



ENVELOPE A – TECHNICAL PROPOSAL

TENDER NO: PROJ-ICT-085

DC & SUPPORTING INFRASTRUCTURE 2023

REQUEST FOR PROPOSAL (RFP) PACK

FOR THE SUPPLY AND CONFIGURATION OF DATA CENTRE & SUPPORTING
INFRASTRUCTURE WITH MAINTENANCE FOR THE EAST LONDON INDUSTRIAL
DEVELOPMENT ZONE

START DATE: 24th November 2024

CLOSING DATE: 22nd January 2024 (12h00)

NAME OF TENDERER: _____

TENDERER'S ADDRESS:

CHECKLIST FOR SUBMISSIONS

ITEM	TICK
Supporting Documentation To Be Submitted	
CIPPC Registration	
Share certificate	
Proof of disability	
Proof of Office Location (lease agreement, statement of account, from the municipality and/or confirmation of address/clearance from the municipal councilor)	
Accredited Valid Original or Certified B-BBEE Certificate for Generic companies for EMES and QSE's - Sworn Affidavit confirming annual turnover and B-BEE management split of company	
Company Profile	
Proposed Solution and Project Approach	
Project Team Skills Matrix \ Organogram and Curriculum Vitae's	
Three Completed Reference Letters (Annexure 2)	
Supplier Development Plan (If applicable)	
Compulsory Documentation To Be Submitted	
Completed and Signed ELIDZ Procurement Handbook with all relevant supporting documentation (Tax clearance etc.)	
CSD Registration Certificate	

Please Note: All the above documents must be submitted with Envelope A - Technical Proposal.

The price schedule and proposed solution costing must be submitted with Envelope B – Financial Proposal.

RFP PACK CONTENTS

1. **Section A:** General Guidelines
2. **Section B:** Requirements Specification
3. **Annexure 1:** Procurement Handbook
4. **Annexure 2:** Reference Letter
5. **Annexure 3:** Enterprise Development Agreement



SECTION A: General Guidelines

FOR THE SUPPLY AND CONFIGURATION OF DATA CENTRE & SUPPORTING
INFRASTRUCTURE WITH MAINTENANCE FOR THE EAST LONDON INDUSTRIAL
DEVELOPMENT ZONE

1 EVALUATION CRITERIA AND COMMERCIAL EQUITY GOALS

The East London Industrial Development Zone (ELIDZ) supports national transformation goals and strives to target its procurement to create opportunities for Historically Disadvantaged suppliers and service providers. In awarding this tender, preference will be given to companies with a better rating in terms of contributions towards Broad Based Black Economic Empowerment (BBBEE).

The “tender” will be evaluated in accordance with the ELIDZ Procurement Policy using the 80/20 rule i.e. 80 of evaluation points will be based on price competitiveness and 20 will be based on BBBEE status. The following formula is used:

Calculation of the points for Price:

$$Ps = R \times \left[1 - \frac{Pt - Pmin}{Pmin} \right]$$

Where:

- Ps = Points scored for price of tender under consideration
- R = Percentage of the price
- Pt = Rand value of tender under consideration
- Pmin = Rand value of lowest acceptable tender
- R must be up to a maximum of 80

Score Breakdown:

- Price (R) = 80 points
- Specific goals = 20 points

A maximum of 10 or 20 points may be awarded to a tenderer for the specific goal specified for the tender. The points scored for the specific goal must be added to the points scored for price and the total must be rounded off to the nearest two decimal places.

Subject to section 2(1)(f) of the Act, the contract must be awarded to the tenderer scoring the highest points.

Preferential and specific goals shall be as per below may include:

- (a) Historically disadvantaged individuals’ companies (51% Black owned)
- (b) Women (51% Black Women Owned) companies.
- (c) Persons with disability owned companies
- (d) SMMEs
- (e) Service providers located in Eastern Cape Province

(f) Youth

(g) Any other RDP goal or preference points in favor of historically disadvantaged individuals, may be added

The tender documents shall stipulate—

(a) the applicable preference point system as envisaged in regulations

(b) the specific goal in the invitation to submit the tender for which a point may be awarded, and the number of points that will be awarded to each goal, and proof of the claim for such goal.

Tenderers are required to submit a Valid original or certified B-BBEE Certificate issued by verification agency accredited by SANS for the Generic Suppliers, for QSE's and EME's Sworn Affidavit signed under oath confirm ownership status. Failure to submit a valid B-BBEE certificate and/or sworn affidavit may result in zero points being awarded for preference.

Unincorporated Joint Ventures are required to compile a consolidated verified BBBEE certificate in order to achieve Preferential Points

The following table shall be used to convert the Specific goals criteria into points.

Table: Specific Goals Points Conversion

Estimated Rand Value inclusive of Vat	Specific Goals and Point allocation
Above R1 000 000 up to R50 000 000	80 points for price
	10 points - 51% and above Black owned suppliers 5 points - 25% up to 50% Black owned suppliers 0 points below 25% Black owned suppliers
	5 points for Eastern Cape Based suppliers 0 points outside Eastern Cape
	1 point for 51% and above Youth owned suppliers
	1 point for 51% and above Women owned suppliers.
	3 points for SMME's (EME or QSE)

Companies with annual turnover less than R10million (Exempted Micro Enterprises or EME's) are automatically awarded a level 4 contributor status, unless the EME is Black Owned (more than 50% black ownership), in which case the enterprise will have a level 2 contributor status. EME which is 100% black owned qualifies for a level 1 contributor. In awarding the EME status, the ELIDZ shall accept a letter from an accounting firm or SARS confirming a company's turnover as less than R10m as well as a sworn affidavit confirming annual turnover and level of black ownership.

B-BBEE certificates issued by non-accredited verification agencies will not be accepted as valid proof of a company's B-BBEE status.

The tender will be awarded to the bid with the highest number of points. A tender may be awarded to a bidder that did not score the highest number of points if reasonable and justifiable grounds exist.

Any contract offered by the ELIDZ will be based on the correctness of information submitted by the service providers. Any misrepresentation of facts by a service provider may lead to disqualification. Should such misrepresentation be uncovered after the commencement of the contracted work, the ELIDZ reserves the right to terminate the contract and recover all payments made to that service provider and any costs that may have been incurred in the process.

ELIDZ reserves the right to have the tenderer's Black Economic Empowerment Credentials verified by an independent agency. (Procurement Handbook – Annexure: 1 must be fully completed and supplementary information may be completed by service providers with a turnover of less than R10m and be accompanied by letter from an accounting firm or SARS confirming the company's or sworn affidavit turnover is less than R10m).

In instances of a joint venture, each participating person and/or company and/or firm must complete and submit Annexure 1 (Procurement Handbook) with the tender together with all profit sharing percentage information.

4 AREA OF SERVICE/POINT OF DELIVERY

The delivery of services will be required at the ELIDZ office, Lower Chester Road, Sunnyridge, East London.

5 SPECIAL CONDITIONS APPLICABLE TO THIS CONTRACT

Service Providers must note the following special conditions of contract will apply to this contract:

Modification of any applicable terms of reference of this contract must be mutually agreed between the parties and reduced to writing.

- VAT: Unless otherwise stated all prices will be inclusive of **Value Added Tax**.
- All services provided must comply and be in accordance with pertinent laws and policies of government.

Where the SERVICE PROVIDER has incurred any liability to the CLIENT, whether arising from or under this Agreement or otherwise howsoever arising, the CLIENT may, without notice to the SERVICE PROVIDER set-off the amount of such liability against any liability of the CLIENT to the SERVICE PROVIDER arising from or under this Agreement, whether either such liability is liquidated or unliquidated, present or future, accrued or contingent, unless otherwise agreed to in writing by the CLIENT.

In the event that the successful Bidder has been awarded the contract with value above R 5 000 000.00 for the same goods/services on a consecutive basis, the successful Bidder will be required to submit a Supplier development plan for SMMEs to be agreed with the ELIDZ.

Where there is no designated sector, ELIDZ may decide to include a specific bidding condition that only locally produced goods or services with a stipulated minimum threshold for local production and content, will be considered, on condition that such prescript and threshold(s) are in accordance with the specific standards determined by the DTI in consultation with the National Treasury.

6 COMPANY PROFILE

A brief company profile is required, to assist ELIDZ in assessing your capabilities, capacity and competitive advantages.

7 INADEQUATE SERVICE LEVELS AND PERFORMANCE

In instances of transgression of a more serious nature, should the ELIDZ during the contract period for any reason regard the Service provider's service levels and performance against this contract as being inadequate or not to the ELIDZ's satisfaction, the details will be reduced to writing, clearly headed " Inadequate performance" and sent to the service provider. In the event that the service provider is unable to remedy the complaints to the ELIDZ's satisfaction

within 14 days of such notice of inadequate performance, ELIDZ reserves the right to immediately cancel this contract and recover costs in terms of the Service Agreement.

8 SERVICE LEVEL AGREEMENT

The successful tenderer will be required to enter into a written Service level agreement with the ELIDZ which will be based on the draft Agreement set out herein in Section C, which will include Section A and B and include such terms and conditions as Management may require or prescribe to give effect to in terms of its legal obligations.

9 PRICE BASIS

ELIDZ requires the tender price to remain firm for the validity period of ninety (90) days after the closing date of the tender. The tender price shall be in South African Rand.

Where prices are subject to variation it must be noted that no prices are to be revised or invoiced, without prior mutual agreement and official modification of the contract.

10 PAYMENT TERMS

A maximum payment processing period of thirty (30) days will be enforced. The thirty-day period is effective from the date a complete claim is received. A complete claim requires the following to be processed:

- Original invoices;
- Original covering letter of approval by the consultant where applicable;
- Original covering letter of approval by the relevant ELIDZ official where applicable;
- Statement of accounts.

All information relating to the ELIDZ's customers (and potential customers), systems, operating procedures etc. is confidential and to this end, the successful tenderer will be required to enter into a Confidentiality Agreement with the ELIDZ.

11 SUFFICIENCY OF TENDER

The tenderer shall satisfy itself before tendering, as to the correctness and sufficiency of its tender for the project. The tenderer shall ensure that the rates and prices it has stated in the schedules cover all the obligations included in the tender and sufficient for the proper completion of the project.

12 TENDERER'S CONDITION

All tenderer's shall be deemed to have waived, renounced and abandoned any terms and conditions printed or written upon any stationery used by the tenderer for the purpose of, or in connection with the submission of this tender.

13 DISQUALIFICATION

Respondents are advised that should there be any contact with ELIDZ staff and the Adjudication Team which could in any way be seen or deemed to constitute a conflict of interest, bribe or otherwise influence the process and the outcome thereof, will result in immediate disqualification.

