

Select Committee on the Petition 05 September 2024 09.00 Court and Assembly Chambers, Town Hall Updated Agenda

- Consideration of written evidence Summary of Submissions
- 1. Mike Summers
- 2. Chris Gare
- 3. Simon Verrechia
- 4. Gonzalo Ibarra
- 5. Marcus Morrison
- 6. Kelly Moffatt
- 7. Jeremy Poncet
- 8. Glynn McKay
- 9. Chamber of Commerce
- 10. Neville Clifton
- 11. Phil Mansell
- 12. Ruth Stewart
- 13. Duane Stewart
- 14. Alex Olmedo
- 15. Andy Trish
- 16. Rosie King

- 17. Sian Ferguson
- 18. Bruce Wilks
- 19. Brian Jamieson
- 20. eLink
- 21. Angus Macaskill
- 22. Aikeah Salumbides
- 23. June Arburo
- 24. Alex and Dot Gould
- 25. Ross James
- 26. Stephen Luxton
- 27. Mike Triggs
- 28. Fraser McKay
- 29. Rob Burnett
- 30. Christine Ford
- 31. Sure Ltd Response to letter and written submission
- 32. Starlink Response to letter

There will be the opportunity for any brief clarifications on written submissions from the Committee should those submitters be in attendance.

- 2. Oral Evidence 10 Minutes per person + 10 minutes Q&As
 - 10.30 Brian Jamieson
 - 11.00 Youth Parliament Representative
 - 13.30 SURE (OPEN AND CLOSED SESSION)
- 3. Date of Next Meeting 20 September 2024, 09.00 Court & Assembly Chambers

More information:

You are invited to give your views to the Select Committee on the Petition. The Petition has set out the following asks:

 Abolish or Reduce the Licence Fee: We call on the Communications Regulator and MLAs to abolish the VSAT licence fee for using Starlink entirely. If a complete abolition is not feasible, we urge you to reduce the fee to a reasonable and proportionate level, not exceeding £180 per year. 2. Approve Starlink Domestic Tariffs: We also call on the Communications Regulator to grant regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands. This would prevent residents from being forced to rely on the more expensive global roaming tariffs, making fast and reliable internet access more affordable for everyone.

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David Rogerson

Adviser to the Select Committee

Summary of submissions received by the Legislative Assembly Select Committee

This paper highlights some of the key messages from the 30 submissions that the Select Committee has received. The purpose of the paper is to guide Committee members in their review of the submissions and identify where they might focus attention. Submissions have been radically summarised and paraphrased; where the same or similar points have been raised by multiple respondents they have not generally been repeated. Inevitably, not every point raised by each respondent has been included. If respondents feel that there are significant omissions, misrepresentations or other such errors, they might usefully be given the chance indicate this during the public session on 5th September.

No.	Name	Key points
1	Mike Summers	 There is a need to check whether use of LEO might adversely affect safeguarding, security and criminal activity.
2	Chris Gare	 Sure cannot meet the needs of the Falkland Islands under an Exclusive Licence. The One Web solution is not fit for purpose. Lowering licence fees would reduce/remove illegal use of Starlink. Starlink is unlikely to enter the market with a licence fee policy that is designed to deter usage. Sure has missed its chance through under investment.
3	Simon Verrechia	 There would be far-reaching benefits from Starlink (e.g. remote learning, professional development, e-health) There is a need to set up mechanisms to monitor and evaluate impact. Consider nationalisation of telecoms services.
4	Gonzalo Ibarra	Connectivity should be seen as a basic right.
5	Marcus Morrison	 Allow freedom of choice – it is built into the FI constitution. Increase competition to breed competence. The petition would allow access to service providers without users having to break the bank.
6	Kelly Moffatt	 As a nation we really need fast, reliable internet.
7	Jeremy Poncet	 Camp needs a much more reliable internet service Sure should remain as a back-up service.
8	Glynn Mackay	 A "sensible" licence fee would enable FI to catch up with the rest of the world. The approach adopted in Ascension (£10 licence fee with Sure and Starlink "successfully integrated")

