Govt. of Bihar Rural Works Department

CORRIGENDUM

Ref no.-मु0अ0-नि० एवं गु०)-25-05/2025 - 2994-

Patna/Dated- 16.06.2025

With reference to invitation for Request for Proposal (RFP), Tender is invited for "Selection of Agency for Developing and Maintaining Intelligent Rural Road Maintenance Monitoring System (IRRMMS) for Rural Works Department, Bihar" for Rural Works Department, Bihar, which was issued vide NIT No. RWD/HQ/AI/2025-26/01, dated: 21-05-2025 and published through advertisement PR No. 004129 (RWD) 2025-26, the earlier schedule of date are now been modified as per column no 4 of the table mentioned below due to technical reason and some unavoidable from downloaded circumstances. be **RFP** and other details can https://rwdbihar.gov.in/NoticeBoard.aspx and https://www.pmgsytenders.gov.in/nicgep/app as per schedule of dates given.

Modified Schedule of Dates

SI. No.	Description	Publish Date & Time earlier	Modified date and Time		
1.	2	3	4		
1	Date and Time for Downloading/Purchasing of Bidding Documents	From 28/05/2025, 11:00 Hrs to 18/06/2025, 15:00 Hrs RFP can be downloaded from www.pmgsytendersbih.gov.in.	From 28/05/2025, 11:00 Hrs to 30/06/2025, 15:00 Hrs RFP can be downloaded from www.pmgsytendersbih.gov.in.		
2	Pre-bid meeting Date, Time & Venue	Venue: Conference Hall Rural Works Department, Government of Bihar. 5thFloor, Vishveshwaraiya Bhawan, Bailey Road, Patna, Bihar 800015	02/06/2025 at 15:00 Hrs Venue: Conference Hall Rural Works Department, Government of Bihar. 5thFloor, Vishveshwaraiya Bhawan, Bailey Road, Patna, Bihar 800015		
3	Mode of submission of Bid document	Bid document can be submitted only online mode.	Bid document can be submitted only online mode.		
7	Bid Submission Last date.	18/06/2025 till 15:00 Hrs	30/06/2025 till 15:00 Hrs		
4	Bid Opening date.	18/06/2025 at 15:30 Hrs	30/06/2025 at 15:30 Hrs		
5	Time and place and date for opening of the Financial Bid.	To be informed later	To be informed later		
5	Tender Document Fee & Earnest Money Deposit	Tender Document Fee of Rs. 10000/- (Rupees Ten Thousand only) (Non-Refundable) and Earnest Money Deposit of Rs. 2500000/- (Rupees Twenty-Five Lac Only) will be submitted online (PMGSY e-tender online Account-through PMGSY e-tender portal by Internet Banking only).	Tender Document Fee of Rs. 10000/- (Rupees Ten Thousand only) (Non-Refundable) and Earnest Money Deposit of Rs. 2500000/- (Rupees Twenty-Five Lac Only) will be submitted online (PMGSY etender online Account-through PMGSY etender portal by Internet Banking only).		



All other terms and conditions other than above mentioned in schedule of dates shall remain same. For any queries regarding tender process kindly contact – Office of Engineer in Chief, Rural Works Department, Government of Bihar, 5th Floor, Vishweshwaraiya Bhawan, Bailey Road, Patna or E-mail at engineerinchief2rwd@gmail.com/engineerinchiefrwd@gmail.com.

> Engineer in Chie Rural Works Department

Memo no.- मु0आ0—नि० एवं गु०)—25—05/2025 -2994 Patna/Dated-05.03.2024

Copy for information and necessary action

1. E-advertisement-cum-E-tendering cell, 5th floor, vishweshwaraiya bhawan, Bailey road

(Nehru path), Patna 2. IT Manager, Rural Works Department, 5th floor, vishweshwaraiya bhawan, Bailey road (Nehru path), Patna

> Engineer in Chief Rural Works Department

SELECTION OF AGENCY FOR DEVELOPING AND MAINTAINING INTELLIGENT RURAL ROAD MAINTENANCE MONITORING SYSTEM (IRRMMS) FOR RURAL WORKS DEPARTMENT, BIHAR.

CORRIGENDUM CUM ADDENDUM

Date: 16/06/2025

SI. No	RFP Document Reference Clause & Page No.	Content of RFP requiring clarification	Clarification / Suggestion		REMARK No Changes. As per RFP		
1	Clause 3, Page	EMD and financial turnover mandatory for all bidders.	Request exemption for DPIIT-recognized startups under Rule 170(i) of GFR 2017, Startup India Circular F.20/2/2014-PPD(Pt.), and Bihar Startup Policy Para 2.3.2.				
2	Clause 4.3, Page 15	Only individual bidders allowed; no provision for consortium or JV.	Allow participation via Joint Venture/Consortium or through Manufacturer Authorization Form (MAF) for OEM-led qualified partnerships.	4		is allowed. Accord	lingly, the relevant eligibility criteria may be read as follows:
					S. No.	Criteria	Pre-qualification Criteria description
					1	Incorporation of the Firm, Legal Entity	The bidder should be a single Business Entity/ Private Limited Company/ a Firm/ Limited Liability Partnership (LLP)/ Consortium. All the above entities including all members of the consortium should be registered under relevant statutory arrangements in India. The Bidder in case of a single Business Entity/Private Limited Company/ a Firm/Limited Liability Partnership should be in existence and operating for at least 05 years as on date of submission of tender. In case of Consortium, the Lead Partner should be in existence and operating for at least 05 years as on date of submission of tender.
					2	Financial Strength	The Bidder in case of a single Business Entity/Private Limited Company/ a Firm/Limited Liability Partnership/Lead Partner in case of a Consortium should have a minimum annual turnover of INR 50.00 Crore (Rupees Fifty Crore only) in the business of Digital solution services / IT / ITES in each of the last three financial years ending 31/03/2024. Note: Turnover of any parent, subsidiary, associate, or other related entity will not be considered.
					3	Net worth	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership should have positive net worth during last three financial years ending 31/03.2024. In case of Consortium, all members of the consortium should have positive net worth during last three financial years ending 31/03/2024.

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			Note: Net worth of any parent, subsidiary, associate, or other related entity / LLP will not be considered.
	4	Past Experience - Design, Development and Implementation of e- Governance/ IT Projects.	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/Any of the Consortium Partners should have experience of at least one ongoing / implemented / completed and operating project in Design, Development & Rollout of e-Governance/ IT Solution with scope of work containing GIS based image analytics and maintenance management system creation for Linear Infrastructure (Roads/ Railways/ Telecom /Utilities) for any Central/ State Government Department, / PSU's in India during the last Five (5) Years to be calculated with reference to the date of submission of tender.
	5	Past Experience - asset management system projects.	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ Any of the Consortium Partners should have experience of at least one ongoing / implemented / completed project of asset management system including data acquisition and design application development preferably in transport sector or other related sector utilities/municipal corporations etc. during the last Five (5) Years to be calculated with reference to the date of submission of tender.
	6	Local Presence	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ Any of the Consortium Partners should have presence in Bihar in the form of a registered office / branch/ project office in the State of Bihar before signing of contract or the bidder will have to submit an undertaking that office will be set up once the work is awarded.
	7	Blacklisting	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/All members of the Consortium should not be blacklisted by any State/ Central Government Departments/ Organizations/ PSUs in India or by any agencies globally for corrupt, fraudulent or any other unethical business practices or for any other reason as on date of submission of tender.
	8	GST Registration and PAN card	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ All members of the Consortium shall be registered for GST and shall have valid PAN number.

2. TECHNICAL EVALUATION CRITERIA:

S. No.	Criteria	Marks System
1	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ Any of the Consortium Partners should have experience in at least one ongoing / implemented / completed project of similar work* in linear infrastructure (Roads/ Railways/	 One project with a value more than ₹ 30 crore = 30 Marks. Projects with a value > ₹ 15 crore and upto ₹ 30 crore = 20 Marks each.

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				Telecom /Utilities) with any Central / Public Limited / State Government Departments / Organizations, PSUs in India during the last Five (5) Years to be calculated with reference to the date of submission of tender. Similar work - Work involving data collection using image/GIS camera/Drone / 360 Degree Panoramic imagery mounted on vehicles / 360 Degree Street View Imagery. These should be integrated with image analytics and asset management system with both web and mobile applications Financial Capability of the bidder - Average Annual • >= ₹ 50 Crore and <= ₹ 100 Crore -			
				Turnover of the Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ Lead Partner in case of a Consortium should be from Digital solution Services / IT / ITES for the last three financial years ending 31/03/2024. 5 marks > ₹ 100 Crore and <= ₹ 200 Crore – 7 marks > ₹ 200 Crore and – 10 marks			
3	Clause 7.1, Page 21	Hosting must be on MEITY-compliant cloud; NIC or other government clouds not mentioned.	Allow all MEITY-empanelled clouds, including NIC Cloud, AWS India, Azure India, etc., as long as data is hosted within India.	No Changes. As per RFP			
4	Not Mentioned	No mention of mobilization advance despite large-scale field deployment requirements.	Clarify whether mobilization advance is available post submission of Performance Security to support system deployment logistics.	There is no provision of Mobilization Advance in the project. No Changes. As per RFP			
5	Clause 10.3 (v), Page 28	AI-based surface condition monitoring mentioned; no reference to road inspection standards.	Confirm whether the methodology must comply with applicable IRC guidelines for IRI/PCI classification and road condition assessment.				
6	Clause 10.3 (v), Page 28	Reporting and visual analytics required; no mention of GIS formats or data granularity.	Specify GIS data formats, chainage interval, resolution specifications, and report template for analytics and mapping integration.	All formats should be open source or freely available. The templates and other details shall be proposed by successful bidder for review and approval by RWD.			
7	Clause 10.3 (iii), Page 27	Edge computing and cloud upload both stated; no clarity on separation.	Clarify whether either edge or cloud processing is sufficient, or both are mandatory. Also define offline data upload permission in low-connectivity zones.	Edge and cloud processing are two different activities as per RFP. With possibility of limited-to-no internet connectivity in rural areas also necessitates a separate user interfaction running independently for the data collection during survey and this is facilitated through mobile application development. Refer Page-22 of the RFP for further details.			
8	Clause 10.3 (ix), Page 29	24x7x365 operations and manpower deployment required.	Please justify why 24x7x365 operation is required for this use case. Is it essential for road data management, or can it be revised to business hours or SLA-based support?	Application availability should be 24X7X365. Necessary manpower support is required in phased shift manner for business hours with reduced deployment on public holidays.			
9	Clause 10.3 (iv), Page 27	360° image capture required; no specs for resolution, frame rate, or metadata.	timestamping, and geo-tagging to ensure consistency in data capture quality.	As per RFP, these details are to be proposed by bidder to meet the RFP requirements. It is pertinent to highlight that each image or video frame or metadata should have an embedded accurate latitude, longitude, and altitude information. GPS accuracy to be at sub meter level.			
10	Clause 10.3 (viii), Page 29	Dashboard and analytics output are mentioned, but formats of statistics and reports are not defined.	Kindly specify the types of reports, analytics dashboards, and output data formats that must be submitted and visualized.	Specific number and details of reports and customized dashboards to be developed shall be decided mutually the bidder and RWD.			