It must be stressed that any queries relating to this tender must be in writing and within the period of one week from the date of the briefing session, and must be addressed to the Project Manager only. Respondents are not to communicate in any manner or form whatsoever with members of ELIDZ personnel about the RFP until the winning service provider has been selected and such selection has been formally communicated to the public. Any such communications by Respondents with ELIDZ personnel or with persons other than the Project Manager may prejudice a Respondent, and may lead to disqualification from consideration for selection. The ELIDZ cannot accept responsibility for the accuracy of any information obtained outside the formal communication process as stipulated.

Any misrepresentation, in particular as it relates to the truthfulness of involvement of HDI's at both ownership level, management and operational level will also result in immediate disqualification.

14 SHEQ COMPLIANCE (IF APPLICABLE)

Before starting work, service providers must produce the following for approval:

1. Project specific Safety, Health & Environmental (SHE) Risk assessments,
 - a. SHE Risk assessments to include activity specific risks, service providers risk to the ELIDZ and the ELIDZ risk to them;
2. SHE plans and safe work procedures must be developed to respond to project specific activities as well as to identified risks: for example (waste management plans, fall protection plans etc.);
3. List of applicable PPE required;
4. Letters of Good standing with workman's compensation where applicable;
5. Applicable legal appointments - as required;

All of the above must be included in a SHE file together with:

1. Copy of scope of work;
2. Copy of appointment;
3. PPE issue register;
4. Requisite training / competency certificates where applicable;
5. Medicals as applicable to the nature of the work (for example, there must be medicals for employees who will be working at heights to confirm that they are fit to work at heights);

15 ACCEPTANCE OF TENDER IN WHOLE OR IN PART

The ELIDZ reserves the right to accept the complete tender as submitted by the tenderer or alternatively, to accept only specific “areas of work” (or parts of “areas of work”) of the tender as it sees fit.

Accordingly tenderer’s are advised to ensure that all prices submitted against each “area of work” are sufficient to cover the tenderer’s entire obligation as defined in these documents, required to provide each specific “area of work”.

16 SUPPORTING DOCUMENTATION TO BE SUBMITTED

ITEM	TICK
Supporting Documentation To Be Submitted	
CIPC Registration	
Share certificate	
Proof of disability	
Proof of Office Location (lease agreement, statement of account, from the municipality and/or confirmation of address/clearance from the municipal councilor)	
Accredited Valid Original or Certified B-BBEE Certificate for Generic companies for EMES and QSE’s - Sworn Affidavit confirming annual turnover and B-BEE management split of company	
Company Profile	
Proposed Solution and Project Approach	
Project Team Skills Matrix \ Organogram and Curriculum Vitae’s	
Three Completed Reference Letters (Annexure 2)	
Supplier Development Plan (If applicable)	

17 COMPULSORY DOCUMENTATION TO BE SUBMITTED

The following documentation is considered as compulsory documentation and is required to be submitted with your tender. Failing to submit the compulsory documentation will lead to disqualification due to non-responsiveness.

ITEM	TICK
Compulsory Documentation To Be Submitted	
Completed and Signed ELIDZ Procurement Handbook with all relevant supporting documentation (Tax clearance etc.)	
CSD Registration Certificate	
Valid Tax Clearance Certificate or SARS PIN	
JV Participation Documentation (If applicable), JV Agreement and consolidated BBBEE	

18 POPIA

By submitting this tender, the bidder hereby consents to providing the ELIDZ with personal information as provided in the Protection of Personal Information Act 2013 (POPIA).

The ELIDZ undertakes to:

1. It will take all reasonable steps and precautions to preserve the integrity of bidders Personal Information and to prevent any corruption or loss of such data.
2. It will not do any of the following: copy, compile, collect, collate, process, store, transfer, alter, delete, interfere with or in any other manner use the bidders Personal Information as described in the Act for any purpose other than with the express prior written consent of the bidder.
3. Utilize the personal information provided for the purposes of assessment of the tender submitted by the bidder and contracting with the successful bidder as the case may be.
4. It will immediately inform the bidder in writing if any Personal Information relating to it has been compromised. The ELIDZ undertakes to immediately inform the bidder in writing as to how it will manage such compromise and what steps will be taken to rectify the situation.
5. Due and reasonable care of the bidder's personal information and not to share the said personal information with any third party unless you have authorised such disclosure or the release of such information is required by law.
6. At all times strictly comply with its obligations under Data Protection Legislation.
7. Subject to legislative, regulatory, contractual and other legitimate conditions, the respective bidder has certain rights in terms of how their information is processed. The bidder can request access to information or guidance on how to lodge a complaint from or direct a request to exercise afforded rights to the ELIDZ Information Officer, or his/her deputy/ies, or the Information Regulator.

8. It will maintain guidelines, policies or procedures for the retention or destruction of data and will retain it only as long as necessary for the identified purposes or to meet legal requirements or policies.
9. It shall implement and maintain, at its cost and expense, appropriate, reasonable technical and organisational measures to prevent loss of, damage to or unauthorised destruction of Personal Information and unlawful access to or Processing of Personal Information.

The ELIDZ shall not incur any liability for costs, loss or damage arising from the use of inaccurate or incomplete data provided by or on behalf of the bidder.

19 METHOD OF SUBMISSION

The RFP document will be available for download at no cost on the 24th November 2023 at 12h00 (Noon) from the East London Industrial Development Zone website: www.elidz.co.za under Opportunities >> Tenders.

All tender documents are to be submitted online at <https://tenderportal.elidz.co.za>

No late tenders will be accepted.

Telegraphic, telephonic, telex, facsimile and e-mail tenders will not be accepted.

The ELIDZ reserves the right:

1. To negotiate with the successful tenderer and/or
2. modify the RFP's goods / service(s) and request Respondents to re-bid on any changes;
3. reject any Proposal which does not conform to instructions and specifications which are detailed herein;
4. disqualify Proposals submitted after the stated submission deadline;
5. disqualify Proposals submitted that do not meet the goods or services specifications;
6. disqualify Proposals submitted that do not meet the necessary functionality where required;
7. not necessarily accept the lowest priced Proposal;
8. reject all Proposals, if it so decides;
9. place an order in connection with this Proposal at any time after the RFP's closing date;
10. split the award of the order/s between more than one Supplier/Service Provider; or
11. make no award at all;
12. ELIDZ reserves the right not to award business to the highest scoring bidder/s where objective criteria justify the award to another bidder.
13. The ELIDZ does not bind itself to accept your (or any) proposal, nor will it disclose any information regarded as confidential.



SECTION B: Requirements Specification

FOR THE SUPPLY AND CONFIGURATION OF DATA CENTRE & SUPPORTING
INFRASTRUTURE WITH MAINTENANCE FOR THE EAST LONDON INDUSTRIAL
DEVELOPMENT ZONE

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1. Introduction

The ELIDZ is a Greenfield development project that is part of a sub-regional economic growth and employment creation initiative driven by the government's micro-economic reform strategy, as implemented by the South African Department of Trade and Industry. Over 400 hectares of prime land has been transformed into a world-class industrial location.

The ELIDZ is the operator of the zone, an entity that exists to help manufacturers to become globally competitive through the development and efficient management of a modern, purpose built industrial location, which offers investing industries a streamlined business environment enhanced by a range of supporting services.

The ELIDZ is a prime industrial park in South Africa. It is perfectly positioned for light industry manufacturers that are investing from R10 million (+/- \$1.2 million) upwards. The zone is specially developed for growth-oriented manufacturers in search of ultimate global competitiveness. The zone focuses on streamlining business operations and engineering operational efficiencies for located industries.

The zone is already operational and currently houses a number of manufacturers that supply products for the local and international markets. The zone is situated on the Buffalo City's West Bank, adjacent to the existing East London port. The ELIDZ includes a Customs Control Area to allow for a duty-free importation of manufacturing inputs utilized in the production of export products as well as providing access to a variety of general sector-specific industrial investment incentives.

The zone has six individually fenced sub-zones, each designed to serve specific manufacturing needs. It is characterized by excellent internal roads and a newly built dual carriageway designed to carry both light and heavy vehicles including 22m-long interlines.

Boasting 150 fully serviced sites with access to all utilities including the highest calibre ICT infrastructure and systems and all are within close proximity to key transport networks. The ELIDZ is on a mission and has already succeeded in establishing local and global export-oriented industries within the zone.

The ELIDZ offers complete solutions and streamlined business activity for companies doing business in a number of sectors. These include:

- Automotive
- ICT and Electronics
- Agro-processing
- Pharmaceuticals
- Energy and Advanced Manufacturing
- Marine Aqua-culture
- Business Process Outsourcing and Offshoring
- Logistics
- General Manufacturing

ELIDZ Forming Part of the New Special Economic Zone Programme

The ELIDZ is an initiative under the South African Government's Special Economic Zones (SEZ) Programme.

SEZ's are geographically designated areas of a country set aside for specifically targeted economic activities, supported through special arrangements (that may include laws) and systems.

SEZ's are designed to be conduits for the creation of an appropriate environment for foreign direct and domestic investment and the development of strategic industrial capabilities. Companies that locate in the SEZ have access the following incentives:

- VAT and customs relief, if located within a CCA;
- Employment tax incentive;
- Reduced corporate income tax rate;
- Accelerated depreciation.

2. Scope

2.1. The Scope Of This RFP Includes The Following:

The East London IDZ would like to appoint a service provider for the supply, installation and configuration of Schneider Electric data centre and supporting infrastructure with maintenance for a one-year period, unless otherwise specified.

The following areas are covered with a detailed scope and requirements in Section B, point 4.

- General
 - Basic Device Configurations
 - Labelling and Asset Tagging
 - Uptime Tier III Audits & Commissioning
 - Packaging and Waste Disposal
 - Earthing
- Schneider Electric EcoStruxure Data Centre Infrastructure
- Corning Fiber Optic Infrastructure
- FiberGuide Infrastructure
- CISCO Network Infrastructure and Cabling
- Infrastructure Maintenance & Support
 - Support Terms and Definitions
 - Fault Logging & On-site Support
- Reporting
- Skills Transfer, Processes & Documentation
- Project Management

Travel and accommodation costs need to be included where applicable.

2.2. The Scope Of This RFP Excludes The Following:

The following is excluded under this project:

- Any infrastructure not listed in Section B, point 4 or procured after the commencement of this contract will be managed separately;
- Licensing for Microsoft, VMware or other products not listed in Section B, point 4.
- Software or Operating Systems upgrades whereby a side-by-side configuration or migration is required will be managed separately or as a project.
- Fiber from the meet-me room to the existing zone blown fiber infrastructure as well as existing data centres.

3. Considerations

3.1. Functionality Evaluation Matrix

The score achieved for quality functionality will be assessed using the following criteria, each of which will be scored individually up to the maximum number of points indicated (failure to submit the relevant information will result in a zero score for that section).

