AFRICAN NATIONAL REGULATORY AUTHORITY BENCHMARKING

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ABSTRACT: This paper provides an overview of the extent to which regulators are using websites to inform and communicate with the public – including consumers and citizens, the private sector, media and researchers and other governmental and non-governmental organisations.

The study follows a previous regional survey conducted in 2004, (Mahan 2004) that ranked the online component of information provision and facilitation of regulatory processes by National Regulatory Authorities (NRAs) in the communications sector.[1]

The benchmarking assessment documents the incidence of different aspects that are important for a regulator's web presence across the categories of basic information and responsiveness, factual information about the national telecom sector, consumer and citizen information including universal service and complaints procedures, business-related information and forms, and information about the regulator and regulatory processes.

A country's inclusion in the assessment was contingent on the country having an independent authority[2] and the authority having a functioning website. Out of a total of 54 countries in Africa, 30 had regulatory institutions that could be classified as independent with websites and 24 did not have websites. The countries were assessed by region (North, South, Central, East and West Africa, and Island countries).

The benchmarking results show marked differences across countries and regions. Egypt received the highest score and performed well across all categories. The NRAs of Nigeria, Mauritius, Kenya and South Africa were ranked in the top five. Following closely are Uganda, Algeria, Senegal and Tanzania. The top ten NRAs were considered to have had adequate content in support of users being informed and being able to participate in regulatory processes. Overall, the total African regional average was low, with a benchmark indicating that national regulatory authority websites hover between static and emerging levels of information provision.

The analysis provides a summarised overview of the performance of African regulatory websites within the benchmarking criteria. It should be noted that this analysis does not judge websites by their look and feel; the main aim of the analysis rather focuses on the content that is provided and the ease of using or accessing the requisite information. It is hoped that this study will provide African regulators with an insight into what their users will most likely be looking for when searching through their websites. The study also highlights best practices that can be replicated.

Keywords: National Regulatory Authorities, websites, benchmarking

INTRODUCTION

The concept of governance in recent years has evolved with the introduction of information and communication technologies (ICT). Governments can now provide services without the need for the traditional face-to-face interaction. This undoubtedly represents a marked change; more so for African countries whose governance measures are increasingly measured by their ability to reduce the complexity of government through the use of e-governance[3]. In this model, a government is expected to incorporate three types of interactions, namely: government-to-government (G2G), government-to-business (G2B) and government-to-citizen (G2C).

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1   A larger volume providing detailed country comparison across all continents is available via the LIRNE.NET website http://lirne.net/2008/07/benchmarking-nra-websites in draft format and will be published early in 2009.

2   The term independent is used loosely here to refer to an institution mandated as the regulator of the sector, but not functioning in the dual role of a fixed mobile operator or mobile operator or ministry

3   Most lending institutions such as the World Bank and International Monetary Fund (IMF) now use e-governance as a measure in determining financing and development improvement within a country.

It is not surprising therefore that e-government has become an important theme and benchmark for the assessment of development via the ability to facilitate government services through ICT initiatives such as web portals. As most African national regulatory authorities (NRAs) already have a website or are in the process of establishing one, it is clear that this is viewed as an important or necessary activity. A website provides a fundamental window to realise the true spirit of e-government. A properly built website provides citizens and other stakeholders with one of the best interfaces to the regulatory agency. It allows for self-service around the clock and reduces long queues and time, as is evident in many African government agencies. In addition, international and local businesses can search for and even apply for certain facilities online without having to make a physical journey to the government agency. A website thus becomes a virtual representation of the entire organisation in cyberspace, (Wattegama 2007).

As Mahan (2005) correctly observes, the importance of a national telecom regulatory authority website cannot be underestimated. A NRA is one of the key government agencies in any country. It is the apex body that is largely responsible for the healthy growth of the telecom sector and the diffusion of telecom services to the public at all levels. It serves a large group of stakeholders varying from citizens and consumers to incumbent operators and prospective investors. Regulators set standards for transparency and accountability, thus a well-designed and informative website will also demonstrate the extent and facility with which the NRA uses the technologies and services it regulates. A well-maintained website increases confidence in the regulator's skills and capabilities and thus provides a window through which to evaluate the level of e-governance within a country.

While there exists a plethora of e-government initiatives taking place within African governments, supported by international agencies, actual analysis of the type of services provided using e-based technologies has received little attention or speculation as to what constitutes effective components. Focusing on African telecom regulatory authorities, this survey follows from a similar study carried out during March-April 2004, (Mahan 2005), which focused on 22 African NRA websites. Unlike the previous study, however, this study evaluates a total of 30 countries out of 54 countries in Africa. The increase in number no doubt marks an increase over the past four years in the use of websites as a tool of regulation.
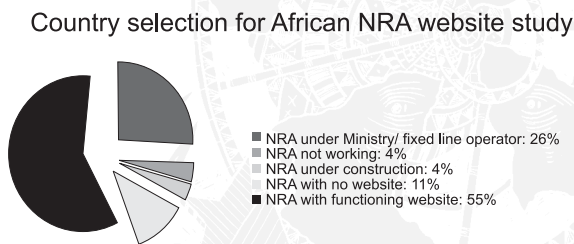
Finally, it is recognised that a website presence indicator for NRAs cannot capture the access that citizens have to these websites, nor can it capture the overall effectiveness, efficiency or transparency of the regulator. What this benchmarking process does attempt, however, is to clarify the type of information and level of interactivity and in so doing assess a country's progress in its e-governance initiatives.

