

OCP Ready COLO Facility Assessment		Borealis Data Center BLD-DC, B52				Borealis Data Center BLD-DC, B62				[Site #3 specific name]			
Self Assessment Status		COMPLETE-MEETS REQUIREMENTS				COMPLETE-MEETS REQUIREMENTS				NOT COMPLETED			
Data Center Location Name		Blondus, building #62				Blondus, building #62							
Data Center Location Address		Blondus, Iceland				Blondus, Iceland							
Site Description: White Space Area		2 whitespaces, 170m2 each, concrete slab, direct air cooled. Pre-installed PDUs with 12 rows of 12 x 400x200mm, 60U high racks, 22kW to 44kW each. Other configurations available with densities up to 88kW (single N). Hot air containment with a plenum above the racks to separate cold air from hot air and either exhaust or recirculate back through the CRAH units. Direct air cooling guarantees annualised PUEs of as low as 1.03				Planned completion on June 2023 of 2 whitespaces, 370m2 each, concrete slab, indirect air cooled. Pre-installed PDUs with 12 rows of 12 x 400x200mm, 60U high racks, designed for 22kW each. Other configurations available with densities up to 44kW. Hot air containment with a plenum above the racks to separate cold air from hot air and either exhaust or recirculate back through the CRAH units. Cooling provided through free coolers outside and heat exchangers without any compressors or even adiabatic spray, guaranteeing lowest annualised PUEs and near-zero WUE.							
Site Description: Critical IT Power		Total power on site is 63MW. The facility is a building within this site and offers a total of 12MW in N setup or 6MW in 2N setup (uninterrupted power).				Planned total power on site is 63MW. The facility is a building within this site and offers a total of 6MW fully concurrently maintainable power feeds with 2N to the IT equipment.							
Site Description: Network Provider Availability		ISP (Sinnar, Novea, Vodafone, BT, etc.), dark fiber				ISP (Sinnar, Novea, Vodafone, BT, etc.), dark fiber							
Site Description: Facility Features		100% year round free cooling, perimeter air cooling or liquid to the rack/PDU, Security				100% year round free cooling, perimeter air cooling or liquid to the rack/PDU, Security							
Site Description: Other Services		Storage Area, Technical and office areas, smart hands, SLAs				Storage Area, Technical and office areas, smart hands, SLAs							
Date Original Assessment Completed		11/28/2022				11/28/2022							
Re-Assessment Date:													
REQUIREMENTS - Attribute		Parameter		Result		Notes		Parameter		Result		Notes	
(Must have an Optimum or Acceptable result)													
ACCESS		Building Access		3. Road level with step and threshold free access		Acceptable		3. Road level with step and threshold free access		Acceptable		0. Selection Required	
Delivery pathway, Loading dock to Goods in		2. 22.7m (108in) W x 2.21m (48in) W undistructured access and threshold free		Optimum		Separate Loading Dock/Storage Area connected to the building via a service corridor.		2. 22.7m (108in) W x 2.21m (48in) W undistructured access and threshold free		Optimum		Separate Loading Dock/Storage Area connected to the building via a service corridor.	
Delivery pathway, Goods in to White space		3. 32.4m (96in) W x 2.1 8m (72in) W undistructured access and threshold free		Optimum				3. 32.4m (96in) W x 2.1 8m (72in) W undistructured access and threshold free		Optimum			
Corridor floor rolling load		1. 3680kg (15000lb) (6.67kN)		Optimum				1. 3680kg (15000lb) (6.67kN)		Optimum			
Unloading/pre-staging/storage area floor uniform load		1. 51223kg/m2 (2500t/ft2) (11.97kN/m2)		Optimum				1. 51223kg/m2 (2500t/ft2) (11.97kN/m2)		Optimum			
Unloading/pre-staging/storage area floor concentrated load		1. 3680kg (15000lb) (6.67kN)		Optimum				1. 3680kg (15000lb) (6.67kN)		Optimum			
RAMPS		Gradient		3. Not Applicable - No Ramps Required		Optimum		3. Not Applicable - No Ramps Required		Optimum		0. Selection Required	
		Width		3. Not Applicable - No Ramps Required		Optimum		3. Not Applicable - No Ramps Required		Optimum		0. Selection Required	
		Landing area		3. Not Applicable - No Ramps Required		Optimum		3. Not Applicable - No Ramps Required		Optimum		0. Selection Required	
		Railings		3. Not Applicable - No Railings Required		Optimum		3. Not Applicable - No Railings Required		Optimum		0. Selection Required	
LIFTS / ELEVATORS		Weight loading		3. Not Applicable - No Lift/Elevator Required		Optimum		3. Not Applicable - No Lift/Elevator Required		Optimum		0. Selection Required	
		Door height		3. Not Applicable - No Lift/Elevator Required		Optimum		3. Not Applicable - No Lift/Elevator Required		Optimum		0. Selection Required	
		Width		3. Not Applicable - No Lift/Elevator Required		Optimum		3. Not Applicable - No Lift/Elevator Required		Optimum		0. Selection Required	
		Depth		3. Not Applicable - No Lift/Elevator Required		Optimum		3. Not Applicable - No Lift/Elevator Required		Optimum		0. Selection Required	
WHITE SPACE		Floor rolling load		1. 3680kg (15000lb) (6.67kN)		Optimum		1. 3680kg (15000lb) (6.67kN)		Optimum		0. Selection Required	
		Floor uniform load		1. 51223kg/m2 (2500t/ft2) (11.97kN/m2)		Optimum		1. 51223kg/m2 (2500t/ft2) (11.97kN/m2)		Optimum		0. Selection Required	
