REQUEST FOR PROPOSALS
KOCHI WAY FINDING PHYSICAL SIGNAGE

SUMMARY OF PROCUREMENT

WRI intends to award a select Fixed Price type contract for manufacture and installation of 25 numbers of physical wayfinding signage panels. The overall project duration is 14 weeks. The manufacture of installable signage units and installation of signages on-ground shall be completed within 9 weeks and 13 weeks from the award of contract respectively.

About the World Resources Institute India

WRI India, an independent charity legally registered as the India Resources Trust, provides objective information and practical proposals to foster environmentally sound and socially equitable development. Our work focuses on building sustainable and liveable cities and working towards a low carbon economy. Through research, analysis, and recommendations, WRI India puts ideas into action to build transformative solutions to protect the earth, promote livelihoods, and enhance human well-being.

About the Project

Kochi Municipal Corporation (KMC) supported by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and World Resource Institute (India) has been engaged multiple mobility and public space initiatives in Kochi city over the last few years.

WRI India, a non-profit registered as India Resources Trust under the Transformative Urban Mobility Initiative (TUMI) project, is developing ‘Reimagining Fort Kochi’ project which aims to create enhanced accessibility in Ro Ro jetty node, by improving traffic flow and coordination between different modes (public and private) including NMT, to achieve reduced vehicular-pedestrian conflicts and enhanced walkable conditions for locals and tourists.

GIZ under the SMART-SUT project, is developing a Transport Strategy Document (TSD) on ‘Seamless and inclusive mobility in Fort Kochi Island (wards 1-28) which documents existing policies and projects related to urban transport and identifies and analyses the problems and challenges. Amongst 14 broad topics under seamless mobility, the ‘Local Connectivity Map’, under the subject ‘Signage and Wayfinding’ of the TSD.

With a common intent of achieving active mobility and safe accessibility in Fort Kochi area, WRI India and GIZ in have jointly initiated the ‘Way finding signage’ project collaboration with Kochi Municipal Corporation (KMC) and Center for Heritage, Environment and Development (CHED).

Physical Wayfinding Signages

The signages are to be vertical free-standing physical (analogue) panels to be installed in prominent locations in Fort Kochi including (but not limited to) important landmarks, open spaces, transit zones, streets, and junctions.

The panels are designed as two variants:
**Type A** – A wider panel of 2.2m (H) x 0.9m (W)

**Type B** – A Narrow panel of 2.2m (H) x 0.6m (W)

All other design features remain the same for both types and are the following:

- The signage panels are to be made of stainless-steel sheets of minimum 1.5mm thickness, mounted on a mild steel frame made of 14 gauge pipes and installed on ground by means of MS base plate of minimum 15mm thickness, which will be fastened to a cement concrete foundation with anchor rods/bolts.

- Both sides of the panel should be the same with provision to display information in the form of maps, graphics and texts and the same to be in a printed or similar medium.

- A portion of the panel must be of acrylic or any other transparent material behind which the printed layout may be accommodated. This has to be done considering the flexibility to replace the printed layout as and when needed.

- The panels must have the provision of backlighting/any other kind of lighting for legibility at night.

- It may also have a provision for solar panels to meet the power requirement for lighting.

See the figures below for more details:

*Note that the above-mentioned specifications are derived for estimation purpose only. The agency proposes alterations in designs and materials based on their manufacturing, resources and technical abilities.*

Materials and fabrication of signages shall conform to the following requirements:

- **Panel boards:** Stainless steel panels of minimum 1.5mm thickness) and shall conform to SAE316L grade or A4 stainless steel, which is the marine grade or any other equivalent material
with respect to strength and corrosion resistance and is ideal for application near seashores. Panels may be coated with vitreous enamel/porcelain enamel or any other equivalent material in terms of durability, corrosion resistance and flexibility of giving required colour.

- **Mild steel frame**: Frame of 14-gauge MS pipes to support the stainless-steel panels which will be mounted on it.

- **Mild steel base plate**: MS base plate of 15mm thickness and shall conform to IS 226 and IS 2062 or any other stated IS specification.

