COST TO COMMUNICATE
AND SPECTRUM
FRAMEWORK

Presentation to the Portfolio Committee on Telecommunications and Postal Services

Mr. Robert Nkuna (Director-General)

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Team DTPS

- Mr. Robert Nkuna, Director-General
- Ms. Mameetse Masemola, ADDG: ICT Policy Development Branch
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- Ms. Adelaide Masemola, Director: Economic Analysis
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- MR. Dick Sono, Chief Director: Radio Frequency Spectrum
"In terms of the Presidential Proclamations No. 37839 dated 15 July 2014 and Government Gazette No. 38280 dated 02 December 2014, the transfer of administration, powers and functions entrusted by specific legislation to the Ministry of Telecommunications and Postal Services and the Ministry of Communications, were established”.

KEY FOCUS AREAS

- Modernising the economy and economic infrastructure through
  Roll-out of ICT infrastructure, applications and services
- Roll-out of Postal and Banking Services
- Development of e-Strategies to roll-out e-Government and e-sectoral services
- Promoting Cybersecurity and security of networks
Context

- The National Development Plan 2030 recognises that inclusive economic growth in South Africa is critical to addressing inequality. Therefore increased access to communications technologies, in particular broadband, and the services and content carried on ICT networks is an important means of promoting growth.

- The government's Medium Term Strategic Framework identifies the high domestic cost of broadband internet connectivity as a major hindrance to socio-economic development in the country.

- SA Connect – South Africa's National broadband policy highlights that one of the primary factors hampering the country's competitiveness is the high prices charged for communications services.

- The National Integrated ICT Policy White Paper (White Paper) indicates the need to address the high cost to communicate that inhibits the ubiquitous utilisation of ICTs.
The entire policy framework of the White Paper is geared towards achieving universal service and access to all ICT infrastructure and services for South Africans regardless of who they are, where they live, their social or economic status.
Contribution of ICT to Gross Domestic Product (GDP)

2013/2014 ICT CONTRIBUTION TO GDP

<table>
<thead>
<tr>
<th>Category</th>
<th>2013/2014 ICT Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>0.2</td>
</tr>
<tr>
<td>Telecommunication Services</td>
<td>1.9</td>
</tr>
<tr>
<td>Computer Services</td>
<td>0.2 0.3</td>
</tr>
<tr>
<td>Content and Media</td>
<td>0.2 0.2</td>
</tr>
<tr>
<td>Related Activities</td>
<td>0.5 0.5</td>
</tr>
<tr>
<td>Contribution to GDP</td>
<td>3.1 3.0</td>
</tr>
</tbody>
</table>
Most households in South Africa access telecommunication services using mobile devices (cellular phones).

Source: Stats SA, 2016
Only 11% of households have both cellular and landline service

ICT uptake and usage (2)

Graph 3: Percentage of Households with access to the Internet at home, or for which at least one member has access to or used the Internet by province for 2015

- Just over half of South Africa’s households (53.5%) had at least one member who used the Internet either at home, workplace, place of study or Internet café.
- The Western Cape and Gauteng provinces had the highest access to the Internet.
<table>
<thead>
<tr>
<th>Category</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Line Subscriptions</td>
<td>3,846,332</td>
<td>3,515,607</td>
</tr>
<tr>
<td>Fixed Public Phone Subscriptions</td>
<td>43,666</td>
<td>26,424</td>
</tr>
<tr>
<td>Prepaid Mobile Subscriptions</td>
<td>72,423,365</td>
<td>68,710,864</td>
</tr>
<tr>
<td>Postpaid Mobile Subscriptions</td>
<td>14,561,818</td>
<td>12,603,599</td>
</tr>
</tbody>
</table>
## Mobile Data Subscriptions

<table>
<thead>
<tr>
<th></th>
<th>46,468,285</th>
<th>50,270,969</th>
</tr>
</thead>
</table>

Making South Africa a Global Leader in Harnessing ICTs for Socio-economic Development
ICT uptake and usage (3)
Aggregated data from questionnaires received from electronic communication services, electronic communication network services licensees (ICASA, 2016)

Mobile data subscription increased by 8.2% between 2015 and 2016.

