FAQ's for Smart Satellite service offers

1. What are the Smart Satellite Services offers?

Smart Satellite services is an alternative way to connect to the internet where copper lines will not be replaced and/ or where Telkom has no coverage/infrastructure for its ADSL, LTE or Fibre service offers. Telkom in partnership with Yahclick will offer three Smart Satellite service products for customers.

2. What is the benefit of these new offers to NTF and existing DSL / Fibre / LTE based customers?

- Openserve, the provider of the network on which Telkom offers their services, is not replacing its copper network where it experiences repeated copper thefts or high fault rates.
- Fibre lines are not available everywhere.
- Satellite services are literally available everywhere in South Africa, whether you are within a deep rural of mainstream area.
- Satellite offers fast reliable download speeds.
- Satellite offers up to 99.5% uptime.

3. Where is Telkom Satellite Internet available?

It is available where Telkom does not have DSL/ Fibre/ LTE infrastructure or telephony services, which means that our satellite offerings are available everywhere – no matter how remote your location is. Apart from your equipment installation and subscription, all you need is a clear view of the sky.

4. Are Telkom Satellite Internet Solutions safe and secure?

Yes. Satellite Internet is secure because intercepting the beam between the dish and the satellite is far more difficult than intercepting the signal in a physical cable.

When using satellite imagine a giant beam being sent when you click "send" on an email up to the satellite. The email is broken down into digital pieces that only our satellite can piece back together – keeping your confidential data more secure than terrestrial Internet.

5. Who may take up these offers?

- **Existing Telkom customers:** who do not have ADSL, LTE or Fibre coverage.
- **NTF customers:** NTF customers who did not previously have access to Telkom products and do not have coverage of ADSL, LTE or Fibre services.

6. What are the 3 Smart Satellite services offers for NTF and <u>existing</u> customers?

Product Description	Download speed	Upload speed	Retail Price Existing	Installation	Contract period
Smart Satellite services unlimited 5Mbps	5Mbps	3Mbps	R899	Free	24 months
Smart Satellite services unlimited 10Mbps	10Mbps	3Mbps	R1 099	Free	24 months
Smart Satellite services unlimited 20Mbps	20Mbps	4Mbps	R1 299	Free	24 months

***<u>Note:</u>** Customer applying for Smart Satellite services who do not have a Wi-Fi router can add it at an additional cost per month for a period of 24month (Note that some `Mobile network` Wi-Fi router such as those from E.g. Huawei/ZTE may have compatibility issues so it is best to source a standard Wi-Fi router and before the installation takes place. Your Telkom sales agent can provide such, or it can be sourced privately.*

Terms and conditions of this offer:

- Setup includes - Installation, Connection and Satellite Equipment (dish, radio and modem) but not the Wi-Fi router. Agents must advise customer to purchase Wi-Fi enabled device (router) prior to the installation
- This deal is subject to the Satellite Internet Services remaining active for 24-months.
- Offer is subject to credit vetting and Rica while stock lasts.
- Setup Equipment remains the property of Telkom.
- Line speeds quoted are best effort and represent 'up to' speeds. Telkom reserves the right to enforce its Fair Usage Policy.
- No upfront set-up fees apply.
- Additional travel costs may apply.
- Should the customer cancel the contract anytime during the 24-month period, the remaining balance of the setup fee and CPE becomes due immediately.

7. What Technology is used for Smart Satellite Services?

Ka-band, broadband satellite service that delivers reliable, high-speed internet connectivity to users in areas with limited or no internet access, at costs comparable to current copper/wireless services is used to provide Smart Satellite services.

8. What is YahClick Smart Satellite services technology based on?

The technology YahClick used is based on Ka multi-spot beams, which is a major differentiator to traditional satellite technology. While satellite internet isn't a new technology, cutting-edge "frequency reuse" maximises spectrum efficiency and means that Satellite services is perfect for home and business broadband needs.

9. Is voice supported on these products?

Yes, IP voice needs to be activated on the modem and customers can then chose one of the IP voice packages to add on.

10. What is the validity period of the Smart Satellite Services data plans?

The monthly Inclusive anytime data has a validity of one month.

