Underwriting Project Cargo with DSU/ALOP Insurance November 27, 2017 Shanghai

SIMI Annual Gathering

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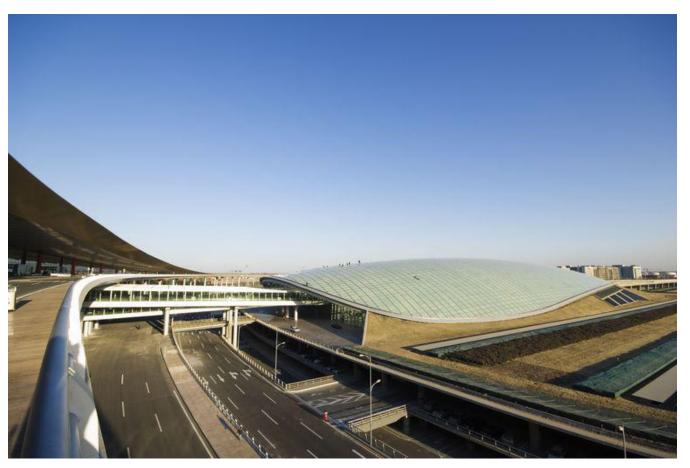


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Great Man-Made River Project, Libya



Beijing Airport, China





Three Gorges Dam, China





London Crossrail Project





South-to-North Water Transfer Project, China





Dubailand, **Dubai**





Jubail II, Saudi Arabia





Definition by INVESTOPEDIA @ Google

 "Infrastructure is the basic physical systems of a business or nation; transportation, communication, sewage, water and electrical systems are all examples of infrastructure.
 These systems tend to be high-cosy investments; however, they are vital to a country's economic development and prosperity.
 Projects related to infrastructure improvements may be funded publicly, privately or through public-private partnerships."

 Lenders participate with a view to enjoy operating profits once the project is completed.



Project Cargo

 Lenders provide cash and project owners have the responsibility and duty of care to ensure the project proceed on schedule and safely; so it can kick off as scheduled and income/profit starts to be generated

 Failure in the supply chain will result in astronomical loss of income (and liability to re/insurers)

 The key is in risk management and this goes beyond underwriting



Figure 1: Five key infrastructure sectors



1. Extraction

- Oil and gas
- Other extraction (coal, metals, minerals)



2. Utilities

- Power generation
- Electricity T&D
- Gas
- Water
- Telecoms



3. Manufacturing

- Petroleum refining
- Chemical
- Heavy metals



4. Transport

- Rail
- Roads
- Airports
- Ports



5. Social

- Hospitals
- Schools



Words of Wisdom

 The success of underwriting this LOB is information, understanding the risk and importantly managing the risk (risk management)

• It calls for the efficient and effective movement of project cargoes by any mode of transport – air, land, sea, road & rail (combination of them too)



Project Cargo

large, over-sized, heavy, high-value mission-critical pieces of cargo multiple shipments of various components that may require disassembly and reassembly after delivery.

Antwerp to Singapore - 6 Steel Wire Reels



Quick Facts

Cargo Origin: Germany

Port of Loading: Antwerp,

Belgium

Cargo Destination: Singapore

Transit Time: 36 Days



Spain to Mexico – 2 Reactor Platforms







Quick Facts

Cargo Origin: Spain

Port of Loading: Port of

Aviles

Cargo Destination: Mexico



Major Factors in Project Cargo Insurance

- Underwriting
- Risk Management
- Loss Prevention
- Kick Off Meeting
- Claims



Project cargo vs ordinary cargo

Prototype (made to order/specs)



Replaceable
items
(available on shelf
/ readily
replaceable)

Lloyds of London Placement vs China/Asia/Far East Placement

- Company vs Lloyds Market
- Evolving of Asia as a more prominent centre on such placements (vast improvement from the 90s and early 2000s)
- Leader & Follower



Underwriting Submission Package

- Re/insurance slip
- Road show slides incorporating Project description, EIA and its funding
- Project schedule & Route Survey
- Cost breakdown
- Bar chart & shipping schedule
- List of critical items and its replacement times