The following table will be used to guide the evaluation committee and score each submission:

Evaluation Areas	Evaluation Criteria	Total Max Points	Item Max Points	Evaluation Description
Project Approach	Fault Logging	20	20	Evidence of a service desk provided for fault logging
			0	No service desk provided for fault logging
	Project Management	15	15	Draft project plan provided with milestones and timeline
			0	No draft project plan provided

Evaluation Areas	Evaluation Criteria	Total Max Points	Item Max Points	Evaluation Description
Service Providers Expertise and Resources	Skills Competency	25	25	Project team members with relevant certifications in both Data Centre and Fiber technologies: Schneider Electric Cooling and Power field service certified, relevant specific SE Products and appropriate Structured Data Centre Fiber certifications
			20	Project team members with relevant certifications in both Data Centre and Fiber technologies: Schneider Electric Cooling and Power field service certified and appropriate Structured Data Centre Fiber certifications
			0	Project team members have no relevant certifications to support the project or only in one discipline
		20	20	Project team members have an average of 10 years or more relevant working experience within the data centre power, cooling and structured data centre fibre disciplines relating to the above certifications
			10	Project team members have an average of 5 years or more relevant working experience within the data centre power, cooling and structured data centre fibre disciplines relating to the above certifications
			0	Project team members have less than 5 years relevant working experience within the data centre power, cooling and structured data centre fibre disciplines relating to the above certifications
	References	20	20	3 Relevant references provided on reference templates. This combined average score will then be translated to a final score out of 20.
			0	Less than 3 relevant references provided

NB: Minimum points required to proceed to the next evaluation phase is 70 out of 100.

3.2. Financial Considerations

Payment milestones will be attached to the service level agreement.

The total bid price from the service provider for this project can't be exceeded. Keeping in mind the price is dependent on the Rand \ Dollar exchange rate, all service providers need to ensure that the rates and price tendered sufficiently covers the service provider's obligations under this project and will allow for the proper completion of the project.

3.3. Time Constraints

<u>Milestones</u>	<u>Target Date</u>
Advert and Issuing of RFP	: 24 th November 2023
Compulsory Briefing Session	: 10h00, 07 th December 2023
Deadline for Questions	: 16h00, 15 th January 2024
Response to Questions	: 16h00, 16 th January 2024
RFP Submission Due Date	: 12h00, 22 nd January 2024

The East London Industrial Development Zone would like this project to commence as soon as possible after approval and the signing of the service level agreement.

3.4. Area of Service & Facilities

The delivery of services will be required at the East London IDZ offices, Lower Chester Road, Sunnyridge, East London. We currently have no remote or branch offices.

Onsite storage and office space will be made available if and when required.

Delivery of the equipment to our new data centre needs to be aligned with either sectional completion or handover of the entire site. The renovation of the new data centre is expected to be completed by the end of January 2023.

4. Detailed Requirements

4.1. General

Service providers are required to provide a copy of all the back-to-back agreements with the Original Equipment Manufacturers (OEMs) which will be attached after the award of the project to the SLA as an addendum. Where no back-to-back agreement exists, proof of the warranty, maintenance and support is to be provided to the East London IDZ.

All back-to-back agreements are to be registered in the East London IDZ's name with administrator access to the portal for device management, support and relevant downloads. This access will be shared with the appointed service provided.

Service providers are required to detail their value offering for each infrastructure area in addition to the back-to-back agreements with the OEMs.

The East London IDZ is aware that all software support related calls are not bound to the OEM's specified repair times and is a best effort service, however Servicer Providers are required to show that every effort was made to resolve the call as close as possible to the detailed requirement.

A critical business service interruption is defined as a service failure whereby the event is rated as **High Impact** and **High Urgency** resulting in the East London IDZ needing to activate either its Business Continuity or Disaster Continuity Plans. The East London IDZ has made every effort to ensure all essential ICT services are protected with by means of high availability or N+1 designs, thus substantially reducing the risk of a critical business service interruption event.

All firmware, software and operating systems relating to the infrastructure detailed in Section B, point 4, needs to be updated by an adequately qualified engineer biannually or whenever an OEM releases a critical update. Software or Operating Systems upgrades which can be classified as simple or in place needs to be included with firmware reviews and the biannual update cycle. Please see exclusions noted in Section B 2.2.

Service providers are required to detail the storage location or locations of the replacement hardware for each infrastructure area.

Service providers are required to improve upon the content within the definition tables if required so that both parties will have a clear understanding of the different maintenance and support offerings.

A soft copy of the infrastructure lists plus the definition tables will be provided upon request via email for easy reference.

4.1.1. Basic Device Configurations

All basic device configurations, such as IP addresses, usernames, passwords, NTP, SNMP, will be discussed and provided during the project kick-off or planning phase of the project.

4.1.2. Labelling and Asset Tagging

Service providers need to label all equipment and cables appropriately.

Labelling needs to be consistent with Uptime Tier III requirements and the following needs to be followed as an initial guide:

- All PDU's need to be labelled to identify redundant power feeds \ circuits, A Feed and B Feed as well circuit breaker numbering.
- All cabling, UTP, fiber and power cables to labeled on both ends.
- All racks, rows and pods to be clearly labelled to ensure clients are able to find their allocated rack or services providers are able to locate and maintain infrastructure.
- All major assets to be labeled with assigned hostnames.

The ELIDZ assets team will provide asset tags which need to be allocated and captured with other identifiable information forming a comprehensive asset list, this will also form part of the as-built documentation.

4.1.3. Uptime Tier III & Commissioning

The Uptime Institute has been appointed to provide Data Centre Tier III Design certification for the ground floor of the facility as well as Data Centre Tier III Construction certification for hall 2.

Therefore, as part of the commissioning process, the appointed service provider needs to ensure the installation is in line with the design and OEM's installation best practices in order to meet the Tier III requirements as well as participate in the construction certification process.

Service providers are further required to provide load banks with an even spread of 3KW over the 48 available racks as part of the certification and commissioning process. This will be used to test the redundancy of the power feeds, A & B feeds, UPS loading and cooling under full load at 144KW.

4.1.4. Packaging and Waste Disposal

All packaging needs to be delivered to the nearest waste recycling centre for disposal in a compliant manner.

4.1.5. Earthing

Both Schneider Electric EcoStruxure pods need to be earthed below the false flooring by means of clamps on the flooring vertical supports. All Schneider Electric subcomponents within the EcoStruxure pods need to be earthed together as per the products available earthing points.

4.2. Schneider Electric EcoStruxure Data Centre Infrastructure

The East London IDZ in consultation with Schneider Electric has designed the following EcoStruxure cold aisle containment data centre solution for data centre hall 2 of our new Stormwind data centre.

At this stage of the project, only one (1) data centre hall will be populated with two (2) Schneider Electric cold aisle containment EcoStruxure pods.

Design layouts and bill of materials provided in below sections.

4.2.1. Stormwind Data Centre Overview & Design Layouts

The following figures or layouts have been included to assist service provides in developing a comprehensive tender response.



