



# Ugu Municipality Rural Broadband Network



This is part of a long term **Integrated Development Plan** for the Ugu District Municipality.

The aim is to improve **Basic Service Delivery** to the outer districts by improving access to communications infrastructure.

The Ugu region covers a area of approximately **5866 square kilometers**

The Ugu region has **6 local municipalities.**

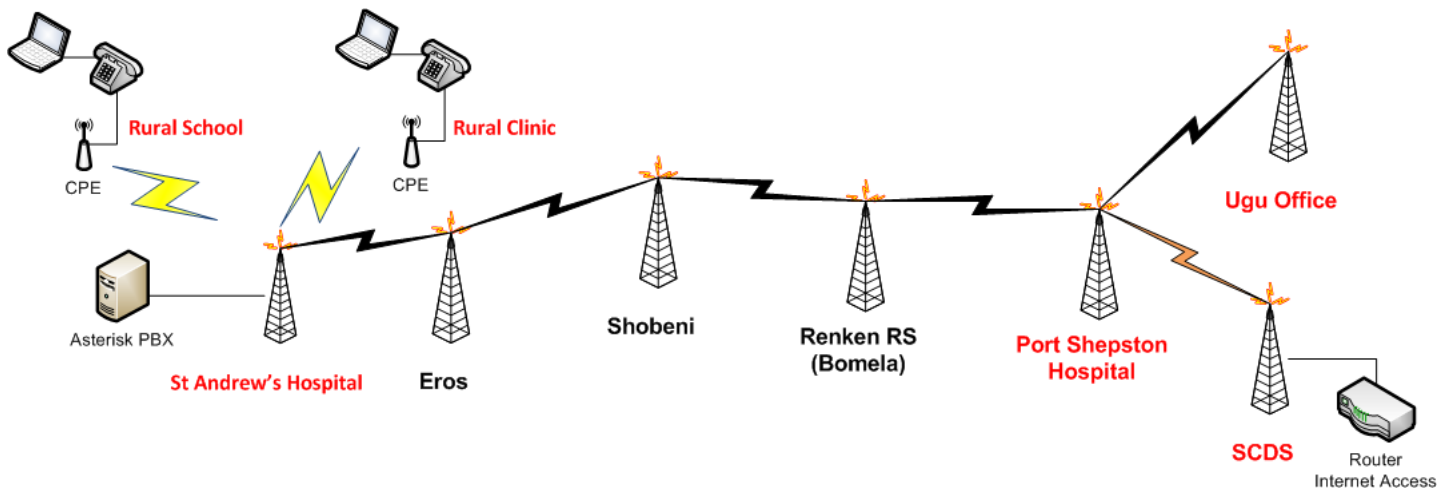
Population of about **800,000 people**



This Network was implemented based on a Local Government program, to provide Telecommunication Services to rural areas.