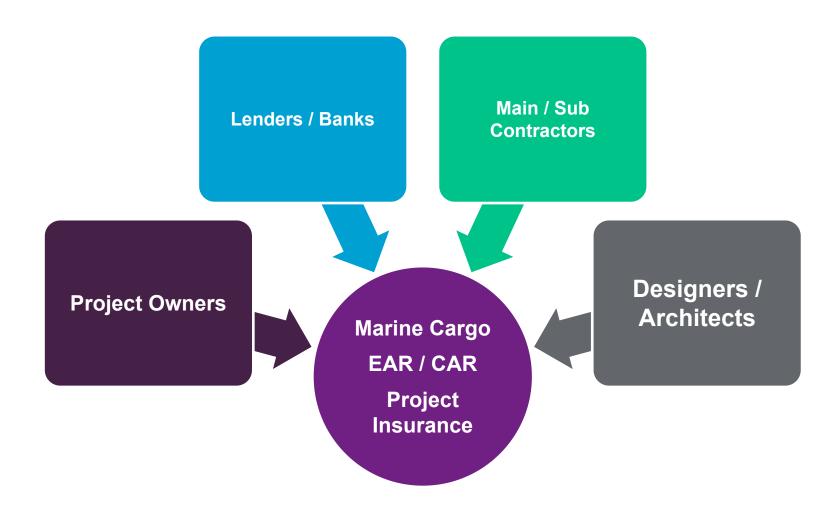
Policy has two sections namely:

 All risks of physical loss and/or damage of project cargo while in transit.

 Delay in Start-Up and Advanced Loss of Profits coverages offer protection against loss of income and profit resulting from late or non-arrival of critical components due to physical loss or damage.

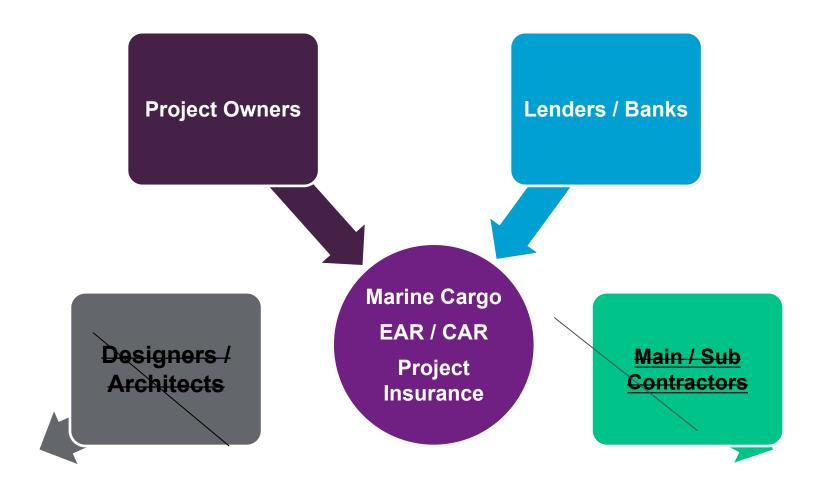


Section 1: Cargo - Insured Parties





Section 2 : DSU - Insured Parties





Section 1 – Cargo in transit

 This speaks for itself and is the standard cover we normally see in any and most cargo programs – ICC A, B or C



Section 2 : DSU/ALOP (con loss)

- Financial loss includes loss of profits and continuing costs incurred as a result of delay in the completion of the project
- Underwritten based on time margins for replacing damaged critical/key items
- Profits typically covered for 18 (or more) months with no less than 30 days deductible



Section 1 – Interest to be insured

- > Plant
- Equipment
- Materials
- Machinery & Spare Parts
- Parts & components
- Buildings & structures
- Supplies & Accessories
- Consumables
- > Include tax & duties
- AGREED VALUE
- But to exclude contractors' plant & equipment unless agreed by Underwriters
 - (but can be a given nowadays)

Section 2: Interest to be insured

- Loss of projected profits
- Additional expenditure incurred in wanting to avoid and/or reduce delay
- Debt servicing costs
- Increased cost of working (ICOW)
 - To safeguard the profitability of a new manufacturing plant/production unit
 - To protect the potential loss of income/revenue from a commercial or residual development
 - To cover the additional loan servicing costs resultant from a DSU of a commercial concern



Standard Cargo Clauses

- ICC A Cl 382 01.01.2009
- ICC B Cl 383 01.01.2009
- ICC C Cl 384 01.01.2009
- ICC (Air) Excl sendings by post Cl 387 01.01.2009
- Inst War Cl (Cargo) Cl 385 01.01.2009
- Inst War Cl (Air) Excl sendings by post Cl 388 01.01.2009
- Inst Strikes Cl (Cargo) Cl 386 01.01.2009
- Inst Strikes Cl (Air) Cl 389 01.01.2009
- Inst Classification Cl 354 01.01.2001 (local registry can be included)



