



Basic Internet Foundation

“Internet Light for all - Free access to information”

Overview & Initial Testing Procedure - Migoli

Executive Summary

This overview and initial testing procedure describes how to unpack and connect the equipment. The document contains the following parts:

- the list of equipment and the testing procedure for Migoli, when installing “Internet lite for all”, the free access to information.

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1. Overview of “Internet lite for all”

Figure 1 presents the general overview over the “Internet lite for all” concept. The goal of the concept is to give everyone free access to information, and premium access to all bandwidth demanding services. Such a freemium (free & premium) model is well established in applications (“Apps”) for mobile communications. You get basic information for free, but need to purchase the premium app for extended functionality. “Internet lite” follows this freemium model, with free access to text, pictures and local video, and premium access to other content.

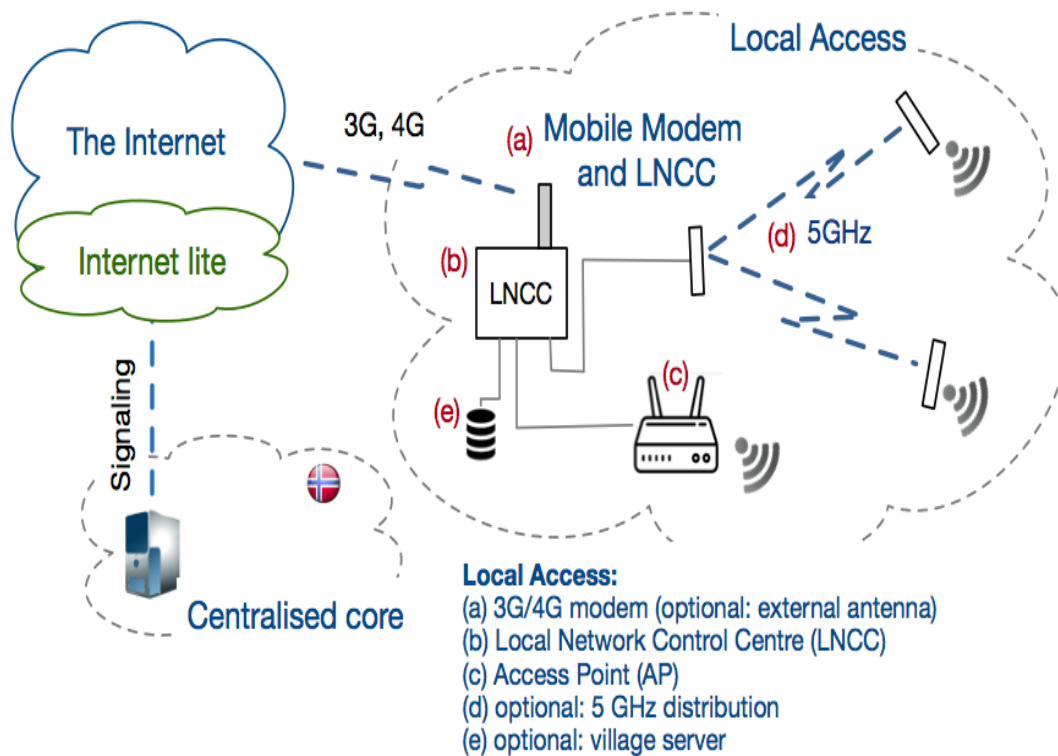


Figure 1: Illustrates the local access

2. Village network

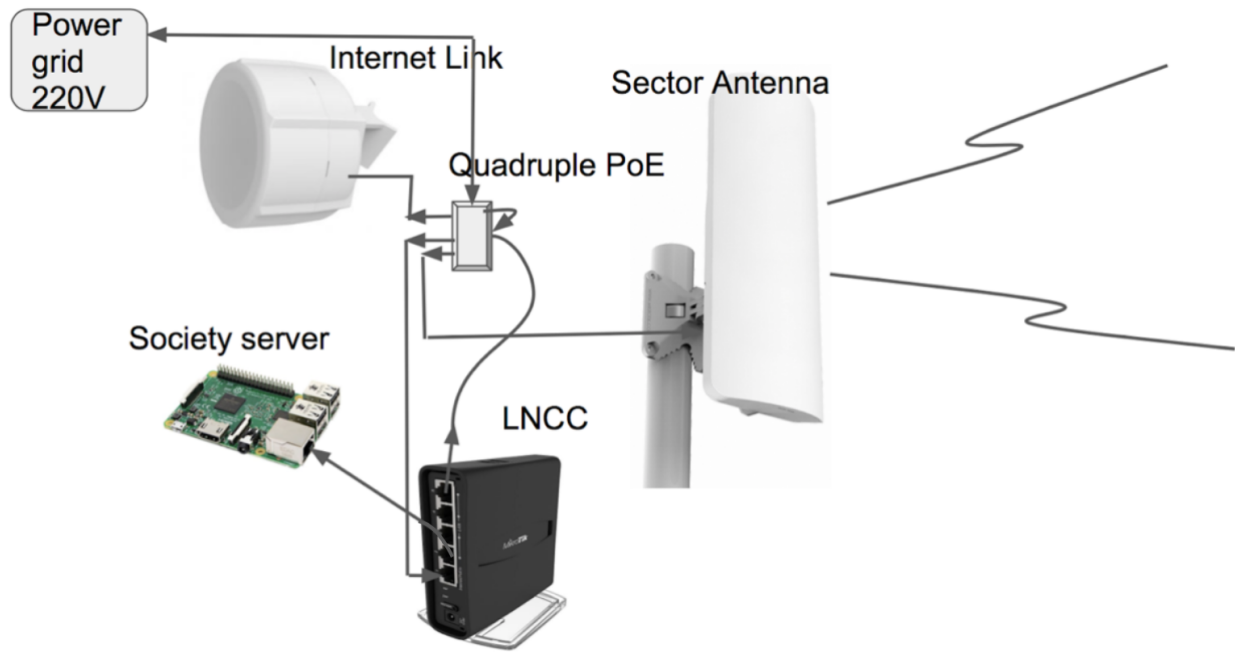


Figure 2: Illustrates the equipment and the layout of the local network
(BasicInternet.no/Solutions)

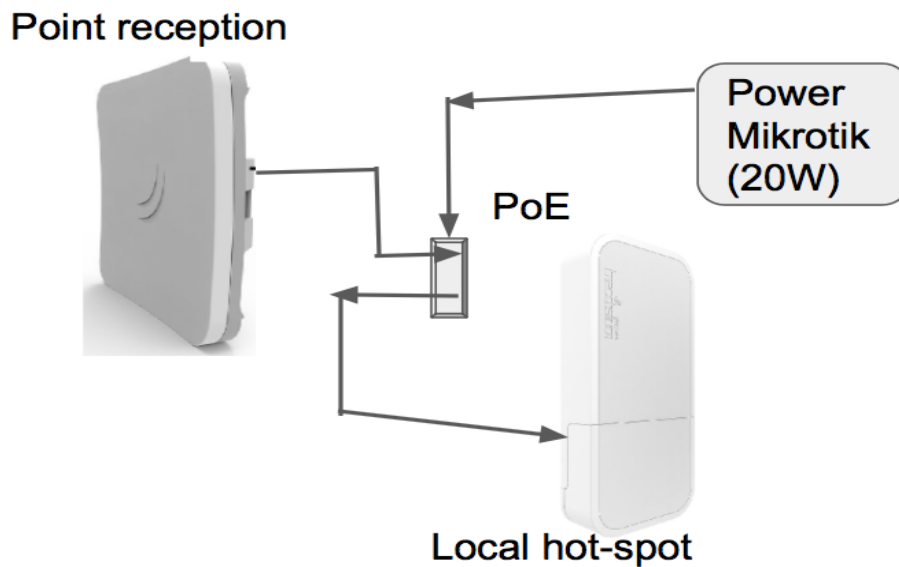


Figure : Illustrates the local hot-spot

