Zenzeleni Networks: enabling environment for community-owned ISPs

“Closing the Digital Divide: Addressing financial challenges to facilitate economic growth”

Dr. Carlos Rey-Moreno, ED Zenzeleni Networks (with ISOC support)
Zenzeleni Networks provides technical, financial and regulatory support to communities

Community networks best alternative to real connectivity to 4 billion users lacking it

Community networks
Rural and poor populations and underserved areas in general not well served by network infrastructure and services

• Collaborative initiative involving DoC, DRDLR, CoGTA and provinces to identify areas that require community network interventions and conceptualising and implementing such networks.

7.3.5 Recommendations to the Minister

• Encourage the entrance of new operators into the market, including WISPs, community networks, and co-operatives – especially those that can serve under-serviced areas - ensuring that they have access to appropriate spectrum at an affordable cost;

ANNOUNCEMENTS, TABLINGS AND COMMITTEE REPORTS NO 147–2016
99% South Africa covered by mobile data vs. 50% users
1USD/day & 22% in communications (instead of food)
Collective expenditure (3,500 inhabitants → > 10,000 USD/month)
Zenzeleni assists communities to enter that market

Solutions based on deep understanding of challenges: 5 years

• Financial:
  - **Low income**: no interest & difficult for CAPEX (no loans)
  - Absent or **unreliable electricity**: increased CAPEX
  - Roads & unavailability of equipment in local market (OPEX)
  - ICT ecosystem excludes small players
    • Bank account, co-location, deposit, bank fees
Other Challenges

• Regulatory
  - English and literacy levels to engage with regulation
  - National assignments (GSM) unused in rural areas

• Technical
  - Lack of technical skills

• Social
  - Lack of confidence & awareness (comm networks & internet)
Financial solutions

- Backhaul management (open access & commons)
- Matching funds / Loans
- Joint procurement
- Interface with ICT ecosystem
• Regulatory
  - CECS/ECNS exemption from ICASA
  - In parliament (GSM for communities)

• Technical
  - Development of Plug & Play solutions

• Social
  - Build capacity & confidence: Locals to champion in other communities
Partnerships: not only with financial partners

- **USAASA**: Seed capital and research
- **Microsoft**: Affordable Access Initiative (non-for-profit)
- **DoC**: Community Networks eskills as part of INeSI
- **DTPS**: facilitate spectrum audits
- **ICASA**: license-exempt spectrum in unused bands (GSM too)
Communities can bridge the digital divide

They need support (not only financial)

Let’s work together to enable they can do it
Zenzeleni Networks: enabling environment for community-owned ISPs

“Closing the Digital Divide: Addressing financial challenges to facilitate economic growth”

Dr. Carlos Rey-Moreno, ED Zenzeleni Networks (with ISOC support)