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# Keynote Address: Enabling digital innovation through universal service and access funds

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# **Enabling Digital Innovation through Universal Service and Access Funds**

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# Contents

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1. Background / Definitions
2. Communications Gap Analysis Model
3. Key USF Trends
4. Kenyan Experience – USF activities
5. The Kenya National Broadband Strategy
6. Enabling Digital Inclusion in Kenya – NBS implementation strategy
7. Way forward

**Digital Innovation** - The application of digital tools and digital infrastructure to offer solutions to enterprises / customers:

- ❑ Benefits; convenience and reduces the cost of business.
- ❑ The biggest driver of innovation – Information & Communications Technology (ICTs)

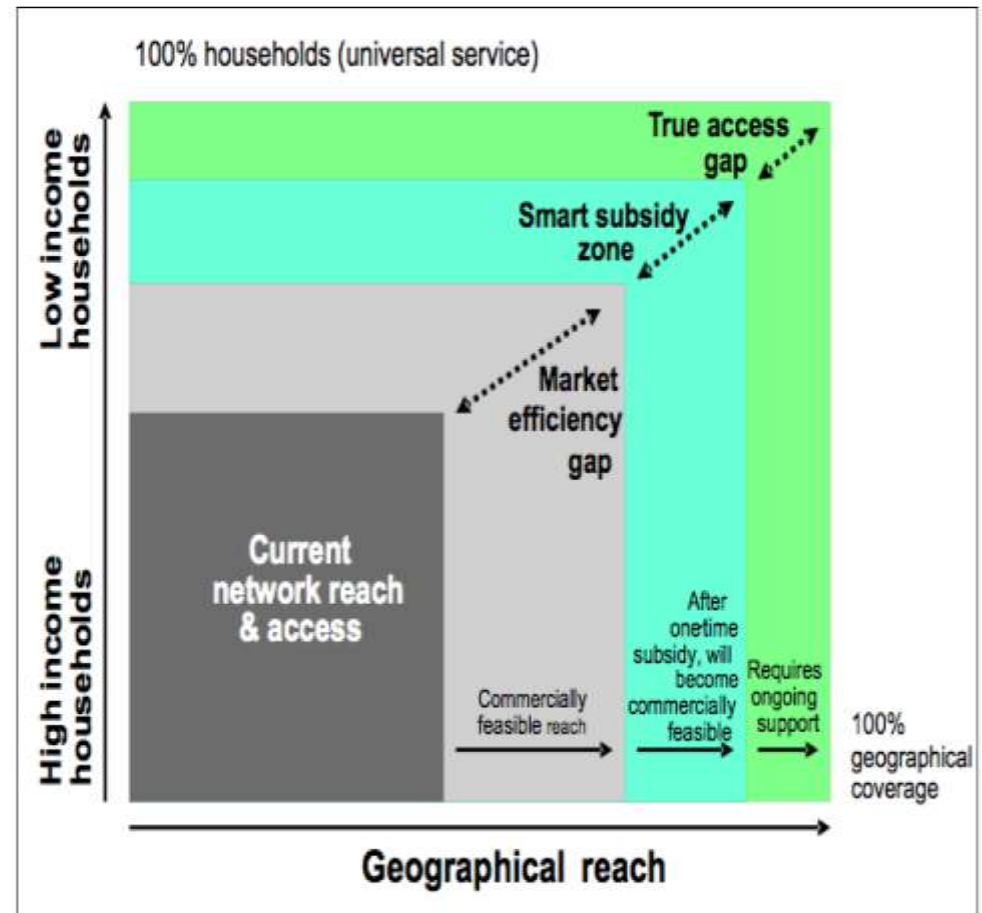
- **Universal Access (UA)**: The provision to every person a reasonable means of access to a publicly available telecommunication centres – public pay phone, community tele-centres, Internet café etc.
- **Universal Service (US)**: Promoting or maintaining of “universal” availability of connections by individual households to public telecommunications networks mainly achievable in developed nations.

**Universal Service Fund (USF)** - a strategic policy tool of a liberalised market for reaching “beyond the market” whose objectives are to serve:

- low income & disadvantaged people (PWDs, women and children),
- high cost (e.g. rural) areas
- Key government institutions in remote and rural areas

# Communications Gap Analysis

- Over last few years operators have bridged the **market efficiency gap** for voice
- The **smart subsidy zone** has narrowed
- The **true access gap** is typically last 5% of total population, but 20% in rural areas. **Requires use of USF**



Source: Intelecon, 2009.