Standard Section 1 Exclusions

- ROD
- MEED
- Scratching, denting, twisting, bending and distortion to steel works (esp bare/unpacked)
- Damage to coatings & linings of pipes
- Final Positioning, installation and testing (CAR/EAR takes over)
- Second Hand / Used goods unless agreed
- Heavy lift vessels more than 20 years of age
- Shipowners and/or vessel owners and/o barge owners and/or shipcharterers and or freight forwarders and/or barge charterers



Cancellation of Policy

- Not cancellable except for
 - War Risks of 7 days
 - Strikes Risks of 7 days but for sendings to/from USA it is48 hours

(but such cancellation shall not prejudice any risk that already attached)



Period of Insurance

 No less than 18 month; and can be up to 7 years (or more) on some

Please take note that most treaty programme allows for POI of not more than 18 months and most would exclude DSU/ALOP cover



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Mode of Conveyances

- Approved vessel(s) and/or barge and/or air and/or road and/or rail and/or any conveyance by land, sea or air and connections
- Ocean barges to be held covered at rates, T&C to be agreed by lead (re)insurer(s)

Mode & types of sea transportation (including use of containers)

Under deck

On deck

Tug & barge (coastal vs ocean going)

Different types of containers (GP vs non-GP)



Section 1 Limits of Liability

 Monetary Amount (eg USD50mio) any one vessel, aircraft or conveyance



Section 2 Limit of Liability

 Monetary Amount (eg USD450 mio) for a fixed Indemnity Period (eg 24 months)



Deductible

- Section 1: Monetary Amount -no less than USD25,000 eel
 - (All claims for loss, damage or expense resulting from any one occurrence or series of occurrences arising out of one event shall be adjusted as one claim)
 - (not applicable to General Average & Salvage; and Sue & Labour Expenses

- Section 2: Number of days -no less than 30 days
 - This is calculated by multiplying the average daily value of loss sustained during the IP by the number of days stated in the policy



Policy Coverage Areas

- Mainly World wide to world wide (including domestic/local sendings); contingent of the S&P agreement and the INCOTERMS
- Include transhipment (or via)
- Up to project site mainly at "lay down" but not final positioning
- Exclude Sanctioned & Embargoed Countries (include US/UN/EU Sanctions)



Full Follow Clause

 Participating (re)insurers to follow the lead with regard to alterations, extensions, additions, endorsements and claims settlements except ex-gratia and without prejudice payments

This can be onerous and be seen as giving away of one's underwriting pen. It is imperative that your follow a reputable lead

(Capability and expertise and/or ability to deploy huge capacity does not make one the best lead)

(The original insurer need not necessarily be the lead esp so since many are only fronting the policy in accordance with local requirements and/or not able to since it is their treaty exclusion)



Claims Control/Cooperation Clause

- Reasssured to advise reinsurers as soon as practicable
- Reassured has the right to appoint nominated adjusters/surveyors as mentioned in the policy
- Reassured to provide to reinsurers all information available and the reinsurers have the right to control all negotiations, adjustments and settlements in relation to the losses
- No admission of liability, promise or payment shall be made without the lead reinsurer written consent
- The lead shall be entitled at their discretion to take over and conduct in the name of the reassured the defence or settlement of any claim
- Reassured shall give full cooperation to the lead



Other Pertinent Clauses

- 50/50
 - Assured to be indemnified by half when it is not possible to know the exact time of the loss/damage
- Returned Goods/Goods sent for repairs
 - Goods automatically covered despite being returned (may restrict to "B" or :C")
- Primary Insurance
 - The policy deemed as the primary one (not a double insurance) should another policy be found
- Shortage & Container loss
 - Assured to be indemnified for claims of theft, pilferage although seals were intact
- Law & Jurisdiction
 - Mainly governed by Law of England or local L & J

Premium Calculation

POPULAR MODELS

- Rule of thumb
- x-times daily indemnity
- x-percent of sum insured





ALTERNATIVE OPTION

Rating Tool





Premium calculation Section 1

 Taking a to be shipped volumes of USD750, 000, 000 with a proposed rate of 0.05% and a commission of 25%

100% premium calculated as follows: USD 750 mio x 0.05% less 25% brokerage

Gross premium is USD375, 000 Net premium (Less 25%) is USD281, 250.00

Premium would include War & Strikes.

