Five Years of Africa Strategy Implementation

2012-2017

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ICANN

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1 Note from the Vice President of Global Stakeholder Engagement in Africa

ICANN's initial Africa Strategy was drafted in 2012 by the Africa Strategy Working Group (ASWG), and then implemented in 2013 at the Multistakeholder Internet Governance and the DNS Industry in Africa (MIGWORKS) event held in Addis Ababa, Ethiopia. The development of this strategy was triggered by the following factors:

- Africa – made up of 54 countries and boasting a population of over one billion – has had very limited participation in ICANN and its activities. During the 2012 New gTLD Program launch, only 17 out of a total 1,930 applications were from Africa.

- At ICANN42 in Dakar, Senegal, the Africa Ministerial Gathering issued a communiqué calling for a stronger ICANN presence in Africa, and more participation by Africans in the ICANN community.

- In order for ICANN to fulfill its mission and commitment to a multistakeholder model of governance, global inclusivity is necessary and an important area of focus.

The Africa Strategy aims to increase participation in ICANN and build capacity amongst stakeholders to help grow the domain name industry in Africa. In 2013, ICANN assigned three staff members with a dedicated budget to put this in place.

Five years later, several flagship programs and projects have been implemented in the region including:

- The DNS roadshow series.

- The DNS mentorship and internship.

- The DNS Exchange Program.

- The Africa DNS Forum.

- Support for African Internet and Internet governance-related events.

- Maintenance of regular channels of communication including the African discussion lists.

- Series of topical workshops.

- Continuous support for African participants at global meetings through ICANN's Fellowship and NextGen programs.

Our work over the past five years has shown us:

- The African community has become much more active in the ICANN community, but needs to participate more effectively.

- Capacity building in Africa is a long-term project that requires the development of strategic partnerships.

- Although there is a greater understanding of ICANN and its remit by African governments, they still expect ICANN to respond to issues pertaining to Internet

security, personal data processing, and their positioning in Internet governance discussions.

- Issues such as digital economy and the Internet's contribution to national and regional economic development are becoming crucial, and ICANN's specific role in them is being questioned.

It is important to note that the ICANN organization has gone through recent transformations such as the IANA stewardship transition, the new ICANN Bylaws, and the new empowered community of ICANN. These changes certainly call for increased challenges for African participation. In the meantime, the domain name industry is progressing with an increased number of registrars and more capable management of registries. All of these developments affirm the need to continue to build upon the implementation of the ICANN Africa Strategy, and to help transform the African Internet ecosystem by bringing it up to speed with the global Internet ecosystem.

Pierre Dandjinou, VP of Global Stakeholder Engagement in Africa

2 Background

Africa is one of the five ICANN regions, and claims 55 country code top-level domain (ccTLD) names. There are a total 249 country code top-level domain names worldwide, with 73 from Asia/Australia/Pacific, 76 from Europe, 37 from Latin America/Caribbean, and eight from North America.

Economic growth in Sub-Saharan Africa is recovering moderately, following a sharp slowdown over the course of the last two years. Estimated to have strengthened from 1.3% in 2016 to 2.4% in 2017, Gross Domestic Product (GDP) growth in the region is mainly led by the continent's largest economies: Nigeria, South Africa, and Angola. Nigeria and South Africa have exited recession; however, their pace of recovery remains sluggish.[1]

ICANN plays a unique role in the infrastructure of the Internet. Through its contracts with registries and registrars, ICANN helps define how the domain name system functions and expands. ICANN coordinates policy development related to the Internet's system of unique identifiers. These policies start out as recommendations that are then refined by the global ICANN community through its Supporting Organizations (SO) and Advisory Committees (AC). Africa contributes to the ICANN policy development process and the global economy of the domain name industry.

As a part of its multistakeholder governance process, ICANN holds triannual public meetings all over the world. Ten of them have been held in Africa. The first one took place in Egypt in March 2000, followed by Ghana in March 2002, Tunisia in October 2003, South Africa in December 2004, Morocco in 2006, Egypt in November 2008, Kenya in March 2010, Senegal in October 2011, Morocco in March 2016, and lastly South Africa in June 2017. During the Dakar meeting from 19 to 21 October 2011, the African Union and Senegal hosted a round table for African Ministers in charge of Communication and Information. The Ministers issued a communiqué which called for enhanced engagement in Africa.

During the ICANN44 meeting in Prague, Czech Republic in June 2012, participants from Africa had a special meeting with the ICANN CEO and President and the ICANN Board Chair. Taking into account the input from the Africa's ICT Ministerial Meeting in Dakar in 2012, this meeting involved discussions on how to get the continent more involved in ICANN. It concluded that a better understanding of the issues hampering Africa's participation in ICANN was needed. It was also suggested that Africa deserves a unique approach so that its contribution to ICANN becomes equal to that of other regions. With these necessities in mind, an African working group was set up to deliver what has now become the "Africa Strategy."

In 2013, the ICANN Global Stakeholder Engagement (GSE) Department formed a team in Africa to increase ICANN's interaction with the regional community. The Africa GSE team provides a point of contact in Africa for the ICANN org and community, raises awareness, provides outreach and understanding of ICANN's role and remits, and drives participation in ICANN's policy development. This report looks at the period from 2013 to 2017, and highlights accomplishments and lessons learned.

