Request for Expressions of Interest:

Provision of Registry Services: .ZA Second Level Registrations

Deadline for submission of Expressions of Interest is 12h00 (South African Standard Time) on Monday, 21 May 2018.

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1. Introduction

The .ZA Domain Name Authority (ZADNA) is a not-for-profit company (NPC) founded in terms of Chapter X of the Electronic Communications and Transactions (ECT) Act no. 25 of 2002. Section 65 of the Act stipulates that the Authority (ZADNA) shall:

(a) Administer and manage the .ZA domain name space;
(b) Comply with international best practice in the administration of the .ZA domain name space;
(c) License and regulate registries
(d) License and regulate registrars for the respective registries;
(e) Publish guidelines on—
   (i) the general administration and management of the .ZA domain name space;
   (ii) the requirements and procedures for domain name registration; and
   (iii) the maintenance of and public access to a repository,

with due regard to the policy directives, which the Minister (of Communications) may make from time to time by notice in the *Gazette*.

(f) Enhance public awareness on the economic and commercial benefits of domain name registration;
(g) Conduct such investigations as it may consider necessary;
(h) Conduct research into and keep abreast of developments in the Republic and elsewhere on the domain name system;
(i) Continually survey and evaluate the extent to which the .ZA domain name space meets the needs of the citizens of the Republic; and
(j) From time to time, issue information on the registration of domain names in the Republic.
(k) When so requested by the Minister, make recommendations to the Minister in relation to policy on any matter relating to the .ZA domain name space; and
(l) Continually evaluate the effectiveness of the ECT Act and things done in terms thereof towards the management of the .ZA domain name space.

ZADNA has attained notable achievements since its establishment including:

(i) Contributing to the establishment of the organisational machinery of [Africa Top Level Domains (AfTLD)](#);
(ii) Launching and leading the [.ZA Domain Name Alternative Dispute Resolution (ADR)](#) process;
(iii) Establishment of a Central Registry platform for registry operation of co.za, net.za, org.za and web.za;

(iv) Harmonising .ZA policies, procedures and standards, including the .ZA Second Level Domain General Policy, SLD Charters, .ZA SLD Technical Standards and .ZA DNSSec Policy and Practice Statement;

(v) Leading the application for and launch of the ZA dotCities (.capetown, .durban and .joburg) Top Level Domains, including their policy framework;

(vi) Leading the application and policy development for the .africa Top Level Domain;

(vii) Contributing to the development of the National Integrated ICT Policy White Paper;

(viii) Widening participation in the local registrar market through the Registrar-Reseller Enterprise Development Project;

(ix) Increasing the use of .ZA domain names and websites through the .ZA Schools Online Project; and

(x) Integrating .ZA domain name registration with the companies and intellectual property registration platform of South Africa.

2. Background to SLRs

In compliance with international best practices in domain name administration, ZADNA recently released for public consultation a Public Discussion Document assessing the viability of Second Level Registrations (SLRs) in .ZA (e.g. yourname.za). The deadline for submission of feedback to the Public Discussion Document is 12 April 2018. ZADNA intends to use the feedback received to guide the implementation of SLRs in .ZA.

Country code Top Level Domains (ccTLDs) such as .co (Colombia), .uk (United Kingdom), .nz (New Zealand) and .ke (Kenya) have opened up for SLRs in the recent years. These ccTLDs have also experienced exponential growth in the domain name space due to the introduction of SLRs.

SLRs are seen as more viable than third level registrations (3LRs) (e.g. yourname.co.za) because they are shorter than 3LRs, support faster web navigation and better brand name visibility, and enable ccTLDs to compete better with generic Top Level Domains (gTLDs) such as .com, .net and .org, which all support SLRs.

In .ZA, domain name registration currently occurs at the 3rd level below designated Second Level Domains (SLDs) such as ac.za, co.za, edu.za, gov.za, net.za, org.za and web.za. There are few historical exceptions (e.g. agric.za and grondar.za) where SLRs were delegated in .ZA before ZADNA assumed the administration and

regulation of .ZA. The .ZA SLR Public Consultation Process will help ZADNA pursue the most sustainable approach to the implementation of SLRs.

3. Background to Request for Expression of Interest

ZADNA, as the .ZA ccTLD manager, also serves as the registry operator for the .ZA ccTLD. In this capacity ZADNA is responsible for the delegation of SLDs and any registration of domain names at the second level of .ZA. However, ZADNA's registry operation function has so far been passive and limited to the delegation and re-delegation SLDs from time to time (there are 20 .ZA SLDs delegated to date).

ZADNA's commitment to the introduction of SLRs requires ZADNA to build active registry operation capacity. This is because SLRs are expected to happen actively on a daily basis in an automated manner. This necessitates that the SLR registry service be on par with the global best-in-class registry services.

