



# Broadband Planning and Implementation

ITU Regional Forum on Digital Transformation  
Rabat-Morocco, 8-10 November 2016

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# Why We Are Here

## BROADBAND and ICT Adoption Fuels Transformation

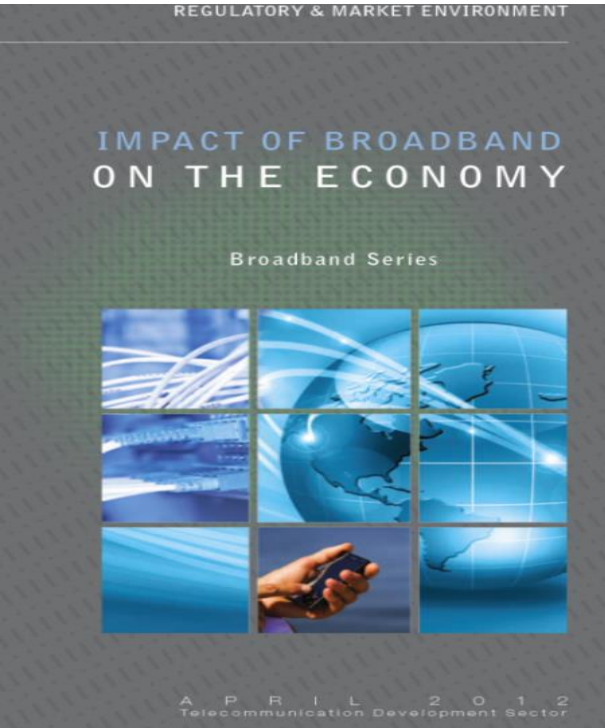
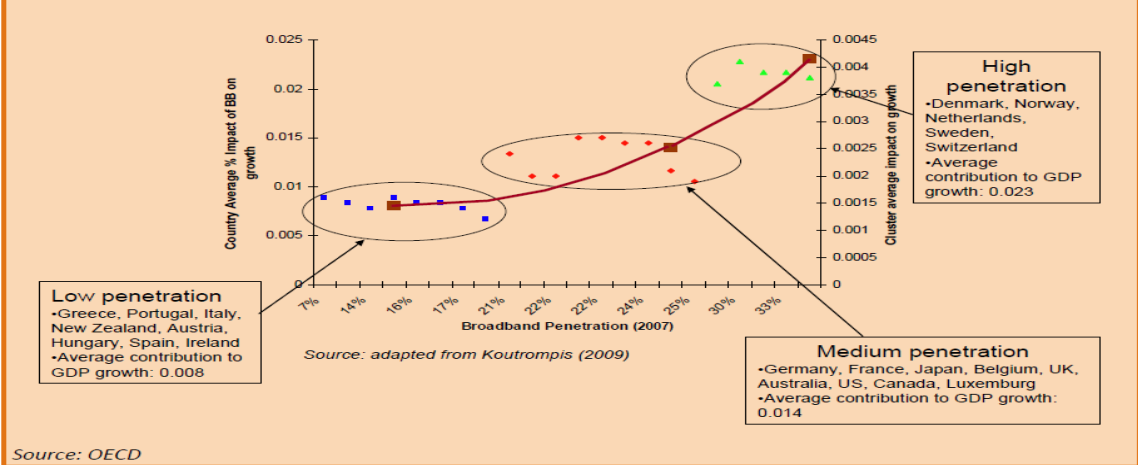