		Floor concentrated load		1. 3680kg (15000lb) (6.67kN)		Optimum		1. 3680kg (15000lb) (6.67kN)		Optimum		0. Selection Required	
		Finished floor to ceiling height		2. 8.3 1m (124in)		Acceptable		2. 8.3 1m (124in)		Acceptable		0. Selection Required	
		Access floor clearance		3. Not Applicable - No Access Floor		Optimum		3. Not Applicable - No Access Floor		Optimum		0. Selection Required	
ELECTRICAL		Number of independent circuits to the rack		1. 2N (A+B)		Optimum		customer chooses N or 2N, either is available without any further complications. In 2N setup, the IT equipment is required to have 2 PSUs or the customer sets up an ATS in each rack		1. 2N (A+B)		Optimum	
		Maximum circuit capacity		1. 16 32A/230V		Optimum				1. 16 32A/230V		Optimum	
		Circuit voltage		1. 400/230 VAC nominal		Optimum				1. 400/230 VAC nominal		Optimum	
		Circuit frequency		1. 47-63 Hz		Optimum				1. 47-63 Hz		Optimum	
		Power receptacle / WEP Type		1. IEC60309 52388W		Optimum		32A, 3ph, N, PE		1. IEC60309 52388W		Optimum	
		Circuit receptacle location		3. Overhead		Optimum				3. Overhead		Optimum	
		Upstream UPS options		3. UPS and non UPS feeds available		Optimum				3. UPS only feed available		Acceptable	
		Rack based batteries permitted		3. Allowed		Optimum				3. Allowed		Optimum	
		Generator load acceptance time		3. <60 seconds		Optimum		no generators for customer IT equipment, only for own net and security systems		3. <60 seconds		Optimum	
COOLING		Rack airflow direction		1. Front to Back		Optimum				1. Front to Back		Optimum	
		Air containment methods		3. Hot aisle containment or rack chimney		Optimum				3. Hot aisle containment or rack chimney		Optimum	
		Maximum rack density		1. 812dw		Optimum				1. 812dw		Optimum	
		Minimum cold aisle width		2. 9120mm (48in)		Acceptable		mostly 1.5m, but minimal is 1.2m		2. 9120mm (48in)		Optimum	
		Minimum free width cold aisle (inside cage)		1. 9120mm (48in)		Optimum				1. 9120mm (48in)		Optimum	
		Minimum hot aisle width		1. 9120mm (48in)		Optimum				1. 9120mm (48in)		Optimum	
		Inlet air conditions		2. ASHRAE Recommended		Acceptable				2. ASHRAE Recommended		Acceptable	
		Air quality		2. Other (Notes required)		Acceptable		EN779 G4 filtering and continuous gas particulate monitoring		2. Other (Notes required)		Acceptable	
		Temperature rise		1. 512 Deg C DeltaT		Optimum				1. 512 Deg C DeltaT		Optimum	
		Cabinet blanking of open space		3. Mandatory		Optimum				3. Mandatory		Optimum	
CABLING		Cabling infrastructure pathways		3. Top and Front of rack fed		Optimum		customers are offered to host their network equipment in our MMR, anything goes from there. The MMR has backup up by diesel generators		3. Top and Front of rack fed		Optimum	
		Overhead Network Infrastructure containment levels		2. 3 Levels (Inter Pod cabling, Inter-Pod cabling)		Acceptable		as per customer requirements		3. 3 Levels (Inter Pod cabling, Inter-Pod cabling, ODB cabling)		Optimum	
		Fibre Type (if installed)		2. Installed Per Customer Requirements		Acceptable				2. Installed Per Customer Requirements		Acceptable	
		Fibre connection presentation (if installed)		2. Installed Per Customer Requirements		Acceptable				2. Installed Per Customer Requirements		Acceptable	
CONSIDERATIONS (For information only)		Parameter		Result		Notes		Parameter		Result		Notes	
SERVICE		Replacement PSU Modules		2. Secure storage available		Acceptable				2. Secure storage available		Acceptable	
		Replacement BBU Modules		2. Secure storage available		Acceptable				2. Secure storage available		Acceptable	
		Option to monitor PSUs and BBUs		3. Yes		Optimum		We currently offer monitoring services for equipment using Modbus or SNMP protocols		3. Yes		Optimum	
		Remote hands for PSU and BBU replacement or expansion		3. Yes		Optimum		We currently offer remote hands services for standard IT equipment. Following customer requirements, we will train our DC Technicians for OCP specific hardware		3. Yes		Optimum	
		Remote hands for OCP IT hardware replacement or expansion		3. Yes		Optimum		We currently offer remote hands services for standard IT equipment. Following customer requirements, we will train our DC Technicians for OCP specific hardware		3. Yes		Optimum	
EFFICIENCY		Site Operations Standards		2. Other (Notes required)		Acceptable		As per customer SLA requirements		2. Other (Notes required)		Acceptable	
		Site PUE Monitoring		3. Continuously monitored		Optimum				3. Continuously monitored		Optimum	
		Site Design PUE		3. <1.2		Optimum				3. <1.2		Optimum	
		Site Annualized PUE Current Achievement		2. Other (Notes required)		Acceptable		Will be provided after one year of operation.		2. Other (Notes required)		Acceptable	
		Site WUE Monitoring		2. Other (Notes required)		Acceptable		Current design doesn't use water.		3. Continuously monitored		Optimum	
		Site CUE Monitoring		3. Continuously monitored		Optimum				3. Continuously monitored		Optimum	
OPENNESS		PUE Published		2. Available upon request		Acceptable				2. Available upon request		Acceptable	
		Facility Design Drawings & Files		2. Available to view upon request		Acceptable				2. Available to view upon request		Acceptable	