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[1] Source the World Bank http://www.worldbank.org/en/region/afr/overview
[2] https://www.icann.org/en/system/files/files/african-union-communique-21oct11-en.pdf

3   Reaching Out to Stakeholders

At the beginning of ICANN's engagement efforts, there was low participant turnout. This was due to a lack of knowledge about ICANN and the organization's activities. To address this, the ICANN GSE team in Africa planned targeted outreach in several countries with government officials, civil society organizations, telecommunication operators, ICT regulatory bodies, and academia. Since then, ICANN has managed to reach out to nearly all African countries. ICANN also contributed by participating in, supporting, and sponsoring regional events.

OUTREACH BY CATEGORY

📖	19	ACADEMIA
💵	28	BUSINESS
🏛	42	GOVERNMENT
🌐	36	ccTLDs
👥	33	CIVIL SOCIETY

AFRICAN COUNTRIES: ICANN PARTICIPATION SINCE 2013

5 events
Benin, Cameroon, Gambia, Ghana, Senegal

4 events
Burkina Faso, Ethiopia, Kenya, Rwanda, South Africa, Sudan, Uganda

3 events
Botswana , Congo, Côte d'Ivoire, Liberia, Niger, Nigeria

2 events
Algeria, Mauritania, Mozambique, Tanzania, Togo

1 event
Cape Verde, Burundi, Central Africa Republic, Chad, Comoros, Djibouti, Egypt, Equatorial Guinea, Gabon, Guinea, Madagascar, Mauritius, Morocco, Namibia, Seychelles, Somalia, South Sudan, Swaziland, Tunisia, Zambia, Zimbabwe

4 Supporting Key Regional Initiatives

ICANN has supported key initiatives in Africa, particularly those with a regional dimension. This support comprises ICANN staff participation in capacity building events and financial contribution or travel support to participants. The table below outlines the main initiatives that ICANN has supported since 2013

REGIONAL EVENTS

Year	Events
2013	13
2014	19
2015	24
2016	24
2017	21
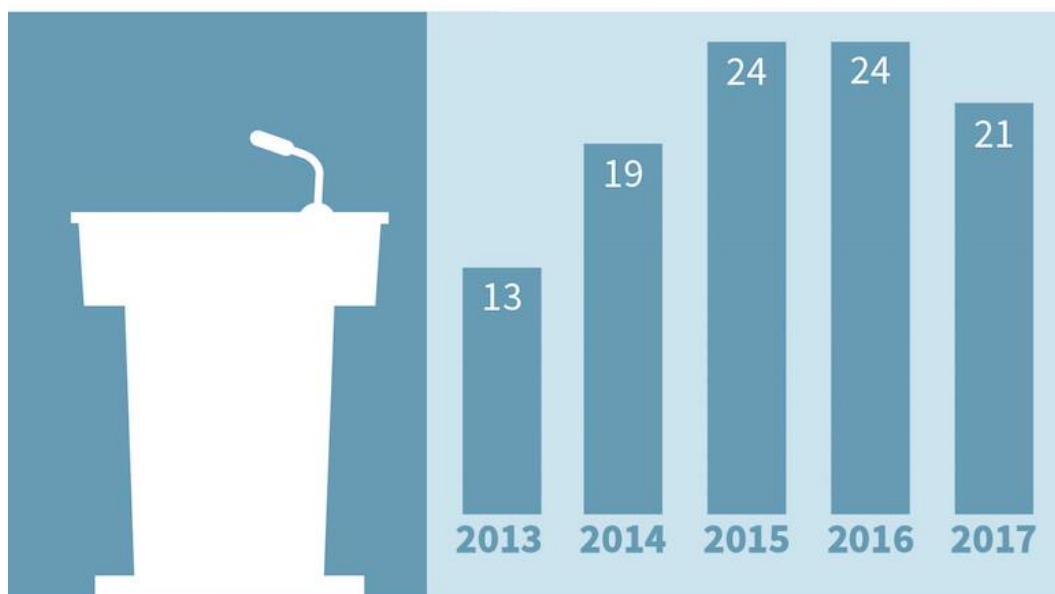
ICANN'S SUPPORT OF KEY REGIONAL INITIATIVES

	FY14	FY15	FY16	FY17	FY18
	5	3	10	13	12

5   Establishment of the ICANN Engagement Center in Nairobi, Kenya

On 24 May 2016, the ICANN Engagement Center in Nairobi was officially opened by the ICT Minister for Kenya, Hon. Joe Mucheru, following the announcement of the office's establishment by the ICANN Board Chair during ICANN55 in Morocco.

ICANN org leaders Tarek Kamel and Sally Costerton, as well as ICANN Board Member Mike Silber, joined in the opening. This milestone of the ICANN globalization agenda was also attended by notable Internet community members from across Africa, including African SO/AC leaders from GAC, AFRALO, NCUC Af* & I* and distinguished early Internet pioneers such as Professor Nii Quaynor, Mouhamet Diop, and Mary Uduma, among others.

The Engagement Center primarily serves as a foothold of the ICANN org in Africa, deepening the ongoing work of the three GSE staff members in Africa. The office has been particularly beneficial for institutional engagement with African stakeholders, public relations, and trainings on issues such as Internet governance and DNS management. The office is engaged in outreach with the AF* (African Internet related associations), governments, and intergovernmental organizations across the continent, as well as in the delegation and re-delegation process.