Figure 1 – Data Centre building Front View Sketch

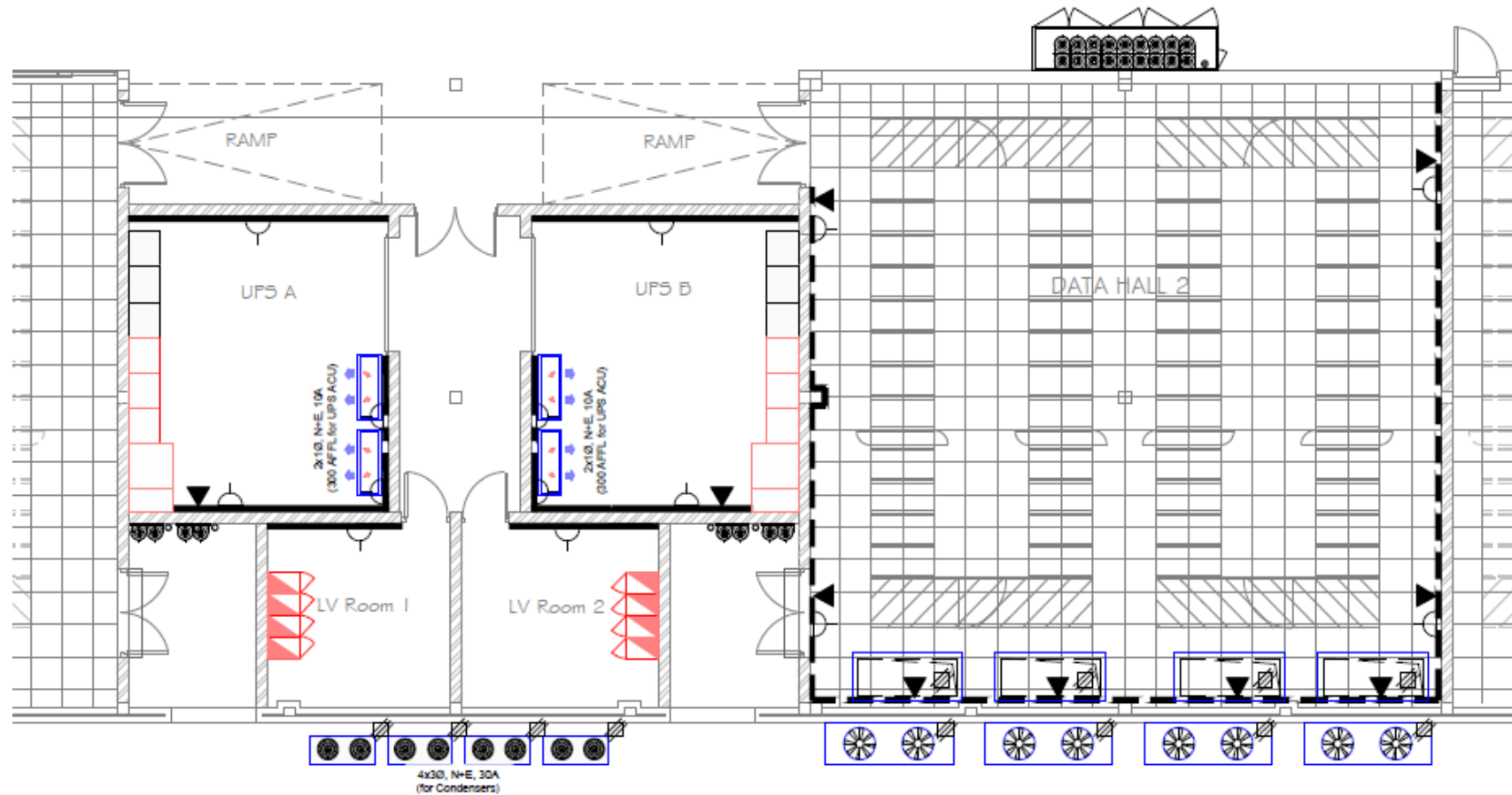


Figure 2 – Data Centre, Ground Floor, Hall 2 and Utilities Layout

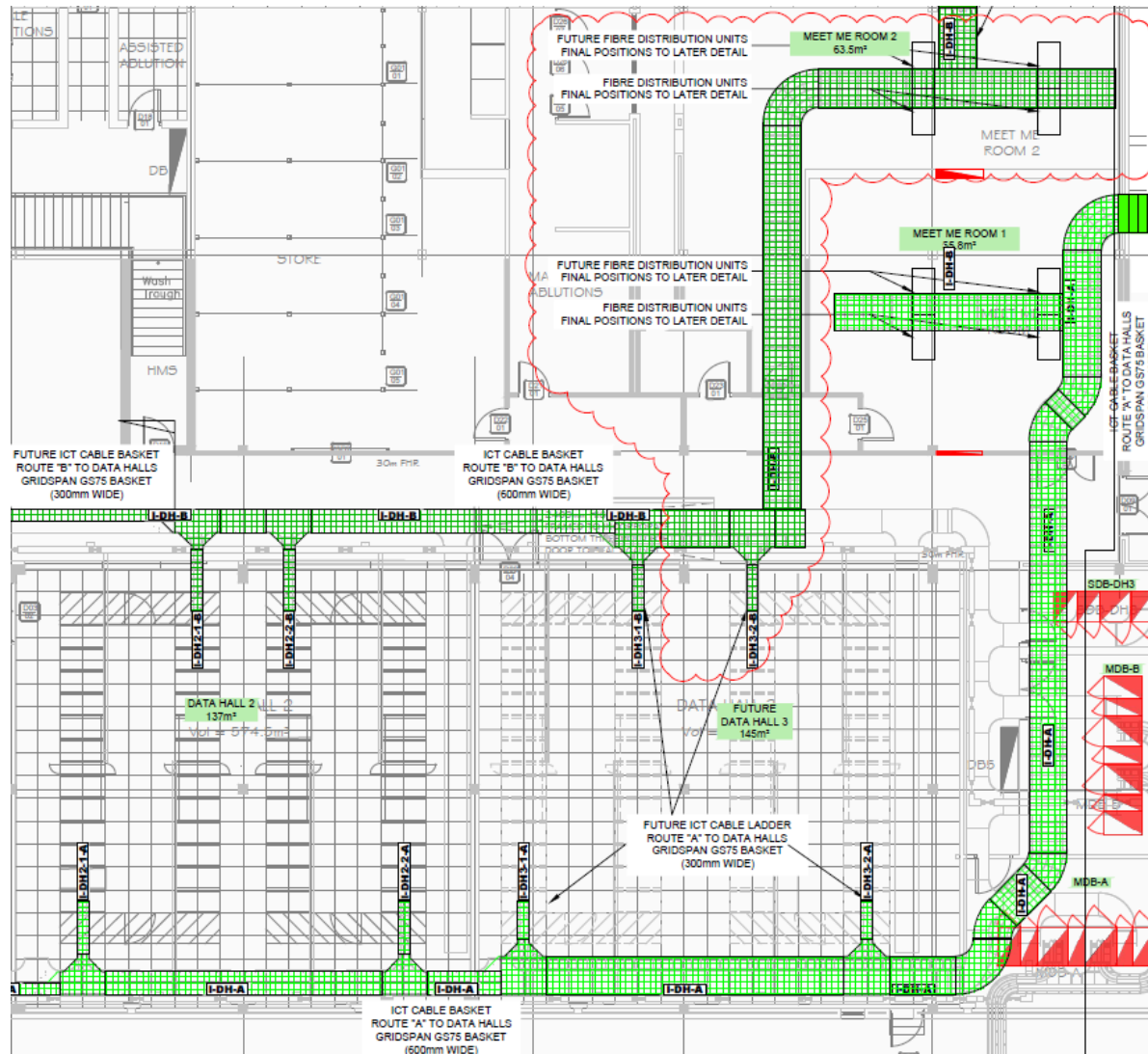


Figure 3 – Data Centre, Ground Floor, Meet Me Room 1 & 2 to Hall 2 Fiber Overhead Ducting

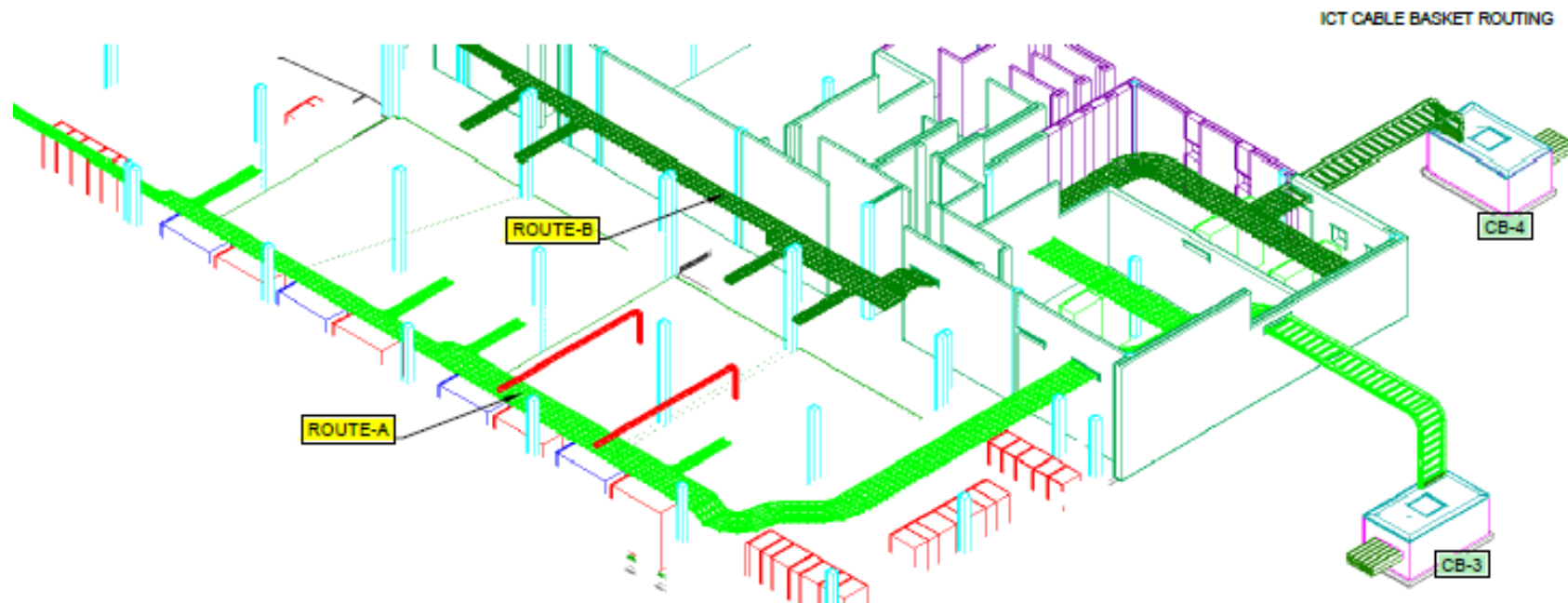


Figure 4 – Data Centre, Ground Floor, Meet Me Room 1 & 2 to Hall 2 Fiber Overhead Ducting (3D Model)

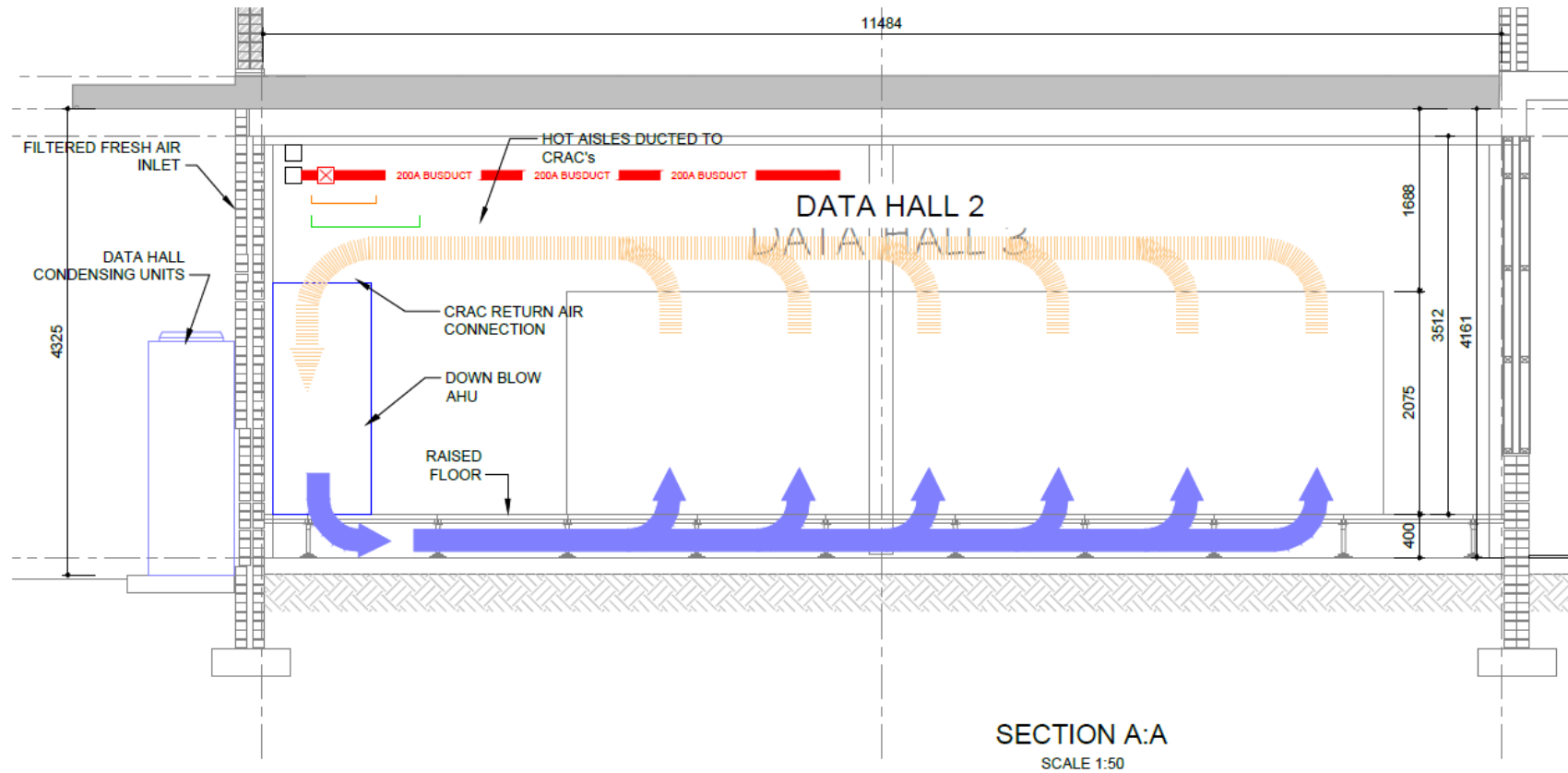


Figure 5 – Data Centre, Ground Floor, Hall 2, Sectional View



Figure 6 – Data Centre, Ground Floor, DC Hall 2, Rack Pod Layout



Figure 7 – Data Centre, Ground Floor, Hall 2 Rack Pod 3D Model

4.2.2. Schneider Electric Bill of Materials

The following Schneider Electric infrastructure needs to be supplied, installed and configured as per the above design as well as the general and detailed requirements.

