



REQUEST FOR PROPOSAL: APPOINTMENT OF A SUITABLE SERVICE PROVIDER FOR THE SUPPLY, INSTALLATION AND SUPPORT OF A MULTI-MEDIA STREAMING SOLUTION FOR THE NHBRC.

RFP NO.: NHBRC

CLOSING DATE: 13 January 2016

TIME: 11:00am

COMPULSORY BRIEFING SESSION

DATE: 01 December 2016

TIME: 11:00 am

VENUE: NHBRC HEAD OFFICE: 5 LEEUWKOP ROAD, SUNNINGHILL, JOHANNESBURG

1. TERMS AND CONDITIONS

This Request for Proposal (RFP) has been compiled by the NHBRC and it is made available to the Bidders on the following basis.

Bidders submitting a Bid in response to this RFP are deemed to do so, on the basis that they acknowledge and accept the terms and conditions set out below:

- 1.1 The NHBRC reserves the right to amend, modify or withdraw this RFP or amend, modify or terminate any of the procedures or requirements set out herein at any time (and from time to time), without prior notice and without liability to compensate or reimburse any person.
- 1.2 The NHBRC reserves the right to carry out site inspections or call for supporting documentation in order to confirm any information provided by a Bidder in its RFP Bid.
- 1.3 This RFP is not intended to form the basis of a decision to enter into any transaction involving the NHBRC, and does not constitute an offer or recommendation to enter into such transaction, or an intention to enter into any legal relationship with any person.
- 1.4 A Bid submitted in response to this RFP will constitute a binding offer which will remain binding and irrevocable for a period of 90 Days from the date of submission to the NHBRC. The offer constituted by the Bid will be deemed not to have been accepted and no agreement will be deemed to be reached with any Bidder, unless and until a definitive Agreement and other related transaction documents are concluded between the NHBRC and the Preferred Bidder.
- 1.5 The distribution of this RFP outside the Republic of South Africa may be restricted or prohibited by the laws of other countries. Recipients of this RFP are advised to familiarize themselves with and comply with all such restrictions or prohibitions applicable in those jurisdictions, and neither the NHBRC, nor any of their respective directors, officers, employees, agents, representatives or advisors, accepts liability to any person for any damages arising out of or in connection with the breach of any restriction or provision outside the Republic of South Africa. Persons contemplating submitting a Bid are advised to obtain legal advice as to the possible consequences thereof in terms of the law of the jurisdictions in which they are located.

- 1.6 Recipients of this RFP document may only distribute it to other parties whom they wish to involve as part of their Bidder consortium in submitting a Bid.
- 1.7 Neither the NHBRC nor any of their respective directors, officers, employees, agents, representatives or advisors will assume any obligation for any costs or expenses incurred by any party in or associated with preparing or submitting a Bid in response to the RFP.
- 1.8 No entity may be involved, whether directly or indirectly, in more than one Bid in response to this RFP. A failure to comply with this requirement may, within the sole discretion of the NHBRC, result in disqualification of the relevant entity.
- 1.9 Any material change in the control and/or composition of any Bidder or any core member of a Bidder after submission of a Bid, shall require the prior written approval of the NHBRC, and any failure to seek such approval from the NHBRC shall result in the NHBRC being entitled, in its sole discretion, to exclude the relevant Bidder from any further participation in the bid process. The NHBRC shall be the sole arbiter as to what constitutes a “material change in the control and/or composition of any Bidder”, and as to what constitutes a “core member of a Bidder” for purposes of such approval. Any request for such approval shall be made to the NHBRC’s Supply Chain Management in writing and shall provide sufficient reasons and information to allow the NHBRC to make a decision. The NHBRC reserves the right to accept or reject any such request for approval at its sole discretion.
- 1.10 Compulsory Briefing Session: A compulsory briefing session will be held, the sharing of information and clarifications of issues related to this Bid, as given by the NHBRC during such session will form part of this Bid and responses.
- 1.11 Any requirement set out in this RFP that stipulates the form and/or content of any aspect of a Bid, is stipulated for the sole benefit of the NHBRC, and save as expressly stated to the contrary, may be waived by the NHBRC in its sole discretion at any stage in the RFP process.
- 1.12 The NHBRC and its advisors may rely on a Bid as being accurate and complete in relation to the information and proposals provided therein by the Bidders.
- 1.13 All Bids submitted to NHBRC will become the property of the NHBRC and will as such not be returned to the Bidder. The NHBRC will make all reasonable efforts to maintain proposals in confidence. Proprietary information should be identified as such in each proposal.

- 1.14 If the NHBRC amends this RFP, the amendment will be sent to each Bidder in writing or publicized as the case maybe. No oral amendments by any person will be considered or acknowledged.
- 1.15 The Bid submitted by the bidder shall be considered irregular if they show any omissions, alteration of form, additions, or conditions not called for, or irregularities of any kind. However, the NHBRC reserves the right to waive any irregularities and to make award in the best interest of the company.
- 1.16 The NHBRC reserves the right to accept or reject in part or whole any bid submitted, and to waive any technicalities for the best interest of the company.
- 1.17 RFP's shall be rejected, among other reasons, where bids are received after the closing date and time as specified in the RFP.
- 1.18 Potential service provider(s) shall be disqualified and their bids not considered among other reasons, for any of the following specific reasons:
 - 1.18.1 If the SCM Mandatory Documents are not submitted and completed (as per checklist)
- 1.19 The NHBRC reserves the right to require that any bidder provide a formal presentation of its RFP at a date and time to be determined by the NHBRC. The NHBRC shall provide all instructions and clarification regarding the purpose and scope of the demonstration. All expenses must be borne by the bidder.
- 1.20 All costs associated with the preparation and submission of the Bid is the responsibility of the Service provider(s). The costs shall not be chargeable to the NHBRC by successful or unsuccessful Bidder.
- 1.21 This document is released for the sole purpose of responding to this RFP and must be considered confidential. In addition, the use, reproduction or disclosure of the requirements, specifications or other material in this RFP is strictly prohibited.
- 1.22 All Bids must be formulated and submitted in accordance with the requirements of this RFP.