METHODOLOGY

The section below provides a summary of the main elements of the methodology that was utilised. Each of the 54 countries in Africa was assessed for the existence of a telecom regulator. This was done through gathering information at the International Telecommunication Union (ITU) website, or through the regional groupings such as ECOWAS, EAC, COMESA, SADC and AU. As noted by Hargittai (2000), assessing for presence through search engines can be deceptive, therefore every effort was made to contact regulatory authorities or send email to contacts residing in those countries to ascertain missing information.

An initial attempt was also made to determine whether an NRA was independent, but it became quickly apparent that it was difficult to draw the line between the independent and quasi-independent. The second and perhaps more important reason was that the methodology of this survey is not intended to evaluate the performance of the NRA per se, but rather the performance of the NRA's website. It was therefore decided that a country's inclusion would be based on the country having an independent regulatory authority not linked to the operator or ministry, and having a functioning website. Each website was then checked to see if it was at a stage in which it was productive to evaluate for a comparative survey. In a few instances, websites were still under construction and thus were not included. Also, if a government agency (usually a ministry) is engaged in carrying out the duties of the national regulator, it was not considered for benchmarking purposes, nor was it considered if the regulatory function was combined with the fixed-line telecom operator's website. Figure 1 indicates the percentage of countries included in this study.

FIGURE 1: COUNTRY SELECTION

Country selection for African NRA website study

■ NRA under Ministry/ fixed line operator: 26%
■ NRA not working: 4%
■ NRA under construction: 4%
■ NRA with no website: 11%
■ NRA with functioning website: 55%

Of a total of 54 countries in Africa, 30 were found to have regulatory institutions with websites that could be classified as independent, accounting for 55%, while 24 did not have websites, accounting for 45% of the countries in Africa.

In order to capture both the availability of information and a user's ability to use the information, each website was assessed across different categories of information provision, namely: Factual Information and news, Consumer and Citizen information, Business information, General and Universal Access. Table 1 below provides a summarised overview of the ranking categories.

	Category	Sub-category
1	Factual information and news	Regulatory acts, legislation, laws
		Statistical information and sector indicators
		Sector news
2	Consumer and citizen information	Consumer information (other than rights, eg tariff information, new numbering plans, etc.)
		Consumer and citizen rights information
		Complaints process
		Information about public hearings
		Statistical information on consumer attention and complaints resolution
3	Business information	Equipment Certification
		Market entry details (such as licensing)
		Interconnection Information
		White papers/ Consultancy papers
		Scare resources (eg spectrum allocation)
4	General	Mission Statement
		Local Languages
		Links to local and international sites
		Contact details of key officials (phone number, email, or online contact form)
		Ease of use (navigation tools, website map, search engine, overall organisation)
		Organisation chart (or equivalent)
5	Universal service / Universal access	Policy information, reports and plans

To achieve a consistent ranking[4], each element was given a score of 1 to 4 based on the degree of richness. The stages were identified as follows:

1. Emerging: Only basic and largely static information is available.

2. Enhanced: Content and information is updated regularly, and information is available not only in its original format (such as acts and legislation) but is also explained and digested.

3. Interactive: Users can download forms, contact officials and make requests. Available information has further value-added, such as being hyper-linked to relevant legislation.

4. Transactional: Users can submit forms online – for example to request information, or to submit a request for licence form.

The ranking was based on qualitative evidence, but subjectivity was reduced by using the above-defined categories rather than merely relying on perceptions.

FINDINGS

This study evidences significant differences among the NRA websites in terms of information provision, usability and functionality. The websites that were assessed as being the most functional, well-designed and with the best range of user-friendly information are on the left side of Figure 2.

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4   For a detailed analysis of the methodology used in the ranking, please see draft working papers via: http://lirne.net/2008/07/benchmarking-nra-websites/. Note: The ranking of the elements is derived from the 2001 UN "Benchmarking E-government" report categories. Each ranking should examine the information offered in terms of its being up to date and facilitating inclusive and informed regulatory processes.

Country Benchmark – Africa
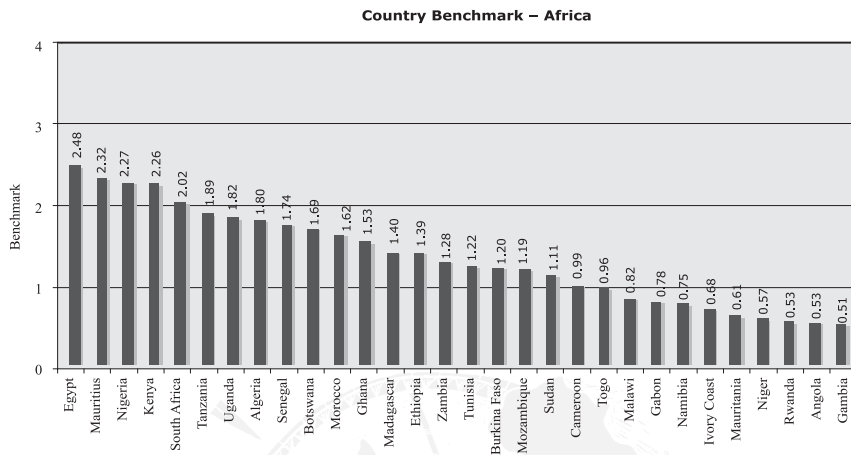
As shown in Figure 2, the NRA of Egypt scored the highest ranking (score of 2.48) and was assessed to be almost fully at the interactive level. In addition, this NRA had an overall average score of the highest benchmark across all sub-categories, with several of the sub-categories benchmarked as interactive (score of 3) – having most of the items linked, forms in PDF or online, downloaded and hyper-linked to relevant legislation. Key best practices of the National Telecommunication Regulatory Authority (NTRA) of Egypt include a clear awareness of who the client/users are and what they need.

