



SAFE ROADS TO PROSPERITY

**ROADS AUTHORITY**

**EXPRESSION OF INTEREST: SC/RFP/RA-13/2019  
MANUFACTURING, SUPPLY AND DELIVERY OF ROAD SIGNS AND  
ACCESSORIES**

**Key Requirements Document**

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## PART A: RULES FOR SUBMISSION

### A1. Supplier Registration Form

In terms of the Procurement Act, 2015 (Act No. 15 of 2015); and as per the directive issued in terms of Section 73 in respect of reservation to local suppliers (23 May 2019) as issued by the Minister of Finance. The Roads Authority is conducting market research to establish competent and compliant local manufacturing firms to be listed as approved bona fide Namibian manufacturers and suppliers of roads signs and related accessories on a potential contractual basis.

Participants must download from the Roads Authority website or physically collect a "Supplier Registration Form" and submit it along with a Company Profile demonstrating their capability in terms of the complete manufacturing/fabrication, supply and delivery of road signs and accessories.

This Key Requirements Document outlines the key criteria that would be assessed to evaluate whether a participant is deemed competent to manufacture/fabricate, supply and timely deliver the said road signs and related accessories. This competency assessment is at the full discretion of the Roads Authority, in line with its standards and specifications (i.e. SARTSM).

### A2. Expression of Interest to Participate and Capability Profile

Expressions of Interest to Participate and Capability Profiles are hereby invited from established metal fabricators and road sign manufacturers.

The following **Four** separate Maintenance Regions are affected:

1. KEETMANSHOOP
2. WINDHOEK
3. OTJIWARONGO
4. OSHAKATI

The approval of suppliers listing process is specifically earmarked for those Suppliers who have already gained experience in metal fabrication (specifically Road Signs manufacturing) and have fully established factories in Namibia. This particular invitation to submit expression interest to participate and a Capability Profile thus focuses only on local suppliers who have the necessary equipment, technical and financial capacity to handle large order; as well as having adequate management and logistical capacity needed in terms of extended potential orders from the Roads Authority.

### A3. Submission Requirements

The submissions must comply with the following requirements:

- 2.1 A "Supplier Registration Form" obtainable from the Roads Authority Website must be submitted (one hard copy), duly signed by the authorized signatory accompanied by a **Company Profile**.

- 2.2 The format of the Document may not be changed.
- 2.3 A full certified copy of Company Registration (including shareholders information) and a valid Fitness Certificate from a local valid.
- 2.4 Alterations to information or figures already entered must be effected by crossing out the incorrect information, entering the correct information alongside the amendment, and initialling thereof by the authorized signatory.
- 2.5 All information must be entered **in black ink**.
- 2.6 Power of attorney where applicable.
- 2.7 The Expressions of Interest to Participate and Capability Profiles must be submitted as follows:
- a. Each Submission shall be delivered by hand in one sealed envelope and shall be deposited in the tender box provided for the purpose at the Roads Authority, First Floor Room 104F, Ministry of Works and Transport Building, Snyman Circle, Bell Street, Windhoek, before the closing date and time indicated below.
  - b. Each envelope shall be properly sealed and shall be addressed to the Chief Executive Officer, Roads Authority, Private Bag 12030, Windhoek, endorsed:-
    - "Expression of Interest to Participate and Capability Profile"
    - "Manufacture/Fabrication, Supply & Delivery of Roads Signs and Accessories"
    - "**Keetmanshoop/Windhoek/Otjiwarongo/Oshakati Regions**"
  - c. Each envelope shall have the name of the Supplier on the reverse side.

**A4. Closing Date of Submissions**

The closing date and time for this submission will be **14 February 2020 at 10:00 at the** Head Office of the Roads Authority, in Windhoek. Ground Floor, Bid Box

The Envelop must be clearly marked with the Bid Reference Number and Bid Title.  
**NO LATE BIDS WILL BE ACCEPTED.**

**A5. Expenses incurred by the Participant**

The Employer will not be responsible for or pay for any expenses or losses, which may be incurred by any tenderer in connection with the preparation and submission of his Expression of Interest and Capability Profile including costs incurred in attending the Pre-Qualification Meeting.

**A6. Definitions**

The following definitions shall apply for purposes of this market research process:

**“Namibian Supplier”** means a “Supplier” (as defined below) who is 100% beneficially owned and controlled (directly or indirectly) by one or more Namibian citizens and whose management and daily business operations are under the control of and are performed by one or more of the Namibian citizens who effectively own and control it; it is furthermore a supplier who is registered with Namibian Inland Revenue for taxes and of whom all of business operations relating to the supply are located, and registered, if applicable, in Namibia and all of whose staff involved in these business operations is resident in Namibia.

