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UNIQUE PERSPECTIVES
FROM OUR WORLD

Liberty Specialty Markets

MARINE CARGO

CARRYING THE FUTURE, PIECE BY PIECE

The global infrastructure market is booming. Developing economies are investing, which means specialist engineering products like turbines are being shipped across the oceans in volumes not seen by the insurance market for years. Christopher Hicks, Marine Cargo Underwriting Manager and Richard Stewart, Senior Underwriter, at Liberty Specialty Markets (LSM) look at the challenges involved in underwriting these large and complex cargos.

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As the world's population continues to grow, the demand to build new and modernised infrastructure is increasing. With experts predicting global population numbers to rise by another two billion by 2040, it will not come as a surprise that activity in the infrastructure market is increasing to meet this demand and is expected to reach $4.2tr by 2020. Indeed, the Global Infrastructure Outlook estimates that, by 2040, global infrastructure development needs to reach an eye-watering $94tr if it is to keep pace with these profound economic and demographic changes.[1]

China remains a powerhouse, accounting for 29% of the world's infrastructure expenditure; Western Europe the US and Canada, which account for 50% of global GDP, are all recording increasing, if more muted, infrastructure spending[2]. Meanwhile, markets in India, the Middle East and Africa are booming.

Key differentiators

These infrastructure projects have several key differentiators from an insurance perspective: the sheer cost, size and complexity of the assets, the logistical challenges, the extended timescales required to repair or replace them and perhaps most significantly, the impact on the overall project financing of any delays.

The costs for the different types of turbines, nuclear reactors, power generators and steels that are required to complete infrastructure projects can run into billions of dollars. All are commissioned to support specific installations and are frequently bespoke designs to suit the individual requirements of the job. For example, when manufacturing a Generation III+ reactor, production of the pressure vessel requires a forging press with a capacity of 14 to 15,000 tonnes, using hot steel ingots of 500–600 tonnes. There are not many forging presses of this kind in the world and individual presses do not have high throughput – typically producing no more than four pressure vessels per year.

Once manufactured, moving these infrastructure assets presents a unique challenge. Loads are generally oversized, unusual or an irregular shape, they weigh many tonnes and require particularly careful risk management in terms of loading and lashing. These are not the standard containerised or bulk products which form the bread-and-butter of the cargo market.

With the order books of specialist manufacturers relatively full, lead times to recommission plant damaged or delayed in transit can run to years. Against this backdrop, it is inevitable that any damage or delay to goods in transit will have a significant impact on infrastructure project outcomes.

Infrastructure lenders are increasingly looking for assurances that fixed costs like debt repayments will not be affected by delays. Debt repayments are dependent on the revenue flow generated by these assets from the income generated from electricity supply contracts, sewage service charges, rail ticket income etc.

Insurance such as LSM's Project Cargo/ Delay in Start-Up (DSU) is one of very few policies in the marine market to cover the loss of fixed costs (such as debt servicing) the assured would have to pay in the event that an infrastructure project was delayed following a marine loss.

Typically, the market sees a lot of relatively small DSU claims, many in developing markets where, almost by definition, assets are being delivered into harsh and testing environments, sometimes by companies with little experience in handling unusual loads and highly specialist equipment. In these situations, it is not unusual for a bridge to fail under the unusually heavy load, or for trailers to overturn on poorly made roads or to simply to crash in difficult conditions. Losses like these are unlikely to be catastrophic, but may incur small project delays.

More serious examples might include larger failures. A power plant scheduled to begin operating on 1 January 2020, for example, may have a 24-month lead time on production of its steam turbines and would need these delivered to site 18 months in advance of commencing commercial operations. Such failures are not unheard of – recently a crane collapsed during the erection of a solar thermal power plant in South Africa, generating losses of $30m[3].

To cover these kinds of scenario, typically, we see companies looking for 12-24 months of DSU cover and have underwritten a variety of projects including gas exploration plants in the Arctic Circle and in Kazakhstan where poor conditions can extend delays by anything up to a further eight months due to the very narrow weather windows in which in which it is safe for ships to sail.

London calling

As the go-to lead market for complex, high value, specialist risks, the London market has long played a key role in supporting the development of infrastructure projects. However, while there may be no shortage of follow capacity, there are few leaders in the market.

Recognising the scale of the challenge and the long-term nature of the cargo risks related to infrastructure projects, Liberty Specialty Markets (LSM) took the decision to make a long-term commitment to the sector, even though other providers were withdrawing from the market after being deterred by the potential or the reality of large losses.

In order to thrive in such a challenging market segment, our dedicated cargo team is supported by a global unit of four marine engineers all either former master mariners or with a track record in Energy, Procurement and Construction. This team in turn is supported by experts from the construction, casualty, surety and terror teams. This means that every client and every risk has access to a bespoke team of dedicated in-house experts who are on call 24/7 for insight and advising inputting and support – all as part of the cover provided. Indeed, one client has LSM staff on site as part of the team advising on everything from naval architecture calculations to new transport processes.

A three-strong team of specialist claims adjusters also ensures that if things do go wrong, clients have access to rapid risk mitigation from some of the most experienced professionals in the market.

Momentum is building

As a result of LSM's investment in people and skills, the team now works on around 15 to 20 specialist, large premium projects a year and a line size of £150m – larger than any in the London market[4]. The number of enquiries is rising fast as the team establishes its reputation and projects – which in the immediate aftermath of the financial crisis failed to attract backing – come back to the table.

Projects that our underwriting team have lead recently include a UK nuclear power plant and a waste-to-energy plant in the UK, a battery storage facility and steel plant in the US, gas projects in Japan and the US, a refinery in Oman and various renewables projects including onshore wind and solar. Having expert insight on tap enables LSM to support the effective management of projects such as these and provides options to suggest controls that make risks more attractive and less costly.

It also means shorter communication chains, minimises costs and helps to ensure that projects flow more smoothly, a key goal for both LSM and its insureds. As a mutual, the business prefers to take a longer-term view of risk. This is particularly important in this highly specialist part of the cargo market as policy periods are normally at least three years in length, but can run as long as eight years. In such a complex and challenging market, we are proud that many of our relationships in this class extend back to when the account started over 15 years ago, testament to the fact there can be no substitute for trust based on expert insight and straight-talking.■

[1]https://blogs.worldbank.org/ppps/forecasting-infrastructure-investment-needs-50-countries-7-sectors-through-2040

[2]http://www.worldconstructionnetwork.com/news/global-infrastructure-market-to-grow-by-60/

[3]https://insuranceday.maritimeintelligence.informa.com/ID1128376/Renewable-energy-market-grapples-with-surprising-loss-trends

[4]Correct at time of going to press

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