

THE IMPORTANCE OF INSURANCE WITH RISKS AND SOLUTIONS FOR PORTS AND TERMINALS

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ABSTRACT

The projects and operations of ports and terminals are exposed to a range of complex and changing risks. In addition to the development of these projects and taking multiple forms, the problems associated with these developed projects develop and often require a balanced strategy to address risk mitigation. This strategy involves risk transfer and reduction using traditional insurance policies, as well as innovations and solutions tailored to specific customer requirements.

KEYWORDS-Insurance, Risk, terminal, Lifecycle, Stakeholders.

I. INTRODUCTION

Life Cycle Risks for Marine Projects. The concept of life cycle risk, which refers to the changing pattern of the customer's risk profile, from the initial development of the project to planning, design, financing, construction, and very long years of operation.

By recognizing that the challenges and risk profile of individual stakeholders of a project will change over the life of the project, the approach should provide insight into how risk issues and solutions can span multiple phases of the project.

II. STAKEHOLDERS

The risks inherent in a port or investment development project could pose a challenge with far-reaching consequences for each stakeholder. In many cases, stakeholders will be seriously coordinated in their perception of risk. However, differences in risk tolerance can lead to different approaches to risk allocation and mitigation measures[2].

One of the objectives that emerges during implementation is to develop a highly structured approach to understanding the profile of individual development or investment risks. Ensuring that the contractual structure, agreed upon by all stakeholders, provides a fair distribution of risk, resulting in optimal and cost-effective solutions, and there are balance-of-risk solutions and risk transfer maintained through the investment cycle or asset life cycle.

Through public sector projects, responsibility is represented in the protection of public interest and government assets through the life cycle of large enterprises. The management of public sector risk mitigation and reduction on projects, leading to the successful deployment of public and private capital and debt, improving contractual protection, project implementation and operational control.

The responsibility for equity holders / investors is to maintain a competitive advantage while protecting the

interests of investors and meeting agreed contractual requirements with customers, other stakeholders and capital providers. As well as to identify and measure pricing and risk transfer to improve valuations, protect assets, reduce the volatility of cash flows required to improve operational performance, serve fixed contractual obligations and repay debts. The responsibility for lenders is to ensure an in-depth risk review and to assess borrowers' suitability and risk-taking to protect the interests of lenders. This is done by identifying gaps between project risks and risk retention arrangements and transferring them to the borrower; protecting the lender through the borrower's risk and compliance provisions in the insurance and financial project documents. As well as for contractors the responsibility shall be represented in the delivery of the project within the time and budget, emergency management and control of the cost of capital[1].

Delivery: Adopting a highly structured approach to identifying, evaluating, allocating and managing critical and emerging project risk issues, and developing an optimal and cost-effective balance to retain risks and risks supported by market knowledge with confidence and depth through standardized data. Professional service as well as for suppliers will be responsible by offering architecture, engineering, and design consulting with confidence in contracting management, and the responsibility lies and extends to reputable and geographical risks. Where a more comprehensive and detailed package would have to be provided by covering the professional compensation policy available in the world for the navigational market as well as the service of handling claims beyond capacity[4].

III. RISKS THROUGH LIFE CYCLE

The concept of the ability to effectively manage risk for the project through the cycle revenues, Stage is an important time to carry out an effective risk through the management framework. Where risks at this stage of the project could include:

- Poor documentation and lack of stakeholder participation in project objectives.
- Insufficient time or budget for feasibility studies.
- Insufficient domains for the project through research and assurance, resulting in undisciplined cost as well as insufficient information in pre-design packages. The existence of more specific risks to risk management planning is unique to organizations. However, to ensure that risks are allocated to the parties most appropriate to be addressed, they should be addressed at the project development / concept stage, including:
- Lack of a structured risk management framework for identifying and managing risk.

- Lack of transparency in key decision-making processes.
- Project objectives are not compatible with the risk management plan.
- Uncertain risk appetite for pre-design concept studies.

