



Artwork by Du Feichen

---

# SOUTH & SOUTHEAST ASIA DATA CENTRE BRIEFING

---

KING&WOOD  
MALLESONS  
金杜律师事务所

---

# CONTENTS

This briefing considers international data centre trends in South & Southeast Asia, drawing on the experience of KWM's specialist data centre legal team.

---

03

Key themes for 2022  
& beyond

---

04

Strategies for market  
entry and expansion

---

06

Case study: Singapore

---

07

Financing of data centres

---

09

An alternative to greenfield /  
brownfield development

---

10

Cross border coverage





## KEY THEMES FOR 2022 & BEYOND

---

### **Shortfall in capacity drives demand**

South & Southeast Asia remains one of the fastest-growing markets for data centres in the world. According to Cushman & Wakefield, the overall Asia Pacific colocation data centre market size will be worth US\$28 billion in 2024, overtaking regions such as North America to become the largest worldwide. There is a massive shortfall in capacity in South & Southeast Asia which is leading to significant demand for new development projects and expansion of existing facilities.

### **Cloud providers eye hyperscale expansion**

The data centre market in South & Southeast Asia has historically been dominated by colocation providers, followed by internet and cloud service providers. Many cloud-based service providers are dependent on the construction of facilities by colocation providers for capacity growth. In recent years, “hyperscalers” such as Google, Facebook and Microsoft have begun to build their own capacity.

### **Assets remain popular with private capital investors**

Data centres continue to be an important sector for private capital investors such as private equity firms, superannuation and pension funds. Public market valuations of data centre operators have reached record levels. Privately held platforms have announced plans for initial public offerings, while other private operators are exploring strategic exits. Private capital players have taken notice and are looking at a range of structures including fund investments, consortiums and direct acquisitions. This is not surprising for an asset class which provides steady and reliable revenue streams and is seen by many as a combination of two important sectors, real estate and technology and is supported by important macro-trends and demographics, particularly in South & Southeast Asia.

### **Convergence of sustainability requirements and green financing**

Tenant and government regulatory focus on energy efficiency continues to be a key concern for operators as cooling represents 35% to 40% of total data centre energy demand. Key areas where data centre operators can reduce energy usage (and costs) include energy efficient UPS (uninterruptible power supply) systems and cooling technologies including liquid cooling. Innovative approaches such as the use of seawater for cooling as well as the use of underground sites are being assessed in Singapore. As operators increase energy efficiency and use of renewable energy, they are also looking at sustainability linked loan (SLL) financing, including the conversion of existing financing facilities to SLLs. Key considerations relating to the financing of data centre projects are discussed on pages 7 and 8 of this briefing.

### **Unique challenges and opportunities in the region**

Investing in data centres in South & Southeast Asia remains a challenge with often unclear regulatory framework for owning / operating data centres and challenges with land ownership. Fewer high-quality ‘stand-alone’ M&A targets remain after significant activity in recent years, and M&A opportunities for data centres and broader data infrastructure now centre around spin-off transactions from telecommunications companies. These transactions present unique challenges which are discussed further on pages 4 and 9.

---

# STRATEGIES FOR MARKET ENTRY & EXPANSION

## Greenfield and brownfield developments

- Often very time consuming and complex from a regulatory / zoning perspective and requires significant capital expenditure
- Key considerations for financing structures include restrictions on ownership of SPVs and restrictions on taking security in real estate
- Green project financing and sustainability linked loans present new opportunities and complexities

## M&A of existing companies

- Acquiring existing companies which hold data centres (and regulatory approvals / operating licenses)
- Relatively few opportunities in this regard in South & Southeast Asia

## Fund investments

- We continue to see financial investors make new investments in the region utilising a variety of fund structures

