

LOCKDOWN AND
THE WAY IT HAS
CHANGED THE
WAY MOBILE DATA
SERVICES US

# **Contents**

Who wins when it comes to speed?	Ξ
Which option is easier on your pocket?	Ξ
Interesting facts	۷
Putting it into perspective	

"Giving you an Internet connection anywhere as long as you're connected to a cellular network."

### LOCKDOWN AND THE WAY IT HAS CHANGED THE WAY MOBILE DATA SERVICES

As the hard reality of the COVID-19 hit us, businesses have had no other alternative but to instruct employees to work from home.

With more meetings taking place remotely and users jumping onto Teams, Skype and other video conferencing applications, the need for high-speed, reliable and affordable connectivity has never been greater.

Needless to say, access to reliable connectivity has become as much a necessity as air and water – an absolute must-have to rate a livelihood in the digital age.

Our behavior has changed, and we have had to quickly adapt accordingly. The entire family is now on lockdown 24/7 in a concentrated area. Something that we never in our wildest dreams imagined would happen. The kids are home streaming movies and playing video games, pulling data down, and the grownups are pulling data up working online – and so, the work and play balance has been manically put on its head. The struggle is real.

So, what are the options available to us?

#### Mobile data

It's exactly just that - mobile - giving you an Internet connection anywhere as long as you're connected to a cellular network. It remains a highly contended service and together with SA's high fibre prices it is definitely not the right solution for an entire family to use while in lockdown

#### Fixed LTE

The best way to describe Fixed LTE (Long Term Evolution) is perhaps that it's like when the horse and cart was replaced by the first motor car. Albeit a faster and more stable connection and ideal for remote working, it's not as fast as Fibre.

#### **Fibre**

The Ferarri of connectivity! Unlike with mobile, Fibre is uncontended with unlimited capacity and speeds can be upped as required. With a speed of up to 200Mbps, it's ideal when the whole family is working and playing from home! It's the most reliable form of connectivity and now more than ever, becoming a necessity.



Unlike with mobile,
Fibre is uncontended
with unlimited capacity
and speeds can be
upped as required.



### WHO WINS WHEN IT COMES TO SPEED?

- With Fixed LTE, if you do not have perfect line of sight to a base station with capacity, you will
  never get the expected and promised throughput speeds no matter what speeds are advertised.
  And let's be real it's not going to cut it where multiple people need to connect even more so with
  mobile data!
- Download speeds are another myth. It's been proven, of late, that some LTE networks are getting
   0.6Mbps download speed, once again proving that LTE cannot cope with the current required capacity.

### WHICH OPTION IS EASIER ON YOUR POCKET?

- There is a perception that South African data costs are exorbitant, but that is an ignorant view
   MOBILE data costs are exorbitantly high, but our fixed line data costs are comparable with the rest of the world.
- Cost-wise, mobile data is by far the most expensive option, fixed LTE less so and hands down,
   Fibre is the most cost effective.
- All fixed or mobile data have a cap and fair use policies which, compared with Fibre, is in a different league.
- Then consider the router costs: The cost for an LTE router is at least four times more expensive than a Fibre router.

Having taken the above into account, the reality is that with such a demand for Internet and connectivity, one needs to work with an uncapped product or mid-month, all your data will be depleted as will your wallet!



It's therefore fair to assume that the fact that there were cable breaks a few weeks back, proves that Fibreoffers a vastly superior performance and there is no better alternative.





### **INTERESTING FACTS**

## Have you ever wondered about how fast fibre really is?

58 Exabits = 58 000 000 000 000 Megabits



1 fibre core can deliver up to 1.2 Pbps



Up to **6912 fibre core per cable** availbable now



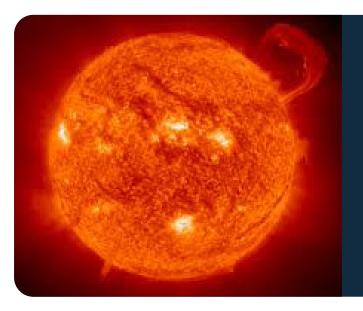
Unlimited duct capacity per trench (illustrating 7-way)



**58 exabits per second** per trench using 7-way duct

#### The above is equivalent to:

- 15 trillion ADSL line
- 3 billion 5G base station



## It's all balls!

- The maximum theoretical download speed of a 5G base station is 20 Gbps
- If that was the size of a golf ball (4,3cm) then fibre would be the size of our sun (1,4 million km)

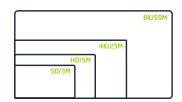
## It's about to explode!



31 connected devices per household by 2005



**205 billion** mobile **apps downloaded** in 2018



By 2022, 62% of TVs will be 4K. First 8K TVs already available to purchase



Nielsen's Law: Bandwidth grows by 50% per year



#### **PUTTING IT INTO PERSPECTIVE**

Below is a practical example of how household bandwidth is growing exponentially:

Use case	Application	Quality	Download	Upload
Toddler on ipad	Youtube	HD	5 Million	1Million
Bluetooth speaker in kitchen	Spotify	HD	2 Million	2 Million
Bluetooth speaker at braai	Spotify	HD	2 Million	2 Million
Wife and friends watching a movie	Netflix	4K	25 Million	1 Million
Husband and Friends watching rugby	RugbyHD.tv	4K	25 Million	1 Million
Teenager player game on Xbox	Steam	4K	25 Million	25 Million
Friend playing game on Xbox	Steam	4K	25 Million	25 Million
Wife's friend on facebook	Facebook		3 Million	3 Million
12 Phones doing messaging, email	WhatsApp, Outlook		12 Million	12 Million
Total			124 Million	72 Million















1000M 1000M

"access to reliable connectivity has become as much a necessity as air and water."

# **About Vox**

Innovation and insight combine in Vox, a market leading end-to-end integrated ICT and telecommunications company. We have an enviable track record of meeting the needs of thousands of consumers, SMEs, large corporates, and public sector organisations. Thanks to our dedicated staff of more than 1 500 people – and our several hundred business partners countrywide - we set the benchmark for service delivery by connecting people through best-of-breed technology.

From data to voice, as well as cloud, business collaboration and conferencing tools, Vox offers intelligent solutions that connect South Africans to the world, supporting entrepreneurs, customers and commerce, whilst practicing values of integrity, choice and service excellence in all of its dealings.