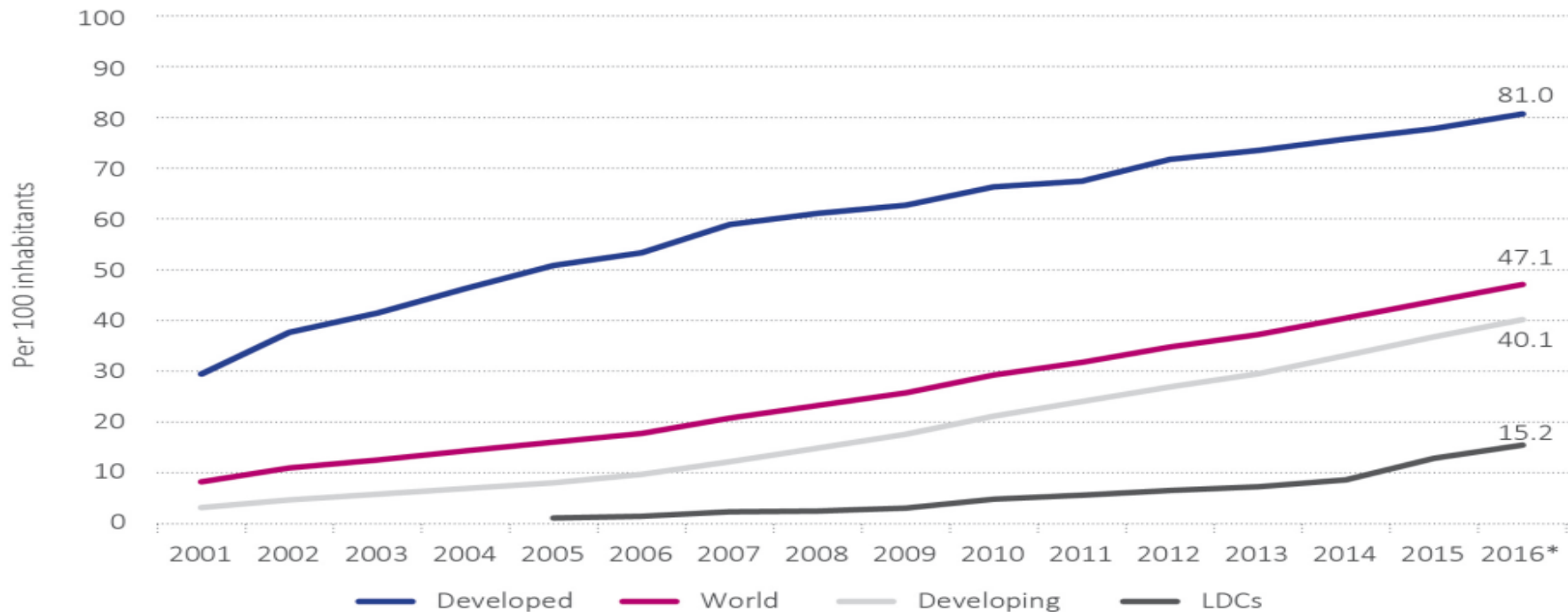
Figure 3: OECD: Percentage of impact of broadband on GDP growth



- Impact greater with greater penetration
- Threshold after which benefits starts to flourish
- So far no end to increase in benefits