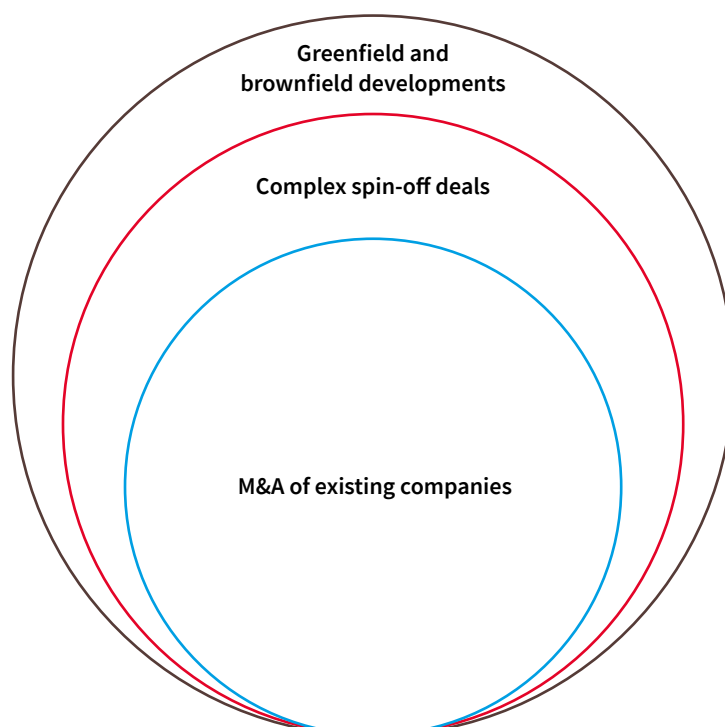
## Complex spin-off deals

- These are deals where telecoms operators spin-off their data centre assets

- Investors acquire these and lease the rack space back to the telcos as cornerstone customers (often with the telco being a significant minority investor in the ongoing JV)
- This is similar to the wave of telco towers sale and leaseback deals a few years ago
- We are currently seeing a significant amount of activity in this regard and have advised on numerous deals using this structure
- These deals are much more complex than straight company acquisitions, but there are more opportunities available and the advantage is that the investor invests into an already operating business with a cornerstone customer and doesn't take development risk

## Value-added services

- We are seeing interest in providers of proprietary integrated application managed services, virtualisation and IaaS solutions including data centre providers and independent technology providers
- Legal considerations include ownership and use of IP, customer contracts and potential regulatory hurdles associated with expansion of such services into new markets