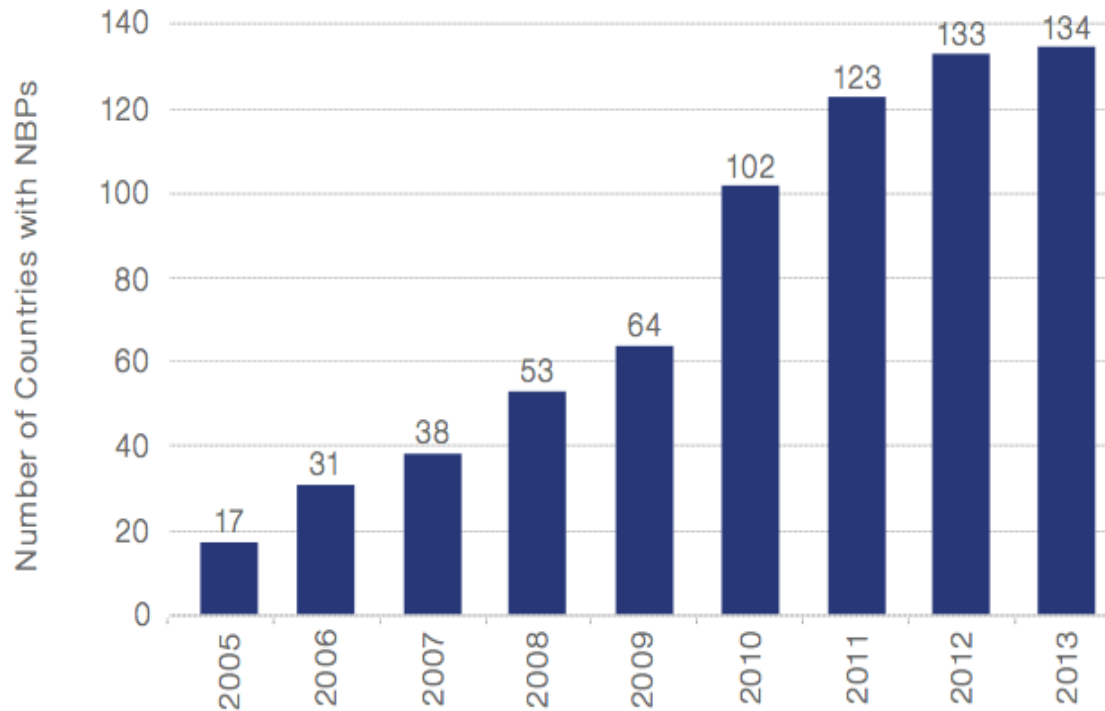
# Key USF Trends Today



1. Inclusion of broadband Internet in USF policies
2. Goals are becoming more ambitious – towards digital inclusion
3. More complex interactions with other sector policies to ensure usefulness of the interventions
4. Greater interest in reaching the poor by commercial companies



Figure 4: Growth in National Broadband Plans, 2005-2013



In 2009/2010 there was an explosion of countries introducing national broadband plans

By mid-2013, 69% of all countries have a NBP. (ITU, 2014)

# Kenya's USF Activities to date



## Research and Development

- Internet market study, National ICT survey & Access gaps study

## Computerization of Health Centres

- Pilot project connecting 22 public health facilities to improve reporting & drug supply

## Digitalization of the Kenya Certificate of Secondary Education Curriculum

- Content development to enhance e-learning, 11 curriculum subjects were digitized at KCSE
- Plans underway to support the primary curriculum digitization

## Community Broadband projects in high cost areas.

Connects all major institutional locations within the town: schools, health facilities, government security installations (police stations) offices with full-service broadband

## ICT for People with Disabilities

- 10 ICT centres for PWD learning institutions, web-portal & awareness campaign

## School based ICT Centres & Telecentres

- Equipped 16 schools each with computers and free Internet connectivity
- Community telecentres with a focus on how to integrate ICT in daily income (livelihoods) generating and other socio-economic activities

## E-Resource centers project with KNLS libraries

- Phase I: 10 e-Resource centers equipped with high speed internet connectivity.
- Phase II: 46 e-Resource centers within community libraries across 47 counties in Kenya