6 Capacity Building Efforts

6.1 DNSSEC WORKSHOPS

Strengthening ccTLD development in Africa is one of the nine objectives in ICANN's Africa Strategy. The DNSSEC Roadshow is one of the key projects for capacity building and the development of the DNS economy in Africa. It combines desk reviews, country assessments on DNSSEC adoption, and country visits to further promote understanding and implementation of the DNSSEC in African countries.

The project has four phases, the first of which started in February 2013 with eight countries. A final report on this phase was presented in July 2013 during ICANN47 in Durban, South Africa. The second phase was launched from December to June 2014, followed by the third phase from July 2014 to June 2015. The Africa GSE team enrolled new countries in these phases each fiscal year.

The 2016 Africa DNS Market Study showed low domain name registration under ccTLDs in Africa. The project will help with the proper implementation of DNSSEC and contribute to the growth of the Africa Domain Names space. Today, there are **more than 500 people** from 19 countries trained on DNSSEC basics.

The table shown also gives a picture on the countries covered through the DNSSEC Roadshow. For more information on the DNSSEC project, please visit the DNSSEC Africa website.

6.2 DNSSEC quarterly calls with ccTLDs

ICANN has used quarterly calls to help ccTLDs share best practices and solve issues surrounding DNSSEC protocol implementation, as there are a number of countries that have hosted workshops without having DNSSEC employed. The first call took place on 6 October 2015 with representatives from .CI, .BF, .TZ, .SN, .NG, .ZA, .MG, .CM, and .CG. Further calls were made in January 2016, May 2016, September 2016, and February 2017.

A mailing list has also been used as a channel of communication between ccTLDs who have implemented DNSSEC and those who are in the planning phase. A tool to check the deployment of African ccTLDs is available here. The website also contains resources to help both technical and non-technical communities interested in DNSSEC basics and/or implementation.

TLD	Roadshow date	Country	Status	DNSKEY	DS Record date
.km	13-15 September 2017	Comoros	Unsigned		
.td	17-19 January 2017	Chad	Unsigned		
.bj	24-26 August 2016	Benin	Unsigned		
.gh	22-24 March 2016	Ghana	Unsigned		
.ma	29 February - 2 March 2016	Morocco	Signed	2/21/14	2/20/16
.tg	17-19 February 2016	Togo	Unsigned		
.za	8-10 July 2015	South Africa	Signed	12/9/16	12/17/16
.mg	4-6 May 2015	Madagascar	Signed	3/17/16	3/19/16
.cg	11-13 March 2015	Congo	Unsigned		
.ci	25-27 February 2015	Ivory Coast	Unsigned		
.bw	1-3 December 2014	Botswana	Signed	11/22/15	12/4/15
.cm	17-19 September 2014	Cameroon	Unsigned		
.bf	19-21-May 2014	Burkina Faso	Unsigned		
.zm	28-30 April 2014	Zambia	Signed	10/3/15	10/9/15
.sn	19-21 March 2014	Senegal	Signed	9/1/16	10/1/16
.rw	10-12 March 2014	Rwanda	Unsigned		
.tz	18-20 September 2013	Tanzania	Signed	10/13/12	2/9/13
.ng	26-27 June 2013	Nigeria	Unsigned		
.ke	June 11-13, 2013	Kenya	Signed	2/23/14	3/21/14

7 DNS Entrepreneurship

The realigned ICANN Africa Strategy 2016-2020 identifies capacity building as a key objective in strengthening ccTLDs and fostering competition and innovation in the African Domain Name industry. It introduced pilot DNS Business Training and Incubation sessions targeted at African registries, registrars, and young entrepreneurs interested in the domain name space. The sessions aim to provide participants with the necessary business skills and provide exposure to key players in the domain name industry. Since its launch in 2015, 12 countries including Rwanda, Tanzania, Kenya, Zambia, Zimbabwe, Botswana, Ghana, Senegal, Morocco, Congo Brazzaville, and Gabon have received training.

Training examples:

- Annual two-day national training sessions in partnership with ccTLD managers and registrars in select countries across Africa.

- Training sessions structured as workshops, instructor-led tutorials, or panels with case studies.

- Enlisting marketing and business modeling experts, mentors, and volunteers from incubators, partner organizations, and established registries. Tech-hubs were also approached to provide additional help with trainings, especially those on entrepreneurship.

- Utilizing the marketing track from the ICANN DNS Entrepreneurship Center in Egypt.

- Creating content, including domain name business marketing presentations and case studies, with the objective to better equip and position participating startups.

8 Engaging with the Youth in Africa

According to the African Union, 65 percent of Africans are below the age of 35, while the World Economic Forum states that the 10 youngest populations of the world are all in Africa. ICANN has made it a focus to put youth at the center of its regional engagement agenda, as suggested in the Africa Strategy.

In the past five years, ICANN has focused on working with national and regional educational networks (NRENs) and the Association of African Universities (AAU) to bring together administrators, students, and faculty. ICANN has also held workshops and public lectures at universities whenever possible.

8.1 Youth Workshops

Two years ago, ICANN piloted a program of youth workshops – YouthCom – targeted at introducing young people under the age of 30 to ICANN and the Internet ecosystem. This program complements the global ICANN NextGen and Fellowship programs, and aims to strengthen them by creating local youth networks. The first workshop of this series took place in April 2016 in Burkina Faso, followed by two others: Kenya in May 2016 and Benin in December 2016. In 2018, four more workshops will be held in the following four countries: Namibia, Lesotho, Madagascar, and Comoros.

