

SomNOG2

Conference : 22nd - 23rd Nov. 2017

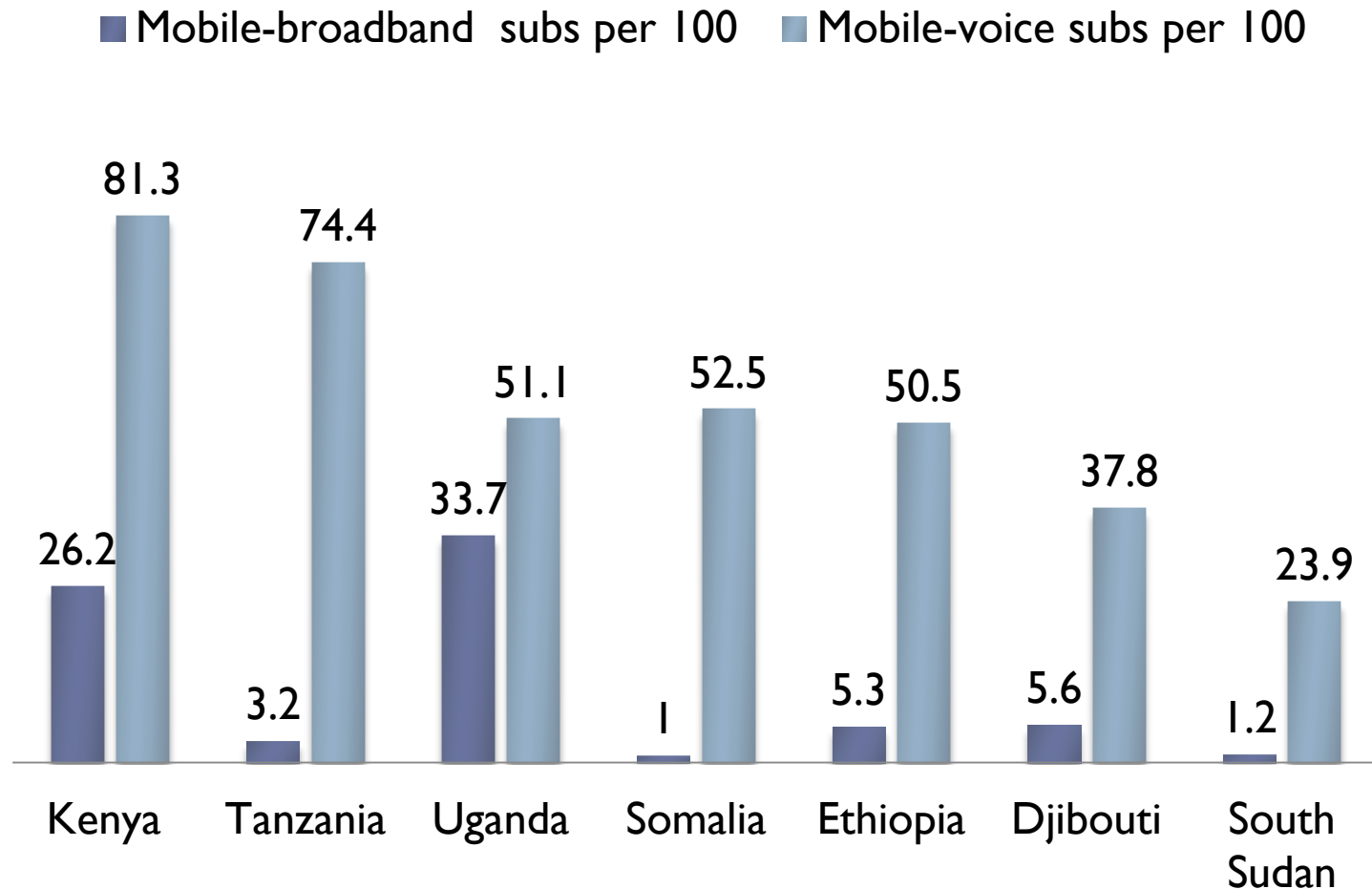


Network Infrastructure sharing and Open access Models

SomNOG2 Conference 2017

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Comparison of Mobile Broadband and Mobile Voice Subscriptions