IV. PORT OPERATORS AND SPECIALIZED TERMINALS

Operators should deepen the understanding, measurement and management of exposure to insurmountable risks arising from the proposed or actual ownership and operation of the plant's outlet or asset, including exposure to past, present and potential obligations. As well as full knowledge of whether the proposed insurance coverage of the project addresses the appropriate risks to the operator of the international port or terminal, including interruption of business without damage. The insurance coverage is consistent with the insurance provisions of the major commercial contracts concluded, the scope of the insurance coverage in respect of the contract works of the property owner, and the extent of compliance with the legal requirements for the purchase of the insurance cover.

V. LENDERS

The role of lenders is defined in structured finance, where lenders are primarily concerned with the revenue earning capacity of the port - the knowledge of things that may affect its ability to operate according to its business situation and financial model, and its obligations. Lenders will seek security and insurance on port assets, which include insurance proceeds. Common issues arising from the entire supply chain, in particular the supply of major lifting and handling equipment include risk and ownership, purchasing insurance during transportation, installation, testing and commissioning, and who benefits from insurance proceeds[8].

Construction works also include port development projects, usually a combination of land construction, buildings, warehouses and other facilities, maritime construction of marine docks, barrages, sidewalk walls, etc. (known as "core works"). Because of the wide variety of extraordinary risks to the foundation business, including harsh sea conditions and natural disasters, many construction insurance companies choose not to insure against such risks or instead offer low levels of insurance coverage. Based on the ratio of land construction to foundation work, and the location of the project itself, will have a significant impact on perceived insurance risk, which means that understanding risk exposure is most important in order to achieve the best risk transfer at the most competitive price. The construction of warehouses, buildings and other land facilities is seen as a very clear risk by insurers that have relatively low risk of loss and are associated with a relatively low rate of access to securitizable values. However, the arrival of on-site cargo handling equipment, usually during the latter stages of the construction project, represents recent consolidation but significantly enhances the values that insurance companies will focus on. At that time, any insurance provided by suppliers of equipment within the port must be taken into consideration in order to negotiate the optimal conditions of the project[5].

The adequacy of the criteria used to design the completed work is also a critical element of the wet business. During the

construction phase, unfinished business going to sea or tide will be more likely to be lost or damaged. In addition, the structure designed to withstand the storm every 50 years is likely to be less powerful during construction than the structure designed to withstand the 100-year-old storm, and the previous storm is likely to occur during the construction period. Each pavement must be designed in its own right to withstand different conditions and exposures, in addition to the integration of the whole project in terms of its units. This includes a number of different design aspects, as well as detailed knowledge of geology and soil conditions is critical to the design and construction of appropriate marine works[6].

Therefore, ideally, an expert familiar with local conditions and the marine environment can develop a soil-testing program. Special hydrographic and hydrodynamic surveys (e.g., tides and currents) should also be given special attention. With calculations based on wave interaction and structures based on the assumption that the level of water, measures and oceanographic and engineering data. To be established a set of factors that can be relied upon in detail in marine engineering projects Because of very complex physical processes. Natural disasters and, to varying degrees, mitigation of impacts such as natural disasters, such as earthquakes, volcanic activity, windstorms, floods and tidal waves, which can cause devastating damage during construction as well as taking into account possible damage to projects during Construction due to the work of the sea or river, flooding, flooding and storm, which lead to the destruction or erosion of marine structures[7].

VI. PROCESSES

As ports and terminals have become increasingly sophisticated multimedia centers for the distribution of goods worldwide, the risks they face on a daily basis are larger and more complex than ever before. It requires significant investments in marine structures, high-value specialized equipment, warehousing and logistics. In addition, claims from ship owners, shipping interests or other users of the port or terminal have increased significantly, leading to a much larger litigation world where contractual obligations may impose burdensome obligations on port owners or terminal operators[9].

Where established ports face a number of significant exposures, as well as complex property or stakeholder arrangements, making it important to have adequate cover. From where Major risks such as financial security many ports do not realize their financial vulnerability to blocked access channels or sidewalks, and may not fully examine the alternatives that may be available to them. In addition to the arrangement of such alternatives, coupled with appropriate insurance, can provide convenience not only for management, but also for investors and banks, especially participants in new developments in the port or terminals.

Many existing ports are subject to many problems, including:

- Employer liability and workers' compensation, in which claims may be realized many years after an actual event occurs. Health problems such as back injuries resulting from transport of goods, exposure to base metals or asbestos, aquifers or sidewalks, which may have historically contained

both base metals and other contaminants (e.g., areas surrounding oil storage, may require cleaning. Insurance against further releases of pollutants during such operations is necessary to reassure the authorities and the local population that the operations will be successful and will not involve further risk.