This is one of the only websites where one does not have to search within several banner headings to find the key service categories. The entire website is organised under clear service provision categories such as Frequency Spectrum, Type Approvals, Licensing and Regulation, with logical sub-categories of functions and activities that a prospective client would need.

Table 2 provides an example of the main sub-categories provided within the websites and the sub-links within the individual categories;

Table 2: Best practice example of links under categories from the NRA of Egypt's NTRA.

| Frequency Spectrum	Type Approvals	Licensing	Regulations
Chart	Procedures	Service Procedures	Interconnection Framework
Guidelines for importers	Type Approval List	Telecom Service Forms	Competition Policy
Guidelines for users	Regulations	WiFi Form	Global Peering Exchange
Regulations	For Importer	Applications Form	Inmarsat Service Providers
For Importers	For Manufacturer		VSAT Regulations
Forms	Forms		Licensed Telecom Chart
Client Docs	Type Approval Form		Class C Licence
Importers Doc	Conformity Form		Standard Licence
Technical Forms	Importers Requisition Form		Universal Service

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As illustrated in Table 2, the Egyptian NRA not only made clear choices of ensuring that each subcategory provided adequate information but in addition ensured that items such as regulations and forms for each category were linked. The majority of the NRA websites in Africa had items such as Regulation as a separate category, with all regulations of the sector placed in this category. The Egyptian NRA website thus serves as a best practice website for other NRAs to emulate.

Nigeria, Mauritius, Kenya and South Africa were also benchmarked as providing an enhanced level of information via their NRA websites. Following closely were Uganda, Algeria, Senegal and Tanzania. Together, these NRA websites were considered to have had adequate content that allowed the user to make informed decisions. The content in most of the categories was available via downloads. In contrast, they significantly differed from Egypt in the interactivity of the content such as fewer hyper-links to relevant legislation and lack of variety of forms available. In addition the Egyptian website had most of its functional categories clearly organised for the user. The nine websites scoring between 1.74 and 2.48 (out of 4, that is ranging more towards the rank of enhanced information provision) exhibited clear efforts in providing detailed content, relevant topic banners and submenu categories within each banner, simplified explanations of the function of each content provided, downloadable content in PDF, and so forth. In addition, when compared to the other NRAs, these provided a good detail of information on the legal and regulatory framework used, the ongoing cases and hearings and recent legislative changes.

The NRA websites for the Ivory Coast, Rwanda, Togo, Gambia, Niger, Mauritania and Angola performed poorly. These websites simply did not provide relevant content other than basic introductions and very little digested or descriptive information; in many instances having no information at all.

There were nine NRA websites benchmarked with a category of enhanced or close to enhanced, accounting for 30% of the NRA websites evaluated in Africa, with the remaining 70% benchmarked as static. When compared to the Mahan (2005) rankings based on data from 2004, there are few differences, with the same NRAs having performed well. Figure 3 provides a comparison of the countries that were benchmarked in 2004 and 2008.

FIGURE 3: COUNTRY DATA COMPARISON (2004 AND 2008)

COMPARISON DATA (MAHAN) 2004 AND KERRETTS (2008)

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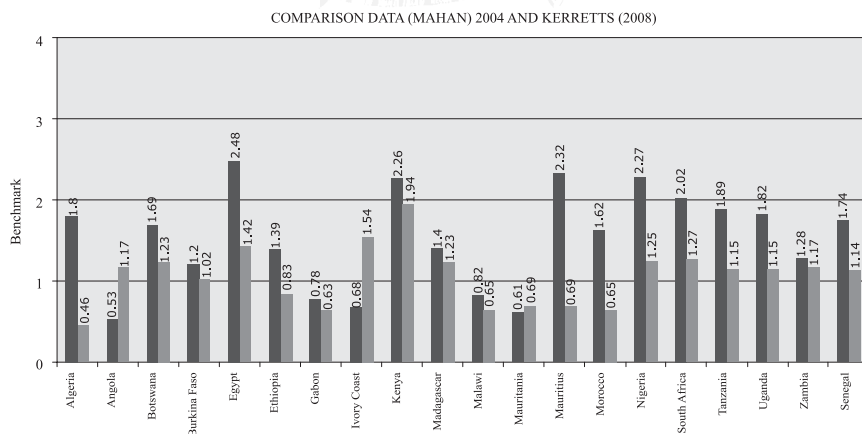
The benchmark scores as shown above show a marked improvement from 2004. In 2004 Mauritius was benchmarked as one of the NRA websites that did not provide relevant content other than basic information; in this assessment it has moved up the benchmark category, being rated as one of the best NRA websites. Egypt's website also shows a big improvement, having been ranked at 1.42 and moving up to 2.48 in 2008. The Zambian website which had a Universal Access category and information in 2004 had no information updated or provided as at the current review of NRA websites. Tanzania remained at the same benchmark level while the rest marked significant improvements, providing more content and information than for the previous review of 2004.

It should be noted, however, that the overall benchmark values shown for each country are only snapshots of the overall situation and do not depict the actual differences in the content and the ability of the websites to inform and communicate to the public, citizens and other government and non-governmental agencies. As evidenced below each NRA differed significantly in the type of content provided. The following sections highlight best practice benchmarks and delve in more detail into each section and subcategory that was benchmarked.

Factual Information

A common denominator for compared NRA websites is the provision of the main legislative background information, statistical information such as sector indicators and sector news. Figure 4 provides the ranking assessment for this category across the 30 countries evaluated in Africa.