2. BACKGROUND

2.1. ABOUT THE NHBRC

2.1.1 The mandate of the National Home Builders Registration Council (NHBRC) is in accordance with the Housing Consumers Protection Measures Act (Act No. 95 of 1998) providing warranty protection against defects in new homes. The Act states that the objects of the Council which are inter alia as follows:

- “to regulate the home building industry”;
- “to establish and promote ethical and technical standards in the home building industry”; and
- “To improve structural quality in the interests of housing consumers and the home building industry”.

The Council is furthermore empowered by the Act:

- “to engage in undertakings to promote improved structural quality of homes constructed in the Republic;
- ”to engage in undertakings to improve ethical and technical standards in the home building industry;
- “to keep a record of competent persons”; and
- “To generally do all things necessary or expedient to achieve its objects and the objectives of this Act.”

2.1.2 The NHBRC's primary mandate is to manage the risk of structural defects in the home building industry and in so doing, protect the consumer. A prime activity of the NHBRC is to manage its risk exposure in terms of the warranty scheme, in order to ensure that it is not unduly exposed to claims. The current risk management tools being used by the Council include the Registration of Home Builders, enrolment and inspection of homes, the Home Building Manual which incorporates design and construction rules, and the appointment of competent persons by the Home Builder to perform certain tasks.

2.1.3 The National Home Builders Registration Council is a statutory body with the responsibility to provide warranty cover (protection) and regulatory services to the home-building industry. This is done in terms of the Housing Consumers Protection Measures Act (No 95 of 1998). It is the NHBRC's mandate to provide protection to housing consumers against defined defects and to regulate the home building industry. Our mandate determines our

scope of business as well as the principles and area of business in which we operate. As a consequence our business is focused on specific business models in defined geographical areas with specific business objectives for all South African Housing Consumers.

The NHBRC is a medium sized organization with a staff complement of 650 employees. The NHBRC's head office is located in Sunning hill, Gauteng with 9 regional offices of varying size, and 12 satellite offices.

NHBRC Office locations

#	NHBRC OFFICE LOCATIONS	#	NHBRC OFFICE LOCATIONS
1	Head Office / Gauteng Central (Sunninghill)	12	Thulamela
2	KwaZulu Natal(Durban) – Regional	13	East London
3	Western Cape (Cape Town) – Regional	14	George
4	Eastern Cape (Port Elizabeth) – Regional	15	Northern Cape (Kimberly)
5	North West (Rustenburg) – Regional	16	Klerksdorp
6	Limpopo (Pietersburg) – Regional	17	Tzaneen
7	Mpumalanga (Nelspruit) – Regional	18	Bela Bela
8	Pretoria (Pretoria) – Regional	19	Witbank
9	Free State (Bloemfontein) – Regional	20	Bethlehem
10	Richards Bay	21	Mafikeng
11	New Castle	22	Eric Molobi Innovation Hub (Soshanguve)

3. PROJECT OVERVIEW

3.1 Purpose

The purpose of this project is to appoint a suitable service provider to supply, deliver, install and configure and support a multi-media streaming solution for a period of thirty-six (36) months.

3.2 Scope of Works

The NHBRC's Marketing, Communication and Stakeholder Relations department requires a turnkey solution that will enable the NHBRC to communicate required information using digital media streaming technology.

The media content may take the form of pre-recorded digital footage such as video, presentations, information from business systems (SAP ERP), RSS feeds, Facebook (NHBRC Page) and others when required real time video to convey important messages to staff and other stakeholders.

The turnkey solution must cover the full solution from a product hosted portal, onsite media streaming and management devices as well as industry commercial type display devices. As for the hosted portal/solution the NHBRC requires a solution that frees the NHBRC from investing in server technology that may be required to support the solution.

The proposed solution is required to integrate making use of the NHBRC's investment in a Unified Communications solution. The solution is a MPLS solution connecting all twenty-two (22) offices to the NHBRC VPN hosted by Telkom at their operations centre in Centurion. A network design diagram is attached in **Annexure-A** for the bidder to better understand the bandwidth requirements. Bidders must familiarize themselves with the network design. Bidders must be able to operate making use of the VPN and the underlying equipment. No additional network infrastructure is to be installed to support the required solution. Bidders must take note of the communication stack in Annexure-F. Products must seamlessly integrate with the CISCO based network stack.

Hardware Requirements:

Display Screens

NHBRC requires the supply, installation, configuration and maintenance of 55" commercial grade display monitors at the locations as noted in Annexure-B. The full technical specification of the monitors is specified in Annexure-C. Bidders are responsible for the installation. The units are to be wall or ceiling mounted at the offices as per Annexure-B. The quantity per office is also noted in Annexure-B.

