

Request for proposal # RFP#2026-IN-03

Engagement of a GIS Agency / Consultant
for GIS-Based Mapping and Spatial Risk
Assessment to Strengthen Urban and Peri-
Urban Disease Surveillance - Cities of
Nagpur and Patna



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Request for proposal number: RFP#2026-IN-03

For: Engagement of a GIS Agency / Consultant for GIS-Based Mapping and Spatial Risk Assessment to Strengthen Urban and Peri-Urban Disease Surveillance - Cities of Nagpur and Patna

1. Request for proposal schedule

Activity	Date and time
Request for proposal (RFP) released	17 th August 2026
Confirmation of interest in submitting a proposal	19 th August 2026
Deadline for fact-finding questions	20 th August 2026
PATH to respond to fact-finding questions	24 th August 2026
Deadline for submission of proposal in response to the RFP	27 th August 2026
Award decision (to be followed by contract negotiations)	4 th September 2026

Note: PATH reserves the right to modify dates at its discretion. Any changes will be communicated to those who confirmed their intent to submit a proposal.

2. PATH statement of business

PATH is a global nonprofit dedicated to achieving health equity. With more than 40 years of experience forging multisector partnerships, and with expertise in science, economics, technology, advocacy, and dozens of other specialties, PATH develops and scales up innovative solutions to the world's most pressing health challenges. Visit www.path.org to learn more.

3. Contracting requirements

- 3.1. The contracting authority shall be PATH or one of its affiliates, either directly or on behalf of operations countries or programs.
- 3.2. Commercial contracting terms and conditions will be negotiated with the successful supplier at the end of the selection process.
- 3.3. By submitting a proposal, the supplier confirms their agreement to abide by the RFP terms and PATH policies, including the [PATH Code of Ethics](#) and general practices promoting sustainability, fair trading, health and safety, records management, anti-fraud and corruption, and environmental responsibility.
- 3.4. The estimated duration of the contract is 6 months.

4. Solicitation terms and conditions

- 4.1. **Notice of nonbinding solicitation:** PATH reserves the right to reject any or all bids received in response to this solicitation and is not obligated to accept any proposal.
- 4.2. **Confidentiality:** Suppliers must treat all information provided by PATH as part of this solicitation as confidential. Unauthorized disclosure of such information may result in PATH seeking appropriate remedies under applicable law.
- 4.3. **Conflict of interest disclosure:** Suppliers bidding on PATH business (herein referenced as “bidders”) must disclose any actual or potential conflicts of interest to the contact(s) listed in the RFP. Conflicts of interest may exist if a personal relationship with a PATH staff member constitutes a significant financial interest, a board membership, other employment, or ownership or rights in intellectual property that conflict with the supplier’s obligations to PATH. Both suppliers and PATH are safeguarded when actual or perceived conflicts of interest are disclosed. When necessary, PATH will develop a management plan to mitigate potential risks associated with disclosed conflicts of interest.
- 4.4. **Acceptance:** A bidder’s submission of a proposal constitutes acceptance of all terms and conditions set forth in the RFP. However, PATH’s acceptance of a proposal does not imply acceptance of its terms and conditions. PATH reserves the right to negotiate the final terms and conditions, as well as the substance of the RFP finalists’ proposals. Additionally, PATH may choose to accept partial components of a proposal if appropriate.
- 4.5. **Right to final negotiations:** PATH reserves the right to negotiate the final costs and scope of work and to limit or include third parties in such negotiations at its sole discretion.
- 4.6. **Third-party limitations:** PATH does not represent, warrant, or act as an agent for any third party as a result of this solicitation. This solicitation does not authorize any third party to bind or commit PATH in any way without express written consent.
- 4.7. **Proposal validity:** Proposals submitted under this RFP must remain valid for at least 90 days from the submission deadline. The validity period must also be explicitly stated in the proposal.
- 4.8. **Limitation of liability:** The terms and conditions outlined in this RFP do not exclude or limit the liability of PATH or the supplier in cases of fraud or other circumstances that result in liability under applicable law.
- 4.9. **Tender costs and liability:** Bidders are responsible for obtaining all necessary information to prepare their proposal and for covering all costs and expenses incurred during the preparation process. Subject to the “Limitation of liability” section (Section 4.8), bidders acknowledge that by participating in this RFP—including the submission of their proposal—they are not entitled to claim from PATH any costs, expenses, or liabilities incurred during the tender process, regardless of the outcome of their proposal.
- 4.10. **PATH’s variation or termination rights:** PATH reserves the right to modify or terminate this RFP process with written notice to all suppliers who have submitted proposals. The solicitation process is intended to proceed in accordance with the provisions outlined in this RFP. However, PATH reserves the right to terminate, amend, or modify the process, including time scales or deadlines, with notice to all suppliers who have submitted proposals. Subject to section 4.8, “Limitation of liability,” PATH shall not be held liable for any losses, costs, or expenses resulting from its termination, amendment, or modification to this RFP.