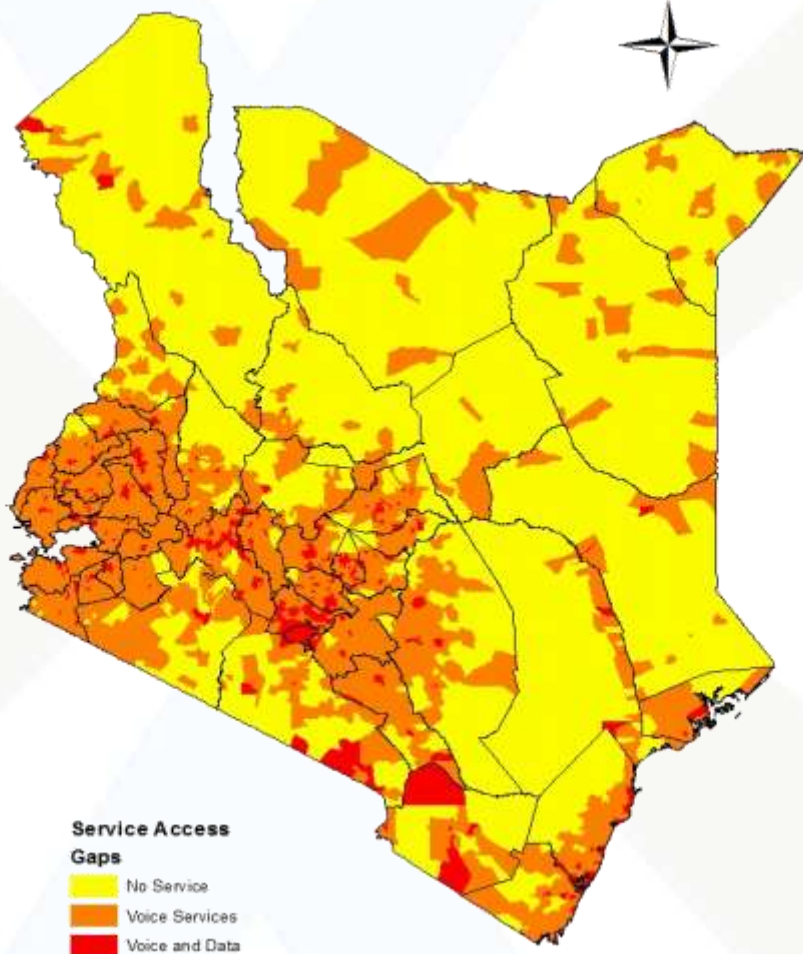
# Going Forward - NBS of Kenya 2013



NBS - partnership between various players:

- Champion – Ministry of Information Communications and Technology (MoICT).
- Driver – Communications Authority of Kenya
- A National Steering Committee comprising various stakeholders.
  - E-Government Directorate
  - Kenya ICT Board
  - National Communications Secretariat
  - Vision 2030 Secretariat
- International Partners
  - USAID through its Global Broadband and Innovations (GBI)

# Address Access Gaps






|              | Voice | Data  |
|--------------|-------|-------|
| Sub Location | 1,119 | 4,374 |
| Population   | 4.4m  | 29.4m |

**Broadband Access in Kenya is less than 7% (2.9 M Subscribers)**

# Increase NOFBI utilization



|                    | Mbps              |
|--------------------|-------------------|
| Available Capacity | 847,464           |
| Utilized Capacity  | 436,006.4 (51.4%) |
| Design Capacity    | 10 Terabits       |

-  OFC (New) of NOFBI Phase 2
-  OFC (Existing) of NOFBI Phase1
-  OFC (Existing) of Private Operators



