



UNITED NATIONS

**Commission on Science and Technology for
Development**

***Internet Broadband
for an Inclusive Digital Society***

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Internet Broadband for an Inclusive Digital Society

Overview:

- Broadband Status and Trends
- Importance and Impacts of Broadband
- The Broadband Ecosystem
- Challenges for Broadband Development
- Responses to Challenges
- National Broadband Strategic Planning Framework

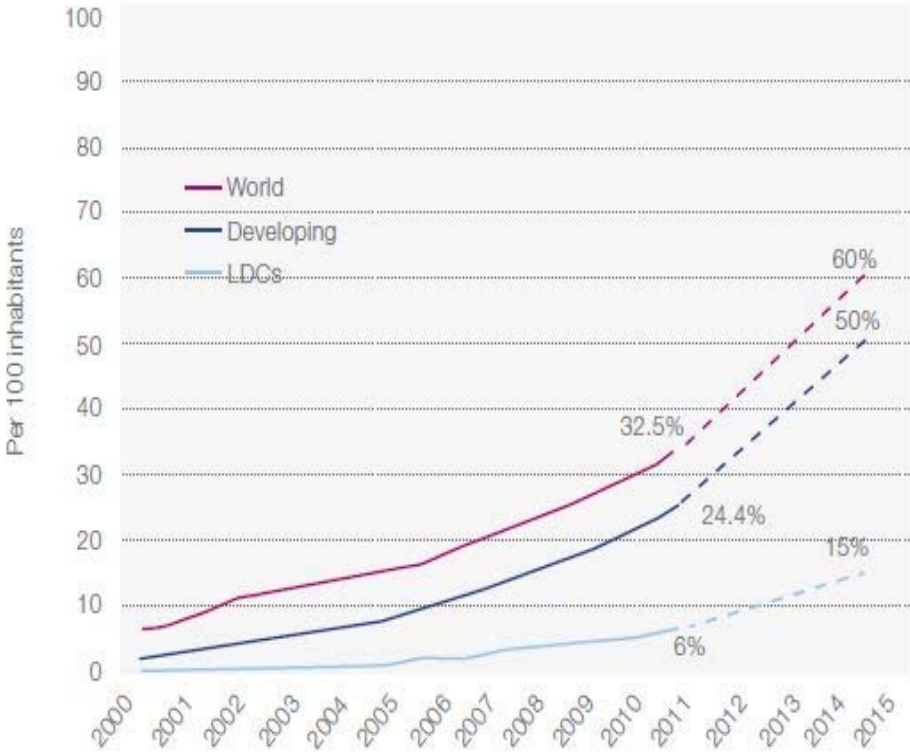
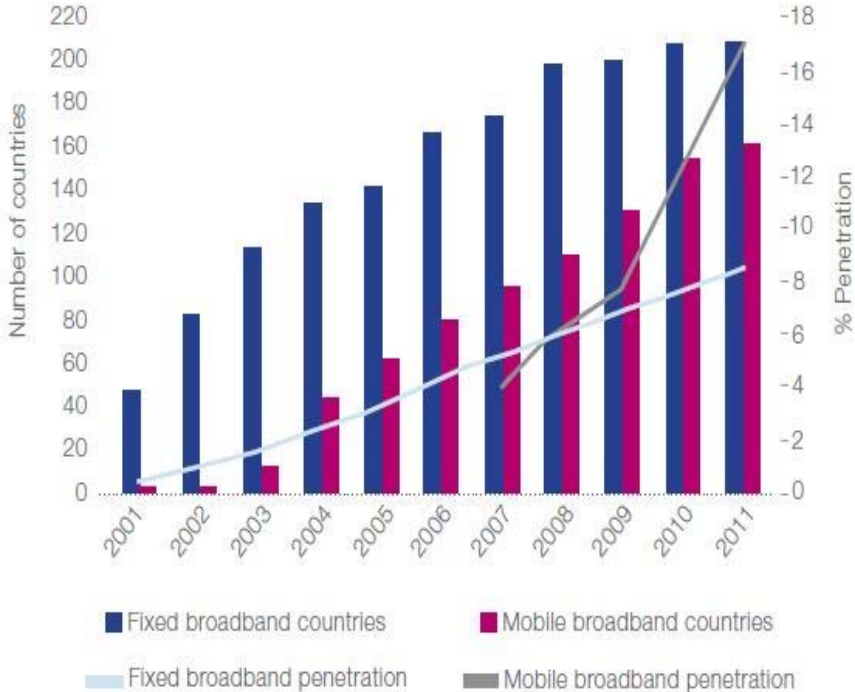
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Broadband status and trends

