# Benchmarking Assessment Methodology

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### Introduction

Two methodologies are used to evaluate national regulatory authority (NRA) websites in this volume. The first is a benchmarking approach which focuses on best practices. This methodology is used for assessing Latin America, the Caribbean and Africa (chapters 3-5) and is described below. The methodology used for the assessment of Asian websites has a primary focus on ranking websites out of a score of 100. This methodology is described in the chapter for Asia (chapter 6).

## Benchmarking methodology

LIRNE researchers first began assessing regulatory websites as discussion tools for courses for regulators. At the time, at the turn of the century, most regulators had only bare bones websites and there was little in the way of 'best practice' to guide their efforts. These early assessments identified categories of information and reported on initiatives that regulators were taking to make resources available in these categories via their websites.

As this work evolved, it also became apparent that different categories of stakeholders who regulators could be reaching via their websites (as well as other channels) needed to be identified. Our question was whether equal efforts were being made, for example, to reach consumers as compared to business users.

While rich in information, the tables used to describe the different websites were difficult to summarize. What was needed was an objective value that could be assigned, which would rank the different categories and provide a snapshot of how individual websites performed, and which areas of informa-

tion required more attention or conversely, were evidence of best practice.

The ranking system for the 2005 NRA benchmark study of regulatory websites in Africa (Mahan 2005) was inspired by the 2001 United Nations report, Benchmarking E-government (Ronaghan 2001) which identified five stages of electronic government: emerging, expanded, interactive, transactional and seamless. These categories were used to evaluate the various aspects of regulatory agencies' websites to arrive at a consistent classification system for the various categories of information and characteristics of the websites analyzed.

The qualitative requirements for the five stages were modified slightly for the NRA benchmarking studies to reflect the particular nature of regulatory websites. The last category of the UN study, seamless, which refers to full integration of all electronic functions and services across administrative and departmental boundaries, was excluded on the grounds that it was not realistic for the subjects of this study — and, in fact, it was not attained by any country in the worldwide study. The stages were therefore defined as follows:

- Emerging: only basic, mostly static information is available.
- Enhanced: content and information are updated regularly, and the information is available not only in its original format (for example, decrees and laws), but also in a simplified and explanatory manner.
- Interactive: users can download forms, contact officials and file requests. The available information has the added value of being linked to relevant legislation or other points of reference.

 Transactional: users can request and submit online requests for information or to complete other regulatory processes such as licence requests or to participate in regulatory forum discussions.

The subcategories were classified with each thematic element assigned a value from 1 to 4, based on the stages described above, and with each category contributing to a final score. The classification was based on qualitative evidence, but subjectivity was minimized by the use of the categories defined above, rather than relying merely on perceptions.

It should be noted that a value of 0 was used to indicate the lack of information or a service. Intermediate scores were also used to provide a more precise assessment. For example, if information was available but it was not completely up-to-date and lacked sufficient explanation, it received a score of 1.5.

## Categories and sub-categories

The evaluation takes into account the different types of information that the regulatory authority must provide to the various stakeholders involved in the telecom market.

| Table 1. Evaluation categories |                                      |     |  |  |  |
|--------------------------------|--------------------------------------|-----|--|--|--|
|                                | Category                             | No. | Sub-Category   |  |  |
| 1 - 1 -                        | Factual information &                | 1   | Laws, regulations  |  |  |
|                                | news                                 | 2   | Statistical information and indicators for the sector                          |  |  |
|                                |                                      | 3   | Sector news  |  |  |
| 2                              | Consumer and citizen information     | 4   | Information for users (rights, rate information, new numbering plans, etc.)    |  |  |
|                                |                                      | 5   | Information about users' and consumers' rights                                 |  |  |
|                                |                                      | 6   | Process for filing complaints  |  |  |
|                                |                                      | 7   | Information about public hearings  |  |  |
|                                |                                      | 8   | Statistical information about assistance to users and resolution of complaints |  |  |
| 3                              | Business information                 | 9   | Certification of equipment   |  |  |
|                                |                                      | 10  | Details about entering market (licensing)                                      |  |  |
|                                |                                      | 11  | Information about interconnection  |  |  |
|                                |                                      | 12  | Articles and documents by consultants  |  |  |
|                                |                                      | 13  | Scarce resources (spectrum allocation)   |  |  |
| 4                              | General information                  | 14  | Mission statement  |  |  |
|                                |                                      | 15  | Local languages  |  |  |
|                                |                                      | 16  | Links to national and international sites                                      |  |  |
|                                |                                      | 17  | Contact information for key officials (telephone, email, contact form)         |  |  |
|                                |                                      | 18  | Ease of use (navigation tools, site map, search engine, organization)          |  |  |
|                                |                                      | 19  | Organizational chart or equivalent   |  |  |
| 5                              | Universal service / universal access | 20  | Information about policies, reports and plans                                  |  |  |

**Factual information and news** considers information such as a description of the sector, online availability of laws and the legal framework, indicators and news.

**Information for users and citizens** includes information useful to the user, consumers' rights, procedures for filing complaints and participation in public consultations.

The third category, **business information**, involves information useful for operators and investors. Aspects related to homologation and certification of equipment, licensing, interconnection and management of the electromagnetic spectrum are evaluated in this category.

The general information category looks for items such as the mission statement, an organizational chart, contact information for functionaries, and external and internal links. While the general methodology takes into account the availability of information in different languages, this sub-category was not considered for many countries in the survey as it was not always relevant. In this case the assessment value was reallocated across the other subcategory components.

