reported to Insurer
Design error
Claim becomes evident

Annual Cover vs Project Cover

Munich RE

Annual PI Cover ~ practice policy

- Policy period: one year
- Usually low limits
- No transparency about smaller project under annual policy, that may affect the limit.

PI Project Cover

- Policy period: Duration of the construction project
- Limit is significantly higher and is geared to the risks of the planners
- Greater transparency for the Insurer, as it can secure specific information on the project

SPPI – UW Factors

- Detailed information of Policy holder
  - Role and professional services to be provided
  - Have any parties to be covered been established for less than 5 years
- Project
  - Name and location of project. Provide site plan and advise soil/ground conditions
  - Detailed description of project
  - Which legal jurisdiction applies to project
  - What project design standards are to be utilized for project
  - What is estimated gross project value
  - What are estimated gross professional fees including project management
  - Provide flow chart or expected bar chart/timeline schedule

SPPI – UW Factors

- What is start and end date for design phase and construction phase
- What is estimated completion date
- Attach copy main contractual agreement between Main Proposer & Principal

- Experience and Loss History
  - Has any proposer ever been subject to any Inquiry or disciplinary proceeding
  - Has any professional liability claim ever been made against any proponent
  - Has any insurer refused to provide terms to any proposer
  - Has any insurer imposed special terms on any insurance to any proposer
  - Has any insurer avoided or cancelled insurance held by any proposer
  - Are any proposers aware of any circumstance that may give rise to a Claim
  - Does Main Proposer have a current professional liability policy

SPPI – UW Factors

- Specific Information
  - Environmental Impact Statement (EIS)
  - Engineering Reports (geotechnical, hydrology, structural, mechanical, electrical etc)
  - Insurance broker submission and quotation slip, completed/signed proposal form

High Risk Projects

Munich RE

Severity potential is higher than usual:

- Infrastructure projects
- Tunnels
- Dams and other hydraulic engineering projects
- Port facilities
- Airports
- Wind power plants
- Offshore construction projects

Part II: Main exposures per type of infrastructure project

A. Tunneling projects

Contractors' liability

1. Damage:
   - to supply lines
   - due to loss of support
   - due to subsidence

2. Tunnel collapse during construction/operation

Part II: Main exposures per type of infrastructure project

Munich RE

B. Bridges

Contractors' liability

1. Insufficiently or wrongly compacted soil / overestimation of load capacity

2. Accidents during construction, e.g. during beam launching

3. Collapse of cranes or scaffolds

4. Vibration / accidental removal of building structure support during foundation drilling operations

Part II: Main exposures per type of infrastructure project

C. Airports

Contractors' liability

Mainly: Modernization and expansion projects

1. Insufficient separation of project site and existing property in operation

2. Traffic on the project site

Image: Munich Re

03

Future Outlook

Largest Casualty Construction Claims for MR

Munich RE

Loss Name / Location	Date of Loss	Loss Description	MR Loss (Euro) – rounded
Kölner Stadtarchiv/ Köln – Germany	03.03.2009	Collapse of whole building due to subway construction works	25m + (in development)
Airport Roissy / Paris – France	23.05.2004	Collapse of terminal due to faulty design	21m
Kier Group / Bournemouth – UK	10.04.2003	Faulty design of shopping center	15m
Congra Plant - Dam Explosion (Bechtel & Jacobs) - USA	09.06.2009	Faulty installation of water heater leads to explosion	10m
Buncefield / Hemel Hempstead - UK	11.12.2005	Explosion of oil storage due to inadequately designed and maintained containment system	9m
Bridge collapse Minnesota – USA	01.08.2007	Construction defect leads to collapse of bridge	8m
Clark Enterprises Washington - USA	21.12.2012	Faulty design leads to ground water flowing into museum	4m

Types of risk involved in the construction industry

Munich RE

Technical risk

- Uncertainty of resource and availability of materials
- Inadequate site investigation
- Incomplete design

Financial risk

- Delay from clients
- Increment for staff benefits
- Unprecedented price in raw materials
- Fluctuations in estimated finance than expected

Construction risk

- Dispute between labors
- Damage to persons and property
- Changing sequences in construction activity
- Non availability of resources
- Change in quantities of work
- Safety of workers