GOALS

- Strengthen youth skills in the Internet governance sphere and prepare future leaders to face the challenges of the digital world in developing countries.

- Develop local partnerships for the continued implementation and development of workshops.

- Promote networking through trainings and the use of online lessons developed by ICANN through the ICANN Learn platform.

KEY TOPICS COVERED

Over the two-day long workshops, various speakers and presenters address a wide range of topics, including:

- Introduction to Internet governance,

- ICANN ecosystem,

- History of the Internet,

- Domain name business (gTLDs, ccTLDs),

- Cybersecurity,

- ICANN Learn platform

MODALITIES FOR IMPLEMENTATION

The YouthCom workshops last two days, and ICANN designates trainers to ensure quality. The selection of beneficiaries is done locally with the support of ICANN. Cost sharing between ICANN and local partners covers expenses, with ICANN supporting international trainers when necessary. Each workshop attracts an average of 30-35 participants.

RESULTS

The trainees:
- Continue their education and enhance their skills online through the ICANN Learn platform, particularly through the relevant African mailing lists.

- Contribute to the emergence of digital governance based on best practices, and positively impact the national digital ecosystem.

- Increase local participation in online debates on Internet governance, particularly on ICANN-related issues.

These efforts have yielded encouraging results. A substantial number of ICANN alumni are now active in their respective local communities, and work regularly with our team to deliver in-class public lectures, workshops, and inaugural national Internet Governance Forums. In addition, multiple higher learning institutions and universities have been open to setting up regular communications with ICANN to better streamline and institutionalize partnerships. These youth projects help build towards a future in which African youth and their communities can fully participate in the Internet ecosystem.

9   DNS Exchange Program

The DNS Exchange Program is in line with the second objective of the Africa Strategy, which seeks to enhance regional and international cooperation with DNS stakeholders and promote DNS operations best practices.

In March 2013, a domain name event was organized in Addis Ababa, Ethiopia with the participation of registrars from Africa and other regions. Capacity building for DNS was mentioned as one of the key actions that can contribute to the development of the regional industry. During ICANN47 in Durban, South Africa, key DNS industry leaders, with the support of African registries and registrars, offered to contribute to capacity building in Africa, by providing training on technical and commercial operations. IP MIRROR, AFILIAS, and ATI have significantly contributed to this program.

AFRINIC worked closely with ICANN in the development of the program alongside AFILIAs and IP Mirror, contributing:

- Travel arrangement for beneficiaries selected by ICANN.

- Per diem allowances to the program beneficiaries.

- Logistical support for the beneficiaries of the program.

In turn, ICANN provided the funds needed for the execution of the program.

EXCHANGE WITH IP MIRROR IN SINGAPORE

Michael Musya (Afriregistrar) and Ajao Oluniyi (Web4Africa) traveled to Singapore from 10 to 23 January 2015 for the program with IP Mirror. The program consisted of:

- Six days (12-15. 18, 23 January) at IP MIRROR.

- One day at SGNIC (16 January).

- Three days (20-22 January) at ICANN's office in Singapore.

- Program with AFILIAS CANADA.

EXCHANGE WITH AFILIAS IN CANADA

Slippy Gregory Mensah of Ghana Dot Com and Wayne Diamond of Diamatrix.co.za, participated in a similar internship program with AFILIAS in Canada in 2015.

At AFILIAS, participants learned about marketing for registrars, promotional programs, point of sale discounts, additional rebates based on volume of sales, renewal rates, customer support, marketing materials, campaigns, and promotion support. Other organizations visited included Tucows, Ryerson University, and CIRA.

The interns noted that the following actions could help improve their activities:

- Well-trained staff are important for a registrar.

- Identification of a unique service by the registrar for branding.

- Important for registrars to have ISO certification.

- Expansion of the reseller base.

- The need to participate in industry events.

- Full system automation.

Additionally, the interns recommended that the program last one week instead of two for time efficiency purposes.

INTRA EXCHANGE WITH ATI TUNISIA

An intra-African ccTLD exchange program took place from 6 to 12 February 2016 in Tunis, Tunisia. The event was hosted by ATI, the .TN ccTLD Registry, and an ICANN-accredited registrar. The participants of this program came from French-speaking countries ccTLDs. The countries in attendance were:

- Burkina Faso: M. Aristide ZOUNGRANA from ARCEP (Autorité de Régulation des Communications Electronique des Postes.

- Cameroon: M. Steve TAMO from ANTIC (Agence Nationale des Technologie de l'Information et de l'Communication).

- Côte d'ivoire: Mme Nicole KADJO from ARTCI (Autorité de régulation des télécommunications/Tic de Côte d'Ivoire).

- Gabon: M. Landry Mexent NDOUMBOU LINGOMBE from ANINF (Agence Nationale des Infrastructures Numériques et des Fréquences).

- Madagascar: M. Haja RAMBOASALAMA from .mg registry

Participants learned about topics such as ccTLD management, domain name business marketing, and domain name dispute resolution. They also discussed relations between the ccTLD and its accredited registrars. The program was an opportunity for participants to share their respective registries activities.

Mr. Jawhar El FERJAOUI, CEO of ATI, and his staff did their best to build an enriching program for the participants.

In summary, four ICANN-accredited registrars from Africa and five ccTLD registries took part in this program between 2013 and 2017.

Moving forward, there is a plan to have ccTLDs from English-speaking countries undergo the same program upon the request of an Africa based registry.

