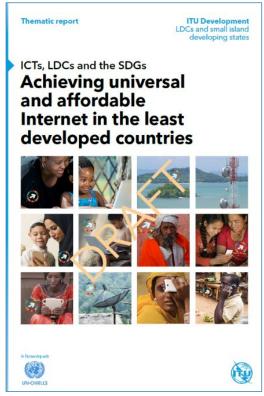


## Pre-WTDC-17 Ministerial Roundtable on ICT 4 SDGs in LDCs, LLDCs & SIDS 8 October, 2017





# ICTs, LDCs and the SDGs Achieving universal and affordable Internet in the least developed countries









#### LDCs & LLDCs SIDS

- LDCs: 47 countries highly vulnerable to economic and environmental shocks
- Includes 17 LLDCs and 9 SIDS
- LDCs, LLDCs and SIDS face related development challenges but are very different in terms of geography, population and level of economic development.

Access/
Infrastructure

SDG 9C "Significantly increase access to information and communications technology and strive to provide *universal* and *affordable* access to the *Internet* in *LDCs* by 2020"

Internet

Affordability



#### **Highlights**

- ICTs, in particular basic services and applications over 2G networks, have had a significant impact on development but promise from broadband is even greater
- LDCs are on track to achieve SDG 9C in terms of access & affordability
- Internet use expected to remain low and skills remain a key barrier
- It is possible to leapfrog: sharing experiences from LDCs
- 3 dimensional framework access, affordability & skills to identify strengths and weaknesses and guide policies



#### Access/Infrastructure

Miles of networks:

1st: International

2<sup>nd</sup>: National backbone

3<sup>rd</sup>: User access

Plus "Invisible mile"



## Explosive growth in access to submarine cables & national backbone infrastructure

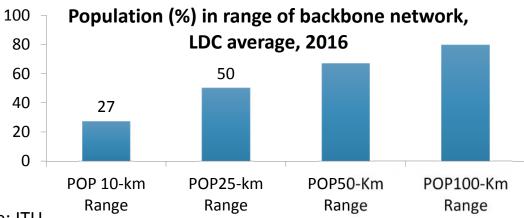
#### International

- Except for 6 (out of 30) ALL sea-facing LDCs have landing stations
- Almost all LLDCs have fiber optic cable crossborder terrestrial links but prices generally higher due to transit
- Unconnected SIDS are planning access to submarine cables
- Leverage regional economic communities for policy on cost-based & open access to submarine cables

#### **National**

Better backbone infrastructure through:

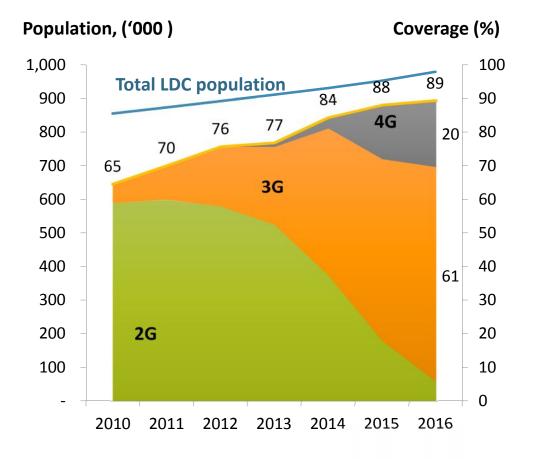
- Access to spectrum/digital dividend
- Regulation on rights of way and open access to networks
- Infrastructure sharing
- Universal Service Funds





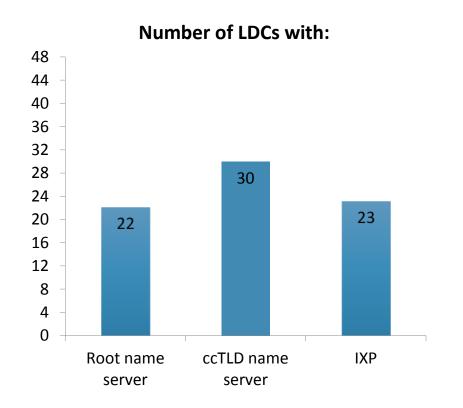
#### Mobile population coverage in LDCs

- Narrowband (2G) Internet coverage high with remaining gaps almost all in rural areas
- 61% of population covered by 3G mobile broadband network
- 26 LDCs have launched 4G

