

## प्लाज्मा अनुसंधान संस्थान

(भारत सरकार के परमाणु ऊर्जा विभाग का सहायता प्राप्त संस्थान)  
इंदीरा ब्रिज के पास, भाट, गांधीनगर - 382428, भारत

दूरभाष: 079-23962020/23962021, फैक्स: 079-23962277

### **CORRIGENDUM NO. 5 DATED 14-10-2021**

Tender Notice No: IPR/TN/PUR/TPT/ET/21-22/012 Dated 31st Aug 2021 for Supply, installation, testing, commissioning and site acceptance of the Containerized Data Center at IPR (Turnkey Project) as per the detailed specifications mentioned in the tender document

Following **ADDITIONAL CLAUSES** are added to our Form No. IPR-LP-ET-02.V5 for Tender No. **IPR/TN/PUR/TPT/ET/21-22/012** dated **31-08-2021**.

#### 7) FORCE MAJEURE

##### DEFINITION OF FORCE MAJEURE

Force Majeure shall mean any event which is beyond the control of the contractor or the purchaser, as the case may be, which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affects the performance of the contract, such as war, hostilities or warlike operations (whether a state of war be declared or not), invasion, act of foreign enemy and civil war, rebellion, insurrection, mutiny, usurpation of civil or military government, civil commotion, embargo, import restriction, confiscation, nationalization, mobilization, commandeering or requisition by or under the order of Central, State Government or Local Authority in India or any other act or failure to act, of any local, state or national government in India riot state/region/country wide transporters strike, earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone hurricane, storm, lightning and pressure waves or other natural disaster, nuclear event causing nuclear radiation, radioactive contamination.

##### NOTICE OF FORCE MAJEURE

If either party is prevented, hindered or delayed from or in performing any of its obligations under the contract by an event of force majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within fourteen days after the occurrence of such event. A party shall give notice to the other party when it ceases to be affected by the force majeure. Failure to notify the purchaser about occurrence of such event within the time frame specified, the contractor shall have no right to claim any provisions.

##### DUTY TO MINIMISE THE EFFECT

The party or parties affected by the event of force majeure shall use reasonable efforts to mitigate the effect thereof upon its or their performance of the contract and to fulfill its or their obligations under the contract

##### CONSEQUENCES OF FORCE MAJEURE

The party who has given notice of force majeure shall be excused from the performance or punctual performance of its obligations under the contract for so long as the relevant event of force majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The delivery time shall be refixed in, even though such force majeure event may occur after contractor's performance of his obligations has been delayed for other cause. No delay or non-performance by either party hereto caused by the occurrence of any event of force majeure shall constitute a default or breach of the contract give rise to any claim for damages or additional cost or expense occasioned thereby; if and to the extent that such delay or non-performance is caused by the occurrence of an event of force majeure. If the performance of the contract is substantially prevented, hindered or delayed for a single period of more than sixty days or an aggregate period of more than one hundred and twenty days on account of one or more events of force majeure during the currency of the contract, the parties will attempt to develop a mutually satisfactory solution.

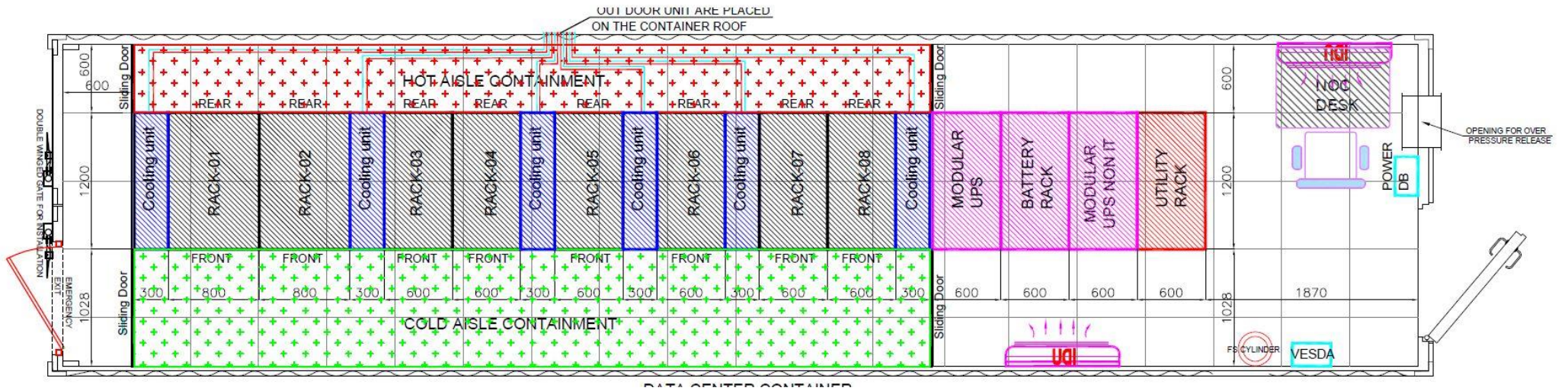
Following technical specifications are replaced in SECTION 'C' TECHNICAL SPECIFICATIONS OF STORES AND DRAWINGS to our Form No. IPR-LP-ET-02.V5 for Tender No. IPR/TN/PUR/TPT/ET/21-22/012 dated 31-08-2021.

