| OCP Ready Colo Facility Site Assessment | Stellium DC1 | | | |
|---|--|------------|---|--|
| Self Assessment Status: | COMPLETE-MEETS REQUIREMENTS | | | |
| Data Center Location Name | Stellium Datacenters DC1 | | | |
| Data Center Location Address | 9 Cobalt Park Way, Wallsend, Tyne & Wear, NE28 9EJ | | | |
| Site Description: A rectiment space (white space) weat | 4,256 SQ. M/S Tier III standard datacentre with 15MW of power of which IT power = 11MW, Design PUE of 1.2 for IT halls 2, 3 &4. IT hall 1 has a design DVS_SIZE_SIZE_SIZE_SIZE_SIZE_SIZE_SIZE_SIZ | | | |
| Site Description, critical in Power | CLS 1 subsea cable landing stations linking USA with UK/mainland Europe and Ireland, CLS 2 subsea cable landing stations linking UK/Norway & mainland Europe, NCI-IX internet exchange dual MMR's 12 national network carriers 144 fibre cable AnkM MAN around | | | |
| Site Description: Network Provider Availability | Newcastle to Stellium DC | | | |
| Site Description: Facility Features | 100% green energy as standard, metered power to all clients, directly supplied from 275kV power grid, No uncontrolled power outages in Cobalt campus in 20 Years. No power reservation fees. | | | |
| Site Description: Other Services | NOC service - remote hands and technical support, build room, client storage, client hot desks | | | |
| Date Original Assessment is Completed | 4/6/23 | | | |
| REQUIREMENTS - Attribute | Parameter Result Notes | | | |
| ACCESS | | | | |
| Building Access | 1. Loading dock with lift or leveler | Optimum | There is a loading dock in place with a leveller to facilitate roll off/roll on of client racks. | |
| Delivery pathway, Loading dock to Goods in | 1. ≥2.7m (108in) H x ≥2.4m (96in) W x ≥2.4m (96in) D unobstructed access and threshold free | Optimum | The pathway from loading dock to white space is unobstructed 3M High X 4M wide and threshold free | |
| Delivery pathway, Goods in to White space | 1. ≥2.4m (96in) H x ≥1.8m (72in) W unobstructed access and threshold free | Optimum | The pathway from the delivery bay to white space is unobstructed with no thresholds, 2.7M High X 1.8M wide doors enroute. | |
| Corridor floor rolling load | 2. ≥459kg (1012lb) (4.5kN) (notes required) | Acceptable | 20+kN (concrete floor), Sector 1 First floor 4.5kN, Sectors 2, 3 & 4 - 5kN, will require route plating. | |
| Unboxing/pre-staging/storage area floor uniform load | 1. ≥1221kg/m2 (250lb/ft2) (11.97kN/m2) | Optimum | Ground floor 20+kN (concrete floor) | |
| Unboxing/pre-staging/storage area floor concentrated load | 1. ≥680kg (1500lb) (6.67kN) | Optimum | 20+kN (concrete floor) | |
| RAMPS | | | | |
| Gradient | 1. Not Applicable - No Ramps Required | Optimum | | |
| Width | 1. Not Applicable - No Ramps Required | Optimum | | |
| Landing area | 1. Not Applicable - No Ramps Required | Optimum | | |
| Railings | 1. Not Applicable - No Railings Required | Optimum | | |
| LIFTS / ELEVATORS | | | | |
| Weight loading | $1. \geq 1500 \text{ kg}$ (3300 \text{ kg}) | Optimum | 3500kG Lift | |
| Door height | (not internal cabin) | Optimum | 2700MM | |
| Width | 1. ≥1.5m (60in) Unobstructed door opening width | Optimum | 1800MM | |
| Depth | 1. ≥1.5m (60in) Unobstructed cabin depth | Optimum | 3000MM | |
| IT TECHNICAL SPACE (WHITE SPACE) | | 0 | Sector 1 - 4.5kN | |
| Floor rolling load | 1. ≥680kg (1500lb) (6.67kN) | Optimum | Sectors 2, 3 & 4 - 5kN | |
| Floor uniform load | 1. ≥1221kg/m2 (250lb/ft2) (11.97kN/m2) | Optimum | Sector 1 - 12kN Sector 2, 3 & 4 - 20kN | |
| Floor concentrated load | 1. ≥680kg (1500lb) (6.67kN) | Optimum | Sector 1 - 4.5kN per 25MM ² Sector 2, 3 & 4 - 5kN | |
| Finished floor to ceiling height | 2. ≥3.1m (124in) | Acceptable | Sector 1 6M First Floor, Sector 2 - 4M first floor sectors 3&4 3.5M Ground floor | |
| Access floor clearance | 2. <900mm (36in) (if used for cooling notes required) | Acceptable | 825MM clear internal depth | |
| ELECTRICAL | | | | |
| Number of independent circuits to the rack | 1. 2N (A+B) | Optimum | Overhead busbars deployed in N+N layout | |
| Maximum circuit capacity | 1. 3¢ 32A/230V | Optimum | 63A single/3 phase | |
| Circuit voltage | 1. 400/230 VAC nominal | Optimum | 400/230V | |
| Circuit frequency | 1. 47-63 Hz | Optimum | 50Hz | |
| Power receptacle / WIP Type | 1. IEC60309 532R6W | Optimum | IEC60309 532R6W | |
| Circuit receptacle location | 1. Overhead | Optimum | Overhead Busbars | |
| Upstream UPS options | 1. UPS and non UPS feeds available | Optimum | UPS & Non UPS available | |
