## CORRIGENDUM II

**Section VII - Service Level Agreement, Clause 4 - Service Level Agreements & Targets, point 4.6.5 Quality of Managed Services stands modified and should be read as under:**

| Measurement | Definition | Target | Severity Level |
|---|---|---|---|
| Manpower Availability | | | |
| Resource availability for MSP Services | No. of shift days for which resource present at the designated location / Total no. of shift days | 99% averaged over all resources designated for MSP services and calculated on a monthly basis | |
| | | >=97 % to < 99% averaged over all resources designated for MSP services and calculated on a monthly basis | 6 |
| | | >=95 % to < 97% averaged over all resources designated for MSP services and calculated on a monthly basis | 7 |
| | | < 95 % averaged over all resources designated for MSP services and calculated on a monthly basis | 8 |
| Audits | | | |
| Implementation of recommendations of previous Half yearly infrastructure audit at Data Centre. | Implementation of recommendations given by the Infrastructure auditor and which have been agreed upon to be implemented by the DCSP & Purchaser | 100% on time, for the recommendations agreed upon with the purchaser, to be implemented in the said quarter | 5 |

| | | | |
|---|---|---|---|
| Outcome of Half Yearly IT Security Audit | The third party auditor shall rate the performance of the DCSP on IT Security implementation. The three ratings for the performance shall be: Satisfactory,<br><br>Requires Improvement | Unsatisfactory rating | 6 |
| | Unsatisfactory | Requires Improvement rating | 5 |
| Implementation of recommendations of previous Half yearly IT Security audit | Implementation of recommendations given by the IT Security auditor and which have been agreed upon to be implemented by the DCSP & Purchaser | 100% on time, for the recommendations agreed upon with the purchaser, to be implemented in the said quarter | 5 |
| Adherence to Backup Policy | Based on the backup policy of the Purchaser | 100% backups taken on time at the Data Centre Sites as per the Purchasers backup policy | 5 |
| | | 100% backups shipped to off-site location on schedule in accordance to the Purchasers backup policy | 4 |
| | | 100% backup restoration testing on time in accordance to the Purchasers backup policy | 3 |
| BCP Drill | Based on the BCP / DR policy of the Purchaser | 100% of the time the drill happens as per schedule mentioned in the Purchaser's BCP / DR policy | 5 |
| Reporting | | | |
| MIS reporting | Refer Annexure – 1, Section V – Scope of | 100% adherence to time lines specified in Clause 19.7 of | 6 |

| | | | |
|---|---|---|---|
| | Work | Section V, Scope of Work | |
| Incident Reporting | Refer Annexure – 1, Section V – Scope of Work | 100% incidents to be provided to Purchaser with in 1 hour with the cause, action and remedy | 5 |
| Quality of Service | | | |
| Network Availability | Network Availability shall be calculated based on an aggregate monthly measurement average between DC and DR endpoints. | 99.99% of the time in delivering traffic to/from other DC/DR locations measured over a calendar month. | 1 |
| Network Latency | aggregate monthly average, roundtrip DC-to-DR (and vice-versa) latency on the Network | Shall be 60.0 milliseconds or less | 1 |
| Packet Loss | Packet Loss shall be calculated based on the arithmetic mean of aggregate monthly measurements between DC and DR Sites. | DCSPs aggregate monthly average packet loss between DC and DR sites shall not exceed 0.1%. | 1 |

**Scheduled network maintenance shall be carried out only on the basis of written approval from UIDAI.**

**Section V – Schedule of Requirements, Clause 3.10 stands modified and should be read as under:**

### 3.10. Operational Requirements

3.10.1. All operation procedures for the MEP Systems should be documented and available for review.

3.10.2. Security policy and procedures for movement of materials & men, within the building and the data center should be made available to UIDAI.

3.10.3. The Sample Operating Process (SOP) and Emergency Operation Process (EOP) for the fire alarm and fire suppression system should be demonstrated to UIDAI to ensure that during an incident, there should be no untoward damage to human resources and equipment.

3.10.4. Maintenance schedules of all equipments should be made available to UIDAI to ensure that all equipments are maintained as per the specifications mentioned by the respective OEMs and that all equipment is in healthy condition.

3.10.5. Maintenance procedures, Risk Assessment and Work method statements should be shared with UIDAI and the documents to be made available for review.

3.10.6. Operation procedures for critical situations like power failure, water leak, damage of fuel line, short circuit, etc should be available for review.