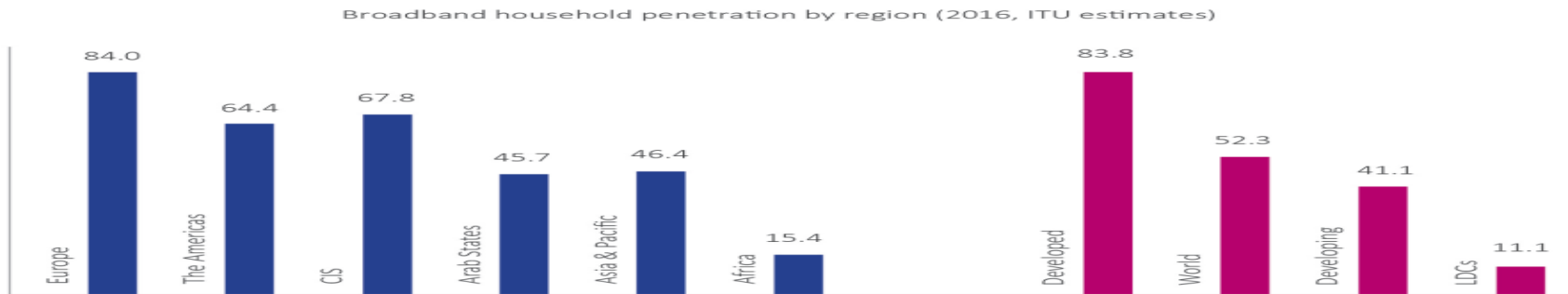
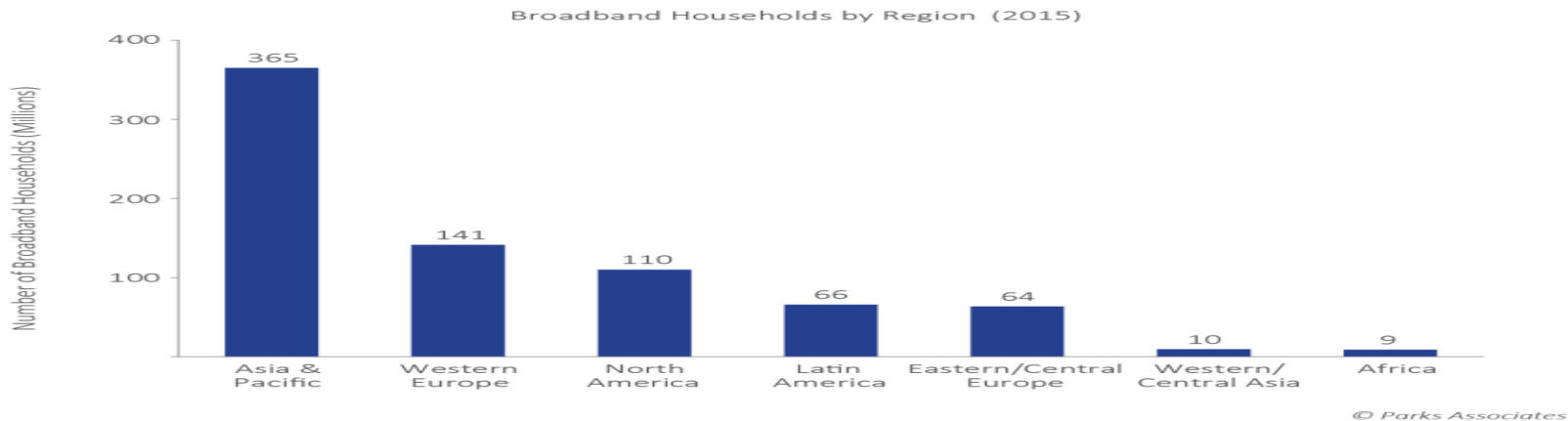
# State of Play

Individuals using the Internet per 100 inhabitants, 2001-2016



ITU BB commission "State of Broadband 2016"

# Household Broadband Penetration



Source: Parks Associates (top); ITU World Telecommunication Development Indicators (bottom).

# Why People are Not Online

## Coverage

- telecommunication infrastructure

## Affordability

- Purchasing power to buy BB and a PC

## Info-literacy

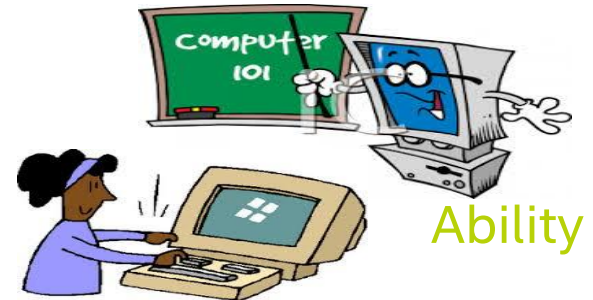
- People who value and know how to manage the internet