| Rack-based batteries permitted | 1. Allowed | Optimum | Agreed | |
| Generator load acceptance time | 1. <60 seconds | Optimum | power down fully restored 30 Seconds | |
| COOLING | | | | |
| Rack airflow direction | 1. Front to Back | Optimum | Agreed | |

| Air containment methods | 1. Hot aisle containment or rack chimney | Optimum | Cold Aisle containment in sector 1. Hot Aisle Containment in sectors 2, 3 & 4. |
|---|--|-------------------------------------|---|
| Maximum rack density | 1. ≥12kw | Optimum | 60+kW with rear door coolers, 15kW with air only |
| Minimum cold aisle width | 1. ≥1500mm (60in) | Optimum | 1800MM for 15kW air only |
| Minimum free width cold aisle (Inside cage) | 1. ≥1200mm (48in) | Optimum | 1800MM for 15kW rack deployment |
| Minimum hot aisle width | 1. ≥1200mm (48in) | Optimum | 1200MM for 15kW rack deployment |
| Inlet air conditions | 1. ASHRAE Class A1 Allowable | Optimum | 24°C |
| Air quality | 2. Other (Notes required) | Acceptable | We provide fresh air filtration to F7 standard to pick up particles from 1 - 10 microns. |
| Temperature rise | 1. ≥12 Deg C DeltaT | Optimum | Agreed |
| Cabinet blanking of open space | 1. Mandatory | Optimum | Agreed |
| CABLING | | | |
| Cabling infrastructure pathways | 1. Top and Front of rack fed | Optimum | Cabling infrastructure is overhead, with layout custom designed to customer floor layout and requirements. |
| Overhead Network Infrastructure containment levels | 1. 3 Levels (Intra-Pod cabling; Inter-Pod cabling; OOB cabling) | Optimum | 3 levels of overhead network cabling trays is the designed standard type. Trays are deployed per customer fit-out requirements. |
| Fibre Type (if installed) | 2. Installed Per Customer Requirements | Acceptable | OS2 fiber is standard. Can also install alternative cabling plants custom per customer requirements. |
| Fibre connection presentation (if installed) | 2. Installed Per Customer Requirements | Acceptable | LC Duplex and MPO is standard. Can also install alternative cabling plants custom per customer requirements |
| CONSIDERATIONS (For information only) | Parameter | Result | Notes |
| SERVICE | | | |
| Replacement PSU Modules | 2. Secure storage available | Acceptable | Secure storage is available on site |
| Replacement BBU Modules | 2. Secure storage available | Acceptable | Secure storage is available on site |
| Option to monitor PSUs and BBUs | 1. Yes | Optimum | Options are available to monitor on our existing infrastructure |
| Remote hands for PSU and BBU replacement or expansion | 1. Yes | Optimum | Available |
| Remote hands for OCP IT hardware replacement or expansion | 1. Yes | Optimum | Available |
| EFFICIENCY | | | |
| Site Operations Standards | 1. OCP Critical Facility Operations Guidelines | Optimum | We employ OCP Critical Facility Operations Guidelines. We employ emaint as our PPM asset based maintenance tool. This calenderises all maintenance activities and issues work orders against each activity. All PPM or reactive based maintenance is supported by RAMS. Clients are given full visibility of scheduled maintenance activity to coordinate/avoid potential conflicts. |
| Site PUE Monitoring | 2. Periodically measured | Acceptable | We monitor our PUE on a monthly basis and report internally on the results. |
| Site Design PUE | 2. <1.5 | Acceptable | Sector 1 - Design PUE 1.24, annualised at 1.35. Sectors 2, 3 & 4 Design PUE of 1.2 Annualised. |
| Site Annualized PUE Current Achievement | 2. <1.5 | Acceptable | Sector 1 - Design PUE 1.24, annualised at 1.35. Sectors 2, 3 & 4 Design PUE of 1.2 Annualised. |
| Site W/LE Monitoring | | | |
| Site WOE MONITORING | 1. Continuously monitored | Optimum | Sector 1 - No cooling water required Sectors 2, 3& 4 will employ continuous monitoring |
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| Site WOE Monitoring Site CUE Monitoring OPENNESS | 1. Continuously monitored 2. Periodically measured | Optimum Acceptable | Sector 1 - No cooling water required Sectors 2, 3& 4 will employ continuous monitoring We monitor our CUE on a monthly basis and report internally on the results |
| OPENNESS PUE Published | 1. Continuously monitored 2. Periodically measured 2. Available upon request | Optimum Acceptable Acceptable | Sector 1 - No cooling water required Sectors 2, 3& 4 will employ continuous monitoring We monitor our CUE on a monthly basis and report internally on the results We carry out Monthly checks on our PUE and report internally on the findings |