

## Pre-bid Queries and Clarifications to the prospective Bidders

S.No	Organisation	Reference to RFP Published	Queries / Concern	Clarifications
1	AMPL	MeitY seeks proposals from bidder to design, manufacture, supply and maintain Integrated NavIC and GPS chips and ensure deployment of Integrated NavIC and GPS receivers.	<p>1. There is no need to develop a new chip / chipset if bidder has already developed / acquired the IP of an existing suitable chip. Designing, manufacturing, supplying and maintaining Integrated NavIC and GPS receiver using already developed chip should be sufficient to discharge the obligations of this tender. Please confirm.</p> <p>2. Bidder selling Integrated NavIC and GPS receiver (that complies to specifications in Annexure-E of the RFP) to GNSS module manufacturers or GNSS receiver manufacturers is qualified as deployment of the receiver. Please confirm.</p>	<p>(i) As mentioned in Section 4.5 of the RFP, the technical proposal shall, inter-alia, include the overall approach and methodology for all components including designing, manufacturing and roll out plans meeting all the functional and technical requirements outlined in RFP. This may include the details of pre-owned IPs and new IPs to be designed/ acquired for developing the Integrated NavIC &amp; GPS Receiver. Subsequently, during Development Stage 1, ISRO will evaluate the technical specifications for the Receiver Chipset (as per Annexure E of the RFP), based on their acceptance criteria (as per Annexure F of the RFP).</p> <p>(ii) As mentioned in Section 2.2 and Section 2.2.2 of the RFP, the bidder can supply the Integrated NavIC and GPS chipset to Global Navigation Satellite System (GNSS) module manufacturers or directly to GNSS receiver manufacturers ensuring proper receiver deployment at field and to get acknowledgment copy of successful deployment of the Integrated NavIC and GPS Receivers from the aforesaid buyers.</p>

2	AMPL	The bidder/s should design, manufacture, supply and maintain awarded quantity of Integrated NavIC and GPS receivers; and ensure deployment of Integrated NavIC and GPS receivers.	There is no need to develop a new chip / chipset if bidder has already developed / acquired the IP of an existing suitable chip. Designing, manufacturing, supplying and maintaining Integrated NavIC and GPS receiver using already developed chip should be sufficient to discharge the obligations of this tender. Please confirm. 2. Bidder selling Integrated NavIC and GPS receiver (that complies to specifications in Annexure-E of the RFP) to GNSS module manufacturers or GNSS receiver manufacturers is qualified as deployment of the receiver. Please confirm.	As Answered in S. No. 1 above
3	AMPL	The bidder can supply the Integrated NavIC and GPS chips to Global Navigation Satellite System (GNSS) module manufacturers or directly to GNSS receiver manufacturers.		
4	AMPL	The bidder has to get acknowledgment copy of the successful deployment of the chipsets from the aforesaid buyers.		
5	AMPL	In this phase each bidder shall design and develop the Integrated NavIC and GPS chipset proof of concept. Timeframe of total 14 months shall be given for proof of concept of chipset.	Bidder should be allowed to submit the proof of concept at any time within the stipulated time frame.	

6	AMPL	Successful proof of concept of the chipset must be shown to ISRO. Complete testing report of the working of the chipset in various geographical and climatic conditions must be approved by ISRO.	Please furnish the detailed test plan and test conditions for testing the chipset in "various geographical and climatic conditions".	During Development Stage 1, ISRO will evaluate the technical specifications for the Receiver Chipset (as per Annexure E of the RFP), based on the acceptance test (as per Annexure F of the RFP). The testing to be carried out in controlled environment using GNSS Simulator which can simulate various geographical conditions in lab environment. The climatic condition test is to check for chipset performance in specified operating conditions of temperature and humidity already mentioned in the RFP (-10C to 85C; 5%-95% RH).
7	AMPL	The bidder shall get equipped to deploy the chipset at commercial level. For this purpose, bidder may get certificates relevant for commercial level deployment.	<ol style="list-style-type: none"> <li>1. Please suggest the certifications that could prove beneficial for selling to various industry segments.</li> <li>2. Will ISRO, CDAC and MEITY provide certificate once the chipset and receiver qualifies their testing?</li> </ol>	<p>Product level certifications (AIS-140, IEC etc) depend on end applications whose certifications are done by different agencies (ARAI / ICAT, BIS etc).</p> <p>As such, NavIC system is already certified for use by different agency for different applications. IMO has recognized NavIC as a component of the World-Wide Radio Navigation System (WWRNS), NavIC L5 has been incorporated in the Radio Technical Commission for Maritime Services (RTCM) standard 10403.3 for differential GNSS applications, NavIC is incorporated into the AIS-140 (Automotive Industry Standard) by ARAI. NavIC has also been incorporated in the NMEA 0183 standard developed by National Maritime Electronics Association. 3GPP has included NavIC for assisted GNSS support.</p>

