ICTs for Inclusive Social and Economic Development

Overview:

- Effective Policies for Promoting ICT Development
- Kenya National Broadband Strategy
- Colombia Vive Digital Program
- Indonesia Broadband Plan
- I, ME, MINE
Effective Policies for Promoting ICT Development

• Best Practices = Best Processes
  ➢ National Broadband Strategies/Plans, Digital Agendas, etc.: Getting from Objectives to Outcomes

✓ Structured, formal processes (Steering Committee)
✓ High level authority and support
✓ Open, inclusive, consultative
✓ Establish objectives, targets, timetables
✓ Market status and gap analysis
✓ Costs and financing
✓ Action Plans
Effective Policies for Promoting ICT Development

• Ecosystem Approach

  ➢ Ensure comprehensive and coordinated incorporation of all inter-related elements

  ✓ Supply and demand
  ✓ Infrastructure, access, services, devices
  ✓ Policy and regulation
  ✓ Applications, content
  ✓ Capacity building, digital literacy
  ✓ Funding sources and mechanisms
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Effective Policies for Promoting ICT Development

• Stakeholder Roles
  - Provide inputs to the planning process
  - Make commitments to participate in implementation

✓ ICT suppliers (networks, services, equipment, software)
✓ Government (national, local)
✓ Public institutions (education, health, security, postal, community, libraries, etc.)
✓ End users (consumers, businesses, govt as user)
✓ Financial sector (banks, investors)
✓ NGOs, donors, international partners, etc.
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Kenya National Broadband Strategy

- Cooperative policy development framework
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Kenya National Broadband Strategy

- Steering Committee leadership, oversight

- Responsible for guiding the overall development of a comprehensive Strategy
- Adopt a consensus-based approach through a shared vision and coordinated activities with stakeholders

1. Establish the key principles and objectives
2. Define and appoint the Working Groups
3. Oversee and advise Working Group deliberations
4. Establishing evaluation procedures to monitor and oversee execution of the Action Plans
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Kenya National Broadband Strategy

Formalized, structured process

1. Key concepts
   Principles, objective and definitions
   Q2 2012

2. Stakeholders Roles
   Identify Stakeholders and categorize into TWGs
   Q3 2012

3. Technical workings Group
   1st Draft NBS
   Q4 2012

4. Public Consultation
   Solicit Inputs and comments, analyze
   Q1 2013

5. Final NBS
   Consolidate and include stakeholder inputs
   Adopt in VISION 2030
   Q2 2013

6. Implement
   Performance targets
   Monitor & evaluate
   Continuous review
   2013 2030
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Kenya National Broadband Strategy

- Ecosystem approach
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#### Kenya National Broadband Strategy

**Table 3: Strategy for Infrastructure, Connectivity and Devices**

<table>
<thead>
<tr>
<th>Sub-Issue</th>
<th>Objectives</th>
<th>Outcomes</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality broadband network</td>
<td>Provide quality broadband services to all citizens</td>
<td>Improved quality of life in the way citizens work, live and learn</td>
<td>• Avail sufficient spectrum for Wireless Broadband Networks.</td>
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<td></td>
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<td>• Government sponsored PPPs to fund infrastructure development.</td>
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<td>• Use of Universal Service Fund to extend broadband network penetration.</td>
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<td></td>
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<td>• Enhance regulatory oversight with respect to quality of service.</td>
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<tr>
<td>Coordination and complimentary services</td>
<td>Provide a harmonized and enabling environment for infrastructure deployment</td>
<td>Reduced cost of deploying and operating broadband networks</td>
<td>• Provide a framework for synchronized planning of civil and ICT data projects.</td>
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<td>• Promote and ensure operators share common infrastructure.</td>
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<td></td>
<td>• Government to provide rebates/tax incentives for operators providing complimentary services (utilities) in marginalized areas.</td>
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<tr>
<td>Accessibility and affordability</td>
<td>Provide accessible and affordable broadband services to all citizens</td>
<td>Increased demand for and use of broadband services</td>
<td>• Government to provide subsidies for access devices.</td>
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<td>• Promote local production of access devices.</td>
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<td></td>
<td>• Promote and avail online local content (e.g. e-Govt. information and services) to spur demand.</td>
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<td></td>
<td>• Continued expansion of power, road, security infrastructure across the country.</td>
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<td></td>
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<td></td>
<td>• Review regulatory framework to optimise spectrum.</td>
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<td></td>
<td>• Re-form and avail additional spectrum to enhance last-mile solutions.</td>
</tr>
<tr>
<td>Availability and reliability</td>
<td>Develop a robust and reliable back-bone for the broadband network</td>
<td>A rich, interruption-free broadband experience</td>
<td>• Establishing redundancy at the International gateways and Landing Points.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>• Establishing redundancy within the domestic network (county level).</td>
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<td></td>
<td></td>
<td></td>
<td>• Building data-centres of international standards.</td>
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<td>• Enhance capabilities of Local Exchange Points.</td>
</tr>
</tbody>
</table>
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Colombia Vive Digital Program