- Ports and terminals often find that demand outstrips existing facilities and sees the need to expand the green fields adjacent to the sites, which may generate negative feedback from local residents and environmental lobbyists. Moreover, the risk of liability to achieve flow risk income.

Property, equipment and risks that may arise from such loss or damage

Assets, including processing of equipment, external physical injury and property damage. As well as loss or damage to vessels or goods. In addition, the consequent removal of debris. Plus errors and omissions. Fines and pollution risk. Alternatively, transport accidents. Moreover, damage resulting from the handling of critical goods, including damage to major customers or suppliers. Damages to wave barriers, pavements, or resulting from the ship. Let alone terrorism[11].

- Events of natural disasters.

Operational port and terminal projects are often the subject of mergers and acquisitions. Whether through the sale of a minority stake, a change in business control, or privatization sponsored by the government. Which can be addressed by providing strong secured insurance including:

- Whether the insurance coverage is arranged according to the risk addresses faced by an international operator or station operator. In addition, business interruption and damage caused the length of compensation period for business insurance, compliance in terms of coverage with the insurance provisions contained in major commercial contracts and the scope of insurance in respect of the contract works that are the responsibility of the owner, until the coverage purchase requirements are processed. In the case of privatization, a comprehensive assessment of the current objective should be made in terms of ongoing insurance programs that provide future operations that do not conflict or overlap or leave gaps in coverage[12] (both non-insured) or risk of underwriting) and the appropriate insurance amount to insure those risks. This will include:

- Historical loss analysis.

- Pricing of the current insurance program; How to compete

- Review the risk management procedures (insurance) and whether major risk management solutions are required and taken into account after completion of the transaction.

- Provide advice on improved or alternative insurance coverage for program coverage, where any insufficiency in current insurance is to be determined, including the estimated costs of implementing these recommendations.

VII. RISK AND INSURANCE

The need for advice, analysis, tools, research and solutions for a wide range of risk issues is ideally designed to help port

operators and freight companies better understand their risk profile and obtain appropriate protection[10].

Work on finding a full cycle risk management. Help customers to:

- Assess, measure and mitigate risks to improve economic outcomes
- Improving insurance investments and risk financing.
- Meeting strategic objectives[11].

To help port operators and users calculate risk management:

Strategic Risk Management - The global nature of the port and operations that make companies vulnerable, including natural disasters, terrorism, operational stress, joint venture failure, political risk and counterparty failure.

Business Strategy and Financial and Operational Performance as well as the Effectiveness of Enterprise Risk Management (ERM) - The complex nature of some port operations can mean higher operating costs, including those related to energy, labor, transportation, safety, security, and environmental exposure. ERM processes can be helped by delivering value in these often challenging environments.

The ERM framework can support strategic alignment, operations, personnel, technology and knowledge[13].

To facilitate daily assessment and management of the lack of information facing the port operator. It also manages information to support decision-making. Supply chain management - and help companies understand and recognize

Critical failure points are critical, such as docks, cranes, tractor services, factory timeout and basic machinery. With strategies for achieving more resilient and resilient supply chains by:

- Help customers understand the exposure to key risks, not only in their supply chains, but also from their suppliers.
- Provide options and alternatives through risk management as well as provide a plan that reduces potential exposure to their business (including pricing and modeling).
- Assist customers in implementing risk strategy in collaboration with key suppliers[14].
- Provide risk transfer options for critical risk exposures in suppliers.

Focus on the design and delivery of the detailed insurance cover to meet the specific needs of the project or investment, taking into account the professional risks of architects, engineers and others Professionals working in the development of projects.

- Project construction risks, including delays in start-up and shipping, whether the insurance arrangements are the owner or are controlled by the contractor[15].
- Operational assets, revenues and liabilities through operational cycles
- Expiration of assets.
- Ensure safety.

- Weather hazards.
- Environmental risks.
- Political risk.

