



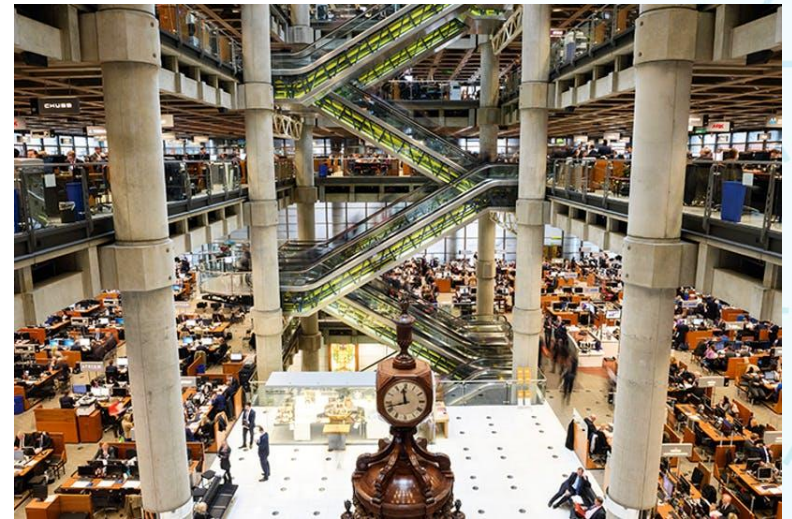
Risk Management and Insurance: A business enabler

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Amsterdam
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CONTEXT – Who are we?



LLOYDS OF LONDON



UNDERWRITING FLOOR

CONTEXT – Who are we?



TOKIO MARINE
KILN

INSURER



BROKER

CONTEXT – What are we going to talk about

- Risk Profile
 - Focus on Risk Profiles which LNG projects face
 - Parties and factors involved
 - Project Risks – Physical and Contractual
- Business Enablers
 - Project Risk Management
 - Risk Engineering
- Risk transfer solutions
- Conclusion

RISK PROFILE

RISK ARENA – Parties and Factors

- PARTIES
- Complex risk relationships between
 - LNG buyer
 - Terminal operator
 - FSRU/ FLNG owner
- FACTORS
 - FSRU
 - **Physical**
 - Location
 - Type of FRSU / FSU and jetty interface solution
 - Jetty based
 - Offshore location with pipeline
 - **Financial**
 - Business models – Revenue / Tolling / BOO schemes
 - **Contingent risk exposures** – pipelines / power stations
 - FLNG
 - Small scale/ Medium Scale/ Large scale

PROJECT RISKS – Physical damage and consequent financial loss

- Stages
 - Yard works - Construction / Fabrication
 - Transportation - Critical Long lead items
 - Voyage & installation
 - Maintenance period
 - Jetty / Breakwater
- Perils
 - Natural Catastrophe
 - Contingency from FSRU/ infrastructure
 - Process risks - high pressure gas / revaporization
 - LNG Supply chain dependency
 - Incoming LNGC foul berthing / collision / port blockage
 - Shipping density / congestion / liabilities
 - Terrorism/ Political Risks

PROJECT RISKS – Contractual Complexity

Key Contracts

- Joint Venture Agreement
- LNG supply Agreement
- LNG Terminal User Agreement
- Gas Sales Agreement
- EPC Contracts
- FSRU (New build or refurbishment)
 - FSRU Time Charter Agreement or
 - FSRU purchase and
 - O&M Agreement
- Port Condition of Use Agreement
- Port Services Agreement
- Credit Agreement

