

## *“Access is the primary objective to expand Internet usage and diversity is paramount in a country like India...”*



In a conversation, **Mr. N. Ravi Shanker**, Joint Secretary (in Charge of e-Infrastructure, e-Learning & Internet Division), Department of Information Technology, Govt. of India, and CEO, NIXI, speaks about diverse aspects of ICT for development in India including e-Governance and Internet Governance to D-Content team of **Syed Kazi** and **Emmanuel Neisa**

*What is the difference between e-governance and Internet governance?*

E-governance is the visible point or the services available to the public through the Common Service Centers or the info kiosks. It comprises all the services available to the public: the train e-ticket, the ration card, pension or any other activity or service brought through technological means.

Internet governance is the activity behind the machine, it is the way we organize the functioning of the Internet. When you enter to Yahoo! or Google, you immediately type www.google.com. When we talk about the ".com" is when we enter in the Internet governance domain. ".com" is a generic Top Level Domain (gTLD). There are broadly 2 categories of top level domain: the gTLDs - .org; .com; .net- commercial organizations have chosen .com, educational institutions have chosen .edu; and then-ational Top Level Domains (nTLD), that assigns an identity to countries content ( ".in" for India; ".fr" for France; ".de" for Germany).

The country top-level domain started when countries began to worry about Internet governance and some countries give more importance to their top-level domains than others, it is a question of positioning and identification. As far as technology is concerned, there is no difference between gTLDs and nTLDs.

*What kind of procedures and obligations does have a top country level domain implies?*

Countries are obliged to come up with an organisation to run the national Top

Level Domain. In india, the ".in" is managed by the National Internet Exchange of India.

*What is the role of ICANN on this issue?*

ICANN (The Internet Corporation for Assigned Names and Numbers) is the principal body that manages the domain names system. It was created as a not-for-profit organisation and evolved out of academic organisations in the US. Its role is to delegate the management of the gTLDs and it is in charge of assigning the country-codes for the nTLD. ICANN also has a role in the assignment of the Internet Protocol (IP) addresses - that identify each machine connected to the Internet-.

Now what is happening is that in the Internet world, the concept of regions is emerging and ICANN has subdelegated the task of assigning IP addresses to regional organisations called Regional Internet Registries (RIR): LANIC in Latin America or APNIC in Asia-Pacific

Now, National Internet Registries are being created to carry the task of the RIRs at a national level. Only 5 countries in Asia have national Internet registries: China, Korea, Japan, Indonesia and Thailand. India is in the process of getting a NIR. NIXI (National Internet Exchange of India) was proposed by the Telecom Regulatory Authority of India to APNIC to become the NIR.

*How can Internet Governance have an impact on common people's access to the web?*

Today ".in" is in English and governe-

ment of India, through its representation in ICANN, has been pushing for nTLD in all official Indian languages. We have kept asking that to the ICANN for the last four years. During the course of the February 2008 ICANN meeting in New Delhi, we demonstrated to the ICANN community at large the importance of the development of technology in the Indian local languages. They were able to understand our multilingual society with 22 official languages and that all of them should be accessible on Internet.

Today, the web is available in English all over the world, but tomorrow, it will be available in Hindi or any other languages all over the globe.

*What was the focus of the Internet Governance Forum held in Hyderabad?*

The 2008 IGF's central issue was Internet for all. When we were in the preparation stage of the IGF, we were asked to focus on a particular field -in Brazil it was "critical Internet resources"-: as a multi-cultural developing country, in which the priority is bridging the digital divide, India decided to focus on Internet for all. Our broad approach is that Internet for All deals with the pillars of the IGF thought process: Access, diversity, Openness and Security.

Access is the primary objective to expand Internet usage and diversity is paramount in a country like India, where linguistic barriers have to be overcome. All our efforts needs to focus on transforming the Internet into a multi-cultural and multilingual platform and not an Anglosaxon one.

*What were the three main IGF outcomes?*

Access for all is a primary driver to break the digital divide and foster digital inclusion, including linguistic issues and physically challenged people. In this context, we are working with the National Association for the Blind and we are developing solutions to bring

web access for visually challenged. It is a big challenge for us to bring technology to that particular group and use it as if there were no longer challenged. Technology experts and administrators have to work together to achieve this immense task.

The second aspect deals with content development. Having technology access does not mean anything for the majority of the population. We are a young democratic nation and that is a very positive factor as content development will be essentially driven by youth.

I would say the entertainment world is another key driver to foster Indian content creation. Education and entertainment will blend together in the next years. I look at the future. Text and SMS are boring; people are looking for images and animations instead.

The third aspect deals with highspeed connectivity. The bulk of Internet services related to education and medicine will need broadband connections to be delivered in the right way. In fact, it is only through broadband connections that you can transmit video and high quality content. The department of Telecom is working to improve our connectivity and some projects are urgently needing it: The National Knowledge Network is an e-infrastructure project, coming from a recommendation of the National Knowledge Commission, that will allow 10000 educational institutions to be interconnected through a high speed network (1gb). Physical infrastructure like this will enable collaboration, exchange of information and joint researches between Universities. They will be able to broadcast their classes through the web, reducing the knowledge and resources gap between educational institutions

*What is the key to include rural areas into these kind of projects?*

Governments efforts have focussed on the implantation of infokiosks, with

shared Internet access under public-private partnerships. Government efforts will be successful only if the village entrepreneur in charge of the infokiosk understands both the technology and the needs of people. He has to provide solutions to people that do not understand technology. In fact, they have requirements in terms of information and services that need to be tapped. The private partner has to choose the right entrepreneur and that person has to deliver and offer useful services to the community.

The village-level entrepreneur has to see the customer as a source of revenue and create a business model for his kiosk. Kiosks have to offer value added services. Government to Citizen services can open the way but the only way for long-term sustainability is expanding the scope of Business to Citizen services.



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