ZADNA has assessed recent SLR projects in different ccTLDs. Experience from the SLR projects in .co, .ke, .uk and .nz have shown that there is substantial interest in SLRs as they are seen as shorter than 3LRs, and support faster navigation and better brand or name visibility. SLRs are also seen as empowering ccTLDs to compete better with gTLDs as the latter offer SLRs instead of 3LRs.

The anticipated demand for SLRs requires that the registration process be automated and be secure, robust and stable. This can best be achieved through deploying suitable registry system and services that should make the SLR process fast, easy and affordable.

The Expression of Interest (EOI) exercise is conducted parallel to the .ZA SLR Public Consultation Process, and is meant to help ZADNA understand suitable SLR registry business model and registry system options. ZADNA anticipates that the EOI exercise will lead to a Request for Proposal exercise, but this depends largely on the outcome of the SLR Public Consultation Process.

Accordingly, service providers responding to the EOI ("bidders") should be cognisant of the fact that the EOI is a preliminary exercise that will assist ZADNA in understanding available registry options for SLRs. **Bidders consent and accept that the EOI process will not result in any appointment for provision of registry services for SLRs.**

4. Purpose of Request for Expression of Interest

The Expression of Interest (EOI) is intended to help ZADNA assess available registry systems, registry providers and business model for SLRs. Given that .ZA is a key component of the national Internet infrastructure, ZADNA is committed to ensure that SLRs are implemented in a secure, stable and resilient manner through a sustainable registry business model.

Furthermore, the National Integrated ICT Policy White Paper envisages that ZADNA will in the future be merged with other local ICT regulators to form a new "Integrated Regulator". The White Paper stipulates that the Integrated Regulator will also assume registry operation functions of all .ZA Second Level Domains (SLDs) and the dotCapeTown, dotDurban and dotJoburg TLDs.

The drafting of legislation that prepares for the integration of ZADNA with other local ICT regulators is currently before the South African Parliament, and is expected to be finalised in the course of 2018/2019. The exact timing of commencing the actual integration of ZADNA with other ICT regulators is not yet clear. However, the integration will be managed such that it does not interrupt the continued operation of the .ZA namespace.

4.1. Ministerial Instruction regarding SLRs

In the meantime, ZADNA recently received a Ministerial Instruction directing ZADNA to implement several transitional measures in line with the White Paper. One of the transitional measures is for ZADNA to build its registry management capacity using .ZA SLRs in preparation for the integration of local ICT regulators.

The Ministerial Instruction requires ZADNA to commence building its registry management capacity from the 2018/2019 financial year (i.e. from 1 April 2018). The Ministerial Instruction also requires ZADNA to accredit registrars for SLRs. This SLR registrar accreditation should enable the registrars currently accredited for .ZA SLDs to also obtain SLR registrar accreditation.

The EOI process, therefore, results from the pressing requirement for ZADNA to use SLRs to build its registry management capacity starting from 1 April 2018. This EOI process is restricted to SLRs, and therefore does not include registry services for .ZA SLDs.

Notwithstanding, bidders are free to outline mechanisms (in their proposals) that will allow the yet-to-be-established Integrated Regulator to assume and combine registry operation functions for SLRs, SLDs and ZA dotCities (in the near future) in line with the White Paper's stipulations.

5. Overall Objectives

Bidders responding to the EOI should ensure that their registry technology and services support ZADNA to:

5.1. Implement a sustainable SLR registry business model that enhances the trust, security and resiliency of the current .ZA registry infrastructure;

5.2. Ensure that SLRs are accessible and price-competitive in line with the pricing framework that currently applies to domain names registered in the .ZA "commercial" SLDs (i.e. co.za, net.za, org.za and web.za).

5.3. Implement an SLR policy framework that is consistent to or complements the policy framework of the commercial SLDs.

5.4. Deliver an effective SLR registrar accreditation framework that supports integration with the registrars accredited for the "commercial" SLDs (i.e. co.za, net.za, org.za and web.za);

5.5. Protect the rights of holders of domain names currently registered in the .ZA SLDs;

5.6. Achieve security, confidentiality and integrity of the availability of the data associated with the Registration Service, Whois service and Authoritative DNS name services of .ZA;

5.7. Establish systems that support a data science and a data analytics capability within .ZA, thus allowing ZADNA to gain insights from the registry data to help support functions such as .ZA strategy development, monitoring, compliance and future policy development.

6. Registry Service Scope Of Work

The required SLR registry service includes but is not limited to:

6.1. Registration service

Bidders must explain:

6.1.1. Software for providing SLR service, including access to source code and the rights to modify the software to meet ZADNA's requirements.

6.1.2. Production and testing computing environments for running the software securely and with high availability, which may be via hardware for locating in data centres or via public cloud services in South Africa.