Source: World bank 2016

Network Infrastructure Needs

- ▶ Redundant International submarine cables
 - ▶ At least two
- ▶ Reliable national backbone
- ▶ Sufficient last-mile access for remote areas
- ▶ Affordable pricing
- ▶ Interconnections -both IP and mobile networks



Network Infrastructure challenges

- ▶ Expensive International and last-mile access
- ▶ Limited network coverage (Internet)
- ▶ **Causes:–**
 - ▶ Duplication of infrastructure
 - ▶ Low level of competition
 - ▶ Short technical expertise
 - ▶ High network costs



Scope and Ease of Infrastructure sharing

Scope of Infrastructure sharing

Land building

- Civil works
- ROW

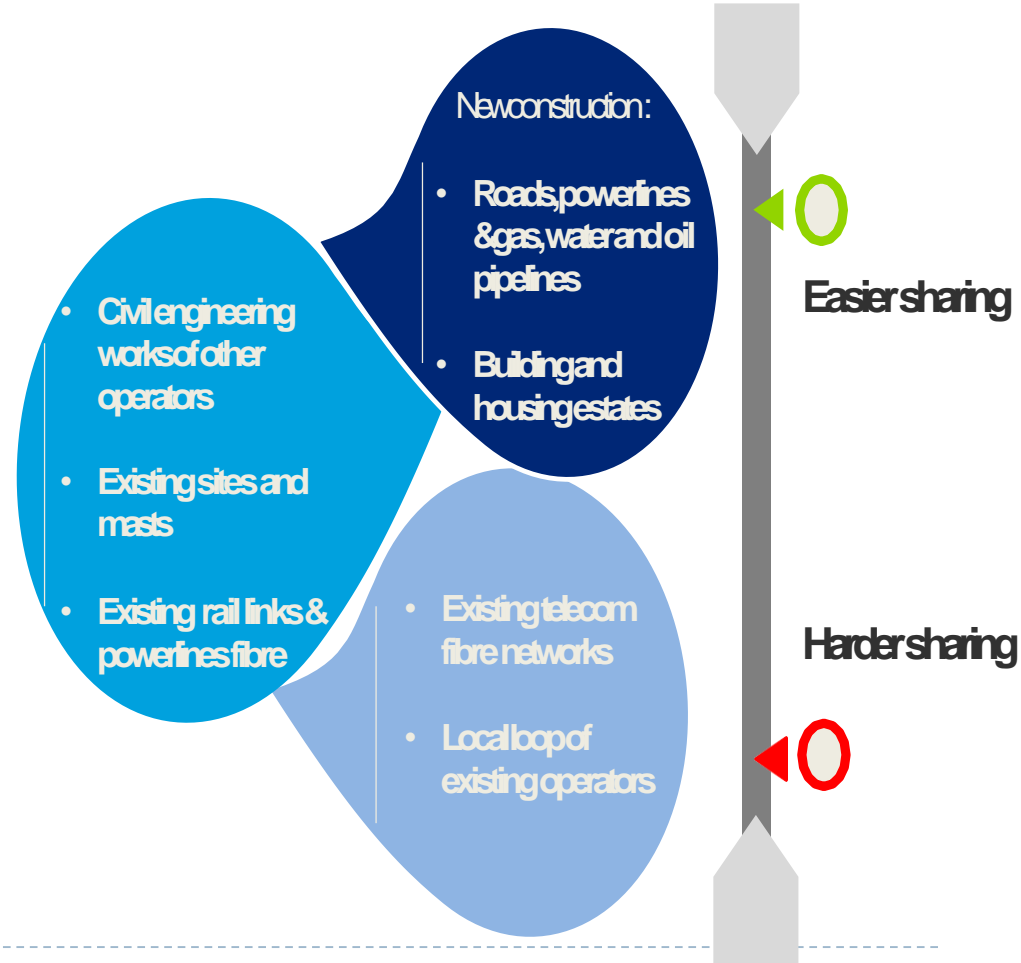
TELECOM INFRASTRUCTURE

- Ducts
- Poles
- Sites
- Masts
- Dark fibre
- Wavelength
- Active network elements