10 Government Engagement and Capacity Building in Africa

Governments provide input and engage with ICANN through the Governmental Advisory Committee (GAC), created under the ICANN Bylaws. The GAC provides public policy advice on ICANN's responsibilities with regard to the Internet's Domain Name System (DNS).

GAC membership consists of national governments and distinct economies recognized in international fora. Multinational governmental and treaty organizations (e. g. African Regional Economic Communities (RECs) and public authorities, including all the UN agencies with a direct interest in global Internet governance such as the ITU, AU, UNESCO and WIPO), are mostly involved in an observer capacity. There are currently 174 GAC members and 35 observers out of which 44 are from Africa.

Over the last five years, the Africa GSE team has been consistent in supporting programs that target both regional and national government and governmental entities. The objective is to create and maintain their awareness of ICANN and the overall Internet governance ecosystem. This has been achieved through:

- Direct country-to-country outreach missions across Africa.

- Participation in governmental meetings through ITU and ATU.

- Direct engagement with various RECs across Africa.

CAPACITY BUILDING FOR GAC MEMBERS AND LAW ENFORCEMENT OFFICERS IN AFRICA

ICANN held the first capacity building workshop for the Africa Governmental Advisory Committee (GAC) members on 23-24 January 2017 in Nairobi, Kenya, in cooperation with GAC Under-Served Regions Working Group (USRWG). The workshop, themed "Harnessing the Potential of the Africa GAC Members for better Participation in ICANN," was held with the support of the Communication Authority and the Government of Kenya.

The workshop was the first of its kind across the globe, and the first regional workshop organized by Nairobi Engagement Office. Göran Marby, ICANN President and CEO, led the ICANN org team that included Government Engagement (GE), GSE, Communications, and the Office of the Chief Technology Officer (OCTO). Thomas Schneider, ICANN GAC Chair at the time, Alice Munyua, Chair of USRWG, and current GAC chair, Manal Ismail, were also present.

Twenty African governments were represented at the meeting along with representatives from various ICANN constituencies including AFRALO, AF* organizations (AFRINIC, AfTLD), as well as local participants from diverse backgrounds led by KENIC (.KE), civil society, academia, and the technical community. Around 100 participants joined the meeting.

A second similar workshop was held alongside ICANN59 in Johannesburg, South Africa, in June 2017. The workshop was organized by ICANN and the Governmental Advisory Committee (GAC) Public Safety working group (PSWG), Under-Served Regions Working Group (USRWG), ZA Domain Name Authority (ZADNA), and South African Police (SAP). Fifty new delegates – 20 from South Africa, 10 from RECs or Southern Africa, and the rest from SSAC, RIRs, GAC and the community – participated in the workshop.

MOTIVATION FOR THE GAC CAPACITY BUILDING WORKSHOPS IN AFRICA

Since the implementation of the Africa Strategy, many African governments have joined the GAC through the team's engagement efforts. Today, the African Union, the African Telecommunications Union, and more than 35 governments are represented in the GAC.

While this is a positive development, the challenge remains in ensuring countries that are not currently represented are encouraged to join their peers at the global policymaking table at ICANN. There is also the need to ensure that the current African GAC members contribute effectively and meaningfully to policymaking at ICANN. The following was pointed out during the GAC workshop:

"Over the years, meaningful and effective participation in GAC policymaking processes, as well as contributions in working groups by Africa GAC members, remains low. This workshop would go a long way in seeking and addressing some of the root causes of this poor participation".

The workshop introduces critical and relevant policy topics to working groups and cross-community working-groups. These topics require the immediate attention of GAC members along with feedback from the African GAC representatives on how to better collaborate, not only with the ICANN African staff and community, but other relevant institutions as well to build a better and stronger domain name industry in Africa.

Key topics covered in GAC Workshops:

- Understanding ICANN and ICANN's Africa Strategy.

- Understanding the role of the GAC within ICANN.

- GAC engagement with other SOs and ACs within ICANN.

- Understanding ccTLD delegation process and requirements.

- New gTLDs.

- Empowered Community.

11 Africa DNS market study

The revised ICANN Africa Strategy 2016-2020 adopted at ICANN52 after its presentation to the community, identified several projects and strategic objectives.

One of the strategic projects (No.15 & 16) identified in the revised strategic plan states:

- Commit and conduct a study on the business feasibility of growing the DNS industry in Africa;

- Commission an observatory to develop new indices for DNS industry growth in Africa.

The study – the first of its kind in Africa – sought to implement these key recommendations and projects in the Africa Strategy plan as identified and approved by the ASWG and the Africa community.

ICANN formally tendered the Request for Proposal (RFP) for the study in December 2015. The goal was to identify and define the strengths and weaknesses in the DNS industry ecosystem in Africa, and develop recommendations on how to advance the industry by realizing potential areas of development. In addition, it asked for analytical findings to help ICANN and players in the African DNS industry develop a roadmap for the development and growth of both ccTLDs and gTLDs in Africa. The outcomes of the study would help set up an observatory that would monitor the growth, development, and emerging needs of the DNS market in Africa.

The final report was released on 24 June 2016 at ICANN59 in South Africa.

The findings of the report, which also serve as next steps for capacity-building in Africa, are highlighted below:

- As of May 2017, there are some 5.1 million domain names associated with Africa. The total annual value of the African Domain Name market is around $52 million.

- Many countries can remove or reduce barriers to Internet industry growth and the domain name market in particular.