8	AMPL	In this phase bidder(s) is required to supply awarded quantity of NavIC and GPS chips in span of 2 years. Also, the bidder must ensure that chipsets are getting deployed in the integrated NavIC and GPS receivers.	Bidder selling Integrated NavIC and GPS receiver (that complies to specifications in Annexure-E of the RFP) to GNSS module manufacturers or GNSS receiver manufacturers is qualified as deployment of the receiver at field. Please confirm.	As mentioned in Section 2.2 and Section 2.2.2 of the RFP, the bidder can supply the Integrated NavIC and GPS chipset to Global Navigation Satellite System (GNSS) module manufacturers or directly to GNSS receiver manufacturers ensuring proper receiver deployment at field and to get acknowledgment copy of successful deployment of the Integrated NavIC and GPS Receivers from the aforesaid buyers.
9	AMPL	Ensure deployment of integrated NavIC and GPS receiver device. Bidder has to submit acknowledgment copy of the deployment at field from the buyer.		
10	AMPL	The successful bidder(s) has to submit acknowledgment copy of the deployment from the buyer.	Purchase order copy from the GNSS module manufacturers or GNSS receiver manufacturers to the bidder for procurement of Integrated NavIC and GPS receiver (that complies to specifications in Annexure-E of the RFP) should serve as buyer's acknowledgement of deployment. Please confirm.	
11	AMPL	Support and Maintenance Phase Support Amount: 10% of the total support amount would be released by C-DAC after approval from CDAC of the reports submitted by the bidder.	Bidder should be allowed to claim this amount against BG at the end of Implementation Phase. Please confirm.	

12	AMPL	The bidder should have at least '1' purchase order/work order/contract of value INR 5 crore related to design, manufacture, supply and maintenance of chips during the last 5 financial years.	The semiconductor chips designed using any semiconductor technology like CMOS, BiCMOS, SiGe, GaAs, GaN, LDMOS etc should qualify for this eligibility criterion. Please confirm.	All kind of Semiconductor Chips qualify this criteria.
13	AMPL	The bidder should have designed, manufactured and supplied at least 3 different types of semiconductor chips and in last 5 financial years in India with cumulative size of atleast 50000 chips.		
13	AMPL	The bidder must have experts having in-depth knowledge in design of semiconductor chips. Annexure		
14	AMPL	Development of Integrated NavIC and GPS Chipset carried out using an Indigenously developed Processor - 10 Marks	Adhering to the "Atmanirbhar India" and "Make in India" spirit, it should be made mandatory to use Indigenously developed Processor for this tender. Please confirm.	