**GLOBAL PERSPECTIVE**

Most global ICT rankings use the following indices to measure how countries leverage ICTs to promote socio-economic development

- **DRIVERS**
  - Readiness
    - Infrastructure
    - Affordability
    - Skills
  - Usage
    - Individual
    - Business
    - Government

- **IMPACT**
  - Economic
  - Social

- **Global IT Report 2016 (World Economic Forum)** South Africa move 10 places up, ranked 65 out of 139 countries
- International Telecommunication Union – ICT Development Index ranks South Africa 88 out of 175 countries.
- South Africa performs well in terms of policy and regulatory environment and business innovation but performs relatively poorly on access, affordability and skills.
### GLOBAL PERSPECTIVE: COMPARATIVE DATA

**TARIFFS**

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>2&lt;sup&gt;ND&lt;/sup&gt; QUARTER 2016</th>
<th>2&lt;sup&gt;ND&lt;/sup&gt; QUARTER 2017</th>
<th>According to this Mobile Price Index, South Africa is ranked 25&lt;sup&gt;th&lt;/sup&gt; out of 49 countries surveyed</th>
<th>The cheapest is offered in Egypt at</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>2.8</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.9</td>
<td>2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>3.9</td>
<td>2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>4.9</td>
<td>3.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>6.6</td>
<td>7.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The cost of 1GB in SA is three times more than in Nigeria.

Source: ICT Research Africa 2017
ICT SECTOR PERFORMANCE
TELECOMMUNICATIONS REVENUE
<table>
<thead>
<tr>
<th>Service</th>
<th>2015</th>
<th>2016</th>
<th>Source: ICT Research Africa 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL TELECOMMUNICATIONS</strong></td>
<td></td>
<td></td>
<td>Mobile data revenue increased significantly by 25.4% from 2015 to 2016.</td>
</tr>
<tr>
<td>REVENUE</td>
<td>147,338</td>
<td>148,849</td>
<td></td>
</tr>
<tr>
<td><strong>MOBILE SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REVENUE</td>
<td>78,838</td>
<td>82,209</td>
<td></td>
</tr>
<tr>
<td><strong>MOBILE DATA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30,216</td>
<td>37,881</td>
<td></td>
</tr>
<tr>
<td><strong>MOBILE VOICE SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>41,992</td>
<td>39,498</td>
<td></td>
</tr>
<tr>
<td><strong>FIXED INTERNET AND DATA REVENUE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13,736</td>
<td>12,608</td>
<td></td>
</tr>
</tbody>
</table>
MOBILE VOICE TRAFFIC

- Local outgoing mobile traffic to same mobile network increased by 17.4%
- Local mobile traffic to other mobile network decreased by 0.6%
- Local mobile to fixed networks decreased by 1.4%
Mobile data revenue increased significantly by 25.4%
Vodacom, Cell C and Telkom charge the same on 100MB.
MTN is most expensive on 500MB, 1GB, 2GB and 20GB.
Telkom is cheapest 500MB, 1GB and 2GB.

Source: ICASA 2017
DATA TARIFFS

“APPROXIMATELY 68,710,864 OF SOUTH AFRICANS ARE PREPAID SUBSCRIBERS YET 1GB OF DATA HAS REMAINED R149 FOR ALMOST TWO YEARS”
However, 22% of disposable income of people earning less than R388 a month is spent on a very limited basket of services including only 7 SMS and 77 minutes of calling time a month (ICT Research Africa).