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	Clause 10.3 (v), Page 28	No mention of how frequently data points must be recorded or visualized.	adly clarify the interval of each data point and the frame-to-me spacing logic for video or image visualizations. This is already clearly mentioned in RFP. Baseline survey + quarterly surveys during whole of maintenance phase (4 Years).			tioned in RFP. Baseline survey + quarterly surveys during whole of operation as		
12	Clause 10.3 (v), Page 28	Image/pano/video visualization not defined clearly (zoom level, multi- layer viewing, resolution).	Please define the visual layer stacking, zoom levels, image file size limits, and how multiple quarterly data sets are to be viewed as layers over the same map.	arterly data sets are to be 11. The first on an arterly data sets are to be established Frequency is an arrest				
13	Not Mentioned	There is no clause defining software source code or IP rights.	Kindly clarify whether the OEM retains the software and AI model Intellectual Property (IP), and what rights, if any, are transferred to the department upon project delivery.			P to be transferred to the RWD upon project delivery. s of SI (to be notified during inception stage) shall remain sole property of SI.		
14	Pre- Qualification Criteria - Incorporation	Private Limited Company/a	Request to allow Consortium / Joint Venture please.	Consortium is allowed. Accordingly, the relevant eligibility criteria may be read as follows:				
	of the Firm, Legal Entity	Firm/ Limited Liability Partnership (LLP)			RE-QUALIFICATIO	Pre-qualification Criteria description		
	Page no. 45, Clause 8			1	Incorporation of the Firm, Legal Entity	The Bidder in case of a single Business Entity/Private Limited Company/ a Firm/Limited Liability Partnership should be in existence and operating for at least 05 years as on date of submission of tender. In case of Consortium, the Lead Partner should be in existence and operating for at least 05 years as on date of submission of tender.		
			2	Financial Strength	The Bidder in case of a single Business Entity/Private Limited Company/ a Firm/Limited Liability Partnership/Lead Partner in case of a Consortium should have a minimum annual turnover of INR 50.00 Crore (Rupees Fifty Crore only) in the business of Digital solution services / IT / ITES in each of the last three financial years ending 31/03/2024. Note: Turnover of any parent, subsidiary, associate, or other related entity will not be considered.			
				3	Net worth	The Bidder in case of Single Business Entity/Private Limited Company/a Firm/Limited Liability Partnership should have positive net worth during last three financial years ending 31/03/2024. In case of Consortium, all members of the consortium should be		
					positive net worth during last three financial years ending 31/03/2024. Note: Net worth of any parent, subsidiary, associate, or other related entity / LLP will not be considered.			

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4	4	-Design, Development and	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/Any of the Consortium Partners should have experience of at least one ongoing / implemented / completed and operating project in Design, Development & Rollout of e-Governance/ IT Solution with scope of work containing GIS based image analytics and maintenance management system creation for Linear Infrastructure (Roads/ Railways/ Telecom /Utilities) for any Central/ State Government Department, / PSU's in India during the last Five (5) Years to be calculated with reference to the date of submission of tender.
	5	Past Experience - asset management system projects.	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ Any of the Consortium Partners should have experience of at least one ongoing / implemented / completed project of asset management system including data acquisition and design application development preferably in transport sector or other related sector utilities/municipal corporations etc. during the last Five (5) Years to be calculated with reference to the date of submission of tender.
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	8	GST Registration and PAN card	The Bidder in case of Single Business Entity/Private Limited Company/Firm/Limited Liability Partnership/ All members of the Consortium shall be registered for GST and shall have valid PAN number.

2. TECHNICAL EVALUATION CRITERIA:

S. No.	Criteria	Marks System
1	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ Any of the Consortium Partners should have experience in at least one ongoing / implemented / completed project of similar work* in linear infrastructure (Roads/ Railways/ Telecom /Utilities) with any Central / Public Limited / State Government Departments / Organizations, PSUs in India during the last Five (5) Years to be calculated with reference to the date of submission of tender. Similar work - Work involving data collection using image/GIS camera/Drone / 360 Degree Panoramic	

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					imagery mounted on vehicles / 360 De Imagery. These should be integrated wit and asset management system with both applications	image applytion			
				2	Financial Capability of the bidder - Turnover of the Bidder in case of Single Private Limited Company/a Firm/ L Partnership/ Lead Partner in case of should be from Digital solution Services / last three financial years ending 31/03/20	Business Entity/ imited Liability a Consortium	• >= ₹ 50 Cro 5 marks • > ₹ 100 Cro 7 marks > ₹ 200 Crore	ore and <= ₹	200 Crore -
15	Technical Evaluation Criteria		Agency (which specifies the per km rate, but not the total value of contract) for which we have completed blake by		echnical Evaluation Criteria – Past Experienc	ee of bidder may b	oe read as :		
	Past Experience of Bidder	• Projects with a value > Rs. 15 Crore and upto Rs. 30 Crore = 20 marks	appropriately in line with IRPMS	S. No.	Criteria		Marks Systen		
	Page no. 47, Clause 9.1	• Projects with a value upto Rs. 10 Crore = 10 marks each (Maximum of 30 Marks)	More than 30,000 km = 30 Marks More than 15,000 km and less than 30,000 km = 20 Marks More than 10,000 km and less than 15,000 km = 10 Marks (Maximum of 30 Marks)	1	The Bidder in case of Single Business Limited Company/a Firm/ Limited Liabi. Any of the Consortium Partners should in at least one ongoing / implemented / co of similar work* in linear infrastructure (R Telecom /Utilities) with any Central / P State Government Departments / Organiz India during the last Five (5) Years to be reference to the date of submission of tend Similar work - Work involving data or image/GIS camera/Drone / 360 Degr imagery mounted on vehicles / 360 Degr Imagery. These should be integrated with it and asset management system with both wapplications	have experience impleted project oads/ Railways/ ublic Limited / ations, PSUs in calculated with er. Dilection using the Panoramic ee Street View mane analytics.	 ₹ 30 crore = Projects win and upto ₹ each. Projects win crore=10 	th a value > 30 crore =	₹ 15 crore 20 Marks upto ₹10
16	Detailed Financial Bid Format as per Scope of Work - Page no. 55,	based IRRMS – Lumpsum cost to be quoted Clause 14 – Payment	Since cloud costs are to be paid on actuals as per RFP, request to please remove this line item from financial bid as this amount is nearly impossible to determine at this point and will change basis every km of data collected.	bid Forr	ost estimate still needs to be provided for the all Bid Evaluation. The payment terms for clo nat will be as follows:	purpose of budge ud cost will be as	ting; however per actuals. Ac	it will not be ecordingly, th	part of e Financial
	Clause 13 & 14	Terms, Item no. 2 & 3 of the RFP, that states "cloud costs shall be paid on actuals on monthly basis".		#	em	Unit	Unit Cost to be quoted (INR)	Quantity	Total Amount (INR) [Unit Cos *
				1	Cost of Design, Development, customisation, Deployment & Maintenance of AI based Intelligent Rural Road Maintenance and Monitoring System (IRRMMS) software.	Lumpsum		01	









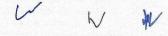
	Cost of Setting up of Centralised Operations Control Centre (COCC) at RWD Head Quarter as per the quantity	Lumpsum	01	
	specified in para –99 of this corrigendum notice and excluding deployment of required dedicated manpower as specified in RFP.			
	Cost of development of 4D Bridge information modelling (BrIM) software	Lumpsum	01	
	Creating baseline data of road deformities like potholes, cracks etc using the state of art technology i.e. 360 Degree Panoramic imagery mounted on vehicle and low altitude aerial flying along the identified roads for the indicative length of approximately 65000 Linear Km which may increase/decrease in future including all deployment of equipment & manpower, data capture and data processing as per scope including Incremental Data Analytics & Report Generation to achieve desired output.	Per Km	65000 * 1	
3	Annual Operations and Maintenance (4 Years) of AI based Intelligent Rural Road Maintenance and Monitoring System (IRRMMS) including all deployment of equipment & manpower, data capture and data processing as per scope including Incremental Data Analytics & Report Generation to achieve desired output.	Per Km /per quarterly round	65000 *16	
4.	Cost of Manpower to be deployed at Control and Command Centre.			
	(a) Project Manager (1 No.)	Per Month	1*48	
	(b) Control and Command Centre team (12 Nos.)	Per Resource/month	12*48	
	Note: If additional manpower is required for control and command Centre, they shall be taken on the basis of unit cost of Sl.No.4 (b)			
5.	Cloud cost required for hosting and running AI based Intelligent Rural Road Maintenance and Monitoring System (IRRMMS). – For the purpose of Budgeting and will not be part of Financial Bid Evaluation. However, the payments shall be done as per the actuals.	Lumpsum	01	
	OTAL COST FOR FINANCIAL VALUATION= (1+2+3+4)			