- 4.11. **Joint venture, consortium, or subcontractors:** The lead supplier submitting a proposal in response to this RFP assumes full responsibility for ensuring compliance with RFP requirements among all members of the joint venture or consortium, including their advisers, subcontractors, and staff.
- 4.12. **Payment and invoicing:** PATH will process correctly addressed and undisputed invoices within 30 days. Suppliers must ensure that comparable payment terms apply to their downstream parties. **Advance payment is not preferred.** If an advance payment is proposed and deviates from industry- or country-standard practices, it must be clearly outlined in the financial proposal submitted to PATH.

5. Instructions for submission

- 5.1. **PATH contacts:** All communications regarding this solicitation must be directed to the contacts listed below. Contacting third parties involved in the project, the review panel, or any other party will be considered a conflict of interest and may result in disqualification of the proposal. All required documents must be submitted to the listed contacts by the submission deadline:

Technical and Financial proposal should be Addressed to: Procurement Officer at rfpindia@path.org

INSTRUCTIONS FOR SUBMITTING THE PROPOSAL:

FORMAT OF THE PROPOSAL: - The Bidder should submit the proposal in English. The response to the proposal should be set out in

two main parts:

- Part A – Technical Proposal
- Part B – Financial Proposal

Part A (Technical Proposal) and Part B (Financial Proposal) must be documented and saved separately and efforts to be made for submission in a single email to enable evaluation of Technical Proposal and Financial Proposal independently. Part B (Financial Proposal) MUST BE PASSWORD PROTECTED separately. Please do not include any price information/password to access the Proposal in Part A (Technical Proposal) and/or in any communication (until and unless requested by PATH).

The subject line of all emails regarding the proposal should read: **RFP#2026-IN-03- Your Company**

- 5.2. **Confirmation of interest:** Send a statement acknowledging receipt of this solicitation and your intent to respond (or not) no later than the date specified in the schedule in Section 1. Send the confirmation to the contacts listed in Section 5.1 above.
- 5.3. **Proposal technical content:** Bidders are advised to provide only the information required. Proposals must be clear, concise, unambiguous, and directly address the stated requirements.
- 5.4. **Selection of shortlist:** PATH reserves the right to select a shortlist from the bids received. PATH may also interview and discuss specific details with shortlisted candidates.
- 5.5. **Deliberate alteration** of a PATH requirement as part of your proposal will invalidate the proposal; and for evaluation purposes, the proposal may be deemed to be unresponsive .

6. Scope of work/specifications and deliverables

6.1. Scope of work

This Scope of Work explains the requirements for hiring a qualified GIS agency or consultant to support stronger disease surveillance in the urban and peri-urban areas of Nagpur and Patna. The work will be carried out separately in each city. It will include creating a combined geospatial database, analyzing disease risk and service coverage, mapping health facilities and surveillance networks, identifying underserved and high-risk areas, developing GIS-based visualization tools, and preparing a plan to include peri-urban areas in the surveillance system. The agency or consultant will also present the key findings to relevant city stakeholders. Unless mentioned otherwise, the estimated amount of work described in this document applies to each city.

1. Background and Rationale

Effective disease surveillance in crowded urban areas and fast-growing peri-urban areas requires a clear understanding of where people live, where health risks are high, where health facilities and surveillance services are available, and where important gaps exist. At present, the required geographic information is spread across different departments and systems. This makes it difficult to identify priority areas and plan surveillance and response activities effectively.

A specialized GIS agency or consultant is therefore required to bring these different datasets together into one accurate and verified geospatial database. The agency or consultant will analyze the data to identify high-risk wards and peri-urban clusters, map health facilities and surveillance units, and locate settlements that are not adequately covered by health and surveillance services.

The analysis will present different risk factors together in the form of a Vulnerability Atlas. It will also help include high-risk and uncovered areas in the existing surveillance and reporting systems.

The final outputs for each city will include GIS-based surveillance risk maps and a plan for integrating peri-urban areas into the surveillance system.

2. Objective of the Assignment

The objective of this assignment is to use GIS mapping, spatial analysis, and risk visualization to strengthen disease surveillance in urban and peri-urban areas. The agency or consultant will:

- Create a combined and geo-referenced GIS database for each city.
- Map surveillance coverage, including surveillance units, reporting health facilities, and their links with health information systems.
- Identify areas with high environmental and vector-related health risks.
- Identify peri-urban and underserved areas.
- Develop GIS tools and support their integration into existing surveillance system

3. Geographic Coverage

The assignment will cover two cities: Nagpur in Maharashtra and Patna in Bihar. In each city, the work will include the main urban area and the surrounding peri-urban areas. Special attention will be given to fast-growing areas on the city outskirts where disease surveillance may be weak. These include informal settlements, unplanned migrant labour colonies, brick-kiln clusters, and other settlements near the city boundary. All activities will be completed separately for Nagpur and Patna. Separate city-level datasets, maps, and surveillance integration plans will be prepared for each city.