OTHER SECTORS INFRASTRUCTURE

- Sewage/water system
- Railroads
- Power grids
- Roads
- Gas & oil pipelines

Ease of Infrastructure sharing

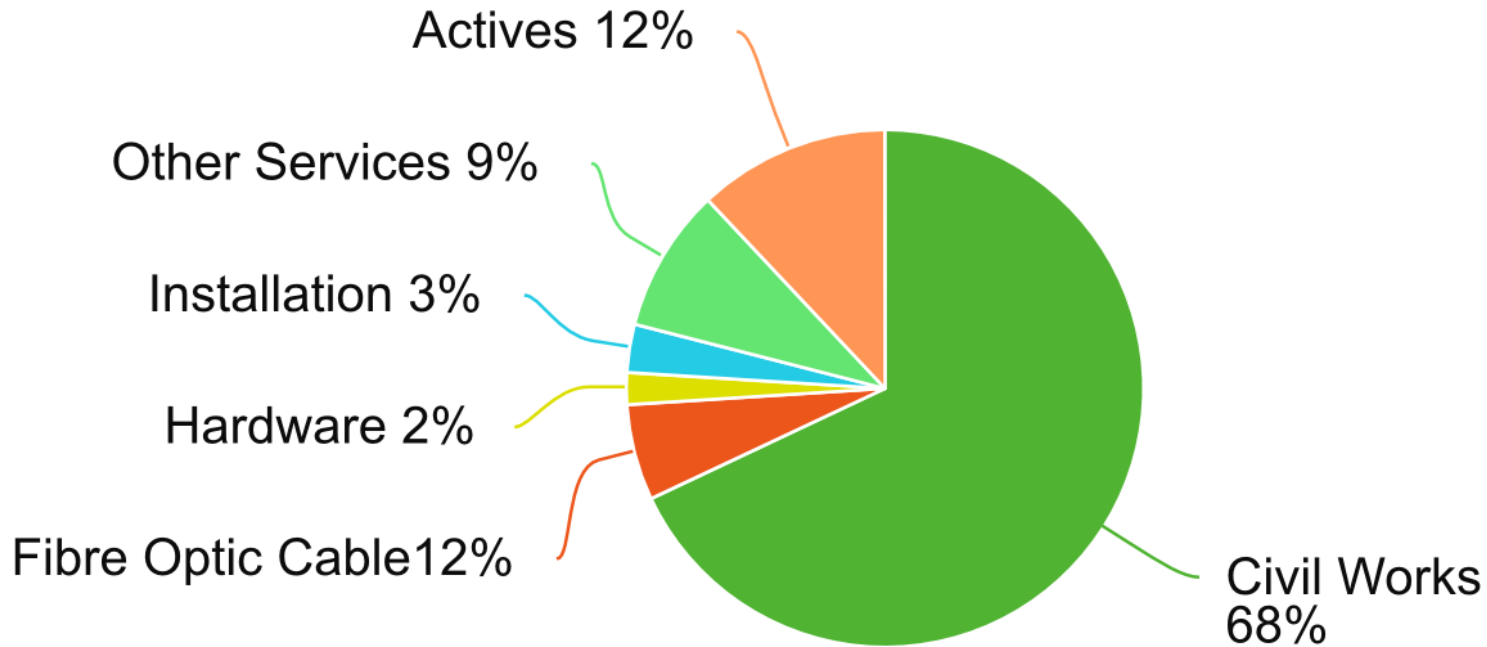


Why Infrastructure sharing necessary

- ▶ Promotion of competition
- ▶ Optimization of capital investment
- ▶ Promotion of new added values services
- ▶ Coverage expansion



