



Independent Communications Authority of South Africa

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INVITATION TO TENDER FOR THE SERVICE PROVIDER TO SUPPLY, INSTALL, COMMISSION, CUSTOMISE AND MAINTAIN THE NUMBERING SYSTEM FOR A PERIOD OF THREE YEARS FOR ICASA.

The Independent Communications Authority of South Africa (ICASA) invites suitably qualified service providers to bid to supply, install, commission, customise and maintain the numbering system for a period of three years.

1. BACKGROUND

ICASA has legislative mandate to maintain and manage a Central Numbering Database System ("CNDB") in terms of section 68(5) of the Electronic Communications Act, Act 36 of 2005 ("the ECA") and the South Africa's Numbering Plan Regulations, Government Gazette No. 39861 ("the Regulations") dated 24 March 2016. The purpose of CNDB is to assist the Authority to be able to efficiently and effectively make allocations, assignments, reservations, reclamations, auditing on the use, reporting, control of the numbering resources and capability to fully support imports and reports in Number Portability system for the numbering resource.

2. SCOPE OF WORK

To supply, install, commission, customise and maintain the numbering system for a period of 3 years.



3. BID SPECIAL CONDITIONS AND TECHNICAL REQUIREMENTS

3.1. The terms of reference for this bid will be evaluated on three levels, which are:

- 3.1.1 Level 1: Mandatory special conditions;
- 3.1.2 Level 2: Functionality; and
- 3.1.3 Level 3: Price and BBBEE Level.

3.2. Mandatory SPECIAL Conditions:

The table below lists special mandatory conditions that the Bidder must cover:

1	Special Condition		
	Bidders Capacity to Develop the Numbering System		
	The Bidder must provide a written undertaking on their letterhead that they have capability to develop, supply, install, commission, customise and maintain the numbering resource system for a period of 3 years in terms of South Africa's Numbering Plan Regulation and that the bidder has provided or is currently providing similar services within ITU Region D - Africa (54 Member States) for the past 8 years.	Comply	Not Compliant
2	Special Condition		
	System Blueprints and User Manual		
	The Bidder must provide a written undertaking on their letterhead to provide the developed system's blueprints and user manual. The undertaking must be signed by the Bidder's senior official authorised to commit the Bidder on such matters.	Comply	Not Compliant
3	Special Condition		
	System Acceptance		



	The bidder must provide a written undertaking they will ensure acceptance signoff of each module supplied, installed, customised and commissioned during the project. The bidder must ensure that all completed modules are working at the time when the whole system is accepted for duration of the contract.	Comply	Not Compliant
4	Special Condition		
	Quality Management System (QMS)		
	The Bidder must provide a written undertaking on their letterhead that the numbering system they provide is designed, developed and implemented according to software development standards such as the ISO 9001/ IEC 12207. The undertaking must be signed by the Bidder's senior official authorised to commit the Bidder on such matters.	Comply	Not Compliant

3.3 Numbering System Functional Requirements

The table below lists Numbering System Functional Requirements that the bidder must cover:

1.	Functional Requirement		
	Application for Number Resources		
	Licensees will be able to apply online for the number resource and returns via web facing portal for licensees – enablement of self-service.	Comply	Not Compliant



2.	Functional Requirement		
	Application for Number Resources		
	Allocations of numbering resources to licensees individually or in blocks including conditions attached to the Assignment and activation dates.	Comply	Not Compliant
3.	Functional Requirement		
	Application for Number Resources		
	Tracking of submitted numbering applications by licensees, and the status of active numbers on licensees' network.	Comply	Not Compliant
4.	Functional Requirement		
	Application for Number Resources		
	Managed process-driven evaluation and validation/ approval of applications on different levels of the workflow;	Comply	Not Compliant
5.	Functional Requirement		
	Application for Number Resources		
	Access to query available number resource through a public portal to allow licensees to check the status of numbering records. The licensees will be able to view number resources allocated to them and the status of their applications via the ICASA Public Website.	Comply	Not Compliant



6.	Functional Requirement		
	Historical Data for the Number Resources		
	Provide the status of primary assignment, reservation, withdrawals or reclamations. Assignment and indicating to whom the resources are allocated, times, dates and history of assignments, reservations, reclamations and activations.		
7.	Functional Requirement		
	Generation of Number Resource Reports		
	Analysis and generation of the following reports: Utilisation levels of number resource, analysis of number resource usage, nationally and as per national destinations codes, assessment on number resource applications, analysis of the current usage patterns, forecast future demands, number resource audit, and capability to perform all the above number resource reports periodically, e.g. Weekly, Monthly, Quarterly and annually.	Comply	Not Compliant
8.	Functional Requirement		
	Internal Application Workflow for Number Resources		
	Notifications when applications are received, assigned to the users and submitted for approval process.	Comply	Not Compliant
9.	Functional Requirement		
	Internal Application Workflow for Number Resources		