For example, a customer who sign up for Smart Satellite service 5mbps, the first allocated data 3Mbps@100GB if is not used up will not carry over.

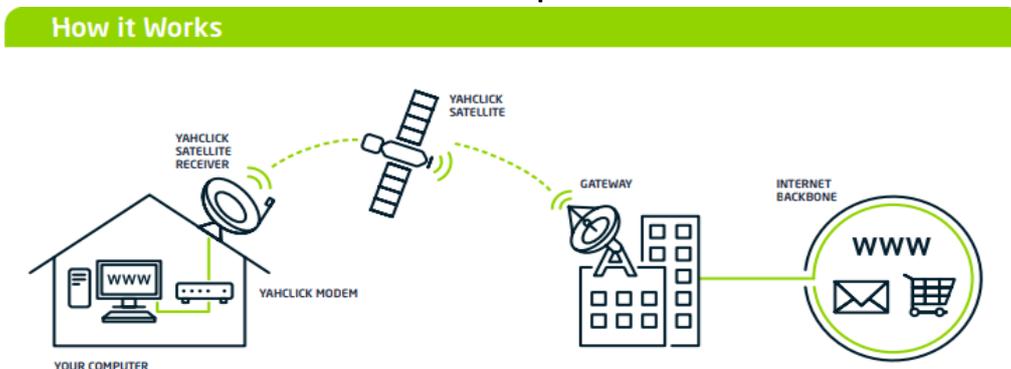### 11. Who is eligible for Smart Satellite Services unlimited?

Existing and NTF customers. Literally anybody anywhere in South Africa.

Customers will always be offered Fibre and then LTE before Satellite services as a last resort.

12. Does Rica apply?

Rica compliance rules shall apply.

13. How does the Smart Satellite service unlimited product work?

Your smart device sends a signal request through your modem to your Telkom satellite dish and then up to our orbiting satellite, which sends a signal to us. Then, we transmit the signal back to the satellite, then to your dish, your modem, and finally, your smart device. All of this happens in less than half of a second.

14. Is there a contract for a set period, or is there a month-on-month ongoing contract?

For all the Satellite bundles the customer must sign a 24-month contract. If a customer cancels the service within the 24-month contract period, the clawback penalty will apply same as the current process with routers on a 24-month contract.

15. What does the Smart Satellite Services product include?

Customers will receive a new suitable Satellite router with a dish (depending on the speed bundle chosen the dishes sizes differ). The Satellite router enables data services and if Wi-Fi service is required then a separate Wi-Fi router must be purchased, and the installation team will connect this Wi-Fi router to the Satellite router. The Wi-Fi router needs to be at the premises where the installation will take place and be available on the day of the installation.

16. What is the Fair Usage Policy?

Telkom Smart Satellite service unlimited Fair Usage Policy						
Plan	DL	UL	Allowance (GB)	First throttle	Second throttle	Third throttle
Smart Satellite service 5mbps	5	3	Unlimited	3Mbps@100GB	1.5Mbps@ 150GB	1Mbps@200GB
Smart Satellite service 10Mbps	10	3	Unlimited	5Mbps@150GB	3Mbps@ 250GB	1.5Mbps@300GB
Smart Satellite service 20Mbps	20	4	Unlimited	10Mbps@200GB	5Mbps@350GB	2Mbps@400GB

17. Can I check how much data is being used on my contract?

Yes, you can! The following option is available to you to check how much data is being used on your package:

- Log into our YahClick powered network on https://selfcare.yahclick.com/YAHS_TELKOM_CC_Login
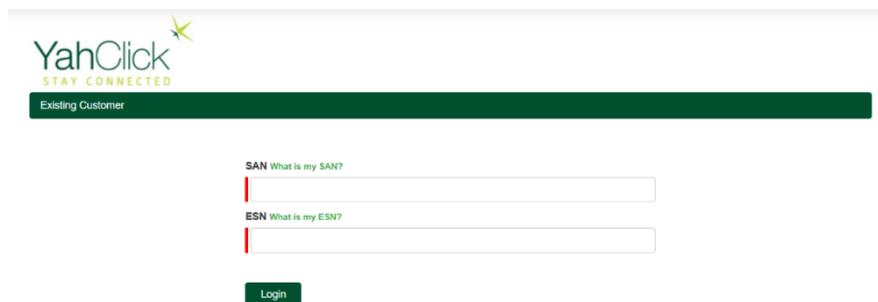
Make sure that you have your Service Number (SAN) and your Equipment Serial (ESN) ready, as you **will** require them to log in. When inputting your ESN password, **only use the numerical part of the number**. For example, if your modem serial number is "BY001312345A6", your ESN password will be "1312345".