During the construction phase, insurance companies typically require certain exceptions in respect of offshore operations in order to mitigate their exposure to losses, which may occur precisely because of the interaction of adjacent water with the construction of the project. In most cases, these exceptions can be extreme

Exhaustion will reduce the compensation available to the insured and take into account the factors already present to mitigate these risks. In addition, the development of a number of extensions of coverage that have been designed

To ensure risk assistance for offshore business developments, which provide distinct savings or cover will not do so usually provided by the words of other traditional insurer. If there is a staged delivery of the business to the planned operation,

Insurance structures to reduce the total cost of risk, and thus contribute to the regulation of insurance programs in the most economically efficient manner[15],

Modeling - earthquakes, hail, floods, cyclones, hurricanes are among the most disasters.

The forces of nature, while terrorist attacks and epidemics can cause unplanned costs, and employers' obligations, such as workers' compensation after a disaster, and unplanned losses are often exacerbated, and models use leading modeling programs in the marine industry to assess unplanned losses and assistance to better understand and identify these risks.

Benchmarking is one of the key tools used to make informed risk management decisions. At the core, there are many risk analysis services established on the measurement database. Then refer to it as the establishment of a dedicated global reference portal, where this can be done by analyzing thousands of transactions to portray the insurance structures of peer groups and market trends in purchasing and pricing.

Customized reference reports for offshore projects can be created based on these strong data, which support negotiations with insurance.

Through claims, management can secure the maximum and prompt payment of your claims, especially for difficult and complex losses, is completely the reason for buying insurance. Where practice claims have a wealth of Experience in the ports and terminals sector, and resources to avoid widespread and increasing losses.

Utilizing the experience of industry and expertise can contribute constructively to understanding the complexities of the supply chain and risk and provide experienced port authorities and terminal operators with the various risks they face.

This allows for emergency response especially in the early stages where the casualty can be followed and critical support can be found.

The knowledge of the various policies available from the insurance market and assistance with claims in detail allows

for reporting procedures, where possible claims can be reviewed and the policy response measured, as well as similar active participation in any of the exercises for this purpose.

The obligation to immediately collect claims can also mitigate the impact of marine losses.

Claimants are usually involved with a client before accepting an insurance policy, providing technical expertise and guidance on policy language and claims protocols are important things to consider.

The loss or damage of any port can reduce the port's capacity to operate at full capacity and may even close during damage until it is repaired. Incidents that directly affect the port itself and remote events can also interrupt natural productivity. Examples can include both damage and non-interruption of business, such as:

- Disruption of sea or rail routes or main roads connecting the port to the outside world and preventing access. This can be followed, for example, when a ship sinks in a critical channel or a river is closed because of low or high water levels,

Access to an important client mine, quarry or manufacturing facility.

- There is damage in the main partner port leading to the denial of access to this port.

- Loss or damage to the customer's ship or goods.

- Political activity, civil disturbances or strikes disrupting the flow of goods to the port.

- Facility malfunctions, either at the same port or at the client and premises.

- Internal or external penetration in IT systems.

To the extent that the loss caused a insured event, properly and thoughtfully and effectively insurance in the event of a business interruption, which it will do to protect revenues from the impact of reduced.

The productivity in the port will compensate for the increased costs that may be incurred. Costs incurred in the preparation of the claim, including forensic accounting costs to calculate claim values, will also be covered.

- What provisions exist in the ownership or lease arrangements with the operators of ports, terminals and landowners with respect to a secured event occurring?

- Whether users are obliged to pay storage charges in the event of port interruptions, which can reduce the charging and discharge revenue losses?

- If the terms of the contractual penalties are included in the cover or uninsured?

- If the variable costs have been correctly calculated in the declared values of savings as a result of an accident?

Political risks in industry sectors of all types are susceptible to shock waves

After a change of government or a political result and violent incidents (whether they cause physical harm or not).

Ports and terminals are attractive sources of foreign currency to host governments and can be targeted if revenue sharing is not seen as arrangements with the host government. To be equitable, particularly as ports and stations (by definition) representing the economic wealth gate of the host country, for example, in mining or other infrastructure projects.

As the growth of trade flows against the background of these projects, the overall consumer growth translates into increased revenues for the country (and port), so the assets themselves become vulnerable to political turmoil.

Customers also incur costs when obtaining the required operating licenses in the host country, so these "franchise type" licensing may need to protect costs. This is especially the case where there has been a change in government, as the new government may wish to review and conclude licensing agreements unilateral retroactive changes in their favor.

