

# ***ATC document for RF Link***

## **1. Technical Specification**

- i. Minimum aggregate link speed should be 300 Mbps and should be scalable upto 2 Gbps.
- ii. Latency should be <10 ms.
- iii. OEM to provide the certificate confirming that Radio equipment is not WiFi based.
- iv. Radio equipment, antenna and related accessories should be from same OEM.
- v. Bidder to provide the data sheet of radio and antenna being proposed and details of EM radiation and safety standards met by the equipment and safety features build in.

## **2. Timelines**

- i. Delivery, installation & commissioning within 5 weeks from purchase order date.
- ii. No separate charges shall be applicable for delivery/ installation/ testing/ commissioning of link.

## **3. Performance Bank Guarantee & Payment Terms**

- i. Successful bidder has to submit PBG equivalent to 10% of the total value of the contract with the validity of at least 180 days beyond warranty period.
- ii. 100% payment will be made after delivery, installation and commissioning of the RF link subject to submission of PBG.
- iii. PBG may be forfeited in case of unsatisfactory performance

## **4. Preventative Maintenance**

- i. Successful bidder to carry out preventive maintenance in each quarter and to ensure its timely execution.
- ii. PM schedule shall be got approved from the customer.

## **5. Monitoring System**

- i. Provide the solution for Monitoring the network using Network Management System (NMS)
- ii. Provide the monthly outage reports.
- iii. Analyse the frequent incidents and conduct detailed analysis of the same.
- iv. Perform incident and fault management for all kind of terrestrial link including Physical testing of all links, Ensuring link quality, Detection and isolation of faults, Logging of calls etc.
- v. The Service Provider will submit monthly reports such as Outage (Hardware as well as Link), Latency, Jitter and Packet Loss.

- vi. Complaint registration should be available for 24\*7\*365. The Downtime of the equipment starts from the time the complaint is logged in at the given address/helpdesk number provided by the bidder for escalating complaints.
- vii. Any delay in escalating a complaint shall be excluded from the availability calculations.

## 6. SLA

- i. Bidder must be able to resolve all the incidents, problems and user queries and other Network related issues as per SLA.
- ii. Bidder needs to maintain the SLA as per below –

Sr No.	Condition	Deliverable	Penalty
1	Link restoration time (MTTR)	Max. 4 Hrs from complaint logging	If the downtime exceeds 4 hours, then penalty of Rs. 100/- per hour will be liable.
2	Network Uptime *To be calculated each month	>=99%	NIL
		98-99 %	Rs 1000/-
		97-98 %	Rs 2000/-
		97-95 %	Rs. 3000/- + (Rs. 1500/- for each %age)
		90-95%	Rs 6000/- + (Rs. 2000/- for each %age)
		<90%	Entire PBG would be forfeited and blacklisting of vendor can be considered in case there is no satisfactory reason for the downtime.

*Note: In case the penalty imposed on the service provider exceeds the amount of PBG then action to blacklist the Service Provider will be initiated.*

- iii. Downtime due to following situations will not be considered for the purpose of penalty calculations –
  - If the link is down due to power failure.
  - Scheduled maintenance by the vendor with prior intimation
  - Riots, natural calamities and other force majeure conditions.

## 7. Other Terms & Conditions

- i. RF Link to be established from Main Secretariat, Sector 1 Chandigarh to State Information Commission building, Sector 16 Chandigarh with 5 years support and warranty.
- ii. Bidder to submit the site survey report and RF link budget details.
- iii. Bidder to provide the product life cycle certificate from OEM and availability of spares for at least 7 years.
- iv. Bidder to provide contact details of the O&M Engineer or helpdesk number for immediate support.
- v. The bidders requiring any clarification on the bid document may submit their queries via email to [sidharath.verma@punjab.gov.in](mailto:sidharath.verma@punjab.gov.in) by 12:00 PM on 01.03.2021 in the following format in a spreadsheet file:

SN	Tender / ATC Clause No.	Page No.	Tender / ATC Clause detail	Amendment Suggestion	Sought /	Justification

- vi. Date and time of pre-bid meeting: 11:00 AM on 03.03.2021.