4. Scope of Services

The assignment includes the following main activities, which are explained in detail in the next sections:

- Collect, combine, and maintain GIS datasets in one unified database.
- Analyze geographic patterns of health risks and surveillance coverage.
- Map health facilities, health-system resources, and surveillance units.
- Identify gaps in disease surveillance in peri-urban areas.
- Link uncovered settlements with existing surveillance and reporting systems.
- Develop GIS-based visualization tools for surveillance teams.
- Prepare a plan to integrate peri-urban areas into the surveillance system.
- Share the GIS findings with relevant stakeholders and agree on the next steps.

Technical Requirements. The work is to be carried out using QGIS, ArcGIS, or an equivalent platform. Datasets and outputs are to be delivered in standard formats, including shapefiles, geoJSON, Excel, and GPS coordinates, and are to be aligned with and integrable into government systems (IHIP/IDSP) and Smart City platforms.

- **Coordinate Reference System:** The same coordinate reference system should be used for all GIS data. WGS84 should be used for storing the data. The appropriate UTM zone for Nagpur and Patna should be used for area and distance calculations. All GIS layers should be converted to the agreed standard.
- **Base Maps and Imagery:** Reliable and official base maps should be used. These may include Survey of India maps, Census boundaries, recent satellite images, and other licensed or open-source maps. The source of each map should be clearly documented. Ward boundaries should match official government records.
- **Integration Approach:** The agency or consultant should confirm how the GIS outputs will be linked with IHIP, IDSP, Smart City, and ICCC platforms. This should include the required file formats and any need for an API. The proposal should also clearly state whether the outputs will be provided as static maps, an interactive web-GIS dashboard or portal, or both.
- **Software and Licensing:** The proposal should clearly state who will be responsible for the cost and management of any paid software license, such as ArcGIS. The final GIS database should also be easy for government teams to maintain using available software, such as QGIS.

5. Data Sources and Responsibilities

This section explains which datasets the agency or consultant must collect or prepare independently, and which datasets will be requested from government departments with support from PATH. The same division of responsibility will apply in both cities. This will help applicants understand their responsibilities, prepare accurate cost estimates, and avoid delays caused by uncertainty about who will provide each dataset.

Data category or GIS layer	Expected source
Data to be provided by government departments with support from PATH	
Ward and administrative boundaries, master-plan maps, planning-zone maps, and road networks	Municipal Corporation, Town Planning Department, and Smart City authorities
Data on slums and informal settlements, including population figures	Municipal Corporation, State Urban Development Agency, and Census
Lists of public health facilities, including UPHCs, UHWCs, and hospitals	Health Department
Lists and locations of laboratories and diagnostic centres	Health Department and IDSP
Lists of IHIP and IDSP reporting units, including MSU and DSU areas	IDSP, IHIP, and District Surveillance Unit
Information on referral linkages between facilities	Health Department and reporting facilities
Environmental risk data, including flood-prone and waterlogging areas, solid-waste hotspots, dumping yards, slaughterhouses, and vector-prone areas	Municipal Corporation, Pollution Control Board, and other relevant departments
IHIP or IDSP case data or line-list data, without personal identification details, including date and location, where sharing is permitted	IDSP and IHIP
Data to be collected or prepared by the agency or consultant	
Field verification of locations and collection or correction of GPS coordinates	Agency or consultant through field visits
Recent satellite imagery	Open-source or licensed satellite imagery providers
Digitization and geo-referencing of scanned or paper maps	Agency or consultant
Mapping of settlements using satellite imagery where official settlement maps are not available	Agency or consultant
Mapping of transport hubs, major movement routes, and high-footfall areas	OpenStreetMap and field observation
Analytical outputs, including catchment areas, buffer analysis, combined map layers, composite risk index, Vulnerability Atlas, metadata, and data dictionary	Agency or consultant through GIS analysis

PATH's Role: PATH will support access to government data by providing formal introductions and data-request letters. PATH will also organize inception and data-coordination meetings, maintain a list of key contact persons, track dataset requests, and support follow-up where data access is delayed.

Data Gaps and Alternative Sources: If government data is unavailable, incomplete, or cannot be shared, the agency or consultant should propose an alternative method during the inception stage. This may include using open-source data or collecting data through field visits. The cost of these alternatives should be included in the original proposal, and no additional payment will be made.

Data Validation: The agency or consultant will be responsible for reviewing, checking, and documenting all datasets used in the assignment, regardless of where the data comes from. This should be done in line with the requirements described in Sections 6 and 7.