6.1.3. Security software and services for securing the registry data including appropriate encryption of sensitive information, logging of all transactions that query or make changes to the registry data, and analysis of logs to detect inappropriate activity.

6.1.4. 24/7 operations and monitoring services for maintaining the operations of the registration service, including where these operations and monitoring services will be located.

6.1.5. Training services for operating and maintaining the registration service.

6.2. Authoritative DNS name services

Bidders must explain:

6.2.1. Software for operating the Authoritative DNS name services for .ZA, including access to source code and the rights to modify the software to meet ZADNA's requirements, and support for DNSSec (Domain Name System Security Extensions) (see RFC 2535).

6.2.2. Production and testing computing environments for running the software securely and with high availability and redundancy (including support for anycast services) – may be via hardware for locating in data centres, or via public cloud services in South Africa and internationally, for both high availability and low response times for DNS queries from any location globally.

6.2.3. Security software and services for monitoring and logging of all transactions that query the DNS information, and analysis of logs to detect inappropriate activity.

6.2.4. 24/7 operations and monitoring services for maintaining the operations of the Authoritative DNS name services - including where these operations and monitoring services will be located.

6.2.5. Training services for operating and maintaining the Authoritative DNS name services.

6.3. Whois service

Bidders must explain:

6.3.1. Software for operating the Whois service, including access to source code and the rights to modify the software to meet ZADNA's requirements, and support for the Registration Data Access Protocol (see RFC 7480).

6.3.2. Production and testing computing environments for running the software securely and with high availability. This may be via hardware for locating in data centres, or via public cloud services in South Africa.

6.3.3. Security software and services for securing the Whois data including appropriate encryption of sensitive information, logging of all transactions that query the Whois service, and analysis of logs to detect inappropriate activity.

6.3.4. 24/7 operations and monitoring services for maintaining the operations of the Whois service - including where these operations and monitoring services will be located.

6.3.5. Training services for operating and maintaining the Whois service.

6.4. Web Registrar Service

The success of .ZA depends largely on the ease of integrating current and future .ZA registrars to the SLR registry service. Bidders should explain how this can best be achieved, including whether or the registry system has a

web registrar platform. The web registrar service proposal should explain the following, amongst others:

6.4.1. Security software and services for monitoring and logging of all transactions in the web registrar platform, and analysis of logs to detect inappropriate activity.

6.4.2. 24/7 operations and monitoring services for maintaining the operations of web registrar - including where these operations and monitoring services will be located.

6.4.3. Training services for operating and maintaining the web registrar service.

Following this EOI, ZADNA anticipates that a detailed Registry Technical Specifications will be published following the conclusion of, or parallel to, the SLR consultation processes.

7. Standards Compliance

ZADNA's goal is to ensure that the .ZA registry service is in keeping with global best practices and standards. In line with this, bidders are encouraged to consider, as a guide, the .ZA SLD Technical Standards and ICANN's technical requirements outlined in the ICANN New gTLD Registry Agreement. In particular, registry technologies and services should comply with the following globally accepted standards:

7.1. DNS

These include current and future IETF standards, including but not limited to RFCs 1034, 1035, 1123, 1982, 2181, 2182, 3226, 3596, 3597, 4343, 5966 and 6891.

7.2. EPP

These include current and future IETF standards relating to the provisioning and management of domain names using the Extensible Provisioning Protocol (EPP) in compliance with RFCs 5910, 5730, 5731, 5732, 5733, 5734 and 3915.

7.3. IPv6

Registry systems should be able to accept IPv6 addresses as glue records and publish them in the DNS. Applicable standards include IETF RFCs 3912 and 4472 and BCP 91.

7.4. DNSSec

Registry technologies and services comply with the .ZA DNSSec Policy and Practice Statement and applicable IETF standards such as RFCs 4033, 4034, 4035, 4509 and 6841.

7.5. Network Ingress Filtering

The registry service should provide Network Ingress Filtering (NIF) checks in compliance with BCP 38 and BCP 84.

7.6. IANA Root Zone Database

The registry system should provide for the update of DNS and Whois records for the .ZA ccTLD in the IANA Root Zone Database to ensure that authoritative information that is publicly available remains up to date.

8. Registry System Licensing

In view of the fact that the extent of the registry service required for SLR implementation is not yet finalised, bidders are required to clarify if their software can be licensed, and outline applicable terms and conditions for such licensing. Such outline should include training and support mechanisms, if any, that the service providers offer to licensees.

9. Indicative Pricing

Service providers are encouraged to provide indicative pricing for their products, services and/or technology. Such pricing should explain any upfront fees, per domain name fees and other fees, and be inclusive of Value-Added Tax (VAT).