Environmental risk

- Natural disaster
- Weather and seasonal implications
- Pollution by construction work

Source: IRJET/A STUDY ON INSURANCE IN CONSTRUCTION INDUSTRY

Wrap up: Main drivers influencing profitable underwriting

Munich RE

Construction Type and Delivery method

- Type of project, project length
- Experience and Quality of Construction Participants (claims history!).
- Collaboration methods (Design Bid Build / Design Build/PPP…)
- Contractual requirements / Standard of Care

Location & Jurisdiction

- Location of project
- Increasing building / standard of care standards
- Labor shortages
- Nat Cat exposure

Type of (re-) insurance support

- Acceptable original coverage scope
- Limit management and diversification within facultative participations
- Attachment point aligned to project type and size
- Adequate deductibles / SIR

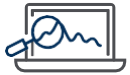
Technical assessment

- Expertise of UW team is critical
- Support by engineering colleagues' cross line in-House

Choice and expertise of carriers

- Trustful partnership assures high transparency
- Good knowledge of UW strategy
- Understanding of buying motivation
- Specialized UW team with excellent construction and risk management know-how;
- Leading insurer in their segment;
- specialized Claims management

Risk of Change



- Inflation
- ESG, new technologies (e.g., green design) elevate new
- standards
- New building materials

Thank you for your attention!

22 September 2023
Nkejane Mofokeng

Munich RE

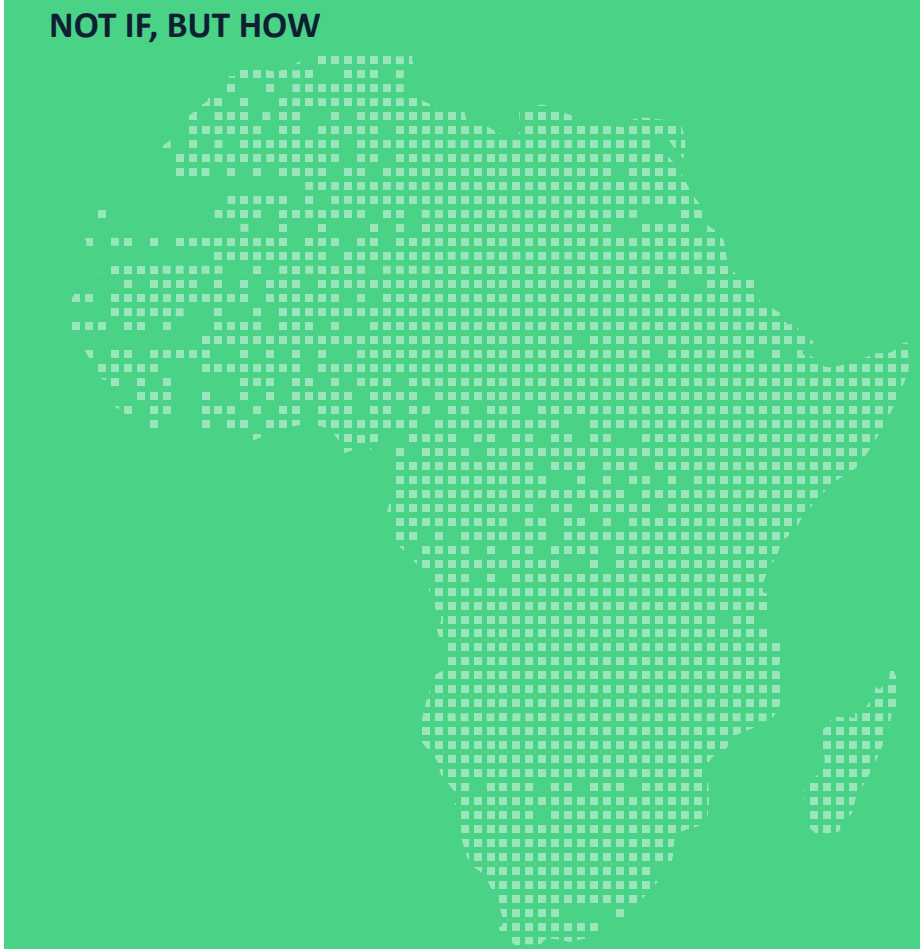


Image: Munich Re