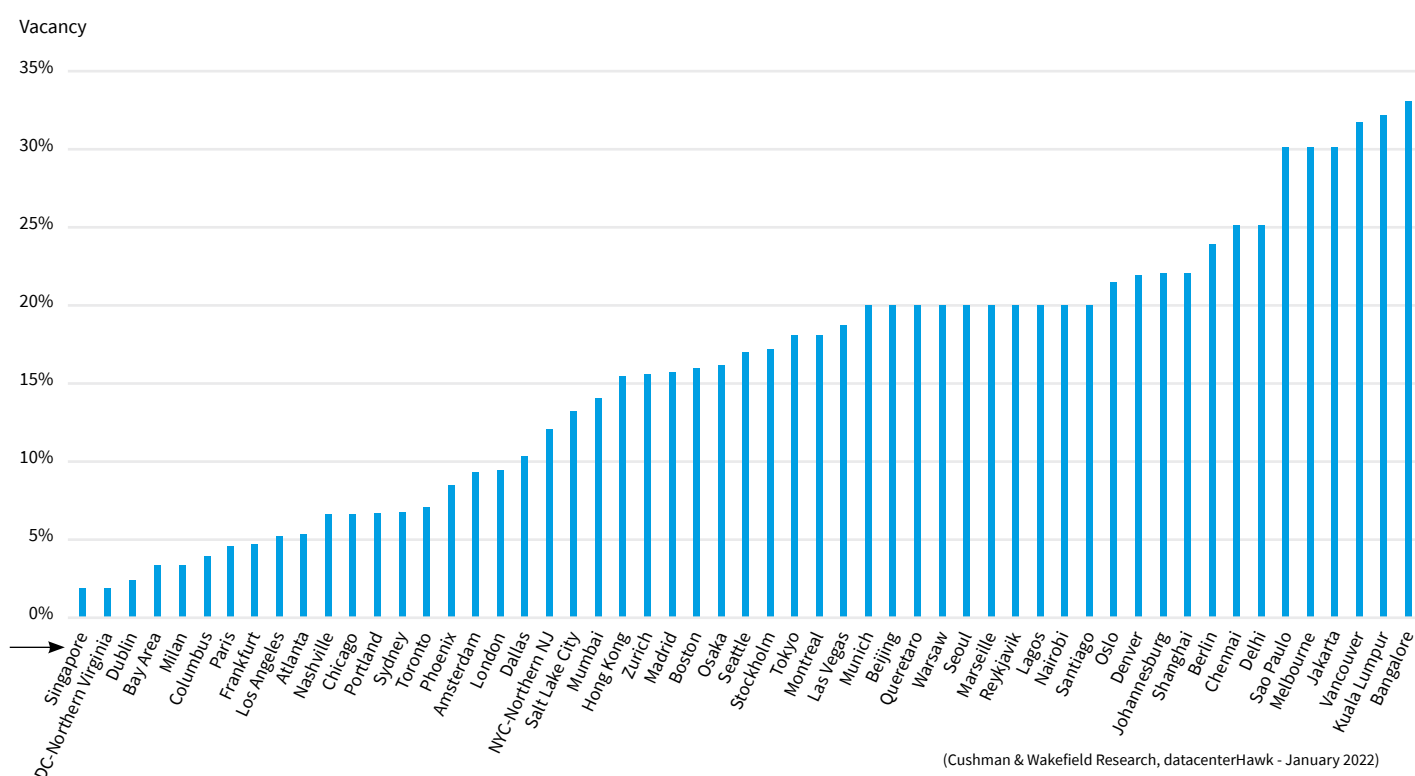




# CASE STUDY: SINGAPORE

## Post-mortem on the moratorium

Vacancy is notably very low in Singapore due in part to the impact of the moratorium on data centre developments