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17	Detail Financial Bid Format as per Scope of work Page no. 54	Bridge inspection and 3D Modelling using drone or any other mode – Lumpsum	for a lumpsum quote. Alternatively, we suggest changing this to a per km unit rate	solution should be for varying length, width, and height.
18	Detail Financial Bid Format as per Scope of Work & Payment	Installation and Commissioning Command & Control Centre — Currently, the payment milestone is 25% as per Page no. 57.	It is challenging to procure hardware on advance payment basis from manufacturers without similar payment milestone from RFP Authorities.	No Changes. Payment terms remains as per RFP.
	Terms Page no. 54, 55, 56 & 57		If verification procedures are required, at least 90% payment may be released upon delivery. The 25% payment milestone (25% of project cost) unnecessarily ties the hardware cost to project cost in percentage terms. The payment terms for hardware are requested to be separate and cleared upon delivery, as in other RFPs please. If payment milestone is a challenge, alternatively, authority may also consider completely removing this line item from RFP and procuring these units directly from GeM.	
19	Page 21	Point 6.1.g - "i.e. combination of low altitude aerial flying, and 360-degree Panoramic imagery mounted on vehicles along the identified roads	Can bidder use just one methodology – drone images-based 3D modelling? Or is it necessary to capture data using drone	The scope involving capturing of imagery may be carried out using mix of Drone and 360-degree panoramic camera mounted on vehicle or any other mode depending upon the site condition and as suggested by the participating bidder in their approach and methodology.
20	Technical Specifications Page 32 & 37	Page 32 - 12.c Ensure positional accuracy of captured data aligns with the project requirements, achieving a spatial accuracy of better than sub meter. Page 37 - Drone / Visual Specifications: GPS Accuracy: Sub-centimetre level	2 Droppe don't be	Sub-meter level accuracy is fine. Rest all conditions shall be as per RFP

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21	Detail	1. Cloud cost required for
21	Financial Bid	hosting and running Al
	Format as per	based Intelligent Rural
	Scope of work	Road Maintenance and
	Page no. 54	Monitoring 1. Cloud cost
	rage no. 34	required for hosting and
100		running Al based Intelligent
No.		
		(IRRMMS). Lumpsum2.
		Setting up of Centralised
		Operations Control Centre
		(COCC) at RWD Head
		Quarter Lumpsum3. Bridge
		inspection and 3D
		modelling using drone or
		any other mode. Lumpsum
		4. Deployment of
		equipment with high
		resolution camera
		integrated with GPS.
		Lumpsum
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Suggest following changes please:

- Cloud cost required for hosting and running Al based Intelligent Rural Road Maintenance and Monitoring System (IRRMMS). Lumpsum Cloud cost as per actuals.
- Setting up of Centralised Operations Control Centre (COCC) at RWD Head Quarter Lumpsum
- Bridge inspection and 3D modelling using drone or any other mode. Lumpsum PER KM UNIT QUANTITY
- Deployment of equipment with high resolution camera integrated with GPS. Lumpsum PER KM UNIT QUANTITY (this is understood to be the drone flights, please confirm).

Financial Bid Format may be read as follows:

Sr. #	Item	Unit	Unit Cost to be quoted (INR)	Quantity	Total Amount (INR) [Unit Cost * Quantity]
1	Cost of Design, Development, customisation, Deployment & Maintenance of AI based Intelligent Rural Road Maintenance and Monitoring System (IRRMMS) software.	Lumpsum		01	
	Cost of Setting up of Centralised Operations Control Centre (COCC) at RWD Head Quarter as per the quantity specified in para – 99 of this corrigendum notice and excluding deployment of required dedicated manpower as specified in RFP.	Lumpsum		01	
	Cost of development of 4D Bridge information modelling (BrIM) software	Lumpsum		01	
2	Creating baseline data of road deformities like potholes, cracks etc using the state of art technology i.e. 360 Degree Panoramic imagery mounted on vehicle and low altitude aerial flying along the identified roads for the indicative length of approximately 65000 Linear Km which may increase/decrease in future including all deployment of equipment & manpower, data capture and data processing as per scope including Incremental Data Analytics & Report Generation to achieve desired output.	Per Km		65000 * 1	
3	Annual Operations and Maintenance (4 Years) of AI based Intelligent Rural Road Maintenance and Monitoring System (IRRMMS) including all deployment of equipment & manpower, data capture and data processing as per scope including Incremental Data Analytics & Report Generation to achieve desired output.	Per Km /per quarterly round		65000 *16	
4.	Cost of Manpower to be deployed at Control and Command Centre.		7		
	(a) Project Manager (1 No.)	Per Month		1*48	
	(b) Control and Command Centre team (12 Nos.)	Per Resource/month		12*48	

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			bidder to be considered)	2	Financial	The Bidder in case of a sa Firm/Limited Liabil Consortium should hav	single Business Entit Lity Partnership/Lea	should be in existence as submission of tender. y/Private Limited Compan d Partner in case of turnover of INR 50.00 Cro Digital solution services / 1	ny/ a
	Page no. 44	company registered in India under the Companies Act 1956 or in any country under respective laws. The Bidder in case of a single Business Entity/Private Limited Company/ a Firm/ Limited Liability Partnership should	specialized skills and expertise ensuring higher standards of quality and innovation in project outcomes. Additionally, given the scale, complexity, and dynamic nature of technology renders a unique nature to this assignment, and hence allowing a Consortium/JV or the ability to subcontract allows for greater scalability, flexibility, efficiency in resource allocation, and risk mitigation. It is hence requested that the respondent parties should be allowed to bid in a Consortium/Joint Venture should be allowed (Financial strength of the lead	1	Incorporation of the Firm, Legal Entity	All the above entities i be registered under rele The Bidder in case of a a Firm/Limited Liability for at least 05 years as of	ty Partnership (LLP) including all members evant statutory arrang single Business Entiry Partnership should on date of submission	ers of the consortium shou gements in India. ty/Private Limited Compar be in existence and operati n of tender.	ny/
	Incorporation of the Firm, Legal Entity	purpose of this RFP. a	significantly enrich the project's involved	No.	Criteria	Pre-qualification Criter	ria description		
	Qualification Criteria	Private Limited Company/a Firm/ Limited Liability	implementation and comprehensive road domain expertise,	3. PR	E-QUALIFICATIO	lingly, the relevant eligib	ulity criteria may be	read as follows:	
4	Clause 8 Pre-	The bidder should be a	https://dpe.gov.in/sites/default/files/relaxsation_of_norms.pdf Given the highly specialized nature of the required work	Consortium	m is allowed Access	lingly the			
			their meeting of quality and technical spec. O.M No F.20/2/2014-PPD(pt.) dated 20th September, 2016						
ر	Pre- Qualification Criteria - Page no. 45	No clause given for MSME / Startup Exemption for Turnover and Experience	prior experience for all Startups/MSMF is relayed subject to	The state of the s	ges. As per RFP				
3	Format as per Scope of work Page no. 54 & 55								
22	Detail Financial Bid	Additional Manpower to be deployed at Control and	annual or monthly bosis		JATION= (1+2+3+4	0			
				TOTAL	COST FO	OR FINANCIAL			
				M (I ar	I based Intelli laintenance and RRMMS). – For the nd will not be no	Monitoring System purpose of Budgeting art of Financial Rid	Lumpsum	. 01	
				ta	ontrol and command the command	inpower is required for different cost of Sl.No.4 (b)			









		The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership should have positive net worth during last three financial years ending 31/03/2024.
3		In case of Consortium, all members of the consortium should have positive net worth during last three financial years ending 31/03/2024. Note: Net worth of any parent, subsidiary, associate, or other related entity / LLP will not be considered.
4	Past Experience	The Bidder in case of Single Business Entity/Private Limited Company/a Firm/ Limited Liability Partnership/Any of the Consortium Partners should have experience of at least one ongoing / implemented / completed and operating project in Design, Development & Rollout of e-Governance/IT Solution with scope of work containing GIS based image analytics and maintenance management system creation for Linear Infrastructure (Roads/Railways/Telecom/Utilities) for any Central/State Government Department, / PSU's in India during the last Five (5) Years to be calculated with reference to the date of submission of tender.
5	Past Experience - asset management system projects.	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ Any of the Consortium Partners should have experience of at least one ongoing / implemented / completed project of asset management system including data acquisition and design application development preferably in transport sector or other related sector utilities/municipal corporations etc. during the last Five (5) Years to be calculated with reference to the date of submission of tender.
6	Local Presence	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ Any of the Consortium Partners should have presence in Bihar in the form of a registered office / branch/ project office in the State of Bihar before signing of contract or the bidder will have to submit an undertaking that office will be set up once the work is awarded.
7	Blacklisting	The Bidder in case of Single Business Entity/Private Limited Company/a Firm/ Limited Liability Partnership/All members of the Consortium should not be blacklisted by any State/ Central Government Departments/Organizations/ PSUs in India or by any agencies globally for corrupt, fraudulent or any other unethical business practices or for any other reason as on date of issuance of tender.
8	GST Registration and PAN card	The Bidder in case of Single Business Entity/Private Limited Company/a Firm/ Limited Liability Partnership/ All members of the Consortium shall be registered for GST and shall have valid PAN number.

4. TECHNICAL EVALUATION CRITERIA:

S. No.	Criteria	Marks System
1	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ Any of the Consortium Partners should have experience	₹ 30 crore = 30 Marks.