3. Package List Migoli

This is the package list for Migoli

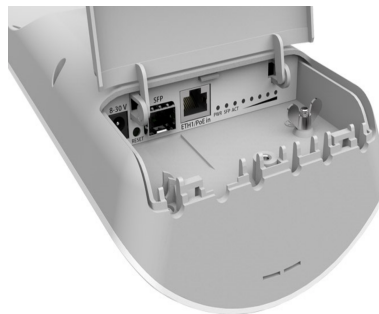
- 1 pc - Internet link (LTE)



- 1 pc - Local Network Control Centre (LNCC)



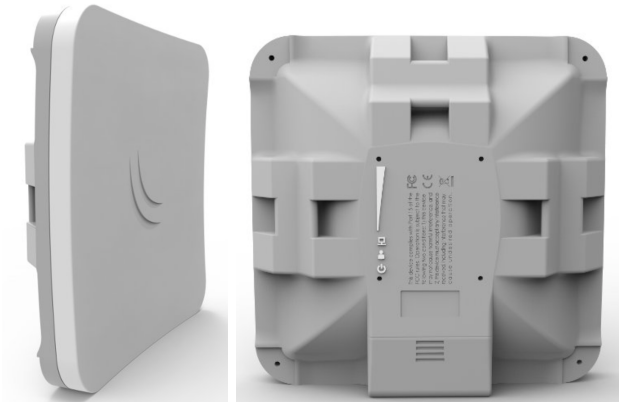
- 1 pc - Sector Antenna



- 8 pc - cable
- 1 pc - SIM card (Felix)



- 3 pc - Point reception



- 3 pc - local hot-spot



- Quadruple PoE



- PoE



4. Installation and Testing

A.Installing/connection

Before start testing the equipment should be connected:

- The items configuration was be done in advance (using a MikroTik Routers and Wireless Software such like Winbox)
- Connecting the power input of the PoE to the power supply station.
- Then, the Internet Link should be provided with a sim card, from a local supplier.
- Connecting the Internet Link with the LNCC (port1) through the PoE (quadruple PoE). The cable /line from the Internet Link goes in the first port of the PoE. A cable connects LAN 1 to LAN 2 in the PoE. A cable from the second port of the PoE side connect the LNCC.
- From the LNCC out of port 3 a cable to connect the society server.
- The Sector Antenna will be connected to the PoE opposite to the input cable from the LNCC port 5.
- For the local hot-spot, there will be a point reception, receiving the signals from the sector antenna, connected to a local wifi hotspot through a dual PoE in which the power in provided to both sides.

