



development projects



Information Technology Training



Elandsdoorn and Sondagfontein Bakeries



The Johan Crujff Foundation Sports Project



The Ndllovu Nappy Factory



Moutse Community Radio Station



Monuta Home



Hlanzekani Waste Project

Ndlovu

- Ndlovu medical centre was built in 1994 and provides combination of private and public health care in addition to a range of community development activities. The township is a previous disadvantaged community. The medical centre serves as a community centre, and has several facilities that the community has access to (post office, vegetable gardens, waste removal, etc).

Some of Ndlovu's Activities

- Integrated Primary Health Care, TB and HIV/AIDS Care
- Providing information, awareness and education on health related issues
- Enhancing ownership of personal well being
- Improving community livelihoods
- Public sports grounds with fitness centre
- A computer training facility
- A nappy factory
- Bursaries for promising youth
- Waste collection and recycling program
- 28 community supported water supply projects

Area: Elandsdoorn

- Township called Elandsdoorn in the Moutse district, located on the R25 between Bronkhorstspuit and Groblersdal
- Approximately 40K- 60K people in 10x8 km area
- Mesh will serve schools nutritional units, pre schools, computer school and the general population.
- High rate of unemployment with statistics showing that only 2% of high school graduates find a job within 2 years of graduating
- Limited PC literacy enablement
- The entire area has access to the Eskom power grid
- Load shedding is currently not taking place
- Generators and UPS systems currently only exist at the Computer school and Medical Centre

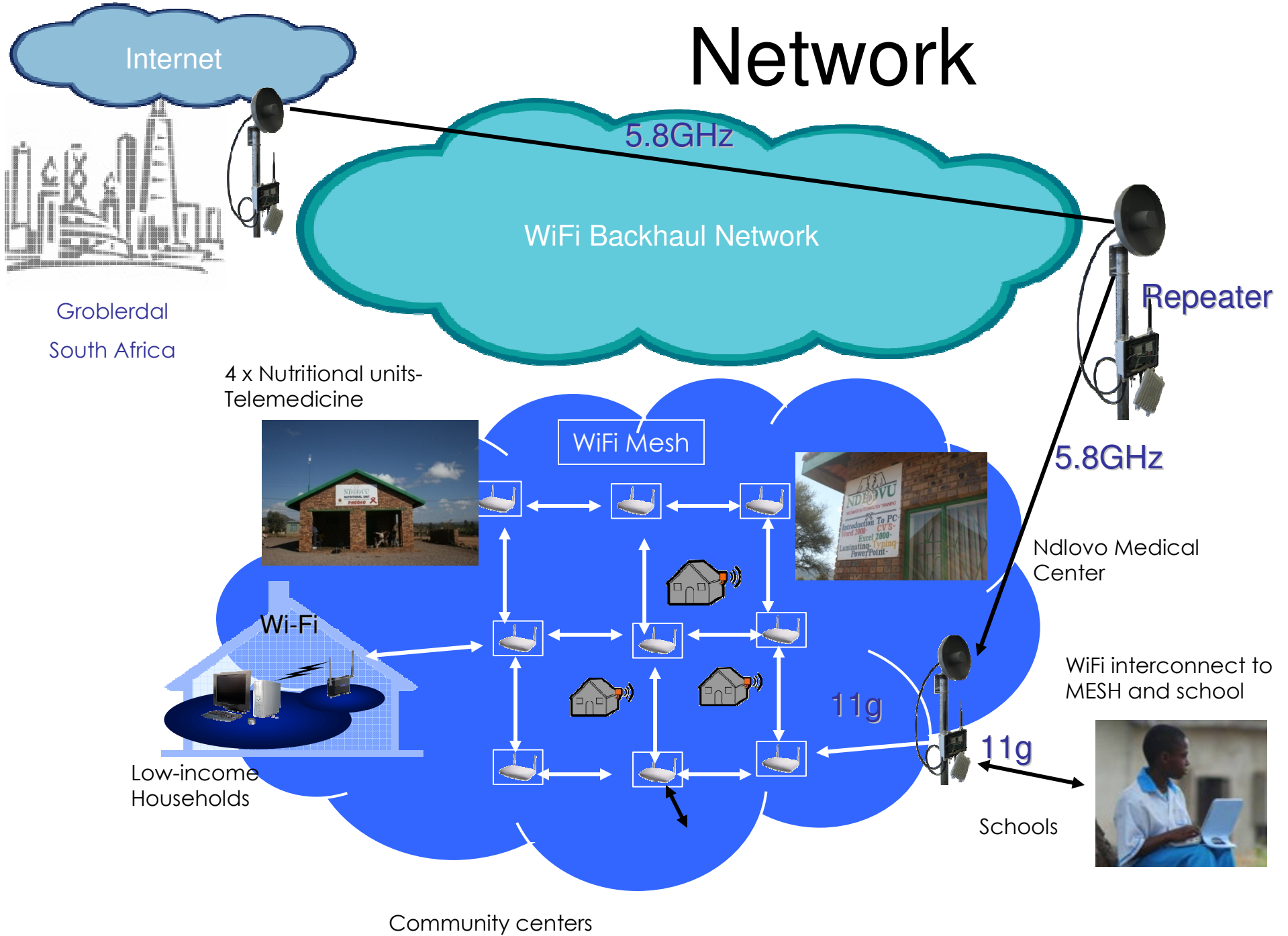
Site selection

- **People are very aware of their need to communicate this can be seen by the large presence of cell phones in even this very poor community**
- **Current ICT infrastructure include Cellular, television including DSTV, Telephone and Fax. The only Broadband provider in the area is CTEC but is unaffordable for most even for the cheapest package**
- **A huge need exist for Entertainment and Affordable broadband internet and also Educational Services**
- **Currently progress on our mesh has been halted due to some governmental issues regarding the telemedicine component of our mesh.**