- There is considerable potential for domain name market growth in Africa. Low cost recovery (but not zero) fees for registering a domain.

- Encourage rules and policies that do not require domain registrants to have a legal presence in the country and domain names to match the business or personal names.

- Ensure functioning and easy-to-use registry landing pages, including automatic procedures for registration fulfillment and payment. EPP and an online payment gateway are recommended.

The Report recommends the establishment of a DNS Observatory to provide trends and data on the DNS in Africa. The full report can be accessed here.

12 Topical Workshops

Workshops on Domain Names, Trademarks, and user Rights Protection in Africa

Over the past three years, ICANN has organized two topical workshops on trademarks and intellectual property. The first workshop was held in Cotonou, Benin with over 70 participants from 25 countries. The second was held in Harare, Zimbabwe, hosted by the regulator PORTZA.

Participants included government representatives, ccTLD managers, African registrars, African I* such as AFRINIC, AfTLD, and AFRALO, African ICT businesses, and intellectual property and trademark experts from Africa and beyond.

These topical workshops were organized within a framework of eight thematic areas, developed within five panels:

⊙ Strategies for protecting trademarks and domain names.

⊙ Update on the New gTLD Program, Trademark Clearinghouse (TMCH), domain name dispute resolution: a user's view.

⊙ Intellectual property rights, global environment, African environment, country case studies.

⊙ Country dispute resolution mechanisms.

⊙ Dispute resolution best practices.

The second workshop in Harare saw the scope expand to include emerging topics of interest impacting the DNS business in Africa:

⊙ DNSSEC Adoption in Africa, The Case for DNSSEC.

⊙ ICANN Accreditation, Why and How?

⊙ Domain Name Marketing Approaches & Business Models.

Key recommendations from both workshops include:

⊙ Deepening engagement with trademark and intellectual property practitioners in the African continent.

⊙ Trainings on dispute resolution mechanisms across the African continent.

⊙ Greater collaboration between registries and registrars as well as trademark and intellectual property rights in tackling domain name-related disputes.

⊙ Deeper understanding of intellectual property rights and trademark laws among the judges in the African continent.

⊙ Need for sufficient trademark and intellectual property capacity to be built across Africa.

Despite the success and clear need for such workshops in Africa, they have not been implemented every fiscal year due to limited financial resources.

13 Africa DNS Forum

The Africa Domain Name System (AfDNS), one of the flagship initiatives pioneered by Africa through the Africa Strategy, turned five last year. For the edition held on 26-28 July 2017 in Dar es Salaam, Tanzania, and hosted by TzNIC, the theme was: "Taking Stock of the Africa DNS Industry and Planning Ahead."

The first ever edition of the Forum took place at the International Convention Center (ICC) in Durban, South Africa, from 12-13 July 2013. The forum was co-organized by ICANN, the Internet Society (ISOC), and Africa top-level domains (AfTLD) as a pre-workshop to ICANN47, which was also being held at the ICC from 14-18 July 2013.

After Durban, ICANN org, the ICANN community, and global partners made the Africa DNS Forum an annual event with subsequent ones taking place in 2014 (Nigeria, hosted by NIRA), 2015 (Kenya, hosted by KENIC), and 2016 (Morocco, hosted by NTRA).

Over the years, the forum has identified key national and cross-border issues that continue to challenge the growth of the industry, such as:

- Registry and registrar strategies (domain name growth, competitive environment).

- Legal issues (dispute resolutions, cross-border domain registrations).

- Registrar accreditation (ICANN accreditation and ccTLD accreditation in a borderless environment).

- Automation (technical capacity and the resiliency of registries, payment gateways, etc.).

- Governments supporting the growth of ccTLDs.

The 2017 Forum participants were noticeably more informed and prepared. The deliberations on the issues mentioned above were rich, honest, and practical. Delegates understood the need to include more stakeholders, and engage with new audiences that have traditionally been ignored but still impact businesses, directly or indirectly. There was also a good mix of local and international delegates (150 delegates checked-in) while the livestream channel attracted 2,160 unique visitors with 392 joining via the Facebook feed. The meeting was held over two and a half days, and included plenary panels and breakout sessions.

Having reached an important milestone, the forum continues to provide a rich and effective platform for the exchange of ideas that are aimed at furthering the growth of both the DNS and Internet industry in Africa.

The Forum now has a dedicated website at dnsforum.africa .

14 Trends in community participation
Since 2013, there has been an increase in participation by the African community at ICANN Public Meetings. The outreach initiative has significantly contributed to this trend.

14.1   Active participation in ICANN meetings

Meeting	Total Participants	Total Newcomers	Africa Participants	Africa Newcomers
ICANN45	Toronto	1778	573	109	23
ICANN46	Beijing	2502	1185	143	46
ICANN47	Durban	1465	428	415	274
ICANN48	Singapore	1967	555	67	19
ICANN49	Singapore	1940	531	82	32
ICANN50	London	3114	1159	195	82
ICANN51	Los Angeles	2282	693	45	18
ICANN52	Singapore	1794	416	65	18
ICANN53	Buenos Aires	1736	412	62	10
ICANN54	Dublin	2395	622	98	12
ICANN55	Marrakech	2273	1007	956	754
ICANN56	Helsinki	1436	344	95	13
ICANN57	Hyderabad	3182	2180	94	19
ICANN58	Copenhagen	2089	640	117	24
ICANN59	Johannesburg	1353	448	498	328
ICANN60	Abu Dhabi	1929	659	160	40

*African participation estimated based on participant self-selected Country - does not include those that selected multiple Countries.

