AON

Scaling at Speed: Risks and Challenges for Data Centre Projects in Asia Pacific

Speed, Scale and Complexity

Kay Takeaways

Rising demand for artificial intelligence (AI) processing capacity is driving growth and complexity for data centre development across Asia Pacific (APAC).

Overlapping construction and operational phases are creating challenges around project schedules and stakeholder accountability.

Integrated, lifecycle-based risk transfer approaches can help reduce gaps, disputes and delays across multi-site project portfolios.

Widespread take up of artificial intelligence (AI) is leading to rapid growth in digital infrastructure across Asia Pacific (APAC). Demand for fast and reliable networks, as well as computing power and storage, are increasing as organisations deploy more data-intensive applications. Many governments and operators across the region are responding with rapid roll out of data centre capacity to meet these needs.

“The industry is clearly experiencing a surge in data centre construction capacity” says Vincent Banton, Head of Construction and Infrastructure, Asia at Aon. “A significant pipeline of projects are being financed, designed and built, with activity moving rapidly across the region. This pace makes it challenging for stakeholders to keep up, particularly given pressures on materials, power supply, experienced contractors, investor capital and market capacity. Demand for these resources is still accelerating and often spans multiple jurisdictions. This introduces added complexity and heightened risk considerations.”

This growth is occurring alongside increasing expectations around delivery speed. Organisations may be finding that capacity needs to be brought online quickly to meet customer and investor requirements, increasing pressure on construction schedules and decision-making. Moving forward quickly through the whole project lifecycle requires a clear understanding of the risk profile specific to data centre projects.

Data centres introduce a whole range of additional challenges compared with other types of infrastructure projects. They involve a wide range of specialised systems — including power, cooling and network architecture — that must be designed, installed and commissioned with care. “The pace and technical demands of data centre projects require a clear and coordinated approach to risk,” says Banton.

A Distinct Risk Profile for Data Centre Projects

The scale, volume and structure of current development activity set data centres apart from more traditional infrastructure projects. These challenges are often further compounded by the complex operating environment and the stringent performance standards demanded by tenants under owners' service agreements.

"These highly engineered facilities depend on the seamless and reliable integration of power, cooling, network and control systems," says Banton. "Each component must be designed, installed and commissioned to exacting standards to minimise disruption and downtime during operations. As a result, issues arising during construction can have direct and lasting implications for operational performance. Accountability of stakeholders across project sites is also more complex. Data centre developments frequently involve multiple buildings, or staggered phases within a single facility. For some projects, different parts of a single building may become operational while others are still under construction. Contractors, owners and tenants may all be present on site, each with different responsibilities and risk exposures.

This delivery model typically results in overlapping risk exposures across the construction, early operational and defects liability phases, potentially revealing gaps in conventional insurance structures. The placement of separate policies for each stage can lead to misalignment in policy terms, coverage periods and scope, increasing the likelihood of uncertainty or coverage disputes when a loss occurs.

> "Data centre developments rarely move in a straightforward sequence from construction to full operation. Phasing strategies and early occupation significantly influence the risk profile and must be carefully considered."
>
> Vincent Banton
> Head of Construction and Infrastructure, Asia

Risk Concentration During Project Transitions

Risk tends to concentrate at key stages in the project lifecycle, with the transition from construction to operation a critical point. While some responsibilities shift from contractors to owners or operators at this point, this can overlap with ongoing commissioning activity and defects liability periods. Where insurance arrangements are spread across different policies and insurers, inconsistencies in coverage and policy periods can lead to increased uncertainty at precisely the point where projects need to progress smoothly.

“Placing insurance separately across each phase can create gaps and misalignment,” says Banton. “As projects move from build to operation, this often leads to uncertainty.” That lack of clarity around coverage and responsibility can hinder decision making, complicate contractual discussions and elevate the risk of disputes, impacting overall delivery timelines.

4 Portfolio Delivery Across APAC

For many owners, developers and investors, data centre risk needs to be managed across a portfolio of data centre assets. Multiple projects may be in development at the same time across different countries, each with their own regulatory environments and insurance market realities.

In parts of APAC, access to certain types of cover — such as capacity for natural catastrophe protection — may be limited or unavailable. This can lead to inconsistencies and gaps in risk management and transfer across a project portfolio. From the perspective of investors and lenders, this raises questions about how losses will be managed and can heighten the risk of significant financial impacts for a project or portfolio.

The Role of Lifecycle-Based Risk Transfer

In response to these challenges, some organisations are moving away from fragmented, phase-by-phase insurance solutions toward more integrated, lifecycle-based products. Aon's Data Centre Lifecycle Insurance Program brings construction and operational cover together within a single framework designed specifically for data centre projects. Policy language, durations and capacity are all aligned with the phased delivery and operation stages, and take account of the complex stakeholder liabilities involved throughout the project lifecycle. This structured framework is designed to help reduce coverage gaps, manages projects transitions effectively and provides greater clarity around how risk is transferred.

With access to capacity from a panel of highly-rated insurers, the program can support large-scale projects and portfolios spanning multiple countries. Integrated risk transfer can also give investors and lenders assurance that their financial risk is being effectively managed throughout construction and early operation.

Lifecycle-based risk transfer solutions like these reflect the practical realities of data centre development. By reducing gaps, supporting smoother phase transitions and improving clarity around liability, they can help owners and contractors deliver projects at speed and with greater certainty.

> "An integrated and consistent insurance framework reduces gaps in coverage and limits the scope for disputes, while supporting more efficient contracting and clearer alignment between stakeholders."
>
> Vincent Banton
> Head of Construction and Infrastructure, Asia

About Aon

Aon plc (NYSE: AON) exists to shape decisions for the better — to protect and enrich the lives of people around the world. Through actionable analytic insight, globally integrated Risk Capital and Human Capital expertise, and locally relevant solutions, our colleagues provide clients in over 120 countries with the clarity and confidence to make better risk and people decisions that help protect and grow their businesses.

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Are you ready to unlock growth, resilience and strategic advantage for the full data centre lifecycle? Find out how Aon's Data Centre Solutions can help — from planning and construction through to operation.

To learn more about Aon's comprehensive global construction and operational risk transfer solution, download our Data Centre Lifecycle Insurance Program fact sheet.