3.10.7. There should be a robust emergency response plan backed up with trained team members, escalation and communication system.

3.10.8. The earth resistance should be measured periodically and monitored.

3.10.9. The access logs should be available for at least 180 days.

3.10.10. The power consumption logs should be updated every 15 days and intimated to UIDAI.

3.10.11. The Managed Service Logs to be provided on a weekly basis and the Change Request Summary/ approvals to be taken from the Purchaser before any activity. Incident ticket Numbers to be generated, shared and escalated on an immediate basis and their resolution and closure should be at the earliest.

3.10.12. Shared Helpdesk is acceptable for the Data center Facilities catering to the Data Center Infrastructure.

3.10.13. The NOC should be provided with a secured facility.

3.10.14. The NOC should preferably be UIDAI dedicated.

3.10.15. The NOC should have a centralized monitoring console/ LCD/ Projector Screen (Video Wall).

3.10.16. The NOC should have a redundant and robust infrastructure with reference to UPS and Network links.

3.10.17. The type of physical/ electronic security should be Access Controlled with electronic and physical Surveillance provided in the NOC.

3.10.18. The Network security (Firewall/ IDS, etc.) should be provided in the NOC.

3.10.19. The following type of communication nodes are to provided in the NOC:

(a) Toll free numbers

(b) PSTN from multiple providers

(c) Email/ messaging

(d) Alerting via Email / SMS

(e) Conferencing

3.10.20. From the Network perspective, the following to be provided:

(a) Internet bandwidth:

1. The bidder shall provide 100 Mbps internet bandwidth.
2. The bidder shall provide internet bandwidth from two network providers.
3. It is recommended that the ISP's connecting Bangalore and Delhi Sites (for BCP/DR) should be same so that there is direct connectivity between the sites and provide low latency connectivity without going through the external networks.
4. UIDAI shall procure bandwidth in increments of 100 Mbits/Sec on a need basis subsequently. The bidder shall make suitable provisions for the same for scalability.

(b) MPLS connection between Data Centre in Bengaluru and Data Centre in NCR Delhi

1. The bidder shall procure dedicated MPLS connectivity between the two data centres. This connectivity shall be procured from two separate MPLS connectivity providers.

2. The bidder shall be responsible for establishing the connectivity with the Bangalore and Delhi data centers.

3. Minimum committed bandwidth of 100 Mbps should be provided between the 2 locations. Additional bandwidth shall be procured by UIDAI on a need basis from the bidder.

4. The bidder is required to provide bandwidth cost for the connectivity in C2 of Annexe 4.2.3c: DETAILED COST SHEET – Variable Recurring Cost.

5. The bidder shall provide the necessary services and equipment required for connectivity between the MPLS cloud of the two selected bandwidth providers as referred in clause (2) above.

(c) Network monitoring and management:

1. The bidder shall perform the following services:

   i. Develop the network architecture and layout diagram for the data centre. This will include physical layout of all network components. The same shall be submitted to UIDAI for approval and subsequent implementation.

   ii. Interconnect all network (LAN and WAN) and security devices as per design and network architecture approved.

2. The bidder shall:

   i. Interact with telecom service providers for integration of network connections in consultation with UIDAI. This will include Internet, Registrars/partners, UIDAI Intranet, and Disaster Recovery connection between UID Data Centres.

   ii. Integrate the perimeter security services with network.

   iii. Performing Move/Add/Changes including Network ports, Cable verifications and connect, Network devices, network other elements including but not limited to Firewalls, Load Balancers, IPS, VPN and Dual Authentication system.

3. From a monitoring perspective, the bidder shall perform the following:

   i. Network monitoring of Devices, Link Up/Down status, Wide Area Network (LAN), Local Area Network (WAN)

ii. Interface with local Telcos and other service providers and other technical teams supporting UIDAI infrastructure

iii. Engage and provide assistance to onsite personnel in performing break/fix activities

iv. Make recommendation for improvements after analysis of operational data

v. Network upgrades as requested for both device and network connectivity

vi. Escalating the Service Level issues to the appropriate members as required for quick resolution of network or security problems

vii. Perform the network availability monitoring

viii. Perform the availability monitoring of security infrastructure Firewalls, IDS/IPS, Event Correlation services, SSL and SSL VPN, etc (as per BOM)

ix. Perform the network alert monitoring

x. Perform the configuration change and log monitoring

xi. Monitor the network access and network ports to ensure the continuous CIDR operation

xii. Monitor the performance of Network, Security devices and highly available systems

xiii. Monitor the utilization of network resource and network connectivity

xiv. Monitor the network capacity and load distribution as required

xv. Proactively identify security vulnerabilities and potential threats and take necessary remedial action