Insurer reserves the right to charge AP if risk profile dramatically changed



Premium calculation for Section 2

- An underwriter needs to look at per day premium and work backwards to get the rate
- Shockingly many is unable to fathom this

Taking a DSU/ALOP cover of USD450 mio with an IP of 24 months

Needing one day premium for this exposure; hence:

- USD450 mio divide by 730 days (24 months) equals to USD616, 438.35 per day
- Hence a rate of 0.18265% (G) / 0.137%
- Total premium (Section 1 & 2 is USD1, 196, 925 (G) / USD897, 750 (N)

Risk Management Fees

- In the past a ball park figure of 10% of the premium was used as RM fees
- Nowadays, Risk Manager would analyse shipping data/shipping schedule pertaining to critical items and advise on the RM fees
- RM fees that has been decided are charged to project owners at inception. This is being paid to the lead re(insurer) who will manage the fund and disburse same to surveyors when tasks are completed
- Once RM fees are exhausted; it is common to see the (re)insurers paying proportionately base on their share in the programme



Premium Payment Terms

- Premium is charged upfront at inception but paid in instalments
 - o 35% at inception
 - o 35% after 12 months from inception
 - o 30% after 24 months from inception



Purpose of Kick off meeting:

- Clearly establishing reporting requirements and communications chains
- Knowing the client's project team members and key contractors
- Reviewing transportation methods and routes
- Assessing the suitability of ships, tugs and barges by inspections and by review of the Sea-Web Ships Database for quality vetting of vessels (general guidelines to have an appreciation of their SOP)
- Route review considering potential weather and climate-related issues
- Review and approval guidelines for:
- --loading plans, including heavy lift inspections
- --stow and sea fastenings
- --inland transit routes
- --port and transport security
- Coordination of survey packaging, loading and security inspections worldwide methodology
- Pre-inspecting facilities and sites for loading or discharge
- Providing onsite attendance at ports of loading or discharge

Project scale & Time line

- Pre-project development (possibly up to 2 years long)
 - Feasibility study of site
 - In search of partners
 - Financing & stakeholders (mainly JV)
 - Design & bid
- Construction (possibly 24 months or up to 7 years)
 - Site work
 - o Fabrication
 - o Erection
- Testing (possibly up to 12 months)
 - Start up & testing
 - Provisional acceptance
- Operation
- Generate income & Pay to lenders!

Risk Management

- The success of infrastructure development ventures are very dependent on the effective and efficient movement of the project cargoes
- Project cargo RM is necessary to manage these shipments
- It involves data management, planning, hands-on intervention and procedural control



Key Features of RM

Project overview & identification of key transport risk elements

Identification of critical items

Review of shipping schedule

Planning of the transit (including review of manufacturer's recommendations and attention to packing mode)

Review of departure & load out procedure

Review of ship board operations (including but not limited to lashing & securing)

Review of routing & voyage route (and on board care)

Review of arrival & discharge procedures

Review of port suitability and related gears in handling goods to site

Review inland transit & final delivery procedures at site



Definition of Critical Items

- Items if damaged that could trigger DSU/ALOP
- Shipment with an insured value in excess of USD 3 mio
- Any equipment in excess of 50 feet
- Any equipment stowed on deck; including flatracks or O/T containers
- Any items requiring special handling due to its characteristics
 - Off balance centre of gravity
 - Irregular footprint
 - Special requirements for lashing & securing
- Any goods shipped in barges especially in open seas (ocean barging)
- Any items with difficulties for repairs and replacements at project site (or repairs/replacements that may cause delay)
- Examples are:

STG, Transformers, HRSGs, Generators, Pumps, Compactors Heat Exchangers

Schedule of CI

- To contain name & location of supplier
- To contain replacement time (including shipping time, installation, testing & commissioning
- To contain shipping schedule (including date at site)
- To contain number of shipments



Marine Warranty Survey

- Warranted all CI to be identified & surveyed
- Risk Manager be advised no less than 10 days prior to the shipment/movement of CI; to enable the appointed surveyor to:
 - Approve vessel(s), tug(s) and/or any carrying conveyances and all lifting equipment including cranes, tackles, wires, shackles and hooks etc required for packing, loading, transhipment and unloading operations
 - Approve and/or attend all packing/preparation, loading, stowage, securing, transportation, discharge and unloading arrangements and operations throughout the transportation chain

