

## Urban Connectivity improved with Poynting Antennas

Author: Poynting Antennas (Pty.) Ltd.

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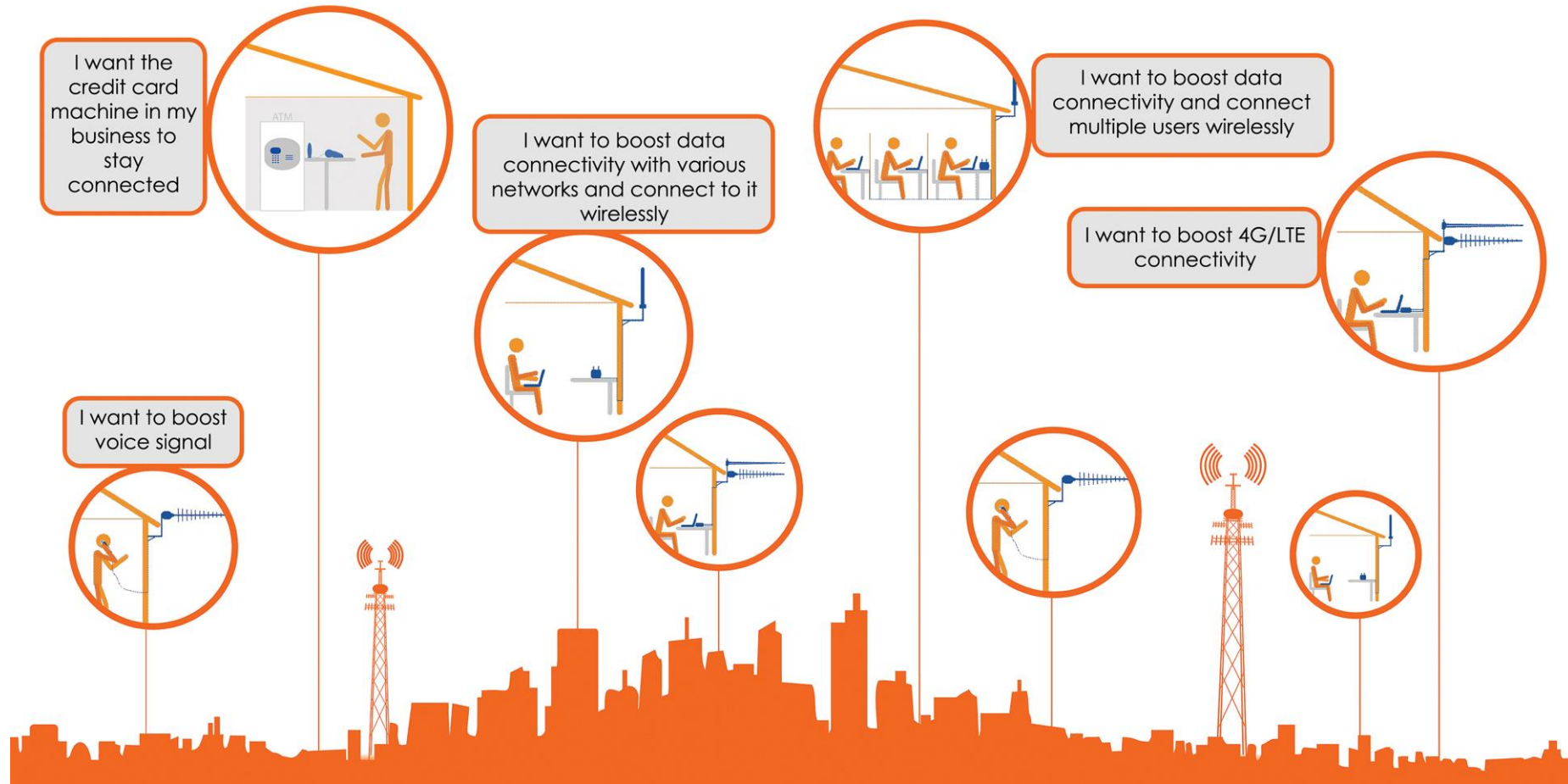
# The Problem

If this sounds like you, then a Poynting antenna is the solution:

- The data connectivity at my house is terrible!
- Internet Speed
- Videos buffer
- It takes me forever to download a song...
- I don't want to wait for a fixed line!
- There is great signal outside, but inside you struggle to open Google.
- Why is it then that we have such bad signal inside our houses and offices?