Bidders are required to supply all additional parts, e.g. mounting brackets to fix the units to the walls at each office. Cables are to be neatly installed and where required cables are to be placed in ega-trunking. Power and data cables must be separated. Data cabling standards are Krone Cat6.

Additional Hardware (Multi Media Streaming Devices)

Bidders must supply multi-media streaming devices that can render information from various sources as listed below and stream this to the onsite display screen. Content from the input sources may be of regional information and / or applicable to a single or multiple office(s). The list below is not exhaustive and as new services become available or required the solution must be capable of incorporating the additional services. Sample services are (See the solution design in Annexure-E):

- SAP ERP
- Marketing multimedia/video streaming as provided by the NHBRC marketing supplier
- Web services
- RSS feeds
- Other XML webservices
- Social media

With the exception of some of the above real-time services the standard marketing streaming must be updated to the streaming device at the scheduled time. The network schedule time for these services is to be between 00:00 and 03:00 non-peak hours. The above implies that the device and service must be configurable to allow for scheduled updates.

The devices are to be rack mounted in the individual offices communication/server rooms. Bidders are to provide brackets or trays to install the units in the rack. All cabling to and from the devices to the display panels are to be supplied and installed by the bidder.

To store pre-recorded media to play at scheduled intervals the multimedia devices requires a minimum of 64GB SSD onboard storage. Any other consumables required for the installation, configuration and maintenance are to be supplied by the bidder.

Managed Portal

The NHBRC requires the solution to be hosted in a fully managed cloud solution. The total solution must be capable to be manage remotely via the Portal interface.

The portal must allow for mobile streaming to mobile devices such as phones and tablets. The purpose of this is to broadcast marketing communication to internal and external stakeholders when required.

The ports to and from the solution must allow for customization, e.g. change HTTP access from port 8080 to an alternative port. NHBRC will require Quality of Service (QOS) to be applied and as such standard ports cannot be used.

Installation

- Network setup
- Channel creation (24 hours)
- Set-up and Installation per site
- Installation of Electrical points where necessary. Electrical installation must comply with local requirements and coordinated with the respective landlord for each office. In some cases the bidder may have to use (sub-contract) the landlord's authorized electrical service provider.
- Shop fitting costs including ceiling support where required.

Monthly management Support

- On-site maintenance
- Off-site maintenance

- The bidder is to appoint a dedicated account manager as a single point of contact. Monthly meetings are to be held at the agreed date and time with NHBRC internal stakeholders. The bidder to allow for sixteen (16) hours per month for in house meetings.
- Content creation and management
 - Flash animation from stills
 - Video creation
 - Voice over and audio editing
 - FTP site for cost effective ad approval process
 - Initial loop configuration and management
 - The bidder to allow for sixteen (16) hours per month for content management and creation
- Licenses

The entire digital network must have the capability to be managed remotely via a digital dashboard. The system must have early warning capabilities in cases of equipment failure and power cuts.

3.4 Project Deliverables

On Appointment the service provider will be required to:

- Provide the NHBRC with a roll out plan
- Installation to commence within 30 days and be completed within 60 days from appointment
- The service provider will provide a turnkey solution as well as support and maintenance for a period of thirty six (36) months.
- All equipment to carry a thirty six (36) month warranty

3.5 Project Information

- The service will have to agree to a non-disclosure agreement
- The service provider will have to confirm their independence and any potential conflicts at the beginning of the investigation
- The service provider will handle all investigations including Executive management allegations
- All installed equipment will become property of the NHBRC

3.4 Project Schedule

The NHBRC expects the duration of the project be thirty six (36) months.

4. TECHNICAL DATA TO BE SUBMITTED BY BIDDER

4.1 Required Information

The NHBRC requires the services of interested and competent organisations or companies that are accredited and experienced in the field of Multi Media Streaming

4.2 Functionality documents to be submitted

The following is what is required to be submitted by the bidders.

4.2.1 During the last three (3) financial years, the bidder must have completed similar projects. The bidder must submit a summary of the projects in the format presented below:

Name of Project	Project Description	Contract Value (incl. VAT)	Client Name	Client Contact Tel
	Total			

4.2.2 Provide project details of your projects that were successfully completed in the last three (3) years in the format below. For each of these projects a reference letter must be provided by the client, on the client’s letterhead, and signed off by an authorized delegated employee of the client.

4.2.3 Capability of Team:

The team should comprise of the following but not limited to:

- **Content and Web Developer:** with 3 year IT qualification and 3 years’ experience
- **Project Manager:** with 3 year IT or Marketing qualification and 3 years’ experience

Kindly provide abbreviated Curriculum Vitae as well as confirmation of registration and qualifications.

4.3 Project Proposal

In addition to the above, the bidder must provide a detailed project proposal.