9	Chamber of Commerce	We live in a changed world where broadband
		internet access is vital for growth.
		£5400 annual licence fee is a major inhibitor of
10	Neville Clifton	growth.Licence fees should be cost-based and apply
10	Wevine Chifton	generally (not just to Starlink)
		 Independent legal opinion should be sought as to
		what can or cannot be done alongside the exclusive
		licence.
		Annex provided on performance and disaster
11	Phil Mansell	 recovery. The ability to contact family overseas is a human
11	riiii iviuiiseii	right.
		 Want to be able to self-supply a better, faster
		service to go alongside Sure.
12	Ruth Stewart	"Desperate need to change a clearly broken system"
		that aids a monopoly provider of sub-par
13	Duane Stewart	performanceditto.
14	Alex Olmedo	 Sure is unable to meet needs in Camp
_ ,	THEX OHITEGO	 Legislative framework is "wrong and outdated" and
		needs to change.
15	Andy Trish	Abolishing the VSAT licence fee will bring significant
		economic and social benefits.
		Sure claims to have approached Starlink but not have able to garee tarms for results.
		 been able to agree terms for resale. It appears that Sure Falkland Islands "does
		whatever it wants" e.g. it has not filed any
		published accounts since 2018.
		Every clause in the Objectives and Principles section
		of the Communications Bill 2017 points to
16	Posio Vina	approving Starlink.
16	Rosie King	This is a necessary changeWe need to hear more about national security
		implications
17	Sîan Ferguson	Access to suitable educational facilities should not
		depend on being able to afford the VSAT licence fee
18	Bruce Wilks	Sure has lost my trust
		Exclusive provider model no longer optimal Grand linear and for its provider and provid
19	Brian Jamieson	• £5400 licence fee is neither just nor morally right.
19	BITUIT JUITHESUIT	 Licence fee was set as a deterrent. It was set on QC advice that not having the possibility of self-
		provision went against the constitution. This way
		self-provision was allowed but could not be
		afforded, irrespective of the service provided by
		Sure.

		•	If the licence fee is set so as to protect the integrity of the exclusive licence, then fees collected ought to be passed on to Sure (to compensate for the loss of custom). If the licence fee is to be passed on to Sure it should be no more than the lowest tariff that Sure operates (not the highest as implied by the £5400 fee) Requiring the public to pay a fee for using an unlicensed service may not be legally justifiable. Starlink must have a licence to operate here.
20	eLink	•	Starlink would be good for our business (enabling us to deliver best quality service to our customers)
21	Angus Macaskill	•	Current service is unsatisfactory and outdated Ships at sea have better service than the islands
22	Aikeah Salumbides	•	Starlink is necessary until submarine cable access is possible It would transform the conversation on communications from a negative to a positive.
23	June Alburo	•	ditto
24	Alex and Dot Gould	•	Lack of Starlink severely restricts business and social activities
25	Ross James	•	Anecdotes offered in support of enhanced broadband: "do not let this opportunity go to waste"
26	Stephen Luxton	•	Need to accept that the situation has changed since 2016 (when previous decision was made). Need not to defend or blame, but to look forward. Not convinced that a Starlink terminal constitutes a VSAT No provision was made when setting the VSAT licence fee to compensate Sure – because no use or revenue was expected. "user pays" should mean that "payer uses" but VSAT fails this test. The fee is arbitrary and unjustified. It should be based on administrative costs. The effect of the fee is not now a disincentive but has created a two-tier market based on who can afford this fee. Licence fee might not be annual, but set to expire with the exclusive licence (at end of 2027) Starlink roaming fee is about to increase from £200pm to £380pm. Domestic Starlink rates vary but tend to be £50-75pm. Starlink not likely to seek a licence in the Falkland Islands without a lower licence fee.