Serial Number	Clause	Tender Specification	Replaced
1	ANNEXURE-B [01] SPECIFICATIONS FOR CONTAINER STRUCTURE & DESIGN	Sr.No 11:To conform to IS 9490/ BS 874	To conform to IS 9490/ BS 874 equivalent or better
2	ANNEXURE-B [07] NETWORK / SERVER RACK SPECIFICATIONS	Sr. No. 5 Optimum physical dimensions are required for Racks to manage the floor space within container. Required maximum Height of the rack along with Casters should be less than 2000mm. Minimum Width of the Server rack should be 600mm and for network rack - 800mm/750mm and Depth of the rack should be minimum 1000mm.	Optimum physical dimensions are required for Racks to manage the floor space within container. Required maximum Height of the rack should be less than 2000mm. Minimum Width of the Server rack should be 600mm and for network rack - 800mm/750mm and Depth of the rack should be minimum 1000mm.
3	ANNEXURE-B [07] NETWORK / SERVER RACK SPECIFICATIONS	Sr. No. 14 Rack should have minimum two temperature and humidity sensors per rack	Rack should have minimum two temperature and two humidity sensors per rack. One set at the front and one set at the back. Combo sensors are acceptable.
4	ANNEXURE-B [07] NETWORK / SERVER RACK SPECIFICATIONS	Sr. No 25. PDU should be with approvals: EN 55022 class A, EN 55024, EN 61000-3-2, EN 61000-3-3, FCC part 15 class A, ICES-003	PDU should be with approvals: EN 55022 class A, EN 55024, EN 61000-3-2, EN 61000-3-3, FCC part 15 class A, ICES-003 Or equivalent
5	ANNEXURE-B [04] SPECIFICATIONS FOR IT-LOAD UPS SYSTEM	Sr. No 4 System configuration should be one number UPS system with minimum capacity of 100kW or higher capacity with (N+1) loaded modules. Modular UPS should be working in N+1 configuration to power the minimum IT load of 90KW	IT UPS should be considered of 100kW capacity with N+1 module level redundancy. Example for modular UPS proposals: 1) If vendor is proposing modular IT UPS with 50kW module then they'd provide the 3 modules (100kW+50kW) 2) If vendor is proposing modular IT UPS with 30kW module then they'd provide IT UPS with total 5 modules (120kW+30kW)  Lithium ion Battery bank should be provided considering 100kW IT load and with 10 minutes backup on full load.  Please Note- This response will supesede all the mentioned clauses related to IT UPS capacity in the tender document.
6	ANNEXURE-B [05] SPECIFICATIONS FOR NON-IT UPS SYSTEM	Offered UPS should be offered user replaceable Modular Swppable (Push-in and plug; unplug and pull-out) battery strings with Battery monitoring system. Modular battery shall deliver minimum 15 mins of back up with calculated non-IT load.	Lithium ion Battery bank should be provided for the quoted UPS capacity and with <b>10 minutes battery backup</b> on full load of the quoted capacity.
7	ANNEXURE-B [06] SPECIFICATIONS FOR COOLING SYSTEM	Sr. No 2. Bidder should propose the number of Cooling Units and its capacity as per the total heat load and should supply the design of maintaining N+1 configuration / N+1 redundancy.	The bidde should propose the cooling units for minimum 8 Racks (6 Server and 2 network racks), where each rack should have the capacity with minimum IT load of 12kW per rack. (12kW x 8 = 96kW + 4 kW buffer). The IT load should be considered of minimum 100 kW and appropriate cooling with N+1 module level redundancy should be supplied.  For example, if vendor is proposing 35kW cooling units then they should design the CDC with total 4 cooling units, i.e. 105kW+35kW (N+1)  Please Note- This response will supesede all the mentioned clauses related to cooling capacity asked in the tender document.
8	ANNEXURE-B [06] SPECIFICATIONS FOR COOLING SYSTEM	Sr. No. 3 Minimum Total IT load to cool should be calculated is 90KW	Minimum Total IT load for the cooling capacity should be calculated is 100KW