15	<b>AMPL</b>	<p>General: In case, the chip sets/modules having almost the same feature as advertised, are already available elsewhere outside India, whether MEITY/CDAC will allow the use of those? If yes, will it not be against the "Atmanirbhar India" and "Make in India" campaigns of the Govt of India considering that these products are developed within the country as part of the earlier tender by MEITY? Kindly suggest.</p>		<p>The RFP focuses on the design, manufacture, supply and maintain 10 Lakh Integrated NavIC and GPS receivers to make use of Navigation Services made available by Indian Constellation of Satellites for achieving self-reliance in navigation sector. As per Section 2.2.1 of the RFP, the chipset must comply with the technical specifications mentioned in the RFP at Annexure E.</p>
16	<b>Alpha Design Technologies PVT. LTD.</b>	<p>10.2. Instructions for Consortium(page 30/66) 1. All members in the consortium should be registered legal entity in India and should have signed the Integrity Pact.</p>	<p>For a foreign company to register in India as consortium partner (not lead bidder) kindly clarify the following: - Is it enough if the founder of the foreign company will establish a new company in India? So that Indian and foreign entities will have the same name and same person's ownership (affiliated companies)? Please advice. (not lead bidder) kindly clarify the following: - As the time available for registration of the foreign company is short, in view of Bid submission date of January 10, 2021, can the "application/other documentation submitted to the specified Government body, towards registration of the foreign company" be provided at the time of bid submission and actual registration document given within one month of Bid submission.</p>	<p>As per Section 10.2 of the RFP, all members in the consortium should be registered legal entity in India and should have signed the Integrity Pact. Also, as per documents to be submitted meeting the Pre-Qualification Criteria (Annexure A Eligibility Criteria) during the Pre-Qualification Bid, an applicant (referred to as "bidder") shall be a Limited Liability Partnership registered under the LLP Act or a Company incorporated and registered in India under the Companies Act, 1956. The LLP/Company should be operational in India for at least last five years (two in case of Startup and MSME) financial years as of 31st March, 2020 as evidenced by the Certificate of Incorporation issued by the Registrar of Companies, India.</p>
17	<b>Alpha Design Technologies PVT. LTD.</b>	<p>Annexure B. Technical Evaluation Criteria (page 38/66)</p>	<p>During technical evaluation the experience of consortium partners also will be considered along with lead bidder, Please confirm.</p>	<p>As per Section 10.2 of the RFP, At least one member of consortium should meet the turnover, project experience and semiconductor chip supply requirement mentioned in Annexure A.</p>

18	<b>ELVEEGO Circuits Pvt. Ltd. Bangalore</b>	#2.2 Scope of Work	<p>While the scope of work uses the American GNSS system's term "GPS" along with the Indian GNSS system "NavIC", should the final ASIC to be designed and developed also include support for other countries GNSS systems like GPS (US), Galileo (Europe), QZSS (Japan) etc.?</p> <p>Is the ASIC to be designed and developed only support "NavIC" or "NavIC" + GPS (US)?</p> <p>Or should the ASIC explicitly support only Indian "NavIC" and exclude support for other countries GNSS?</p>	As per Section 2.2 of the RFP, the Scope of the work to include atleast the provision of Integrated NavIC and GPS receivers. The bidder may design & include other GNSS systems for multiple applications/marketing however, that is not mandated by the RFP.
19	<b>Elena Geo System</b>	Section 6.1	<p>This is Phase II of the project. As per original RFP issued in 2017 and finalized in 2019, based on which contracts are already been awarded, 06 distinct vendors were supposed to be selected to maintain the competition, 03 were supposed to be from MSME category and 03 from open category. However, the current RFP is silent about this aspect. Hence, it is recommended that in current selection of 3 vendors, as per the Phase II of RFP, vendors selected earlier in Phase I are not to participate in this Phase. This will achieve the goal of maximizing the production capability in the country.</p> <p>Submitted for your kind consideration and issue of necessary amendment for RFP</p>	As per the Terms & Conditions of the RFP & extant General Financial Rules

20	<b>Atto Communications Pvt Ltd</b>	page7; section 2.2 The bidder/s should design, manufacture, supply and maintain awarded quantity of Integrated NavIC and GPS receivers: and ensure deployment of Integrated NavIC and GPS receivers	In this tender Scope is limited to only to build ICs or build the Receiver devices also?	As per the Section 2.2 of the RFP, the activities listed in the Scope of the work includes - Development Phase (Successful testing of the proof of concept of Integrated NavIC and GPS chipset followed by successful testing of the proof of concept of Integrated NavIC and GPS receiver device), implementation Phase to deploy Integrated NavIC and GPS Receivers and Support and Maintenance Phase to provide Support and Maintenance of Integrated NavIC and GPS Receivers.
21	<b>Atto Communications Pvt Ltd</b>	page7: section 2.2 The total awarded quantity is 10 Lakh.		Yes
22	<b>Atto Communications Pvt Ltd</b>	page17: section 4.5 Section IV - Proof of Similar work done in Past	The Similar work proof can only be considered with Govt bodies or can also be considered in public and private sectors?	Proof of Similar work done in Past with Government bodies or public/ private sector is considered.
23	<b>Atto Communications Pvt Ltd</b>	page21: section 5.4 The support price for 10Lakh chips will be divided by 10 to get the support price per lakh and the lowest financial proposal per Lakh will be awarded as the lowest bid: "L1" The bidder who quoted the next Lowest Support Price would be termed as "L2" and so on	More clarity required on deciding on L1. L2, etc ..	The details are provided at Section 6.1 Award Criteria of the RFP