- **Anchor rods, bolts, nuts and washers**: Anchor rods shall be of mild steel. High strength bolts shall conform to IS 1367 whereas precision bolts, nuts etc., shall conform to IS 1364.

- **Concrete**: Concrete shall be of M20 grade.

- **Acrylic sheet**: Clear acrylic sheet of thickness 8 mm with an abrasion resistant coating and an added non-glare property (matte finish), that would ensure scratch resistance and minimized glare, without sacrificing light transmission.

- **Graphics**: Made from vinyl or non-vinyl graphic films which has a reflective property for legibility at night. It shall be weather-resistant and show colour fastness. A certificate of having the film tested for co-efficient of retro-reflection, day/night time colour luminous, shrinkage, flexibility, liner
removal, adhesion, impact resistance, specular gloss and fungus resistance, 3 years outdoor weathering (as per table 14 of ASTM D 4956-09) and its having passed these tests shall be used.

- **Lighting:** LED lights of required wattage and numbers shall be placed in such a manner to achieve uniform lighting of the signage. It shall be ensured that no dark patches, hot spots, shadows and light leaks appear when the lights are turned on.

- **Solar Panels:** Solar panel of required watts to power the LED lights within the signage panel.

*Note: All the materials shall be procured from approved manufacturer as per the specification and shall be accompanied by Manufacturer Test certificate.*

**SCOPE OF WORK**

The scope of work includes the following tasks

1. **Design phase**
   - Task 1: Analyze site conditions
   - Task 2: Create tasks and timelines
   - Task 3: Develop signage panel design
   - Task 4: Develop detailed drawings and BOQs
   - Task 5: Approval from WRI

2. **Manufacture phase**
   - Task 6: Install prototypes on-ground
   - Task 7: Modify and finalize signage panel based on inputs
   - Task 8: Manufacture and install final signage

3. **Warranty phase**
   - Task 9: Maintain and repair the signage for a period of 2 years
   - Task 10: Provide warranties and other documentation

1. **DESIGN PHASE**

Task 1: Analyze site conditions

- Perform site visits to verify the locations provided by WRI India, ground conditions and available area for installation of signage
- Identify potential conflicts with architecture or landscape for its visibility and access
- Identify any other potential non spatial challenges/ conflicts related to internal transport, unloading and installation of signage

Task 2: Create tasks and timelines

- Develop a design development, prototyping and installation schedule to ensure timely deadlines are achieved.
- In the interest of time, utilize time effectively by adequate coordination of tasks for printing of maps vs design and manufacture of signage panel
- Report to the concerned WRI India team as and when the tasks are completed as per the scheduled timelines
Task 3: Develop signage panel design

- Provide detailed signage frame design based on the preliminary prototype developed during the selection phase.
- This has to include a rigid and a durable frame developed with a and a sub-surface installation detail. Frame design to also include details to accommodate the designed layout elements and graphics on the signage panel provided by WRI India.
- Provide design and fixture details of the signage panel to accommodate all the components of signage information, including text and graphics.
- Prepare sign layouts based on actual sign messages to determine sign and letter sizes and determine need for variations to the signage program.

Task 4: Develop detailed drawings and BOQs

- Prepare Good For Construction drawings and detailed list of material and costing for the panel designs finalized in consultation with WRI India.
- This implies set of designs are converted into a detail drawing, finalized in consensus with WRI India.
- Draft drawings to be shown and discussed in detail WRI India and the manufacturer shall incorporate all the revisions and recommendations and submit the final drawings.
- No changes should be done in the designs unless discussed with WRI India. A consistency should be maintained in the line weights, drawing standards, units, fonts, sheet templates, labelling and sheet sizes.

Task 5: Seek approval from WRI

- Submit and seek approval from WRI India on finalized design, materials, installation process and timelines for the prototypes.
- Submit the necessary drawings and reports for approval.

2. MANUFACTURE PHASE

Task 6: Install prototypes

- Manufacture and Install atleast 2 prototypes in designated locations for pilot implementation identified and approved by WRI India, CHED and KMC.
- Towards delivering finished product, coordinate the tasks and take responsibility of accommodating the printed maps in the signage panels, if the printing is done by a third party.
- Be responsible for the installation of the signs in accordance with the design intent of the approved program.