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					in at least one ongoing / implemented / completed project of similar work* in linear infrastructure (Roads/ Railways Telecom / Utilities) with any Central / Public Limited State Government Departments / Organizations, PSUs in India during the last Five (5) Years to be calculated with reference to the date of submission of tender. Similar work - Work involving data collection using image/GIS camera/Drone / 360 Degree Panoramic imagery mounted on vehicles / 360 Degree Street View Imagery. These should be integrated with image analytics and asset management system with both web and mobile applications	and upto ₹ 30 crore = 20 Mark each. • Projects with a value upto ₹10 crore=10 Marks each (Maximum of 30 Marks)
				2	Financial Capability of the bidder - Average Annual Turnover of the Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/ Lead Partner in case of a Consortium should be from Digital solution Services / IT / ITES for the last three financial years ending 31/03/2024.	• > ₹ 100 Crore and <= ₹ 200 Crore
25	Clause 9Technical Evaluation	The Bidder in case of Single Business Entity/ Private Limited Company/ a Firm/	The primary goal of the IRRMS is to monitor and maintain roads across a vast network of 65,000 kms. Evaluation criteria	The Te	echnical Evaluation Criteria – Past Experience of bidder may l	pe read as :
	CriteriaPast Experience of BidderPage no.	Limited Liability Partnership should have experience in at least one	has been executed" rather than "financial value of work undertaken" directly aligns with the project's extensive	S. No.	Criteria	Marks System
		ongoing / implemented / completed project of similar work* in linear transport infrastructure (Roads/Railways/ Telecom/Utilities) with any Central / Public Limited / State Government Departments / Organizations, PSUs in India. Similar work - Work involving data collection using image/GIS camera/Drone/360 degree panoramic imagery mounted on vehicles/ 360 degree street view imagery. These should be integrated with image analytics and asset management system with both web and mobile applications. One project with a value more that Rs. 30 Crore = 30 marks. Projects with a value Rs. 15 Crore and upto Rs. 30 Crore = 20 marks.	coverage needs, ensuring that bidders are assessed on their experience relevant to managing large-scale geographic spans. It emphasizes practical, logistical, and operational expertise over monetary value, which may not necessarily reflect the complexities involved in managing such an extensive rural road network in Bihar.Additionally, sector focus should be limited to Roads and Railways that are similar in terms of construction and maintenance specific challenges and environmental, logistical, and regulatory landscapes. Further image analytics and asset management system integration can often involve basic functionalities that do not necessarily employ sophisticated, automated processes for advanced feature detection and analysis. It is crucial to explicitly include AI/ML technologies in the evaluation criteria to ensure bidders who are truly equipped to handle complex data analytics and intelligent automation are assessed. Further, the experience should specifically demonstrate the ability to process and analyze image data through advanced software solutions hosted in cloud (SAAS based solutions) to handle large volumes of data dynamically and scale operations seamlessly as project demands increase. Accordingly, the following amendment to the criteria is suggested—The Bidder in case of Single Business Entity/ Private Limited Company/ a Firm/ Limited Liability Partnership/ Consortium/ JV should have experience in at least one ongoing / implemented / completed project of similar work* in linear transport infrastructure (either Roads or Railways) with any Central / Public Limited / State Government Departments /		reference to the date of submission of tender.	 One project with a value more than ₹ 30 crore = 30 Marks. Projects with a value > ₹ 15 crore and upto ₹ 30 crore = 20 Marks each. Projects with a value upto ₹10 crore=10 Marks each (Maximum of 30 Marks)

		Crore = 10 marks each(Maximum of 30 Marks)	Organizations, PSUs in India Similar work - Work involving SaaS based data processing/reconstruction and analytics of image data (from GIS camera/Drone/360-degree panoramic imagery mounted on vehicles) published to high-resolution 2D maps on a web-portal with at least 10,000 linear km of Road/Rail infrastructure analysed. These should be integrated with image analytics and reporting along with AI models validated with relevant precision/recall parameters for automated feature and change detection. More than 30,000 km = 30 Marks More than 15,000 km and less than 30,000 km = 20 Marks More than 10,000 km and less than 15,000 km = 10 Marks (Maximum of 30 Marks)						
26	Clause 9 Technical Evaluation Criteria Page no. 46 Clause 13 Detailed Financial Bid	Cloud cost required for hosting and running AI based IRRMS – Lumpsum	We suggest incorporating POC demonstrations into the technical evaluation criteria. Given the complexity and specialized nature of AI technology involved in this project, a POC will significantly enhance the decision-making process by providing a deeper, practical insight into each bidder's technological solution. This approach not only ensures that the chosen solution is the best fit for the project's needs but also aligns with best practices for procuring advanced technological systems. Given the dynamic nature of cloud service usage, which can fluctuate based on actual operational demands, we propose that the cloud costs be quoted based on actual usage rather than	Cloud	cost estimate still needs to be provided for the cial Bid Evaluation. The payment terms for clourmat will be as follows:	purpose of budge ad cost will be as	ting; however, per actuals. Ac	it will not be ecordingly, th	part of e financial
	Format as per Scope of Work Page no. 54	cost to be quoted	a lump sum estimate. This approach aligns with industry best practices for cloud billing, offering flexibility and ensuring costs accurately reflect the real consumption of services. Further, Cloud environments offer the ability to scale resources up or down based on actual demand. Quoting on actuals allows for the flexibility to adjust resource utilization efficiently in response to varying system load, making it cost-effective and responsive to actual needs. This is also in line with the provisions of Clause 14 – Payment Terms, Item no. 2 & 3 of the RFP, that states "cloud costs shall be paid on actuals on monthly basis".	Sr. #	Cost of Design, Development, customisation, Deployment & Maintenance of AI based Intelligent Rural Road Maintenance and Monitoring	Unit	Unit Cost to be quoted (INR)	Quantity 01	Total Amount (INR) [Unit Cost * Quantity]
					System (IRRMMS) software. Cost of Setting up of Centralised Operations Control Centre (COCC) at RWD Head Quarter as per the quantity specified in para –99 of this corrigendum notice and excluding deployment of required dedicated manpower as specified in RFP.	Lumpsum		01	
				2	Cost of development of 4D Bridge information modelling (BrIM) software Creating baseline data of road deformities like potholes, cracks etc using the state of art technology i.e. 360 Degree Panoramic imagery mounted on vehicle and low altitude aerial flying along the identified roads for the indicative length of approximately 65000 Linear Km which may increase/decrease in future including all deployment of	Lumpsum Per Km		65000 * 1	

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				3	data procest Incremental Generation Annual Op Years) of A Maintenance (IRRMMS) equipment a data proces	& manpower, data capture and ssing as per scope including I Data Analytics & Report to achieve desired output. Detail Data Analytics & Report to achieve desired output. Detail Data Analytics & Report to achieve desired output. Detail Data Analytics & Report to achieve desired output. Detail Data Analytics & Report to achieve desired output. Detail Data Analytics & Report to achieve desired output. Detail Data Analytics & Report to achieve desired output. Detail Data Analytics & Report to achieve desired output. Detail Data Analytics & Report to achieve desired output. Detail Data Analytics & Report to achieve desired output. Detail Data Analytics & Report to achieve desired output. Detail Data Analytics & Report desired output.	Per Km /per quarterly round	65000 *16	
				4.	Generation t	Data Analytics & Report to achieve desired output. power to be deployed at Control and Centre.			
					(a)	Project Manager (1 No.)	Per Month	1*48	
					(b)	Control and Command Centre team (12 Nos.)	Per Resource/month	12*48	
					taken on the	tional manpower is required for command Centre, they shall be basis of unit cost of Sl.No.4 (b)			
				5.	Al based Maintenance (IRRMMS) and will no	equired for hosting and running Intelligent Rural Road and Monitoring System For the purpose of Budgeting of be part of Financial Bid However, the payments shall be ne actuals.	Lumpsum	01	
				TOT EVA	AL COS' LUATION= (T FOR FINANCIAL (1+2+3+4)			
28	Bid Submission Last Date Page no. 6	18.06.2025 till 1500 Hrs.	It is requested that the Bid End Date may be extended to at least 3 weeks from the date of circulation of responses to Prebid queries to allow adequate time for bidders to provide high quality response to the RFP.	The re	vised Bid due	date is June 30, 15:00 Hours			
29	Qualifications for manpower Page no. 40 & 41	The no. of resources to be initially deployed at Control and Command Centre would be limited to 06 nos. (Each representing 6 Chief Engineer Zones). However, the number of resources can be increased on a need basis for which additional amount shall be paid to the bidder as per the financial quote as quoted by the bidder for additional resources as indicated in the financial bid format.	We understand that the qualification requirement of	The quebasis",	alification req is the same as	uirement of "Additional Manpows mentioned for the Position - Mi	ver to be deployed at Conti nimum OCC Team in the	rol and Command Centre RFP.	on ne

30	Financial Bid Format as per Scope of work	as per Scope of work Page no. 54	lumpsum as different bridges have different lengths and detailed quantity and length of bridges is not given in RFP. Please confirm		nges. Payment terms remains as per RFP.				
31	Format as per Scope of Work & Payment Terms Page no. 54,	Commissioning Command & Control Centre – Currently, the payment milestone is 25% as per	independent and different payment milestones should be defined. Suggestive payment milestones - 1. 50% payment on mobilization 2. 50% payment on delivery 90-100% payment is required for hardware delivery to effectively meet the timelines and delivery required for COCC		nges. Payment terms remains as per RFP.		of Drone en	d 360-degrees	e panoramic
32	55, 56 & 57 Scope of WorkPage 21	combination of low altitude aerial flying, and 360- degree Panoramic imagery mounted on vehicles along	view images and drone imagery, per km	camera particip	ope involving capturing of imagery may be car mounted on vehicle or any other mode deper ating bidder in their approach and methodology eter level accuracy is fine.	name upon the s	ite condition	and as sugge	ested by the
33	Technical Specifications Page 32 & 37	Page 32 - 12.c Ensure positional accuracy of	sub-centimeter level GPS 2.Drones don't have sub-centimeter level GPS 3.Accuracy can be achieved by using RTK units or attaching	Rest al	conditions shall be as per RFP	er to deploy senar	ate field team	for entire fiel	ld survey.
34	Scope of Work Page 23	Clause 6.1.F - Operations and Maintenance by deploying trained manpower with required IT Equipment to carry out Day-To-Day activities of field operations as detailed in this RFP	team or COCC team		tment shall not purchase/hire any drone or Came				
35	Detail Financial Bid Format as per Scope of work Page no. 54	13.1 - Deployment of equipment with high resolution camera integrated with GPS - LUMPSUM	equipment is assumed to be capital-cost (whether department wants to purchase the drones and 360-degree camera vehicles) or is it the running cost on a per km basis. Request you to please change the financial bid unit appropriately if it is intended to be a per km cost	No ch	anges. As per RFP.	ournose of hudget	ing however.	it will not be	part of
36	Payment Terms Page no. 56	Clause 14: All cloud costs shall be paid based on actuals on monthly basis.	Request to remove cloud cost from financial bid as Clause 14 -payment terms state that it will be paid as per actuals by Bihar RWD	Finan	cost estimate still needs to be provided for the point of the provided for the point of the poin	id cost will be as p	er actuals. Ac	cordingly, th	
				Sr. #	Item	Unit	Unit Cost to be quoted (INR)	Quantity	Total Amount (INR) [Unit Cost * Quantity]
				1	Cost of Design, Development, customisation, Deployment &	Lumpsum		01	







