

REQUEST FOR PROPOSALS **KOCHI WAY-FINDING DIGITAL SIGNAGE**

SUMMARY OF PROCUREMENT

WRI intends to award a select Fixed Price type contract for manufacture and installation of 5 numbers of digital 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

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.

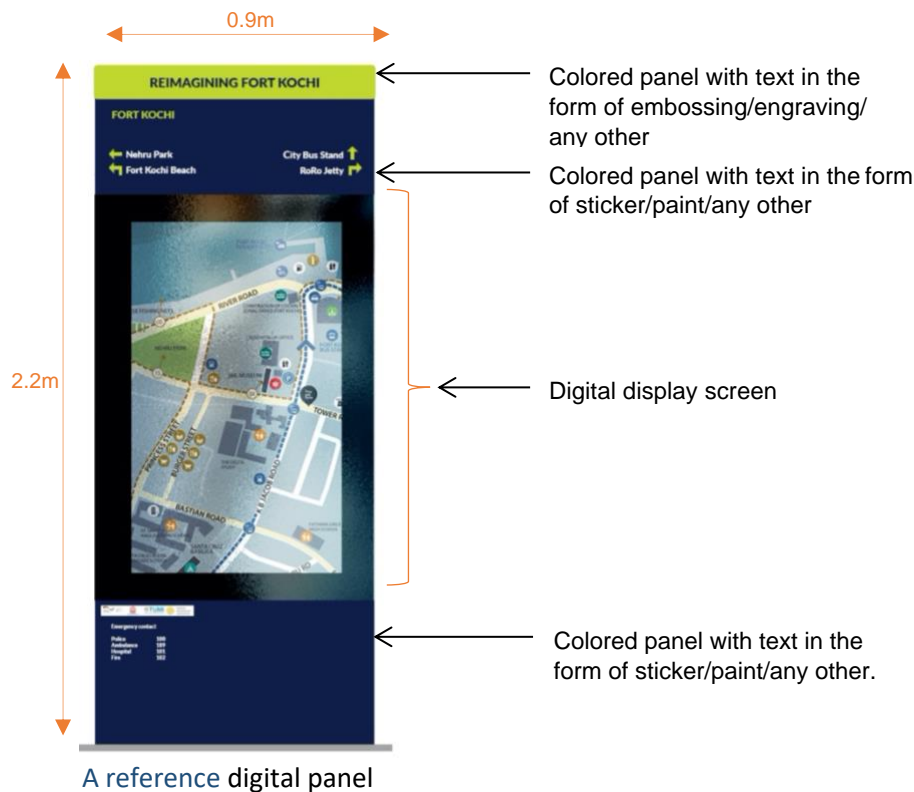
With a common intent of achieving active mobility and safe accessibility in Fort Kochi area, WRI India and GIZ in have jointly initiated the '**Way finding signage**' project collaboration with Kochi Municipal Corporation (KMC) and Center for Heritage, Environment and Development (CHED).

Digital Wayfinding Signages

The signages are to be vertical free-standing 'digital panels' to be installed in key locations in Fort Kochi which has high pedestrian footfall and a critical need to explore the permanent and dynamic components. The panel has to be positioned in a safe, shaded and space with minimal conflict from external sources for the upkeep of the screen.

They key features of the digital signage are as follows:

- The signage panels are to be made of stainless-steel sheets of minimum 1.5mm thickness and 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. The specification of each materials is given in the 'Material specifications' section.
- Alternatively, prototypes manufactured with inbuilt screens can also be used, given it adheres to the required materials specifications.
- The display screen to be a minimum width of 55" (inches) or more in order to project the information in a legible manner.
- The map and information to be displayed in at least 2 languages (English and Malayalam) in coordination with the website developer (provided via WRI India team)
- The panel to be designed to create a partial enclosure or a roof to keep the screen protected from external forces. This could be a stainless-steel frame with acrylic or metal roofing and side covers.
- The screen to include toughened glass to protect it from external damage
- Provide necessary backhand support to be provided to feed in pre-approved data or provide necessary internet connection for dynamic exploration of data



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 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
- **Digital display:** Display screen of min 55 inches or more with high brightness (3000 nits or above)
- **Protection case:** IP65 case for the digital display made of SAE316l stainless steel frame and tempered and laminated front glass ensures optimum protection from outdoor extremities. It has to be water and weatherproof against the damaging effects of the sun, rain and dust.
- **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.

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 : Provide necessary logistical support and technical backing for smooth running of the website
- Task 5: Develop detailed drawings and BOQs
- Task 6: 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 year
- 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.
- Provide design of a roof structure or partial enclosure to protect signages that are being installed outdoors from weather and any other external forces.

Task 4: Provide necessary logistical support and technical backing for smooth running of the website

- Identify and provide electricity supply and all the necessary hardware for self-sustenance of the signage panel. Acquire necessary permissions with KSEB (Kerala State Electricity board) for the supply and take all precautions to ensure safety from wear and tear and external forces. The expenses for the supply should be covered for the maintenance period of 2 years.
- Identify and provide internet connectivity through subcontracting or agreement with service providers for a period of 2 years. The expenses for the connection should be covered in the maintenance charges. Also, make sure all the required hardware like cabling, back up mechanisms and technical support are provided for the smooth functioning of the signage.
- Display the map to include all the updated facts

Task 5 : 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, labeling and sheet sizes.

Task 6: 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 7: Install prototypes

- Manufacture and Install atleast 1 prototype in designated location 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 layout 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 8: 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 layout, panel design and materials based on the inputs provided

Task 9: 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

Stage	Content	Tasks	Deliverable	Time (indicated after signing of contract)	Quantity
Stage 1	Inception Stage	Task 1 & 2	Report & Presentation	Within 2 weeks	Soft copy and printed report
Stage 2	Design development	Task 3	Report & presentation	Within 4 weeks	Soft copy and printed report
Stage 3	Detail drawings & Estimation	Task 4	Report & presentation	Within 6 weeks	Soft copy and printed report
Stage 4	Installation of prototypes	Task 5	Official letters	Within 7 weeks	Printed copy
		Task 6	Signage units manufactured with approved materials & design to scale Prototypes installed in allocated locations	Within 9 weeks	Installable signage units
Stage 5	Implementation of finalized signage units	Task 7 & 8	Signage units implemented as per the revised design in allocated locations	Within 13 weeks	Installable signage units
Stage 6	Operation & maintenance	Task 9 & 10	Warranty & proof documents	Within 14 weeks	Hard copy

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 atleast 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 used 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 fulfilment 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.