## Content

- Importance for people
- e.g. Education



Awareness

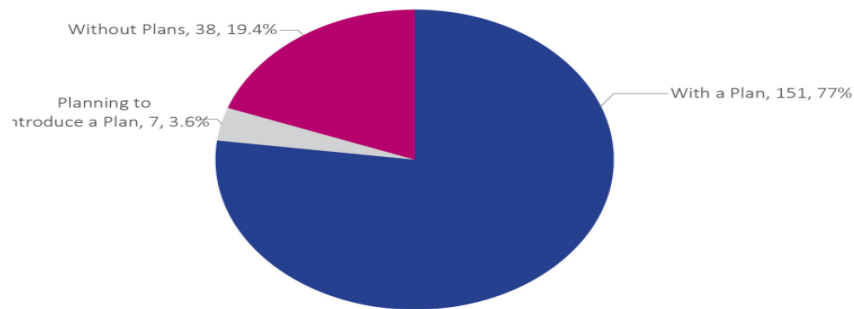


Ability

# How Are We Doing - ITU Targets and Progress

1: All countries have a BB plan

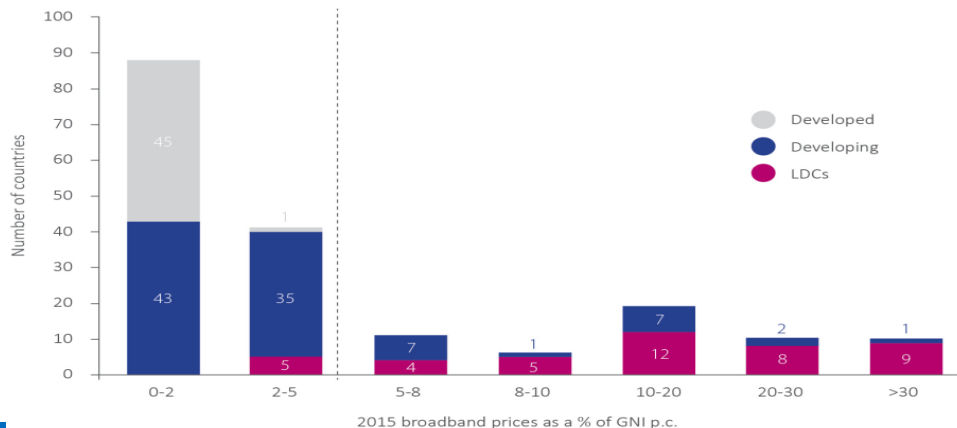
80% done



Number of Countries with Broadband Plans, 2006-2016

2: Make Broadband Affordable (5% GNI)