SA Connect (SA’s Broadband Policy for South Africa) targets 5% as a percentage of disposable income that people can dedicate to communication services.
Recommendations of the Portfolio Committee on Telecommunications and Postal Services (Cost to Communicate Hearings include)

- Consumer protection - ensure price transparency by MNOs to empower consumers to make informed decisions when choosing service providers and ensure that service providers include user guidance and product awareness so they can make informed decisions about which product/package best serves their needs.

- DTPS must fast-track the finalisation of the Rapid Deployment Policy in consultation with all spheres of government to accelerate network expansion.

- DTPS must encourage the entrance of new operators into the market, including community networks and cooperatives, especially those that can serve...
underserviced areas—ensuring that they have access to appropriate spectrum at an affordable cost
POLICY AND REGULATORY INTERVENTIONS

- **Supply side measures**
  - Open Access Regime (Wireless Open Access Network)
  - Spectrum policy
  - Rapid deployment policy

- **Demand side measures**
  - ICT SMME Strategy
  - e-Government Strategy and Roadmap
  - National e-Strategy

- **Policy Directions and regulations**
  - Policy Direction on Effective Competition in broadband markets
  - End-User and Subscriber Service Charter Regulations
SUPPLY SIDE MEASURES

- Review of Call Termination Regulations of 2014

Key interventions
- Competition Commission – Data Services Market Inquiry
- ICASA – Priority Market Project

SUPPLY SIDE MEASURES

- This policy allows for effective service based competition and ensure accessible, affordable, high quality and reliable services for consumers
- It will increase network coverage, and enable the rapid deployment of broadband infrastructure and

Open Access Policy

- It encourages and promotes shared and equal access to broadband infrastructure
- The policy removes barriers to competition
- And fosters innovation and development of applications and services
This policy simplifies, streamlines and accelerates the deployment of critical broadband infrastructure. It provides a framework for ECNS licensees and landowners to work together for the public benefit while upholding the right of ECNS licensees to access property in order to deploy their networks. Rapid Deployment National Coordinating Centre deployment enables the automation of approval and permit systems.

Policy balances the environmental, health, safety, security and social impact of the deployment of electronic communications infrastructure.

Radio frequency spectrum is a national asset, a finite resource and a vital element of the communications infrastructure. Access to mobile broadband spectrum is critical to achieving NDP and SA Connect targets. The policy provides for a special dispensation for spectrum pricing, including reducing spectrum fees for licensees that provide services that meet clearly defined public interest goals and meet national objectives. Policy The policy provides for spectrum sharing, spectrum trading for non-high demand spectrum, refarming and setting aside of high demand bands for wireless open access.
Government’s objective is to ensure that spectrum is accessible to all

Licensing of spectrum should contribute to the realisation of the following public interest policy objectives

- Achievement of universal access to broadband;
- Adoption of open access principles;
- Ensure an optimal and sustainable level of service competition;
- Entry to market for historically disadvantaged people;
Electronic Communication Act (Act 36 of 2006)
Section 3 (1) mandates Minister to make policies on matters of national policy applicable to the ICT sector —
(a) the radio frequency spectrum;
• Spectrum can be assigned with set aside or obligations to address historical legacies and inequalities in the sector but this should not delay its allocation.

• Set aside spectrum for use on an open access basis and through joint private sector investment in infrastructure;

• A Ministerial policy directive will consider as a priority on how best to ensure that the release of high demand spectrum fulfils policy objectives and how best the application of open access principles to the assignment of broadband spectrum will be achieved.

• Department is in process to development draft policy direction to licence the spectrum for deployment of the Wireless Open Access Network.
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**DEMAND SIDE MEASURES**

- The strategy addresses fragmentation of e-Government initiatives, duplication of resources and lack of synchronization to digital transformation.
- The objective of the strategy is to ensure that all South Africans can access quality public service and government information from anywhere at any time.
- The strategy also seeks to reduce the cost of public administration and facilitates the efficient delivery of public services across South Africa.
- A roadmap for the implementation of the e-government strategy outlines the role players, timelines and key indicators.