24	<b>Manjeera Digital Systems Pvt.Ltd.</b>	2.2 Scope of Work, Item 5: Development Stage I on Page 7/66	Stated as “Integrated NavIC & GPS Chip” Question: Will a chipset eligible. In that case it should be “Integrated NavIC & GPS module”	As mentioned in Section 2.2 and Section 2.2.2 of the RFP, the bidder can supply the Integrated NavIC and GPS chipset to Global Navigation Satellite System (GNSS) module manufacturers or directly to GNSS receiver manufacturers ensuring proper receiver deployment at field and to get acknowledgment copy of successful deployment of the Integrated NavIC and GPS Receivers from the aforesaid buyers.
25	<b>Manjeera Digital Systems Pvt.Ltd.</b>	Same section as above: Development Stage II on Page 8/66	Stated as “Integrated NavIC & GPS device” Question: What is this device and how is it different from the chip above. Needs clarification	As mentioned in Section 2.2.1 of the RFP, In Development Stage II, bidder shall get equipped to demonstrate the readiness of Integrated NavIC and GPS Receiver device at commercial deployment level to C-DAC while the focus of Development Stage I is to get evaluated the technical specifications of the Receiver Chipset by ISRO (as per Annexure E of the RFP) based on their Acceptance Criteria (as per Annexure F of the RFP). As per Section 2.3. of the RFP, Bidder has the choice to have either an integrated single ASIC chip or Multi-chip Module.
26	<b>Manjeera Digital Systems Pvt.Ltd.</b>	Same as above, next sentence	Sated as “chipsets” Question: Are they same as “chip” referred in Phase-1 or “Device” in Phase-II? Suggested that ‘Receiver Modules’ is used for Phase-I or whenever this is referred in the rest of the RFP and “Application Device” for Phase II	As answered at S. No. 25 above
27	<b>Manjeera Digital Systems Pvt.Ltd.</b>	Development Stage II: Item 2 Page 9/66	Stated as “bidder must showcase demo of the working of chipset in the receiver” Question: What is the “receiver here”. It should be ‘Application Device’? These is considerable confusion in the terminology throughout the document	As answered at S. No. 25 above

28	<b>Manjeera Digital Systems Pvt.Ltd.</b>	2.2.2 Phase 2: 1 a Page 9/66	Stated as “Ensuring proper deployment of the receiver at field” Questions/Comments: i. Seller (bidder) may not be able to inspect the customer work to ensure proper deployment. Bidder can at most get a certificate of deployment. ii. The customer (buyer) may have their own timeline of deployment, which may not be consistent with the timeline of the RFP. So the bidder can only get a certificate of successful deployment of a few receiver modules (but not all bought by the customer) iii. Some of the customers (buyers) may be manufacturers of the devices (such as vehicle tracking systems), which are in turn sold to end user. Thus the buyers from the bidder may not deploy directly in the field. Therefore the word ‘field’ may be omitted	As mentioned in Section 2.2 and Section 2.2.2 of the RFP, during the Implementation Phase, the bidder can supply the Integrated NavIC and GPS chipset to Global Navigation Satellite System (GNSS) module manufacturers or directly to GNSS receiver manufacturers ensuring proper receiver deployment at field and to get acknowledgment copy of successful deployment of the Integrated NavIC and GPS Receivers from the aforesaid buyers. Also, as per Section 2.2.3 of the RFP, during the Maintenance Phase, bidder has to provide a comprehensive warranty for 3 years from the date of sale of Integrated NavIC and GPS receiver. Hence, proper tracking of field usage of these receiver is to be maintained by the bidder.
29	<b>Manjeera Digital Systems Pvt.Ltd.</b>	Page 25/66	as “Advance amount will be disbursed only when it is sought by the bidder” Question: >If the bidder doesn’t seek advance, when will the 20% be paid to the bidder? > Similarly, when will be the 10% earmarked for Stage II paid to the bidder without any BG	The advance amount is disbursed only in case it is sought by the bidder. In case the bidder does not seek advance, the contract amount will be reimbursed upon meeting the milestones identified in the RFP. As per Section 8 of the RFP, 10% of the total support amount would be released by C-DAC against bank guarantee after the completion of both development stage I and II.
30	<b>Manjeera Digital Systems Pvt.Ltd.</b>	Annexure E: GNSS Signal Reception Capability – NavIC Page 62/66	Stated as “at least 2 Freq. bands” Question: Does that mean that S band is not essential? Having S-band will impact the cost and hence clarification is necessary	As per Annexure E of the RFP, the integrated NavIC and GPS Receiver to inter alia support atleast 2 Frequency bands out of the 3 NavIC bands- L5 (1176.45 MHz), S (2492.028 MHz), L1 (1575.42 MHz). Consequently, enabling provision of S band is not essential.

