

**PRE-BID QUERIES FOR PROCUREMENT OF
INERTIAL NAVIGATION SYSTEM (QTY-106)**

| <u>Ser No.</u> | <u>Para No. of RFP</u> | <u>RFP Description</u> | <u>Queries</u> | <u>Reply</u> |
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| M/s Safran Electronics and Defence Services India Pvt Ltd | | | | |
| 1. | Para 2 | Synopsis - Broad Description of Equipment / System | It only specifies requirement of Digital INS. However, ambiguity still remains as, Digital INS correlates to RLG technology only and no other INS technology has digital version. In the absence of this clarity, to become L 1, vendors may offer only the "obsolete" low performance Analog RLG (of 1970 vintage) that may give digital output, completely detrimental towards modernization of Artillery. | Digital INS as per RFP. Digital gyro also mentioned in Appx J of RFP. |
| 2. | - | - | How will Digital / Analog INS technology will be assessed & differentiated during technical assessment & demonstration? | DGQA will assess. Only digital gyro acceptable as per RFP. |
| 3. | - | - | (a) Superiority aspects of Digital RLG INS against Analog / Hybrid Analog RLG are as under:- <u>Digital RLG.</u> (i) Already been integrated & introduced in service on PINAKA, Dhanush, Akash (Army & Air Force), WLR etc. (ii) Already qualified on ATAGS, Akash Prime & awaiting introduction in service. | Pt Noted |



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| | | | <p>(iii) Under advance stage of trial evaluation on Akash NG, QRSAM, MGS, Atulya Radar, Ashlish Radar & many other programs.</p> <p>(iv) Majority of the Indian Navy & Air Force platforms are also integrated with Digital RLG INS.</p> <p>(v) Analog RLG INS are being replaced with Digital RLG INS on various platform.</p> <p><u>Analog RLG:-</u></p> <p>(i) Analog RLG INS has been integrated on 1st & 2nd PINAKA Regiments (when digital RLG technology was not available).</p> <p>(ii) Once Analog RLG became obsolete in 2010, 3rd PINAKA Regiment onwards only Digital RLG INS is integrated.</p> <p>(iii) For K-9 repeat order, Digital RLG INS is being considered, by L & T, to replace existing INS on K-9 platform.</p> <p><u>Analog RLG with Digital Output</u> In Hybrid Analog RLG INS, Analog RLG signals are converted to Digital signals through very high powered PCB, however still retaining Analog RLG characteristics like performance etc.</p> | Point noted. However, RFP clearly quotes digital gyro. |



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| 4 | | Very High Medical Risk Hazards for Maintenance of Analog RLG INS | A very high-powered PCB is integrated in Hybrid Analog RLG INS (to convert Analog signals to Digital RLG), which needs special maintenance set up at workshop, including availability of medical infrastructure mandatorily (including equipment for heart stroke) within the workshop. Due to very high medical risk, during the maintenance, presence of minimum two technical persons is strongly recommended inside the workshop to provide medical support to each other, in case of any eventuality. No such requirement or maintenance hazard is applicable for Digital RLG INS. | Point Noted. |
| 5 | Para 22 (Page 10) | Bid Timelines | Pre bid queries have been requested by 13 Jan & pre bid meeting is scheduled on 06 Jan 2023. Please clarify. | Timelines as per RFP. |
| 6 | Para 22 (Page 10) & Para 24 (Page 11) | <u>Submission of Bids</u> | Bid submission schedule & pre bid queries meeting schedule is contradicting. Please clarify. | Typing Error. Pre Bid Queries submission to be read as 04 Jan 2023. |
| 7 | Para 33 (Page 13) | Demonstration / Evaluation | Demonstration / Evaluation - Please confirm, at what stage indigenous content will be assessed. | As per Appendix-F (Demonstration Methodology) of RFP. |
| 8 | Para 2 (Page 18) | Physical Characteristics | Please confirm type, make, technical details of gear box of vehicle to design motion control sensor for the equipment. | 5 Speed, manual transmission, 4x4, Gearbox |
| 9 | Appendix E | Maintenance Philosophy | Please confirm as under: - (a) Will MRLS, STEs & STMEs for maintenance at 'O', 'I' & 'D' level be also part of deliverables along with deliveries of 106 x INS? (b) If deliveries of maintenance equipment (MRLS, STEs & SMTES etc) is not part of main contract for deliveries of 106 INS within 12 months then will separate contract be executed for purchase of these maintenance equipment under emergency financial power or later by MGO branch towards maintenance of equipment? (c) If indigenous 'I' & 'D' level maintenance facilities for offered INS is not already existing, will MRLS for RLG INS still be purchased, as MRLS cannot be used for repair of INS without maintenance facilities, as No MRLS can be used as part of 'O' level repairs in field locations. | MRLS, STEs & SMTs for maintenance at 'O' 'I' level will be a part of deliverables of 106 x INS. 'O' and 'I' level to be transferred. 'D' level contract will be separate. The same is mentioned in Appendix E of RFP. |