Key Components Reviewed

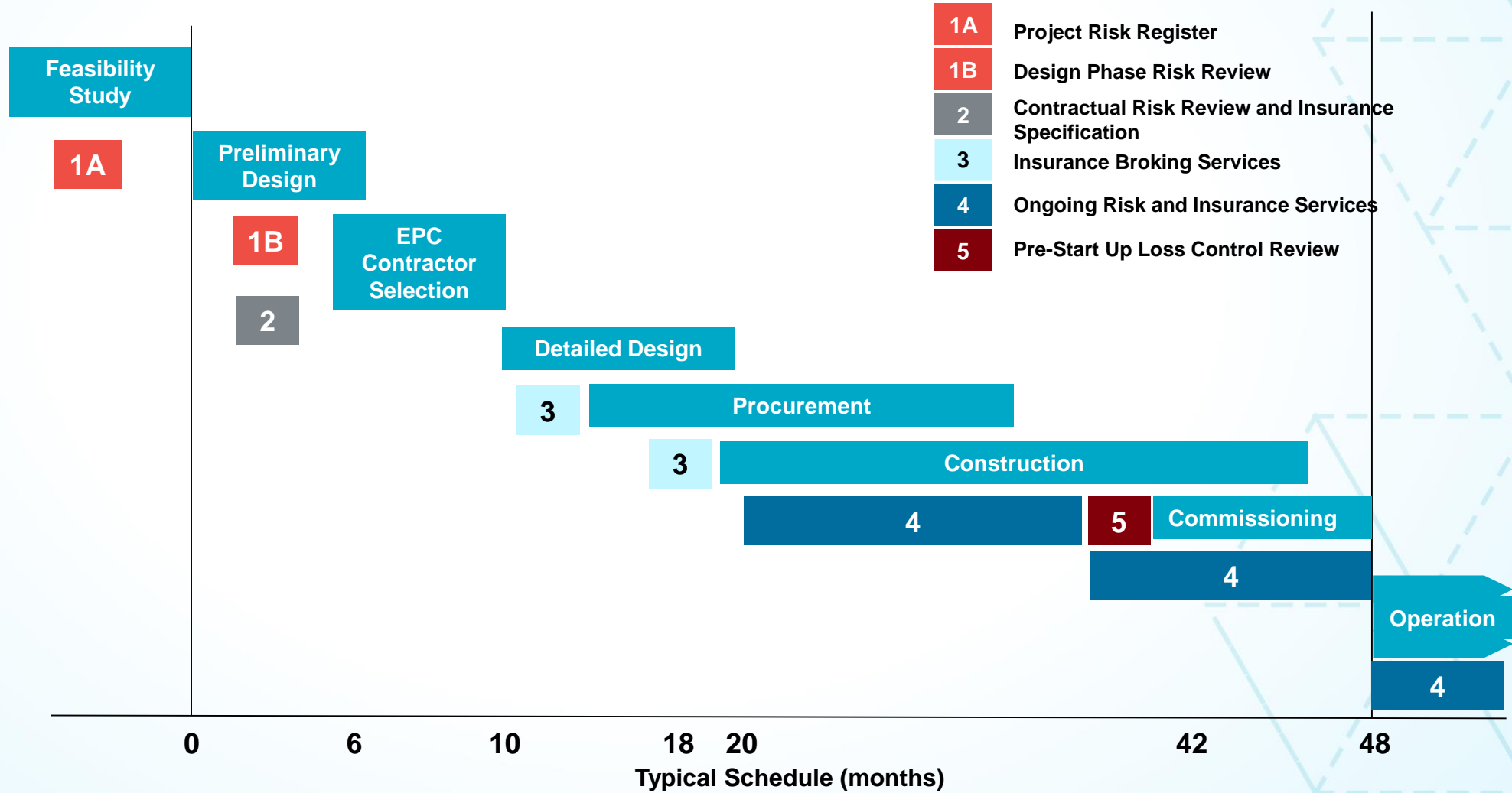
- Extent of Force Majeure
- Hold harmless / Indemnities
- Insurance requirements
- Capped Liabilities
- Delay and default
- Title and responsibility to LNG and gas