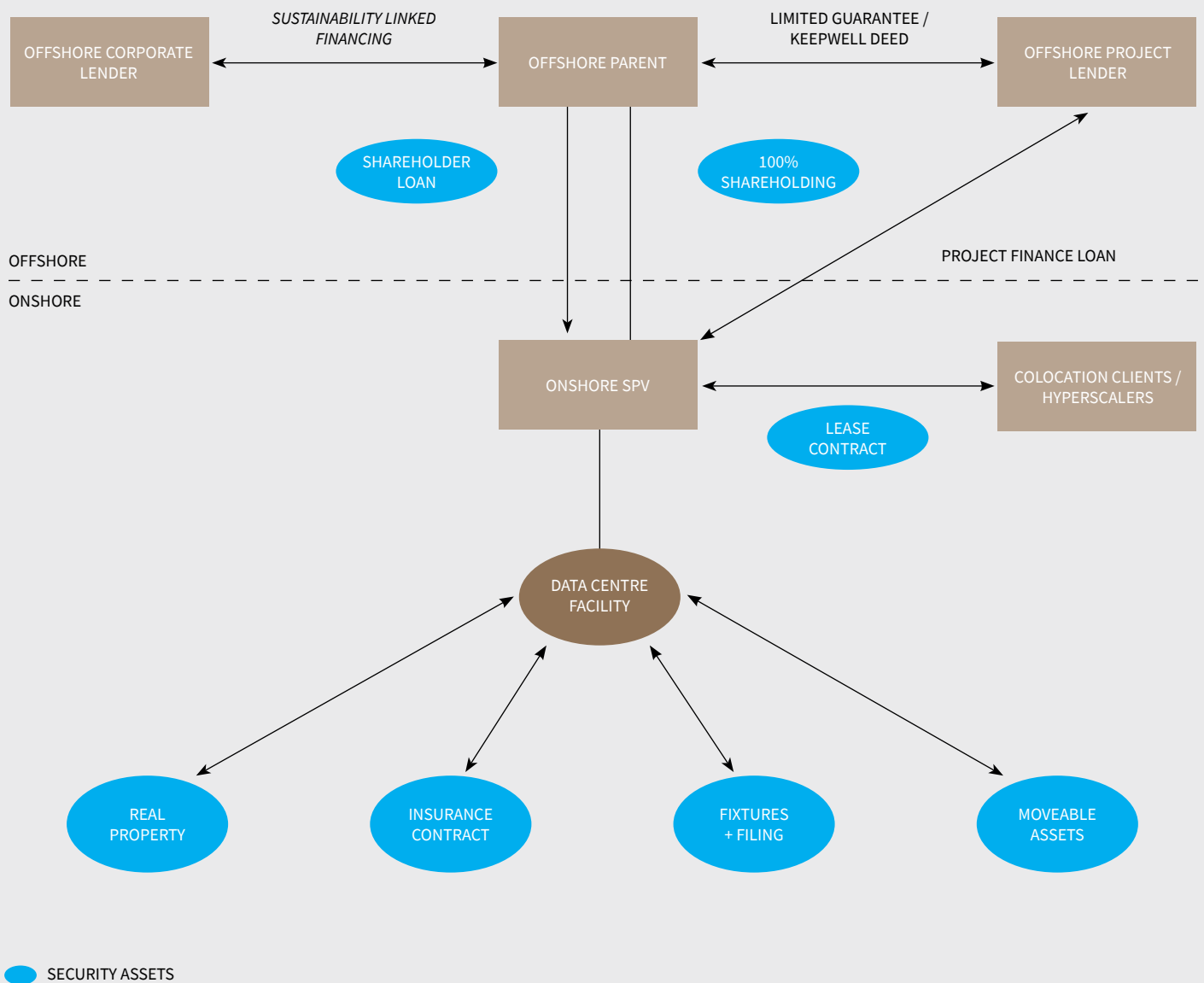


### Singapore recently lifted its moratorium on new projects with a focus on energy efficiency and power usage effectiveness (PUE)

- Widespread data centre proliferation has led to sustainability concerns in many key markets across the globe and moratoriums in markets such as Singapore and the Netherlands
- The Singapore government has initiated a pilot program for new projects and is seeking anchor data centres that are best in class in terms of energy efficiency and will call for proposals to develop new data centres with a total capacity of up to 60 MW in the second quarter of 2022
- The new facilities will need to have a minimum capacity of 10 MW and a PUE of 1.3 or lower. PUE is a measure of the energy used by the computing equipment in a data centre. Existing assets are also eligible for expansion up to the minimum stipulated 10 MW and beyond, in case operators decide to carry out the necessary improvements
- Challenges include the availability of renewable energy, ability to develop better methods of cooling servers and the ability to design more efficient facilities to meet sustainability goals of clients and local jurisdiction
- Singapore has a total generation capacity of approximately 14,000 MW, and an installed base of 70 data centres totalling approximately 1000 MW. Given that the country gets nearly all its electricity from natural gas, data centre operators who locate here cannot adequately source renewable power
- This shortfall has not gone unnoticed. In October of 2021, Singapore's Energy Market Authority (EMA) issued its first ever RFP for electricity imports including power from low carbon sources. Singapore plans to import 30% of energy from low carbon sources by 2035

# FINANCING OF DATA CENTRES

## Typical Data Centre Financing Structure



---

# FINANCING OF DATA CENTRES

## Financing structure: key issues and considerations

### General

- Real estate vs leveraged vs project finance focus
  - Familiarity with different reporting and certification standards
  - Different focus (hard assets vs cash flow) = different financial covenants
- Technical concerns
  - Real estate arrangements
  - Anticipated minimum IT load
  - Power supply / UPS arrangements
- Credit concerns / financial covenants
  - Material contracts (specified / % threshold)
  - Loan to value
  - Gearing (equity / debt ratio)
- Colocation facilities vs single-customer “hyperscalers”
  - Possible concentration risk concern from lenders
  - Credit assessment by lenders of customers
- Purpose / utilisation term-out loan)
  - “Fit-out costs” – staged depending on committed contracts
  - Funding debt service reserve / transaction expenses
  - Repay shareholder capital
- Limited recourse?
  - Limited guarantee (fall away after construction phase)
  - Keep-well
- “Green” requirement
  - Focus on building efficiency / energy usage
  - Third-party certification
- Typical security
  - Share security over SPV
  - All-asset security over SPV assets, including
    - Real estate (if available)
    - Customer contracts and accounts
    - Insurance
  - Subordination of customer rights in colocation facility