6. GIS Data Review and Validation

The agency or consultant will review and check all datasets before using them for analysis. This will include the following:

- Check that all administrative boundaries and base maps are correctly geo-referenced and complete.
- Check facility locations and remove duplicate facility records.
- Confirm that health facilities are correctly linked with their reporting units.
- Check and correct the coordinates of health facilities using GIS tools or GPS, where needed.
- Verify facility details, including the type of facility and the services available.
- Confirm referral linkages from UPHCs and UHWCs to higher-level facilities and laboratories through discussions with facility staff and surveillance teams.
- Use sample checks to confirm that indicators have been correctly included in the GIS database.

As a suggestive minimum quality standard, the agency or consultant should verify and validate the coordinates of at least 10% of the health facilities.

- **Positional Accuracy Standard:** The agency or consultant should define and follow a clear accuracy standard for all GPS coordinates collected. For example, facility coordinates should generally be accurate within 5 to 10 meters. The acceptable level of error and the method used to check accuracy should be clearly documented.
- **Field Verification:** The agency or consultant should physically verify an agreed sample of health facilities and peri-urban settlements using GPS. The number of locations to be checked and the verification process should be agreed during the inception stage.

7. Preparation and Cleaning of Spatial Datasets

The agency or consultant will combine all datasets into one standard GIS database. This will include the following:

- Arrange all datasets in a clear and standard folder structure, using consistent file names and tags.

- Convert all datasets, including Excel files and vector-surveillance data, into standard GIS formats such as shapefiles or GeoJSON. All layers should be brought together in one GIS project or database.
- Clean and standardize the data by removing duplicate records, correcting missing or incorrect coordinates, and using the same map projection and coordinate system across all layers.
- Check that all required data fields are complete, validate a random sample of records, and document all data-cleaning changes made.

8. Ward, Slum, Health Facility and Service-Coverage Mapping

The agency or consultant will collect ward boundary maps and shapefiles from the Municipal Corporation. This will also include urban expansion maps, planning-zone maps, and road-network data.

Slum and Informal-Settlement Mapping

- Map slums and informal settlements, including available population data.
- Identify high-density and vulnerable areas.
- Map peri-urban growth areas where basic infrastructure and services are limited.
- Prepare settlement maps and a master list of all settlements with unique identification numbers.
- The master list should include the settlement name, ward, and coordinates.
- Each settlement should be classified as peri-urban, informal, high-density, migrant-labour colony, brick-kiln cluster, or another relevant category.

Health-Facility Mapping

- Prepare and geo-reference a complete list of public health facilities, including UPHCs, UHCs, hospitals, and clinics.
- Include major private health facilities where information is available.
- Check and correct the coordinates of all mapped facilities.
- Map public and empaneled private laboratories, diagnostic centres, and medical colleges.
- Add all verified health-facility information to the GIS database.

Surveillance and Service-Coverage Mapping

- Map all IHIP and IDSP reporting units and reporting health facilities.
- Map the areas covered by MSUs, DSUs, and other surveillance units.
- Compare the location of reporting units with population distribution.
- Identify areas that have too few reporting units in relation to their population.
- Prepare maps showing surveillance coverage and gaps.

9. Access and Distance Analysis

The agency or consultant will assess how easily people can access health facilities and surveillance services. This will include the following:

- Create service areas around health facilities, such as a 1 to 3 kilometers radius or an area based on travel time.
- Estimate the population covered within these service areas and identify locations where access is limited.
- Prepare maps showing access to health services and gaps in coverage.
- Use indicators such as the number of facilities in an area, the services available, and the population covered by each facility.
- For settlements that are outside existing service areas, identify the nearest surveillance unit through distance analysis.
- Confirm the most suitable reporting facility for each uncovered settlement, based on the facility's service capacity and whether it reports through IHIP or IDSP.

10. Identification of Underserved and High-Risk Areas

The agency or consultant will identify and classify the areas of greatest concern by combining different GIS data layers. This will include the following:

- Identify underserved areas where access to health and surveillance services is limited.
- Identify high-risk areas with weak surveillance coverage, also called grey zones, by combining information on environmental risks, population vulnerability, and surveillance coverage.
- Classify priority areas using a combined risk score.
- Identify peri-urban and other high-risk settlements and classify their surveillance coverage as fully covered, partially covered, or not covered.
- Compare the level of health risk in each settlement with the availability of surveillance services.
- Mark a settlement as a surveillance gap when it has high risk but low or no surveillance coverage, weak links with reporting facilities, or low reporting performance despite being located within a reporting unit's area.

Mobility and transmission-pathway analysis. Map transport hubs and transit nodes (bus stands, railway stations, and other transit points), major mobility corridors, and high-footfall zones, and overlay them with high-risk areas to identify potential transmission pathways, including emerging peri-urban growth areas along corridors that carry increased risk.