	Maintenance of Al based Intelligent Rur Road Maintenance and Monitorir System (IRRMMS) software.	ng	
	Cost of Setting up of Centralise Operations Control Centre (COCC): RWD Head Quarter as per the quantit specified in para – 99 of this corrigendur notice and excluding deployment of required dedicated manpower as specified in RFP.	at y n f	01
	Cost of development of 4D Bridge information modelling (BrIM) software		01
2	like potholes, cracks etc using the state of ar technology i.e. 360 Degree Panoramic imagery mounted on vehicle and low altitude aerial flying along the identified roads for the indicative length of approximately 65000 Linear Km which may increase/decrease in future including all deployment of equipment & manpower, data capture and data processing as per scope including Incremental Data Analytics & Report Generation to achieve desired output.		65000 * 1
3	Annual Operations and Maintenance (4 Years) of Al based Intelligent Rural Road Maintenance and Monitoring System (IRRMMS) including all deployment of equipment & manpower, data capture and data processing as per scope including Incremental Data Analytics & Report Generation to achieve desired output.		65000 *16
4.	Cost of Manpower to be deployed at Control and Command Centre.		
	(a) Project Manager (1 No.)	Per Month	1*48
	(b) Control and Command Centre team (12 Nos.)	Per Resource/month	12*48
	Note: If additional manpower is required for control and command Centre, they shall be taken on the basis of unit cost of Sl.No.4 (b)		
	Cloud cost required for hosting and running AI based Intelligent Rural Road Maintenance and Monitoring System (IRRMMS). – For the purpose of Budgeting and will not be part of Financial Bid Evaluation. However, the payments shall be done as per the actuals.	Lumpsum	01

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T				TOTAL COST FOR FINANCIAL EVALUATION= (1+2+3+4)
			•	
37	Detail Financial Bid Format as per Scope of work Page no. 54 & 55	deployed at Control and Command Centre on the basis of requirement – Per Resource	annual or monthly basis	On Monthly Basis.
38	Scope of Work Page 23	Clause 6.1.G road deformities like potholes, cracks etc	Please specify the feature list for creating the baseline data	All standard deformities like potholes, cracks, rutting, vegetation, ROW encroachment, water logging etc to be covered. However, the list of other deformities to be included can be finalised with mutual discussions between RWD and SI.
39	Detail Financial Bid Format as per Scope of work Page no. 54 & 55	Creating baseline data of road deformities like potholes, cracks etc for the indicative length of approximately 65000 Linear Km	Please confirm if the per km cost includes flights done 4 times in a year or once per km	Creating baseline data of road deformities like potholes, cracks etc for indicative length of approximately 65000 Linear Km which may increase/decrease in future using state of the art technology i.e. combination of low altitude aerial flying, and 360 Degree Panoramic imagery mounted on vehicles along the identified roads followed by capturing of images mandatorily on quarterly basis from 2 nd to 5 th year (Operation and maintenance phase of the project).
40	Clause 12- Period of Project Page 15	Extensions will be done based on the performance of the agency and need of the project with the 20% rate of annual increment for the extended period	Whether 20% increment in cost YoY is applicable only upon extension of contract or is also applicable during the execution period of contract of 5 years	20% rate of annual increment is applicable only for the extended period beyond 5 years (if extended) of the original contract period.
41	8 - (Point # 4, 2) Page # 44 PQ – Financial Strength	The Bidder in case of a single Business Entity/Private Limited Company/ a Firm/Limited Liability Partnership should have a minimum annual turnover of INR 50.00 Crores (Rupees Fifty Crores only) in the business of Digital solution services/IT / ITES in each of the last three financial years Note: Turnover of any parent, subsidiary, associate or other related entity will not be considered.		
42	8 - (Point # 4.4) Page # 45 PQ – Past Experience	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership should have experience of at least one ongoing / implemented completed and operating project in Design Development & Rollout or Company (IT Solution)	of images in GIS application Provision of web & mobile based road management/maintenance system. The Bidder in case of Single Business Entity/ Private Limited Company/ Limited Liability Partnership should have experience of at least one ongoing IT implemented	

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		containing GIS based image analytics and maintenance	for Linear transport Infrastructure (Roads/ Railways/ Telecom /Utilities) for any Central/ State Government	
		management system	(entral/ Ctata C	
		creation for Linear transport		
		Infractantian (B)	수 있는데 가는 사람들이 살아 살아 먹는데 하다 하다. 그는 아이를 하는데 하면 하다고 있는데 그리다 그 때문에 되었다.	
		Infrastructure (Roads/		
		Railways/ Telecom		
		/Utilities) for any Central/		
		State Government		
		Department, / PSU's in		
		India in the last Five (5)		
		Years from		
13	8 - (Point #			
-	4 5)D "	The Bidder in case of Single	Requesting authority to addition of maintenance system	Chall by D. C. C.
	4.5)Page #	Sincy Tilvate	Totaled engagement. The Bidder in case of Single Division	Shall be as per Para -2 of this Corrigendum Notice.
	45PQ - Past	Limited Company/a Film/	Entity/ Private Limited Company/a Film/ Limited Liability	
	Experience	Limited Liability	Partnership should be provided Liability	
			Partnership should have experience of at least one	
			oligoling/implemented / completed project of asset	
15		I de l'oust one	management maintenance system including data acquisition	
- 1				
50		project of asset	transport sector preferably VIZ., transportation/or other related	요즘 아이들 아이들 경영하다 하는 사람들은 사람들이 되었다. 그 그 그래요 그 생각이 되었다는 것이 없는 그 그래요?
			sector utilities/municipal corporations etc.	그리 마시 그 바다 그리는 얼마는 것이 하는 나는 살이 살아지는 것이 되었다. 그 아이를 살아 있다고 나는 그 모든데
		including data acquisition		
		and design application		
		development/		
		implementation transport		
-				경기가 있다. 아니라 어려워 가는 이 경기가 되었다면 하는 사람이 아름은 사람이 아무지도 하는 사람이 있다.
		sector preferably viz.,		
		transportation/or other		
		related sector		
		utilities/municipal		
		corporations etc.		
	9 – (Point # 1)	The Bidder in case of Single	Requesting authority to addition of web & Mobile Road	
	Page # 46	Business Entity/Private	Requesting authority to addition of web & Mobile Road	Shall be as per Para -2 of this Corrigendum Notice.
17	TQ - (a) Past-	- interigration	manifeliance solution will provide comprehensive coverage to	2 of this Corngendum Notice.
5	Experience of	Company'a Tilli	meet the project objective.	
		Limited Liability		
5	bidder	Partnership should have	The Bidder in case of Single Business Entity/Private Limited	
		experience in at least one	Company/a Firm/ Limited Liability Partnership should have	
			experience in at least one onesis.	
		/implemented/completed	experience in at least one ongoing /implemented/completed	
		b. ofeet of sutility WOLK III	(ROads / Railways / Telecom/ Hallalan)	
	Stage many at the	transport	Cellulal/Fublic Limited/State Government Departments /	
-		- (Itodas / (Organizations, PSUS in India Similar work - Work involving	
		refection / (data collection using Web & Mobile Based Road Monagament	
		Utilities) with any	/ Maintenance System/Mobile base AI/ML solution /	
			LIDAR/image/GIS company/Day /266	
			LIDAR/image/GIS camera/Drone/360 Degree Panoramic	
		- Government 1	imagery mounted on vehicles/360 Degree Street View	
13				
		collection using image/GIS •	One project with a value 1 120	
			One Project with a value > 15 crore and up to '30 crore = 20	
		Panoramic imagery N	One i toject with a value > 13 crore and up to 30 grove = 20	
The same				
		Degrae Ct.	one Project with a value up to 10 crore = 10 Months	
	and the second s	- B. CC SHEEL VIEW	Maximum of 30 Marks)	
		Imagery. These should be		
		integrated with image		
		analytics and asset		
		management system with		
		- G-mont System With		