	Capability to allow users to analyse and process number resource application, to search for free numbers, register or reserve or make allocations of the number resources on the numbering system.	Comply	Not Compliant
10.	Functional Requirement		
	Internal Application Workflow for Number Resources		
	Capability to return number resource that the licensees no longer need or use.	Comply	Not Compliant
11.	Functional Requirement		
	Internal Application Workflow for Number Resources		
	Capability to decline, approve or communicate additional information to licensees.	Comply	Not Compliant
12.	Functional Requirement		
	External Access to the Number System		
	The Web Service Server will be configured within the ICASA DMZ to enable licensees' access to the public facing component of the system while the back-end component of the system remains secured within ICASA's private internal network.	Comply	Not Compliant
13.	Functional Requirement		
	Enquiries on for Number Resources		



	Capability to view allocated numbers in the system in a list view of all number ranges allocated in read mode only using the name of licensees and the number ranges, and information of the overall numbering plans.	Comply	Not Compliant
14. Functional Requirement			
User access			
	Access the system remotely and perform all functions through the ICASA website.	Comply	Not Compliant
15. Functional Requirement			
Communications via the system			
	The numbering system must allow for the generation of email alerts and escalations to simplify and help in monitoring adherence to set turnaround times and speed up processes whenever action is required on the pending applications, system changes among others. Ability to provide for automated communication and generation of signed allocations, assignments and reservations or its equivalent.	Comply	Not Compliant
16. Functional Requirement			
Billing of application fees			
	Provide for numbering resource charging capabilities on different number range applications, Create, calculate and charge numbering applications at different dates, create and send invoices for applications on all number charges, provides for alert of receipts of new application invoices and provides alerts of	Comply	Not Compliant



	receipts of proof of payment. The system should be able to be synchronised or integrate with other ICASA financial system such as JD Edwards.		
17.	Functional Requirement		
	System Customisation		
	The bidder must customise the numbering system in terms of the South African Number Plan regulations. The system must among other requirement cater for mobile numbers, geographic numbers, non-geographic numbers, toll free numbers, international signaling codes, national signaling codes, shorts codes, and routing codes.	Comply	Not Compliant
18.	Functional Requirement		
	System Backup ability.		
	Ability to provide own backup information.	Comply	Not Compliant
19.	Functional requirement		
	System availability		
	The Number Management system availability should be at least 99.99999%. Based on availability levels specified, respondents shall provide a risk analysis of the proposed design solution, mean time between failure (MTBF) of the overall system, and relevant MTBF for essential hardware and software elements. The target above is to include scheduled maintenance outages but exclude any system hardware or	Comply	Not Compliant



	software upgrade. The method of calculation shall be clearly outlined. The bidder must provide typical Mean Time to Repair (MTTR), including times for significant software components recovery. They shall also specify what types of service degradation can occur under fault and overload conditions, the design objectives for each type of degradation and the corresponding effect users. The bidder must detail the architecture used to deliver this level of availability.		
20. Functional requirement			
System Security			
	System security management process and controls to protect system administrators, networked systems, licensees and the Authority. Provision of retaining valuable data for maintenance, security and regulatory reasons for at least 12/24 months.	Comply	Not Compliant
21. Functional requirement			
Support & Maintenance			
	Service provider will be required to maintain and support the system for the duration of the contract.	Comply	Not Compliant
22. Functional requirement			
Upgrades			
	The bidder will perform the system upgrades and	Comply	Not



	maintain the numbering system in accordance with the service level agreement for a minimum period of 3 years.		Compliant
23. Functional requirement			
Data Clean-up and transfer			
	The bidder will perform data clean up and transfer it to the newly supplied numbering system. The data contained in the old numbering system and excel sheet dates back to 2005. The amount of data is at 3 gigabyte on 16 March 2021 with an ongoing growth as the Authority makes allocations to licensees on requests.	Comply	Not Compliant
24. Functional requirement			
Data Clean-up and transfer			
	The bidder will include in their project plan a schedule to allow the transfer of data to be audited and verified that all old data has been correctly transferred to the newly supplied numbering system. The transfer process must be accepted after the audit and verification during the testing phase and at the handover phase by ICASA	Comply	Not Compliant
25. Functional requirement			
User training			
	Provision of users training for the numbering system shall be performed end to end on all levels of the work flow process for a maximum of 10 officials. The work flow assignments of the application to various numbering specialist,	Comply	Not Compliant



	analysis of the applications, allocation of the number ranges, recommendations of the various submission of the number ranges and approval.		
26. Functional requirement			
System Configuration, Diagrams and flow charts			
	Diagrams showing the various components of the system and their interconnections. Demonstration that the system is current, and the software and hardware can interwork with current and cater for future applications.	Comply	Not Compliant
27. Functional requirement			
Project Plan			
	A project plan with Milestones, Work Breakdown Structure, Schedule, Budget allocations, Responsibility Matrix, Risks and Contingency Plans.	Comply	Not Compliant
28. Functional requirement			
The due diligence must include the evaluation			
	Satisfactory delivery, installation, training, testing and commissioning. Satisfactory System performance. Adequate after-sales maintenance support by the bidder for a period for 3 years	Comply	Not Compliant



4. Period of assignment

- 4.1. All work is to be carried out following the schedule as agreed with the Authority.
- 4.2. The project is expected to be completed within a minimum period of six (6) months and a maximum period of twelve months (12) months from the contract's date of conclusion. The system must be fully functional at the end of the period.