14.2   ICANN Fellowship Program

AFRICANS PARTICIPATING IN THE FELLOWSHIP PROGRAM

20 — 2012
21 — 2013
38 — 2014
38 — 2015
33 — 2016
52 — 2017
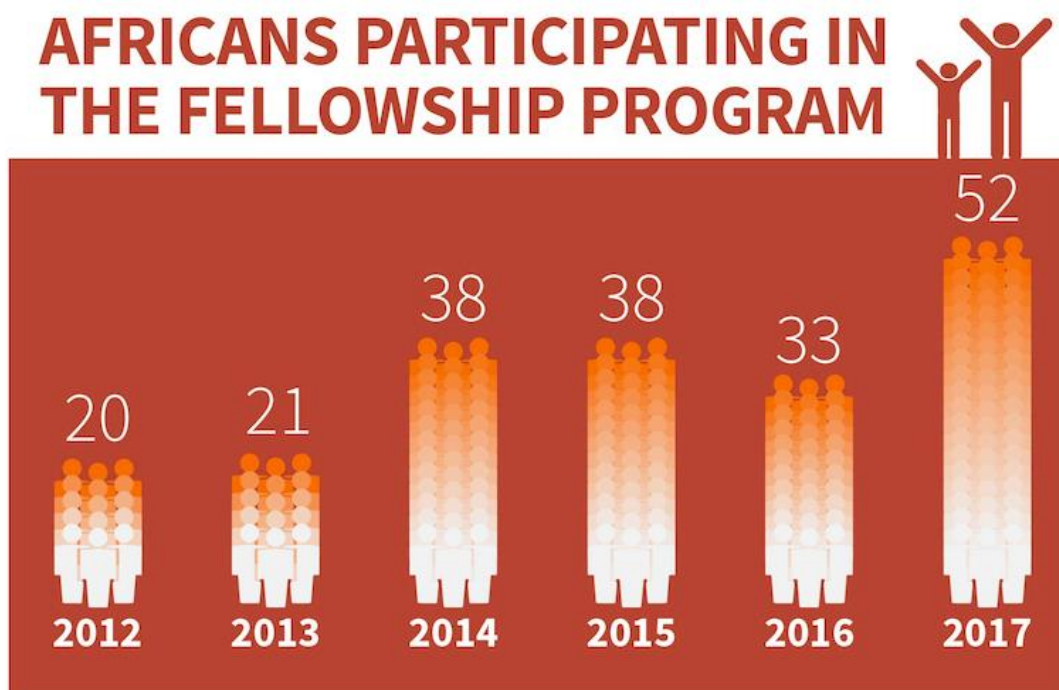
14.3   Participation in SO/ACs

African representation in ICANN Advisory Committees (AC) and Supporting Organizations (SO).

ALAC	GAC	ccNSO Council	GNSO Council	ASO Council
3	44	3	3	3

The GAC is currently chaired by a community member from Africa. Others have also occupied leadership positions in the GAC, ALAC, and on the Board.

14.4   Contribution to Internationalized Domain Names (IDNs)

With the support of ICANN, the African community has contributed to a number of panels, particularly in the Ethiopic Script Label Generation Rules panel – an initiative from the Ethiopian national community members.

Community members have also been involved in the Arabic IDN task force and the Latin Script Label Generation Rules panel.

14.5   Contribution to special working groups or ad-hoc groups

The African community was active during the IANA stewardship transition process, with several members taking leadership roles in working groups. There are also members of the community working actively in the Cross-Community Working Group Work Stream 2.

15 Trends in DNS business (ccTLDs and gTLDs in Africa)

According to the Africa DNS Market Report 2016, the overall use of domain names in Africa is relatively small. Personal domain name registration in Africa is insignificant due to the low Internet uptake and income levels relative to the costs of overseas hosting, which must often be paid for in foreign currency and is not readily available for local citizens. Even in countries with a more vibrant local hosting industry, the number of personal domain names is relatively low.

The local business market and consequent demand for DNS registrations is constrained by a wide range of factors, from the high cost of setting up a business to the lack of local hosting infrastructure. These and many other factors can be seen as part of an 'ecosystem' in which each component of the value chain needs to be in place for the market to function efficiently, which in turn creates demand for local domains. In general, it can be observed

that there are two different markets for domain names in Africa, each with their own characteristics:

⊙ Local/African entities

⊙ Offshore (out of continent) entities

15.1   Local Entities

Domain name registration by African entities mainly takes place in countries where the local hosting industry and web development sector has developed sufficiently to create demand for local domains. These are concentrated in a few countries where many competing networks have access to cost-effective international and national backbones. ***This primarily comprises South Africa, Egypt, Mauritius, Nigeria, Kenya, Zimbabwe, Uganda, Tunisia, and Morocco.*** In addition, the presence of one or more IXPs in each country makes local hosting more viable, which in turn drives up the demand for domain names. Local domain name business also consists of the relatively high number of registrations by African entities of domains under the legacy gTLDs due to their 'intrinsic default' attraction, as well as effective marketing and cost-effective service provision, and lack of reliable (perceived or real) and affordable local domain registration and hosting options within Africa.