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9 – (Point # 1) Page # 48 TO - (e)	of the Bidder in case of Single Business Entity/	business	No Changes. As per RFP	
Financial Capability of the Bidder	Private Limited Company/a Firm/ Limited Liability Partnership should from Digital solution services/IT/ ITES for the last three financial years: > > 50 Crore and <= 100Crore-5marks > 100 Crore and <= 200Crore-7marks 200 Crore and above - 10	Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership should from Digital solution services/IT/ ITES / consulting business for the last three financial years: • >= 50		
6.1 – (Point # i) Page # 21 Scope of Work	equipment with high resolution camera integrated with GPS. SI shall be responsible for operations, maintenance and replacement (if required) of these assets	with GPS are not mentioned. Hence, requesting authority to provide the minimum specifications of the High-resolution camera.		
1.1(Point # i) Page# 22 Mobile Application Development for Quarterly Survey	The system should be capable of storing at-least 150 Kms of survey data locally.	of storing at-least 25 Kms of survey data locally.		
2 (2), Page 24	indicative length of approx. 65,000 kilometres of rural roads which may increase/decrease in future,	Monitoring, Perform yearly monitoring surveys for indicative length of approx. 65,000 kilometers of rural roads which may increase/decrease in future, with single inspection per quarter		
	Page # 48 TQ - (e) Financial Capability of the Bidder 6.1 - (Point # i) Page # 21 Scope of Work 1.1(Point # i) Page# 22 Mobile Application Development for Quarterly Survey 2 (2),	applications One project with a value more than '30 crore= 30 Marks. One Project with a value > 15 crore and up to '30 crore = 20 Marks each. One Project with a value up to 10 crore = 10 Marks each. (Maximum of 30 Marks) 9 - (Point # 1) Page # 48 TQ - (e) Financial Capability of the Bidder Capability of the Bidder Capability of the Bidder TO - (e) Financial Capability of the Bidder Capability of the Bidder Capability of the Bidder TO - (e) Financial Capability of the Bidder Capability of the Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership should from Digital solution services/IT/ ITES for the last three financial years: > > 50 Crore and <= 100Crore-5marks > > 100 Crore and <= 200Crore-7marks > 200 Crore and above - 10 marks Canability of the Bidder in case of 100Crore-5marks > > 100 Crore and <= 100Crore-5marks > > 100 Crore and c= 100Crore-7marks > 200 Crore and above - 10 marks Canability of the last three financial years: The system should camera integrated with GPS. SI shall be responsible for operations, maintenance and replacement (if required) of these assets during contract period. 1.1(Point # i) Page# 22 Mobile Application Development for Quarterly Survey 2 (2), Page 24 Perform quarterly monitoring surveys for indicative length of approx. 65,000 kilometres of rural roads which may increase/decrease in future, with single inspection per	applications One project with a value more than '30 crore= 30 Marks. One Project with a value > 15 crore and up to '30 crore = 20 Marks each. One Project with a value up to 10 crore = 10 Marks each. One Project with each of the Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership should from Digital solution services/IT/ TIES for the last three financial years: 1 ≥ 50 Crore and <= 100Crore-5marks	applications Cohe project with a value provided by the provided p

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49	Point # 2, b) Page # 25 Key Features of the Proposed System	System should be capable of processing and giving out the results of at-least 500 Kms of survey data within 3 days of data capturing.	vendor is required to complete a minimum of 500 Kms of	This refers to capability of the system and setup to be deployed by SI
50	Point# 1.4 & 1.5Page # 30Integration with third party system	The proposed system should be designed to integrate with existing/futuristic road monitoring systems and databases, allowing seamless data exchange and synchronization. Data of Rural Roads and GIS information should be in place for seamless and easy	Requesting authority to provide clarification regarding total number of 3rd party applications, APIs, Legacy Data and who will coordinate to get information required.	This refers to SI adopting modular approach for easy integration with other applications in future.
51		technically and logistically complex. The inspection of	The specifics regarding the bridges are not provided, such as the total number of bridges, the types of bridges, and the minimum and maximum lengths of the bridges. Hence, requesting the authority to provide the information to understand the requirement.	o and horald delices area. Solution should be for any length width and horald
52		Scope of the Work for "Digital Twin - 4D BrIM, Bridge Information Model Integrated Drone Inspection"	Requesting the authority to change the scope only the following: • Bridge inventory • Bridge GIS Mapping • Bridge Health assessment Bridge inspection by Bridge Engineer and defect reporting through Mobile App.	As per RFP. It is highlighted that RWD is not looking for manual inspections which are then recorded an transmitted through App. The assessment should be done leveraging AI/ML models rather than manually.
53	Page # 38	These devices will be utilized by field personnel of road contractor to	December 1 1 1 1 1 1	No Changes. As per RFP

54	Page 44, The Bidder in case of a PQ - Financial Single Business have the Work Experience through the entity that ultimates the support of the properties of		We request the authority to accept only those bidders who					
	Strength	Entity/Private Limited Company/ a Firm/Limited	intends to implement the project, rather than through a subsidiary or affiliated company.	S. No.	Criteria	Pre-qualification Criteria description		
		Liability Partnership should have a minimum annual turnover of INR 50.00 Crores (Rupees Fifty Crores only) in the business of Digital solution services / IT / ITES in each of the last three financial years		2	Financial Strength	The Bidder in case of a single Business Entity/Private Limited Company/ a Firm/Limited Liability Partnership/Lead Partner in case of a Consortium should have a minimum annual turnover of INR 50.00 Crore (Rupees Fifty Crore only) in the business of Digital solution services / IT / ITES in each of the last three financial years ending 31/03/2024. Note: Turnover of any parent, subsidiary, associate, or other related entity will not be considered.		
55	Page # 6 Important Information	Bid Submission Last date. 18/06/2025 till 15:00 Hrs	Requesting authority to extend the bid submission date till 04/07/2025 as the project is involved huge scope of work to understand and preparation.			is June 30, 15:00 Hours		
56	1.1.3/24	Managing the operation & maintenance of the hosted systems on a 24x7x365 basis	What is RWD standard working hours against which they need major support for operation & maintenance of the hosted system? What is RWD expectations on 24X7 support, is it to keep infra uptime?	24x7x365 is the infra and application uptime (except the standard maintenance/ upgrade cycle that sh informed to RWD in advance)		ance)		
57	1.1.3/22	Operation and Maintenance: 24*7*365 Operation and Maintenance	Could you please provide a list of activities that need to be conducted between 10 PM and 6 AM? Are these activities limited to repair work, or do they include ensuring system uptime as well?	be informe	ed to RWD in a			
58	4. Qualification of ManpowerPg 40-41	2. Minimum OCC teamTotal required= 12 (2 resources representing each Chief Engineer Zone)Location- PatnaNote: 2. The no. of resources to be initially deployed at Control and command center would be limited to 06 no (Each representing 6 Chief Engineer Zones). However, the number of resources can be increased on need basis for which additional amount shall be paid to the bidder as per the financial quote as quoted by the bidder for additional resources as indicated in the financial bid format. Meanwhile, the bidder is expected to build capacity of the serving officers of RWD who can handle the activities in the control and command centre.		representi additional	ng 6 Chief Engi amount shall b	e initially deployed at Control and command centre would be limited to 12 nos. (Each ineer Zones). However, the number of resources can be increased on need basis for which be paid to the bidder as per the financial quote as quoted by the bidder for additional the financial bid format.		

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59	59 EMD; Pg- 46 #11 Submission of original Earnest Money Deposit in an envelope (offline) as mentioned earlier. As mentioned on Page No. 6, the EMD has to be submitted through PMGSY e-tender online Account. However, on Page No. 45 (Pre-qualification criteria), it is mentioned that EMI is to be submitted in an envelope (offline). Request to kindly provide a clarity on this.				ted online through NEFT/R'			
		mentioned earner.	provide a clarity on this.	Sl.No.	Criteria	Pre-Qualification Criteria Description	Required Documents	
60	#2 Important	#12 Tandar Dagum - F		11,	EMD	EMD as per the details given in ITB	Earnest Money Deposit of Rs. 2500000.00 (Rupees Twent Five Lacs Only) to be submitted in online mode onl (PMGSY e-tender online account through PMGSY Etender portal using Internet banking in the form of NEFT/RTGS only)	
	Information:	and Earnest Money Deposit	On page 46- EMD is mentioned offline, while on page-6 it is	EMD to	be submitte	ed online through NEFT/RT	GS only	
	Pg-6	Earnest Money Deposit of Rs. 2500000/- (Rupees	tender online Account-through PMGSY tender portal by	The crite	eria under P	re-Qualification criteria in l	그는 내용하는 것은 물론에 되는 것은 것은 사람들은 사람들은 가는 것이 없다.	
			We would like to draw your kind attention towards amount of EMD i.e., Rupees Twenty-Five Lac only, which is on a higher	Sl.No.	Criteria	Pre-Qualification	Required Documents	
		tender portal by Internet	We request the Authority to consider and all we have been supported by the support of the suppor	11.	EMD	Criteria Description EMD as per the details given in ITB	Earnest Money Deposit of Rs. 2500000.00 (Rupee Twenty-Five Lacs Only) to be submitted in online mod	
61	#7/14	Banking only) Cloud Environment Setup					only (PMGSY e-tender online account through PMGSY E- tender portal using Internet banking in the form of NEFT/RTGS only)	
		, setup	Provisioning cloud infrastructure based on MiETY cloud guidelines – is the expectation to set up the infra for dev and testing environment?	As per R	FP		33331)	
63	10.Bid	10. Bid Opening and	Notes: The invoice for the vehicle running cost shall be raised as per the actual distance (in km) travelled for project implementation during the month as per GPS tracking report. We assume that the invoice can be raised monthly instead of quarterly however request your clarifications? We request you to clarify if the Pre-Qualification and details.	raised a) The Ir as per eport. b) If the specific contrar c) The Ir during d) Payme e) GST/s f) All the		 For Item no2 & 3 (Initial Base Line survey & quarterly surveys during operation and maintenance period years): The Notes in Page-57 may be read as: a) The Invoice for the Operational Resources to be deployed at Control and Command Centre shall be as per the actual deployment during the calendar month. b) If the number of resources at the Control and Command Centre is increased / decreased beyond specified in the contract, during the contract period, then such payment will be calculated on the bacontract rates of such resource position and period for which they are deployed. c) The Invoice for the length of road surveyed may be raised as per the actual distance (in km) surduring the month as per GPS Tracking Report. However, payment will be done on quarterly basis. d) Payment due shall be made after deducting applicable taxes. e) GST/ any other applicable taxes shall be paid at actuals/ as per prevailing rates at the time of invoice f) All the payments will be made to the Bank Account of the S.I. 		
		2) The bids will be opened in two parts: one for pre- qualification & Technical and one for the Commercial	Technical proposal needs to be submitted in a Single Document (Section 1- Pre Qualification and Section 2-Technical Proposal) or Two Separate documents Technical Proposal – A. Pre-Qualification and Technical Proposal B. Detailed Technical Proposal. We humbly request the Authority to clarify the same.	wo sepai	ate docume	ents to be submitted separat	ely.	