Case hotspot and cluster detection. Where time-stamped case data is available (for example, IHIP/IDSP line lists), the agency/consultant will analyze the spatial and temporal pattern of reported cases to detect concentrations that may signal emerging or under-recognized transmission, including:

- Generate case-density surfaces (kernel density estimation) and identify statistically significant hotspots and clusters using recognised spatial statistics (for example, Getis-Ord G_i^* , Moran's I , and space-time methods such as SaTScan).
- Overlay detected hotspots and clusters with surveillance-coverage, environmental risk, and vulnerability layers to distinguish genuine high-transmission areas from artefacts of reporting, flag hotspots in low-surveillance or underserved areas, and produce periodic hotspot maps that can be refreshed for routine surveillance review.
- Confirm the availability, resolution, and time period of case data at inception; where case-level data cannot be shared, apply this analysis at the most granular level permitted (for example, ward or facility aggregates) or scope it as an optional extension.
- Risk and vulnerability inputs include: environmental risk factors (flood-prone and waterlogging zones, sanitation gaps, solid-waste hotspots, vector-prone areas, wet markets, dumping yards, slaughterhouses including informal ones, peri-urban livestock holdings, and migratory bird rest areas); population vulnerability (density, slum clusters, and peri-urban expansion); a composite multi-layer overlay; and mobility and transmission-pathway analysis. Each risk and vulnerability layer is classified as low, medium, or high.

11. GIS-Based Prioritization for Health Infrastructure and Outreach Services

Based on the risk and coverage analysis, the agency or consultant will prepare GIS-based priority maps and lists to show where surveillance, health services, and community outreach need to be strengthened. This will include the following:

- Classify priority areas using a combined risk score.
- Assign each settlement a high, medium, or low priority level based on its risk level and the seriousness of surveillance and service gaps.
- Prepare a gap-prioritization matrix and a final list of settlements requiring action.
- Identify priority peri-urban areas for phased inclusion in the surveillance system as Phase 1, Phase 2, or Phase 3.

- Decide the phase for each settlement based on factors such as risk level, population size and density, and the availability or weakness of surveillance coverage.
- Prepare a prioritized settlement list showing the phase assigned to each area.
- Develop a combined risk index and a Vulnerability Atlas to clearly identify priority locations.
- Link the identified peri-urban settlements with the appropriate surveillance units and primary health facilities to support action.

These outputs will help city teams focus surveillance, health-service linkages, and community outreach on the highest-risk and most underserved areas.

12. Map Production Standards

All maps and geospatial outputs are to meet consistent production standards, including the following:

- Apply standard legends, scales, and labelling across all maps, and store all outputs in a structured repository.
- Use standardized map templates (title, legend, scale, labels, and color scheme) and apply uniform symbology and classification across all maps, including standardized symbology for high-risk, uncovered, and low-performing areas.
- Deliver maps in both printable formats (PDF/PNG) and digital GIS formats and provide layered GIS project files in QGIS/ArcGIS or an equivalent platform.
- Maintain a GIS map repository containing both PDF outputs and editable spatial files (shapefiles/geoJSON).
- As an indicative scale of work, the assignment is expected to produce at least eight standardized map outputs per city, in addition to dedicated gap-area maps.
- Localization. Provide key map labels and community-facing dissemination outputs in the relevant local language for each city (Marathi and/or Hindi for Nagpur; Hindi for Patna) in addition to English.
- Accessibility. Use colour-blind-safe and print-legible colour palettes so that classifications remain distinguishable in both colour and greyscale.

13. Data Quality Assurance

The agency/consultant will apply systematic quality-assurance measures throughout the assignment. In addition to the review, validation, and cleaning steps set out in Sections 6 and 7, quality-assurance deliverables include clean and validated datasets with complete quality checks, a dataset documentation and metadata repository, and an SOP for data updating and maintenance.

- **Metadata standard.** Document metadata for every layer in line with a recognized geospatial metadata standard (for example, ISO 19115).
- **Data dictionary.** Provide an attribute data dictionary defining each field, its data type, permissible values, and source for every dataset.

14. Stakeholder Consultation Requirements

The assignment will include structured consultations with city authorities, surveillance teams, health officials, and other relevant stakeholders in each city.

- Hold an inception meeting with surveillance teams and programme stakeholders. The agency or consultant will present the proposed methods and GIS indicators, finalize the required datasets and sources, agree on roles and timelines, and obtain formal approval.
- Hold data coordination and validation meetings with the designated officials from relevant departments.
- Hold a meeting with surveillance teams, municipal authorities, and facility staff to confirm facility and reporting linkages, where required.

- Conduct orientation and capacity-building sessions for surveillance and municipal officials on how to understand and use the GIS maps. The maps should also be tested during existing review meetings. At least two sessions should be conducted, with at least 30 participants in each session, across at least two review platforms.
- Hold a validation meeting with surveillance teams, municipal authorities, and other stakeholders to review and formally approve the peri-urban surveillance integration plan.
- Conduct a city-level dissemination session to present the GIS findings and agree on priority actions. Participants should include surveillance teams, urban local bodies, city programme units, Smart City or command-centre teams, and the Health Department.