(d) Local Area Network

## Section IV – Contents of Bid

## Annexe 4.2.3c: DETAILED COST SHEET – Variable Recurring Cost (stands modified and should be read as under):

| Sl.No | Particulars | Unit | Estimated Qty per month | Unit Rate (INR) | Amount per month (INR) (6) =[(4)*(5)] | Taxes per month (INR) | Total Amount per month (INR) (8)=[(6)+(7)] |
|---|---|---|---|---|---|---|---|
| -1 | -2 | -3 | -4 | -5 | -6 | -7 | -8 |
| C1 | *Environmental and Infrastructural Service Charges* | | | | | | |
| C1.1 | Environmental and Infrastructural Service charges per month | kWh | 200000 | | | | |
| | | | | | | | |

| Sl.No | Particulars | Unit | Qty | Unit Rate per month (INR) | Amount per month (INR) (6) =(4)*(5) | Taxes per month (INR) | Total Amount per month (INR) (8)=[(6)+(7)] |
|---|---|---|---|---|---|---|---|
| -1 | -2 | -3 | -4 | -5 | -6 | -7 | -8 |
| C2A | *Internet Bandwidth* | | | | | | |
| C2A.1 | Internet Bandwidth charges for 100 Mbps burstable to 300 Mbps by provider 1 | Mbps | 100 | | | | |
| C2A.2 | Internet Bandwidth charges for 200 Mbps burstable to 500 Mbps by provider 1 | Mbps | 200 | | | | |
| C2A.3 | Internet Bandwidth charges for 500 Mbps burstable to 1 Gbps by provider 1 | Mbps | 500 | | | | |
| C2A.4 | Internet Bandwidth charges for 100 Mbps burstable to 300 Mbps by provider 2 | Mbps | 100 | | | | |
| C2A.5 | Internet Bandwidth charges for 200 Mbps burstable to 500 Mbps by provider 2 | Mbps | 200 | | | | |
| C2A.6 | Internet Bandwidth charges for 500 Mbps burstable to 1 Gbps by provider 2 | Mbps | 500 | | | | |
| C2B | *Bandwidth (Dedicated MPLS Connectivity between Bengaluru – DC and NCR – DC)* | | | | | | |
| C2B.1 | Bandwidth charges for 100 Mbps by provider 1 | Mbps | 100 | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C2B.2 | Incremental Bandwidth charges every additional 100 Mbps on existing link between Bengaluru DC and NCR DR by provider 1 | Mbps | 100+ | | | | |
| C2B.3 | Bandwidth charges for 100 Mbps by provider 2 | Mbps | 100 | | | | |
| C2B.4 | Incremental Bandwidth charges every additional 100 Mbps on existing link between Bengaluru DC and NCR DR by provider 2 | Mbps | 100+ | | | | |

| Sl.No | Particulars | Unit | Qty | Unit Rate per month (INR) | Amount per month (INR) (6) =(4)*(5) | Taxes per month (INR) | Total Amount per month (INR) (8)=[(6)+(7)] |
|---|---|---|---|---|---|---|---|
| -1 | -2 | -3 | -4 | -5 | -6 | -7 | -8 |
| | ***Other Variable Costs if any*** | | | | | | |
| C3 | Any other Variable Recurring Cost (please provide precise brief description) | | | | | | |
| C4 | Any other Variable Recurring Cost (please provide precise brief description) | | | | | | |
| | **TOTAL VARIABLE RECURRING COST (C)** | | | | | | |

Note:-

i. Establishing the MPLS link between the Bengaluru DC and NCR DC (DCSP site) shall be the responsibility of DCSP.

ii. In case the DCSP chooses STM-1/STM-4 technology, the DCSP shall provide suitable devices to connect STM-1/STM-4 interfaces terminating in the Data center to the Internet Routers (in the Data Center) which have Gigabit Ethernet Interfaces (Copper + Fiber). The internet routers shall be provided by UIDAI. The DCSP shall also install, configure and manage the device. (Note:- this is required for DC and DR sites)