**“Supplier”** is a generic reference to any supplier of works, services (including professional services) or goods, being a business enterprise or legal entity or joint venture that adheres to statutory labour practices and is an on-going and independent enterprise for profit, providing a commercially useful function.

**A7. Signing of Submission**

A person duly authorized thereto shall sign the submission. This information shall include a designation by power of attorney from all parties in the event that there more than one owner(s).

**A8. Enquiries**

Any enquiries may be directed to the responsible persons as indicated on the ‘Invitation to Submit an Expression of Interest and Capability Profile’.

## **PART B: CAPACITY REQUIREMENTS**

### **Background**

Road signs are used to communicate a message to road users.

Road Signs consists of the following:

- a) Regulatory,
- b) Warning,
- c) Information,
- d) G-series,
- e) Guidance,
- f) Tourism,
- g) Route Markers,
- h) Symbolic, and
- i) Accessories: Steel products like poles and clamps.

In order to maintain similar appearance of road traffic signs the Roads Authority of Namibia, requires that all road signs manufactured comply with the Road Traffic Act, (Act 42 of 1999), its Regulations, the Road Traffic Sign Policy of the Roads Authority, the latest editions of the South African Road Traffic Signs Manual (SARTSM) and SANS 1519 (as amended).

### **Raw Materials**

Typically, Road Traffic signs consist of three basic components:

- a) Steel plates (Blanks), normally Chromadek 1.4-mm thick, pre-painted (Iscor G 275 or approved equivalent), which has been treated on both sides with an epoxy primer followed by a silicon polyester top coat See COLTO Section 5602 (c) or aluminum composite material like Hula Bond or approved equivalent (coastal signs).
- b) Background sheeting/painted as per COLTO Section 5602 (f).
- c) Retro-reflective material:-  
Retro-reflective material shall be supplied in the grades (COLTO 5602 (f) and shall comply with the requirements of SANS 1519 and the adhesion requirements of CKS 191. (COLTO Section 5602 (g))

### **The Manufacturing Process (COLTO Section 5603)**

A recognized, bona fide Namibian manufacturer/fabricator of road signs shall manufacture/fabricate Road Traffic signboards.

Road Traffic signboards shall be manufactured/fabricated strictly in accordance with specification and drawings as issued by the Roads Authority. They shall be manufactured from Chromadek 1.4-mm thick (inland signs) or from aluminum composite material, 4-mm thick (coastal signs) according to what is specified on the drawings and related specifications.

Retro-reflective material shall be affixed to the sign face strictly in accordance to the specification of the manufacturer of the retro-reflective material.

Pre-fabricated road sign faces and Road Traffic Signs imported from outside Namibia **will not be accepted.**

Where road signs are manufactured/fabricated in more than one unit, the complete units shall be assembled in the workshop prior to the delivery to ensure that all sections and legends fit together properly. Joints in road signboards shall be provided only at locations as shown on the drawings. Refer to COLTO Section 5603 for specifications.

#### **Typical Cutting of sheets (Supplier may outline their own methodology)**

The steel sheeting are normally supplied in rolls (or flat sheet) of 3.5-ton or flat sheet, of with width of 1.2-m and 1.4-mm thickness. The rolls may be off-loaded from the trucks by means of a forklift or overhead crane (or similar). A de-coiler is being used to flatten the rolls (where applicable) to a flat sheet that will be cut or slatted to the required sizes.

Corners are typically rounded with a Triangle notcher. Circles are typically cut with a Circle Shear to ensure a smooth edge. A guillotine is typically used to cut the sheets into sections as specified.

For information signs, panels up to 6-m will be bend by means of press-brake.

Holes for mounting the sign will be punched or drilled prior to painting.

All the sheets are checked for defects or contamination; Roads Authority officials will have access to the factory during business hours, for inspection. Sheets must be free of grime in order for background sheeting or paint to adhere properly, additionally, mineral spirits to remove greasy fingerprints for cleaning sheet surfaces.

#### **Road Sign Faces and Painting of Sheets**

Paint colours, legends and borders used on road traffic signs shall comply with the applicable statutory provisions and also with the requirements in the Road Traffic Act, (Act 42 of 1999), it's Regulations, the Road Traffic Sign Policy of the Roads Authority, the latest editions of the South African Road Traffic Signs Manual (SARTSM) and SANS 1519 (as amended).

All paints used shall conform to the requirements CKS 193 see COLTO 5602 (f).  
The reference numbers of the colours to be used, COLTO 5602 (f).

In the case of pre-painted steel plate (Chromadek), the manufacturer shall ensure that the colours and shades thereof match with those shown in SANS 1091.

Preparation of surfaces and the painting shall be carried out as specified in COLTO Section 8400.