15.2   Offshore Entities

Many African ccTLD subdomains are registered by entities located outside of Africa. This is usually done because the special characteristics of the domain results in demand from Special Interest Groups, which may be present in other parts of the world. Or, in other cases, due to multi-national businesses registering domains under the ccTLDs as a strategy for securing their intellectual property interests. In a small number of cases, domains have been registered by the African diaspora. However, the vast majority of off-shore registrations are concentrated in the countries with ccTLDs that are amenable to 'domain hacks,' often using a ccTLD as part of a word.

Further, Section 1.3 of the Report notes that, the African continent top-level DNS address space consists of 54 top-level country code ccTLDs, (of which one, Southern Sudan (SS), is not yet delegated). It also includes five Internationalized Domain Names (IDNs): Egypt (مصر†), Algeria (الجزائر†), Tunisia (تونس†), Sudan (سودان†), and Morocco (المغرب†); and three city codes: .CAPETOWN, .DURBAN and, .JOBURG. ICANN recently delegated .AFRICA, to ZA Central Registry (ZACR). Note that according to responses from the survey, the use of IDNs is reasonably widespread. Analysis shows that at least 46% of registries offer non-Latin scripts and more than a third of registrars (34%) do.

Data from May 2017 indicates that a total of just over 3.5 million domains are active under the African ccTLDs. There are around 1.4 million registrations in the gTLDs by African entities.

SNIPPETS OF THE FINDINGS

■ Registries

☐ 51 functioning ccTLDs

■ Registrar market

☐ 26 countries have only one registrar, usually the registry

- ☐ 13 countries have a fully competitive registrar market

- ■ Registrant market

- ☐ Over 5 million African domains (ccTLD & gTLD)

- ☐ 4.4 domains / 1000 population

- ☐ Value of $52 million p.a.

OVERALL SUMMARY OF KEY FINDINGS

- · Approximately 1% of gTLDs are registered by Africans.

- · The registrant market review identified over 5 million African ccTLD and gTLD domains.

- · Registrations by Africans of gTLD domains total approximately 1.4 million, the bulk of which is 1.2 million .COM domains.

- · The research indicates that high access costs, lack of infrastructure, and the fact that African Internet access is primarily via mobile devices, results in a lower demand for domain names than in other parts of the world.

- · Other broader issues identified as high barriers by respondents include:

  - ☐ Poor dependability of Internet connections.

  - ☐ Unclear or restrictive policy and regulatory environments.

- · Domain name registration by African entities takes place mainly in countries where the local hosting industry and web development sector has developed sufficiently.

- · Compared to other regions, Africa has a very small number of ICANN-accredited registrars. In total, there are only 12 ICANN-accredited registrars in the region.

16 Challenges

Africa is a diverse and unique region. Its 54 countries boast a rich diversity of ethnicities, cultures, and languages across a vast geography. Therefore, effective engagement comes with its share of challenges.

- ☐ Limited financial resources from ICANN org to cover all the current and proposed projects as per the Africa strategic plan.

- ☐ Low participation from the community in global Internet-related discussions.

- ☐ Language barriers for some community members as ICANN publishes content only in the 6 UN languages.

- ☐ Slow responses from requestors in communication with PTI for ccTLD re-delegation request from some countries.

- ☐ Lack of awareness of the local communities at the national level. This is compounded by the fact that some of the ICANN-knowledgeable community members do not share information at the local level.

☐ As an underserved region, many African countries suffer from lack of broadband connectivity to enable increased Internet services, especially in the domain name environment. This, in turn, is characterized by the high cost of connectivity compared to other regions, lower literacy levels, as well as inadequate local content. There is an overall need for better awareness and effective participation by Africa not only within ICANN but the wider Internet governance ecosystem.

Despite the efforts and commitment from ICANN org leadership and the African community, some projects have been slow to implement and many remain in the early formative stages. Limited financial resources, along with difficult logistical and operational processes, have been a contributing factor in the inability to fully realize these goals.

The Africa Strategy requires substantial capital investment and it can only be achieved through collaboration and partnership with the community. ICANN does not have sufficient resources to realize these goals alone, so there is an urgent need for the African community to become more involved. There is an ICANN strategy for Africa, but Africa needs a strategy for ICANN as well.

17 Looking Ahead

○ Challenges and accomplishments of the past five years are the driving factors behind our futures plans and actions.

○ ccTLD issues have been discussed with stakeholders on a case-by-case basis and there is better understanding of country codes top-level domain management in Africa. ICANN will continue support for the DNSSEC implementation.

○ The existence of an engagement center in Africa and the availability of the DNS market study are foundations for ICANN's activities and the development of the DNS market in Africa.

○ Capacity building will be considered a key component of ICANN engagement in Africa. This will be designed towards all stakeholders, specifically those from governments, academia, the private sector, civil society, and youth communities.

○ While noting specific country requests, attention will be focused on regional initiatives in order to maximize the use of resources available for engagement.

○ The continuation of key flagship programs such as the DNS Entrepreneurship and the DNSSEC Roadshows.

○ Strive to leverage and partner with existing regional and sub-regional events and platforms like the Africa Internet Summit and Africa DNS Forum series, to further advance engagement with the community. Efforts will be made to reach out to new audiences, including the youth and academia, and leverage existing online platforms like ICANN Learn as a way to reach the community and enhance capacity building initiatives.

○ In closing, there is a need for greater participation from Africa's technical community in ICANN moving forward, with particular attention paid to emerging issues such as GDPR, DNS abuse, and law enforcement, which can all have an impact on Internet resources in Africa.