- The national e-Strategy addresses current challenges through the application of three key interventions:
  - The ICT sector interventions facilitates competitions as well as address crosscutting issues such as National e-infrastructure availability, application development and digital identity.
  - The sector interventions pillar’s purpose is to develop sectoral interventions which support the 9-point plan and the medium-term strategic framework.
  - The third pillar establishes a comprehensive action plan to address issues related to the fourth industrial revolution.
The ICT SMME strategy facilitates the development and entry of SMMEs (particularly youth and women entrepreneurs) in the ICT sector. The strategy focuses on interventions to increase the levels of uptake and usage by SMME in all sectors of the economy. The strategy establishes a coordinating mechanism that improves integrated planning to support ICT SMME start-ups, incubation hubs based on the comprehensive ICT value chain analysis.

**Key interventions - ICASA’s Priority Markets Project (the implementation of the Minister’s Policy Direction on effective competition in broadband markets)**

- Phase 1 (Markets Study) of the 4 phases of this project is currently underway. The due date for submission of information was 10 October 2017.

- Phase 2 will consist of the release of the Discussion Document, and stakeholders given 45 working days to make written inputs.

- Public hearings may be undertaken (Phase 3) if necessary.
The process will culminate in the release of the Findings Document (31 March 2018) which will provide details in terms of the list of markets that are prone to ex ante regulation and a list of priority markets to be subjected to Section 67(4) of the ECA.
Key interventions- ICASA – Review of End –User and Subscriber Service Charter Regulations

- Draft amendments to the 2016 regulations. Amendments aimed at empowering consumers and address current challenges in respect of market practices:
  - 2016 parliamentary hearings, one of the key issues raised by stakeholders was the disappearance of data. In this regard, the amendments to the regulations 1) increases the validity periods of purchased data bundles and 2) seeks to eliminate the charges of unexpected out of bundle data charges
  - In terms of voice and SMS services, operators will be required to send notifications of service depletion to the end-user at set intervals and provide end-users
  - Licensees would be required to conduct quarterly campaigns to educate end-users on the use of smart phones, use of data as well as the services and products that the service providers offer
  - The following that, ICASA published an analysis of prepaid retail voice and data tariffs and the End-User and Subscriber Service Charter regulations in April 2016 was gazetted to address the following amongst others Bill-shock, transparency in
data billing, prepaid packages and roaming billing in line with the Transparency directive.

Key interventions- ICASA – Review of End –User and Subscriber Service Charter Regulations

- The following data expiry dates are proposed:

<table>
<thead>
<tr>
<th>Data bundle</th>
<th>Period before it expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>1MB to 50MB</td>
<td>10 days</td>
</tr>
<tr>
<td>50MB to 500MB</td>
<td>30 days</td>
</tr>
<tr>
<td>500MB to 1GB</td>
<td>60 days</td>
</tr>
<tr>
<td>1GB to 5GB</td>
<td>90 days</td>
</tr>
</tbody>
</table>
Key interventions - Competition Commission (the implementation of the Minister’s announcement in his Budget Vote speech that the Commission will be enlisted to probe the high costs of data)

- The inquiry is undertaken in terms of the provisions of the Competition Act No. 89 of 1998, as amended. The purpose of the inquiry is, in the main, to understand factors of the market(s) and value chain that may cause or lead to high prices for data services.

- The Commission has released the Terms of Reference and a call for submissions to gain clear understanding of the data services value chain, to assess the state of competition in the market at every stage of the value chain, as well as establish whether data supply quality and coverage is adequate by international standards and the country’s developmental needs.
Process of the Inquiry:

- Call for submissions (deadline 1 November)
- Individual requests to key stakeholders (e.g. MNOs) and potential meetings
- Analysis of information and further information requests and interaction with key stakeholders
- Release of interim findings and recommendations designed to attract further submissions (April 2018)
- Final report (due 31 August 2018)
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