- Ecosystem approach

In the year 2014 the Digital Ecosystem of the country will accomplish:

**INFRASECTURE**
All Colombians have at least one connectivity solution thanks to a modern information highway.

**USERS**
Reduce the digital gap in Colombia through training and awareness of ICT.

**APLICATIONS**
That Colombians have a more productive and easier life thanks to a large supply of applications and digital contents.

**SERVICES**
That Colombians have access to a competitive supply of the latest technological services.

**DEMAND**

**SUPPLY**

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Colombia Vive Digital Program

**INFRASTRUCTURE**

**OBJECTIVE**
In 2014 all Colombians will have at least one connectivity solution thanks to a modern information highway

**STRATEGIC OBJECTIVES**

- Have adequate international connectivity to support the Internet traffic, multiplying the current capacity by 20

- Build a national fiber optic network that reaches at least 700 municipalities where 90% of the Colombian population is located

- Ensure that 100% of the municipalities urban areas have wireless Internet coverage, with 3G service and at least 50% with the latest generation service such as 4G

- To achieve that all rural towns with more than 100 people have access to a public Internet place
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Colombia Vive Digital Program

**APPLICATIONS**

**OBJECTIVE**
Colombians have a more productive and easier life thanks to a wide range of applications and digital contents

**STRATEGIC OBJECTIVES**

- Achieving greater efficiency, transparency and citizen participation, by making that 100% of entities of national order and 50% of the local entities provide government services online, keeping the leadership in e-government in Latin America and the Caribbean.

- Articulate and support efforts of the technology plan from the other ministries.

- Develop applications for the MSMEs so that 50% use internet.
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Colombia Vive Digital Program

“Puntos Vive Digital” (PVDs): public access ICT centers
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Indonesia Broadband Plan

1. Supply aspect / Infrastructure:
   - Competition in the operation of wireline broadband
   - Optimizing the use of spectrum
   - Optimizing the use of right of ways
   - Sharing Infrastructure
   - Neutral Technology
   - Open access
   - Network and system security

2. Demand Aspect / Utilization and Adoption:
   - Digital literacy (e-literacy)
   - Aggregating demand:
     - E-government
     - E-education
     - E-health
     - E-procurement
     - E-logistic
   - Green ICT dan Green with ICT

3. Funding Aspects
   - Optimizing the use of USO Fund and non-tax revenue ICT sector
   - Collaboration of Government and private (public private partnership)
   - More efficient and effective ICT planning and funding in the state budget

4. Regulation Framework and Institutional Aspect
   - Policy and regulation framework to create conducive investment and business climate
   - Institutional supervisors and executors of Indonesia Broadband Plan
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Indonesia Broadband Plan
## ICTs for Inclusive Social and Economic Development