An additional ten (10) 48u NetShelter racks have been included to allow for flexibility in client requirements. These additional racks need to be assembled and stored until needed to meet the layout requirements of a client, potentially replacing a select amount of half racks over time.

All configurable devices need to be configured according to the basic device parameters provided and onboarded to EcoStruxure IT Expert. These devices need to be grouped according to location and type. Relevant dashboards, alert parameters and reports to be configured or created to ensure optimal monitoring and management of the data centre hall.

Number	Product Code \ Model	Description	QTY
1	AR3307	NetShelter SX 48U 600mm Wide x 1200mm Deep Enclosure with Sides Black	28
2	AP8853	Rack PDU 2G, Metered, ZeroU, 32A, 230V, (36) C13 & (6) C19	56
3	AP8858EU3	Rack PDU 2G, Metered, ZeroU, 16A, 230V, (18) C13 & (2) C19, IEC309 Cord	20
4	AR8164ABLK	Cable Ladder 6" (15cm) Wide w/Ladder Attachment Kit (AR8166ABLK)	3
5	AR8165ABLK	Cable Ladder 12" (30cm) Wide w/Ladder Attachment Kit (AR8166ABLK)	9
6	AR8177BLK	Cable Ladder Attachment Kit, 750mm Wide, Data Cable Partitions	4
7	AR8561	Cable Trough, 600mm	48
8	AR8580	Cable Trough, Open Bottom, 300mm	4
9	AR8162ABLK	Data Cable Partition, NetShelter, 600mm Wide	44
10	AR8163ABLK	Data Cable Partition, NetShelter, 600mm Wide, pass-through	52
11	AR8184	Cable Partition, 300mm	4
12	PDPM277H	APC Modular Remote Power Panel, 277kVA, 400A, 400V, 72 Pole, 300mm	1
13	PDM1316IEC-3P	APC IT Power Distribution Module 3x1 Pole 3 Wire 16A 3xIEC309 300cm, 360cm, 420cm	7

Number	Product Code \ Model	Description	QTY
14	PDM1332IEC-3P	APC IT Power Distribution Module 3x1 Pole 3 Wire 32A 3xIEC309 300cm, 360cm, 420cm	5
15	PDX316IEC-120	APC Modular IT Power Distribution Cable Extender 3 Wire 16A IEC309 120cm	5
16	PDX316IEC-240	APC Modular IT Power Distribution Cable Extender 3 Wire 16A IEC309 240cm	3
17	PDX332IEC-240	APC Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 240cm	3
18	PDX332IEC-480	APC Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 480cm	4
19	PDPM277H	APC Modular Remote Power Panel, 277kVA, 400A, 400V, 72 Pole, 300mm	1
20	PDM1316IEC-3P	APC IT Power Distribution Module 3x1 Pole 3 Wire 16A 3xIEC309 300cm, 360cm, 420cm	7
21	PDM1332IEC-3P	APC IT Power Distribution Module 3x1 Pole 3 Wire 32A 3xIEC309 300cm, 360cm, 420cm	5
22	PDX316IEC-120	APC Modular IT Power Distribution Cable Extender 3 Wire 16A IEC309 120cm	6
23	PDX316IEC-240	APC Modular IT Power Distribution Cable Extender 3 Wire 16A IEC309 240cm	3
24	PDX332IEC-120	APC Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 120cm	1
25	PDX332IEC-240	APC Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 240cm	1
26	PDX332IEC-480	APC Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 480cm	5
27	PDPM277H	APC Modular Remote Power Panel, 277kVA, 400A, 400V, 72 Pole, 300mm	1
28	PDM1316IEC-3P	APC IT Power Distribution Module 3x1 Pole 3 Wire 16A 3xIEC309 300cm, 360cm, 420cm	7
29	PDM1332IEC-3P	APC IT Power Distribution Module 3x1 Pole 3 Wire 32A 3xIEC309 300cm, 360cm, 420cm	5
30	PDX316IEC-120	APC Modular IT Power Distribution Cable Extender 3 Wire 16A IEC309 120cm	7
31	PDX316IEC-240	APC Modular IT Power Distribution Cable Extender 3 Wire 16A IEC309 240cm	2
32	PDX332IEC-240	APC Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 240cm	2
33	PDX332IEC-480	APC Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 480cm	5
34	PDPM277H	APC Modular Remote Power Panel, 277kVA, 400A, 400V, 72 Pole, 300mm	1
35	PDM1316IEC-3P	APC IT Power Distribution Module 3x1 Pole 3 Wire 16A 3xIEC309 300cm, 360cm, 420cm	7
36	PDM1332IEC-3P	APC IT Power Distribution Module 3x1 Pole 3 Wire 32A 3xIEC309 300cm, 360cm, 420cm	5
37	PDX316IEC-120	APC Modular IT Power Distribution Cable Extender 3 Wire 16A IEC309 120cm	6
38	PDX316IEC-240	APC Modular IT Power Distribution Cable Extender 3 Wire 16A IEC309 240cm	3
39	PDX332IEC-240	APC Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 240cm	4

Number	Product Code \ Model	Description	QTY
40	PDX332IEC-480	APC Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 480cm	3
41	ACDC2512	Roof Height Adapter, SX42U to SX48U, 300mm	4
42	ACDC2513	Roof Height Adapter, SX42U to SX48U, 600mm	20
43	ACDC2000	Ceiling Panel Mounting Rail - 1800mm (70.9in)	8
44	ACDC2550	Depth Adapter, 1070 to 1200mm, SX42U, 300mm Width	4
45	ACDC2551	Depth Adapter, 1070 to 1200mm, SX42U to SX48U, 600-750mm Width	20
46	ACDC2002	Ceiling Panel Mounting Rail - 300mm (11.8in)	2
47	ACDC2003	Ceiling Panel Mounting Rail - 100mm (3.9in)	2
48	ACDC2106	Ceiling Panel - 1800mm (72in)	26
49	ACDC2018	Aisle Containment Lighting kit (w/ power supply)	8
50	ACDC2019	Aisle Containment Lighting kit (w/o power supply)	12
51	ACDC2400	Aisle Containment Door - Sliding	4
52	ACDC2406	Door Post, 1500 - 1800mm (60 - 72in) Aisle Width	4
53	ACDC2403	Door Header - 48U SX	4
54	ACDC2408	Door Lock	4
55	AR8186	Bracket Kit, Cable Ladder Elevation	22
56	NBRK0750	NetBotz Rack Monitor 750	4
57	NBPD0165	NetBotz Camera Pod 165	8
58	NBES0303	NetBotz Door Switch Sensors (2) for an APC Rack - 12 ft.	24
59	NBHN125	NetBotz 125 kHz Handle Kit	48
60	NBRK0250A	NetBotz Rack Monitor 250A	48
61	SFTWES200-DIGI	EcoStruxure IT Expert 1 Year Digital 200 node Subscription	1
62	AR8429	Horizontal Cable Organizer 1U w/brush strip	8
63	AP7821B	RACK PDU, METERED, 1U, 16A, 208/230V, (8) C13	20
64	AR7708	NetShelter SX Air Recirculation Prevention Kit	48
65	AR8165ABLK	Cable Ladder 12" (30cm) Wide w/Ladder Attachment Kit (AR8166ABLK)	4

Number	Product Code \ Model	Description	QTY
66	AR8136BLK200	APC 1U 19" Black Modular Toolless Blanking Panel - Qty 200	12
67	AR8442	Vertical Cable Organizer, 8 Cable Rings, Zero U	152
68	AR8184	Cable Partition, 300mm	4
69	AP9335TH	APC Temperature & Humidity Sensor	30
70	NBPD0150	NetBotz Rack Sensor Pod 150	4
71	AR3200	NetShelter SX Colocation 2 x 20U 600mm Wide x 1070mm Deep Enclosure with Sides Black	20
72	NBRK0750	NetBotz Rack Monitor 750	3
73	AP9876	Power Cord, C19 to IEC309 16A, 2.5m	40
74	AP420	APC FERRITE FOR 10BT CABLE QTY 10	20
75	WSITECOORD	Site Coordination Service	1
76	WUPGEAA-UG-01	1Yr EAA Prev Svc Upgrd to FW or Exstng Svc Plan - (1) 1or3P UPS 10 - 40kVA, Batt Frm, PDU or Acc.	140
77	WSTRTUP5X8-PD-30	Start-Up Service for (1) 1/2 Rack Remote or (1) Modular Power Panel	4
78	WUPGSTRTUP7-UG-01	Scheduling Upgrade to 7X24 for Existing Startup Service for up to 40 kVA UPS or Battery Frame	4
79	WASSEMPDU5X8-PD-30	Scheduled Assembly Service 5X8 for (1) 1/2 Rack Remote or (1) Modular Power Panel	4
80	WASSEM5X8-AX-20	Scheduled Assembly of the Thermal Containment Components	2
81	WASSEM5X8-AX-21	Assembly Service for Thermal Containment Add-ons	40
82	WASSEMNBA-NB-20	NetBotz Assembly Service for up to 3 Appliances and Associated Accessories for 7-Series - 2-Series	2
83	WASSEM5X8-3R-PX-10	5X8 Scheduled Assembly of 1-3 Additional Racks	15
84	WASSEM5X8-5R-PX-20	5X8 Scheduled Assembly Service for 1-5 Racks	1
85	WUPGASSEM7-UG-01	Scheduling Upgrade to 7X24 for Existing Assembly Service for up to 40 kVA UPS, Batt Frame or Netbotz	20
86	WUPGASSEM7-AX-00	Scheduling Upgrade to 7X24 for (1) Existing Cooling Assembly Service	42
87	WNSCESSUCORE	EcoStruxure IT Expert Onboarding Service	1
88	WSTRTUP7X24-DC-11	Startup SKU- caters for 7 days accom and exp for 2 x FSR's	5
89	AR3307	NetShelter SX 48U 600mm Wide x 1200mm Deep Enclosure with Sides Black	10
90	AP8853	Rack PDU 2G, Metered, ZeroU, 32A, 230V, (36) C13 & (6) C19	20
91	AP9335TH	APC Temperature & Humidity Sensor	10

Number	Product Code \ Model	Description	QTY
92	AR8442	Vertical Cable Organizer, 8 Cable Rings, Zero U	40
93	NBES0303	NetBotz Door Switch Sensors (2) for an APC Rack - 12 ft.	5
94	NBHN125	NetBotz 125 kHz Handle Kit	10
95	NBRK0250A	NetBotz Rack Monitor 250A	10
96	WCONFIG1NB-NB-10	Netbotz Configuration Service in ISX Designer 1	1
97	WASSEM5X8-3R-PX-10	5X8 Scheduled Assembly of 1-3 Additional Racks	4
98	WSTRTUP7X24-DC-11	Startup SKU- caters for 7 days accom and exp for 2 x FSR's	1

Table 4.2.2A

No alternative solutions will be accepted.