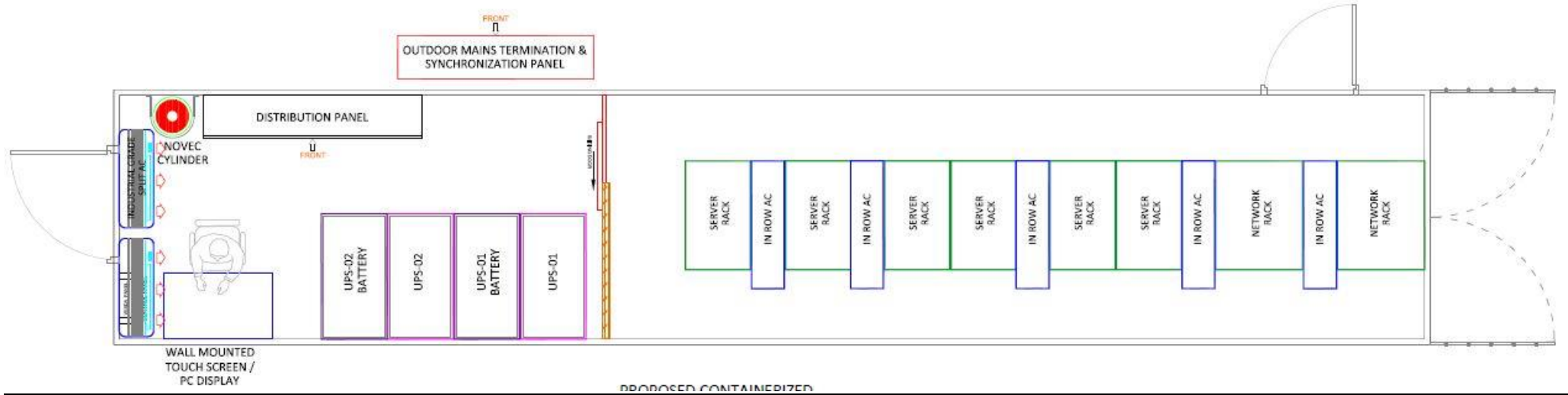
Following technical specifications are **ADDED** in SECTION 'C' TECHNICAL SPECIFICATIONS OF STORES AND DRAWINGS to our Form No. IPR-LP-ET-02.V5 for Tender No. IPR/TN/PUR/TPT/ET/21-22/012 dated 31-08-2021.

Serial Number	Clause	Tender Specification	Addition
1	<b>Addition</b>	General: Draft Layouts	Addition: Two draft layouts are attached below for better understanding of the requirement.
2	ANNEXURE-B [07] NETWORK / SERVER RACK SPECIFICATIONS	Blanking Panels	Following tool-less blanking panel quantity should be supplied with the racks: 1 U x 160 nos <b>OR</b> 2 U x 80 nos.

# Draft Layout (1) - Containerized Data Center (CDC)



# Draft Layout (2) - Containerized Data Center (CDC)



Following technical specifications are **DELETED** in SECTION 'C' TECHNICAL SPECIFICATIONS OF STORES AND DRAWINGS to our Form No. IPR-LP-ET-02.V5 for Tender No. IPR/TN/PUR/TPT/ET/21-22/012 dated 31-08-2021.

Serial Number	Clause	Tender Specification	Deletion
1	2. Component-wise Scope of Work (2.6.2.6)	All IT Racks should be installed with automatic door opening system for any cooling issue(s).E.g., if installed N+1 cooling fails and temperature in the racks rises the doors should be automatically opened to avoid any damage to the installed IT hardware in the racks.	This clause stands removed.

All other details mentioned in the Tender documents will remain unchanged.

For more details, kindly refer the following website:  
<http://www.ipr.res.in/documents/tenders.html> & <https://eprocure.gov.in/eprocure/app>