Task 7: Modify and finalize signage panel based on inputs

- Seek approval for the prototype signage panel design and materials, by WRI India, based on stakeholder review and inputs in a span of 3 weeks post their installation on ground.
- Revise the map, panel design and materials based on the inputs provided.

Task 8: Manufacture and install final signage

- Adopt the design and materials approved by WRI India, post stakeholder consultation for manufacturing of the remaining number of signage units.
- Manufacture the remaining approved number of units as per the designated timeline.
- Install all the units in designated locations identified and approved by WRI India.
• Acquire necessary permissions with KMC (Kochi Municipal Corporation), CHED (Centre for Heritage Environment and Development) and other concerned agencies for smooth processing of the project
• All the permission has to be formal documented through respective formats

3. WARRANTY PHASE

Task 9: Maintain and repair the signage
• Include maintenance and repair of the signage for damage due to its build quality or manufacturing defect, for a minimum period of 2 years as a part of the contract (maintenance contract)
• Provide a maintenance contract or an equivalent mechanism for maintenance and repair of signage, for damage caused due to external forces
• Manage maintenance, repair and upkeep of signage in case there is a damage to the signage

Task 10: Provide warranties and other documentation
• Provide warranties, guarantees, record drawings and other documentation
• Provide operating and maintenance instructions on lighting, replacement of printed layout and any other to incorporate in the maintenance manual
• The manufacturer to retain all the invoices and document all the expenses for accounting purposes

TIME FRAME AND OUTPUTS/DELIVERABLES

<table>
<thead>
<tr>
<th>Stage</th>
<th>Content</th>
<th>Tasks</th>
<th>Deliverable</th>
<th>Time (indicated after signing of contract)</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>Inception Stage</td>
<td>Task 1 &amp; 2</td>
<td>Report &amp; Presentation</td>
<td>Within 2 weeks</td>
<td>Soft copy and printed report</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Design development</td>
<td>Task 3</td>
<td>Report &amp; presentation</td>
<td>Within 4 weeks</td>
<td>Soft copy and printed report</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Detail drawings &amp; Estimation</td>
<td>Task 4</td>
<td>Report &amp; presentation</td>
<td>Within 6 weeks</td>
<td>Soft copy and printed report</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Installation of prototypes</td>
<td>Task 5</td>
<td>Official letters</td>
<td>Within 7 weeks</td>
<td>Printed copy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Task 6</td>
<td>Signage units manufactured with approved materials &amp; design to scale</td>
<td>Within 9 weeks</td>
<td>Installable signage units</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Implementation of finalized signage units</td>
<td>Task 7 &amp; 8</td>
<td>Signage units implemented as per the revised</td>
<td>Within 13 weeks</td>
<td>Installable signage units</td>
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GUIDELINES FOR PROPOSAL SUBMISSION

Qualification

The qualified vendor must demonstrate capacity and experience to provide the services indicated in the suggested scope of work as follows:

- Proven experience of minimum 3 years in the field of signage design and manufacture/fabrication.
- The technical expertise to work with metal sheets and availability of all the equipment and machinery for the same including CNC laser cutting machine, CNC metal shearing machine, CNC press brake machine and fiber laser welding technology.
- Prior experience of working with public agencies in a similar context for at least one project in the last three years.
- A proven record of delivering projects within the planned time schedule and cost estimates.
- Should not have failed to perform on any contract or been expelled from or abandoned any work or have any of their works rescinded for any reason in the last three years.
- Necessary logistics to manage supply of raw materials and also to deliver finished products in bulk based on the project requirement
- Necessary logistical and administration support staff to manage the production and installation of products.

The team shall be led by an experienced and qualified expert with relevant experience in signage design, manufacture and installation. In the selection of manufacturers much importance will be attached to the experience and quality of key members of the proposed consulting team and in particular, of the person proposed to lead it in the field. The proposal should identify the team leader, who is to be available to the project full time, and other key members of the team, indicating length of time for which each is intended to be assigned to the study.

The team should have experience in the following disciplines:

- Team Leader – An expert with relevant qualification and experience in the field of signage manufacturing and design
- Product design expert/ equivalent designation - Expert with relevant designing and manufacturing background
- Implementation expert - material expert and cost estimates/Surveyor/Site supervisor
- Support staff: AutoCAD Draftsman, Typist/Data Entry Operator
- And any other felt necessary.

