

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
ISRO HEADQUARTERS (ISRO HQ)
BANGALORE**

Tender for Space Object Tracking Data for 100 objects for 6 months

Bids to be submitted online

Tender No.: ISRO HQ/ISRO HQ PURCHASE/HQ202100002401 dated 12-10-2021

A. Tender Details

Tender No : **ISRO HQ/ISRO HQ PURCHASE/HQ202100002401**

Tender Date : **12-10-2021**

Tender Classification: **SERVICES**

Purchase Entity : **ISRO HQ PURCHASE**

Centre : **ISRO HEADQUARTERS (ISRO HQ)**

Procurement of Space Object Tracking Data for 100 objects for 6 months

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A.1 Tender Schedule

Bid Submission Start Date : **12-10-2021 18:15**

Bid Clarification Due Date : **29-11-2021 16:00**

Bid Submission Due Date : **30-11-2021 16:00**

Bid Opening Date : **30-11-2021 16:01**

Price Bid Opening Date : **09-12-2021 16:00**

B. Tender Attachments

NA

C. Bid Templates

C.1 Technical Bid - Space Object Tracking Data for 100 objects for 6 months

1. Space Object Tracking Data-Tracking of objects for 6 months

Item specifications for Space Object Tracking Data

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Space Object Tracking data		-		

Document : RFP

2. Space Object Tracking Data-extension of the same by 6 months

Item specifications for Space Object Tracking Data

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Space Object Tracking data		-		

3. Space Object Tracking Data-extension of the same by 3 months

Item specifications for Space Object Tracking Data

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Space Object Tracking data		-		

4. Space Object Tracking Data-extension of the same for further period of 3 months

Item specifications for Space Object Tracking Data

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Space Object Tracking data		-		

Common Specifications (Applicable for all items)

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Time Stamping (mandatory)	< 10 us	Yes / No / Explain		
2	Range Measurement (mandatory)	better than 50 m (1 sigma)	Yes / No / Explain		
3	Azimuth (mandatory)	better than 0.1 degree (1 sigma)	Yes / No / Explain		
4	Elevation (mandatory)	better than 0.1 degree (1 sigma)	Yes / No / Explain		
5	Doppler (mandatory)	better than 7.5 cm/s (1 sigma)	Yes / No / Explain		
6	Signal to Noise Ratio	Mandatory	Yes / No / Explain		
7	Radar cross section	Preferred	Yes / No / Explain		
8	Object ID (mandatory)	Known Objects - Norad ID Unknown objects - Object wise ID in a track session	Yes / No / Explain		
9	Flag/ Indicator on data quality	Mandatory	Yes / No / Explain		
10	Data points in single track session per object	>100	Yes / No / Explain		
11	Duration/ Sampling per object	2 minutes/ 1 sec (can be multiple arcs from orbits within 12 hours) 30 sec/ 200 ms (can be multiple arcs from same orbit)	Yes / No / Explain		
12	Precise Station co-ordinates (i.e., antenna phase center)	better than 1cm	Yes / No / Explain		

13	Any corrections on the coordinates w.r.t phase center	If the measurements are already corrected for the same it should be mentioned clearly and the offset values to be provided	Yes / No / Explain		
14	Calibration delays	If the measurements are already corrected for the same it should be mentioned clearly and values to be provided as when measured	Yes / No / Explain		
15	Estimated orbit with the same measurements	For validation purposes	Yes / No / Explain		
16	Transmit/Received (Centre) Frequency	For ionosphere delay computation	Yes / No / Explain		

Supporting Documents required from Vendor

1. along with the technical bid the documents shall be attached as per Clause no:1.2 of Annexure -B

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	To be eligible, the tenderer should have not been banned or suspended from Government transactions due to any reason including corrupt and fraudulent practices. The self declaration in this regard shall be submitted.	Yes / No / Explain	
2	The tenderer shall submit relevant documentary details regarding the owned space objects/debris detection radar(s)	Yes / No / Explain	
3	The Tenderer shall be an owner of space objects/debris detection radar(s) and take complete responsibility of securely sharing the space object tracking data	Yes / No / Explain	
4	Only those Tenderers, who have previous experience of tracking space objects/debris detection with radar and carrying out the related bias corrections are eligible for bidding.	Yes / No / Explain	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	Space Object Tracking Data-Tracking of objects for 6 months	100.00 Nos.		-		
2	Space Object Tracking Data-extension of the same by 6 months	100.00 Nos.		-		
3	Space Object Tracking Data-extension of the same by 3 months	100.00 Nos.		-		
4	Space Object Tracking Data-extension of the same for further period of 3 months	50.00 Nos.		-		

Common charges (Applicable for all items)

any other charges	
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