18. Can I stream entertainment and work from home?

Yes, you can! Telkom Smart Satellite service Internet Solutions puts entertainment and working from home at your fingertips.

Telkom Smart Satellite service Internet Solutions are ideal for:

- Streaming videos, music and movies;
- Video conferencing;
- Working from home;
- Online shopping;
- Online banking;
- Holiday planning;
- Web surfing;
- Social Networking like Facebook, Instagram, LinkedIn, Pinterest.

For example, Netflix streaming requires a download speed of 1.5 Mbps for low quality, 3 Mbps for SQ quality, and 5 Mbps for HD quality, so any of Telkom's Satellite Internet Solutions can comfortably handle any binge-watching needs. It is also ideal for streaming music via applications like Spotify and Napster. Music giant Spotify for example only requires .096 Mbps of speed for streaming on your phone and .1670 Mbps to listen on your computer or tablet. Telkom also delivers good video chat capability. Video chat users, according to Skype, need 1.5 Mbps download and 1.5 Mbps upload, while video calls with multiple people need 8 Mbps to download.

19. Are Telkom Smart Satellite service Internet Solutions able to support online gaming?

It is important to note that online gaming does not work over satellite internet services due to transmission latency. "Turn-based" games, such as casino games, and strategy games, such as chess, will work fine as will popular Facebook games like Candy Crush. You will be able to download games and game updates and use the streaming video and music services offered through your gaming system.

20. What is transmission latency?

Latency is the time it takes for a signal to make a round-trip journey from your smart device and back. There is a half-second delay with satellite Internet service caused by the distance that data needs to travel up to the satellite and back again. Therefore, time-sensitive applications that require fractions-of-a-second user inputs (such as online gaming or real-time equities trading) are not supported by Telkom's Internet Satellite Solutions.

21. How much internet speed do I need?

Different households and businesses can have drastically different Internet needs.

A single person who uses the internet only to access social media won't need as much internet speed as a business of five video conferencing, for example.

Let's look at some internet speeds and what you can do with them:

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- Due to transmission latency, Telkom does not support online gaming or real-time equities trading.

Now that you know all about Internet speed, you can see that Telkom Smart Satellite service Internet Solutions has a package to suit the needs of your household and/or business. Even when you live in a remote location, we have a package capable of delivering a different level of bandwidth to match your needs.

22. Why choose Telkom Smart Satellite service Internet Solutions?

Telkom partners with the communities where we install, making support and service a part of the community revenue stream. This means that should you ever encounter problems – the appointed service provider is in your community and available to answer questions and provide solutions.

We are affordable. Telkom invests in our customers by providing free standard equipment infrastructure and installation*; and all our packages offer unlimited data. Telkom offers different package options to suit your needs.

23. How do I check that I'm covered by Smart Satellite Services?

The whole of the South African continent is covered by Satellite services.

24. What happens if I relocate?

The Satellite service that is provided is a fixed broadband service and should a customer relocate, Telkom will have to dismantle the dish and installation and install at the new premises. This will be an additional cost for the customer.

25. What are the calling plans bolt-on's?

IP voice is a bolt on product that can be added to Smart Satellite service. Customers can keep their geo number. Example of voice packages:

Voice Bolt-on	Inclusive Value	Price (month to month)
Closer Basic	• Anytime on-net minutes • FUP 3000 min	R40
Closer 100	• Anytime on-net minutes • 100 off-net minutes • FUP 3000 min	R70
Closer 300	• Anytime on-net minutes • 300 off-net minutes • FUP 3000 min	R130
Closer Unlimited	• Anytime on-net / off-net minutes • Combined FUP of 3000 min	R220

26. I'm an existing Smart Satellite Services subscriber, will I be able to migrate upwards or downwards between the offers?