31	ELKAY	<p>3.2.7. Receiver shall be designed to have anti-jamming capability to mitigate the effects of RF interference from narrow and wideband interference source such as Distance Measuring Equipment(DME) and Tactical Air Navigation (TACAN), FM Radio signals &amp; FM harmonics, Land mobile, WCDMA, Wimax/Wi-Fi signals etc. using state of the art techniques. Vendor shall demonstrate performance of implemented mitigation techniques/algorithms.</p>	<p>Does anti-jamming should only be used for industrial interference and interfering signals from different radio services?</p>	<p>Referred sections doesn't pertaing to subject RFP</p>
32	ELKAY	<p>3.2.12. Receiver shall take external 1 PPS time mark for price time transfer. 3.2.11. Receiver shall provide 1 PPS time mark for precise time synchronization. 5.4 GNSS receiver shall receive the 1PPS time mark from IN/GNSS or other GNSS receivers for time synchronization.</p>	<p>Does it mean that GNSS receiver can be synchronized from external device and can be as source of synchronization for external devices?</p>	<p>Referred sections doesn't pertaing to subject RFP</p>

33	ELKAY	3.2.13. GNSS receiver shall provide PVT solution at an update rate of minimum 10Hz.	It should be a GNSS-only solution or it is possible to integrate with the built-in MEMS sensor?	Referred sections doesn't pertaing to subject RFP
34	ELKAY	3.2.14. BIT and Maintenance: System shall have a comprehensive built in testing capability during Power ON i.e. PBIT (Power on Built In Test) and CBIT (Continuous Built In Test) while in operation. It shall include integral processing for detection and location of hardware faults and reporting the health result over a bus. Receiver shall also perform IBIT (Initiated Built In Test) whenever initiated through external command.	How the GNSS receiver informs the flight computer of the test results?	Referred sections doesn't pertaing to subject RFP
35	ELKAY	5.3 The receiver shall be interfaced with on-board flight control computer/Real time computer to receive the control and command input and the baro-altitude information for baro-altitude aiding to improve availability and accuracy of vertical position.	What data protocol is used for the control and command input? Whether the receiver should integrate the GNSS data, baro-altitude data and make a joint solution for the flight control computer?	Referred sections doesn't pertaing to subject RFP

36	<a href="#">ELKAY</a>	9.1 Receiver hardware design and certification shall conform the means of compliance to RTCA-DO-254 or equivalent.	please Explain the requirment	Referred sections doesn't pertaing to subject RFP
37	<a href="#">ELKAY</a>	9.3 Receiver for IRNSS-NavIC GNSS shall be developed to conform to SICD and design standards SAC/ISRO.	please Explain the requirment	Referred sections doesn't pertaing to subject RFP
38	<a href="#">ELKAY</a>	9.4 The software and firmware design, development, testing, verification and validation process for the system shall conform to RTCA-DO-178B, level-B standard or equivalent.	please Explain the requirment	Referred sections doesn't pertaing to subject RFP
39	<a href="#">ELKAY</a>	9.5 Receiver shall be tested and certified as per MIL-STD810G, change-1 for environmental conditions and MIL-STD461E and MIL-STD-462C for EMI/EMC conditions (Refer Annexure-I for environmental test and Annexure-II for EMI/EMC test ).	Time frame for test	Referred sections doesn't pertaing to subject RFP

