Cross-Border Cooperation for Digital Transformation

e-Governance Conference

21st – 22nd May 2019
Tallinn, Estonia
The picture as of today

- 54 countries with a 1.2 billions population and over 50 digital legal, regulations and policies

- Limited cross-countries infrastructures and a strong reliance on non-African infrastructure and products

- Intra-Africa trade represents approx. 18% of African exports (vs. 69% for the EU)

- Digital markets are largely national and do not benefit from the scale of the continent

- Low level of digital skills
..a situation which called up 25 countries (more than 600M population) to form an alliance together with 41 private partners to face the 4th Industrial Revolution.

**Smart Africa’s members states**

- Angola
- Benin
- Burkina Faso
- Cameroon
- Chad
- DR Congo
- Côte d’Ivoire
- Djibouti
- Egypt
- Gabon
- Ghana
- Guinea
- Kenya
- Mali
- Niger
- Rwanda
- Sao Tome & Principe
- Senegal
- South Africa
- South Sudan
- Togo
- Tunisia
- Uganda
- Zambia

24 Member States have joined the Alliance. This represents a Market of 600+ millions people.

**Partner Organizations**

- ITU
- African Development Bank
- African Telecommunications Union
- UN Economic Commission for Africa
- NEPAD
- ICANN
- The World Bank
- GSMA
- ICANN
- UNESCO
... And where each country leads and champions a flagship project, which collectively form the pillars and enablers of Digital transformation
..and together with clear and ambitious vision

Transform Africa into a **single digital market** by 2030

- Build an **affordable digital infrastructure** to interconnect the continent
- Harmonize regulations, promote and facilitate **investment and doing business** across Africa
- Accelerate the birth of a **digital society**
The vision is aligned with our key partners’ one

- African Union
- International Telecommunication Union (ITU)
- United Nations Economic Commission for Africa
- European Union
- The World Bank
- GSMA
- ICANN
- African Telecommunications Union
...and that vision is supported by 3 groups of objectives...

**Africa as a single digital market by 2030**

1. **Develop an affordable digital infrastructure across the continent**
   - Interconnect all African countries
   - Establish the One Africa Network
   - Facilitate the bulk purchase of wholesale Internet bandwidth
   - Increase the number of public and private datacentre in Africa

2. **Harmonize regulations, promote and facilitate doing business and investing across Africa**
   - Create investment vehicles to finance multi-countries projects
   - Promote for an interoperable digital ID for Africa
   - Harmonize digital payment solutions across Africa
   - Support the creation of an African start-up ecosystem

3. **Accelerate the birth of a digital society**
   - Connect schools with on-grid & off-grid power to the Internet
   - Leverage digital to reduce gender gap through education and leadership programs
   - Create a pool of African digital talents through a scholarship program
The game of numbers...and figures......BUT Let’s focus on the TREND AND RATIOS

Why develop an affordable digital infrastructure across the continent?

CONTROVERSIAL FIGURE????
Here is the KPI from the high cost of the Internet in Africa...

The African Digital Frontier

500 million + mobile phone subscribers across the continent

110 million + Internet Users in 2015

The four biggest mobile phone markets are Nigeria, South Africa, Kenya and Ghana.

The largest fixed line broadband market is South Africa, followed in order of market size by Egypt, Morocco, Algeria and Tunisia.

International Internet Usage

1. PEOPLE’S REPUBLIC OF CHINA - Internet users: 1,088,000,000
2. INDIA - 264,000,000
3. USA - 257,000,000
4. FRANCE - 142,000,000
5. BURMA - 81,000,000
6. JAPAN - 75,000,000
7. SOUTH KOREA - 70,000,000
8. GERMANY - 62,000,000
9. BRAZIL - 62,000,000
10. NEW ZEALAND - 4,000,000

South Africa has 4.2 million 3G capable handsets in 2010.

10.8% of South Africa’s population uses data services.

SOCIAL MEDIA IN AFRICA

57% of tweets in Africa are sent from mobile devices.

MORE COOLNESS?

SOURCES:
cnn.com
www.internetworkstats.com
www.interactivemedia.com
www.bbc.com
Infographic designed by @inewswow
The first objective focusses on developing an affordable Digital Infrastructure across the continent.

