

OCP Ready COLO Facility Assessment	Chayora TJ1			[Site #2 specific name]			[Site #3 specific name]		
Self Assessment Status:	COMPLETE-MEETS REQUIREMENTS			NOT COMPLETED			NOT COMPLETED		
Data Center Location Name	Chayora TJ1								
Data Center Location Address	No.17 Tongjin Road, Beichen District, Tianjin - 天津市北辰区通纬路17号								
	Chayora phase 1 RFS 30 Sept 2020 has 4 IT Suites providing c1,000m2 (10,000 Sq. ft.) of raised floor, with ASHRAE Recommended TC9.9 compliant temperature and humidity control, Gaseous fire suppression and overhead bus bar fed UPS critical power rated at 4MW. A further 5 x 1,000m2 data halls are immediately available for MEP fit to suit.								
Site Description: White Space Area	Planned 18MW of IT power based on either DR N+1 and 2N topology with 15min battery backed								
Site Description: Critical IT Power	Telstra (Network Management), CT, CU, CM, CTCIC								
Site Description: Network Provider Availability	TJ1 is a Tier III certified DC on the Chayora Tianjin campus. With 6 x 1,000m2 data halls and is carrier and cloud neutral with Telstra, China Unicom, China Telecom, China Mobile, CTCIC and China Broadband connected and direct access to AWS, Azure, AliCloud, Tencent & Huawei cloud.								
Site Description: Facility Features	Chayora is an international customer focused data centre campus. Fully permitted, power and fibre secured and ready to construct multi-phased land options on seven sub-plots totalling 32 hectares. Six 3,000 rack DCs and three 1,000 rack high performance computing DCs with bespoke design to meet customer requirements. Carrier neutral with China Telecom, China Mobile, China Unicom and international carriers connected to the site. Resilient diverse fibre enabling connectivity at 1000Gb/s if required, including direct diverse connections to National super-POPs. Dual routed (full 2N), independent connection power supply through dedicated sub-stations providing up to 300MW grid power. Adjacent (500m) gas turbine power plant can enable 'clean' direct power generation and supply backed up by highly resilient grid. Physical access control security, full infrastructure management and site operations. Powered Land, Build-to-Suit, Assured Scalability and Wholesale Colocation options available.								
Site Description: Other Services	7th August 2020								
Date Original Assessment is Completed									
Re-Assessment Date:									
REQUIREMENTS - Attribute (Must have an Optimum or Acceptable result)	Parameter	Result	Notes	Parameter	Result	Notes	Parameter	Result	Notes
ACCESS									
Building Access	1. Loading dock with lift or leveler	Optimum	External Loading bay is provided with dock levelers to offload equipment and racks from truck level to unloading area, when it can then be rolled threshold free in to the Goods Receiving area.	0. Selection Required			0. Selection Required		
Delivery pathway, Loading dock to Goods in	1. 22.7m (108in) H x 22.4m (96in) W x 22.4m (96in) D unobstructed access and threshold free	Optimum	Access throughout the facility is design for a 54U cabinet to be transported on a pallet truck, through doorways sized at 3m clearance.	0. Selection Required			0. Selection Required		
Delivery pathway, Goods in to White space	1. 22.4m (96in) H x 21.8m (72in) W unobstructed access and threshold free	Optimum		0. Selection Required			0. Selection Required		
Corridor floor rolling load	2. 2459kg (1012lb) (4.5kN) (notes required)	Acceptable	Part of the corridor is constructed of raised floor system using cementitious infilled steel flooring based on CISCAs Standard	0. Selection Required			0. Selection Required		
Unboxing/pre-staging/storage area floor uniform load	1. 21221kg/m2 (250lb/ft2) (11.97kN/m2)	Optimum		0. Selection Required			0. Selection Required		