40	<b>ELKAY</b>	<p>10.1 xviii. IPR must also reside in India so that India has access and complete control to these rights in times of emergency to protect our national interest.</p> <p>2.3. 2. Bidder has the choice to have either an integrated single ASIC chip or Multi-chip Module.</p> <p>2.2. 1. The total awarded quantity is 10 Lakh.</p> <p>2.2.1. Phase 1: ... Complete testing report of the working of the chipset in various geographical and climatic conditions must be approved by ISRO.</p>	<p>Is this meant for foreground or also background IPR? If this means also background we would not be able to bid! 14 months of development means that background must be used! Is an discrete analogue FE acceptable or is it a must to have it also as an ASIC? Does that mean 1 Mio. ASICs, or Receivers? 1. is the design, 3. is testing: Does that mean, that within 14 months a complete design, ASIC production (first run), packaging, breadboarding, setup ... has to be done?</p>	<p>As per Section 10 Terms and Conditions of the RFP and Section 2.2 Scope of work. As per Section 2.2.1 of the RFP, The chipset must comply with the technical specifications mentioned in the RFP in Annexure E</p>
41	<b>eInfochips</b>	<p>27thNov RFP for design, supply integrated NavIC and GPS receivers</p>	<p>Any preference of foundry and node technology</p>	<p>The choice of appropriate foundry and node technology is at description of the bidder</p>
42	<b>eInfochips</b>	<p>27thNov RFP for design, supply integrated NavIC and GPS receivers</p>	<p>Can we bid for only NavIC design and supply instead of GPS as well</p>	<p>No. The Scope of the work interalia includes deployment of integrated NavIC and GPS Receivers</p>
43	<b>eInfochips</b>	<p>27thNov RFP for design, supply integrated NavIC and GPS receivers</p>	<p>Any provision for covid-19 pandemic risk/schedule delay and loss due to that ? OR any risk mitigation Critical path options.</p>	<p>As per the Terms &amp; Conditions of the RFP &amp; extant General Financial Rules</p>

44	<b>eInfochips</b>	27thNov RFP for design, supply integrated NavIC and GPS receivers	Deposit amount criteria should be rethought.	As per the RFP and its Corrigendums issued thereof.
45	<b>Unison Electronics Autho Rep in India SkyTraq Technology Inc (Taiwan)</b>	A typical NavIC+GPS/GAGAN Receiver chipset/Module will consist of L1, L5 & S-band RF Front-Ends and Baseband Processing for NavIC and GPS/GAGAN Channels. This module is targeted as cost-effective solution for commercial, strategic & critical infrastructure sector applications.  GNSS Signal Reception Capability	NavIC : S (2492.028 MHz) 1L1 (1575.42 MHz)11 --- See Note* GPS L-band Civilian Signals ; GAGAN SBAS	As per Annexure E of the RFP, the integrated NavIC and GPS Receiver to inter alia support atleast 2 Frequency bands out of the 3 NavIC bands- L5 (1176.45 MHz), S (2492.028 MHz), L1 (1575.42 MHz).
46	<b>Unison Electronics Autho Rep in India SkyTraq Technology Inc (Taiwan)</b>	Antenna Support	Since chipset requirement is for L1 / L5 / S-band 3 different frequencies, why is RF input not three inputs?	As per Annexure E of the RFP, the integrated NavIC and GPS Receiver to inter alia support atleast 2 Frequency bands out of the 3 NavIC bands- L5 (1176.45 MHz), S (2492.028 MHz), L1 (1575.42 MHz). Moreover, there could be one common patch antenna for L1 & L5 bands and another patch antenna for S band requiring only 2 RF inputs.

