

360° PERSPECTIVE



STRUCTURE
RESEARCH

ANALYST NOTE

HONG KONG DATA CENTRE MARKET SPOTLIGHT
Tseung Kwan O Industrial Estate Dynamic

January 26, 2018



HONG KONG DATA CENTRE DEVELOPMENT

Impact of the Tseung Kwan O Industrial Estate on the Data Centre Market Dynamic in Hong Kong

January 26, 2018

Analyst: Jabez Tan

Summary: The Tseung Kwan O Industrial Estate (TKOIE) issue: There has been notable controversy surrounding the TKOIE, specifically pertaining to the potential impact on data centres operating within its jurisdiction. The primary issue of contention is the subletting restriction within TKOIE imposed by the Hong Kong Science and Technology Park (HKSTP) which states that 'applicants (data centre operators) are requested to note our standard lease restriction on alienation in that the grantee (data centre operator) shall not part with possession of the lot or any part thereof. In effect, no subletting shall be allowed and the grantee (data centre operator) shall always retain exclusive possession of the premises including the control of access right.'

Background: The Tseung Kwan O Industrial Estate (TKOIE) is one of the three industrial estates managed by the Hong Kong Science and Technology Park Corporation (HKSTP) under HKSAR government funding. The primary objective of the HKSTP is to broaden Hong Kong's industrial base and promote industrial and technological innovation geared towards the enhancement of Hong Kong's economy and business environment. Lands in industrial estates are supposed to be ordered to companies engaging in skill-intensive manufacturing and service industries.

Land Availability: The slowdown in industrial development (and the ongoing migration of industry and manufacturing to mainland China) during the early 2000s left many plots of land within the TKOIE empty and abandoned. Demand was low for these plots of land, which were largely inaccessible and inconveniently located far away from the city centre. Then came the rise of the Internet and the need for server capacity to support the increasing amount of data and content generated from the shift of many businesses to an online-centric footprint. Many data centre providers saw an opportunity to capitalize on this trend while acquiring land at a discounted rate.

Used for Connectivity and Infrastructure: With the recent development of Hong Kong into a regional data and connectivity hub, several plots of land in Tseung Kwan O, including those within the industrial estate and outside the industrial estate, were offered to carriers to set up submarine cable landing stations and enterprises for data centre development. For plots of land granted within the TKOIE, there have been controversial cases, where data centre operators have supposedly violated the subletting restrictions. The conflict arises from the fact that colocation providers are obtaining land within TKOIE at a subsidized rate, and are in essence re-leasing space within the plot of land to house IT equipment.

Data Centre Service Providers Affected Within TKOIE: China Mobile, China Unicom, Global Switch, NTT Communications, HKCOLO / TELEHOUSE, Digital Realty Trust / Cyxtera, Towngas Telecom, Telstra (Pacnet), Hong Kong Exchange

Why is this such a controversial issue? The controversy is the result of a clear "no-subletting" rule imposed onto the use of the TKOIE land coupled with the fact that the HKSTP still approved the purchase of the regulated land by data centre colocation providers. Since the data centre colocation business, at its core, leases space within the facility for critical IT infrastructure, it begs the question why there has not been more enforcement or penalties associated with the breach of this regulation.

Why are people so unhappy with the data centre situation in TKOIE? The unhappiness stems from several parties:

- **Local government:** There are Hong Kong government officials that are against colocation data centre providers developing data centres within the TKOIE. A number of government officials are concerned that the HKSTP Corporation, formed to promote the technology and industrial development in Hong Kong, have strayed away from their founding mantra. The HKSTP offers land within the industrial estate at a discounted price to incentivize these enterprises to set up shop within the TKOIE with the end goal of promoting industrial and technological innovation. Third party data centres in their view have contributed minimally if any to advancing the level of innovation in Hong Kong and have instead purchased TKOIE land at a discounted price only to rent it out for the hosting of IT equipment at premium high-margin rates, while in the process consuming large amounts of power from Hong Kong's power grid.
- **Hong Kong citizens/businesses:** With the rising cost of real estate in land-scarce Hong Kong, many citizens and local enterprises that did not qualify for approval to attain land in TKOIE noticed the cost discrepancy between purchasing land from the typical channels versus what data centre providers are paying for in TKOIE land. There have been a material amount of local newspaper articles touching on this very issue.