		technical evaluation being completed before the commercial proposals are opened and compared.		
64	Pre- Qualification Criteria: Pg- 45	Past Experience: Design, Development and Implementation of Governance/IT Projects	Company/a Firm/ Limited Liability Partnership should have experience of at least one ongoing / implemented / completed and operating project in Design, Development & Rollout of Governance/ IT Solution with scope of work containing GIS	The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability The Bidder in case of Single Business Entity/ Private Limited Company/a Firm/ Limited Liability Partnership/Any of the Consortium Partners should have experience of at least one ongoing / implemented / completed and operating project in Design, Development & Rollout of e-Governance/ IT Solution with scope of work containing GIS based image analytics and maintenance management system creation for Linear Infrastructure (Roads/ Railways/ Telecom /Utilities) for any Central/ State Government Department, / PSU's in India during the last Five (5) Years to be calculated with reference to the date of submission of tender.
65	e,h / 22	survey of the road flag an alert in case of a malfunction of the equipment""The entire process of data collection should be unassisted with no	We understand that this statement aims to ensure that data collection accurately represents the actual location, road, or bridge without any tampering during the process. However, there are other human interventions involved, such as handling the camera, drone, vehicle, and necessary operations while conducting the survey, which we assume are acceptable to the RWD. Kindly clarify.	As per RFP.
66	1,2 ->2/23	human control intervention" IRRMMS Predictive Maintenance Strategies	While evaluation metrics such as accuracy, precision, recall, and F1-score are mentioned, we would like to clarify whether there are specific baseline performance thresholds for these metrics, particularly with respect to different types of defect detection (e.g., potholes versus minor cracks). We assume that any additional anomalies expected from our AI model will be treated as new requirements, as this would necessitate remodelling and retraining the AI model, along with the associated development, testing, and verification	SI should come with list of anomalies they are capable of detecting through their model in the requirement and design phase. The final list shall be mutually agreed between RWD and selected SI
67	1.2->4/ 24	IRRMMS Anonymized and Secure Data Handling	efforts. Kindly confirm. We would like to clarify whether, beyond encryption and access controls, are there specific anonymization techniques or standards that must be followed?	Standard encryption and access controls as per Government standard.
68	2-> Key Features -> 2.a.iii/ 25	Technology Details: Backend Technology Processing	What types of anomalies, beyond road distress items like	SI should come with list of anomalies they are capable of detecting through their model in the requirement and design phase. The final list shall be mutually agreed between RWD and selected SI













69	2.e/25	The system should have the provision of retaining with new data instances in ar incremental manner	We would request Authority to kindly provide the details pertaining to expected refresh frequency (Quarterly/Monthly).	
70	#1/43	Implementation Schedule Inception Report to be submitted in T+1 month	Please clarify the essential and desirable elements of the inception report	This will be agreed mutually between RWD and selected SI
71	#4/25	Ticketing: Defect ticket generation	We assume that the client's existing ticket logging system will be utilized for this project. Could you please provide details on the current ticket logging process?	
72	5.v/26	Baseline Data for Recommendation: Repair suggestions	We would request the client to please provide the baseline inputs on typical repair initiatives done in the past based on distress quality of the roads.	Repair work to be taken up as per relevant IRC standard guidelines.
73	3b/26-27	MIS: The web UI should provide an interactive dashboard that provides real-time and historical road monitoring.	We would like to clarify whether 'real-time' road monitoring entails continuous data ingestion to the cloud from the input video feed as this would entail circuit and the state of the cloud from the input video feed as this would entail circuit and the state of the cloud from the input video feed as this would entail circuit and the control of the cloud from the input video feed as this would entail circuit and the control of the cloud from the input video feed as this would entail the control of the cloud from the input video feed as this would entail the control of the cloud from the input video feed as this would entail the control of the cloud from the input video feed as this would entail the control of the cloud from the input video feed as this would entail the control of the cloud from the input video feed as this would entail the control of the cloud from the input video feed as this would entail the control of the cloud from the input video feed as this would entail the control of the cloud from the cloud from the input video feed as this would entail the control of the cloud from the input video feed as this would entail the control of the cloud from the cloud f	Real time except when survey conducted in offline mode. SI shall upload the data basis its proposed architectu to enable near-real time availability.
74	4.1/27	Data availability: The web should display	We seek clarification from the Authority on who will be responsible for providing the details related to the cost of road development and maintenance, as well as the required form	RWD will provide those details on need basis
75	#8/28	Hosting	and format for submitting this information. Could you please clarify whether the cloud hosting for this project will be	Dedicated Infrastructure.
76	/31	Alert System: Set up automated alerts and notifications of project milestones	project will be on a dedicated infrastructure or a shared one? We would like to seek clarifications from the Authority on the following 1. How will the baseline data of project inception be shared for reporting purposes and alert mechanism. 2. What will be the subsequent frequency of data updates (source as fresh frequency)?	Through IRRMMS application There should always be new real time data as part of quarterly survey that will be ongoing at that time. RWI team should have complete rights to view the data into Cloud directly if required
77	1.10.2/40	requirements as per government's IT policy.	the infrastructure security requirements. Can you please clarify	please visit: https://investit.bihar.gov.in/download For broader cybersecurity guidelines applicable at the national level, you may refer to the Indian Computer Emergency Response Team (CERT-In) or the Ministry of Electronics and Information Technology (MeitY) websites.
78		Operation and Maintenance	We would request the Authority to kindly provide details on the expected user volume to access the target Platform.	~500 concurrent users
79	Pg- 30	Operation and Maintenance	We would request the Authority to kindly provide the number of trainings that has to be factored in the scope. How many stakeholders or users are expected to be trained during the project? What are the key focus areas for training sessions (e.g., usage of mobile application, usage of dashboards etc.?	Approximate no. of departmental Field officers = 2000 Nos. Core team members from the department = 25 Nos. Orientation/ Training sessions that must be factored in the scope — 1. Whenever any new module is launched — All Field Officers to be oriented on the use of module in batches. 2. Core team members- To be trained on usage and management of hosted system, platform features, COCC system along with ongoing technical support, operation & maintenance support for supplied devices to ensure seamless data collection throughout the project duration, use of software modules and any other training on any theme as deemed necessary. For reference purpose the organizational structure of RWD, different schemes implemented, created network of assets and other relevant statistics for reference is annexed because.
		<u></u>		assets and other relevant statistics for reference is annexed herewith.







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80	7. Implementation Schedule	Resources and Setup of	We would request Authority to consider increasing the timeline for cloud configuration and set up of Control Centre by 2 months i.e. T+6 months.	RWD will be amenable to minor adjustments in intermediate timelines subject to merit based on mutual agreement between RWD and SI at inception stage. However, overall timelines for all critical outputs remain same.
81	#6. Scope of Work; Pg 21	Survey	We hereby request the Authority to clarify whether the mobile application will be Android or IOS or both.	Both Android and IOS
82	Key Features of the Proposed System; Pg 26	a. Dashboard b. Various Customised Reports	We hereby request the Authority to clarify on Specific number and details of reports and customized dashboards to be developed? Furthermore, clarify the number of users having access to reports & dashboards.	Specific number and details of reports and customized dashboards to be developed shall be decided mutually by the bidder and RWD. However, all Field officers will have access to the dashboard as per their territorial jurisdiction.
83	Key Features of the Proposed System; Pg 26	#10. Data Collection and transfer	We hereby request the Authority to clarify where the data needs to be transferred.	Data needs to be transferred to the Cloud to be set up by SI
84	#8 Hosting Pg-28	The licenses will be procured in the name of RWD.	We hereby request you to amend the sentence as follow: "The EULA/ license agreement for all the software/ hardware Equipments needs to be signed directly between client and OEM"	No Changes. As per RFP.
85	Annual Operations and Maintenance Payment Pg 56	Annual Operations and Maintenance Payment	We hereby request the Authority to clarify on who will borne the expense for procuring following: a) License payment terms of IRRMMS platform for the first years and subsequent 4 years b) Payment terms for all the hardware components to be procured by SI on client's behalf	This will be borne by SI and budgeted in financial bid.
86	We declare that: Pg 60-61	c) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any corrupt practice, fraudulent practice. Coercive practice, undesirable practice, or restrictive practice.	We request the Authority to clarify that this clause shall be applicable to the team proposed as a part of this project.	
87	Building Data Platform: Redundancy and Replication: Pg = 23	Ensure redundancy and/or replication across multiple zones to maintain uptime. Test redundancy and replication by simulating failures	Disaster Recovery for IRRMMS apart of mentioned multiple zones for redundancy. If yes, please highlight RTO and RPO for DR site requirement.	Bidder to propose corresponding details which should be in line with those applicable with other IT systems in state and central government
88	Building Data Platform: Pg – 23	Security Solutions: Implement robust security measures to protect data integrity and compliance	compliance etc.	
89	Backup and Archival StrategyPg - 23	Develop and implement a comprehensive backup and	data and archival data i.e. for 3/5 years etc.	3 Years (refresh monthly thereafter)

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90	#7. Performance Security Deposit; Pg-14	b) The successful bidder will also submit an acceptance of the LOI within three days from the awarding of the Contract.	period from 3 days to 7 working/ business days.	No Changes. As per RFP
91	#14. Arbitration	All Arbitration proceedings shall be held at Patna, Bihar State, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.	proceedings shall be held at Vollette West D	No Changes. As per RFP
92		contrary elsewhere contained herein, the maximum liability of bidder shall be, regardless of the form of claim, the	We hereby request the Authority to limit the liability to 1x the fees paid to Bidder under this assignment/contract hence request for amending the clause as below: Subject to the above and not withstanding anything to the contrary elsewhere contained herein, the maximum liability of bidder shall be, regardless of the form of claim, the consideration received by bidder for this Agreement in connection with work performed by the SI.	
		Reselling	Since there is requirement to bring in MEITY approved cloud service provider (CSP) in this RFP the following language can be considered to be added as part of the contract to ensure that the CSP licensing terms solely govern the cloud components: "Notwithstanding anything contained to the contrary, Client's usage of any third-party hardware, software and cloud services ("CSP products") shall only be governed by and subject to CSP's licensing terms and agreements and accordingly, the provisions of the RFP/subsequent LoA/Contract will not be applicable."	
4		proposed clause	We hereby like to draw your kind attention towards addition of IPR Ownership clause as below: We/firm can assign ownership of the deliverables to the Client upon receiving payment of all our charges in connection with the Contract. We/firm will retain any pre-existing background IP that belongs to us and was developed independent of the services.	Any pre-existing IP, to be called out at inception stage, shall remain with SI