B.Testing receive antenna (3G/LTE)

There are three ways to test the network

1. First, connect the Internet Link to the power through a PoE. The Internet Link will give a green light to indicate the electricity receiving. By connecting the Internet Link to a laptop (Windows Laptop) and then, open an Internet browser for checking whether it provide Internet .

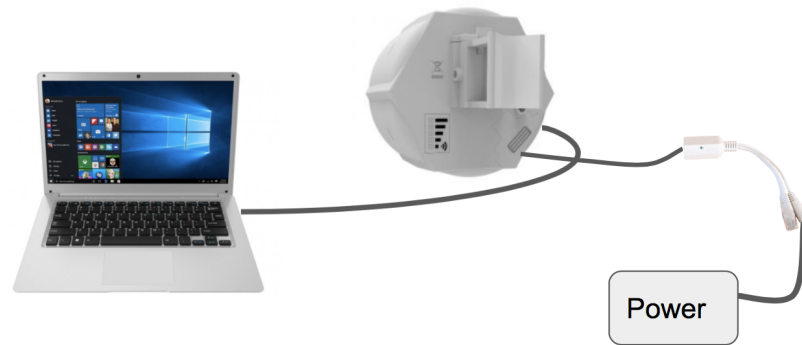


Figure 4: Shows the Internet Link connected to a windows laptop for testing

2. In case that there is no laptop available for the testing process, connect the Internet Link and the local Internet control centre (LNCC) to the power. Then, you could connect the LNCC (port 1) to the Internet Link (LTE) and check with a smart mobile / tablet whether it sends wifi. % NEED A BETTER DRAWING FOR THE LTE ANTENNA



Figure 5: Shows the Internet Link connected to LNCC for testing

3. Another possibility to test is by connecting the Internet Link to the local hot-spot through a PoE injector to connect and provide power.

Making sure that there is a electricity coming to both devices. Then, testing by using a smart device to measure whether it supply a wifi.

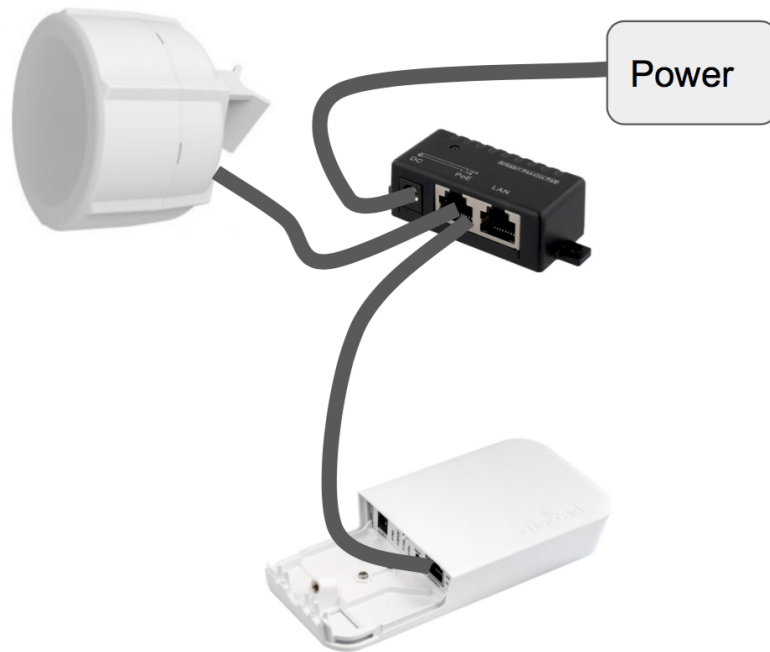


Figure 6: Shows the Internet Link connected to the local hotspot for testing

C. Testing LNCC functionality

How to test the LNCC, given that we have Internet coming in on port 1 (Ethernet cable)

- Describe shortly how the first connectivity steps are
- Describe which network ports need to be open
- Describe how to test starting from the Wifi Link (or alternatively using an Ethernet cable on ports 2-4)

@Sudhir, please describe what you experience with both LNCCs, RB951 and RDB952

Mikrotik has a Winbox.exe software to configure the LNCC

<https://wiki.mikrotik.com/wiki/Manual:Winbox>