		<u> </u>	
		•	Sure should be able to tolerate the loss in iots
			profits (which should never have been allowed to
			grow so high)
<i>27</i>	Mike Triggs	•	Starlink is far superior to Sure and should be
			available at a sensible affordable rate.
28	Fraser Mackay	•	Starlink needed to avoid an "all eggs in one basket" situation.
		•	Use would be additional to Sure as a back-up for safety.
29	Rob Burnett	•	Sole trader working in live sports publishing finds
			that his requirements are at the extreme edge of the capabilities of Sure's internet services.
			•
			Stressful, living in fear of income stream being lost.
		•	The reason for these struggles is not now a
			technology problem but a regulatory one.
		•	Needs to be resolved to attract "digital nomads" to the Falklands.
		•	There has to be a way around the exclusive licence;
			2027 is going to be far too late.
<i>30</i>	Christine Ford	•	Abolishing the Starlink licence fee will enhance
			internet accessibility and promote digital inclusion;
			the potential economic benefits outweigh the loss of
			licence revenue
		•	Starlink domestic tariffs are generally lower than
			Sure's internet packages; they would enhance
			internet access, reduce costs, and stimulate
			economic and social development
The fo	ollowina submissions were	also	received in response to data requests from the
_	Committee	u.50	received in response to data requests from the
31	Sure SA		The proper place to consider the matters raised in
J 1	Sure SA		the petition is the upcoming FIG review of what
			happens in the communications sector after 1
			• •
			January 2028 (the earliest date that the exclusive
			licence may be terminated)
		•	This review should consider the questions raised by
			the increasing (often unlicensed) use of Starlink –
			e.g. the implications of "cherry-picking".
		•	It should also consider cybersecurity and law
			enforcement obligations.
		•	The £5400 VSAT licence fee was critical to Sure
			agreeing to proceed with its exclusive licence – a
			policy that it was reassured would apply for the full
			licence period.
		•	Licensing Starlink would not be compatible with
			exclusive licence granted to Sure.
		•	_
		•	The Committee cannot ignore the legal framework.

32	Starlink	•	Starlink would very much like to apply for a service provider licence. The only reason we have not
			applied to date is the exclusive contract in place. We were previously told we were not able to apply.
		•	Licence fees increase costs to subscribers and limit the ability to reach the un- and under-connected.
		•	We encourage the removal of all per terminal fees, as is the norm in the 100+ markets where Starlink
			operates.
		•	For example purposes only, the standard Starlink residential domestic tariff in the UK is £75 per
			month. Monthly business tariffs vary from £80 for 40GB -£300 for 2TB of data.

From: Mike Summers <m.j.summers@horizon.co.fk>

Sent: Wednesday, August 7, 2024 4:02 PM

To: Cherie Clifford (Clerk of the Legislative Assembly) <clerkofassembly@sec.gov.fk>

Subject: Re: Select Committee on the Petition - Date of next meeting

Hi Cherie,

Grateful you would pass this to the Select Committee Chair.

"The Crimes Ordinance and the Police and Criminal Evidence Ordinance were drafted, debated and passed in an environment in which the Telecommunications Ordinance gave authorities some level of control over, and access to data on the telecommunications system, and it has been all in one place. I am aware that the police have, rightly, had access to certain data on the Sure system to prevent crime, particularly relating to safeguarding children.

In a de-regulated environment this may not be the case and needs to be checked. There could be several implications for safeguarding, security and possible criminal activity. Whatever the benefits of LEO, we have to consider carefully the risks to society, and particularly children, of there being no controls on access. It may require additional legislation if the existing Ordinances are no longer adequate."

Many thanks,

Mike

Dear MLA Spink,

Thank you for your email.

I can provide a short explanation for public disclosure **REDACTED**

Short explanation (public)

The short explanation is that internet service providers, so those services which transmit data over the internet, can hold data which is relevant to law enforcement operations. This data can be accessed by law enforcement agencies using appropriate routes, such as disclosure requests, court orders and requests for mutual legal assistance, even if the service provider is based outside the jurisdiction.

Generally speaking, the data held by companies providing transmission services is limited because although they transmit data they are unlikely to store data content, such as electronic messages, images, banking information etc. This data may be stored by the companies providing the internet-based service, such as social media companies, internet search companies, banking organisations etc., rather than the companies transmitting the data.

In the Falkland Islands, it is unlikely that the use of Starlink to transmit data will make any significant difference to law enforcement operations.

Longer explanation (private)

REDACTED

I hope the above is helpful, if I can assist further please do not hesitate to contact me.