Figure 4: Factual Information
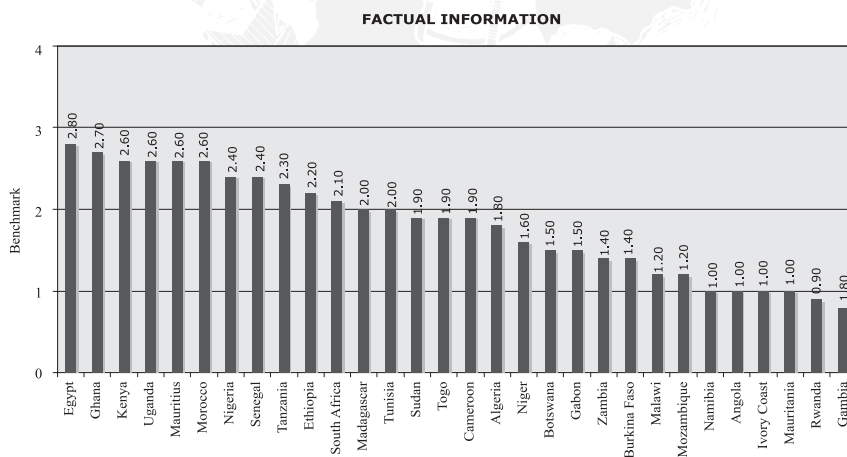
Overall the best websites in this category were Egypt, Ghana, Kenya, Uganda, Mauritius and Morocco, each having a benchmark at the enhanced level and bordering on being interactive. This implies that content was regularly updated, informative, hyper-linked and could be easily downloaded (benchmark scores ranging from 2.6 to 2.8).

However, the actual benchmark within each subsection differed substantially. For the news section, Rwanda, Mauritania, Burkina Faso and Nigeria had scanty information on sector news, whereas in the Southern African and Western African region, Namibia and Gambia had

no news. The news information provided by other countries related to activities being handled by the regulator. The type of news provided ranged from news on press reports made by the regulator, such as press statements by the Directors General and press releases of notices to the operators or change of policy and/or legislation.

Of exception were the Egyptian, Tanzanian, South African, Mauritian and Gabonese NRA websites, where news on the sector was also linked to the press clippings and all news items were categorised with past years also available for review. The Mauritius news was archived by year and dated as far back as 2003. Sudan, Mauritius and Morocco were the only NRAs to provide comprehensive news on what was happening internationally (with the Morocco NRA categorising this under the Events banner with links to International, National and Local banners).

Overall, the news category did not refer to events about the operators and their activities. Nor did it convey information on investment discussions that have been taking place in the region (the Kenyan NRA was the only one to offer a downloadable guide for investors). A quick read of any of the regions' newspapers online reveals a great number of events taking place in the sector yet in spite of this, most NRAs did not have up-to-date information.

The location of the news section on the website was similar across all countries with a few exceptions. Most countries had a news section on the centre column of the home page, or the left-hand side of the website, or at the top level with a clear banner marked news (see Kenya, Uganda, South Africa). Many of the NRAs had also placed the most recent news on the centre column of the home page (Tanzania, Egypt) and had included latest consultative documents and press releases on the same section. Others marked items such as Press Releases or What's New? or Recent Publications (see Tanzania, Sudan, Ethiopia, Botswana).

Statistical indicators and sector indicators were poorly provided across all countries. Where provided, data was often incomplete and focused mainly on tariffs – some as old as 2006 (Namibia), and/or the list of licensed ISPs and mobile operators (Botswana). Some NRA websites, such as Rwanda, did not provide any information. Most were rated as 0 or 1. Exceptions were the NRA websites for Uganda, Egypt, Ghana, Senegal and Morocco, for which the statistics provided were detailed and offered users full information on the current level of telecom penetration with different indices. This was a marked improvement from the previous assessment - see Mahan (2005), for which the Ugandan website showed no statistics. The Ethiopian NRA provided a comparative analysis of the sector with statistical information on other countries in sub-Saharan Africa; this was the only NRA to do so.

Given that this information is readily available, most NRAs have neglected this important area on their websites. Significantly disappointing was the South African website where no statistical information was found, yet overall its rankings are significantly higher than other African countries. This also applied to Ivory Coast, Gambia, Gabon, Botswana, Zambia, Sudan, Mauritius and Mauritania, where no comparative statistical information on their respective data was provided online.

A common denominator for the compared websites is the provision of main legislative background information. As this is a basic category of information that is readily available, it was not surprising to find that all the NRA websites reviewed had provided this information. In addition, most of the legislative documents could be downloaded for easy reading in PDF. Two NRAs stand out as best practice in this subcategory:

South Africa's NRA website offered access to legislative documents currently in progress, pending and in force. This provides the user with sufficient knowledge to know what policies are expected.

Egypt's NRA website has organised the legislative documents in the relevant service categories. Thus under the banner of Frequency, one would find the legislation relating to frequency allocation.

Few NRAs, however, provided relevant online information regarding the legislative framework for investment and for related fields such as guidelines to personal data protection. While all countries did avail the regulatory and policy documents, very few took the initiative to also provide a summative analysis of the policies. It seems therefore that the assumption is that all readers understand legal documentation.

CONSUMBER AND CITIZEN INFORMATION BENCHMARK

The objective of this section is to assess the degree to which NRA websites cater to the needs of the end-consumers and provide information to citizens. Special emphasis was given to evaluate the type of consumer rights information available, the complaint process in place, information about public hearings and statistical information on consumer attention and complaints resolution.