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| 10. | - | - | <p>(a) How much % of indigenous content for INS (alone) is required, as INS is major equipment & is almost 80 % of cost of the complete system.</p> <p>(b) What procedure will be followed to assess the indigenous content for the INS & complete system during technical evaluation of vendor's bid?</p> <p>(c) Will empowered committee visit vendor's indigenous manufacturing facilities, including the availability of test benches required specifically for manufacturing, testing & maintenance of INS, to assess the availability of indigenous manufacturing facilities of INS & complete system? If No, then how this important aspect will be assessed / evaluated based on which RFP has been issued under emergency financial power? Will some undertaking, with technical details be asked from vendor on this aspect? If yes, what is the format in which vendor required to submit these details?</p> | Under Buy Indian Category 60% Indigenous Content need to be achieved. Entire procurement process will be as per DAP 2020. |
| 11. | Para 23 (Page 11) | Bid submission date | <p>Pre bid meeting is scheduled on 06 Jan 2023 & MoM will be made available to vendors not before 09 Jan 2023, which leaves only 5 days for vendor to submit the bid. Since new RFP has completely different operational parameters as compared to old RFP (issued in Oct 2022), we request MoD / AHQ to extend bid submission date by 14 days till 27 Jan 2023, 1700 hours & request to share the confirmation during pre-bid meeting.</p> | Timelines as per RFP. |
| 12 | - | - | <p>We suggest, that an assessment be made on key issues as under, before RFP for INS is finalized.</p> <p>(a) How to assess Digital/ differentiate Digital/ Analog RLG.</p> <p>(b) Already available indigenous manufacturing & maintenance facilities for Digital / Analog RLG INS available within country/ Army at 510 ABV.</p> <p>(c) How assessment be made of Indigenous content (%) of all INS.</p> <p>(d) Level of indigenous maintenance facilities available in India (Field/ I/ D/ Factory level) for these INS & if not already available then timelines be assessed by when these can be established to achieve indigenous maintenance.</p> <p>(e) Availability of qualified Indian vendors, with established technical & commercial credentials, having Digital / Analog RLG manufacturing facilities to participate in the INS RFP.</p> | Pl refer answers at paras above. |



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| <u>M/s Alpha Design Technologies Pvt Ltd</u> | | | | |
| 13. | Page 10 | Integrity Pact. | What is the validity of EMD of Rs 70 L? Please clarify. | 18 months as per para 8(e) of Annexure-I of Appendix K. |
| 14. | Page no 9 – Para 16 | Training. | Is the Training Table requirement given to be added to RFP Page 36 – Annx IV to Appx E. Please clarify | Para 3 not to be considered in Annexure-IV to Appendix E of RFP. |
| 15. | Page 19 – Para 6 (b) (i) | Should have alignment time not more than 05 Minutes. | Can it be defined as emergency – 5 minutes and normal 10 minutes? It is better to have a bit longer time to give more accuracy with System when used with GPS. | As per RFP |
| 16. | Page 19, Para 6 (C) | (a) Position (X-Y)- 3M or less (b) Height (Z)-3m or less (c) Orientation: - 1 Mil or less | It needs to be 3 m CEP. Pl clarify. It needs to be 3m PE. Pl clarify. It needs to be 1 mil RMS. Pl clarify. | Desired accuracy for GPS aided INS is 3m for (X, Y), 3m for height and 1 mil for orientation |
| 17. | Page 19, Para 6 (d) | Standalone INS mode (a) Open survey: - (i) Height (Z): 5 M CEP or less. (ii) Orientation: - 1 Mil or less. | It needs to be PE (probably error) instead of CEP (circular error probable) Please clarify. It needs to be 1 mil RMS. Please clarify. | Desired accuracy for standalone INS mode is 5m for (X,Y), 5m for height and 1 mil for orientation. |
| 18. | Page 39- Para 9 | Demo location and time period. | Demo location and Duration may be intimated for administrative preparation. Please clarify. | Deviall, 02 Feb 2023 onwards. |
| 19. | Annx-I to Appx F- Page 40, Para 2 | Remarks. | It is requested to show the Demo vehicle for 01 Hr Inspection during Pre bid meeting if possible. | Will be shown after the Pre-bid meeting. |
| 20. | Page 2, Para 3 (j) & (k) | Pre bid 6 th Jan and 13 Jan Bid submission respectively. | Since the time provided is very short between Pre bid and Bid submission. It is requested that, 07 additional Days may be provided for bid submission. Revised bid submission date may be considered as 20 Jan 2023. Kindly accept our request. | Timelines as per RFP. |