5. Briefing Session

There will be a virtual non-compulsory briefing session on Microsoft Teams.

6. Bid evaluation criteria

The bid will be advertised for 21 calendar days in the ICASA website on an 80/20 procurement principle.

Bidders will be evaluated on; (a) submission of the required documents, (b) functionality and (c) price/ bb-bee. Only bidders who meet the cut-off score of 80 points out of 100 points for functionality will be considered further for price evaluation. All bid proposals submitted will be evaluated following the 80/20 procurement principle as prescribed by National Treasury Regulations.

No	Category	Weight
A.	Price	80
B.	BBBEE Status Level Contribution	20



	TOTAL	100
C.	Functionality: Pre-qualification criteria	
1.	<p>Central Numbering Database methodology</p> <p>5 = Methodology includes all the information below:</p> <ul style="list-style-type: none"> ➤All functional requirements from clause 3.3. <p>4 = Methodology includes all the information below:</p> <ul style="list-style-type: none"> ➤25 functional requirement excluding item 17 of the functional requirements from clause 3.3. <p>3 = Methodology includes all the information below:</p> <ul style="list-style-type: none"> ➤24 functional requirements excluding item 15 and 17 of the functional requirements from clause 3.3. <p>2 = Methodology includes all the information below:</p> <ul style="list-style-type: none"> ➤a maximum of 23 functional requirements excluding item 15 and 17 and any additional functional requirement from clause 3.3. <p>1 = Methodology includes all the information below:</p> <ul style="list-style-type: none"> ➤a maximum of 22 functional requirements excluding item 15 and 17 and any two additional functional requirement from clause 3.3. 	40



<p>2.</p>	<p>Provide a Project Plan</p> <p>5 = A project plan with Milestones, Work Breakdown Structure, Schedule, Budget allocations, Responsibility Matrix, Risks and Contingency Plans.</p> <p>4 = A project plan with Milestones, Work Breakdown Structure, Schedule, Budget allocations, and excludes risks and contingency plan.</p> <p>3 = A project plan with Milestones, Work breakdown structure, schedule and excludes Budget allocation, risks and contingency plan.</p> <p>2 = A project plan with only a schedule.</p> <p>1 = No project plan submitted</p>	<p>15</p>
<p>3.</p>	<p>Provide reference letters with company letterheads of similar service supplied in the past five years. The reference letters must have contacts details such as the landline, mobile number, email address and the person to be contacted.</p> <p>5 = Provide four (4) or more testimonial reference letters of service supplied on letters heads.</p> <p>4 = Provide three (3) testimonial reference letters about service supplied on letterheads.</p> <p>3 = Provide two (2) testimonial reference letters about services rendered.</p> <p>2 = Provide one (1) testimonial reference letter about service supplied on letterheads.</p> <p>1 = No submission of testimonial reference letters.</p>	<p>10</p>



	Unverifiable services supplied will constitute disqualification of the bidder.	
4.	<p>Provide skills transfer plan for ten (10) ICASA staff members with timeframes.</p> <p>5 = A skills transfer plan which includes training, timeframes, objectives and working methodology.</p> <p>4 = A skills transfer plan which includes training, timeframes, objectives and without working methodology</p> <p>3 = A skills transfer plan with training and timeframes only</p> <p>2 = A skills transfer plan submitted only.</p> <p>1 = No skills transfer plan submitted</p>	10
5.	<p>Provide previous experience reports showing a successfully supplying, installing, customisation and commissioning of the numbering resource database system in region 1 of the ITU. NB:(reports must have a high level details of the amount of work performed, the name of the country/regulator or Administrator to which services where rendered, the timeframes and the status of the database showing whether it is a server-based or web-based system)</p> <p>5 = five or more services that included supply, install, commission and maintenance of the</p>	15



	<p>country's numbering resources system.</p> <p>4 = four services that included supply, install, commission and maintenance of the country's numbering resources system.</p> <p>3 = three services that included supply, install, commission and maintenance of the country's numbering resources system.</p> <p>2 = two services that included supply, install, commission and maintenance of the country's numbering resources system.</p> <p>1 = no submission of sample reports</p>	
<p>6.</p>	<p>Experience and qualifications</p> <p>5 = More than 10 'years' experience and personnel with relevant qualifications such as IT project management certifications and IT Development System Certification</p> <p>4 = 8 'years' experience and at least more than 2 candidates with relevant qualifications</p> <p>3 = 5 'years' experience and at least 2 candidates with relevant qualifications</p> <p>2 = 3 'years' experience and 1 candidate with appropriate qualifications.</p> <p>1 = 1 year experience and no candidate with relevant qualifications.</p>	<p>10</p>



	TOTAL FOR FUNCTIONAL PRE-QUALIFICATION CRITERIA. Grand Total: 100 Minimum cut-off point: 80	100
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NAME.....SIGNATURE.....

SUPPLIER.....DATE.....