Power cables from each UPS room will be provided by the UPS installer to each of the InRow PDU modules.

4.3. Corning Fiber Optic Infrastructure

The East London IDZ in consultation with Corning has designed a fiber optic infrastructure solution from the main distribution 40rea (Meet-me rooms) to each data centre hall, focusing on data centre hall 2 for this project.

The meet-me rooms will contain the main distribution frames (MDF), while each data centre EcoStruxure pod will have an associated intermediate distribution frame (IDF). Each rack will be provided with a fiber patch module applicable to the client's requirement. An A fiber route and B fiber route IDF will be placed in each data centre hall, allowing for client fiber route redundancy. As per Figure 3 & 4 above, wire baskets will be provided for fiber distribution from the meet-me rooms to the data centre halls and MDFs. These baskets need to be extended to create an appropriate drop down the cabinets or fiber frames.

Fiber connectivity from the data centre meet-me rooms to the existing blown fiber infrastructure as well as existing data centres within the East London IDZ zone is out of scope and will be catered for in a separate fiber project.

Service providers are to include the OEM where required to ensure the products are installed as per the OEM specifications and best practices. This will further ensure the East London IDZ and appointed service provider will be able to support the solution as the data centre expands.

This section includes the following areas:

- Corning High-Level Design
- Corning Bill of Materials

4.3.1. Corning High-Level Design

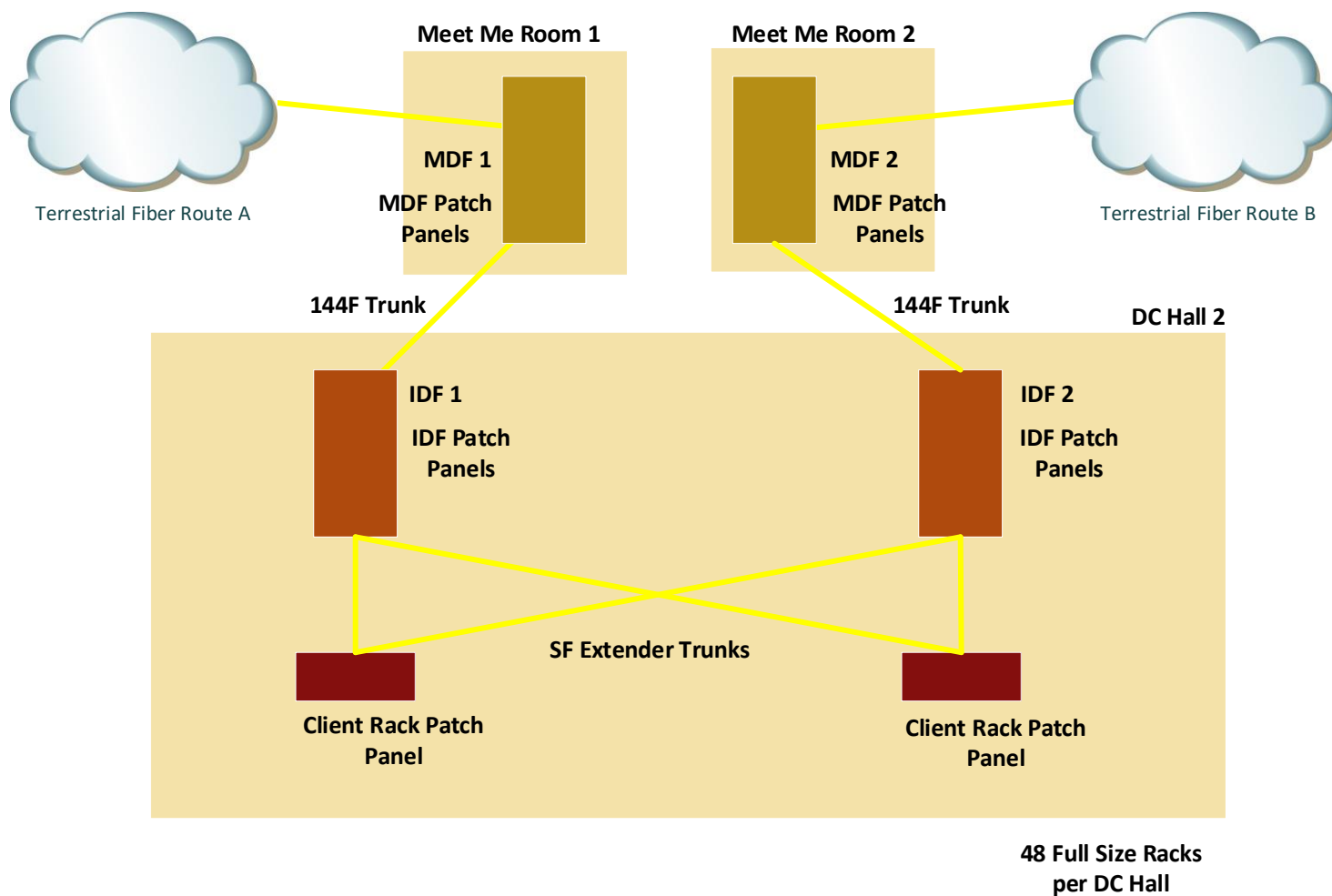


Figure 8 – General Layout for MDF Connecting to a Single Data Centre Hall

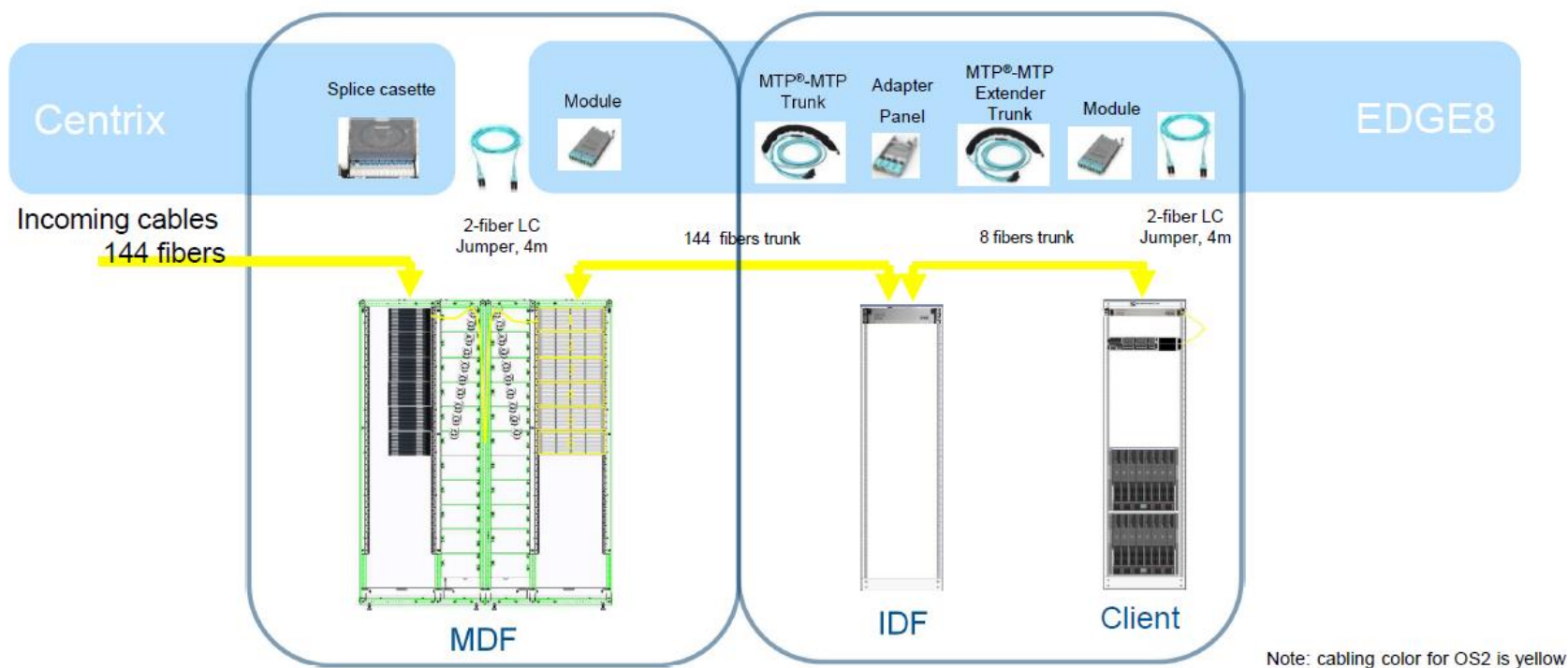


Figure 9 – Typical Link from MDF – IDF - Client

4.3.2. Corning Bill of Materials

The following Corning infrastructure needs to be supplied and configured as per the above design and detailed requirement:

Description/Location	Part Number	Spec Sheet	Quantity
MDF: Bill of Materials for 2x MDF			
EDGE Optical Distribution Frames and Cabinets			
EDGE Dual Cabinet - without bottom channel, with doors with plexiglas window, side and rear walls, 2200 mm (H) x 1800 mm (W) x 600 mm (D), 19 inch mount	EDG-CAB2R2218PGRAN	Spec Sheet	2
CAB STRAIN RELIEFE PLATE FOR LOOSE TUBE CABLE	CAB-SR-CBL	-	1
Centrix Service CAB-TT-TOOL Zipper Tool (cutting transition tubes and feeding in the fibre)	CAB-TT-TOOL	-	1
Set with 50 m of transition tubes For Fiber routing from Strain Reliefe to Cassettes	CAB-TT-050M	-	1
Tube Connectors (24 x 1-1, 2-1, 3-1) For securing the fibers in Tubes on the SR	CAB-TC	-	1
EDGE8™ Housings			
EDGE8™ Housing, 4 rack unit, holds up to 72 EDGE8 modules or panels	EDGE8-04U	Spec Sheet	4
EDGE8 MTP LC Modules			
EDGE8™ Solutions Module, LC Duplex to MTP (non-pinned), 8 Fiber, OS2, IL 0.6 dB	ECM8-UM08-04-E8G-ULL	Spec Sheet	216
Centrix		-	
4U, for up to 12 Centrix cassettes	CTX-S4U	-	4
Centrix™ Splice Cassette 18x LC Duplex/UPC adapters and 36x LC/UPC single fiber pigtails (OS2) CS	CTXCPP36-A9-2RC000	-	32
Asymmetric 2U / 4U for 19 Inch	CTX-BKT19-2U-ASY	-	4
Uniboot Patch Cords			
EDGE Reverse polarity, Uniboot, LSZH , LC Duplex - LC Duplex , OS2-Ultra , 002M patch cord,	E787802GNZ20004M	Spec Sheet	288