47	<b>Unison Electronics Autho Rep in India SkyTraq Technology Inc (Taiwan)</b>		<p>Currently there is no low-cost L1/L5/S-band antenna. There is no Indian company making low cost L1/L5 antenna. How will the antenna issue be solved in order to sell 1Mpcs L1/L5/S-band NavIC/GPS chipset into the market?</p>	<p>L1+L5 antenna are commercially available at low cost. However, inclusion of S band would somewhat increase cost but some end-users interested in dual band would also opt for NavIC-only (L5+S) processing. Further, availability of S-band low cost antenna may be there in near future. Innovative Small Patch Antenna supporting S band can also be designed and used.</p>
48	<b>Unison Electronics Autho Rep in India SkyTraq Technology Inc (Taiwan)</b>		<p>Will government create demand for 1 million set of L1/L5/S-band NavIC/GPS tracker for this MeitY tender? If not, as the cost of adopting L1/L5/S-band NavIC/GPS will be much higher than current GPS solutions, how will companies winning MeitY tender sell 1 million chipset to the market in 2 years?</p>	<p>Demand for NavIC+GPS chipsets will increase in near future as there are multiple advantages (increased accuracy &amp; availability) of multiconstellation and dual frequency receivers. Also, combining GEO+MEO constellation will substantially improve GDOP and position accuracy thereby besides position solution availability. As government has mandated use of NavIC in AIS-140 and similar regulations may be possible in future as well for other applicatons, and as NavIC has got international certification and inclusion in various standards of IMO, RTCM, NMEA and 3GPP, the acceptance and requirements of NavIC will definitely grow in near future, thereby increasing its commercial market share.</p>
49	<b>Signalchip Innovations Private Limited</b>	<p>Pg. 22, § 5.4 Financial Bid Evaluation</p>	<p>Will the cost of the Integrated NavIC and GPSchipsetand/orcost Of the GNSSmodule or GNSS receiver be considered in the financial bid evaluation.For example a higher development cost</p>	<p>As per Section 5.4 of the RFP, The quoted amount by the bidder to design and manufacture Integrated NavIC and GPS receivers shall be considered for Financial Bid evaluation. The Financial bid Support Price quoted by the bidder will be all inclusive and include, inter-alia all taxes. The contract will be awarded to the proposal having lowest financial value as per details in Section 6 of the RFP.</p>

50	<b>Signalchip Innovations Private Limited</b>	Pg. 26, § 8, row 1 20% of the total support amount would be Can the bank guarantee requirement be released in advance by CDAC at the start of this phase against bank guarantee.10% of waived (at least partially) for MSMEs. Th.is the total support amc)unt would be released is because MSMEs without strong by C-DAC against bank guarantee after the completion of both development stage I and amount to get the bank guarantee.II	Can the bank guarantee requirement be waived (at least partially) for MSMEs. This is because MSMEs without strong revenue/earnings have to deposit similar amount to get the bank guarantee, making the advance not that useful	As per the Section 8 of the RFP, the advance amount would be released against bank gaurantee.
51	<b>Signalchip Innovations Private Limited</b>	Pg. 26, § 8, row 1 20% of the total amount would be released in advance by CDAC at the start of this phase against bank guarantee. 10% of the total support amount would be released by C-DAC against bank guarantee after the completion of both development stage I and II	If Advance is not taken is it nesaary to submit any Intellectual Property to the Escrow as specified in 7.2 vi	As per the Scope of the Work idicated at Section 2.2.1 of the RFP, establishing Escow account is an essential criteria.

52	<b>Signalchip Innovations Private Limited</b>	Pg. 26, § 8, row 2 Implementation Phase Supply of awarded quantity of Integrated NavIC and GPS receivers. Minimum average of 25% of awarded quantity of Integrated NavIC and GPS receivers must be deployed every six months.	In case less than 25% of awarded quantity of receivers were deployed in a quarter and hence did not qualify to receive the support amount, can the numbers deployed be added to the numbers deployed in the subsequent quarters to claim support amount.	As per Section 8 of the RFP, Minimum average of 25% of awarded quantity of Integrated NavIC and GPS receivers must be deployed per six months. In case the bidder has deployed more than 25% of awarded quantity of chips in six months, payment shall be made for the actual quantity supplied in those six-month. However the RFP does not provide the provision of adding the volume not deployed in current quarter to the subsequent quarter.
53	<b>Signalchip Innovations Private Limited</b>	Pg. 30, § 10.1, ii Government of India (GoI) Ministry/Department/Body may ask the bidder to supply government a quantity of chip at a government determined rate at the time of requirement by the government. The amount of chips required and the rate shall be specified by GoI at that time. The bidder shall be obligated to provide such chips at such rates.	If the bidder is obliged to supply at the govt. determined rate, how can the commercial feasibility of the govt. determined rate be ensured.	Under normal circumstances, the bidder may sell the Receivers at a price deemed fit to the commercial requirement.