6.2. Deliverables:

The agency/consultant will produce the following deliverables for each city (Nagpur and Patna), unless inherently common to the assignment:

- **Inception.** A structured inception report submitted at the start of the assignment, covering the methodology, work plan, data and data-collection plan, roles and responsibilities, implementation timeline, and the finalized list of datasets, sources, and access points; with documented inception minutes.
- **Consolidated GIS database.** A focal-person directory; dataset request tracker and coordination minutes; compiled GIS layers (administrative, population, health, surveillance, environment, mobility); cleaned and validated datasets with quality checks; a metadata repository and data-updating SOP; and a final dataset repository shared with city and surveillance teams.
- **Spatial risk and coverage analysis.** A GIS indicator framework; multi-layer spatial analysis outputs (GIS project files); a map set covering environmental risk, population vulnerability, health-system access and gaps, surveillance coverage, high-risk low-surveillance zones, mobility and transmission risk, case hotspots and clusters, and composite risk and priority; and a GIS map repository (PDF plus shapefiles/geoJSON).
- **Health-system asset and surveillance mapping.** Geo-referenced databases of public health facilities and of laboratories/diagnostic centres; GIS layers of surveillance and IHIP/IDSP reporting units; a validated facility and surveillance-unit dataset; a referral-linkage layer; and an updated health-system asset layer in the GIS database.
- **Peri-urban gap analysis.** A geo-referenced settlement database with risk and coverage attributes; a classified list of surveillance gaps and a gap-prioritization matrix; GIS maps of high-risk settlements, coverage gaps, and priority intervention zones; a risk-versus-surveillance overlay; and a final dataset for planning and integration.
- **Settlement linkage.** Settlement-to-surveillance-unit and settlement-to-health-facility linkage databases; a reporting and escalation pathway document (reporting frequency and an escalation protocol for alerts and outbreak signals); a geo-tagged settlement-to-surveillance GIS layer; and a validated, approved, integrated linkage database (Excel plus shapefile/geoJSON) with validation records.
- **GIS visualization tools.** A standardized GIS map set with integrated surveillance indicators; printable outputs (PDF/PNG) and layered GIS project files; learning resources (presentations, user guides) and orientation-session reports; a protocol for using GIS outputs in routine review meetings; formal agreement from MSU/DSU and city teams to adopt the tools and integrate them into the standing surveillance review agenda; and a finalized GIS visualization toolkit shared with stakeholders.
- **Peri-urban surveillance integration plan.** A consolidated dataset combining risk, gap, and linkage analysis; a prioritized, phase-wise list of peri-urban settlements; IHIP/IDSP-aligned reporting workflows and integration mechanisms (including actions to improve reporting completeness); a RACI matrix (MSU, DSU, health facility, municipal/ULB, and inter-sectoral roles such as WASH and vector control); a time-bound implementation roadmap (Gantt chart or workplan with review checkpoints); a monitoring framework (indicators including coverage increase, reporting completeness, and timeliness); and the final, approved integration plan with validation records.

- **Dissemination.** A technical presentation on findings and recommendations; printed and digital map annexures; session agenda, participant list, and attendance record; a session report; a validated list of priority settlements and actions; a final action plan with roles, responsibilities, and timelines; and minutes with stakeholder confirmations.
- **Capacity-building and training plan.** A costed training plan and materials for surveillance and municipal staff (participants and session structure), with a recorded walkthrough to support continued use after handover.

Payment schedule

Deliverables	Percentage
Inception	10%
Consolidated GIS database and Spatial risk and coverage analysis	20%
Health-system asset and surveillance mapping and Peri-urban gap analysis	20%
Settlement linkage and GIS visualization tools	10%
Peri-urban surveillance integration plan	20%
Dissemination and Capacity-building and training plan	20%

7. Fact-finding questions

- 7.1. Fact-finding questions must be sent to the contacts listed in Section 5.1 by the date specified in the RFP schedule (Section 1). Questions submitted after this deadline will not be accommodated.
- 7.2. Fact-finding questions should reference specific sections of the RFP and, where possible, be aggregated rather than sent individually.
- 7.3. To uphold transparency principles, all fact-finding questions and PATH's responses will be shared with all bidders who confirmed their intent to bid. Questions will be anonymized and answered if PATH reasonably determines that responding does not disadvantage any potential supplier and does not involve commercially confidential information. Commercially confidential questions will be handled in accordance with PATH's policy on information and data.
- 7.4. PATH may request additional information from a bidder at any time before the award. The bidder must provide the requested information within the specified time frame. Failure to provide supplementary information to PATH in a timely manner may result in the rejection of the proposal or disqualification from the procurement process.

