

# Registries Stakeholder Group Statement



## Draft Final Report of the 2023 Africa Domain Name Industry Study

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Reference url:

<https://www.icann.org/en/public-comment/proceeding/draft-final-report-of-the-2023-africa-domain-name-industry-study-21-12-2023>

### Background<sup>1</sup>

ICANN org is seeking input on the draft final report of the 2023 Africa Domain Name Industry Study, and on whether it appropriately addresses the key objectives of the study:

- *Does the study identify and define the strengths and weaknesses in Africa's Domain Name System (DNS) industry ecosystem?*
- *Does the study develop recommendations to advance the industry and bring it closer to realizing its full potential?*
- *Does the study document relevant data and provide further analytical findings? This information is essential for ICANN and other stakeholders involved in the Africa namespace to develop a roadmap that outlines the specific needs and priorities for the development and growth of both country code top-level domains (ccTLDs) and generic top-level domains (gTLDs) in Africa.*

### Documents for input

- [Draft Final Report of the 2023 Africa Domain Name Industry Study \(pdf, 6.63 MB\)](#)

### Related RySG Comments

- [RySG comment on the Draft 2016 African Domain Name System Market Study](#) (May 2017)

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## Registries Stakeholder Group Comment

The Registries Stakeholder Group welcomes the opportunity to provide feedback on the draft final report of the 2023 African Domain Name Industry Study. We first provide overarching comments evaluating - as requested - whether the report appropriately addresses the key objectives of the study, followed by detailed comments and questions.

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<sup>1</sup> Background: intended to give a brief context for the comment and to highlight what is most relevant for RO's in the subject document – it is not a summary of the subject document.

Overarching comments.

The 2023 African Domain Study provides a comprehensive analysis of Africa's current digital and ICT environment. The authors take up the challenge of exploring the diverse African landscape, addressing a wide array of issues, including internet access and usage, digital literacy, content regulation and blocking, and infrastructure and backbone development. Having these insights as a background is essential, as the DNS industry does not operate in a vacuum, but within this wider context. In addition, the study provides sufficient data on the African DNS Industry, giving a good impression of the state of the industry in individual countries and the continent as a whole.

Overall, however, it is our impression that the study overly focusses on Africa's digital development, and thereby falls short in providing a clear response to its key objectives: identify and define the strengths and weaknesses in Africa's Domain Name System (DNS) industry, develop recommendations to advance the industry and bring it closer to realising its full potential, and provide data and analytics that allow ICANN and other stakeholders to develop a roadmap that outlines the specific needs and priorities for the development and growth of both ccTLDs and gTLDs in Africa. While we believe that the necessary information is present in the report, we recommend restructuring the study and being vigilant about avoiding duplication.

Concretely, in our view, the study would better address its objectives if there is a clearer distinction between a concise background section covering Africa's digital development and ICT environment, and a core section focusing on the African DNS Industry. The background section should explore all issues that influence the African digital and ICT landscape but fall outside the direct influence of ICANN and other DNS stakeholders, such as access to the undersea cable system, backbone infrastructure, the cost of broadband access, digital literacy of internet users, establishment of IXPs, e-commerce and e-government, regulatory environment when it comes to content regulation, shut downs, etc.. In conclusion, and to segue into the next section, the report should acknowledge the interdependence between a thriving ICT ecosystem and flourishing DNS industry.

The core of the study should concentrate on issues directly relevant to the development of the DNS industry and growth of ccTLDs and gTLDs in Africa, and within the sphere of influence of ICANN and its stakeholders. These include for example transitioning to a registry-registrar model for the national ccTLD, facilitating the registration process, liberalising registration policies.

While we acknowledge that restructuring the entire report at this stage of the project pose significant challenges, we do recommend revising the executive summary according to the following structure:

- Background: concise analysis of Africa's Digital environment
- Africa's DNS environment: current state, strengths and weaknesses
- Recommendations to further enhance Africa's DNS industry
- Priorities and building blocks to develop and grow ccTLDs and gTLDs in Africa.

The bullet points below are detailed comments and questions on the report.

- The language of the disclaimer (page iii) caught our attention. Its formulation and repeated warnings may undermine the credibility of the report and its recommendations. We recommend revising the language to adopt a more generic tone and expect that when the authors are of the

opinion that certain data is unreliable, inaccurate, or incomplete, they either refrain from using it or, where they use it in the report, clearly communicate the specific concern.

- One of the Objectives of the Africa DNS Study, according to the first paragraph of page 9, is to *'Develop a Trial Observatory to demonstrate the potential for continuous monitoring the status and growth of the DNS Industry in Africa.'* We would appreciate further clarification regarding this Observatory, as various references in the report left us somehow confused:
  - One of the objectives of the 2016 Africa DNS Study was to explore options for establishing an observatory. What happened with the findings of the 2016 report? How is 2016 work linked to the work done in 2023?
  - The section on 'Project background' on page 18 and 19, mentions that the project will *'lead to the establishment of a trial observatory'* and *'assessment of the feasibility of establishing a DNS observatory, leading to a proposal for a consequent mechanism and implementation of a trial observatory for the DNS marketplace in Africa.'*
  - On page 25, in the methodology section of the report, it is mentioned that data for the report was *'gathered via the DNS Observatory'*. On page 78, it is mentioned that cooperation with ccTLDs improved *'due to the DNS Observatory being operational and providing valuable information to ccTLD managers.'* Is this DNS Observatory the same observatory the project aims to propose? Or is there a different Observatory created after the 2016 study?
  - Section 9, on page 166, mentions that a *'Trial DNS Observatory is part of Milestone 3 of (the) project and will be presented as a separate document.'*
  - The report refers in several instances to data at <https://observatory.dnsstudy.africa> .
- We welcome the inclusion of two additional languages for the survey, but wish to reiterate the concern expressed in our comments on the 2016 Study regarding the potential impact of a lengthy survey on the response rate as some targeted respondents may not have the bandwidth to participate. We also note a discrepancy in the response rate provided in the executive summary (on page 9) compared to the information provided on pages 26 to 28.
- IXPs are an integral part of internet infrastructure, offering numerous benefits to the local internet community and the local DNS industry. While we do not question the importance of IXPs, we are concerned that some statements in the report are incorrect or incomplete.