Improving, but still lots to do



# ITU Targets and Progress

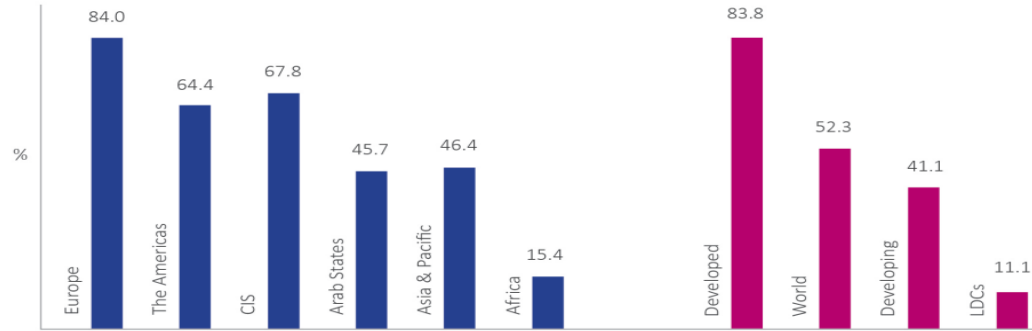
3: 40% of BB HH in developing countries

Reached

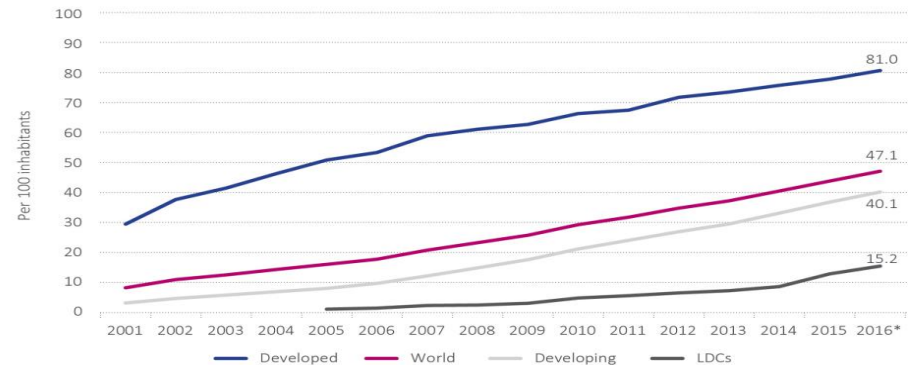
4: 60% WW internet users, 50% in developing, and 15% in LDCs

Not Reached

Broadband household penetration by region (2016, ITU estimates)



Source: Parks Associates (top); ITU World Telecommunication Development Indicators (bottom).  
Individuals using the Internet per 100 inhabitants, 2001-2016

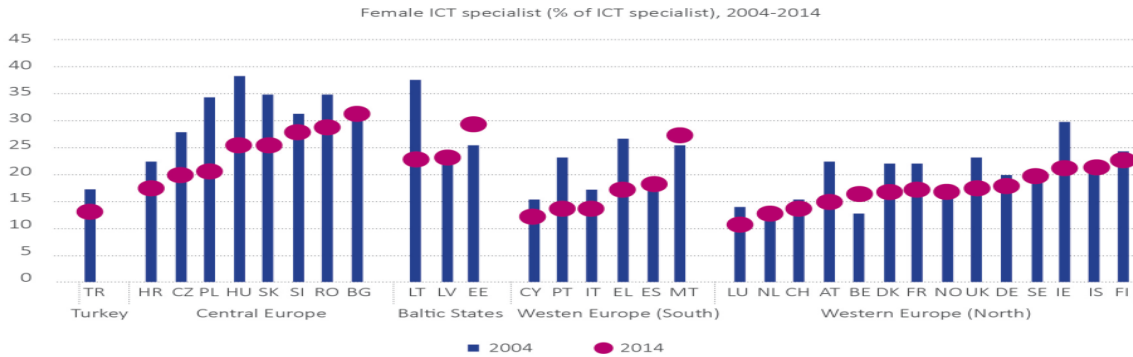
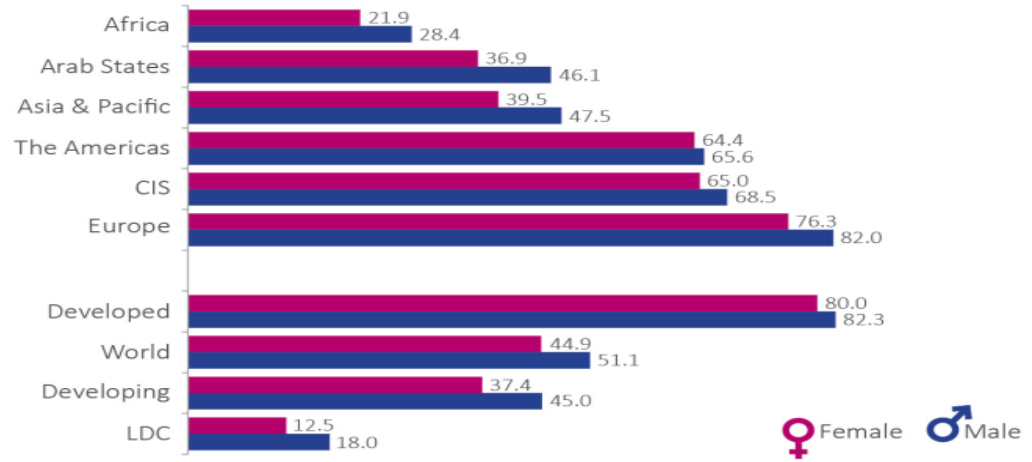




# ITU Targets and Progress

5: Gender equality in internet access by 2020

Improving, but more to do



Source: OECD.