IDF: Bill of Materials for 2x IDF			
EDGE8™ Housings			
EDGE8™ Housing, 2 rack unit, holds up to 36 EDGE8 modules or panels	EDGE8-02U	Spec Sheet	6
EDGE™ Solutions Strain-Relief Bracket, accommodating twelve EDGE Solutions clip parking positions	EDGE-CDF-RJ12-BKT	Spec Sheet	30
EDGE8™ Adapter Panels			
EDGE8™ MTP® Adapter Panel, 32F (4xMTP) , Bend-improved Single-mode (OS2)	EDGE8-CP32-V1	Spec Sheet	120
EDGE8™ Solutions Trunk Cables			
EDGE8™ Solutions MTP Trunk, OS2, 144 fibres , LSZH Cca-s1b,d1,a1 according to EN 50575 , Pulling Grip on One End, 40 Metres	GE7E7E4GLZDDU040M	Family Specs sheet	6
EDGE8™ Solutions MTP Trunk, OS2, 144 fibres , LSZH Cca-s1b,d1,a1 according to EN 50575 , Pulling Grip on One End, 60 Metres	GE7E7E4GLZDDU060M	-	6
Client: Bill of Materials for Client Racks			
EDGE8™ Housings			
EDGE8™ Housing, 1 rack unit, holds up to 18 EDGE8 modules or panels	EDGE8-01U-SP	Spec Sheet	24
EDGE8 MTP LC Modules			
EDGE8™ Solutions Module, LC Duplex to MTP (non-pinned), 8 Fiber, OS2, IL 0.6 dB	ECM8-UM08-04-E8G-ULL	Spec Sheet	48
EDGE8™ Solutions Trunk Cables			
EDGE8™ Solutions MTP Extender Trunk, OS2, 8 fibres , LSZH Cca-s1b,d1,a1 according to EN 50575 , No Pulling Grip, 10 Metres	ZE7E808GLZDCX010M	Family Specs sheet	24
EDGE8™ Solutions MTP Extender Trunk, OS2, 8 fibres , LSZH Cca-s1b,d1,a1 according to EN 50575 , No Pulling Grip, 15 Metres	ZE7E808GLZDCX015M	-	24
EDGE8™ Solutions MTP Extender Trunk, OS2, 8 fibres , LSZH Cca-s1b,d1,a1 according to EN 50575 , No Pulling Grip, 20 Metres	ZE7E808GLZDCX020M	-	24
Uniboot Patch Cords			

EDGE Reverse polarity, Uniboot, LSZH , LC Duplex - LC Duplex , OS2-Ultra , 001M patch cord,	E787802GNZ20001M	Spec Sheet	48
EDGE Reverse polarity, Uniboot, LSZH , LC Duplex - LC Duplex , OS2-Ultra , 002M patch cord,	E787802GNZ20002M	Spec Sheet	48
Services			
Field Support by AE, per hour	FIELD SUPPORT HOUR		16
Mobilisation Fee	MOBILISATION FEE		1
Mobilisation Fee, off-hours	MOBILISATION FEE OFF		1

Table 4.3.2A

No alternative solutions will be accepted.

It is expected that only a few client racks will be populated with patch panels from the start of the project.

4.4. FiberGuide Infrastructure

Inter pod and rack cable routes to be provided between both IDF's and all other racks by means of an overhead ADC Krone FibreGuide build. The following FiberGuide infrastructure needs to be supplied and configured as per the below layout and estimate build detail:

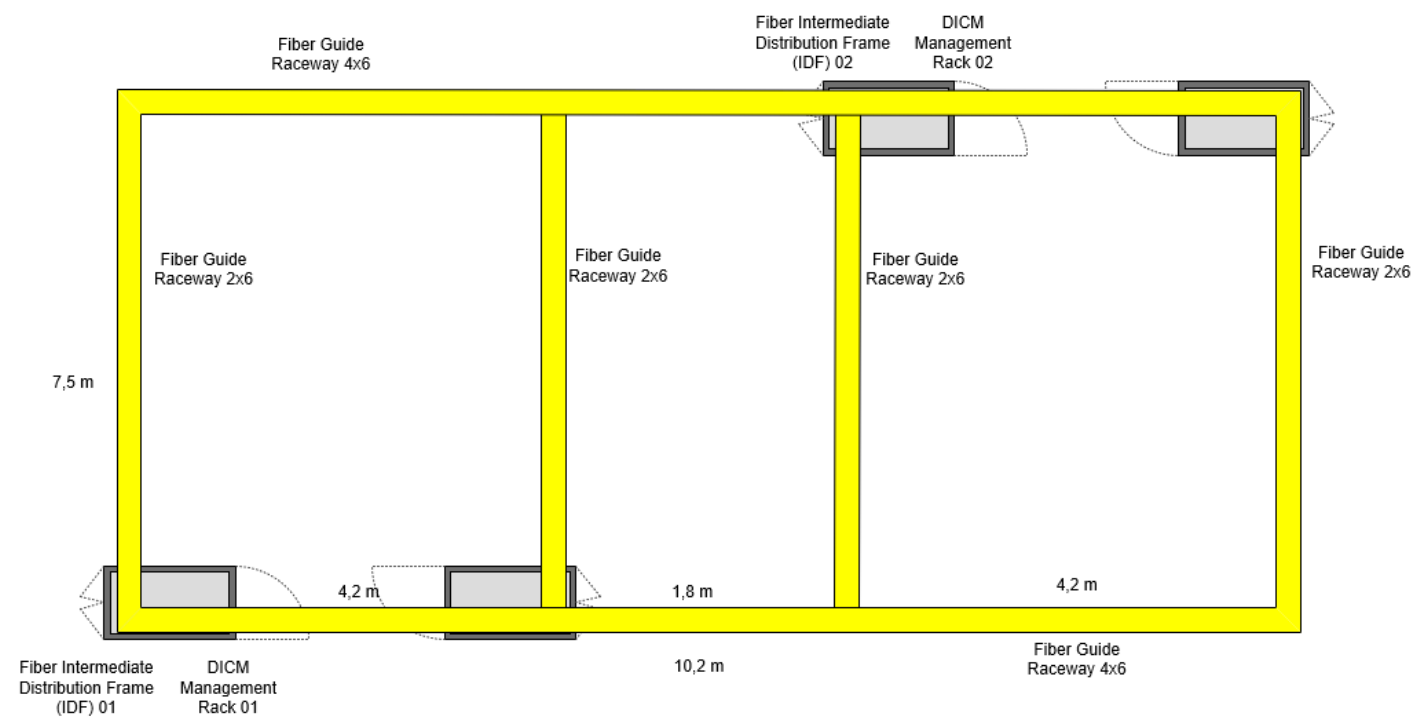


Figure 10 – FiberGuide Fiber Management System Layout

4.4.1. FiberGuide Bill of Materials

The following FiberGuide infrastructure needs to be supplied and configured as per the above design and estimate detailed requirement. Service providers are required to allow for the ceiling mounting of the FibreGuide to a concrete ceiling.

FiberGuide Infrastructure Bill of Materials					
Number	Part Number	Description	System Size	QTY	Location
1	FGS-MH9E-B	90° Horizontal Elbow, 4x6in, Yellow	4x6	4	Stormwind Data Centre Hall 2
2	FGS-MDSA-GB	Straight Reducer, 2x6 to 4x6in, Yellow	2x6, 4x6	8	Stormwind Data Centre Hall 2
3	FGS-MSHS-G	Horizontal Straight Section, 2x6in, Yellow	2x6	14	Stormwind Data Centre Hall 2
4	FGS-MSHS-B	Horizontal Straight Section, 4x6in, Yellow	4x6	16	Stormwind Data Centre Hall 2
5	FGS-MHRT-B	Horizontal T, 4x6in, Yellow	4x6	4	Stormwind Data Centre Hall 2
6	FGS-MDSP-B	Downspout, 4x6in, Yellow	4x4	4	Stormwind Data Centre Hall 2
7	FGS-MEXP-LP-G	2-Inch Low-Profile Express Exit™, 2x6in, Yellow	2x6	48	Stormwind Data Centre Hall 2
8	FGS-MFAW-B	Snap-Fit Junction Kit, 4x6in, Yellow	4x6	38	Stormwind Data Centre Hall 2
9	FGS-JUNC-G	Non-Toolless Junction Kit, 2x6in, Yellow	2x6	8	Stormwind Data Centre Hall 2
10	FGS-HNTR-12MM	New Threaded Rod Bracket Kit, 12mm for 2x6, 4x4, 4x6in Systems	2x6, 4x4, 4x6	56	Stormwind Data Centre Hall 2
11	FGS-HNTR-12MM	FGS-HNTR-12MM	FGS-HNTR-12MM	4	Stormwind Data Centre Hall 2

Table 4.4A

This bill of material has been developed as a suggested and estimated parts list and does not constitute a guaranteed complete bill of material.

4.5. CISCO Network Infrastructure and Cabling

CISCO switches need to be supplied and configured for all management interface uplinks of new equipment provided in this project. End of row management racks have been identified in the design layouts as an end of a row rack in each rack pod.

Any single mode or multi-mode fiber cabling not included in the bill of materials will be provided by the East London IDZ.

The following CISCO infrastructure needs to be supplied and configured as management switches for the two (2) Schneider Electric rack pods with support as specified:

Line Number	Part Number	Description	Service Duration (Months)	Quantity
1.0	C9300L-48P-4X-E	Catalyst 9300L 48p PoE, Network Essentials, 4x10G Uplink	N/A	8
1.1	CON-SSSNT-C93004X4	SOLN SUPP 8X5XNBD Catalyst 9300L 48p P	36	8
1.2	S9300LUK9-179	Cisco Catalyst 9300L XE 17.9 UNIVERSAL	N/A	8
1.3	C9300L-NW-E-48 (SA)	C9300L Network Essentials, 48-port license	N/A	8
1.4	FAN-T2	Cisco Type 2 Fan Module	N/A	24
1.5	PWR-C1-715WAC-P	715W AC 80+ platinum Config 1 Power Supply	N/A	8
1.6	PWR-C1-715WAC-P/2	715W AC 80+ platinum Config 1 Secondary Power Supply	N/A	8
1.7	CAB-C15-CBN	Cabinet Jumper Power Cord, 250 VAC 13A, C14-C15 Connectors	N/A	16
1.8	SSD-240G	Cisco pluggable USB3.0 SSD storage	N/A	8
1.9	C9K-NONE	Smart Building Application Opt Out SKU	N/A	8
1.10	C9K-ACC-SCR-4	12-24 and 10-32 SCREWS FOR RACK INSTALLATION, QTY 4	N/A	8
1.11	C9300L-DNA-E-48 (SA)	C9300L Cisco DNA Essentials, 48-port license	N/A	8
1.12	C9300L-DNA-E-48-3Y	C9300L Cisco DNA Essentials, 48-port, 3 Year Term license	36	8
1.13	CON-SSTCM-C93LE48	SOLN SUPP SW SUBC9300L Cisco DNA Ess	36	8
1.14	C9300L-STACK-KIT	Cisco Catalyst 9300L Stacking Kit	N/A	8
1.15	C9300L-STACK	Catalyst 9300L Stack Module	N/A	16

Line Number	Part Number	Description	Service Duration (Months)	Quantity
1.16	STACK-T3-50CM	50CM Type 3 Stacking Cable for C9300L	N/A	8
1.17	NETWORK-PNPLIC	Network Plug-n-Play Connect for zero-touch device deployment	N/A	8
2.0	SFP-10G-LR=	10GBASE-LR SFP Module	N/A	4

Table 4.5A

No alternative solutions will be accepted.