FIGURE 5: CONSUMER AND CITIZEN INFORMATION.

CONSUMER & CITIZEN INFO.
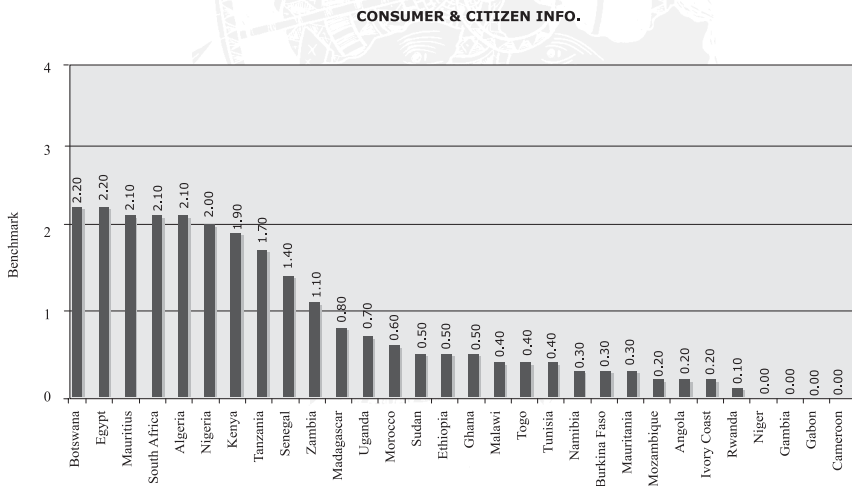
As shown in Figure 5, the websites that performed well were those of Botswana, Egypt, South Africa, Mauritius, Algeria, Kenya and Tanzania. These websites had content that could be termed as complete, up-to-date and contextualised – with benchmarks ranging between 2 and 2.20. Most of the information on consumer affairs was also downloadable. However, when each category is viewed in detail significant differences occur in the type of content provided.

For the category of consumer and citizen information, Kenya scored the highest (3.5), falling between interactive and transactional. A best practice here was the provision of tariff information and numbering plans under the consumer affairs banner. Almost all other benchmarked countries had this information located in the statistics section or under the news

headings and press release statements. Consumers would therefore have to look through the entire website to find the information likely to be the most relevant to them. In addition, Kenyan tariff information could be downloaded and was compared over a number of years. Egypt followed closely, scoring a benchmark of 3 (interactive).

While Egypt's website had no dedicated consumer affairs section, the entire website was consumer-centric. Thus consumer information, such as numbering and tariffs, was clearly highlighted with a section on FAQs provided under each banner heading. South Africa, Tanzania and Ghana also scored highly with content being rated between enhanced and interactive (benchmarks of 2 and 2.5 respectively). NRA websites providing no information in this subcategory in Eastern and Southern Africa were Rwanda, Uganda, Namibia, Ethiopia, Cameroon and Gabon. For West and North Africa, the websites for Burkina Faso, Ivory Coast, Togo, Nigeria and Gambia had no information in this category.

Largely disregarded by all NRAs evaluated was the issue of consumer and citizen rights. Egypt scored the highest with a benchmark of 3 and Botswana and Tanzania followed in this category with a benchmark of 2.5 (falling between enhanced and interactive). Of significant concern was a lack of information on quality of service parameters used to evaluate operators, which is a basic role of the regulatory agency; except for Botswana and Egypt, this aspect was hardly covered by the other NRAs online. In addition, all the NRAs, except for Egypt, did not cover information on possible hazards of equipment.

The section for complaints process varied across the NRAs. Scoring a benchmark of between enhanced and interactional (3.5) were Botswana and Tanzania, whereas Egypt rated at 3 and Mauritius at 2.5. Botswana and Mauritius provided a downloadable complaints management procedure while Tanzania provided a complaints form both in Swahili and English. These four NRAs were considered best practice in this section. Fourteen NRAs provided no complaints forms, accounting for more than 40% of the NRAs analysed. Nonetheless, on the complaints process most countries assumed this to be an aspect that should either be written directly to the Director General of the NRA, providing a post box or email address, while others provided an online form to be completed, with no particular address as to where this should be directed.

On the issue of public hearings the Kenyan website stood out, having the public hearings banner categorised into current, past and ongoing, allowing the user to know what has taken place and is currently being reviewed. The South African NRA also had a public comments section allowing users to make an online comment on any of the public hearings. The South African NRA also had its public notices well laid out, providing details of the public hearings or amendments about to take place, links to the various laws concerned, the process in place and what it would affect. This was exceptional among all the sites reviewed. Both of these two websites benchmarked a score of 3.5. The Botswana website also stood out by having a rulings and judgements section, although in all the three cases this section was not directly under the consumer affairs banner.

Statistical information on consumer attention and complaints resolution was not covered by the NRAs except for Mauritius, which provided a downloadable PDF document that analysed the complaints received and resolutions resolved during the year. The Nigerian NRA also had a best practice benchmark documenting and archiving complaints received, going back to 2005.

Overall, what becomes evident within this section is that consumers are required to obtain information relevant to their needs that is scattered across the different banner headings

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rather than located in one place. Further, information on number portability, setting of call centres and telephone number coding, which is available in most of the websites reviewed by Wattegama (2007) for the Asian region, is not provided by the African NRAs. No doubt the issue of consumer and citizen information still has a long way to go. This may be attributed to the fact that Internet penetration is still very low and therefore perceived as an unlikely means of citizen participation and information retrieval.[5]

BUSINESS INFORMATION BENCHMARK

This section deals with the information usually sought by business firms and investors, such as market entry details, interconnection information, scarce resource allocation, process for equipment certification and any publications/consultancy work done in the area. Figure 6 below depicts the individual benchmark scores for this category.