1. Develop an affordable digital infrastructure across the continent
   - Interconnect all African countries
   - Establish the One Africa Network
   - Facilitate the bulk purchase of wholesale Internet bandwidth
   - Increase the number of public and private datacentre in Africa

**IMPACT (Social and Economic)**
- Reduces the high dependency of Internet access on **sub-marine cables**
- Reduces the cost of Internet access in Africa and make affordable
- Allows equal access to submarine cable for landlocked country
- Promote One Africa Network
- Unlocks the potentials for continental data-centers
- Allows African voice and data to remain on African continent

**Legend**
- Smart Africa Countries (24)
- Non Smart Africa countries (9)
- Connecting through Smart Africa Countries
- Connecting through non Smart Africa Countries
- Submarine Connectivity

**Desktop feasibility Summary of Smart Africa Project**

<table>
<thead>
<tr>
<th>Zone</th>
<th>Normal Soil (KM)</th>
<th>Hard Rock (KM)</th>
<th>River Crossing (KM)</th>
<th>Sea Cable (KM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Zone</td>
<td>5210</td>
<td>0</td>
<td>1</td>
<td>978</td>
</tr>
<tr>
<td>North Zone</td>
<td>5630</td>
<td>1200</td>
<td>2</td>
<td>1955</td>
</tr>
<tr>
<td>South Zone</td>
<td>1880</td>
<td>120</td>
<td>6</td>
<td>8165</td>
</tr>
<tr>
<td>Total</td>
<td>12320</td>
<td>1320</td>
<td>9</td>
<td>11098</td>
</tr>
</tbody>
</table>

Source: Smart Africa and Tata Communication, 2018
The 2nd objective focusses on harmonizing regulations, promote and facilitate doing business and investing across Africa.

- Create investment vehicles to finance multi-countries projects
- Promote for an interoperable digital ID for Africa
- Harmonize digital payment solutions across Africa
- Support the creation of an African start-up ecosystem

Flagship Projects

<table>
<thead>
<tr>
<th>Intra-African cross-border connectivity</th>
<th>Status/Lead Champion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>One Africa Network</th>
<th>On Going</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Digital Economy</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Startup &amp; Innovation Ecosystem</th>
<th>To be launched</th>
</tr>
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<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
..and the 3rd objective focuses on accelerating the birth of a digital society

3

Accelerate the birth of a digital society

- Connect schools with on-grid & off-grid power to the Internet
- Leverage digital to reduce gender gap through education and leadership programs
- Create a pool of African digital talents through a scholarship program

Flagship Projects

- Smart Cities: Closed
- Smart Villages: On going
- Capacity Building and Digital Literacy: On going
- Scholarship Fund: On going

Lead Champion
Where we came from....
Our achievements during the first phase focussed on governance and launch of the Free Roaming project within the Smart Africa Space

**Phase 1 (2014 – 2015): Initiation phase**

- Finalization of the Smart Africa’s governance
- Inception of Smart Africa Secretariat
- Launch of 2 projects:
  - Free Roaming
  - Smart Africa Scholarship fund (61 Scholarship awarded as of to date)
For the Free Roaming initiative, two pilots projects were initiated which demonstrated a compelling reason to establish an African Clearing House.

- **The common framework:**
  - The traffic is exempted from surcharges on International traffic.
  - No charges for receiving calls while roaming
  - Prevailing local tariff rates in the visited country applies to inbound roamers with no discrimination between inbound roamer and local subscriber of visited networks.

### Northern Corridor
- **Tariff**: Regional retail tariff is capped at 0.10 USD per minute
- **Results**: 
  - Revenues increase by 58%
  - Costs reduction by 45%
  - Margin increase by 218%
  - Roaming traffic increase by 911%

### West Africa Region
- **Tariff (outgoing calls)**: Local tariff
- **The first 300 minutes are free within the limit of 30 days cumulative stay OR return to the country of origin**
- **Results**: Increase of the Roaming and international incoming traffic between countries
..the success of free roaming pilots project gave birth to One Africa Network initiative, where critical decisions have to be made in order to take-off into a truly member states owned..

<table>
<thead>
<tr>
<th>Critical Decision</th>
<th>Current status</th>
<th>Next steps</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service scope</strong></td>
<td>Zero fee for incoming calls and SMS</td>
<td>Internet data at local rates</td>
<td>One Africa voice &amp; SMS price</td>
</tr>
<tr>
<td></td>
<td>Outgoing calls on local rates</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Geographical scope</strong></td>
<td>2 zones cumulating 12 countries</td>
<td>More countries onboarded</td>
<td>One Africa Network</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td>No regional traffic exchange platform</td>
<td>National &amp; regional clearing houses</td>
<td>One Africa Infrastructure</td>
</tr>
<tr>
<td><strong>Regulation</strong></td>
<td>• Draft regulation for roaming &amp; international communications</td>
<td>Validation of regulatory draft</td>
<td>One Africa Regulation</td>
</tr>
<tr>
<td></td>
<td>• ToR for architecture and clearinghouse</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Phase 2 (2016 – 2019): First initiatives launched