Unboxing/pre-staging/storage area floor concentrated load	1. 2680kg (1500lb) (6.67kN)	Optimum		0. Selection Required			0. Selection Required		
RAMPS									
Gradient	1. Not Applicable - No Ramps Required	Optimum		0. Selection Required			0. Selection Required		
Width	1. Not Applicable - No Ramps Required	Optimum		0. Selection Required			0. Selection Required		
Landing area	1. Not Applicable - No Ramps Required	Optimum		0. Selection Required			0. Selection Required		
Railings	1. Not Applicable - No Railings Required	Optimum		0. Selection Required			0. Selection Required		
LIFTS / ELEVATORS									
Weight loading	1. 21500kg (33000lb)	Optimum	2 nos. Cargo lifts with a capacity of 4000kg are provided.	0. Selection Required			0. Selection Required		
Door height	1. 22.4m (96in) Lift /Elevator door opening height (not internal cabin)	Optimum	Cargo lift door's height is 3m	0. Selection Required			0. Selection Required		
Width	1. 21.5m (60in) Unobstructed door opening width	Optimum	Cargo lift's width is 2m	0. Selection Required			0. Selection Required		
Depth	1. 21.5m (60in) Unobstructed cabin depth	Optimum	Cargo lift's depth is 3.6m	0. Selection Required			0. Selection Required		
WHITE SPACE									
Floor rolling load	2. 2459kg (1012lb) (4.5kN) (Notes Required)	Acceptable	The raised floor system is constructed of cementitious infilled steel flooring based on CISCAs Standard	0. Selection Required			0. Selection Required		
Floor uniform load	1. 21221kg/m2 (250lb/ft2) (11.97kN/m2)	Optimum	The raised floor system is constructed of cementitious infilled steel flooring based on CISCAs Standard	0. Selection Required			0. Selection Required		
Floor concentrated load	2. 2459kg (1012lb) (4.5kN) (Notes Required)	Acceptable	The raised floor system is constructed of cementitious infilled steel flooring based on CISCAs Standard	0. Selection Required			0. Selection Required		
Finished floor to ceiling height	2. 23.1m (124in)	Acceptable	There is a minimum clearance of 4m from raised floor to the bottom of the false ceiling.	0. Selection Required			0. Selection Required		
Access floor clearance	1. 2450mm (18in) (if not used for cooling)	Optimum		0. Selection Required			0. Selection Required		
ELECTRICAL									
Number of independent circuits to the rack	1. 2N (A+B)	Optimum	Basis of design is 2N at rack location derived from a distributed redundant central UPS.	0. Selection Required			0. Selection Required		
Maximum circuit capacity	1. 3 32A/230V	Optimum	Tap off boxes, on a split-free system, provided with Single Phase or 3 Phase outlets, complete with power monitoring.	0. Selection Required			0. Selection Required		
Circuit voltage	1. 400/230 VAC nominal	Optimum	Nominal 230V a.c. Single phase,, 400 V a.c. 3 phase.	0. Selection Required			0. Selection Required		
Circuit frequency	1. 47-63 Hz	Optimum	Nominal 50Hz, +/- 0.1 Hz	0. Selection Required			0. Selection Required		
Power receptacle / WIP Type	1. IEC60309 532R6W	Optimum	Both connector formats can be provided (equivalent to BS 4343), single phase/3 wire (blue) or 3 Phase/5 wire (red).	0. Selection Required			0. Selection Required		
Circuit receptacle location	1. Overhead	Optimum		0. Selection Required			0. Selection Required		
Upstream UPS options	1. UPS and non UPS feeds available	Optimum	Basis of design is for central UPS (4 to make 3 or 2N redundancy). However power supply can be arranged as generator backed for OCP racks if required.	0. Selection Required			0. Selection Required		
Rack-based batteries permitted	1. Allowed	Optimum		0. Selection Required			0. Selection Required		
Generator load acceptance time	1. <60 seconds	Optimum	Design transfer time is <25 seconds	0. Selection Required			0. Selection Required		
COOLING									