FIGURE 6: BUSINESS INFORMATION
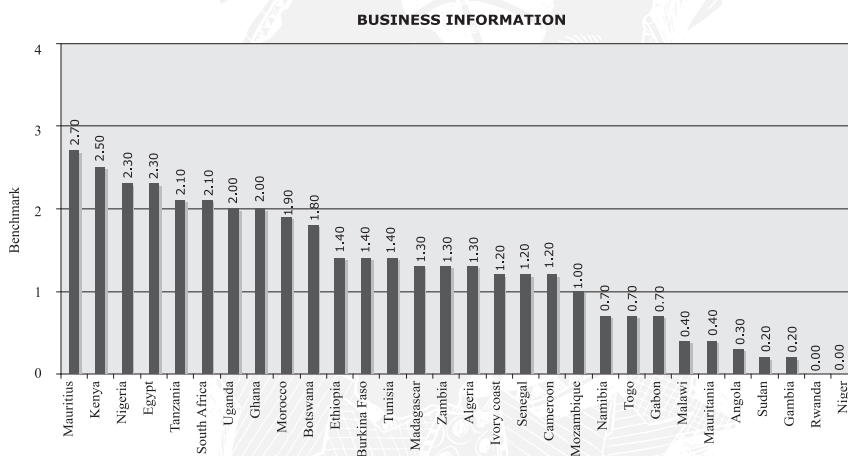
Business information was a strong category across all websites. Even those websites which scored lowest in overall ranking offered licensing forms available for download. Mauritius, Kenya, Nigeria, Egypt, Tanzania, South Africa, Uganda and Ghana scored the highest benchmarks, as shown in Figure 6, having content that was rated between enhanced and interactive. The NRAs of Angola, Sudan, Gambia, Rwanda and Niger scored poorly, with almost no information provided within this category.

As for the other categories reviewed, actual content within this category differed. For equipment certification, the websites for Kenya, Tanzania, Ethiopia, Mauritius, Zambia and Botswana had the highest scores, rating between interactive and transactional at 3.5. These websites cover detailed aspects of equipment certification and provide good best practices for other NRAs. For example, the Kenyan NRA had this content located on the standards and type approval banner. The content included list of equipment approved and rejected in Kenya,

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5   However, this presumes that only individuals are obtaining and using such information. In reality, NGOs, the media and other community intermediaries may use the NRA website to obtain information then to be more widely disseminated.

approval fees and forms. The Tanzanian NRA in addition had a checklist of equipment certification form. Those not scoring highly in this section include Malawi, Mozambique, Namibia, Angola, Rwanda, Cameroon, Gabon and South Africa from the Southern African and Eastern African regions; Tunisia, Egypt, Morocco and Mauritania from the North African region; and Ivory Coast, Senegal, Togo, Nigeria and Gambia from the West African region. None of these NRAs had any information available on this topic.

Information on scarce resources such spectrum allocation was available and well explained on the websites for Egypt, Niger, Ghana, South Africa, Kenya, and Uganda, which stood out with details on procedures for monitoring and policy information on spectrum.

On market entry information, Egypt scored a benchmark of 4, rating at enhanced. This was the only category to receive a rating of enhanced within Africa. Tanzania, Mauritius, Kenya, Namibia, South Africa and Botswana followed closely scoring a benchmark of between interactive and transactional (rating at 3.5). These NRAs had market entry details such as licensing procedures that were accompanied by forms. Most of the NRAs did not provide a reading on the telecom market and what needs to be done. Namibia had an interesting link to the Tourist board of Namibia while Mauritius provided information on the meaning of licences and what they were for.

For interconnection, almost none of the NRA websites provided information except for Algeria, Tunisia, Egypt, Nigeria, Uganda and South Africa, the latter having exceptionally detailed information on interconnection agreements made between different service providers.

Lacking on most of the websites were consultative papers, with the exception of Mauritius and Algeria which both had a large number of consultancy publications and Tanzania which had one paper on "Telephone Tariffs Trend Analysis" (2000-2006).

GENERAL INFORMATION BENCHMARK

This section, general information, looks for more general features such as mission statement, local language translation, links to other national and international sites, contact details of key officials, ease of navigation and organisation chart.

FIGURE 7: GENERAL INFORMATION benchmark

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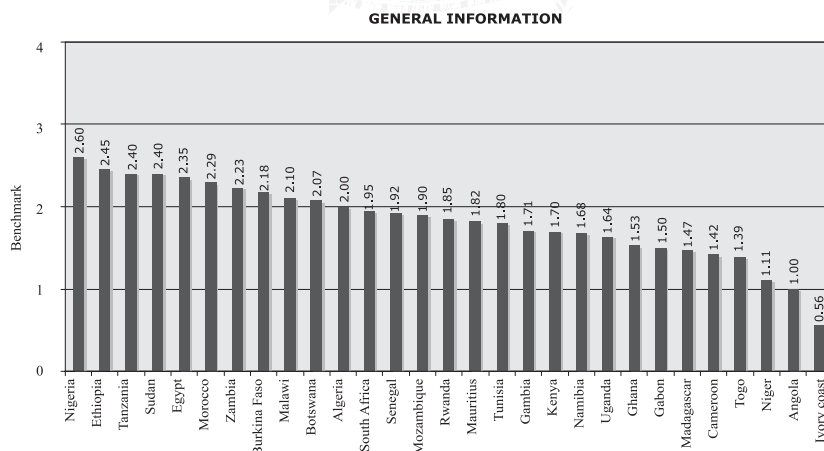
As illustrated in Figure 7, the benchmark scores within this category differ significantly when compared to the performance in the other categories. NRA websites that have been ranked poorly across the other categories have generally fared better in the general information category. Most of the websites were generous in providing information about the regulator and the regulatory agency, such as organisational charts and mission statements, as well as links to local and international sites.