- Projects: 9 projects initiated
- Blueprint: 4 blueprints (2 initiated, 2 produced)
- Doubling of state members:
  - From 2016 to 2018: From 11 to 24 (600M)
  - Past 75 days progress (three countries approached):
    - Committed to join: Sierra Leone (7.9M), Ethiopia (110M) and Congo (5.3M)
    - Ongoing discussions: Nigeria (196M)
- 9 international organisations and 28 private companies now participating to the Alliance
- Support for the creation of Council of African Regulators
- Best practice sharing initiatives implemented (Study tour in South Korea, …)
- Organization of Smart Africa events: TAS, Smart Country days.
- Operationalization of Smart Africa Secretariat
Where we are today
### Smart Africa as a facilitator and an enabler for member countries’ digital transformation

<table>
<thead>
<tr>
<th>Step 1: Identify &amp; analyze digital topics</th>
<th>Step 2: Develop Blueprint</th>
<th>Step 3: Raise Funds for projects</th>
<th>Step 4: Implement projects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Countries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Focus on national initiatives</td>
<td>• Lead and/or contribute to blueprints development</td>
<td>• Mobilize investments for national projects</td>
<td>• Lead management and implementation for national projects</td>
</tr>
<tr>
<td>• Contribute to whitepapers</td>
<td>• Develop national strategy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Share experience</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Smart Africa**

- Develop Whitepapers
- Share Best practices
- Conduct studies
- Facilitate Blueprint development for members
- Organise Events to showcase blueprint (TAS, CAR ...)
- Only for cross-border projects (SPV, ...)
- Support countries to mobilize investments for national projects
- Insource or outsource implementation and project management for cross-border projects

**Private Sector**

- Contribute to Whitepapers
- Provide expertise for studies
- Partner in Blueprint development for members
- Sponsor Events (TAS, CAR ...)
- Sponsor all projects including cross-border projects and national projects
- Implementation for all projects including cross-border projects and national projects
11 projects have been identified

<table>
<thead>
<tr>
<th>Projects</th>
<th>Started?</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interconnect all African countries</td>
<td>Yes</td>
<td>3 countries at implementation stage</td>
</tr>
<tr>
<td>Establish the One Africa Network</td>
<td>Yes</td>
<td>12 countries at implementation stage</td>
</tr>
<tr>
<td>Facilitate the Bulk purchase of wholesale Internet bandwidth</td>
<td>Yes</td>
<td>Scoping still ongoing</td>
</tr>
<tr>
<td>Increase the number of public and private datacenters in Africa</td>
<td>Yes</td>
<td>In discussions</td>
</tr>
<tr>
<td>Create investment vehicles to finance multi-countries projects</td>
<td>Yes</td>
<td>In discussions</td>
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<tr>
<td>Promote for One digital ID for Africa</td>
<td>Yes</td>
<td>Scoping still ongoing</td>
</tr>
<tr>
<td>Harmonize digital payment solutions across Africa</td>
<td>No</td>
<td>In discussions</td>
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<tr>
<td>Support the creation of an African start-up ecosystem</td>
<td>Yes</td>
<td>Scoping still ongoing</td>
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<td>Connect schools with on-grid &amp; off-grid power to the Internet</td>
<td>Yes</td>
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<td>Leverage digital to reduce gender gap through education and leadership programs</td>
<td>Yes</td>
<td>Scoping still ongoing</td>
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<tr>
<td>Create a pool of African digital talents through a scholarship program</td>
<td>Yes</td>
<td>Implementation started (62 students)</td>
</tr>
</tbody>
</table>

Step 1: Identify & analyze digital topics
As an example..4 blueprints have been initiated, 3 more will be in a near future

<table>
<thead>
<tr>
<th>Blueprints</th>
<th>Leader</th>
<th>Status</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra-Africa connectivity</td>
<td>🇬🇭</td>
<td>Closed</td>
<td>Transformed into Cross border project</td>
</tr>
<tr>
<td>Smart cities</td>
<td>🇰🇪</td>
<td>Closed</td>
<td>On going assistance with 4 countries</td>
</tr>
<tr>
<td>Capacity building</td>
<td>🇬🇭</td>
<td>On going</td>
<td>To be shared with other countries</td>
</tr>
<tr>
<td>Digital economy (Kenya)</td>
<td>🇰🇪</td>
<td>On going</td>
<td>Presentation of the blueprint at TAS 2019</td>
</tr>
<tr>
<td>Start-up &amp; innovation ecosystem</td>
<td>🇳🇬</td>
<td>To be launched</td>
<td>Sharing of national experience at TAS 2019</td>
</tr>
<tr>
<td>Cyber security</td>
<td>🇳🇬</td>
<td>To be launched</td>
<td>Sharing of national experience at TAS 2019</td>
</tr>
<tr>
<td>Datacenter</td>
<td>🇳🇬</td>
<td>To be launched</td>
<td>Sharing of national experience at TAS 2019</td>
</tr>
</tbody>
</table>
Smart Africa organizes large and high visibility events & forums

Key figures*
- 19,000+ delegates
- 112 countries
- 100+ ministers
- 100+ sessions
- 100+ regulators

*: past five editions
Thank you

QUESTIONS?

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