8. Qualifications, evaluation criteria, and selection

8.1. **Supplier qualifications:** In relation to the scope, suppliers must provide information on their overall qualifications, including:

The consultant or agency should have strong GIS and geospatial skills, knowledge of public health and disease surveillance, and experience working with government health and urban systems. These requirements apply to the full team or organization. They will apply whether one agency works in both cities or separate teams are selected for Nagpur and Patna. The numbers and experience requirements mentioned below are indicative minimum standards and will be finalized during the procurement process.

- A registered firm, organization, or consortium, or an individual consultant leading a team with the required mix of skills, with valid registration and statutory documents (for example, incorporation certificate and PAN/GST as relevant).
- No conflict of interest that would compromise the independence or integrity of the assignment.
- At least three years of experience in GIS-based mapping and spatial analysis.
- At least three comparable GIS or spatial-analysis assignments, preferably in health, urban development, or public services, including building consolidated multi-layer geospatial databases with data cleaning, validation, and metadata.
- Experience producing decision-ready map products and, ideally, interactive web-GIS dashboards or portals.
- Understanding of urban and peri-urban disease surveillance, or prior work with health departments, IDSP/IHIP, or comparable health information systems, including mapping facilities, reporting units, and service coverage and translating analysis into public health targeting.
- Familiarity with environmental and vector risk factors relevant to urban disease transmission is desirable.
- Experience integrating GIS outputs with government platforms (IHIP/IDSP, Smart City / ICC, municipal/ULB systems) and coordinating across departments and focal persons to manage data-sharing and obtain official validation and sign-off.
- Proven proficiency in QGIS and/or ArcGIS (or an equivalent platform), including projections and coordinate systems (WGS84 and the appropriate UTM zone), buffer and catchment analysis, multi-criteria overlay, and composite risk indexing.
- Ability to work with standard formats (shapefiles, geoJSON, Excel, GPS coordinates), document metadata to a recognized standard (for example, ISO 19115), ensure the final database can be maintained with government tools (for example, QGIS), and clarify responsibility for any proprietary licensing.
- Familiarity with the urban and peri-urban context of Nagpur and/or Patna (desirable), and capacity to prepare key map labels and community-facing outputs in the relevant local language (Marathi and/or Hindi for Nagpur; Hindi for Patna) in addition to English.
- A commitment to confidentiality and responsible handling of health and location data (with applicable data-protection compliance); all datasets, maps, and outputs produced under the assignment remain the property of the commissioning institution.

Suppliers that fail to meet reasonable qualifications will not be shortlisted or technically evaluated.

8.2. **Selection and evaluation criteria:** Proposals must follow any templates provided and address all specified requirements.

- **Stage 1:** Proposals will be reviewed for completeness, including timely submission, technical proposal, financial proposal, and all required information. Only complete proposals will proceed to Stage 2. Proposals submitted late, incomplete, or with omissions may be rejected at this stage and automatically disqualified from further review.
- **Stage 2:** Proposals that pass Stage 1 will undergo detailed evaluation based on the methodology outlined below. Information provided as part of the qualification process may be verified during this stage of the evaluation.

8.3. **Evaluation criteria:** Proposals will be assessed to determine the most economically advantageous option using the criteria and weightings in Table 1. Assessments will be based strictly on the proposal submitted.

Table 1. Proposal evaluation criteria and weighting.

Evaluation criteria	Weight (%)
Social value, sustainability, community impact (including small business subcontracting)	10%
Experience (three similar projects in the past 36 months)	20%
Experts (proposed personnel, including CVs/resumes highlighting experience and signed confirmation of availability)	20%
Methodology/approach to implementation	20%
Financial proposal	30%
Total	100%

8.4. Only those agencies that obtain a minimum score of **50 marks out of 70 marks** in the Technical Evaluation shall be considered technically qualified.

Financial Proposals shall be requested, opened, and evaluated only for agencies that meet or exceed the minimum qualifying technical score of **50 out of 70 marks**. Agencies scoring below this threshold shall be disqualified from further evaluation, and their Financial Proposals shall not be considered.

The final evaluation and selection shall be based on the combined Technical and Financial scores, as per the evaluation criteria specified in this RFP.

8.5. **Scoring model:** Proposals subjected to technical or detailed evaluation will be scored using the model outlined in Table 2 for all technical components.

Table 2. Proposal scoring model.