Almost all websites had content on the mission statement of the NRA. In addition, many included a historical account of the founding of the NRA and its main objectives within the telecom sector.

While there was effort made to provide information on the organisation of the NRA, the depiction of an organogram within the NRA was only done by slightly more than half of the thirty NRAs analysed. Malawi, Namibia, Cameroon, Gabon and Rwanda in East and Southern Africa provided no organogram, nor did Tunisia, Mauritania, Ivory Coast, Togo, Niger and Gambia in West and North Africa.

The use of links to other institutions both locally and internationally was also adequately detailed by most websites. The Ethiopian, Sudan and Angola websites provided long lists of links to most of the international telecom institutions. This was in contrast to the minimalist content these NRAs provided in other benchmarked categories. In addition, the NRAs of Egypt, Morocco, Nigeria and Burkina Faso had categorised the links section into local, international and national.

The category of contacts differed across the NRAs benchmarked. While most provided contact details of the regulator, not many made the effort to provide contact details of key officials within the regulatory institution. Tanzania, Rwanda and Sudan were the exceptions in East Africa, while in the South and West African regions, the Zambian, South African and Nigerian NRAs stood out. These NRAs had detailed contacts and email addresses of each head of the department within the NRA.

While effort was made to check what the national language of the country was before checking on the aspect of local language, this was difficult to ascertain. Some countries had what they called national languages and then a list of local languages. For this reason, it was decided that national languages would be utilised as the criteria. Thus if a country had more than one national language cited in the UN country analysis then this would be the criterion used on the website in determining if one or more languages were utilised.

For example: In East Africa, only Tanzania included Swahili (a language also cited as the national language in Kenya) text in one of the categories – consumer complaints. It should be noted that 99% of Tanzanians speak Swahili, a language that is also used as a business language in the country. All the other sections were in English. In Rwanda, both French and English were given as options on the website (languages spoken by 7% of the population); however, Kinyaruanda, a language noted as the national language and spoken by 100% of the population, was not provided, despite the fact that all government paperwork is done in these three languages. The Sudanese NRA stood out, having English, French and Arabic as language options with all three cited as national languages. In Southern Africa, Angolan and Mozambican websites were only in Portuguese.

The overall ease and use of navigation across all the websites varied. Four websites stood out, however, from the 30 NRAs evaluated, namely: Egypt, South Africa, Mauritius and Nigeria – providing ease of drop-down menus at the top of the page and links with well-

categorised sections within each topic. Morocco, Algeria, Senegal, Uganda, Kenya and Tanzania also had well-designed websites, with clear banner headings that facilitated locating information.

NRAs that could do with some improvement include Sudan, which was crowded with information in its centre and left-hand columns, making it confusing initially to get around. The Tanzanian website also had a lot of information crowded onto the main pages, rather than using the menu bars available in the left-hand columns. The NRAs of Mauritania, Ivory Coast, Niger, Gabon, Rwanda and Cameroon, while neat had minimal information with few banner headings; this made it difficult to find relevant information.

UNIVERSAL ACCESS BENCHMARK

This final section, universal access, addresses policy information, reports and plans on universal access. As shown in Figure 8, most NRAs benchmarked relatively low marks compared to the other categories.

In East and Southern Africa, Kenya, Uganda Mauritius and Mozambique stood out, having dedicated banner headings for this section highlighting relevant policy and activities being undertaken. In addition, the Uganda NRA provided a diagrammatic representation of the process while the Tanzania NRA made mention of its UA policy but provided no details.

FIGURE 8: UNIVERSAL ACCESS BENCHMARK
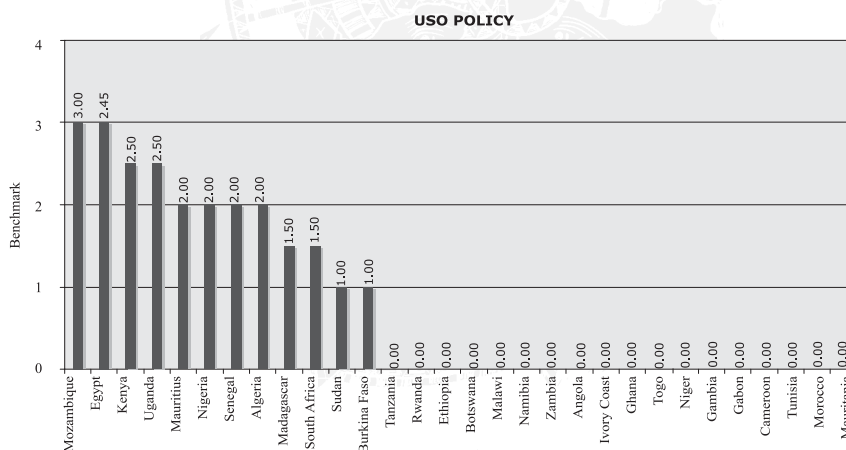
CONCLUSION AND RECOMMENDATIONS

On the basis of the findings of this survey, an immediate observation is the number of websites that have come under review. Out of the 54 countries in Africa, only 55% (30) were reviewed as having independent regulatory bodies with a website. This is comparative to Asia - see Wattegama (2007) where three out of ten NRAs, or 29%, did not have a website as at 2005. While it may be unfair to attribute the lack of this information to lack of understanding of the role of regulator, and that this may be due to a lack of other issues such as resources and lack of regulatory body institutions that are in place, it nevertheless indicates a need for improvement and raises concerns regarding e-governance.