Existing Subscribers will be allowed to migrate between the Smart Satellite plans. There will be additional charges for customers migrating from 5/10 to 20Mbps service. No penalties will be charged for downgrades.

27. Does the Smart Satellite Services network support Voice calls?

Yes, it does. IP Voice will work provided you have a data connection & supporting CPE. IP Voice will be able to utilise any fixed calling plan.

28. How much does it cost for a voice call?

Dependent on Calling Plan selected. For off-net calls, normal fixed line tariffs will apply. Please consult Telkom's latest Tariff list as published on the web.

29. Where will you install the satellite dish?

It can be mounted on a roof, wall or via a pole mount on the ground. We cover up to 60kms from the installation centre. The installation team will determine the best position for the Satellite dish.

30. What speeds can I achieve 'up to'?

Our services deliver headline speeds in the following as follows:

Packages	Download Speeds	Upload Speeds
Smart Satellite 5 Mbps	5Mbps	3 Mbps
Smart Satellite 10 Mbps	10 Mbps	3 Mbps
Smart Satellite 20 Mbps	20 Mbps	4 Mbps

31. Does weather affect the dish?

The service is designed to cope with most weather conditions, including wind speeds of up to 100mph. During periods of extremely heavy rain or snow, the radio signals may become attenuated (reduced). There are sophisticated, automatic measures to effectively increase the power of your system to compensate for any attenuation by using Adaptive Coding & Modulation (ACM). ACM enables the system to automatically react to the effects of rain fade.

32. How do I get Telkom's Smart Satellite Services Offer?

- Visit www.telkom.co.za and locate the Telkom Smart Satellite product and complete the online form – an agent will call you.
- Call into our sales call centre via 10213
- Talk to a Telkom sales representative

33. Who do I call if I have a technical query or coverage related problems?

To receive support on the Satellite product the following options are available to customers:
- Number to call:
  - 0860 478 728 for internet and Voice
- For Voice Services Log via
  - https://apps.telkom.co.za/logafault
- Billing
  - 10210@telkom.co.za

34. What does Congestion mean?

When the number of people using the network simultaneously increases, the Internet speed may reduce. During peak periods, your download speeds are slightly less than usual. This is a universal phenomenon that is commonly referred to as congestion on the network.

35. Are there any minimum requirements for computers when implementing Telkom Satellite Internet Solutions?

Our satellite system can connect to any smart device; PC, MAC, or laptop if there is a network card installed.

36. Can I use wireless router?

Yes, a wireless router can be connected to the Telkom Satellite Solution! The router should be purchased additionally and separately from the Satellite solution either by the customer directly or added to the Telkom account where Telkom will deliver the Wi-Fi router. The router should be a standard Wi-Fi router and not a 3G/4G type Mobile network router.

37. Why does a ping give a slow response over Satellite?

A ping is not a reliable test for connectivity or speed. The reason for this is that a Satellite is based in a geostationary orbit approximately 36,000 km above the equator. Due to the distance it has to cover, it will normally take approximately 600ms. Added to this, a ping is classified as low priority command by networks. This means that all other applications will be processed before the ping command. As there is no acceleration applied to the ping command, this can sometimes cause increased ping times or even a 'time out' – making it an undependable speed test.

38. How does Telkom Optimise Traffic?

The YahClick Network uses a network traffic classification system (called DSCP) to optimise traffic according to the purpose of the traffic by allocating network traffic to a Class of Service (CoS).

Through this classification, it seeks to prioritise traffic where interruptions are most noticeable and customer impacting (like voice traffic) versus activities where a delay is least interrupting or noticeable (like downloading a file).

The table below provides the classification from highest priority to lowest priority. The dynamic management and control of this mechanism is done by highly sophisticated traffic controllers and monitors supplied by a specialist company called Procera Networks.

The traffic in YahClick Network is classified and prioritized as shown below in the table:

Application	CoS	Drop Probability
Voice Payload and signalling	5	Lowest
Business Apps and VPN	4	Low
Interactive communications, streaming media, default traffic	3	Medium
Peer-to-Peer, File Sharing	2	High