4.3.1 The proposal document must outline the intended/proposed approach to the Project,

4.3.2 The approach and methodology must be clearly stipulated and must cover all aspects in section 3

4.3.3 The proposed fee structure should be outlined in detail as follows:
(mandatory requirement)

- Cost of Equipment
- Monthly management cost (remotely from head office)
- Cost of maintenance as per manufacturers standards
- A total budget inclusive of VAT and all other costs (if applicable) should be presented.
- Payment will be effected over the thirty six (36) month period

5. TECHNICAL AND PRICE EVALUATION CRITERIA

5.1 In accordance with the NHBRC Supply Chain Management Policy, the bid evaluation process shall be carried out in three (3) stages namely:

Stage 1: Compliance check of Mandatory Requirements;

Stage 2: Functional Evaluation; and

Stage 3: Price and Preference Points

Stage 1: Compliance check of Mandatory Requirements

As per SCM Mandatory Checklist

Stage 2: Functionality in terms of the set technical evaluation criteria

The following values will be applicable when evaluating the bid

5=Excellent 4=Very good 3= Good 2= Average 1= Poor 0= Non-compliance

No.	Evaluation Criteria	Description	Weight
1	Refer to Para 4.2.1	Bidders Experience Rating Scale 0 Years' Experience = 0 Points 1 – 2 Years' Experience = 2 Points 3 – 4 Years' Experience = 3 Points 5 Years' Experience = 4 Points More than 5 Years' experience = 5 Points	20
2	Refer to Para 4.2.2	Bidders References Rating Scale 0 Reference = 0 Points 1 – 2 reference letters = 2 Points 3 – 4 reference letters 3 Points 5 reference letters = 4 Points More than 5 reference letters = 5 Points	25
3.	Refer to Para 4.2.3	Capability of Team: Content Web Developer: with 3 year IT qualification and 3 years' experience Rating scale Qualification with 3 Years' Experience= 5 points Qualification with 2 Years' Experience= 3 points Qualification with 1 Years' Experience= 1 point No qualification or experience = 0	20
		Project Manager: with 3 year IT or Marketing qualification and 3 years' experience Rating scale Qualification with 3 Years' Experience= 5 points Qualification with 2 Years' Experience= 3 points Qualification with 1 Years' Experience= 1 point No qualification or experience = 0	15

4.	Refer to Para 4.3	<p>Quality of Project Proposal</p> <p>Provision of a sound project proposal that clearly demonstrates the service required by NHBRC including its related methodology and approach.</p> <p>Points are allocated based on the technical panel's individual assessment of the adequacy of the proposal which must include but not limited to the following key deliverable areas covered in section three (03) of the bid document</p> <p>Rating scale: 5 Points =Excellent 4 Points =Very good 3 Points = Good 2 Points = Average 1 Point = Poor 0 Points= Non-compliance</p>	20
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6.2 Technical (Functional) Assessments' minimal acceptable requirements:

TOTAL SCORE = 100

After considering the functional pre-qualifying criteria, a bidder is considered to have passed Stage 2 (Functional Requirements) if the TOTAL score is equal to, or greater than 60 points

Stage 3: Price and Preference Points Evaluation

Only bids that achieve minimum qualifying score **(60 points)** for **Stage 2 (Functional Requirements)** will be evaluated further.

The contract will be awarded in terms of Regulations 4 of the Preferential Procurement Regulations pertaining to the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000) and Preferential Procurement Regulations,2011

and bids will be adjudicated in terms of a (90/10) preference point system in terms of which points are awarded to bidders on the basis of:

90/10 Preference point system (for acquisition of services, works or goods with a Rand value more than R1million) (all applicable taxes included)

$$P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$$

Where;

P_s = Points scored for comparative price of bid or offer under consideration

P_t = Comparative price of bid or offer under consideration

P_{min} = Comparative price of lowest acceptable bid or offer.

The points scored will be rounded off to the nearest two decimal places.

The points will be awarded to a Bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

BBBEE Level	90/10
Level 1	10
Level 2	9
Level 3	8
Level 4	5
Level 5	4
Level 6	3
Level 7	2
Level 8	1
Non-Compliant Contributor	0

The points scored for price will be added to the points scored for B-BBEE status level to obtain the Bidders total points scored out of 100 points.

NB: Prices must be fixed for duration of the contract.

6. RFP SUBMISSION INSTRUCTIONS

6.1 All RFP documents must be sealed in a clearly marked envelope and deposited into the tender box at the **NHBRC HEAD OFFICE: 5 LEEUWKOP ROAD, SUNNINGHILL, JOHANNESBURG**

7. AVAILABILITY OF THE RFP DOCUMENT

7.1 Bid documents can be downloaded on the NHBRC Website (www.nhbrc.org.za/current-tenders) from the 28 November 2016.

7.2 There will be a compulsory briefing session that will be held on the 01 December 2016 at 11:00 at the **NHBRC HEAD OFFICE: 5 LEEUWKOP ROAD, SUNNINGHILL, and JOHANNESBURG**

8. RFP CLOSING DATE

8.1 Bid documents should be marked for Attention: Supply Chain Manager, and deposited into the Bid boxes at the NHBRC National Office, 5 Leeuwkop Road, Sunninghill on or before the **13 January 2016 at 11:00**. No emailed or faxed Bids will be accepted. The Bid document should be supplied in a sealed envelope and clearly marked (**Copy or Original**) with the Bid number and the full name of the service provider(s).