Yours sincerely,

Stuart Walker Crown Counsel

Email: prosecution@sec.gov.fk

Tel: +500 28460

Law & Regulation Directorate | Attorney General's Chambers | Stanley | Falkland Islands | FIQQ 1ZZ

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Submission to the FIG Starlink Select Committee (Final)

Strategic Advisor, Starlink Petition Group

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31st July 2024

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1. Introduction of the contributor.

I have had a career spanning 50 years in senior-level roles across the semiconductor, personal computer software, and telecommunications industries. I started in the late 1960s designing mainframe computers with International Computers Ltd (ICL), followed by several years in the semiconductor industry. I had European product marketing responsibility for two microprocessor families—9900, Texas Instruments, and 68000, Motorola Semiconductors.

Notably, I started Microsoft's operations in Europe in 1982, and later, until 2000, I was responsible for global standards for Cable and Wireless Internet and voice networks. My first visit to the Falkland Islands in 2000 sparked a deep interest in the islands and its people. My passion for the Falklands is also driven by an interest in enhancing its telecommunications services, which has proved challenging. I have been to the islands for eleven subsequent visits, with my next one scheduled for late September 2024.

From 2008 until 2017, I served as a retained Advisor to the Falkland Islands Government, providing expertise on numerous telecommunication matters, including regulatory aspects. I also monitored the Quality of Experience (QoE) for the customers of Sure Falkland Islands' broadband service customers on behalf of FIG for seven years from 2009. I investigated many issues uncovered by the monitoring.

In 2018, I started OpenFalklands, a blogging platform dedicated to publishing public and insightful posts on various aspects of Falkland Islands telecommunications. My writings delved into anecdotal issues often discussed on Facebook but with a focus on professional and objective analysis. Satellite communication and Internet KPI performance have been a central theme of my posts. Since 2019, I have been writing about Starlink and OneWeb, exploring the potential benefits of these LEO constellations for the Falkland Islands.

2. Background to the Select Committee submission.

As a submission to the Starlink Select Committee, I will not add to the submissions concerning how Starlink will benefit the islands' consumers and businesses, as this will probably dominate most submissions by local Falkland Islanders. The support of the Petition by 2,400 individuals said more about the need for a Starlink service than anything I could add.

Market conditions and telecommunications technologies have considerably changed since the last Telecommunications Ordinance Select Committee meeting held in November 2016, when the decision was made to disincentivise consumers and businesses from using VSATs to protect Sure Falkland Islands' exclusive licence.

For this submission, I would like to focus on four subjects by providing relevant background and context that will, I hope, aid the members of the Select Committee in their final deliberations.

- 1. Major Global Market Shift Reflected in Falklands Starlink Battle.
- 2. Analysing Current Shortcomings in Sure Falkland Islands Internet Access Services
- 3. Implications of Starlink's unlicensed use in the Falkland Islands
- 4. What would be Starlink's attitude to FIG's £5,400 VSAT licence fee?

Note: In Falkland Islands law, the term 'VSAT' encompasses all satellite technologies, whether GEO or LEO. I'll continue using that term when discussing the VSAT license. Still, in practice, I'm referring to a Class license for Starlink or any other satellite technology that may become available in the islands in the future.

3. An irreversible global Market shift in the satellite industry.

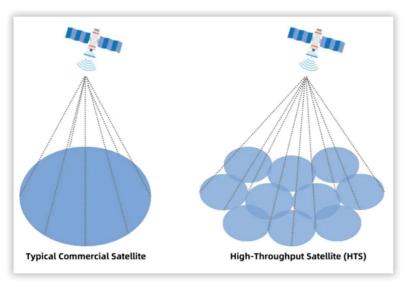
Even though allowing the affordable use of Starlink in the Falkland Islands represents a significant transformation opportunity, Starlink's current status in the Falkland Islands is just one small battle in the global war between **Geostationary High-Throughput Satellites** (GEO-HTS) and **Low-Earth-Orbit High-Throughput Satellites** (LEO-HTS).

The selection of satellite technology, or a combination thereof, is crucial for the Falkland Islands' economic and social development. Evaluating the potential wide-scale introduction of Starlink to the local market by reducing VSAT licence costs requires an understanding of global technological advancements in the satellite industry and their subsequent effects on local telecommunications providers, such as Sure Falkland Islands.