# Broadband Enablement



- Broadband Review
  - Policies – competition and spectrum
  - Gov. funding, e.g. USF, PPP
  - Reduce taxes
  - Adopt best practices
- Specific, time bound goals – demand and supply
  - Assign funding
  - Implement Plan
- Auction Spectrum
  - Support Infrastructure build out
  - Minimize impediments for Fiber deployments
- Gov. Programs:
  - Digital Literacy
  - Subscriptions and Devices
  - Content
  - E-Gov.

# Elements of a Plan

- Measurement of current status
- Targets – SMART for supply and demand
- Cost and funding
- Timelines
- renewable
- Adopt successful examples
- focus on both supply and demand
- Implementation and Monitoring

# Keys to Success

Broad Political Support

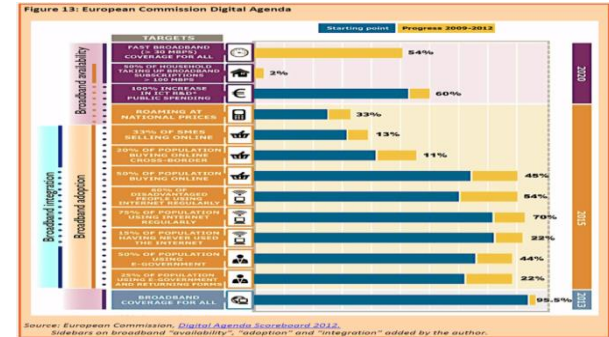
Implementation and Monitoring



**GSR discussion paper**  
**Monitoring the Implementation of Broadband Plans and Strategies**

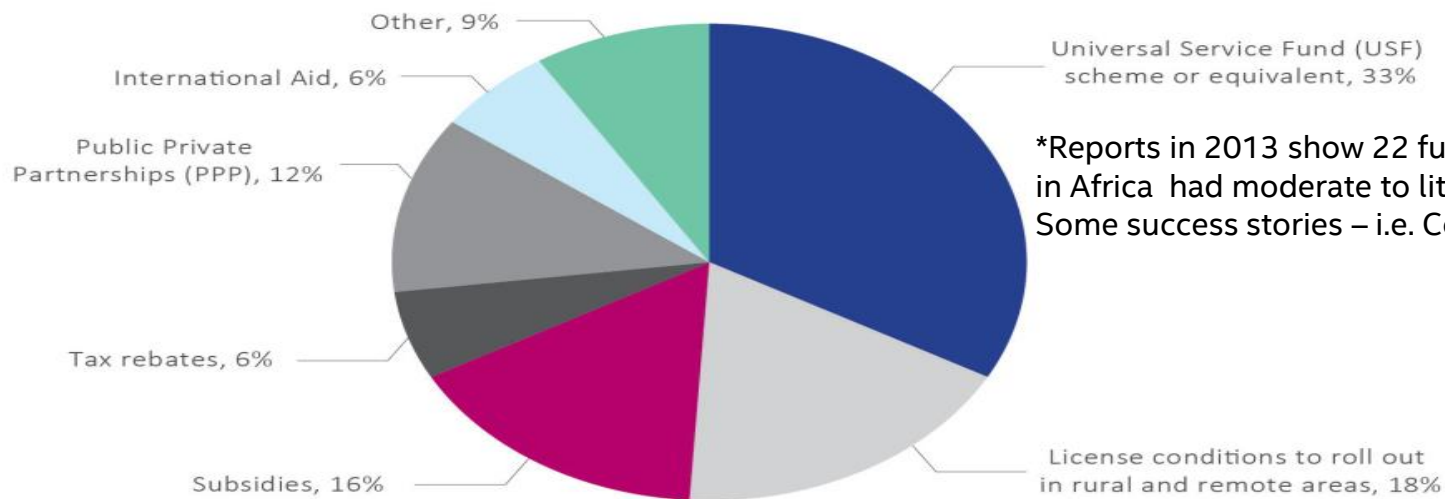
# Demand Creation

- Connectivity and devices
- Tax reductions
- Digital training



# Strategies for the Underserved

**Figure 12: Strategies Adopted to Achieve the Targets for Rural & Remote Areas, 2015**



\*Reports in 2013 show 22 funds studied in Africa had moderate to little activity  
Some success stories – i.e. Costa Rica

Source: ITU-D Study Group 1, Q5/1; responses were received from 42 ITU Member States.

Note: Multiple responses were possible, so this pie chart shows proportions of total responses.

# Demand Creation

## ITU telecom World 2012

“We have a lot of pipes and an increasing amount of fat pipes, but they are empty fat pipes.”

Jorgen Abild Andersen - DG Telecom, Danish Business Authority, The Power of Digital Innovation

### •Government has a major role in stimulating demand:

- As an end-user providing better online services at scale in e government, cutting costs and increasing efficiency for consumer and government alike.
- As a content generator creating awareness and demand with relevant applications and services (also in key verticals such as health, education, energy, transport).