BUSINESS ENABLERS

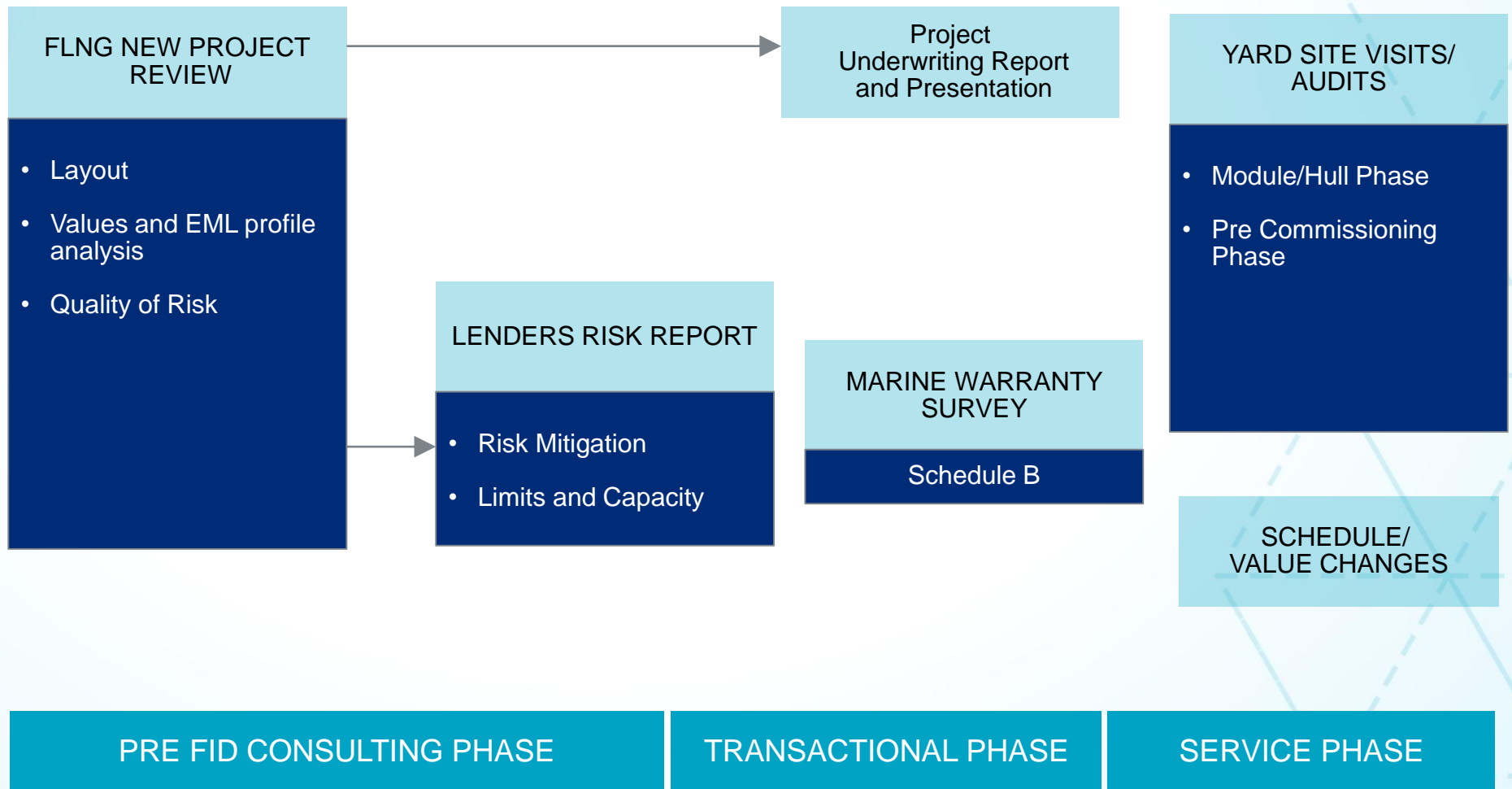
PROJECT RISK MANAGEMENT PROCESS

- A sequence of project phase activities to assist the Project in managing risk exposures ‘right from the start’, in order to:
- Attract financing (if applicable)
- Minimize insurance costs and cost of risk over project life cycle
- Enhance quality of risk in developments at the most cost effective stage

PROJECT RISK MANAGEMENT SERVICE



RISK ENGINEERING – The bridge between FLNG and Insurance Markets



RISK TRANSFER SOLUTIONS

FSRU – Typical Risks That Can Be Insured

TERMINAL OWNER

- Jetty and process / pipeline assets
- Breakwaters
- Gross profit
- Contigent Business Interruption (LNG Chain)
- Marine and Third Party Liabilities
- Charterer's Liability
- Terrorism and PV
- CEND

FSRU PROVIDER

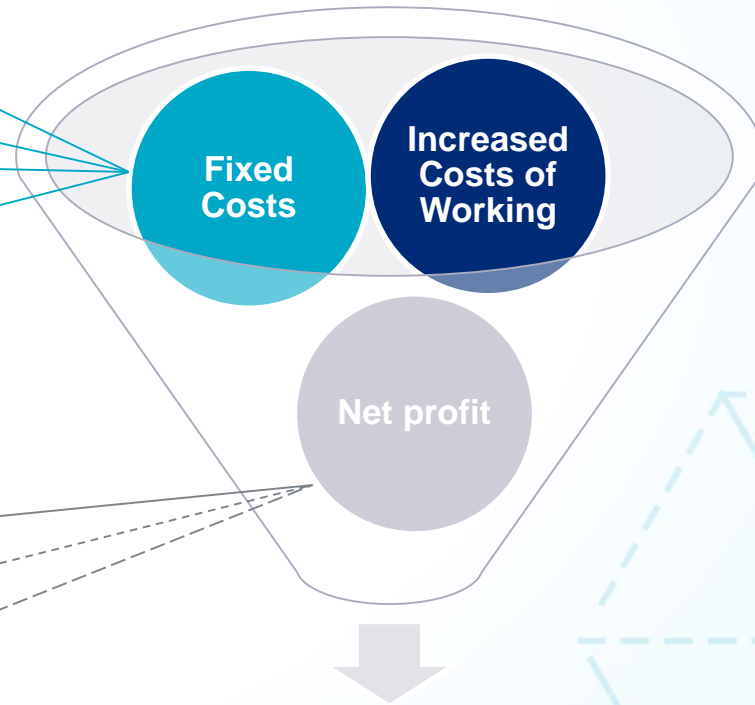
- FSRU Hull
- Loss of Hire
- P&I
- CEND

LNG Cargo

FSRU LNG TERMINAL DSU / BI INSURANCE INDEMNITY COMPONENTS – linking Terminal with FSRU

Components:

Port Service Charges
FSRU Hire
Debt Service
Terminal O&M Costs



Sources:

Tolling Profit
(Gas Trading Profit)
(Power Generation Profit)

DSU/BI Indemnity

CONCLUSIONS

CONCLUSIONS

- Think Risk and Insurance early
- Be nimble with risk in contracts – seek deviation from the norm
- Budget for cost
- Study all the options for insurance
- Protect your balance sheet



THANK YOU

Questions?

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THANK YOU

Questions?

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