#### **Retro-reflective Material**

Retro-reflective materials shall be supplied in the following grades and shall comply with the requirements of SANS 1519 (as amended) and the adhesion requirements of CKS 191:

Class 1 material	-	7 years warranty
Class 2 material	-	10 years warranty

Class 3 material - 10 years warranty

The templates for all letters, numericals, arrows, borders symbols , etc. or the actual legend shall be designed by an approved computer program and cut out by a Vinyl cutter to ensure smooth edges, perfect rounding, extra clarity and visibility to all roads signs.

#### **Time of Manufacture**

The manufacturer shall paint an identification code on the reverse side of every completed road signboard in the lower corner nearest to the road surface in a position where the code will not be obscured by the framework or erection posts. The code shall be in the form as specified in COLTO Section 5604 (c).

#### **Storage and handling**

All road signs or parts thereof shall be transported, handled and stored as per COTLO 5606.

#### **Coastal Conditions: In addition to COLTO**

Road sign boards intended for erection under coastal conditions shall be manufactured to the following additional requirements:

**For all regulatory, control, warning and information signs < 3 m long and < 1.5 m in height the following shall apply:**

Aluminum composite material (Hula Bond or similar approved by the Engineer/Roads Authority) to be used with the following specifications:

- a) Aluminum composite plate with a minimum **thickness of 4 mm** shall be used:
  - 1) Weight (kg/m<sup>2</sup>): Minimum of 5.51
  - 2) Density (kg/m<sup>3</sup>): 1,380 minimum
  - 3) Modulus of elasticity (N/mm<sup>2</sup>): 70 000
  - 4) Terminal Resistance R (m<sup>2</sup>K/W): Minimum of 0.0097
  - 5) Section modulus W (cm<sup>2</sup>/m): Minimum of 1.54
  - 6) Linear Terminal expansion (mm/mk/°C): 2.4 at 100 °C temperature difference.
  - 7) Aluminum composite material to have a minimum outdoor lifespan of 5 years.
- b) No support framework, erection brackets, clamps or clamp profiles will be required

**For all information signs > 3-m long and > 1.5-m in height the following:**

Chromadek panels with a thickness of 1.6-mm shall be used or as approved by the Engineer:-

- 1) Support framework, erection brackets, clamps or clamp profiles will be required.
- 2) All straight edges of the road signboard shall be bend to form an angle with the sign face of between 80° and 90°, preferably closer to 80°. The radius of the bend must be 5-mm and the bent edge width shall be 30-mm. Edge corners that form between horizontal and vertical edges must have an opening of 2 mm to 5-mm to allow water to drain from the inside of the sign board. The front area of the sign face must be as specified on the Drawings.
- 3) All holes shall be 10-mm in diameter and drilled prior to painting. The holes shall be located 25-mm from the edge of the sign and shall have a maximum horizontal and vertical spacing of 500-mm and minimum of 250-mm."

#### **Road sign supports**

- a) All supports will be timber posts 110 mm x 75 mm (between 4 m and 6 m long), for 1.5 m signs, painted with a primer and with Woodoc 50 Exterior Sealer - Marine, Gloss Battleship Grey.
- b) Supports for 401 and 405 ext., to be 75 mm x 50 mm (between 1-m and 2-m long)
- c) All regulate, control, warning and information signs will have at least two support posts, spacing to be determined on site (inner dimensions between supports approximately 450-mm) for 1.5-m road signs. Where the signs are longer than 1.5-m a third support will be required.
- d) Bolts, nuts and washers will be of stainless steel (3CR12) (Low grade stainless steel, not galvanised) 10-mm x 135-mm with nylon sleeve and shoulder insulating washers (kids) 12 mm outside diameter and 10 mm inner diameter with a 30 mm diameter and 4 mm thick nylon washer to minimize bimetallic corrosion. Bolts to be 30 mm longer than the thickness of the post and the road sign to enable protection against theft. Heads of bolts and washers to be painted the same colour as the surface on which it is mounted.



**Typical Equipment Required (Supplier may outline their own methodology and equipment):**

- a) Off-loading equipment
- b) De-coiler to handle at least 3.5 ton
- c) Guillotine and slitter
- d) Press-brake for bending of panels up to 6 m
- e) Triangle notcher
- f) Circle shear cutter
- g) Vinyl cutter
- h) Approved roads sign design software program

**Applicable Specifications**

COLTO Standard Specifications for Bridge Works for State Road Authorities, 1998 Edition, Section 5600

**SANS**

- a) Sans 763
- b) SANS 1555 Temporary road signs
- c) SANS 1091 Paint colours
- d) SANS 1519 (as amended) Retro-reflective material
- e) SANS 754 Road sign supports
- f) SANS 1274 Coatings

**Other**

CKS 191: Adhesion requirements

**Any enquiries may be directed to:**

**Mr. Eben Gawaxab**

**Procurement Officer**

**Contact No: +264 (0) 61 284 7088**

**Email: [gawaxabe@ra.org.na](mailto:gawaxabe@ra.org.na)**