- Creating trust frameworks, confidence in privacy and quality standards to drive consumer uptake.
- Focus on establishing connectivity for all to increase demand and then upgrade speed and capacity, rather than going straight for next-generation networks which may not meet current consumer needs.
- Taxation policies to drive uptake of devices and services, not to throttle success by raising the costs for the end-user through targeting ICT goods and services.
- Stimulating “trapped” demand through incentives for development of locally-relevant applications, reduced taxes on devices, free internet offices in remote and rural areas.

**Announcement: ITU telecom World 2016 – Broadband Commission Demand Creation working group report**

# Resources

## International Initiatives

- Smart Africa: <http://smartafrica.org/>
- Global Connect: <https://share.america.gov/globalconnect/>

## Organizations and Reports

- ITU Broadband Commission: <http://www.broadbandcommission.org/Pages/default.aspx>
- World Bank: <http://www.worldbank.org/>
- A4AI: <http://a4ai.org/>
- Intel Corporation, Cisco, Samsung, Facebook, etc.: <http://www.intel.com/content/www/us/en/education-solutions/broadband-universal-service-overview.html>

## Best Practices

- ITU demand Creation report: TBD

# Summary

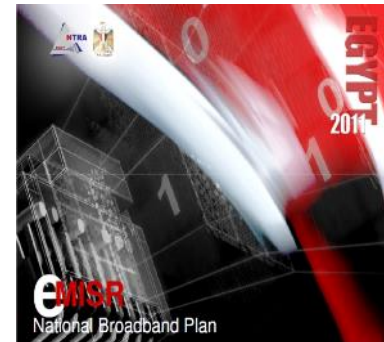
- Broadband and ICT are essential for all
- Broadband planning is critical to overcome the impediments – access affordability, awareness, and ability
- Demand Creation and Implementation Monitoring are critical steps
- Many plans to choose as examples



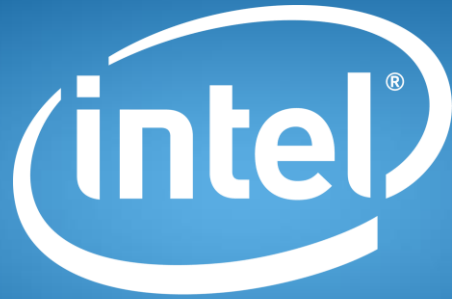
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THE NATIONAL  
BROADBAND PLAN

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Colombia

That seeks to promote the mass use of internet to make the quantum leap towards  
Prosperity for all







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