### Sustainability linked financing (SLL)

- Bank vs bond
- Typical KPIs:
  - Use of renewable energy (possible split between IT and other load)
  - Reduction in water use
  - Sustainability reporting (which standard?)
  - Workplace safety
  - Worker training / certification

### Green / project financing

- Typical loan economic terms
  - Gearing typically 80 / 20% debt / equity
  - 5-7 years maturity (conversion of construction loan to term-out loan)
  - Debt service reserve
  - Increasing cash-sweep requirement
  - Limited amortisation (none during construction phase)

### Asia-specific considerations

- Generally, English Law / Singapore arbitration for financing and local law for security
- Ownership restrictions over local SPV on share enforcement
- Restrictions on taking real estate security
- Timing for loan / security registrations
- Work with local bank for account management (if required)

### Specific borrower considerations

- “True-up” equity distribution at end of construction period or “stable-operation” date from excess construction proceeds or extent to which funding “under-geared”
- Distribution lock-up tied to positive trigger
- Cash-flow sweep tied to proceeds available for distribution that have been locked-up
- Replacement of material customer contracts
- Pre-approved customers
- LTV top-up
- Equity cures



# AN ALTERNATIVE TO GREENFIELD / BROWNFIELD DEVELOPMENT

## Spin-off Transaction: Challenges and Opportunities

- Telcos across Southeast Asia are spinning-off their data centre assets to attract further investment in their data centre infrastructure necessary to capture international customers
- Investors acquire these and lease the rack space back to the telcos as cornerstone customers (often with the telco being a significant minority investor in the ongoing JV)
- Investor will typically then be charged with managing the assets, expanding capacity further and attracting international customers
- These deals are much more complex than straight company acquisitions, but can generate significant returns where they are properly structured and executed

### OWNERSHIP AND CONTROL

- Telcos may be reluctant to relinquish control over core assets
- Regulatory requirements may also require a minimum equity participation
- Carefully structured JVs may be required, including different ownership percentages for different aspects of the business or a long-term view taken on dilution

### EXISTING CUSTOMERS

- Existing customers likely to be domestic, with data centre services bundled with higher value services
- Tension between SLAs for existing customers, vs best quality assets for international customers
- Clear resale / distribution parameters needed

### QUALITY OF ASSETS

- Current assets in the region are unlikely to be high quality. There may be gaps in regulatory compliance (e.g. planning or zoning consents)
- Impacts on business plan as well as SLAs agreed with the telco for its own requirements
- Detailed due diligence needed to inform contractual based solutions

### EXCLUSIVITY / NON-COMPETE

- Telco may want to compete with the JV in future
- Investor may want to be able to develop business in country outside of the JV
- Business / opportunity referral and right of first refusal provisions may be needed

### EXPANSION PLANS AND DILUTION

- Inherent tension between value of assets / business contributed into the JV and cost of executing future expansion plans
- Strong local partner can help achieve expansion, but unlikely to provide funding and may not want assets to be encumbered as part of a security package for a loan
- Careful business planning required including navigating the JV relationship to help achieve expansion. JV agreement must be very robust in relation to funding requirements

### EXIT / LIQUIDITY

- Telco exit to a competitor / prohibited transferee may be a concern
- Investor will need flexibility to exit, causing Telco concern on the strength of a future JV partner
- Exit provisions need detailed discussion and planning to enable the investor to exit on best possible terms