10. Local Presence of .ZA Registry Service

ZADNA considers it to be of strategic importance to have the operation of the .ZA registry infrastructure geographically located in South Africa. Accordingly, registry service providers from outside South Africa must explain how they propose to meet this local presence requirement.

11. Expected Outcomes and Deliverables

Upon review of the EOIs, subject to the outcomes of the SLR Public Consultation Process, ZADNA intends making definite decisions about the best approach to SLR implementation. This will include SLR policy, pricing and operational frameworks ("business model"). **The ultimate business model will decide the manner in which ZADNA may deliver registry services for SLRs.**

Bidders will be informed of the ultimate decisions. Notwithstanding, ZADNA anticipates that bidders will be invited to participate in a subsequent Request for Proposals (RFP), which may include detailed Registry Technical Specifications. **Only bidders that submit proposals in response to this EOI will be invited to participate in the RFP process.**

12. Timeframes

In view of the ongoing SLR Public Consultation Process, timelines are not specific at this stage. However, ZADNA is committed to the implementation of SLRs in the current 2018/2019 financial year in view of the recent Ministerial Instruction.

13. Competency and Expertise Requirements

Each bidder must provide the following with their proposals:

13.1.   Background information, including:

13.1.1. A description of its primary business.

13.1.2. Names of the bidder's directors and key personnel responsible for providing the technology, products and /or services under its proposal.

13.1.3. Details about the bidder's ownership structure including names of directors, any subsidiaries and and jurisdiction of incorporation.

13.1.4. Experience and performance history in supporting or providing similar services to similar or related projects in the domain name space.

13.2.   Information on the bidder's products, technology and/or services.

13.3.   Proposed indicative timeframe for supplying technology, products and / or services.

13.4.   Resumes of key personnel involved in supplying technology, products and / or services.

13.5.   Contact officer with phone and email addresses.

13.6.   Bidder's principal place of business address.

13.7.   References from the bidder's customers.

13.8.   Declaration of any current or potential conflicts of interest, including where the bidder itself or any related entity is directly or indirectly involved in any trade, business or undertaking of ZADNA.

14. Review of Expression of Interest

ZADNA will take the following factors (amongst others) into account when reviewing EOIs:

14.1.   Ease and sustainability of integrating accredited registrars to the SLR registry service.

14.2.   Ease of configuring registry technology and service to align with the SLR policy framework.

14.3.   Sustainability of skills transfer to ZADNA or another entity nominated by ZADNA for SLRs.

14.4.   Experience and performance history in providing services to a similar scale and complexity as .ZA.

14.5.	Value for money taking into account financial and non-financial costs.

14.6.	Ability to meet specified registry technical and operational requirements.

14.7.	Ability to meet and deliver on SLR goals.

14.8.	System capabilities with respect to security, confidentiality, stability, integrity and availability.

14.9.	Flexibility, including the ability to make changes to software to customise for .ZA requirements and the degree of on-going innovation.

14.10. Whole-of-life costs, including payment model (e.g. upfront versus on-going charges).

14.11. Sustainability of registry system licensing or ownership framework, where applicable.

15.Proposal Costs

ZADNA shall not be liable for the costs incurred by bidders in preparing and submitting EOIs, and in attending any presentation that ZADNA may require bidders to attend as part of the EOI process. Such costs shall be borne by bidders.

16.Reserved Rights

ZADNA reserves the following rights in respect of this EOI:

(a) Right not to proceed with the SLR project;
(b) Right to delay the implementation of the SLR project;
(c) Right to vary the scope of the SLR project;
(d) Right to vary the envisaged approach to the provision of registry system and services;
(e) Right to re-advertise the EOI;
(f) Right to expand or restrict service provider participation in any subsequent Request for Proposals or Tender;
(g) Right to terminate the participation of any bidder in the EOI process; and

(h) Right, at any time and for any reason, to require additional information from bidders.

17. Submission of EOIs

EOIs must reach ZADNA no later than **12h00 (South African Standard Time) on Monday, 21 May 2018**. They must be submitted to Mr. Vika Mpisane (Chief Executive Officer of ZADNA) by email to slr@zadna.org.za.

It is responsibility of each bidder to ensure that its EOI reaches ZADNA no later than the aforementioned deadline. EOIs received after the deadline will not be accepted.

18. Lobbying and Further Information

Bidders are prohibited from trying to solicit the input of the members of the Board of Directors or the staff of ZADNA, and from lobbying them regarding the EOI. All questions related to the EOI should be directed to Mr. Vika Mpisane (Chief Executive Officer of ZADNA) at telephone number +27 10 020 3910 or via email at slr@zadna.org.za.

This restriction does not prohibit bidders from communicating with ZADNA staff about other matters of ZADNA that are not related to the EOI.

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