• The decision of whether to survey or otherwise shall be at the discretion of the risk manager

Effects of Loss/Damage

Interference in construction schedule leading to

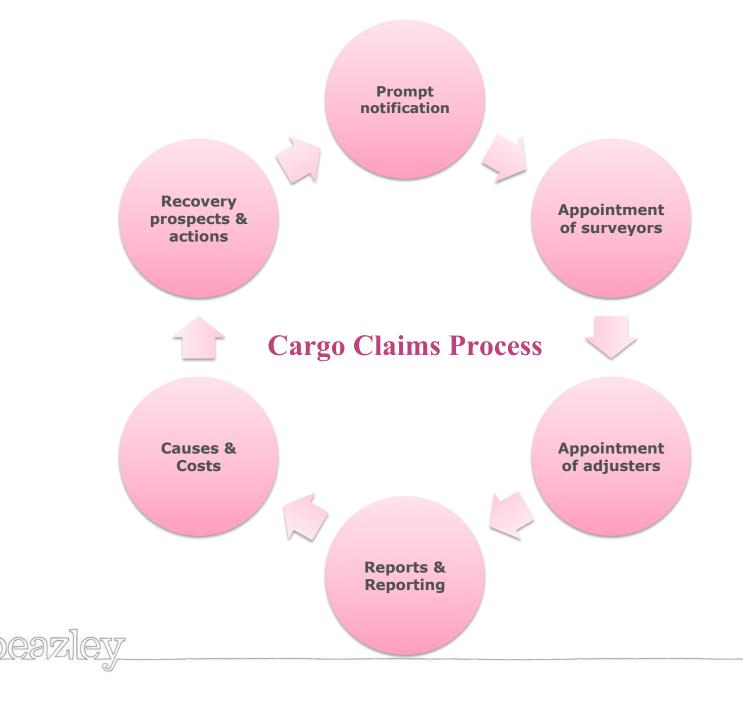
Possible delay in start up leading to

Physical loss & damage leading to

Loss of Gross Profit leading to

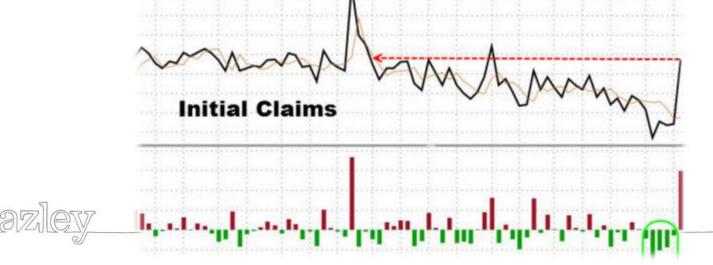
Failure to perform debt servicing





Section 1 Claims

•This is straight forward as it relates to the commercial invoice and claims settled base on it if it is total loss; otherwise to pay for costs of repair and replacements



Section 2 DSU/ALOP claims

- This can be more complex and complicated
- This can include but not limited to:
 - Extra expenses incurred to repair/replace or expedite the delivery of the items and to minimize any loss
 - Debt servicing in full or in part to lenders during the period of delay or reduced operation (inability to perform to its usual/normal capacity)
 - Fixed operating costs or portion thereof during the delay or reduced operational capacity
 - ALOP or part thereof during delay in kick starting the project as scheduled
 - o ICOW due to additional costs incurred to avoid or minimize the loss of revenue
 - o Bonus, late penalties and liquidated damages due to delay



Risk Management/Loss Prevention vs Loss Assessment

There is a huge and distinct disparity on the prerequisites, job scope and role of RM/LP personnel vs loss assessment

RM/LP personnel must be pro-active and have sea-going experience while LA personnel can afford to deliberate further and deal with the matter later and/or tp seel alternative view

There is a huge different of one who is a RM/LP surveyor as opposed to a tally clerk!



Underwriting in the 90s vs Now

Lack of expertise then as opposed to now

Lack of capacity then as opposed to now

Lack of interest then as opposed to now

Lack of information now as opposed to then

Leap of faith now as opposed to then

Rate of no less than 0.1 net for section 1 and DSU net rate of 2.5 days then then the soft market now

Deductible of no less than USD50,000 for section 1 and 60 days for Section 2 then as opposed to lower (or even nil) now

Just as profitable though