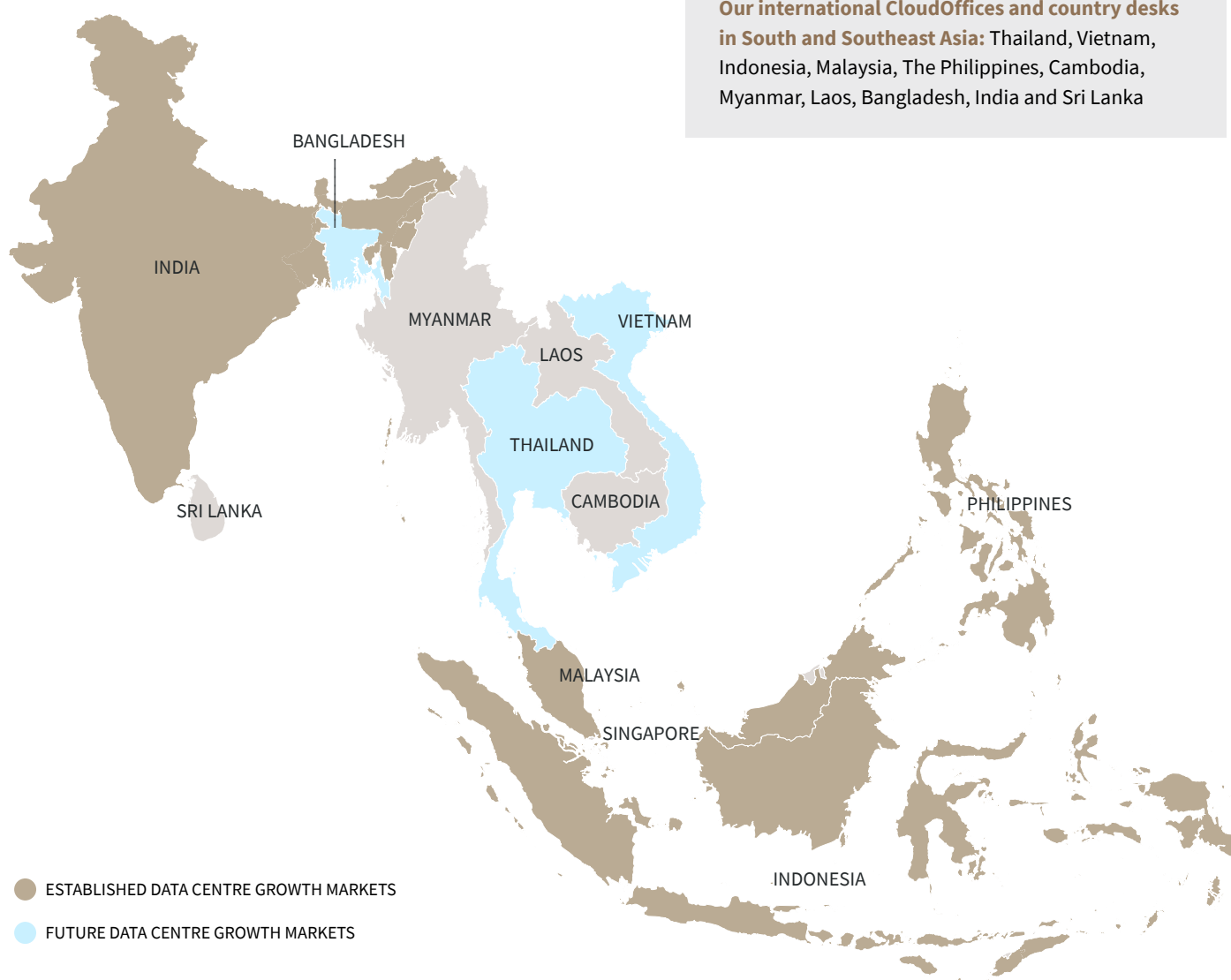


# CROSS BORDER COVERAGE

## The leading Telco and data infrastructure team in Asia Pacific

- As the only global law firm headquartered in Asia, we have an exceptional cross-border regional team with broad and deep corporate experience across Asia Pacific
- We know the telco and data infrastructure space (including data centres) extremely well, having advised on some of the most significant matters over many years
- To further support our clients' global objectives, KWM has a series of International CloudOffices in jurisdictions where we do not have a physical office. Our CloudOffices are comprised of a multi-disciplinary team of lawyers who have significant experience in the region
- Through our own expertise and experience in these jurisdictions and our familiarity with leading local counsel developed over many years, we can identify not just the most qualified local firm, but also the best teams and individuals within those firms to assist us

