



# ZICTA

ZAMBIA INFORMATION AND COMMUNICATIONS TECHNOLOGY AUTHORITY

## Getting Landlocked Countries Connected – Zambia's Experience

Bwalya Mwango  
Projects Manager

**Sept 14, 2015**

# Country ICT Statistics



- Zambia is a landlocked country with a total surface area of **752, 618** square kilometers
  - 8 neighboring countries: DRC, Tanzania, Malawi, Mozambique, Zimbabwe, Botswana, Namibia and Angola
  - The country has an estimated population of about **15, 545, 778**
  - The nominal GDP for Zambia:-
    - Total – US\$ 22.24 billion
    - Per capita – S\$ 1,800
- (Transport & Communications sector contributes **24%** to GDP, the highest among all sectors of economy)
- The ICTs penetration rate as at Q2 2015:-
    - Mobile – 68.2%
    - Internet – 30.5%



# Brief History – Zambia's International Gateways



- **Before 1994**
  - Telecommunications sector was a monopoly (only one player – Zamtel)
  - 02 international gateways via satellite (Mwembeshi Earth Station)
- **1994 – 2009**
  - Telecommunications sector liberalized: 3 players – Zamtel, Telecel (now MTN), Zamcell (now Airtel)
  - Carrier of carriers (on optic fibre): ZESCO, CEC (now CEC Liquid Telecom)
  - Only one licensed IGW operator, Zamtel
- **2009 – today**
  - Liberalization of IGW
  - All players have own IGWs with ZESCO and CEC Liquid dominating market

# Key Policy and regulatory frameworks



- **Radio Communications Act of 1994**
  - Liberalized telecom sector
  - Created independent regulator
- **National ICT Policy**
  - Promoted principles of broadband connectivity
- **ICT Act No. 15 of 2009**
  - Liberalized IGW
  - Universal Access

# Zambia's IGW Leading Players

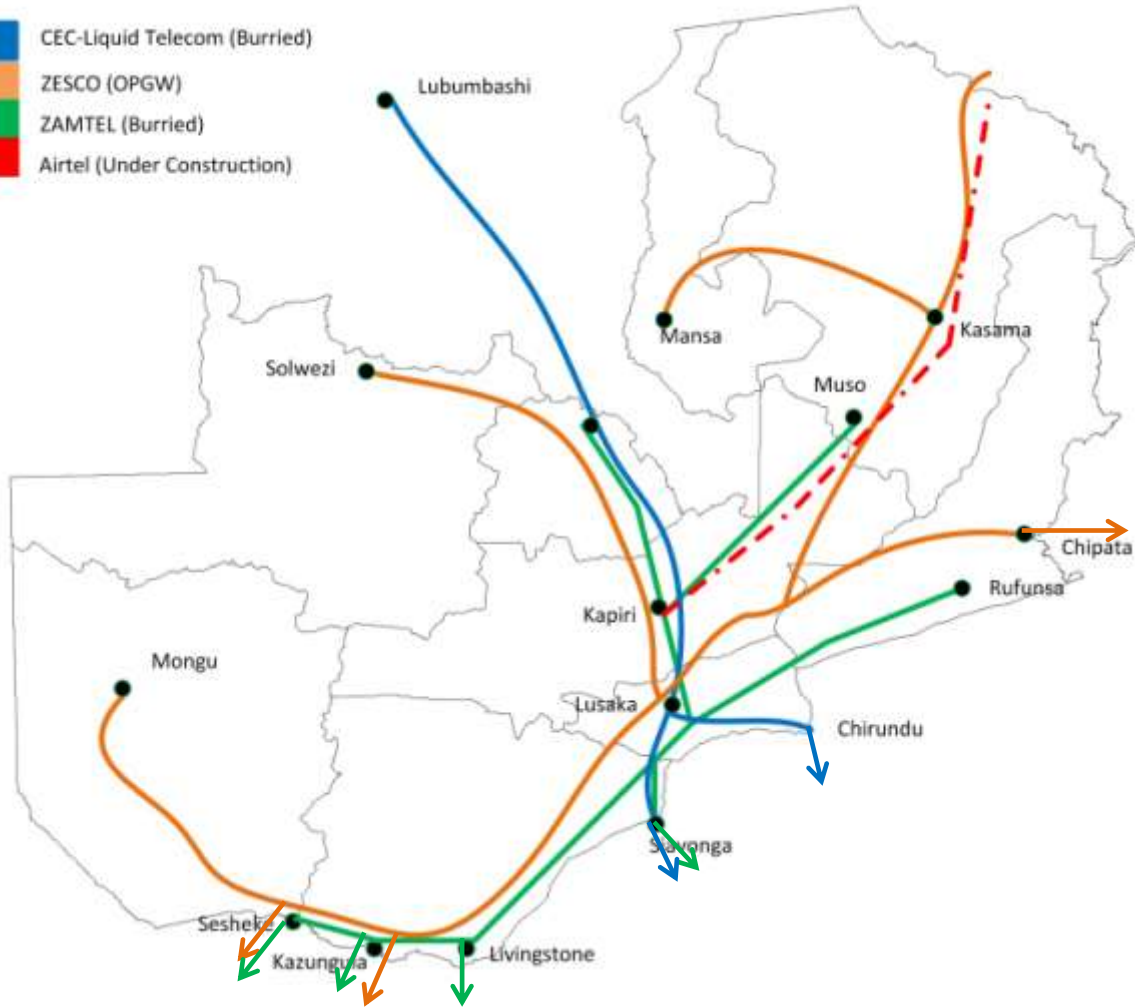


- ZESCO – countrywide optic fibre network with 4 IGWs
- CEC Liquid Telecom – extensive optic fibre network along the commercial corridor of the country with 3 IGWs
- Zamtel - 3 IGWs on fibre and 2 via satellite
- MTN/Airtel – via microwave links to regional neighbours and satellite

# Zambia's IGW Infrastructure



- CEC-Liquid Telecom (Burried)
- ZESCO (OPGW)
- ZAMTEL (Burried)
- Airtel (Under Construction)



# Challenges to attaining International Connectivity for LL Countries



- Non-conducive environments to attract investment in broadband infrastructure – licensing, regulatory, taxation, etc
- High transit fees imposed by intermediary and coastal countries
- Absence of regional cooperation on virtual landing points

# Key factors in promoting International Connectivity for Landlocked countries



- Appropriate policy and regulatory framework - Zambia has more than 10 IGWs on optic fibre after liberalization of the IGW resulting in significant reduction of costs for international BW (e.g. international calling rates dropped by more 50% in Zambia within a month of liberalizing the IGW!!)
- Use of UASF for developing broadband infrastructure – In Zambia the UASF has been utilized mainly for rural communications
- Facilitating reduced transit fees and establishment of virtual landing points for landlocked countries
- Identifying and using relevant technologies depending on scenario – satellite, optic fibre, terrestrial microwave radio are all available options



Thank You