## Extensive Fiber Optic Network

- 60,000KM

Deployment of Nationwide  
Broadband wireless networks



# Infrastructure, Connectivity and Devices



Subsidized and free devices including laptops

Establish Neutral National Data Centers







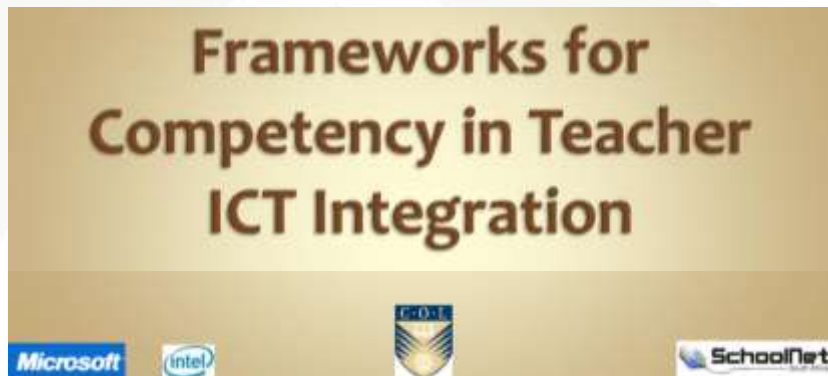
# Capacity Building and Awareness



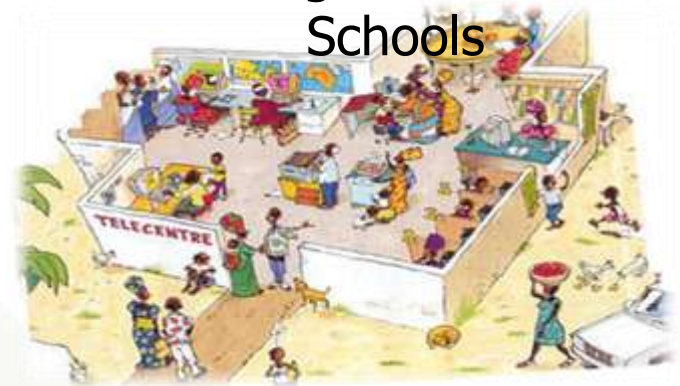
ICT curricula aligning skills with industry demands



Integrate ICT in Schools



Mandatory ICT training for all teachers



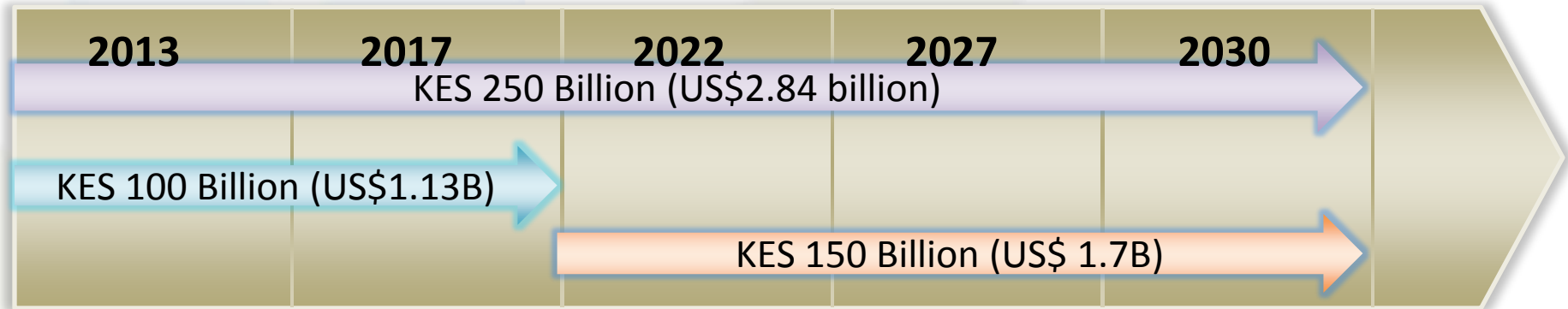
Establish ICT centers in all wards

# Broadband Future: Telemedicine

Connectivity to all health facilities



# NBS Funding and Investment Requirements (KES)



- Active collaboration with financial sector
- % of ICT in National Budget raised from current 0.5% to 5%
- 70B Broadband Infrastructure Bond
- 30B Broadband Venture Capital fund

## ■ Regulatory Reforms

Unified licensing framework, promote infrastructure sharing, create effective voice and data interconnection regimes

Stimulate private sector investments and promote PPPs within the ICT sector.

## ■ Enhanced targets and funding for the Broadband Strategy

Including infrastructure, spectrum, content and capacity building in rural areas

Community development and ICT knowledge initiatives

## ■ Deepen Innovative Content / applications development

Target the health sector, Education and Special Program for PWDs under PPPs framework

Increase the reach of m-money driven initiatives for “Bottom of Pyramid” users

## ■ Universal Service Funds – operationalize USF and use USF for greater broadband access and affordability.

*Thank you*