



## INTERNET BROADBAND FOR AN INCLUSIVE DIGITAL SOCIETY



UNCTAD CURRENT STUDIES ON SCIENCE, TECHNOLOGY AND INNOVATION. N°11



UNITED NATIONS



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## List of Abbreviations

<b>2G/3G/4G</b>	second/third/fourth generation
<b>A2K</b>	access to knowledge
<b>DSL</b>	digital subscriber line
<b>FTTH</b>	fibre to the home
<b>G3ict</b>	Global Initiative for Inclusive ICTs
<b>GDP</b>	gross domestic product
<b>ICT</b>	information and communications technology
<b>IPR</b>	intellectual property right
<b>ITU</b>	International Telecommunication Union
<b>LDC</b>	least developed country
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>SME</b>	small and medium-sized enterprise
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>VSAT</b>	very small aperture terminal
<b>WiMAX</b>	Worldwide Interoperability for Microwave Access
<b>WTO</b>	World Trade Organization

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## Introduction

Internet broadband is shorthand for a range of capabilities enabled by the convergence of computers, the Internet, smart devices, high-speed wireline and wireless networks, and a plethora of innovative applications and services that these technologies make available. Compared with narrowband technologies such as dial-up telephone connections, which deliver a maximum data rate of 56 kilobits per second (kbps), broadband Internet refers to high-speed public Internet access. Although the boundary between narrowband and broadband is blurry, the International Telecommunication Union (ITU) describes broadband as Internet connections with downstream speeds of 256 kbps or more (ITU, 2010).

The precipitous growth of broadband networks and services over the past decade has been sparked by a combination of continuing rapid technological developments across the information and communications technology (ICT) landscape and the commensurate spectacular rise of popular applications and services that are made possible by broadband connectivity. These changes have also been increasing the socioeconomic development impact of broadband ICTs on various spheres, ranging from education to health care, and political and economic inclusion. Today, broadband ICT policies are increasingly becoming an integral part of national development plans and poverty reduction strategies to fight poverty and facilitate economic and social development. Hence, access to broadband ICT networks, services and applications represents an

in least developed countries (LDCs).<sup>1</sup> This has been noted in a variety of forums, including the Broadband Commission, the World Summit on the Information Society and the United Nations Educational, Scientific and Cultural Organization (UNESCO). Economic and Social Council resolution 2012/5 states that “there is a growing digital divide in the availability, affordability, quality of access and use of broadband between high-income countries and other regions, with least-developed countries and Africa as a continent lagging behind the rest of the world...”

All stakeholders have been called upon to maintain as a priority concern the bridging of the digital divide and to continue to focus on pro-poor ICT policies and applications, including access to broadband at the grass-roots level, with a view to narrowing the digital divide between and within countries. Innovative approaches that will encourage universal access to affordable broadband infrastructure in developing countries need to be devised. During its 2012 meeting, the Commission on Science and Technology for Development proposed to share and analyse policies and best practices intended to be comprehensive and inclusive, aimed at reducing the urban–rural gap in broadband access in developing countries and the digital divide throughout, especially in LDCs and landlocked developing countries.

The Commission also invited member States to use the multi-stakeholder approach in drawing up their national broadband plans and to develop

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