4.5.1. UTP Cabling Bill of Materials

The following Molex cabling needs to be supplied and installed as per the estimate cable quantities and lengths provided.

Service providers need to connect all management interfaces to the nearest management switch. Various cable lengths are to be provided to limit excessive cable slack. The East London IDZ has standardized UTP cable colours to differentiate between various services, dark green is the colour allocated for management services.

Number	Description	QTY	Location
1	MOLEX CATEGORY 6 UTP 568B PATCH CABLE (2 Meters)	9	Stormwind Data Centre Hall 2
2	MOLEX CATEGORY 6 UTP 568B PATCH CABLE (3 Meters)	35	Stormwind Data Centre Hall 2
3	MOLEX CATEGORY 6 UTP 568B PATCH CABLE (5 Meters)	36	Stormwind Data Centre Hall 2
4	MOLEX CATEGORY 6 UTP 568B PATCH CABLE (10 Meters)	54	Stormwind Data Centre Hall 2
5	MOLEX CATEGORY 6 UTP 568B PATCH CABLE (15 Meters)	42	Stormwind Data Centre Hall 2
6	MOLEX CATEGORY 6 UTP 568B PATCH CABLE (20 Meters)	12	Stormwind Data Centre Hall 2
7	CAT 6 INLINE COUPLER, RJ45 FEMALE TO FEMALE, STRAIGHT THROUGH, WHITE	20	Stormwind Data Centre Hall 2

Table 4.5.1A

No alternative solutions will be accepted.

This bill of material has been developed as a suggested and estimated parts list and does not constitute a guaranteed complete bill of material.

4.6. Infrastructure Maintenance & Support

Service providers are required to provide a Schneider Electric Advantage Ultra Service Plan with an eight (8) response time upgrade, it is expected that in the event of a critical business service interruption, the necessary priority will be provided. This service is for a one-year period for the infrastructure listed in the Schneider Electric Tables 4.6C and 4.6D. Some critical spares are provided for onsite and this will be expanded upon in future projects.

Services providers are required to provide CISCO SMARTnet next business day support for the CISCO devices listed as per the bill of materials in Table 4.5A.

Maintenance and support definition criteria provided below for both hardware and software.

CISCO SMARTnet Service (NBD)				
CISCO SMARTnet Service (NBD)	Equipment Covered	Hardware Replacement	CISCO OS Updates	CISCO TAC Support
	All CISCO Infrastructure Included by the East London IDZ	8x5xNBD	Yes	Yes
	Registered Access to CISCO.com	Smart Call Home Diagnostics and Alerts		
	Yes	Yes		

Table 4.6A

Schneider Electric Advantage Ultra Plan	
Equipment Covered	Hardware Support Coverage Window
All Schneider Electric Infrastructure Included by the East London IDZ	24 Hrs Standard Office Days, 24 Hrs Day 6, 24 Hrs Day 7, Holidays Covered
Software Updates and Support Included	Hardware Replacement
Yes	Onsite Support, Parts and Material Provided, Replacement of Local Spare Stock
Software Response	Software Support Coverage Window
Standard	24 Hrs Standard Office Days, 24 Hrs Day 6, 24 Hrs Day 7, Holidays Covered
Preventative Maintenance	Environmental Inspection
One visit per year to assure system is performing to manufacturer specifications.	Verify the system's surroundings to optimize the lifetime of the UPS solution.

Table 4.6B

The following Schneider Electric UPS and CRAC units have been supplied and installed under the principal contractor with a standard warranty.

Service providers are to provide the Schneider Electric Advantage Ultra Service Plan with support as detailed above for Table 4.6C and Table 4.6D below.

Number	Product Code \ Model	Description	QTY	Serial Numbers
		UPS Stand-Alone 200Kva units (not parallel)		
1	GVL200K500DS	Galaxy VL UPS 200 scalable to 500 kW, 400/480V, Start-up 5x8	2	UPS 1 : BD2317004099 UPS 2: BD2317004100
2	GVLOPT004	Galaxy VL Internal Backfeed kit for IEC	2	
3	LIBSESMG16IEC	Galaxy Li-Ion Battery Cabinet IEC with 16 x 2.04 kWh battery modules	4	
4	IDAV2022A	DX CRACs - 72 kWc	3	
		Basic Unit	4	
		Version: 5 - Double power supply - Vers. C	4	
		Air accessories: 3 - Motorized damper	4	
		Electrical accessories: C - Power phase correction capacitors	4	
		Control / measurement accessories: 1 - Kit AFC	4	
		Packaging: 6 - Wooden case(ISPM15) for unit with damper	4	
		Return Air plenum box	4	
		Q1 - Height-adjustable legs kit	4	
		S5 - Relay 24Vac fire/smoke remote alarm	4	
		J5 - Water leak detector + tape probe	4	
		J2 - Room temperature/humidity sensor	4	
		Remote Air cooled condensers + Blu Chem coated fins and S/S casing	4	

Number	Product Code \ Model	Description	QTY	Serial Numbers
5	IDAV0601A	DX CRACs - 19 kWc		
		- DX CRACs - 19 kWc	4	
		- Double Power Supply	4	
		- Electrical Accessories (Power Phase Correction Capacitors)	4	
		- Packaging	4	
		- Floor Stand	4	
		- Relay 24V Fire Smoke Remote Alarm	4	
		- Water Leak Detector (Tape Probe)	4	
		- Remote Air-Cooled Condensers + Blu-Chem Coatted Fins and S/S Casing	4	

Table 4.6C

Number	Product Code \ Model	Description	QTY
1	PDPM277H	APC Modular Remote Power Panel, 277kVA, 400A, 400V, 72 Pole, 300mm	4
2	NBRK0750	NetBotz Rack Monitor 750	7

Table 4.6D

Service providers are required to include a local supply of refrigeration gas for refilling or maintenance as needed as well allow for the replacement of the cooling units air filters on an annual basis.

The following preventative maintenance activities are expected to be performed quarterly, all parts, labor and travel related to the site visits need to be included:

- Visual inspection of all power and cooling products
- Environmental inspection
- Gas pressure test of all cooling products
- Visual inspection of cooling filters
- Cleaning of the facilities
- Biannual verification and updating of firmware versions of UPS and cooling units
- Provide and present a detailed report at a scheduled meeting. Operations information from InfraStructure Central \ Ecostruxure IT needs to be included in the report, this will be provided by the East London IDZ.

4.7. Fault Logging & On-site Support

The following information and support needs to be provided by the service provider:

- A single call center needs to handle all faults or calls logged relating to this project. Contact details will need to be provided to the East London IDZ.
- On receipt of the fault with relevant information, the successful service provider must provide a unique fault reference number to the East London IDZ.
- All faults need to be logged with the relevant Original Equipment Manufacturer (OEM) within 15 minutes of receiving the fault from the East London IDZ.
- The fault logging service needs to be available 24 hours a day including weekends and public holidays.
- It is expected that either the service provider or the OEM will provide adequately qualified on-site personnel for the duration of the call.

4.8. Skills Transfer, Processes & Documentation

It is expected that the service provider will transfer the necessary skills to the relevant individual ELIDZ project team members during the implementation or configuration of all infrastructure in order to ensure continuity.

Detailed as built or project documentation, including designs needs to be provided to the ELIDZ in the original editable version and PDF version at the end of the implementation period.

The service provider is required to adhere to any internal processes and procedures the East London IDZ approves. Planning should be in conjunction with the operational requirements of the ELIDZ.

4.9. Project Management

In addition to the project meetings, the following minimum project management deliverables are required as part of this project:

- Project Initiation Document
- Project Kick-off Meeting
- Monthly Project Report Meeting Presented to the Project Team with Minutes
- Project Plan
- Risk & Issue Register
- Lessons Learned
- Project Close-out Report

Service providers are required to provide the draft project plan with milestones and a timeline for this project within the tender submission, with the expected implementation start date of 01 February 2023. The dates can be updated once awarded to the successful service provider. This plan is required for functionality evaluation purposes.

The duration of this project will be 12 months.

5. Response Format

5.1. Company / Firm Profile

- Provide an overview of your company profile.
- Provide information on your operation office locations. Do you have local offices in the BCM Metropolitan \ Eastern Cape Province \ National or International?
- Provide a Municipal Clearance Certificate
- Provide an organogram for team allocated to this project in terms of roles and responsibilities

5.2. Proposed Solution

Describe your proposed solution or methodology of services that will be provided in detail in response to the detailed requirements as per Section B, point 4. This is an essential part of your response and it will form part of the service level agreement.

All areas of Section B, point 4 is **mandatory**. Service providers will be disqualified if any of the technical requirements are excluded within this Section.

5.3. Implementation Methodology

Describe the proposed engagement model with reference to this tender. Please provide the following:

- Engagement Structure
- Implementation Methodology, for example, ITIL, Prince 2

5.4. Service Provider Skills Competency

Provide a detailed list of personnel whom will form the team for this project, listing similar projects completed by each team member, their relevant skills \ qualifications and years of work experience relevant to this project in the form of a summary. Include curriculum vitae's of the personnel in the project team.

Where a third-party assists the appointed service provider with a portion of the defined deliverables, clearly indicate the scope of the third-party as well as include their relevant skills \ qualifications and years of work experience relevant to this project for the associated personnel.

5.5. References

- Provide a minimum of three (3) relevant completed reference letters, stamped, signed and dated.
- Reference letter template is attached as Annexure 2;
- Provide details of the relevant services offered to these references, establishing a track record as well as provide contactable references at these sites \ clients.
- The ELIDZ reserves the right to verify the references.

The evaluation score for references will be calculated by dividing the sum of all the ratings provided by 90 and multiplying again by 20 to calculate a score out of 20.

6. Conclusion

This document seeks to provide comprehensive information for the purposes of supporting the proposal of a solution that meets the requirements of the ELIDZ.

The information provided herein has been done so in partnership with the relevant business units of the ELIDZ in order to describe necessary requirements.

Please forward any queries in writing to Ms. Zandile Mtebele at the following contact details:

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Fax: (043) 702 8251

Zandile@elidz.co.za



ANNEXURE 1

PROCUREMENT HANDBOOK



ANNEXURE 2

REFERENCE LETTER



ANNEXURE 3

ENTERPRISE DEVELOPMENT AGREEMENT