- Fixed networks and service providers
 - ◆ ADSL, coaxial cable, Fiber-to-the-home/business
 - ◆ Triple/quadruple play service options
- Wireless broadband
 - ◆ 3G/4G (LTE) mobile services
 - ◆ Fixed wireless: WiFi, WiMax, new standards
- Devices
 - ◆ Computer/laptop evolution
 - ◆ Smart phones, tablets, etc.
 - ◆ Internet of Things
- Applications
 - ◆ Social media, Web 2.0
 - ◆ Mobile apps

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Status of Broadband and Internet Development



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Importance and Impacts of Broadband

- Economic development
 - ◆ Correlations with GDP growth
(->3% for 10% penetration? 20% “critical mass” effect)
 - ◆ Productivity gains, employment, consumer surplus, firm efficiencies
- Social opportunity, enrichment
 - ◆ Education, Health care
 - ◆ Gender equity, Indigenous cultures
- Political empowerment
 - ◆ Information access
 - ◆ E-Government
 - ◆ Political activism

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The Broadband Ecosystem:

- Public Policy and Regulatory Environment
 - ✓ National ICT policy, regulation; spectrum management
 - ✓ Local government policies
- Infrastructure and Services
 - ✓ International and national Backbone networks
 - ✓ Fixed and mobile local access networks and services
 - ✓ Public access facilities
- Devices and Applications
 - ✓ End-user devices: suppliers, retailers
 - ✓ Applications and content

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The Broadband Ecosystem:

- Financial Sector
 - ✓ Banks, investors, venture capital
 - ✓ Public finance, Universal Service Funds
 - ✓ E-Banking/M-Banking services
- Human Resources
 - ✓ Consumers, households
 - ✓ Businesses, SMMEs, entrepreneurs
 - ✓ Employees (public, private)
 - ✓ Education, training, awareness

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Challenges for Broadband Development:

- High costs of capital investments in infrastructure
- Lack of financial mechanisms and investor interest in marginal areas
- Low revenue potential from many users
- Costs for broadband devices
- Lack of awareness, skills, training
- Insufficient supporting infrastructure: electricity, roads
- Inadequate ICT training and knowledge among government officials
- Lack of digital content in local languages, of relevance to minority cultures

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Responses to Challenges:

1. High-level broadband policy coordination
 - Cooperative strategic planning among all stakeholders
2. Market-based development
 - Enable market forces to expand broadband by facilitating competitive investment and access
3. Expanding beyond the market
 - Augment market forces in non-commercial locations, through both supply- and demand-side initiatives.
4. Enhancing broadband value
 - Reinforce the benefits of broadband through targeted applications, eGovt, awareness, and training

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National Broadband Strategic Planning Framework:

- Principles and Objectives
 - ✓ Definitions of key concepts
 - ✓ Guiding principles
 - ✓ Specific objectives and targets
- Stakeholder Roles
 - ✓ Government ICT policy and regulatory bodies
 - ✓ Other government agencies and institutions
 - ✓ ICT network and service providers
 - ✓ Other ICT suppliers
 - ✓ Financial sector representatives
 - ✓ Information, applications, and content providers
 - ✓ Community organizations, NGOs
 - ✓ Business and citizen consumer representatives

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National Broadband Strategic Planning Framework

- Planning and Implementation Process
 - ✓ Steering Committee and Working Groups
 - ✓ Baseline research
 - ✓ Public forum and consultations
 - ✓ High-level strategy
 - ✓ Implementation Action Plans
 - ✓ Financial sources and obligations