The team leader, in addition to being technically authoritative, must be fully able to fulfil the responsibility of managing all the staff working on the entire signage and manufacturing process. The required Experience for Team Leader is a minimum of 7 Years. Experience required for other key professional staff is 5 years.
Proposal content

Prospective vendors should submit the following:

1. Overall technical capability and specialized competence:
   - Provide a brief history of the firm and all manufacturers, years in business, project team background, professional and project experience.
   - Provide a project list containing at least five projects completed by the firm that best represents a similar scope along with a copy of client certificates/testimonials.

2. Capacity of employees and firm to perform the work within the specified time period:
   - Capacity of employees and firm, including all manufacturers and their representatives, qualifications, and locations, to perform the work, including specialized services, within the time limitations.
   - Provide CVs of team members,
   - Provide detailed project schedule for scope of work.
   - Provide details of subcontractors and suppliers who will be involved in providing necessary support for developing the final product.

3. Workshop logistics and equipment:
   - Provide details of all hardware, machinery and technology used for the manufacturing, testing and installation of signage and its components.
   - Provide details of transport and logistics support to supply raw materials and finished products.

4. Past performance records on contracts:
   - Include past performance on contracts with government agencies or private industry with respect to such factors as control of costs, quality of work and ability to meet schedules

5. References:
   - Please provide client contact references including name, phone number, email, fax and mailing address for three design projects you have completed within the last 36 months along with a brief explanation of your involvement

Expression of Interest, Deadline for Questions, and Proposal

All expressions of interest and questions about this RFP must be received via email to the contact below by date, time (IST). Answers to the questions will be shared with all parties who have asked questions or otherwise expressed interest.

WRI Contact Name: Team WRI India (Vikas Guntur and Rajeev Malagi)
Email address: Vikas.Guntur@wri.org & Rajeev.Malagi@wri.org

All proposals must be sent by 18th March, 11am (IST) in electronic format to the same contact listed above.
EVALUATION AND SELECTION

Evaluation Criteria

The following elements will be the primary considerations in evaluating all proposals submitted in response to this RFP:

- Completion of all required elements
- The extent to which the vendor’s proposal fulfills WRI’s stated requirements as set out in the RFP
- Overall cost of the vendor’s proposal
- Meeting of the vendor qualification criteria
- Debarment and sanctions – WRI will not consider proposals from vendors that are presently debarred by the Indian government or named on any restricted parties lists
- Sustainability – WRI values sustainability and all other factors being equal, will favor a proposal to more sustainably perform the work.

Selection Process

The vendor will be shortlisted and finalized in two stages:

- **Stage 1: Fulfilling the technical requirements and bidding process based on**
  - Competitive quote for the manufacturing and installation of signage
  - Team qualifications and experience in projects
  - Composition of manufacturer’s team

- **Stage 2: Manufacturing a prototype: for examining design, quality and durability**
  - Manufacturer to manufacture at least 1 sample of the ‘to scale’ prototype based on the specifications mentioned in the document or an equivalent material of top-quality standards
  - Prototype will be sued to test legibility, color, reflectivity, scale and cost.

WRI in consultation with key stakeholders which includes KMC (Kochi Municipal Corporation), CHED (Centre for Heritage Environment and Development) and CSML (Cochin Smart Mission Ltd) to shortlist and finalize the manufacturer based on fulfillment of all the technical qualifications and bidding; as well as the design, and quality of the prototype.

The bidder offering the best overall value will be selected. For this procurement, price and non-price aspects are considered to be of approximately equal importance.

No proposal development costs shall be charged to WRI / all expenses are to be borne by the bidders. WRI may award to the bidder offering best value without discussions. However, WRI reserves the right to seek bidder clarifications and to negotiate with those bidders deemed to be within a competitive range.

WRI may, at its discretion and without explanation to the prospective vendors, choose to discontinue this RFP without obligation to such prospective vendors or make multiple awards under this RFP. Contracts will not be awarded to vendors debarred by the Indian government or named on restricted parties lists.