The final category evaluates information about **universal service / access policies** and plans that are made available via the NRA websites.

The evaluation thus considers five categories and a total of 20 subcategories. The following table shows the categories and their respective sub-categories.

## **Weighting of categories**

Each category and subcategory was assigned a certain weight. Equal weights were assigned to the first three categories, and the fourth and fifth categories were weighted to total 100 percent, as shown in Figure 1 and Table 2.

### **Observations**

Benchmarking implies that comparisons are undertaken between similar websites to identify good practices and to engender a sharing of knowledge around approaches which to increase the functional profile of the website and facilitate informed regulatory processes. Because this is a rapidly evolving area, the primary focus of this methodology is current state of the art, rather than progress over time. However, although the subcategories may be altered from one evaluation year to the next, the overall framework does allow individual regulatory agencies to assess the evolution of their websites.

As the subcomponents each receive a value from 0 to 4, it becomes irresistible to make charts which rank the countries in terms of their achievement in reaching a 4 in all areas of information provision. However, ranking is only a by-product of this methodology, unlike the approach used in chapter 6, which was designed specifically to rank the Asian websites.

It is not necessarily the case, however, that a value of 4 is the desirable value for a particular area of information provision.

In some instances, clear, well-explained and up-to-date information may be the best approach (which would yield a value of 2) rather than interactivity which might be more bells and

Factual information and news

25%

Universal Service /
Universal Access
10%

Business information
25%

| Table 2. Weighting of categories        |         |  |        |  |  |  |
|---|---------|--|--------|--|--|--|
| Category                                | Weight  | Sub Category   | Weight |  |  |  |
| Factual information                     | 25.0%   | Laws, regulations  | 10.00% |  |  |  |
| & news                                  |         | Statistical information and indicators for the sector                          | 10.00% |  |  |  |
|   |         | Sector news  | 5.00%  |  |  |  |
| Consumer and citizen information        | 25.0%   | Information for users (rights, rate information, new numbering plans, etc.)    | 5.00%  |  |  |  |
|   |         | Information about users' and consumers' rights                                 | 5.00%  |  |  |  |
|   |         | Process for filing complaints  | 5.00%  |  |  |  |
|   |         | Information about public hearings  | 5.00%  |  |  |  |
|   |         | Statistical information about assistance to users and resolution of complaints | 5.00%  |  |  |  |
| Business information                    | n 25.0% | Certification of equipment   | 5.00%  |  |  |  |
|   |         | Details about entering market (licensing)                                      | 5.00%  |  |  |  |
|   |         | Information about interconnection  | 5.00%  |  |  |  |
|   |         | Articles and documents by consultants  | 5.00%  |  |  |  |
|   |         | Scarce resources (spectrum allocation)   | 5.00%  |  |  |  |
| General information                     | 15.0%   | Mission statement  | 2.40%  |  |  |  |
|   |         | Local languages  | 0.00%  |  |  |  |
|   |         | Links to national and international sites                                      | 3.90%  |  |  |  |
|   |         | Contact information for key officials (telephone, email, contact form)         | 3.90%  |  |  |  |
|   |         | Ease of use (navigation tools, site map, search engine, organization)          | 2.40%  |  |  |  |
|   |         | Organizational chart or equivalent   | 2.40%  |  |  |  |
| Universal service /<br>universal access | 10.0%   | Information about policies, reports and plans                                  | 10.00% |  |  |  |

whistles than further illuminating. For this reason, spider web charts are used in the appendices which show regional averages against which the country can benchmark its own progress.

In this same vein, use of Web 2.0 tools have not been specifically included in the assessments. The NRA surveys rank information provision in terms of increased interactivity and functionality, hence, websites with higher scores are more likely to embrace Web 2.0 philosophies of interconnectedness and sharing of information, if not the actual tools themselves. Findings indicate that there is room for development of best practices around using Web 2.0 tools on regulatory websites. Interactivity on NRA websites is usually centred around forms (to request information or to submit requests, comments, etc.) and hyperlinking within the site.

Some applications that could be useful to include on NRA websites include:

- · RSS feeds and XML;
- thematic Tags (collective tagging, social tagging);
- Wikis or forums for particular subjects, manuals or to support participatory user-generated content
- Flickr or onsite photo collections can make the regulatory authority more familiar

Finally, some websites are aesthetically more attractive than others. This is a subjective kind of observation, and likely has to do with regional and national cultural norms and graphic tradition. This methodology does not evaluate the attractiveness of design except where bad design impedes the functionality of the website.

#### References

Mahan A.K. "Benchmarking African NRA Websites", in Mahan, A.K. and Melody, W.H. Stimulating Investment in Network Development: Roles for Regulators. WDR and infoDev, 2005.

Ronaghan. S.A, (2001), United (2001) 'Benchmarking E-government: A Global Perspective - Assessing the Progress of the UN Member States', United Nations Division for Public Economics and Public Administration (UNDPEPA) and American Society for Public Administration (ASPA).

<a href="http://egov.dubai.ae/opt/CMSContent/Active/EGOV/ar/Documents/Benchmarking\_E-Government\_A\_Global\_Perspective.pdf">http://egov.dubai.ae/opt/CMSContent/Active/EGOV/ar/Documents/Benchmarking\_E-Government\_A\_Global\_Perspective.pdf</a>