• **Other data centre providers:** As the TKOIE opened its doors to data centre development, other data centre operators not able to obtain land within the industrial saw its competitors bring online more data centre capacity into the market. Perhaps the largest and most vocal data centre provider that has publicly spoken out against using TKOIE land for data centre development is SUNeVision (iAdvantage). Equinix has gone on the record to point out the potential regulatory grey areas governing the use of land in TKOIE which is “technically rented to end-users and hence cannot be sub-leased”. It is also worth pointing out that Equinix is now a wholesale customer of iAdvantage at its new MEGA Plus data centre just outside the TKOIE in order to avoid the risk of regulatory complications. The rise of data centres popping up in TKOIE has driven supply up, and has naturally made pricing more competitive within Hong Kong due to the influx of local and international firms building data centres within TKOIE.

How is the subletting restriction enforced by the HKSTP? It appears that data centre providers within TKOIE run the risk of violating the HKSTP subletting restrictions, and therefore being slapped with penalties which include being charged an additional premium. On the flip side, many consider this restriction a grey area that can be worked around. The HKSTP revealed that between 2013-2015, only one suspected case of letting or subletting the data centre premises to a third party involved the operation of a data centre, though it did not specify which data centre.

Here's how the HKSTP enforces the subletting restriction according to an official statement:

1. Investigate the suspected sublet and demand the provider to cease the breach. This could be done by vacating the customer or revising the existing contractual agreement to conform with HKSTP policy.

2. If the provider refuses to take appropriate remedial actions, HKSTP will take appropriate legal actions according to the lease terms, including charging an additional premium depending on the severity of the breach. If the breach is still not rectified, HKSTP reserves the right to initiate the re-entry procedure according to the lease agreement. HKSTP did not specify what these ‘appropriate legal actions’ constitute, nor what actually happens in a ‘re-entry procedure’, and so far it appears that there has not been a case which has escalated to that level of severity.

HKSTP also noted that it approaches each infraction on a case-by-case basis and declined to pre-specify its approach in handling repeated cases of subletting breaches.

How will this impact Colocation Data Centres moving forward:

• The HKSTP's position is that it continues to believe data centres are essential infrastructure to sustain Hong Kong's continuous economic development. And to that effect, the Office of the Government Chief Information Officer (OGCIO) established a Data Centre Facilitation Unit (DCFU) in July 2011 to support the deployment of data centre infrastructure in TKOIE by also providing advisory services to enterprises interested in setting up data centres in Hong Kong. It's worth noting that the DCFU has handled over 350 enquiries from enterprises both outside and within Hong Kong. HKSTP also confirmed that it has no plans to develop a data centre park similar to what Singapore is doing.

- **So how can colocation providers avoid violating the subletting policy?** Data centre operators that provide colocation services in the TKOIE would be required to prove that it has exclusive possession and are able to have full control over the accessibility of these data halls/suites. End users purchasing colocation services, whether wholesale or retail, would have to ensure that this clear distinction is written into the colocation service level agreements (SLAs) with their service provider in order to be in compliance with the HKSTP policies. For many data centre operators that provide managed services and remote hands service, having access into the customer's area is a natural part of the contractual relationship.

- **Impact to wholesale colocation providers:** The data centre operators within the TKOIE that provide wholesale colocation services would be impacted to a greater extent compared to retail colocation providers. Wholesale colocation, at its core, entails the subletting of a data hall/suite or even an entire building to a customer or tenant (which is a more commonly used term in the data centre industry).

- **Impact to colocation customers:** Given that colocation providers are required to have exclusive access and full control over the accessibility of these data halls, end-users or tenants within these TKOIE data centres that require high levels of security and privacy are subjected to an additional layer of risk.

Land for data centre development outside TKOIE: The Hong Kong government has earmarked three plots of land in Tseung Kwan O located outside the industrial estate for data centre development. The first one-hectare site was granted to SUNeVision (iAdvantage) through a public tender in October 2013. There are plans to make a second one-hectare site available for public tender in 2016, but delays (partially due to the election cycle) have pushed back the timeline further and many speculate that this could likely be a 2019-2020 time frame, though this still remains unconfirmed.

Takeaway: The TKOIE question is clearly an issue from many angles. While the reality is that there has not been a widespread enforcement of the anti-subletting policy, customers of these data centre service providers run the risk of having their critical IT infrastructure being impacted negatively by this issue. Servers located within TKOIE that fall within the limits of this regulation could potentially see the Hong Kong data centre market impacted in a meaningful way since over 30% of Hong Kong's data centre capacity is located in TKOIE, according to a recent Hong Kong Data Centre Supply Report published by Structure Research. There needs to be further dialogue between both the HKTSP and the data centre service providers to clarify the details of this regulation and where to draw the line on this issue.

STRUCTURE RESEARCH

901 KING STREET WEST, SUITE 400
TORONTO, ONTARIO
CANADA M5V 3H5
PHONE: +1.647.822.1404
INFO@STRUCTURERESEARCH.NET

360° PERSPECTIVE