

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

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Para No. of RFP	Para 2					
Ser Para No. of RFP Description No. RFP M/s Safran Electronics and Defence Services India Pvt I to	Synopsis - Broad Description of Equipment / System					
Queries Id	Broad It only specifies requirement of Digital INS. However, ipment 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.	How will Digital / Analog INS technology will be assessed & differentiated during technical assessment & demonstration?	(a) Superiority aspects of Digital RLG INS against Analog / Pt Noted Hybrid Analog RLG are as under:-	Digital RLG,	(i) Already been integrated & introduced in service on PINAKA, Dhanush, Akash (Army & Air Force), WLR etc.	(ii) Aiready qualified on ATAGS, Akash Prime & awaiting introduction in service.
Reply	Digital INS as per RFP. Digital gyro also mentioned in Appx J of RFP.	DGQA will assess Only digital gyro acceptable as per RFP.	Pt Noted			

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								,	Para No. of RFP
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	Analog RLG with Digital Output. 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.	(iii) For K-9 repeat order, Digital RLG INS is being considered, by L & T, to replace existing INS on K-9 platform.	(ii) Once Analog RLG became obsolete in 2010, 3 rd PINAKA Regiment onwards only Digital RLG INS is integrated.	 (i) Analog RLG INS has been integrated on 1st & 2nd PINAKA Regiments (when digital RLG technology was not available). 	Analog RLG:-	(v) Analog RLG INS are being replaced with Digital RLG INS on various platform.	(iv) Majority of the Indian Navy & Air Force platforms are also integrated with Digital RLG INS.	(iii) Under advance stage of trial evaluation on Akash NG, QRSAM, MGS, Atulya Radar, Ashlish Radar & many other programs	Queries
								Point noted. However, RFP clearly quotes digital gyro.	Reply

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Appendix E	Para 2 (Page 18)	Para 33 (Page 13)	Para 22 (Page 10) & Para 24 (Page 11)	Para 22 (Page 10)		Para No. of RFP
Maintenance Philosophy	Physical Characteristics	Demonstration / Evaluation	Submission of Bids	Bid Timelines	Very High Medical Risk Hazards for Maintenance of Analog RLG INS	RFP Description
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.	Please confirm type, make, technical details of gear box of vehicle to design motion control sensor for the equipment.	Demonstration / Evaluation - Please confirm, at what stage indigenous content will be assessed.	Bid submission schedule & pre bid queries meeting schedule is contradicting. Please clarify.	Pre bid queries have been requested by 13 Jan & pre bid meeting is scheduled on 06 Jan 2023. Please clarify.	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.	Queries
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.	5 Speed, manual transmission, 4x4, Gearbox	As per Appendix-F (Demonstration Methodology) of RFP.	Typing Error Pre Bid Queries submission to be read as 04 Jan 2023.	Timelines as per RFP.	Point Noted	Reply

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(a) How much % of indigenou INS is major equipment & is almo (b) What procedure will be fol for the INS & complete system du (c) Will empowered committee facilities, including the availability manufacturing, testing & mainten indigenous manufacturing facilitie how this important aspect will be RFP has been issued under e undertaking, with technical details yes, what is the format in which very pre bid meeting is scheduled on 0 to vendors not before 09 Jan 202 submit the bid. Since new RF parameters as compared to old RI / AHQ to extend bid submission de & request to share the confirmatic before RFP for INS is finalized. (a) How to assess Digital / differ (b) Already available indigenous for Digital / Analog RLG INS ABW. (c) How assessment be made of (d) Level of indigenous mainter D/ Factory level) for these INS & is be assessed by when these can be indigenous maintenance. (e) Availability of qualified Indian of commercial credentials, having facilities to participate in the INS Finalized.	12		10	No.
(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. (b) What procedure will be followed to assess the indigenous content for the INS & complete system during technical evaluation of vendor's bid? (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? 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 by14 days til 27 Jan 2023, 1700 hours & request to share the confirmation during pre-bid meeting. We suggest, that an assessment be made on key issues as under, before RFP for INS is finalized. (a) How to assess Digital/ differentiate Digital/ Analog RLG. (b) Already available indigenous manufacturing & maintenance facilities for Digital / Analog RLG INS. (c) How assessment be made of Indigenous content (%) of all INS. (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 technical & commercial credentials, having Digital / Analog RLG manufacturing facilities to participate in the INS RFP.		Para 23 (Page 11)	:.	Para No. of RFP
How much % of indigenous content for INS (alone) is required, as major equipment & is almost 80 % of cost of the complete system. What procedure will be followed to assess the indigenous content Vhat procedure will be followed to assess the indigenous content vhat procedure will be followed to assess the indigenous content so INS & complete system during technical evaluation of vendor's bid? Will empowered committee visit vendor's indigenous manufacturing es, including the availability of test benches required specifically for facturing, testing & maintenance of INS, to assess the availability of anous manufacturing facilities of INS & complete system? If No, then his important aspect will be assessed / evaluated based on which has been issued under emergency financial power? Will some taking, with technical details be asked from vendor on this aspect? If what is the format in which vendor required to submit these details? If the format in which vendor required to submit these details? If the bid since new RFP has completely different operational neters as compared to old RFP (issued in Oct 2022), we request MoD to extend bid submission date by14 days til 27 Jan 2023, 1700 hours least to share the confirmation during pre-bid meeting. PRFP for INS is finalized. Iready available indigenous manufacturing & maintenance facilities available in India (Field/ I/ tory level) for these INS & if not already available in India (Field/ I/ tory level) for these can be established to achieve nous maintenance. Incercial credentials, having Digital / Analog RLG manufacturing & maintenance.		Bid submission date	•	RFP Description
77	We suggest, that an assessment be made on key issues as under, before RFP for INS is finalized. (a) How to assess Digital/ differentiate Digital/ Analog RLG. (b) Already available indigenous manufacturing & maintenance facilities for Digital / Analog RLG INS available within country/ Army at 510 ABW. (c) How assessment be made of Indigenous content (%) of all INS. (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. (e) Availability of qualified Indian vendors, with established technical & commercial credentials, having Digital / Analog RLG manufacturing facilities to participate in the INS RFP.	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 by14 days till 27 Jan 2023, 1700 hours & request to share the confirmation during pre-bid meeting.	(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. (b) What procedure will be followed to assess the indigenous content for the INS & complete system during technical evaluation of vendor's bid? (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?	Queries