8.2 **No late submissions will be accepted.**

9. VALIDITY PERIOD OF BIDS

9.1 All bids submitted by the bidders must be valid for a period of 90 days from the closing date specified above.

10. ENQUIRIES SHOULD BE DIRECTED TO BOTH:

10.1 Administrative Enquiries

Department: Supply Chain Management

Contact Person: Mr Ricardo Francis

E-mail address: Ricardof@nhbrc.org.za

11. SUBMISSIONS OF PROPOSALS

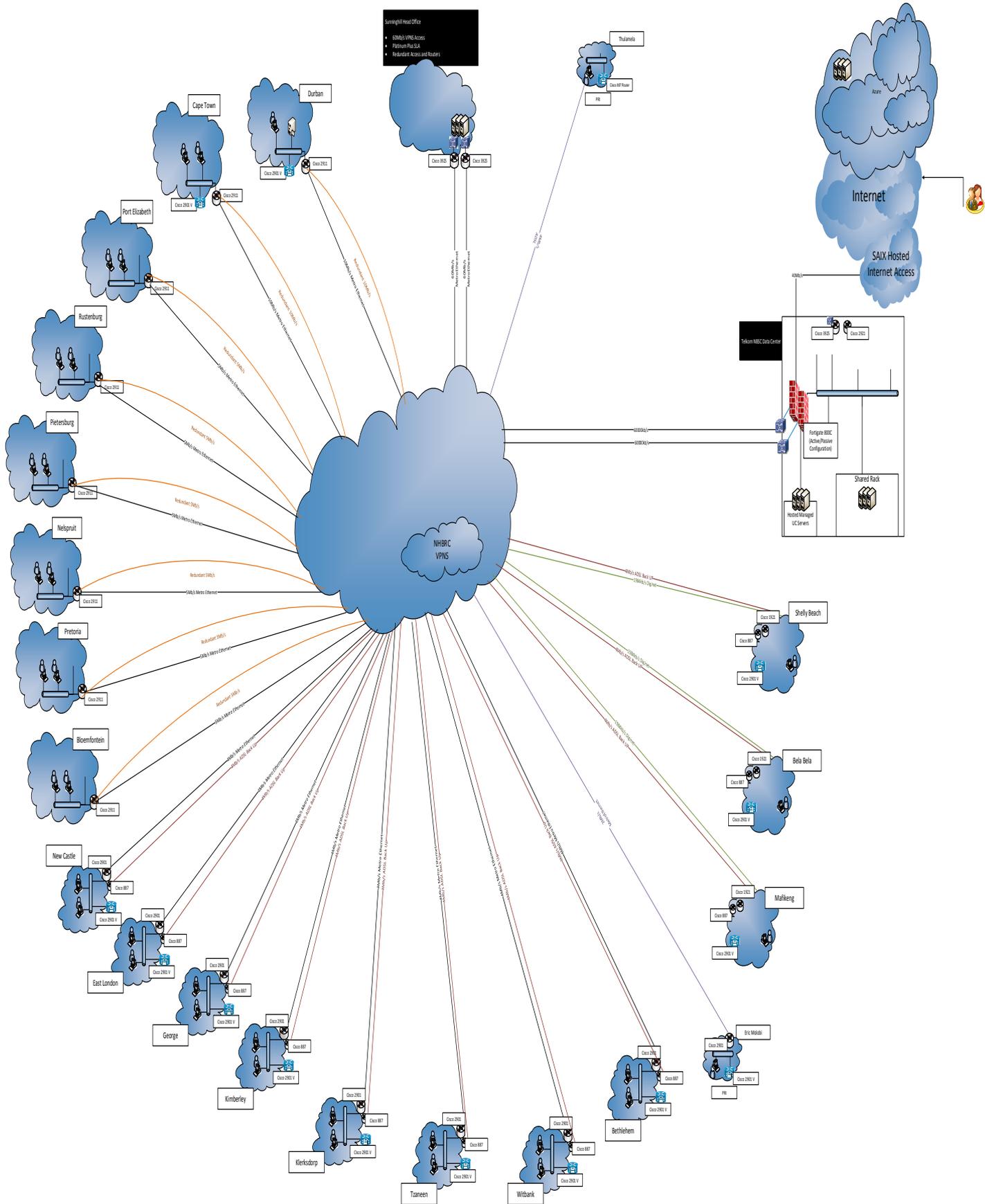
- 11.1 Submission of bid MUST include **one** (1) original copy of the proposal in a clearly marked envelope and deposited into the Bid box.
- 11.2 All costs and expenses incurred by the Bidder relating to the participation in, and preparation of this proposal process shall be borne by the Bidder exclusively. All documentation and manuals submitted in respect of this RFP shall be retained by NHBRC, whether or not the proposal is accepted.

12. SCM MANDATORY CHECKLIST

12.1 The following documents as listed below are required to be made available with the distribution of the RFP:

DOCUMENTS TO BE SUBMITTED			
No.		Please note; the items marked with an (X) are mandatory requirements and failure to meet the requirements will result in your bid being disqualified.	Yes/No
1.	X	SBD1 Invitation to bid which must be signed and thoroughly completed.	
2.	X	SBD2 Tax Clearance Certificate which must be valid.	
3.	X	Proposed Fee Structure	
4.	X	SBD 4 Declaration of interest must be signed and thoroughly completed.	
5.	X	SBD 6.1 Preference claim form must be signed and thoroughly completed regardless if points are claimed or not.	
8.	X	SBD 8 Declaration of Bidder's past supply chain management practices must be signed and thoroughly completed.	
9.	X	SBD 9 Certificate of independent bid determination must be signed and thoroughly completed.	
10.	X	Compliance with minimum technical specifications (annex C)	
11.	X	Attendance of compulsory briefing Session	

Annexure-A (NHBC Network Topology)



ANNEXURE-B (MONITORS AND SOLUTION EACH OFFICE LOCATION)

The table below list the location and number of units required per office.

