Background

• Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ)
  o Established by the Postal and Telecommunications Act of 2000.
  o Started its operations in March 2001
  o POTRAZ situated at Emerald Business Park, No. 30 The Chase Harare

• Legislation brought about a new institutional framework for telecommunications:
  o Liberalized the sector
  o Introduced distinct roles of government, regulator, operators, and consumers.
POTRAZ MANDATE

• Ensuring provision of sufficient domestic and international telecommunication services
• Ensuring provision of services at rates consistent with the provision of an efficient and continuous service
• Promote the development of the sector services in accordance with:
  o Practicable recognised international standards
  o Public demand
POTRAZ MANDATE cont’d

- Furthers the advancement of technology
- Represents Zimbabwe internationally in matters relating to the sector
- Establishes, approves or controls the National Numbering plan
- Manages the Radio Frequency Resource
- Advises the Government on all matters relating to the telecommunication services
## General Country Background

<table>
<thead>
<tr>
<th>Location</th>
<th>Southern Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>390 590 square Km</td>
</tr>
<tr>
<td>Population</td>
<td>12.6 Million</td>
</tr>
<tr>
<td>Population Distribution</td>
<td>38% Urban: 62% Rural</td>
</tr>
</tbody>
</table>

- Telecommunication service usage is mainly in urban areas.
MARKET STRUCTURE
FIXED

• One fixed public operator (TelOne.)
• Offers local, regional and international voice telephone services.
• Has 337 881 subscribers (Lines)
• The fixed teledensity is 2.68%.
• Of these, 61 % are in the capital Harare.
• 53% are residential lines.
• 84 % of the lines are connected to the digital exchange.
• 17 % of the lines are in rural areas.
MARKET STRUCTURE

MOBILE

• There are three mobile operators: Econet, Net One and Telecel.

• The current subscriber base as at 30 June 2011 for the operators:
  
<table>
<thead>
<tr>
<th>Operator</th>
<th>Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econet</td>
<td>5,521,000</td>
</tr>
<tr>
<td>Telecel</td>
<td>1,297,000</td>
</tr>
<tr>
<td>Net One</td>
<td>1,349,000</td>
</tr>
</tbody>
</table>

• Mobile teledensity stands at 64.85%.

• All mobile operators are 100% digitalized.

• All the three operators offer 2G, GPRS, EDGE, and 3G services.

• Public mobile internet subscribers are currently 1.5 million.
MARKET STRUCTURE

INTERNET ACCESS

• The licensees are issued with either Class A or Class B.
• Class A allow VoIP services.
• Class B does not offer VoIP services.
• There are 11 Class A Internet Access Providers.
• There are 2 Class B Internet Access Providers.
• Internet users are estimated to be 1.6 million.
• Internet penetration rate is currently 12.7 %.
## MARKET STRUCTURE

### GENERAL

<table>
<thead>
<tr>
<th>Type of Operator</th>
<th>Number of licenses'</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSTN</td>
<td>1</td>
</tr>
<tr>
<td>Mobile</td>
<td>3</td>
</tr>
<tr>
<td>Internet Access Class A</td>
<td>11</td>
</tr>
<tr>
<td>Public Data</td>
<td>2</td>
</tr>
</tbody>
</table>
## SECTOR PERFORMANCES
(Number of subscribers in `000)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>NetOne</td>
<td>331</td>
<td>418</td>
<td>347</td>
<td>1,200</td>
<td>1,349</td>
</tr>
<tr>
<td>Econet</td>
<td>649</td>
<td>990</td>
<td>3,200</td>
<td>5,200</td>
<td>5,500</td>
</tr>
<tr>
<td>Telecel</td>
<td>246</td>
<td>248</td>
<td>451</td>
<td>1,300</td>
<td>1,297</td>
</tr>
<tr>
<td>Tel One</td>
<td>345</td>
<td>364</td>
<td>385</td>
<td>378</td>
<td>338</td>
</tr>
</tbody>
</table>
**ICT INFRASTRUCTURE**

- The country is now linked to the undersea cables as follows:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Backbone fibre Link</th>
<th>capacity</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powertel</td>
<td>Harare-BYO- Plumtree-Botswana</td>
<td>STM 16</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>Harare- Mutare - TDM</td>
<td>STM 16</td>
<td>Complete</td>
</tr>
<tr>
<td>Econet/Liquid Telecom</td>
<td>Harare-Masvingo-Beitbridge- South Africa</td>
<td>STM 64</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>Harare-BYO- Beitbridge – South Africa</td>
<td>STM 64</td>
<td>Work in progress</td>
</tr>
<tr>
<td>Tel One</td>
<td>Harare-Mutare-Mozambique</td>
<td>STM 64</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>Harare-Mazoe-Chinhoyi</td>
<td>STM 16</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>Harare-Chinhoyi-Makuti-Chirundu-Zambia</td>
<td>STM 16</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>Masvingo-Beitbridge-South Africa</td>
<td>STM 64</td>
<td>Work in progress</td>
</tr>
<tr>
<td></td>
<td>Harare-Gweru- Bulawayo-Beitbridge</td>
<td>STM 64</td>
<td></td>
</tr>
<tr>
<td>Africom</td>
<td>Harare-Mutare-Mozambique</td>
<td>-</td>
<td>Work in progress</td>
</tr>
</tbody>
</table>
• Zimbabwe Telecommunications Backbone
• Zimbabwe Telecommunications Backbone

Key:
- Yellow = Fibre

- TelOne Infrastructure
- Africom Infrastructure
- Econet/Ecoweb Infrastructure
- Telecel
- Proposed Zim Backbone
- National Backbone

- PowerTel Existing backbone
- Zimbabwe National Infrastructure Backbone

Key

- Econet/Ecoweb
- Existing Backbone

- Powertel Infrastructure
- TelOne Infrastructure
- Africom Infrastructure
- Telecel
- Proposed Zim Backbone
- National Backbone
- Zimbabwe Telecommunications Backbone
• Zimbabwe Telecommunications Backbone

Key

To ZAMBIA
To BOTSWANA
To SOUTH AFRICA
To MALAWI
To MOZAMBIQUE
To MAURITIUS

National Backbone

<table>
<thead>
<tr>
<th>Color</th>
<th>Service Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>TelOne</td>
</tr>
<tr>
<td>Yellow</td>
<td>Powertel</td>
</tr>
<tr>
<td>Blue</td>
<td>Econet</td>
</tr>
<tr>
<td>Green</td>
<td>Africom</td>
</tr>
<tr>
<td>Black</td>
<td>POTRAZ</td>
</tr>
</tbody>
</table>

Places

- Bulawayo
- Harare
- Mutare
- Gweru
- Masvingo
- Beitbridge
- To South Africa
- To Botswana
- To Zambia
- To Malawi
- To Mozambique

Places mentioned in the text:

- Zimbabwe Telecommunications Backbone
- BULAWAYO
- HARARE
- CHINHOTHO
- MUTARE
- GWERU
- MASVINGO
- To SOUTH AFRICA
- To BOTSWANA
- To ZAMBIA
- To MALAWI
- To MOZAMBIQUE
Redundancy

- Complementary Systems
  - Multi-operator scenario
  - Traditional Earth Stations
  - VSAT HUBS
  - Terrestrial Microwave
  - Mobile Satellite Systems
Thank You

Tatenda