



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. 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.

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1. 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. 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.

2. The responsibility for equity holders / investors.

That 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. 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

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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.

3. 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.

3.1. NVOCCs

The other ocean transportation intermediary under FMC oversight functioning independently or often as part of a global freight forwarder is the non-vessel operating common carrier (NVO). Traditionally, the NVO profited as a consolidator of small shipments on the spread between full and less than container load rates usually priced in the form of FAK (Freight All Kinds) rates. The NVO charges a basic commodity rate to the individual shipper and pays the container rate to the steamship company. Less than containerload (LCL) cargo is brought to container freight stations (LCL) where they are stuffed or stripped of cargo. In recent years, beneficial cargo owners (BCOs) who would otherwise contract for full container loads directly with steamship lines have been turning to NVOs. In this role, NVOs function as direct customers of shipping lines, as they typically book the containers and organize the chain around them. The larger non-asset service NVO providers can get better prices from the steamship lines which they can resell to the Beneficial Cargo Owners (BCOs). This offers BCOs greater flexibility to

move cargo on various ships rather than those within their slot-sharing agreements (Leach, 2016).

A number of mergers, vessel sharing agreements, shipping alliances, a major bankruptcy by Hanjin Shipping, and reduced sailing schedules as a result of larger container vessels deployed has steadily increased the role of NVOs in the trades. NVO controlled share of the U.S. Transpacific cargo business grew to 41.8% in the first half of 2016 from 30% in 2012 (PIERS, 2016; as cited in Mongelluzzo, 2016). Medium and smaller size BCOs (1-2000 TEU per annum) in particular have looked to NVOs to navigate around congestion delays at ports and provide flexible, price competitive options to BCO service contracts directly with the carriers. The NVO can look for vessel capacity over the entire market and provide end-to-end rates and services for customers. A reduction in ocean carrier sales staffs and basic services such as chassis provision have moved many small shippers away from direct bookings through vessel owning common carriers. Additional concerns such as port labor issues, carrier instability, delayed vessel calls, and demurrage costs incurred from congestion and late delivery from the terminal have moved many full container load shippers to work with NVOs. The liner shipping firms will need to adapt to large price sensitive NVO customers who are less brand loyal than a BCO. Seasonal shipment periods when space is tight may reduce NVO price competitiveness, but in a turbulent downward freight rate environment, as has been the case for the last decade, within over-tonnaged trade lanes like the Trans-Pacific, the result is an opportunity for major NVOs to increase market share.

Similar to ocean freight forwarders, NVOs are subject to increased service commitments to justify their costs to shippers. Their expertise and nimbleness in the marketplace allows them to search for new options for shippers through additional ports of call and transporting of LCL and FCL (Full Container Load). Local NVOs with strong ties to intermodal trucking firms and 3PL providers can be as strong as the global NVOs as they are often tied in with logistics providers with functions such as purchase order management, vendor management, consolidation services and cross docking. The increased of market analytics based on apps and cloud-based technologies will heighten the ability of larger NVOs to incorporate data from contracts and spot freight rates to provide more transparent pricing on freight rates (Johnson, 2016). For NVOs that rely on volume from forwarders, CoLoadX <http://coloadx.com/> is a digital ocean procurement firm that seeks to connect forwarders with NVOs. (Johnson, 2016).

4. 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.

5. 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?

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.

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. Therefore, ideally, a soil-testing

program can be developed by an expert familiar with local conditions and the marine environment. 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. 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. 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.

- 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 (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

6. 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. 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.

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

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.
- 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.
- Operational assets, revenues and liabilities through operational cycles
- Expiration of assets.
- Ensure safety.
- Weather hazards.
- Environmental risks.
- Political risk.

Conclusions

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.

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