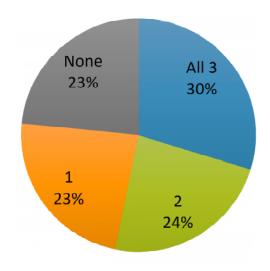




### **Building core Internet infrastructure**



% of LDCs that have 3 fundamental Internet infrastructure components, 2017



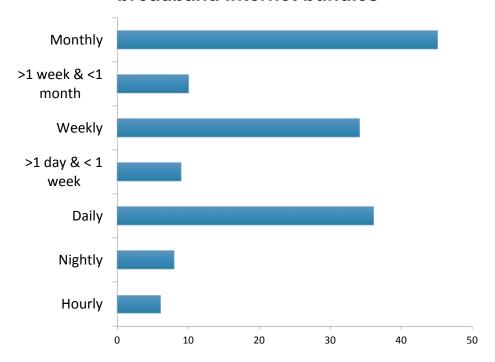


### **Affordability**



#### **Understanding affordability**

#### Number of LDCs with different mobile broadband Internet bundles



- Despite price drops, international comparison (ITU price basket) shows that broadband remains unaffordable to many
- ...but by 2020 will be affordable in many LDCs
- Handset biggest barrier to entry
- Flexible tariffs help with affordability and operators have adapted to low-income users
- Governments can help bring down prices by driving competition and limiting taxes
- Backbone constraints for LLDCs and some SIDS

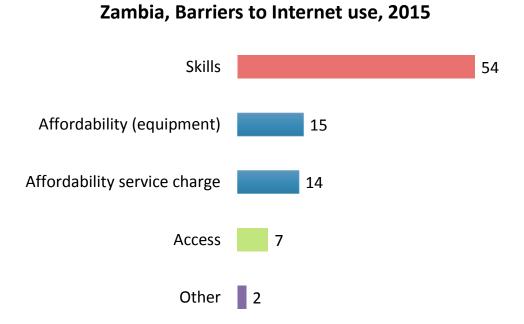


#### **Skills**



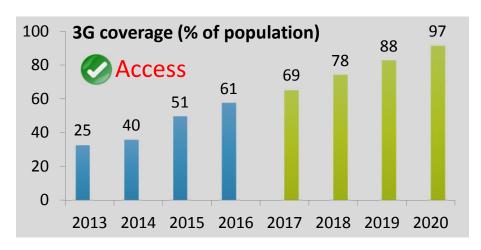
#### Skills emerging as leading barrier

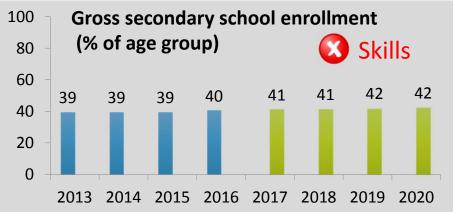
- Lack of digital literacy emerging as a leading barrier to Internet use in many LDCs
- Digital skills closely linked to educational attainment
- Secondary school enrolment in LDCs (43%) lies well below world average (76%)
- Strategic ICT sector plans need to highlight the role of, and make link to educational policies
- Gender digital divide must be addressed to ensure universality aspect of SDG 9C