**Our international CloudOffices and country desks in South and Southeast Asia:** Thailand, Vietnam, Indonesia, Malaysia, The Philippines, Cambodia, Myanmar, Laos, Bangladesh, India and Sri Lanka





---

# OUR DATA CENTRE SPECIALIST TEAM



NICOLA YEOMANS

CO-HEAD PRIVATE CAPITAL  
SINGAPORE

TEL +65 6653 6738  
MOB +65 8339 5896  
EMAIL nicola.yeomans@sg.kwm.com



MICHAEL LAWSON

PARTNER IN CHARGE  
SINGAPORE

TEL +65 6653 6503  
MOB +65 9026 6929  
EMAIL michael.lawson@sg.kwm.com



JOHN SHUM

PARTNER  
SINGAPORE

TEL +65 6653 6505  
MOB +65 8321 6377  
EMAIL john.shum@sg.kwm.com



DARYL COX

PARTNER  
SINGAPORE

TEL +65 6991 6506  
MOB +61 447 072 658  
EMAIL daryl.cox@sg.kwm.com



EMMA SIMPSON

SENIOR ASSOCIATE  
SINGAPORE

TEL +65 8163 1286  
MOB +65 6991 6524  
EMAIL emma.k.simpson@sg.kwm.com



TIAN XU

ASSOCIATE  
HONG KONG

TEL +852 3443 8569  
MOB +852 6796 6110  
EMAIL tian.xu@hk.kwm.com



SCOTT GARDINER

PARTNER  
HONG KONG

TEL +852 3443 1224 (HK) / +61 2 9296 2158 (AU)  
MOB +852 94049899 (HK) / +61 419 533 313 (AU)  
EMAIL scott.gardiner@hk.kwm.com



SIMONE MENZ

PARTNER  
MELBOURNE

TEL +61 3 9643 4219  
MOB +61 412 603 499  
EMAIL simone.menz@au.kwm.com



PATRICK GUNNING

PARTNER  
SYDNEY

TEL +61 2 9296 2170  
MOB +61 418 297 018  
EMAIL patrick.gunning@au.kwm.com



BRYONY EVANS

PARTNER  
SYDNEY

TEL +61 2 9296 2565  
MOB +61 428 610 023  
EMAIL bryony.evans@au.kwm.com



## ABOUT KING & WOOD MALLESONS

A firm born in Asia, underpinned by world class capability. With over 2000 lawyers in 30 global locations, we draw from our Western and Eastern perspectives to deliver incisive counsel.

With 30 offices across Asia, Europe, North America and the Middle East we are strategically positioned on the ground in the world's growth markets and financial centres.

We help our clients manage their risk and enable their growth. Our full-service offering combines un-matched top tier local capability complemented with an international platform. We work with our clients to cut through the cultural, regulatory and technical barriers and get deals done in new markets.

### Disclaimer

This publication provides information on and material containing matters of interest produced by King & Wood Mallesons. The material in this publication is provided only for your information and does not constitute legal or other advice on any specific matter. Readers should seek specific legal advice from KWM legal professionals before acting on the information contained in this publication.

### Asia Pacific | Europe | North America | Middle East

King & Wood Mallesons refers to the network of firms which are members of the King & Wood Mallesons network. See [kwm.com](http://kwm.com) for more information.

[www.kwm.com](http://www.kwm.com)

© 2022 King & Wood Mallesons

### JOIN THE CONVERSATION



SUBSCRIBE TO OUR WECHAT COMMUNITY.  
SEARCH: KWM\_CHINA