54	<b>Signalchip Innovations Private Limited</b>	Pg. 31, § 10.1, xix All intellectual property rights in the design of the chip set under this RFP (excluding IPs of the individual components that are part of the chip) and codes shall be jointly owned by C-DAC and the bidder. The bidder will provide all support in getting the IPRs registered with Indian authorities at the cost and expense of MeitY.	Can the bidder sell the IPRs and/or the chipset on their own independent of C-DAC? What happens to background and pre-developed IPRs? Does C-DAC need ownership of those IPRs as well?	As per Section 7.2 of the RFP, the provision of joint ownership of IPR under the RFP has been made for escrow arrangement only, wherein all the design & development related project documents would be kept. The documents would be released to CDAC from ESCROW only before invocation of exit clause or in the case of Developer not complying with the terms of RFP. However, in a normal scenrio wherein the bidders complying to the terms of the RFP, IPRs and/or the chipset can be sold by them on their own independent of C-DAC.
55	<b>Signalchip Innovations Private Limited</b>	Pg. 33, § 10.8 Indemnity	Is indemnification for Indian jurisdiction sufficient?	Yes
56	<b>Signalchip Innovations Private Limited</b>	Pg 65 Annex E GNSS Signal Reception Capability GPS L-band (L1C/A, Lk) Civilian Signals ; GAGAN SBAS	Is support for GPS L1C Mandatory? Is support for GAGAN SBAS Mandatory?	It is clarified that GPS L1 C/A and GAGAN SBAS are Mandatory. However, if vendor is not opting for NavIC S-Band option (i.e. Vendor is opting for NavIC L5 and NavIC L1 band option), GPS L1C is also Mandatory.

57	<b>Signalchip Innovations Private Limited</b>	9 Pg. 26, § 8, row 2 60% of the total support amount for award edquantity of chips.Support amount payment to be made by C-DAC onpro-rata basisevery six months.To get the support amount deployment of minimum average of 25% of award edquantity of chips would be required per six months.	In case an indogenous chip is deployed in the duration specified in the RFP by a technically qualified bidder, who is not L1, L2 or L3 is there a possibility to get the support money	The support amount will be disbursed only to the bidders who are awarded the contract.
58	<b>Telit Wireless Solutions Ltd</b>	GNSS Signal Reception Capability	Our module does not support S-band. S-Band support will require additional antenna.	As per Annexure E of the RFP, the integrated NavIC and GPS Receiver to inter alia support atleast 2 Frequency bands out of the 3 NavIC bands- L5 (1176.45 MHz), S (2492.028 MHz), L1 (1575.42 MHz). Consequently, enabling provision of S band in the deliverable is not essential.
59	<b>UFK Electronics Pvt. Ltd.</b>	Annexure E: Technical Specification of Integrated NavIC and GPS chip/Receiver.  Parameter: Package Size & Form Factor: ~450 mm2, Single Chip or Multi-Chip Module Leadfree, RoHS Compliant Desirable.	Size mentioned is 450mm sq is this chip area or size of final module (final module includes Chip + TCXO & External RF Filters)	It is the size of the Single chip/Multi Chip Module (MCM).

60	<b>Silizium Circuits Pvt</b>	9(1)/2020-MDD (Vol.1)	What is the procedure for Consortium. Does it need to be with the applicants	As per Section 10.2 of the RFP, Bidder can form consortium with any partner(s) to leverage the expertise of the partners- Design/Fabrication/ATMP/Sales or any other relevant expertise required to supply Integrated NavIC and GPS receivers
a	<b>Silizium Circuits Pvt</b>	9(1)/2020-MDD (Vol.1)	Is there any restriction or preference to any specific technology node	The choice of appropriate technology node is at the discretion of the bidder.
62	<b>Silizium Circuits Pvt</b>	9(1)/2020-MDD (Vol.1)	Will there be any additional documentation regarding the technical specifications	Technical Specification are per the details provided at Section 2.4 and Annexure E of the RFP. MeitY/ ISRO may be contacted for further details as required.
63	<b>Silizium Circuits Pvt</b>	9(1)/2020-MDD (Vol.1)	Is there a possibility of contribute to particular segment of the project or only the complete chip	The participating bidders has to comply with the entire activities listed in Section 2.2 Scope of Work of the RFP