

## **Breakout Session Summary**

### **Promotion of Cost-Effective Broadband and Internet Services**

**Moderator: Dato V. Danapalan, Chairman, MCMC**

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Good morning. I am happy to report to you that our breakout session addressed a broad range of issues on the promotion of cost effective broadband access. Thanks to the good contributions of the presenters, panelists and delegates, the session focused on very timely and weighty issues, of concern to both developed and developing economies. I offer the following Chairman's summary on behalf of all those who participated.

I would like to begin by summarizing the major themes and issues that came out of the breakout session:

- While recognizing that national broadband strategies will need to be country specific, there was a general agreement among participants on the value of cost effective broadband infrastructure and access to all economies and societies around the globe;
- The group discussed how advances made over the past few years in low-cost technologies can improve local access to broadband services, particularly in developing countries;
- There was discussion of broadband connectivity issues on multiple levels, from local and national, through regional and international;
- The group heard from several countries that have concentrated not only on efforts to promote the supply of broadband services but also on efforts to stimulate demand and acceptance of those services and of multimedia applications.
- There was a discussion of challenges posed by affordability of broadband access in many countries.

The overall context of the discussion – which came through in the presentations and panelist remarks, as well as from the audience questions – is that broadband access will be a vital tool in the future to improve the lives and well-being of citizens in all countries. This consensus provided the starting point for the rest of the discussion, which moved to a substantive and often detailed discussion of how to best achieve the goal of bridging the digital divide among citizens – both within and between countries.

As much of the discussions and debate sought to address issues rather than seek convergence, it is important that I report on the highlights of the various presentations and discussions.

Presenters Sudhalakshmi and Michael Best reported on the advances over the past year in both the take-up of low-cost wireless access technologies, and in the quality of those technologies themselves. They indicated that technologies such as cordECT and 802.11 (Wi-Fi), are being used successfully to link rural communities in many countries, including India. In this regard, the session also noted that Wi-Max has the potential for future applications. Mr. Best indicated that a franchise model of “micro” enterprise in India could provide a sustainable business model for local entrepreneurs at revenues of some \$3-5 a day. The key is

to involve local ownership and tailor marketing to local needs. In addition, content applications should be developed to generate traffic that will use e-government, agricultural, tele-medicine and rural banking services. State support for development of community Internet centers may be provided, but in the case of India, a forward-looking bank provided funding as a way to broaden its distribution of banking services, including ATM access. These sustainable, tailored business models were seen as vital to providing broadband access in remote or rural areas.

Presenter Audrey Baudrier noted that in France, the broadband market is vibrant and innovative, but it does not reach the entire population or the full geographic extent of the country. Government policy has been tailored to be appropriate for further development in the zones where broadband service is not subject to competition or not available at all. She noted in particular that the regulator focuses its intervention on the wholesale markets to incite alternative operators to invest in infrastructure and to offer cost-effective services. The regulator also makes a strong effort to involve local communities and private operators in the implementation of projects. As Chairperson of ITU-D Study Group 1, Ms. Baudrier stressed the importance of comparing the situations of different countries and invited the GSR participants to join in the work of the ITU-D study groups to define a new question on Broadband in view of WTDC-06.

Presenter Russell Southwood discussed the experience of many African countries, which have faced the issue of having to procure expensive international Internet bandwidth even to complete Internet links within the same city. He discussed an initiative to build national and regional Internet exchange points (IXPs) within African nations, allowing local traffic to remain local. This will lower the cost of backbone bandwidth and, by decreasing latency, allow many new applications to be rolled out in developing countries that were not previously possible with limited local bandwidth. He stressed that, lower costs and increased quality of service will then ultimately benefit consumers in these countries, he suggested.

Contributions from the audience underlined the need to address the larger issue of affordability, including the need to directly address the current practice of having to purchase whole-circuit backbone access on international routes. Several contributions, emphasized the critical nature of the cost disparities that confront developing countries and urging international action to make broadband access more affordable. The World Bank representative urged advocacy on this issue, noting that developed countries have vastly greater purchasing power to obtain Internet access than citizens in developing economies do.

Other audience members and panelists added that the issue of high rates for facility access was not just international in scope, but also included the need for incumbents to reduce costs for leased lines on a national basis. Several contributors pointed out that flat-rated services appear to be vital in a broadband environment but that current rates in many countries remain high for consumers. Panelist Jose Alfredo Rizek Vidal of the Dominican Republic noted that national regulators should ensure that their own regulations set the proper environment for broadband development before they address regional and international initiatives. He emphasized the need for a partnership between the private and public sectors.

Also on the international level, panelist Ahmed Toumi presented an initiative, dubbed the Global Broadband Satellite Infrastructure Initiative, to develop global, open standards for low-cost broadband access to satellites. The initiative would involve harmonizing spectrum use and creating common standards in order to create a global market for equipment manufacturing. It would also call for harmonizing regulatory frameworks, based on common principles such as the promotion of competition. In response to a question from the audience, Mr. Toumi affirmed that the initiative would reinforce, not interfere with, national regulators' ability to set rules for satellite access in their countries.

Panelists Leong Keng Thai of Singapore and Alaa Fahmy of Egypt discussed their countries' experiences in promoting the take-up of Internet services and broadband access. A series of carefully planned initiatives in Egypt focused not only on free Internet access on the supply side, but also low-cost purchases of computers, on the demand side. Balancing of these initiatives was successful in increasing Internet usage in the country, and Egypt has now turned to a broadband access initiative as well. On the demand side, this initiative is promoting a "laptop for every professional" – both to boost computer purchases and to provide a market for Wi-Fi and Wi-Max installations. Mr. Leong noted that his country, with a small land area, has less difficulty than most others in providing access to broadband infrastructure. The key to obtaining ubiquitous use, then, is to stimulate demand through promotion, education and establishing the government itself as an "anchor tenant" through the provision of e-government services.

Finally, the discussion turned to the issue of whether spectrum should be considered a scarce resource. Presenter Michael Best noted that in many rural areas, spectrum should be widely available, and even in densely populated areas, recent advances in cognitive radios and other technologies mean that there are greater opportunities for spectrum sharing and reuse. The meeting noted that these new technologies may be initially confusing and destabilizing, but they ultimately will free regulators up to explore new spectrum management techniques that will maximize spectrum use. Other contributors questioned the conclusion that spectrum was no longer a scarce resource, particularly in certain bands. For example, GSM equipment is manufactured to use either 900 MHz or 1800 MHz and in those bands, technical scarcity is still a reality in many countries.

As you will note, the discussion during the breakout session involved a broad debate on broadband access. I am confident that the delegates who attended the session benefited from the rich presentations and discussions and take away ideas which will no doubt help with their national initiatives.

I thank you, Madame Chairperson, for the privilege of moderating this discussion and presenting this summary for the attention of the GSR.