Political risk insurance can protect against catastrophic losses caused by unpredictable political events - protection against often-tragic events (Black Swan) is the reason why customers choose to buy political risk insurance (with coverage usually taken

On a confidential basis, i.e. without the host country being aware of such insurance).

Experience in this category of risk, including experience in both, private insurance companies and government entities in export credit and investment arena. Therefore, the commercial needs of the private market and the requirements of multilateral entities, such as multilateral investment, need to be recognized.

All this provides adaptation and policy regulation to address specific project risks within the host country through a wide network of relationships that helps us find adequate cover for all project sizes, even when the focus is on passive media in the countries where our customers operate, or wherever they are Plan to start projects.

As well, as develop political risk coverage for a wide range of companies around the world, and develop a cover for lenders against:

- Confiscation.
- Forced abandonment.
- Political violence damage to assets (politically induced violence, including war, civil war, civil strife, riots, strikes, terrorism or sabotage).
- Ineligible currency conversion / non-transfer.
- Forced abstraction.
- Business interruption.
- License revocation.
- Aborting the contract / renouncing the contract.
- Default Arbitration.

The risks of cyber ports and terminals, and increased reliance on technology and automation partnerships that are economic and useful. However, this dependency also introduces the vulnerability. Any loss of availability, safety or

confidentiality of critical systems or data has the potential to cause significant damage Impact of work, with consequent financial loss. As the development of targeted piracy, attacks increases, so efforts must be made to contain the threat and respond to it.

Internet risk insurance can provide cover for a variety of events and losses that the organization can suffer.

VIII. THE MAIN COVERAGE SECTIONS INCLUDE:

8.1 Protection from liability

Claims associated with the use of information technology organization (IT) to attack others; protection of liability claims arising from the unauthorized release of personal data or third party confidential information; crisis management costs to investigate and contain the violation and notify affected individuals; replace damaged or damaged data; interruption work due to network downtime; extortion data after security interruption; protection for some liability claims, such as intellectual property infringement or defamation.

Comprehensive assessment of the environmental risks inherent in the port or terminal project, while allowing you to derive Options for effective management of key environmental risks in operations, and at times of mergers and acquisitions.

Tools that help the organization manage its risk profile. Solutions are designed to help companies control overall risk costs through monitoring and erosion of insurance policy and those losses that are retained.

Understanding your risk profile, data collection, conversion, and consolidation services is designed to improve the quality and timing of risk data. Moreover, the integration of risk data sources into a unified repository of claims and transactions, policies, exposures and other data needed for risk management Effective way. To provide a comprehensive view of risks, claims and information, the processes data from most major carriers and officials. The Reporting Toolkit is designed to help risk managers and safety departments accurately identify trends and identify them in areas where corrective action is needed. Ability to drill down and expose exposure data for in-depth analysis of losses. It also processes the administration to automate and streamline claims for life cycle. The amount of customizable claims, medical billing management, document management and payment, and collaborative reporting in a single system. Integrated business rules and claims interventions and automation of routine claims practices.

8.2 Site management

Where sites will be identified as corporate entities, physical locations, wild or otherwise as required. Clients can track different types of exposures, such as property or financial exposure to each Website to produce strong loss ratio reports. Thereby reducing operational costs to help port owners and operators identify potential facility and port safety issues, the intention system provides assessment tools designed to measure compliance with government regulations, industry, standards, and best internal practices.

IX. CONCLUSION

Moreover, facilitate the collection and exchange of compliance data across the enterprise, which enables management to objectively carry out track, measure and compare results and progress by entity, in terms of geography, or any other criteria.

Incident, accident and absence notifications and accident patterns can be completed at ship stations, ports or on ships at the time, they occur, using the Web-enabled functionality. By taking advantage of Accident and Claims Management Solutions, customers can report notifications in a comprehensive and easy to use format, thereby enabling compliance with industry standard certification and auditing.

At the same time, opportunities and risks associated with greater automation of transport should be analyzed in greater detail through a cross-border macroeconomic perspective. The need for standardization and the potential for loss of low-level functions, including the legal aspects and dispute resolution mechanism that may arise when full automation is implemented taking into account environmental dimensions and resources

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