What are 'HTS' satellites, and what are the differences between 'LEO' and 'GEO' satellites?

High Throughput Satellites (HTS)

The term can be applied to both GEO and LEO satellites. Advanced High-Throughput Satellites (HTS) offer satellites significantly higher data rates than traditional satellites. They accomplish this using multiple spot beams instead of a single broad beam. These spot beams can simultaneously target different geographic areas on Earth. HTS satellites support high data rates of hundreds of Mbps and have much higher aggregate throughput capacities.



Source & thanks: IPLOOK

What are GEO satellites?

A Geostationary Earth Orbit (GEO) satellite orbits the Earth at 35,786 kilometres. At this height, it matches the speed of the Earth's rotation and thus remains stationary relative to its surface. This enables the use of fixed antennas, such as those at Sure Falkland Islands' site in Stanley, to maintain a constant connection with Intelsat's GEO satellite.

GEO satellites are primarily used for broadcasting TV channels, communication services, and providing internet access. Before the advent of Low Earth Orbit (LEO) satellites, GEO satellites dominated the commercial satellite market. They have been utilised for decades, offering well-

understood technology and a long lifespan. Very Small Aperture Terminal (VSAT) systems are a type of GEO satellite technology. GEO satellites are ideal for broadcasting because such services are not affected by their main drawback: a high round-trip delay (latency) of over 550 milliseconds. Combined with terrestrial path delays, the total latency can reach >850 milliseconds.

High latency is problematic for real-time interactive applications such as voice communication, gaming, and cloud-based distributed applications, which require round-trip delays of less than 150 milliseconds. This has recently come to the fore in the KEMH in Stanley.

Several new GEO HTS satellites are being slated to launch soon, supporting high data rates but still having high round-time trip delays.

What are LEO satellites?

Starlink and OneWeb are notable examples, along with Amazon's Project Kuiper. LEO satellites orbit the Earth at altitudes ranging from 180 kilometres to 2,000 kilometres, much closer than GEO satellites. Specifically, Starlink orbits at approximately 550 kilometres, while OneWeb orbits at about 1,200 kilometres.

LEO satellites complete an orbit in 90 to 120 minutes. Each satellite uses 'spot beams' to cover smaller areas of the Earth's surface as they pass over at speeds of around 27,000 kilometres per hour.

Starlink and OneWeb are inherently HTS constellations, capable of supporting data rates in the hundreds of megabits per second (Mbit/s). Their proximity to Earth results in much lower round-trip delays than GEO satellites. For instance, Starlink has demonstrated download speeds exceeding 300 Mbit/s and round-trip delays to the UK of around 70 milliseconds, compared to greater than 550 milliseconds for GEO satellites in the Falkland Islands.

One primary benefit of HTS LEO constellations is their low latency, which, unlike GEO satellites, makes them ideal for real-time communications, voice-based services, gaming, financial trading, and cloud-based applications.

While GEO satellites are optimal for broadcasting or streaming services (albeit with a start-up delay), LEO constellations excel in real-time, high-download-speed services in remote locations. Of course, they will not replace terrestrial fibreoptic cable connectivity where this is achievable.

What is the cutting-edge service for GEO and LEO satellites?

Internet access is a significant revenue driver for GEO and LEO satellite technologies. Historically, GEO satellites provided internet connectivity to remote areas, but LEO constellations have emerged as a powerful alternative. While GEO satellites are effective for broadcasting TV, they are much less suited for real-time applications due to their higher latency.

LEO constellations like Starlink offer high download speeds and low latency, making them particularly well-suited for Internet Access services. Previously, GEO satellites represented a necessary compromise for Internet connectivity, but the advent of LEO constellations has introduced a transformative option that addresses the limitations of GEO satellites.

Starlink, in particular, is a prominent market disruptor, and the shift it represents is significant and unavoidable. The rise of LEO technology is reshaping the landscape of global internet access, and its

impact should not be ignored or dismissed as there would be significant social and economic impact by doing so.

Market dynamics.