Province	Location	Number Required
Eastern Cape	East London (Satellite)	1
	Port Elizabeth (Regional)	1
Free State	Bethlehem (Satellite)	1
	Bloemfontein (Regional)	1
Gauteng	Shoshanguve (Satellite)	1
	Sunninghill (Regional)	1
	Tshwane (Satellite)	1
Head Office	Sunninghill	3
KZN	Durban (Regional)	1
	Newcastle (Satellite)	1
	Shelly Beach (Satellite) *	1
Limpopo	Bela-Bela (Satellite)	1
	Tzaneen (Satellite)	1
	Polokwane (Regional)	1
	Thulamela	1
Mpumalanga	Nelspruit (Regional)	1
	Witbank (Satellite)	1
North West	Klerksdorp (Satellite)	1
	Mafikeng (Satellite)	1
	Rustenburg (Regional)	1
Western Cape	Bellville (Regional)	1
	George (Satellite)	1
Northern Cape	Kimberley (Regional)	1

* The Shelly Beach office will relocate to Richards Bay

ANNEXURE-C (MONITORS – TECHNICAL SPECIFICATION)

The specifications below are the requirements for the TV Monitors. Proposed units must be equal or better.

Product Features	Specification	NHBRC Requirement
Product Type	LED-backlit LCD flat panel display	Required
Power Consumption Operational	140 Watt	Must be less or equal
Diagonal Size	55"	Required
Commercial Use	Yes - digital signage	Required
Dimensions (WxDxH)	124.44 cm x 8.23 cm x 72.02 cm - without stand	Approximately
Resolution	1920 x 1080	Required
Display Format	1080p (FullHD)	Required
Input Video Formats	720p, 1080i, 1080p	Required
Video Interface	Component, composite, HDMI	Required
HDMI Ports Qty	1 ports	Required
PC Interface	DVI, VGA (HD-15), DisplayPort	Required
HDCP Compatible	Yes	Required
Technology	IPS	Required
LCD Backlight Technology	LED backlight - direct-lit LED	Required
Image Aspect Ratio	16:09	Required
TV Tuner	No tuner	Optional
Commercial Features	Digital signage	Required
Features	Clock, gamma correction, video noise reduction, Auto Power Off, Dynamic Contrast, brightness sensor, black level correction, Smart Energy Saving, temperature sensor, picture by picture (no tuner), picture in picture (no tuner), portrait mode, Digital Noise Reduction (DNR), landscape mode, Image Sticking Minimization (ISM), Power on Delay, Dynamic Color Enhancer, contrast sensor, key lock, Narrow Bezel Design, Dynamic Clear White, Input Labeling, compatible with SuperSign Software	Required
DVR	Flash - 8 GB	Optional
Storage Drive Capacity	8 GB	Optional
USB Port	Yes , 1 ports	Required
Remote Control	Remote control	Required
Power	AC 230 V (50/60 Hz)	Required
Environmental Standards	ENERGY STAR Qualified	Required

Extended Specification

	General	
Commercial Use	Yes - digital signage	Required
Diagonal Size	55"	Required
HDCP Compatible	Yes	Required
HDMI Ports Qty	1 ports	Required
PC Interface	DVI, VGA (HD-15), DisplayPort	Required
Product Type	LED-backlit LCD flat panel display	Required
TV Tuner	No tuner	Optional
Timer Functions	Sleep, wake	Required
Video Interface	Component, composite, HDMI	Required
	Audio System	
Audio Controls	Sound mode	Required
External Speakers Amplifier Power (Total)	20 Watt	Required
Features	On/off switch, Clear Voice II technology	Required
	Connections	
Connector Type	1 x HDMI (19 pin HDMI Type A) ; 1 x USB (4 PIN USB Type A) ; 1 x network (RJ-45) ; 1 x DisplayPort input (20 pin DisplayPort) ; 1 x DVI-D input (24 PIN Digital DVI) ; 1 x DVI-D output (24 PIN Digital DVI) ; 1 x component video / AV / RGB input (15 PIN HD D-Sub (HD-15)) ; 1 x audio line-in (mini-phone stereo 3.5 mm) ; 1 x serial input (9 PIN D-Sub) ; 1 x speakers output (RCA phono x 2) ; 1 x serial output (9 PIN D-Sub) ; 1 x remote control input	Required
	Display	
Brightness	350 cd/m2	Required
Colour Depth	Up to 1.06 billion colours	Required
Commercial Features	Digital signage	Required
Display Format	1080p (FullHD)	Required
Dynamic Contrast Ratio	500000:1	Required
Features	Clock, gamma correction, video noise reduction, Auto Power Off, Dynamic Contrast, brightness sensor, black level correction, Smart Energy Saving, temperature sensor, picture by picture (no tuner), picture in picture (no tuner), portrait mode, Digital Noise Reduction (DNR), landscape mode, Image Sticking Minimization (ISM), Power on Delay, Dynamic Color Enhancer, contrast sensor, key lock, Narrow Bezel Design, Dynamic Clear White, Input Labeling, compatible with SuperSign Software	Required
Image Aspect Ratio		16:09 Required
Image Contrast Ratio		1000:01:00 Required
LCD Backlight Technology	LED backlight - direct-lit LED	Required