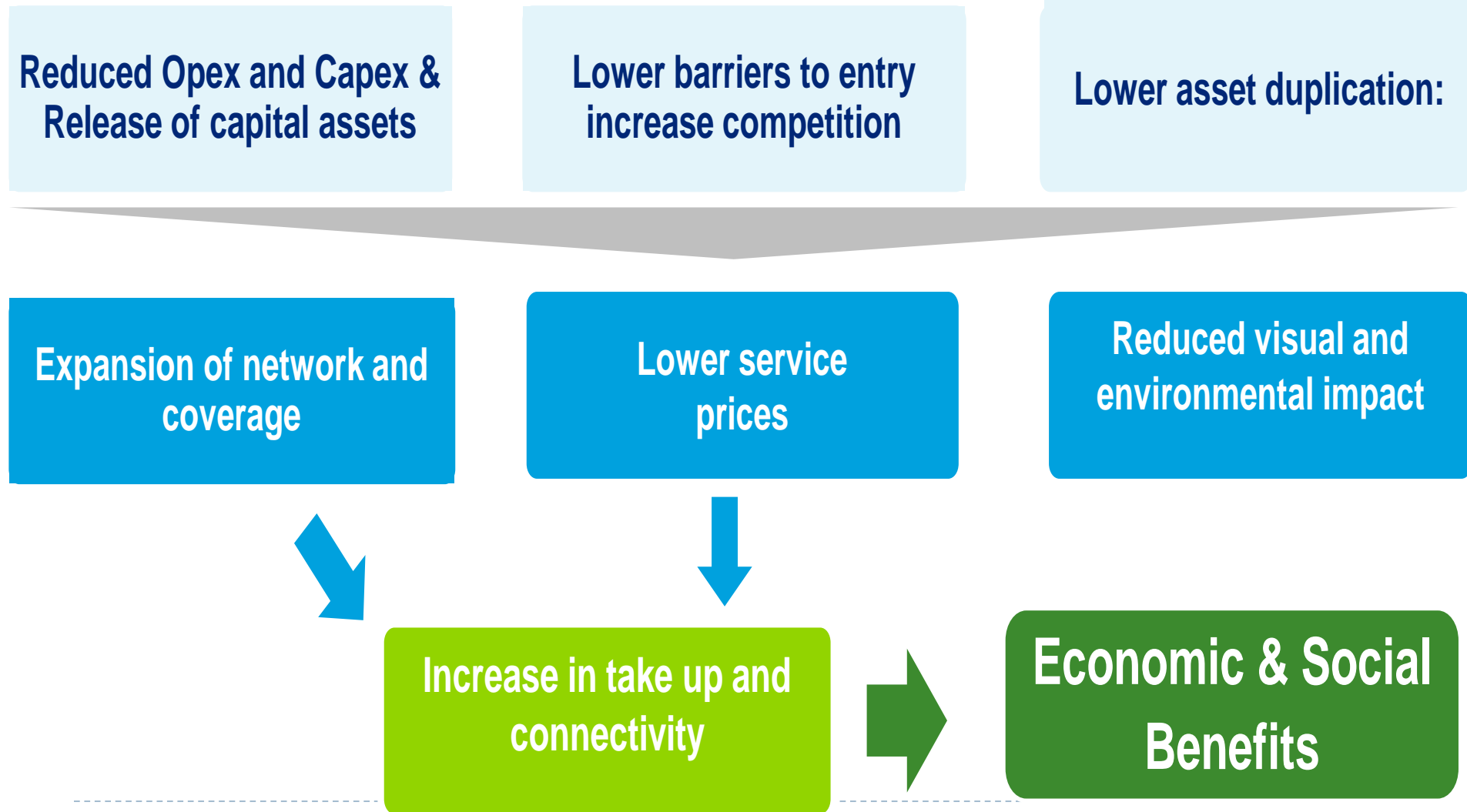
First year cost of rolling-out a new fibre network



Source: OECD



Major Benefits of Infrastructure Sharing



Burundi's national fibre backbone - The Burundi Backbone System (BBS)

Before Burundi gained access to an international fibre cable in 2012, internet access was dependent on expensive satellite connections and was limited to a small number of urban subscribers. In rural areas the backbone network remained underdeveloped .

To solve this problem the government created a PPP with the Burundi Backbone System (BBS) in 2010. BBS is a company that was formed as a joint venture between four of the country's leading telecom operators and one ISP.

The World Bank provided the Burundian government with a loan of US\$11.5m to help finance the US\$25m project.

The project involves the creation of a 1,250km fibre optic backbone connecting all 17 provinces.

Way forward

- ▶ **Telecom Infrastructure sharing will become important for speedy growth and rollout of telecom services especially in developing countries**
- ▶ **Government has to take initiatives to facilitate proper framework for infrastructure sharing**
- ▶ **Proper regulatory and policy framework for infrastructure sharing is important to boost this sector.**