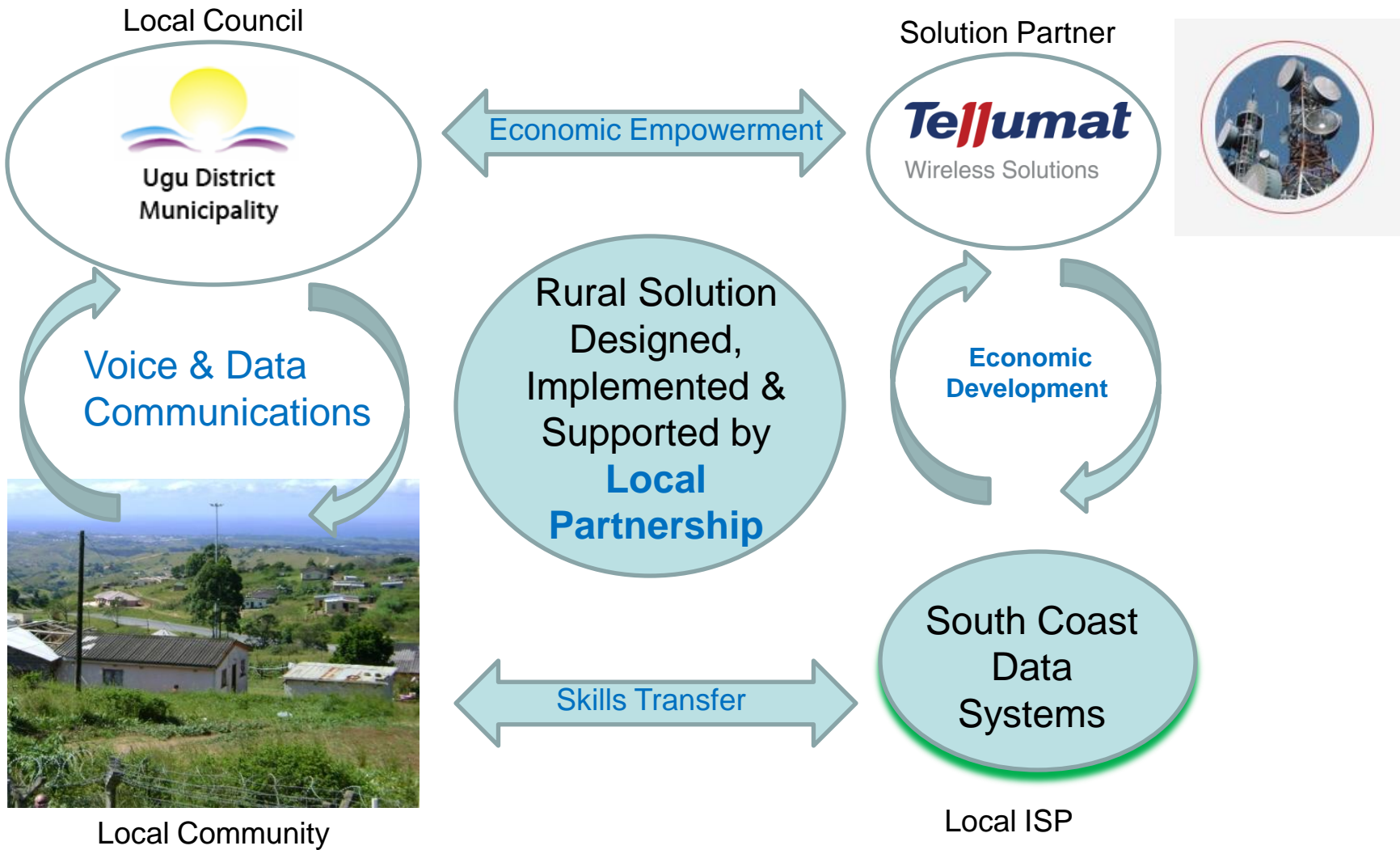
# Ugu Municipality Rural Broadband Network

- Project outline
  - Involved extensive consultancy with **Local Authority**
  - The Backhaul route planned to allow for **rural demographics**
  - Site sharing with existing operators allowed for an **efficient & economical** solution to be implemented
  - Project managed by **phased approach**



This Network was implemented based on a Local Government program, to provide Telecommunication Services to rural areas.

# Ugu Municipality Rural Broadband Network



This Network was implemented based on a Local Government program, to provide Telecommunication Services to rural areas.

# Ugu Municipality Rural Broadband Network

ISP  
Microwave & CPE



Shared  
Infrastructure



Eskom Tower at  
Harding

Effective Low  
Cost Solution



Small Footprint  
Equipment Container

Low Maintenance

Ugu House  
Microwave & CPE



Low  
Environmental  
Impact



Water Tower at  
Hospital



# Ugu Municipality Rural Broadband Network

- The solution implemented was a Full Turnkey
  - **Wireless** Access Network.
  - **Microwave** Backhaul.
  - **Integration** with Local ISP.
  - Aatrix PBX – **VoIP** telephone system
  - **Maintenance & Support.**
- Broadband Data Services provided
  - **Internet**
  - **VoIP**
- Achievements
  - **Free On-net Voice** communications between Municipal & Regional service office's. (e.g. Hospital – Health Care)
  - **Access** to Governmental Information Systems.
  - Provided Broadband services to Rural **School**



This Network was implemented based on a Local Government program, to provide Telecommunication Services to rural areas.

# Ugu Municipality Rural Broadband Network

- Tellumat Wireless Division Overview.
  - [Company Credentials & BEE](#)
  - We offer a Complete, reliable and flexible [Suite of Solutions](#)
  - We provide services to [any](#) Wireless Equipment Vendor
- Tellumat in-house Turnkey capabilities include.
  - [Project Management](#)
  - [Network Architecture Design](#)
  - [Radio Frequency planning](#)
  - [Solution Engineering](#)
  - [Implementation](#)
  - [Training](#)
- For further information visit [www.tellumat.com](http://www.tellumat.com)



# Ugu Municipality Rural Broadband Network

- **Professional Services Rendered**
  - Initial Project Scope
  - RF **Feasibility** and Site Surveys
  - Proof of Concept development
    - **Customization** of VoIP interface
    - Demonstration and **Testing**
  - Detailed **RF Planning**
  - **Sourcing** of Equipment for customisation
  - Installation and Commissioning using **Local partner**
  - IP Provisioning, **Service** Integration and End-to-end testing.
  - **Training** local CPE installers
  - Coverage **Optimization**
  - Post-deployment **Maintenance and Support**
  - **24 x 7 Helpdesk.**