Before Starlink, the market for satellite data communications was largely homogeneous, dominated by GEO satellites from providers like Hughes, SES, and Intelsat, which are used by Sure Falkland Islands as its 'upstream provider'. However, the global market will likely fragment significantly, driven by diverse customer needs. This fragmentation will result in four evolving market sectors relevant to non-military telecommunication services in the Falkland Islands.

Broadcast TV services.

Broadcast TV will continue to be dominated by traditional, reliable, cost-effective GEO satellites. After transmission by GEO satellite, the TV channels are distributed to the community using UHF Digital Terrestrial Television (DTT) technology.

Two companies provide these services in the Falkland Islands. The British Forces Broadcasting Service (BFBS) offers time-corrected UK channel broadcasts from Sappers Hill and directly into Camp. BFBS also provide an online TV and movie 'broadcast' service over Sure Falkland Islands' local IP network called MiPlayer. Meanwhile, KTV provides TV subscription-based packages throughout the islands.

However, GEO-based TV broadcasting is under tremendous market pressure due to the uptake of Internet-based services. Even Sky is slowly moving toward Internet delivery of its services and the eventual shutdown of satellite delivery.

Interactive services

Historically, Sure Falkland Islands has relied on an Intelsat GEO satellite to deliver Internet Access services. This approach is a real compromise due to the high costs associated with limited capacity on GEO satellites and the high capacity costs. In 2019, Sure stated it could not double its satellite capacity without a £1 million annual subsidy from the Falkland Islands Government. Intelsat's GEO satellite's limited capacity and affordability forced Sure to implement a restrictive quota system to manage internet usage on the islands. Without this system, the service would likely collapse during periods of high congestion. LEO services are usually quota-free.

Due to performance and cost limitations, GEO-based Internet access services are not ideal for interactive applications, but no other technology was available in the 2015-18 time window. Using an undersea cable was not feasible or affordable, and it probably still isn't. LEO-based services now represent the future of Internet access for consumers and businesses in remote or under-populated locations like Camp.

Migration from GEO broadcast to online streaming.

Personal streaming by services such as Netflix, Amazon Prime, YouTube, Disney+, and Paramount+ is a significant driver behind the shift from broadcast TV distributed by GEO-based satellites to accessing content using LEO-based Internet streaming. As consumers transition from traditional GEO satellite TV broadcasts to online streaming, the distinction between these services is increasingly blurred. This trend is fueled by the availability of quota-free, high-speed LEO-based services like Starlink. As a result, traditional GEO satellite service providers face severe revenue challenges as their customers migrate.

The other major trend driving consumers to Internet streaming is the improved picture quality now experienced on streaming services. Broadcast TV is limited to SD or HD resolution. However, a few companies, such as DirecTV, make UHD content available directly to customers. Content creators now create most of their content in UHD / 4K resolution content with High Dynamic Range (HDR) colour depth. If you want to experience this, then consumers MUST go online. This particularly impacts BBC, which shows UHD 4K HDR on iPlayer and ITV on ITVX. With ITVX, there is an added benefit of an add-free subscription, which is very popular.

It shouldn't be forgotten that even watching HD content is currently problematic on the islands as it requires 8Mbit/s download speeds, let alone UHD 4K, which requires >15Mbit/s download speeds.

Mixed usage

Most countries and islands, such as the Falklands, will have a mixed market that uses GEO and LEO services based on specific needs. There will not be a single 'market winner' as such. LEO-HTS services such as Starlink will continue to grow exponentially over the next few years, but GEO-based services will remain vital for broadcast services.

Both technologies will continue to coexist but with a significant shift from GEO to LEO-based Internet access services.

Conclusions

The advent of Starlink LEO satellite providers represents a transformational market inflexion of GEO satellite providers, and many are looking to provide LEO-based services. Local incumbent telecommunications companies must also adopt modified infrastructure investments to accommodate this change and give them the best chance to survive.

4. Analysing current shortcomings in Sure Falkland Islands Internet Access services

The Starlink Select Committee should make Starlink licences affordable to the whole islands' communities due to performance deficiencies in the Internet Access portfolio of the local exclusive telecommunications provider, Sure Falkland Islands. Demonstrating these deficiencies is the first test for an applicant for a VSAT licence.