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Another noteworthy observation is the issue of language presentation of the NRA. While almost all websites have presented their information in either French, English or Arabic, it is surprising that none has made the effort to present the information in local languages, given that the majority of the African populace speaks at least more than one local language and has a common local language understood by many. This is therefore an issue for reconciliation given that the issue of literacy, while classified in the international languages, has a different bearing when taken in the context of local languages.

In addition, given that the three main international languages dominate Africa (English, French and Arabic) effort should be made to ensure that the options for viewing the NRA websites in other languages are available. Of exception are the North African NRA websites which all provided options for English or French as an alternative to Arabic. It is recommended that African NRAs make effort to provide these two languages options in their websites.

The type of information provided across the African sites also raises issues of concern. While there is a remarkable improvement from the last review done by Mahan (2005), information still remains largely factual with very little effort made to explain and allow the reader to digest the information provided. Where information was available for downloading, this was mostly for legal and policy documentation, but even this was explained separately. Disappointing across all the sites was a lack of effort made to analyse the statistical information laid out on the websites. Most of the information was laid out without any effort for comparative analysis across all the years. This type of information would be very informative to many stakeholders and in addition, provides information for researchers and journalists internationally on the development growth of a country.

In addition, except for information regarding licensing procedures, many websites lacked the information usually sought by businesses and investors. For example, none of the websites had a list of equipment that was prohibited in the country, nor did they have an analysis of the telecom environment in their respective countries.

Presenting information that was useful to consumers is another category that was also neglected by the majority of the African NRAs. For example, information about consumer complaints was scantily available in a few lines, rather than an explanation of what one needs to do for different scenarios. The Kenyan NRA website offers a section on consumer complaints procedures and information on current and ongoing complaints. Most of the NRAs therefore neglected information on the type of complaints a consumer can make, whom to contact in the different scenarios and toll-free numbers for making complaints (not one NRA had a toll free number available). Given the prevalence of mobile phones now in Africa, it would be expected that the regulators, in conjunction with the operators, provide a toll-free number for handling complaints.

In addition, content on quality of service (QoS) parameters and health and environment issues were covered by fewer than three of the 30 NRAs reviewed. Given that websites are meant to be a window into what is happening both within the internal regulatory environment and external environment, these two aspects are strongly encouraged as content that should be readily available for consumers to make well-informed decisions.

Revealing and in need of improvement was the level of the NRA to participate as a vehicle for participating in regulatory processes. Nearly all the websites had an overall ranking of between emerging and enhanced levels – ie as having largely static information that is updated

regularly but not explained and digested. Where information was downloadable this was mostly limited to policy and legal documents. None of the African NRA websites could overall be considered as at the interactive and transactional levels – ie with information having further value added such as being hyperlinked to relevant legislation, facilitating real-time online submission of forms and emails, and so forth.

NRAs should be aware that a valuable amount of traffic will be from researchers, journalists and international investors who further broker information to the general public. Thus a newsroom feature or consumer information banner that has further links to information within the website is very important for facilitating information dissemination via these users.

As noted in the introductory section of this chapter, the most important message this survey could communicate would be that all African NRA sites could be improved with little effort. While in the past blame has been placed on the lack of human and financial resources, this argument is no longer warranted. Given that the websites already exist, specific improvements needed relate mainly to the uploading of relevant information as well as making the site more functional.

Nonetheless, a number of assumptions need to be addressed by regulators in order to fulfil basic conditions for web presence success – that is, a website's ability to be interactive and dynamic. These include, but are not limited to:

- common understanding of the role and opportunities to apply ICT in general and web presence in particular in communicating to the various stakeholders in the sector;
- existence of human resources within the agency to support content development and technical know-how to ensure that the website is accessible, user-friendly, up-to-date and most importantly that the relevant content is continuously provided;
- basic conditions of ICT access and usage within the country in particular to connectivity to the Internet. Content relevancy and actual effectiveness of the website will not be achieved readily without this factor being addressed.

Perhaps the most important lesson that African NRAs can learn is that there is no need to reinvent the wheel. Other NRA websites exist that are open to the public for any NRA to copy and learn from in improving the effectiveness of their own websites. We hope that this study has contributed to this process by pointing to some of the best practices in the region.

FUTURE STUDIES

This study sought to focus on the available information uploaded as content in NRA websites. It sought to focus on the relevance of the information in providing informed decision making for the would-be user. However, this study did not delve into the actual process of choice of content and whether in fact these websites are frequently visited and for what type of information. Such a study, in the form of a qualitative and quantitative questionnaire to NRAs, would enhance this study by providing useful feedback on what users expect NRAs to provide.

In the same vein, it would be useful to initiate a study that focused on the de facto interactivity of the websites. What is the response time for queries made online? What type of online queries can one make? An email sent to a number of NRAs during this study to clarify location of information received no feedback, revealing a need to ensure that features made available via the NRA websites are in use.

In conclusion, websites are an increasingly significant element in evaluations of NRA performance. For the future, website content and interactivity will be a progressively important factor in assessing regulatory effectiveness. NRAs therefore need to ensure that websites are up-to-date and relevant. One way to do this is to keep seeking feedback from their clients (journalists, researchers, businessmen, government and non-government institutions) and to share their experiences with other NRAs both in the region and internationally.   ❑

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