Need For Entertainment



Network



Internet

5.8GHz

WiFi Backhaul Network

Repeater

5.8GHz

WiFi Mesh

4 x Nutritional units-
Telemedicine

Ndlovo Medical
Center

Wi-Fi

WiFi interconnect to
MESH and school

Low-income
Households

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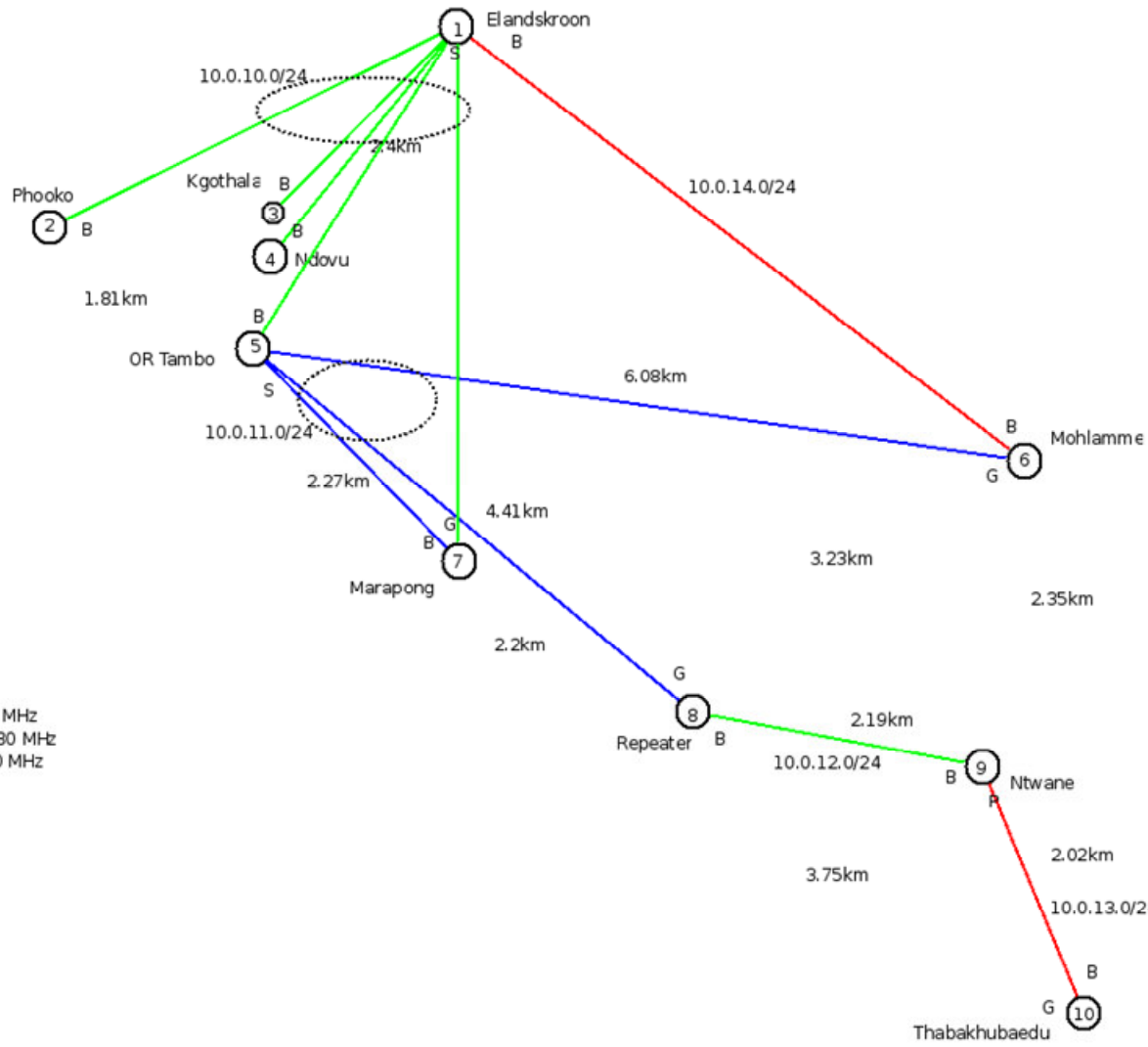
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Schools

Community centers

- Currently only the local nodes exists
- All the units are running on grid power provided by the national provider.
- Currently we are in the process of getting the telemedicine issue sorted out with the DOH
- Funding is available for the next 3 years after which the project must become self sustainable

WiFi Mesh Design



- P = Patch antenna
- G = grid antenna
- S = Sector antenna
- B = Bokkie built-in antenna

Red = Channel 132, Freq 5660 MHz
 Green = Channel 136, Freq 5680 MHz
 Blue = Channel 140, Freq 5700 MHz



Partners

- Elandsdoorn Development Trust
- Intel
- Meraka (Living Labs)
- Telkom Foundation
- Eskom
- Possible partnership exists with Right To Care through WHO involvement once Telemedicine issue is sorted

Challenges & Lessons learned

- As we are still in an early stage most of the challenges still lie ahead.

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Way forward

- **20 donated PC's will be given away to community members that present the best business concepts through means of a competition**
- **The Computer School will also be used for skills development and also creating exposure and awareness.**
- **If this project proves successful then we would like to replicate the entire concept at our Lillydale Clinic near Hazyview**