Assessment	Score	Summary	Interpretation
Excellent	5	Provides strong evidence of relevant knowledge, skills, and experience to meet the scope, along with demonstrated innovation in delivering the scope more effectively.	In addition to addressing the majority of bullet points under each criterion heading, the proposal demonstrates a deep understanding of the project. All solutions offered are directly linked to project requirements, showing how they will be delivered and their impact on other areas and stakeholders.
Good	4	Offers sufficient evidence of adequate knowledge, skills, and experience to meet the scope, potentially demonstrating some innovation, though it may be less robust. Meets all requirements with minimal gaps.	Indicates that the bidder has addressed most bullet points under each criterion heading in detail. The evidence provided shows not only what will be delivered but also offers some detail on how this will be achieved. Bidders should clearly relate their proposals to the aims of the project and be specific in how their proposed solutions will achieve the desired outcomes.
Acceptable	3	Presents reasonable evidence of relevant knowledge, skills, and experience for the scope, meeting requirements in most areas, though not all.	Addresses most bullet points under each criterion heading but lacks clarity or detail on how the proposed solutions will be achieved. While evidence is provided, generic statements are not specifically aligned with the project's aims or objectives. Significant omissions of key information under each criterion heading may result in a score of 3.
Minor reservations	2	Provides some evidence of relevant knowledge, skills, and experience for the scope, meeting requirements in certain areas but with significant omissions.	Indicates that the bidder has not provided sufficient evidence on how they will address several bullet points under the evaluation criteria headings. The tender is partly sketchy, with little or no detail on how the project requirements will be met. The evidence provided is weak or inappropriate and does not clearly relate to the desired outcomes.
Serious reservations	1	Shows limited evidence of relevant knowledge, skills, and experience for the scope.	Indicates major weaknesses or gaps in the information provided. The bidder demonstrates a poor understanding, raising significant doubts about their suitability for the project.
Unacceptable	0	Lacks any evidence of relevant knowledge, skills, or experience for the scope.	This applies if no response is given, the response is unacceptable, or it does not meet the required criteria.

Annex A. Supplier's proposal format/questionnaire

In response to the evaluation criteria questions, the proposal should demonstrate the following:

Evaluation criteria		Proposal outline
Social value	SV 01	Explain how your business supports the social aspects of the region or country where it operates. (5 points). [Maximum half page]. Proposal:
	SV 02	Describe how you plan to incorporate small and disadvantaged businesses. (5 points). [Maximum 1 page] Proposal:
Experience	EXP 01 EXP 02 EXP 03	Summarize three similar projects undertaken in the past 36 months. (20 points). • Cite three projects done in the last 36 months that are similar in scope, complexity, and cost to the current work you are proposing. • Include a completion certificate detailing the exact scope, dates within which the work was done, and the success rate for each project. • Include the name of the organization, the key contact, their office, and the email address for each project. PATH may contact the cited organization as part of the selection process or due diligence without seeking further permission. • Identify major internal and external resources specific to this scope. Proposal:
Expert personnel	PER 01 PER 02	Experts (proposed personnel, including CVs/resumes highlighting experience and a sign-off confirming their availability). (20 points). • List the personnel you intend to use for implementing the scope, clearly stating the role of each expert, the number of days assigned, etc. • Attach a one-page CV/resume for each expert, including a sign-off confirming their availability. • Discuss project management and the roles of the project team. Proposal:

Evaluation criteria		Proposal outline
Methodology/ approach	MA 01	Methodology/approach to implementation. (20 points). • Explain how you plan to implement the scope and any innovations you will introduce. • Provide a timeline for meeting the deliverables. • Identify potential obstacles and your plan to overcome them. • Provide any comments on the scope or terms of reference.
	MA 02	Proposal:

Abbreviations: EXP, experience; MA, methodology/approach; PER, expert personnel; SV, social value.

Documentation to be submitted.

To demonstrate the qualifications and experience above, applicants are to submit the following with their proposal:

- A profile of the firm or consultant, with relevant registration and statutory documents.
- A portfolio of at least three comparable assignments (brief description, client, year, and sample map outputs where possible).
- CVs of the proposed key team members.
- At least two client references or completion certificates for comparable GIS or spatial-analysis work.

Annex B. Financial proposal

The financial proposal must comply with the following guidelines. Sample templates are provided on the next page.

Itemized costs

Provide itemized costs for the complete scope of this project based on the scope of work and deliverables outlined in Section 6. The final scope of work may be subject to negotiation; however, bidder selection will be based on the original scope of work. Bids must include itemized costs for key elements of the scope of work, as follows:

- Percentage participation of key staff in the total level of effort.
- Roles and rates for key staff.
- Estimated total level of effort and associated costs.
- Reimbursable costs (e.g., transportation/flights, accommodations, internet, agency costs, agency fees, subcontracted resources, administrative costs, supplies, and taxes).

Suggested templates for preparation of the financial proposal

Consultancy fees

Name of expert	Role in the project	Day rate (in INR)	No. of days	Total cost (in INR)
Expert y				
Expert z				
Expert w				
Expert q				
Total A				

Reimbursable expenses

Item	Unit cost (in INR)	Quantity	Total cost (in INR)
Transportation/flights			
Accommodations			
Ground Transport			
Total B			

Total A	
Total B	
Sub-Total	
Taxes*	
Grand Total	

*Taxes should be zero if none apply and/or if there are relevant exemptions.