The Broadband Commission for Digital Development

With the support of United Nations Secretary-General Ban Ki-moon, the Broadband Commission for Digital Development was launched on 10 May 2010 by the International Telecommunication Union (ITU) and the United Nations Educational, Scientific and Cultural Organization (UNESCO). It is chaired jointly by President Paul Kagame of Rwanda and Mr Carlos Slim Hélu, Honorary Lifetime Chairman of Grupo Carso, with ITU Secretary-General Hamadoun I. Touré and UNESCO Director-General Irina Bokova as vice chairs. They are joined by top-level figures from government, industry and international agencies, as well as those concerned with the content that will be delivered through broadband networks, from education to entertainment.

The job of the Commissioners is to define practical ways in which countries — at all stages of development — can provide access to broadband networks for their citizens, in cooperation with the private sector. They will report their findings to the UN Secretary-General in September 2010, immediately before the summit to be held in New York to review work on achieving the Millennium Development Goals by the target date of 2015. With only five years left before then, broadband networks are an essential and uniquely powerful tool for achieving those goals and lifting people out of poverty worldwide.

The connected society

Broadband connections to the Internet are an essential element in modern society, with wide economic and social benefits. In every nation (not just the richest) these networks should be seen as having same fundamental importance as transport, power or water networks. This is the message of the Broadband Commission for Digital Development.

According to ITU statistics, more than a quarter of the world's population is now users of the Internet, and that number is rising fast. Many of us have become used to going online for information, entertainment, commerce and social contact. But the Internet delivers much more than that. High-speed, high-capacity networks — what we know as 'broadband' — can be used to carry data and services that can significantly widen horizons and opportunities for people everywhere. They can do so across all sectors, and they can do so very cost-effectively.

How does broadband achieve this? There are three main areas where these networks are having a growing impact: services visible to individual Internet users; services that enable professionals to provide communities with a better quality of life, and services that control industrial and other processes in the essential infrastructure of society. Here are just a few examples:

Infrastructure and industry
In the electricity industry, broadband networks can show consumers and suppliers how much power is being used in real time, and where. This means that demand and supply can be stabilized as power is delivered or stored on 'smart grids'. And in 'smart buildings' energy is saved through constant monitoring of heating and lighting. The manufacture and distribution of goods can be constantly tracked using broadband networks, which are also the foundation for cloud computing that offers rapid scalability of resources for businesses — as well as flexible access for individuals.

Education
Through e-learning, broadband improves access to digital resources, extending education to more people of all ages, at all levels of need, and reaching out to previously deprived communities. It also helps in training teachers and linking databases to improve administration.

Research
Using broadband, it is now possible for universities and research institutes to share vast amounts of data worldwide, and for students to read books in libraries on the other side of the globe. This speeds up work in countless fields, including areas like medicine and agriculture that have an especially important impact on the lives of people in the poorest regions.

Environment and emergencies
One particularly important area of research involves monitoring the Earth's environment, through sensors on the ground or data collected by satellite. Broadband networks ensure that data are transmitted swiftly to show, for example, the effects of climate change, crop shortages, or impending natural disasters. Broadband helps again by supporting emergency communications and medical assistance.

Transport
Safety on the roads is improved by broadband delivering real-time information to traffic control systems and individual drivers. It helps streamline traffic flows, cut fuel consumption and minimize accidents, making it much easier to integrate all types of transport safely and efficiently.

Lifestyle
At the same time, videoconferencing removes the need for travel, and with a broadband connection, people will increasingly be able to work away from the office and while on the move. Whether through a mobile device or at home, they can also enjoy a huge range of content produced by the publishing, music and video industries, for which broadband networks have become a leading delivery channel.

Health care
Network-based monitoring of chronic medical conditions and low-cost remote consultation and intervention will be increasingly favoured by medical professionals, particularly those serving remote communities or ageing populations. Telemedicine, as it is known, will give many more people a better chance of health.

Democracy and culture
By putting information online, local and national governments can not only keep citizens up to date with what is happening, they can also offer immediate and interactive access to services, such as applying for licences or registering to vote. Citizens themselves have a powerful platform on which to create spaces for sharing ideas and for expressing the creativity of their particular cultures.

A cost-effective platform for progress

At present, millions of people cannot enjoy these benefits because broadband networks are seen as expensive and unprofitable to construct. Even where they exist, access is often prohibitively expensive. Broadband subscriptions cost under 2.5 % of Gross National Income (GNI) per capita in the 40 most connected nations. But at the other end of the scale, in the 30 countries with the lowest level of broadband penetration, subscriptions cost over 100% of per-capita GNI.

And yet a report issued by the OECD in December 2009 (Network Developments in Support of Innovation and User Needs) suggests that broadband networks can pay for themselves within ten years, because of the savings made in delivering services. In Australia, for example, it has been estimated that cost savings in health care alone could pay for the country's National Broadband Network twice over. For developing countries, the solution is likely to be found in mobile broadband — using a mobile phone, of which there are now some five billion worldwide, to connect to the information society. By improving education, medical services, trade and more, broadband Internet access can make a tremendous difference. High-speed networks can lead to high-speed growth.

In the same way that the construction of electricity grids and transport links spurred innovation far beyond the dreams of their builders, high-speed broadband networks stimulate greater efficiency and the creation of new businesses. For society as a whole, they are a platform for progress, and the Broadband Commission for Digital Development will do its best to encourage government and industry leaders to take action on installing broadband for all.

For further information visit: www.broadbandcommission.org