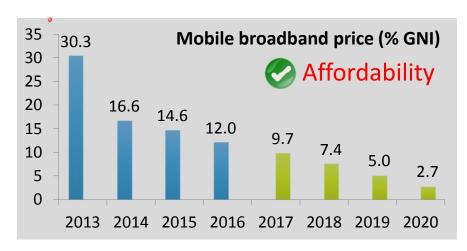


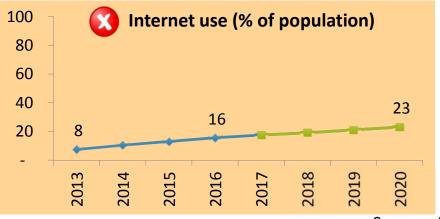


#### **Target 9C in 2020**



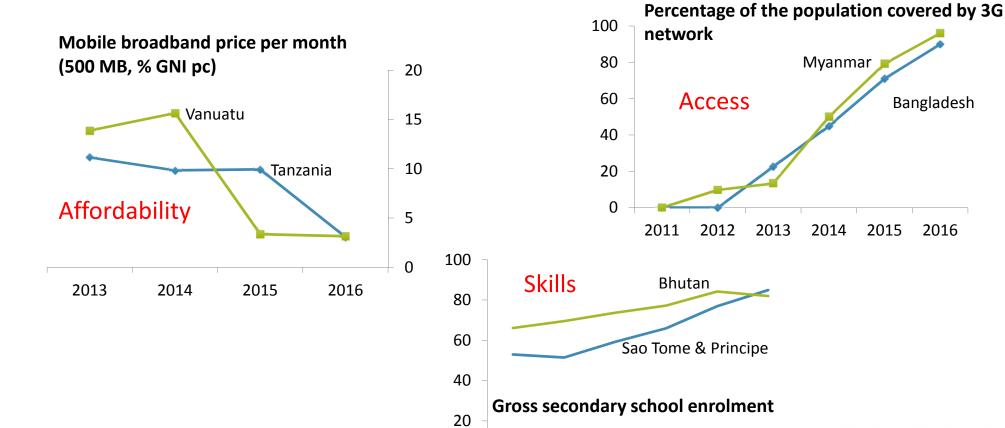








#### It is possible to leapfrog

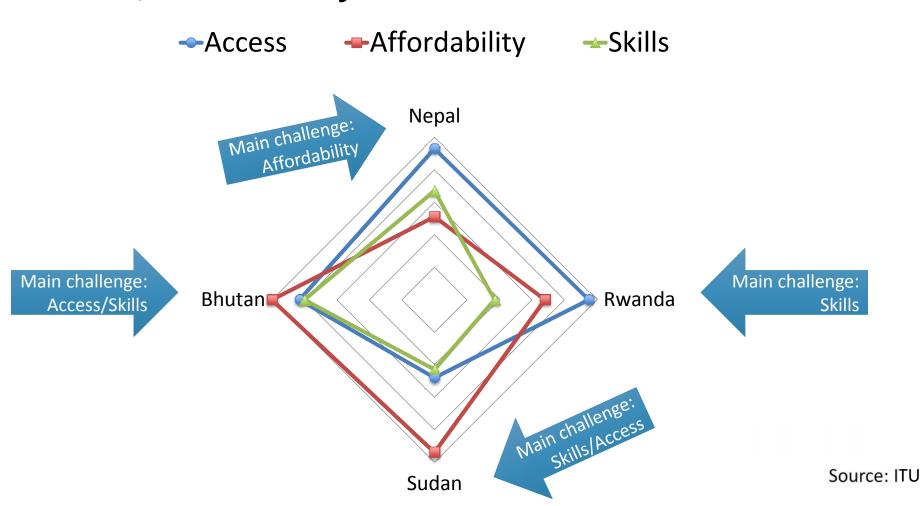


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2010 2011 2012 2013 2014 2015



### 3 dimensional framework to guide policy makers: access, affordability & skills



### **Recommendations**

- ✓ Drive competition and intensity of competition
- ✓ Coverage obligations, open access regulation & universal service funds
- ✓ Build core infrastructure
- ✓ Rationalize taxation
- ✓ Focus on digital literacy and skills
- ✓ Achieve gender parity
- ✓ Foster institutional strengthening
- ✓ Produce better data



Send your comments to <a href="mailto:bdtlse@itu.int">bdtlse@itu.int</a> by Oct. 31, 2017