Rack airflow direction	1. Front to Back	Optimum	Front to Back	0. Selection Required			0. Selection Required		
Air containment methods	1. Hot aisle containment or rack chimney	Optimum	Hot Aisle containment is employed	0. Selection Required			0. Selection Required		
Maximum rack density	1. ≥12kw	Optimum	Average power density is 8kW per cab. Power density of up to 15KW can be achieved without special requirements.	0. Selection Required			0. Selection Required		
Minimum cold aisle width	1. ≥1500mm (60in)	Optimum	1200mm is standard pitch to achieve maximum rack count, but there are no constraints on a width, subject to reducing the overall cab/rack count.	0. Selection Required			0. Selection Required		
Minimum free width cold aisle (inside cage)	1. ≥1200mm (48in)	Optimum		0. Selection Required			0. Selection Required		
Minimum hot aisle width	1. ≥1200mm (48in)	Optimum		0. Selection Required			0. Selection Required		
Inlet air conditions	1. ASHRAE Class A1 Allowable	Optimum	The basis of design is ASHRAE Recommended (Class A1) 2015	0. Selection Required			0. Selection Required		
Air quality	1. EN 779 G4 and F7 filtering & Gas particulate monitoring to the ANSI/ISA 74.04-1985 G severity levels	Optimum		0. Selection Required			0. Selection Required		
Temperature rise	1. ≥12 Deg C DeltaT	Optimum	Base design is for a Delta T of 15 Deg C	0. Selection Required			0. Selection Required		
Cabinet blanking of open space	1. Mandatory	Optimum		0. Selection Required			0. Selection Required		
CABLING									
Cabling infrastructure pathways	1. Top and Front of rack fed	Optimum		0. Selection Required			0. Selection Required		
Overhead Network Infrastructure containment levels	1. 3 Levels (Intra-Pod cabling; Inter-Pod cabling; OOB cabling)	Optimum		0. Selection Required			0. Selection Required		
Fibre Type (if installed)	1. OS2 & OM4	Optimum		0. Selection Required			0. Selection Required		
Fibre connection presentation (if installed)	1. Interchangeable LC Duplex and MPO	Optimum		0. Selection Required			0. Selection Required		
CONSIDERATIONS (For information only)	Parameter	Result	Notes	Parameter			Parameter		
SERVICE									
Replacement PSU Modules	2. <2 day delivery	Acceptable		0. Selection Required			0. Selection Required		
Replacement BBU Modules	2. <2 day delivery	Acceptable		0. Selection Required			0. Selection Required		
Option to monitor PSUs and BBUs	1. Yes	Optimum		0. Selection Required			0. Selection Required		
Remote hands for PSU and BBU replacement or expansion	1. Yes	Optimum		0. Selection Required			0. Selection Required		
Remote hands for OCP IT hardware replacement or expansion	1. Yes	Optimum		0. Selection Required			0. Selection Required		
EFFICIENCY									
Site Operations Standards	1. OCP Critical Facility Operations Guidelines	Optimum		0. Selection Required			0. Selection Required		
Site PUE Monitoring	1. Continuously monitored	Optimum		0. Selection Required			0. Selection Required		
Site Design PUE	1. <1.2	Optimum		0. Selection Required			0. Selection Required		
Site Annualized PUE Current Achievement	2. Other (Notes required)	Acceptable	The predicted annualised PUE is <1.2 but the facility has not been operational for 12 months with customer load, therefore this metric score will be updated at that point	0. Selection Required			0. Selection Required		
Site WUE Monitoring	1. Continuously monitored	Optimum		0. Selection Required			0. Selection Required		
Site CUE Monitoring	1. Continuously monitored	Optimum		0. Selection Required			0. Selection Required		
OPENNESS									
PUE Published	2. Available upon request	Acceptable		0. Selection Required			0. Selection Required		
Facility Design Drawings & Files	2. Available to view upon request	Acceptable		0. Selection Required			0. Selection Required		