# The Problem



# Why do we experience problems?

## Why do we have this problem?

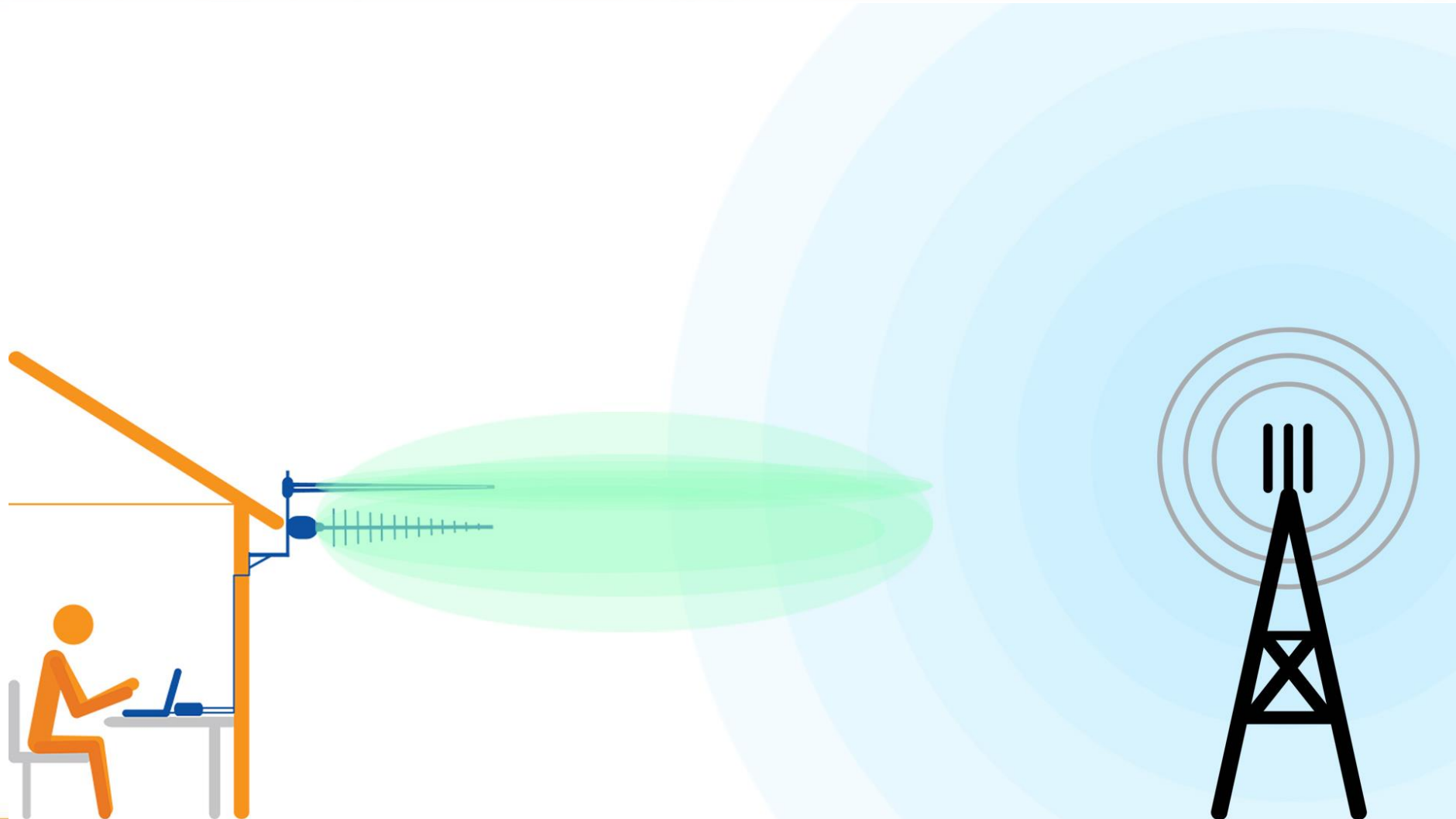
- Did you notice that you have strong signal outside the building, but inside it fades away. That is because outside there is less interference with the signal.
- Buildings and other structures disrupt the signal. If you mount the antenna outside, it offers the opportunity to receive the signal from an outdoor environment which is not prone to the multipath fading experienced in an indoor environment.
- There is a 10-20 dB advantage when receiving the signal in an outdoor open space environment as compared to a cluttered indoors.
- This together with the antenna gain provides anything between 20-30 dB gain when using an external antenna

## Remember:

- LTE requires MIMO Technology.
- In areas with good signal, rather use an OMNI-Directional antenna
- In remote areas, areas with poor signal quality or if your are on the border of 3G or 4G areas, then rather go for a Poynting Directional antenna.



# How does an antenna work?



# The Solution to bad connectivity



- With a high performance outdoor antenna solution from Poynting, you can get a better connection indoors.
- Simply mount the antenna outside where the signal is strong and connect the antenna via cable directly or with a coupler to your device.
- As easy as that.