95		Collection	What types of bridge deformities should be detected (e.g., cracks, corrosion, joint displacement, sagging)? Are there any standard datasets available for initial model training or benchmarking? Are bridge inspection data (past or ongoing) already digitized and available for AI model training and validation? Is LiDAR scanning mandatory for all bridges, or are there alternative acceptable methods (e.g., drone photogrammetry)?	Corrosion or a around the fo 2. Baseline to be 3. The scope of objective is to asset uptime,	rust; Joint displacement undation and any addition e created by SI. work also includes cor o generate detailed Digio optimize resource alloc	aken. Only visible anomalies like Structural crack or separation. Sagging or deformation of beams; and deformities not explicitly listed here. Iducting drone-based inspections of road bridge tal Twins for the Operation and Maintenance Dation, and improve the maintenance lifecycle of	es across Bihar epartment to e the bridges.
96		Survey Equipment and Integration	Acquisition Control Unit during bridge inspections?2. Are there specific constraints on drone usage in sensitive zones (e.g., near railways, urban areas, or defence installations)?3. Can the bridge inspections be integrated with road surveys, or must they be conducted as separate workflows?			ovals for Drone Usage. Other conditions shall be	e as per KIT.
97		Visualization and Reporting	annotated meshes, defect overlays)? 2. Should reports include severity grading, repair prioritization, and estimated cost of rectification? 3. Is there a preferred format or structure for bridge inspection deshboards?	SI to suggest based of	m men experience.		
98		Operational & Regulatory Questions	Are there any mandatory standards or compliance frameworks for bridge inspection and reporting (e.g., IRC codes, BIS standards)? What is the expected turnaround time from inspection to defect reporting and ticket generation? Are bridge inspection cycles predefined (e.g., bi-annual), or	As per KFP			
			should the system dynamically schedule based on risk? 4. Share the existing workflow for bridge inspections till ticket generation				
99	1.6/30	Minimum Bill of Material &	Share the existing workflow for bridge inspections till ticket generation For improved COCC display functionality, it is recommended.	Minimum Bill of M	aterial & Quantity for C	command-and-Control Centre may be read as:	
99	1.6/30	Quantity for Command-	A. Share the existing workflow for bridge inspections till ticket generation For improved COCC display functionality, it is recommended to have following minimum requirement: 1) Large Format Display: 8 Units instead of 2 units listed in	Minimum Bill of M Component	Purpose	Specifications	Quantity
99	1.6/30	Minimum Bill of Material & Quantity for Command- and-Control Centre	4. Share the existing workflow for bridge inspections till ticket generation For improved COCC display functionality, it is recommended to have following minimum requirement: 1) Large Format Display: 8 Units instead of 2 units listed in RFP given need for addition of at least one display per zone 2) Workstations: 20 workstations (laptops) instead of 40 units			Specifications - Intel i7/i9 or AMD Ryzen 7/9 - 32 GB RAM - 1 TB SSD - NVIDIA RTX 3060 GPU or higher - Dual 24" 4K monitors	12 Units
99	1.6/30	Quantity for Command-	4. Share the existing workflow for bridge inspections till ticket generation For improved COCC display functionality, it is recommended to have following minimum requirement: 1) Large Format Display: 8 Units instead of 2 units listed in RFP given need for addition of at least one display per zone	Component	Purpose Operator analysis of	Specifications - Intel i7/i9 or AMD Ryzen 7/9 - 32 GB RAM - 1 TB SSD - NVIDIA RTX 3060 GPU or higher - Dual 24" 4K monitors - 85" or larger - 4K UHD resolution - HDMI, DisplayPort, LAN connectivity - Touchenabled (optional)	12 Units 8 Units
99	1.6/30	Quantity for Command-	4. Share the existing workflow for bridge inspections till ticket generation For improved COCC display functionality, it is recommended to have following minimum requirement: 1) Large Format Display: 8 Units instead of 2 units listed in RFP given need for addition of at least one display per zone 2) Workstations: 20 workstations (laptops) instead of 40 units	Component Workstations Large Format	Purpose Operator analysis of road data Centralized	Specifications - Intel i7/i9 or AMD Ryzen 7/9 - 32 GB RAM - 1 TB SSD - NVIDIA RTX 3060 GPU or higher - Dual 24" 4K monitors - 85" or larger - 4K UHD resolution - HDMI, DisplayPort, LAN connectivity - Touch-	12 Units
99	1.6/30	Quantity for Command-	4. Share the existing workflow for bridge inspections till ticket generation For improved COCC display functionality, it is recommended to have following minimum requirement: 1) Large Format Display: 8 Units instead of 2 units listed in RFP given need for addition of at least one display per zone 2) Workstations: 20 workstations (laptops) instead of 40 units listed in RFP.	Component Workstations Large Format Display UPS	Purpose Operator analysis of road data Centralized visualization Backup power for critical systems	Specifications - Intel i7/i9 or AMD Ryzen 7/9 - 32 GB RAM - 1 TB SSD - NVIDIA RTX 3060 GPU or higher - Dual 24" 4K monitors - 85" or larger - 4K UHD resolution - HDMI, DisplayPort, LAN connectivity - Touchenabled (optional) - 20 kVA or higher - Online double-conversion - Surge protection	12 Units 8 Units
100	1.6/30 Due date	Quantity for Command-	4. Share the existing workflow for bridge inspections till ticket generation For improved COCC display functionality, it is recommended to have following minimum requirement: 1) Large Format Display: 8 Units instead of 2 units listed in RFP given need for addition of at least one display per zone 2) Workstations: 20 workstations (laptops) instead of 40 units	Component Workstations Large Format Display UPS The revised Bid du	Purpose Operator analysis of road data Centralized visualization Backup power for critical systems	Specifications - Intel i7/i9 or AMD Ryzen 7/9 - 32 GB RAM - 1 TB SSD - NVIDIA RTX 3060 GPU or higher - Dual 24" 4K monitors - 85" or larger - 4K UHD resolution - HDMI, DisplayPort, LAN connectivity - Touchenabled (optional) - 20 kVA or higher - Online double-conversion - Surge protection	12 Units 8 Units
\(\frac{1}{2}\)	(• 1	Quantity for Command- and-Control Centre	4. Share the existing workflow for bridge inspections till ticket generation For improved COCC display functionality, it is recommended to have following minimum requirement: 1) Large Format Display: 8 Units instead of 2 units listed in RFP given need for addition of at least one display per zone 2) Workstations: 20 workstations (laptops) instead of 40 units listed in RFP. It is requested that bid due date be extended till atleast 3 weeks from the date of release of clarifications to enable bidders to	Component Workstations Large Format Display UPS The revised Bid du	Purpose Operator analysis of road data Centralized visualization Backup power for critical systems	Specifications - Intel i7/i9 or AMD Ryzen 7/9 - 32 GB RAM - 1 TB SSD - NVIDIA RTX 3060 GPU or higher - Dual 24" 4K monitors - 85" or larger - 4K UHD resolution - HDMI, DisplayPort, LAN connectivity - Touchenabled (optional) - 20 kVA or higher - Online double-conversion - Surge protection	12 Units 8 Units

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				Power of Attorney authorized signatory for signing of proposal. Power of attorney to authorized signatory for signing of proposal. Power of attorney duly executed and notarized. The scanned copy of PoA is to be uploaded in PMGSY e-tenders along with pre-qualification proposal. The criteria under Pre-Qualification criteria in Page-46 may be read as:
102		NEW CLAUSE	PENALTY CLAUSE	If there is a delay in achieving the milestones or submission of deliverables, penalty may be imposed as follows:
	* -			 0.5 % of the payment cost for respective Deliverable(s)/Milestone(s) for the delay per week or part thereof for the delay.
				 0.5% of cost from respective invoice on account of not maintaining devices equipment, software, hardware, data backup, and road survey etc., for the delay per week or part thereof for the delay.
				 0.5% in case of delay in deployment/ replacement of resources for the delay per week or part thereof for the delay
				The penalties shall be capped to 5% of the Invoice value for the respective Deliverable(s)/Milestone(s) and the Penalties above 5% of the Invoice Value may lead to rescindment of agreement.
				Such deductible amount shall not be paid to the SI against the corresponding invoice raised.
				Note: Regarding deployment/replacement of resources: Any resource to be deployed at project location will be screened by the committee headed by the Engineer-in-Chief, RWD. In case the service of the specified personnel is not made available at proper time or performance of a team member provided by bidder is not found acceptable by the Department, the bidder shall replace those personnel with a person of equal or better qualification and experience. In case of replacement, the same shall be allowed only upon approval by the Employer and the replacement candidate has to be onboarded within 30 days failing which a deduction to the extent of 5% pertaining to the fees payable against the replacement position from monthly bill shall be imposed.

Frouhank Kumor (Prashank Kumar) IT Nodal PMGSY

(Arvind Kumar) Technical Advisor to ENC, RWD, Patna

(Ram Manohar Thakur)

Chief Engineer-1, RWD, Patna

16161-5

(Anil Kumar) Chief Engineer-2 RWD, Gaya

(Chandra Shekhar Azad)

Chief Engineer-3, RWD, Bhagalpur

(Sudhir Kumar) Chief Engineer-4, RWD, Purnea

(Jay Kishor Thakur) Chief Engineer-5, RWD, Muzaffarpur

(Kishor Kumar) Chief Engineer-6, RWD, Darbhanga

(Md. Sultan Ahmad) Chief Engineer-Construction & Quality Control RWD, Patna

Chief Engineer-Maintenance & Upgradation RWD, Patna

(Nirmal Kumar) Engineer in Chief RWD, Patna