### Indonesia Broadband Plan

#### e-Health Objectives and Strategies

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Outcomes</th>
<th>Strategies</th>
<th>Time Frame</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>National e-Health Network</td>
<td>Nationwide connection to all hospitals, clinics, health facilities</td>
<td>Connect all locations virtually through e-Govt network, establish regional local nodes</td>
<td>Palapa Ring +1</td>
<td>Min. Health MCIT</td>
</tr>
<tr>
<td>National Vital Health Statistics Database</td>
<td>Integrate access to data on disease, treatments, patient records</td>
<td>Incorporate e-health module into secured national e-Govt data center, develop standardized applications</td>
<td>Palapa Ring, NIX + 1 (17)</td>
<td>Min. Health Min. Internal Aff MCIT</td>
</tr>
<tr>
<td>Universal Health Coverage (UHC, JKN)</td>
<td>Equal distribution of health service in the region</td>
<td>Data and service integration with social security network and health insurance programme</td>
<td>Palapa Ring, NIX + 1 (17)</td>
<td>Min. Health Min. Internal Aff MCIT</td>
</tr>
<tr>
<td>Special Treatment Coverage</td>
<td>Health service is expanded to underserved areas</td>
<td>Broadband application for telemedicine telediagnosis, teletherapy</td>
<td>Palapa Ring +1 – 2018</td>
<td>Min. Health MCIT</td>
</tr>
<tr>
<td>National Health Promotion Programme</td>
<td>Improvement of nutrition programmes, sanitation, health environment and maternal care</td>
<td>ICT broadband to disseminate public health campaign and preventive programme</td>
<td>2015</td>
<td>Min. Health Min. Internal Aff MCIT</td>
</tr>
<tr>
<td>Mobile e-Health Treatment Programme</td>
<td>Equal distribution of health service in the region</td>
<td>Mobile e-Health as an extended service area for promotion programme, preventive and curative</td>
<td>2016</td>
<td>Min. Health Min. Internal Aff MCIT</td>
</tr>
<tr>
<td>Regulations on Health Information System</td>
<td>Priority for promotion and preventative, Maternal care as priority target</td>
<td>Staff of Puskesmas (Public Health Centre) with ICT skill and task to promote and motivate community behaviour to public health</td>
<td>2014-2019</td>
<td>Min. Health Min. Internal Aff Min. State App. RE</td>
</tr>
</tbody>
</table>
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I = Innovative
ME = Mobile-Enabled
MINE = Micro-Investment in the
Networked Economy
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I, ME, MINE

= Innovative, Mobile-Enabled, Micro-Investment in the Networked Economy

- Digital networks not only connect people socially, but can become a vital financial inclusion mechanism
  - As much as 75% in developing world don’t have bank accounts
  - Safaricom’s M-Pesa (Kenya, Tanzania, etc.)
  - Micro payments, transfers, on-line purchases, credit

- ICT-driven development allows for (depends upon) E-entrepreneurs
  - On-line micro-businesses: mobile apps, e-commerce sites
  - Self-employed tech experts, info-tainment providers, etc.
  - Need paying customers, also investors
ICTs for Inclusive Social and Economic Development

I, ME, MINE

- E-finance, and e-investment, are not well established in most developing countries
  - ICT sectors have been built without local capital, finance
  - Banks are inexperienced, focus on safe, big investments
  - Start-ups need capital, credit, customers, time

- Innovative solutions:
  - Mobile money payments, direct e-purchases
  - Crowd-sourced micro-investment (e.g., Kickstarter)
  - Venture capital funding of e-enterprise (e.g., Savannah Fund)
  - USAF co-financing of ICT incubators
  - Micro lending (e.g., Grameen)
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Remittances

- International remittances are a crucial input to development
  - Over $350 billion in payments into developing countries from 200 million ex-pat workers
  - Philippines: 10.5 million OFWs contribute > 10% of GDP

- Mobile and Internet technology dramatically reduce cost and increase convenience, efficiency of remittances
  - Phone-to-phone transfers
  - Social network contacts, immediacy

- Overseas remittances can also support micro-enterprises
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Development Assistance, Aid

- Mobile-enabled micro payments also significantly alter the options for development assistance, donations
  - Direct transfer payments via mobile money
  - Contributions to and by charities (global and local)
  - Reduced transaction costs, also increased performance data

- Disaster relief and refugee aid
  - Haiti
  - Syria
  - Philippines
I, ME, MINE

Text “RELIEF”
to UNICEF: 864233
= $10.00 donation to
Philippines typhoon victims

Thank you
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