## LTE vs FIXED



LTE is as fast and can be even faster than fixed broadband and your area is covered, but you have to cut back to 3G all the time?

- We have a wide range of 4G antennas that are already bestsellers in Europe and elsewhere.
- Wideband or narrowband, Poynting can provide exactly what you need.



## Directional Cellular Antennas





## OMNI - Directional Cellular Antennas



- Point the antenna in the direction of the cellular tower.
- The cellular tower should belong to the operator you are using ( e.g. Vodacom to Vodacom)
- The cellular tower should also be 3G or 4G enabled.
- It takes up to a minute for the tower and the antenna to connect so keep the antenna in that direction for +- 1 minute to see if the reception improves.
- If you are not sure of where the tower is, move the antenna in increments of a few degrees at a time to see where the signal improves.



- If you have an option of more than one tower, select the tower with the least obstructions between you and the tower even if it is much further.
- The antenna can pick-up a tower's signal up to 35 km away.
- It is better to connect to a tower 35 km away with clear \*line-of-sight than a tower that is 2 km away but behind a hill.
- The antenna should be mounted as high as the cable allows.



The following items that obstructs your line-of-sight can influence the signal:

- Landscape (in other words a hill or mountain)
- Any metal obstacle like a corrugated iron roof, buildings with metal reinforcing etc.
- Trees (especially if it is raining and the leaves are wet)



\*Line-of-sight - 'Line-of-sight' is an imaginary line that stretches between the antenna and the tower, with no obstacle in between.





## Speedtest.net

Ookla Tools

USK: All ages

Offers in-app purchases

This app is compatible with all of your devices.



## Network Cell Info Lite

Wilysis Tools

USK: All ages

This app is compatible with all of your devices.



## Netmonitor

parizene Tools

USK: All ages

This app is compatible with all of your devices.



## 4G map & speedtest

Sensorly.com Tools

USK: All ages

This app is compatible with all of your devices.



## BTSearch Poland

Sylwester Sokolowski Tools

Unrated

This app is compatible with all of your devices.



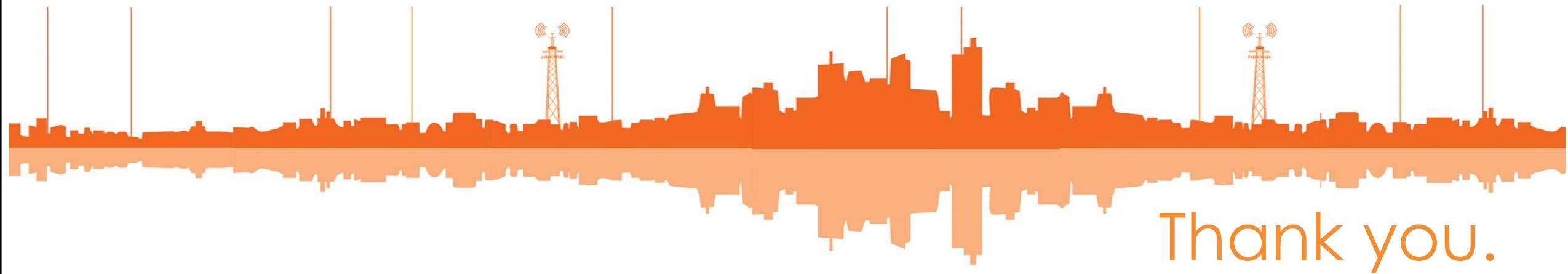
## 3G 4G WiFi Maps & Speed Test

OpenSignal.com Tools

USK: All ages

This app is compatible with all of your devices.





# Poynting Antennas – Contact Data



## Your Contact



Tjeerd Huitema

Business Development Executivem & International Sales | MD Poynting Europe

+4989208026538

[tjeerd.huitema@poynting.co.za](mailto:tjeerd.huitema@poynting.co.za)

### **Poynting Antenas (Pty.) Ltd.**

Unit 4, N1 Industrial Park, Landmarks Avenue  
Samrand, Gauteng  
South Africa  
0157

#### **Phone**

+27 (0) 12 657 0050

#### **Email**

[sales@poynting.co.za](mailto:sales@poynting.co.za)

[sales-international@poynting.co.za](mailto:sales-international@poynting.co.za)

### **Poynting Europe GmbH**

Regus Business Center Neue Messe Riem  
Kronstadler Straße 4,  
81677 München  
Germany

#### **Phone**

+49 (391) 590 818 50

+49 (89) 2080 265 38

#### **Email**

[customerservice@poynting.tech](mailto:customerservice@poynting.tech)