M/s. Alpha Design Technologies Pyt Ltd 13. Page 10 Integrity Pact. What is the validation of the vali	be considered as 20 Jan 2023. Kindly	50
Page 10 Integrity Pact. Page 10 Integrity Pact. Page 19 — Should have alignment time not more than 05 Minutes. Page 19, (a) Position (X-Y)- 3M or less (b) Height (Z)-3m or less (c) Crientation: -1 Mill or less. Page 19, (a) Open survey: - (i) Height (Z): 5 M CEP or less. (ii) Orientation: -1 Mill or less. (iii) Orientation: -1 Mill or less. Page 39- Demo location and time period. Appx F- Page 40, Para 2		ovided is very shor requested that, 07 hmission Revised
Page 10 Integrity Pact. Page 10 Integrity Pact. Page 19 - Should have alignment time not more than 05 Minutes. Page 19, (a) Position (X-Y)- 3M or less (c) Orientation: -1 Mil or less. Page 19, (a) Open survey: - (i) Height (Z): 5 M CEP or less. Page 39- Demo location and time period.	It is requested to show the Demo vehicle for 01 Hr Inspection during Pre bid meeting if possible.	show the Demo
Page 10 Integrity Pact. Page 10 Integrity Pact. Page 19 - Should have alignment time not more than 05 Minutes. Page 19, (a) Position (X-Y)- 3M or less (c) Orientation: - 1 Mil or less. Page 19, Standalone INS mode (a) Open survey: - (i) Height (Z): 5 M CEP or less. (ii) Orientation: - 1 Mil or less. (iii) Orientation: - 1 Mil or less.	nd time Demo location and Duration may be intimated for administrative preparation. Please clarify	d Duration may be clarify.
Page 10 Integrity Pact. Page 10 Integrity Pact. Page 19 — Should have alignment time not more than 05 Minutes. Page 19, (a) Position (X-Y)- 3M or less (b) Height (Z)-3m or less (c) Orientation: -1 Mill or less	It needs to be PE (probably error) insteated probable). Please clarify. It needs to be 1 mil RMS. Please clarify. 1 Mil	(probably error) i clarify il RMS. Please c
Page 10 Integrity Pact. Page 10 Integrity Pact. Page no 9 - Training. Page 19 - Should have alignment time not more than 05 Minutes.	 Y)- 3M or It needs to be 3 m CEP. PI clarify. m or less It needs to be 3m PE. PI clarify. - 1 Mil It needs to be 1 mil RMS. PI clarify. 	CEP. Pl clarify. Il RMS. Pl clarif
Page no 9 – Training.	ian 05 Can it be defined as emergency – 5 minutes? It is better to have a bit longer accuracy with System when used with GPS	ter to have a tem when used
Alpha Design Technologies Pyt Ltd Page 10 Integrity Pact.	Is the Training Table requirement given to be added to RFP Page 36 – Annx IV to Appx E. Please clarify	able requiremen / to Appx E. Plea
REP Alpha Design Techno	What is the validity of EMD of Rs 70 L? Please clarify.	y of EMD of Rs 70
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Para No. of RFP	Bharat Electronics	Annexure 1 to Appendix F		Para 33 of Part -II	VEM Technologies Pvt Ltd	Ser No 2 of Covering Letter	Ser No 5 (d) of Appendix A	Ser No 5 (e) of
RFP Description	s Ltd	Demonstration Methodology		39	<u>† Ltd</u>	Broad Description of Equipment / System	Operational Characteristics and Features	Operational
Queries		(a) Ser No 2: The system should be capable of being mounted on an in-service light vehicle (4x4). In service 4x4 Maruti Gypsy will be provided for mounting the equipment. When will the Maruti Gypsy be provided for integration? Will it be given at the location of Demo?	(b) Ser No 5 : The system should be capable of being mounted on an in-service light vehicle (4x4). It should be capable to be detached from the light vehicle (4x4) when not in use, for storage purpose. Should the entire system be removed from vehicle or only the Display Unit and Optical Device?	As per Para 33 of Part - II of RFP, the Demonstration / Evaluation is scheduled within thirty days of issue of RFP. Since we need some more time to make system ready for demonstration, it is requested that the demo may be scheduled after 15th Feb 2023.		RFP mentions the requirement of Digital Inertial Navigation System with Electric Theodolite Is Electronic Theodolite a part of complete system? Is Electronic Theodolite to be supplied one unit for each system? Further details on Electronic Theodolite are required.	Detailed information required on Optical Device.	Detailed information/ Technical Specification on LRF
Reply		At the location of Demo.	Entire System.	Timelines as per RFP.		Part of the System to be supplied with each INS.	Optical Device is used for integration of orientation	For fixing points that are