LCD Display Technology	IPS	Required
Resolution	1920 x 1080	Required
Response Time	8 ms	Required
Total Pixels	6,220,800	Required
Viewing Angle	178 degrees	Required
Viewing Angle (Vertical)	178 degrees	Required
DVR		
DVR	Flash - 8 GB	Optional

Environmental Parameters

Humidity Range Operating	10 - 80%	Required
Max Operating Temperature	40 °C	Required
Min Operating Temperature	0 °C	Required

Environmental Standards

ENERGY STAR Qualified	Yes	Required
ENERGY STAR Version		6 Required

Media Player

Storage Drive Capacity	8 GB	Optional
USB Port	Yes , 1 ports	Required

Miscellaneous

Cables Included	VGA cable	Required
Compliant Standards	FCC Class A certified, UL, TUV, VCCI, C-Tick, cUL, CB, KCC, ERP	Required
Included Accessories	IR receiver, batteries, cable tie	Required

Power

Nominal Voltage	AC 230 V (50/60 Hz)	Required
Power Consumption Sleep	0.5 Watt	Required
Power Consumption Stand by	0.7 Watt	Required
Power Device	Power supply	Required

Remote Control

Type	Remote control	Required
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Stands & Mounts

Flat Panel Mount Interface	400 x 400 mm	Required
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Video Features

Input Video Formats	720p, 1080i, 1080p	Required
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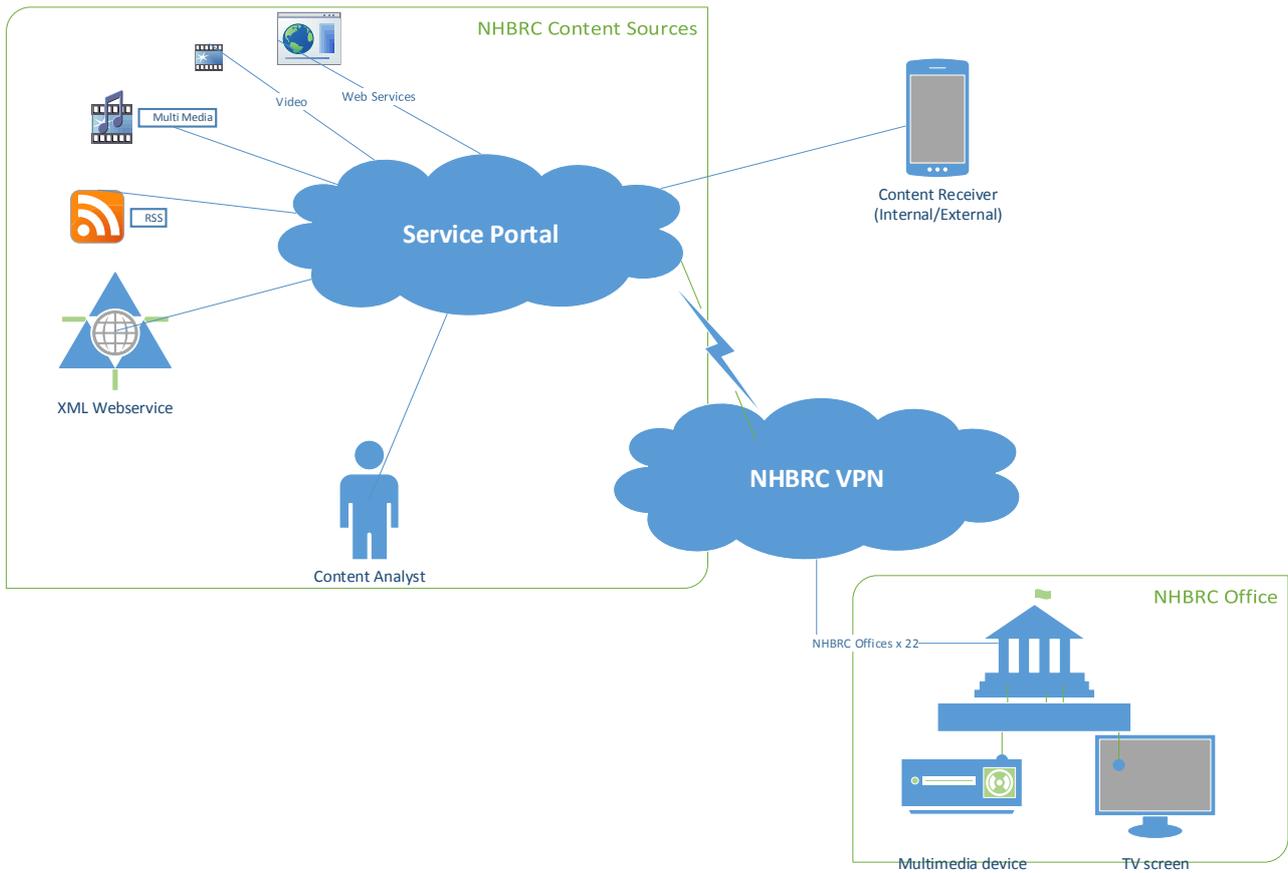
ANNEXURE-D (OFFICE LOCATIONS AND ADDRESS)