For example, on page 13, it is noted that *'Once a functioning IXP exists, Data Centers become not only viable but essential. This then leads to the growth of a local hosting industry, and consequent demand for low cost domains, which in turn is expected to result in social and economic benefits.'* We find this statement to be overly simplistic and question the suggested role of 'low cost domain names' in this chain of thoughts. Moreover, later in the report, on page 66, a different causal relation is suggested: *'Registration of (especially local) domain names foster the growth of the economy in terms of the construction of data centres to accommodate the machines hosting African websites, the IXPs to interchange local data, the telecommunications (especially fibre) infrastructure to interconnect these locations, ...'*

On page 60, the report states that *'countries with an IXP that has sufficient peers exchanging meaningful amounts of traffic have, on average, 12 times as many domains as those without'*. While we acknowledge the importance of a well functioning IXP, we find this statement oversimplified, as it overlooks factors such as population size and the number of internet users.

Additionally, we have observed some discrepancies in the data on IXPs provided in section 4.4.3.1: '63 IXPs in 316 (sic) African countries' (page 56) versus '68 known IXPs' (page 58) ; the data on IXPs per country on page 56 does not correspond with the information shown in figure 4-17 on page 57; the content of page 56-57 and figure 4-17 are duplicated on page 63 and figure 4-23.

- In the methodology section, the authors delineate various targets for the data gathering. We are concerned that the sentence, on page 23, '*All those peering at an IXP operate a network, and therefore are Registrants. Many of them are also ISPs and may therefore be Registrars.*' is potentially confusing to the reader. This definition appears to diverge from the common definition of a registrant/registrar within the ICANN community, as outlined in the Glossary of Terms on page 181.
- On page 75 the report states: '*Demand for local domain names is often driven by application developers who need to access affordable high bandwidth network services and to share other resources, ideas, and contacts to build their business.*' In our view, the described needs of developers do not explain a demand for local domain names.
- We urge the authors of section 4.5.5 on 'Offshore and on-continent hosting' to remain clear on the distinction between domain name registration and the hosting of website content. While domain names are registered by a registrant with an identifiable country of residence, the hosting of website content can occur within or outside the country/continent. This section, including the titles of the figures such as 'where .com domains are hosted in Africa', is potentially confusing and should be revised for clarity.
- The labels on Figure 4-50, on page 78, appear incorrect and there is no reference or interpretation of this figure in the text.
- We suggest refraining from using 'Country Code WW' to denote the code WW (worldwide) associated with IP addresses managed by organisations such a google or cloud providers. Within the context of this study, this terminology may cause confusion with a (non-existing) ccTLD .ww. (pages 87 and 90)
- The majority of section 5.1.3, titled 'the influence of politics on telecommunications and the Internet', should be included in a background section on Internet development in Africa as the mentioned policies do not directly impact the DNS industry.
- On page 106, the authors, based on the information in Table 5-3 (Internet freedom vs number of domain names) and Table 5-4 (Internet freedom vs number of domain names, excl. Freenom) conclude that the number of domains per capita is significantly higher in free countries compared to partly free or not free countries. Surprisingly, the authors do not make the observation that 'Freenom practices', according to the tables, only appear in countries labelled as not-free.
- We recommend that the authors construct a conceptual framework outlining their understanding of a healthy DNS industry. This framework should cover a variety of factors including and go beyond the number of domains under management. Such a framework could facilitate the analysis and comparison of the DNS industry across African countries, as well as the formulation of actionable recommendations. The Country DNS Success Index and Table 7-2 (ZARC case study) can serve a starting point for such a framework.

- It is unclear to us why the analysis presented in the last paragraph on page 151 is included in a section on language. Also, figures 7-8 and 7-9 on page 153 are missing.
  - The ZARC case study, presented on page 158, is a good example of a successful DNS industry which has developed and is operating without reliance on government subsidies. However, saying that the absence of governance subsidies is a 'key for success' for ZARC's achievements doesn't seem correct.
  - The information regarding internet shutdowns by African governments on page 168 (2nd to 6th paragraph) should be covered in a section on shutdowns and not be placed in a concluding section of the report.
  - The ccTLD for Eritrea is .et according to page 169, but .er according to page 143.
  - How should one interpret the statement on page 170 that '*This study, via the African DNS Observatory, also plans to provide an African-based Anycast system in Africa*'? How does such an initiative align with a study on the DNS industry in Africa?
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*Summary of Submission:*

*The 2023 African DNS Study is a rich and detailed resource on Africa's Digital environment and DNS Industry. The comment does suggest the report to be more focused on the DNS Industry in its analysis and recommendations.*