#	OFFICE	NHBRC Address *A
1	Head Office (Sunninghill) / Gauteng Central (Sunninghill)	5 Leeuwkop Road Sunninghill, Johannesburg
2	KwaZulu Natal(Durban) – Regional	Suite 502 Fifth Floor The Marine Building 22 Dorothy Nyembe Street Durban
3	Western Cape (Cape Town) – Regional	Ground Floor South Barinor Vineyards Vineyards Office Estate 99 Jip De Jager Drive Bellville
4	Eastern Cape (Port Elizabeth) – Regional	40 Pickering Street Newton Park Port Elizabeth
5	North West (Rustenburg) – Regional	North Block No 28 67 Brink Street Rustenburg
6	Limpopo (Pietersburg) – Regional	Suite 202 Gabbles Building 81 Hans Van Rensburg Street Polokwane
7	Mpumalanga (Nelspruit) – Regional	Suite 201 Medcen Building 14 Henshal Street Nelspruit
8	Pretoria (Pretoria) – Regional	524 Sancardia Shopping Centre Corner Church & Beatrix Street Pretoria
9	Free State (Bloemfontein) – Regional	Unit 4 Hydro Park 98 Kellner Street Westdene Bloemfontein
10	Shelly Beach	Shop 13 TradeWinds 786 Portion Phase 1 Marine Drive Shelly Beach
11	New Castle	Suite 3 1st Block A 2 Whyte Street Newcastle
12	East London	8 Princes Road Vincent East London

#	OFFICE	NHBRC Address *A
13	George	1st Street 14 Fairview Office Park George 6259
14	Northern Cape (Kimberly)	13 Bishops Avenue Block B Sanlam Business Complex Kimberley
15	Klerksdorp	OfficeNo. 174, First Floor Sanlam Park Building 29 President Kruger Street Klerksdorp
16	Tzaneen	Docex 7 Tzaneen 61F Bert Booyesen Street Off Boundart Street Tzaneen
17	Bela Bela	18 Sutter Ave Warmbad
18	Witbank	Block 5C D First Floor Burea de Paul Business Park Route N4, Corridor Crescent Witbank
19	Bethlehem	6A Corner President Boshoff & Bruwer Strs Bethlehem 9700
20	Mafikeng	Mega City Shopping Centre Cnr Sekame & Dr James Moroka Drive Shop No 38 Mmabatho
21	Eric Molobi Innovation Hub (Soshanguve)	Block XX Eric Molobi Training Centre Innovation Hub 224 Juventos Street, Thorntree View, Soshanguve A. Pretoria East
22	Thulemela	Room 105 First Floor Municipality Old Agriven Building ext. Civic Centre Thulamela Municipality

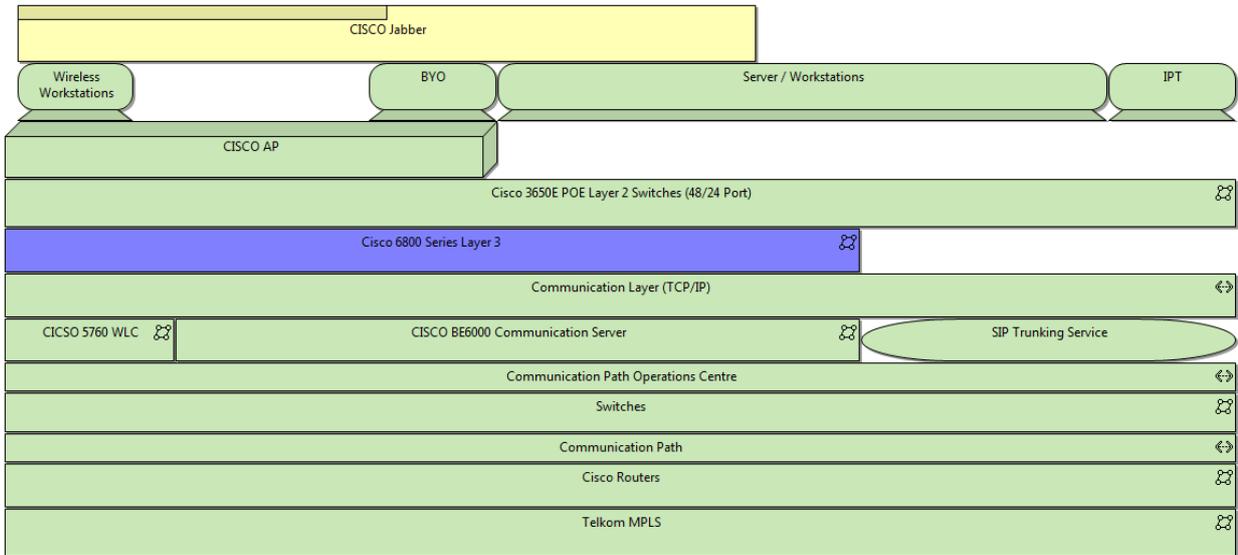
ANNEXURE-E (NHBCR REQUIREMENTS DESIGN)

Below is the NHBCR solution design.



ANNEXURE-F (NETWORK (UNIFIED COMMUNICATIONS) TECHNOLOGY STACK)

Bidders are required to take note of the Unified Communications stack below.



ANNEXURE-G (BIDDER SOLUTION ARCHITECTURE)

Bidders must provide details of their solution architecture in Annexure-X.