While this has been a core requirement for obtaining an individual VSAT licence, it must now be demonstrated that this applies at a country-wide level.

The Select Committee must agree that Sure cannot meet the country's needs of consumers, businesses, and the government under the exclusive licence with their existing services under their exclusive licence. How are the Internet access services deficient?

Sure's Intelsat-based GEO Internet Access service.

The existing Sure Intelsat GEO satellite service provides only a low-performance Internet Access service, with download speeds and round-trip latencies that prevent consumers, businesses, and the government from effectively utilising the power of the Internet as available in the rest of the world. Internet-based services are incorporated in nearly all fields of human activity, and the low-performance nature of the service is self-evident to all users.

Specifically, the Sure Internet Access service only provides a range of download speeds from 2Mbit/s to 8Mbit/s, making it virtually impossible to use infotainment streaming services such as Netflix and YouTube in SD, let alone HD or UHD. This, combined with unreliability caused by extreme congestion, makes using the Internet an exceedingly frustrating experience. This led to the 2,400 islanders signing the Petition.

Furthermore, the Sure Internet Access service has proved highly unreliable, with blackouts sometimes cutting off all the island's international communications.

However, the other major issue is the high round-trip delay of 550ms, which severely interferes with interactive voice-based services such as Skype, WhatsApp, or Messenger. This delay can be up to 1000mS when terrestrial delays are added. The delay makes conversations challenging and frustrating, as all Falkland Islanders experience daily. Voice services are negatively affected, and many computer applications hosted in the 'Cloud' require low round-time trip delays to function correctly. This has been a particular issue for business and government services, as demonstrated by the patient records system in the KEMH hospital.

Sure's proposed low-latency service.

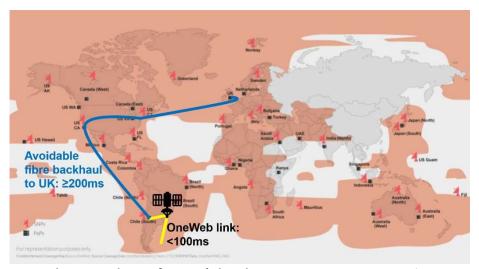
It had been hoped that Sure's introduction of a low-latency service based on the OneWeb LEO satellite constellation by Sure Falkland Islands would provide a suitable low-latency service for real-time interactive communication with UK and cloud-based services. As the Falklands is a UK dependency, most Internet-based real-time communication occurs with the UK.

However, Sure's testing of this proposed service has demonstrated a significant deficiency: a round-trip delay of 300ms to the UK. Sadly, the service cannot be called a low-latency service that would benefit their customers as the 300mS latency would still disrupt voice-based interactive services,

requiring round-trip delays of less than 150mS. An OpenFalklands post discussed this situation in great detail and proposed the cause of the high round-time trip delay.

It is essential to state that this is not a OneWeb issue *per se* but is caused by Intelsat's routing choices or limitations in backhauling the Falkland Islands' low-latency traffic to the Internet backbone in the UK.

The Falkland Islands seems to have been a poor choice for using Intelsat's Multi-Orbit capability, as it does not play to the strengths of OneWeb's low-latency LEO constellation.



The route chosen for Sure's low-latency Internet Access service

Due to its limited capacity and higher operational costs, the proposed Sure low-latency service could not replace the Intelsat GEO service and would not used for streaming services. Currently, the term "not fit for purpose" seems apt.

Since the announcement of this excessive delay, as reported in the Technology Development Group, Sure Falkland Islands has made no demonstrable update or progress. Indeed, attempts to update Sure router 'architecture' failed, bringing down all the islands' communications for several hours. No updates have been provided on when Sure's low-latency service will launch, as it has already been delayed for over nine months.

In contrast, Starlink's quota-free technical performance is ideal for streaming **and** real-time voice services to the UK. In the Falkland Islands, Starlinks' maximum download speeds exceed 300Mbit/sec, and round-trip delays to the UK are around 80ms, which is as good as in the UK.

5. Implications of Starlink's unlicensed use in the Falkland Islands

I have no personal knowledge regarding the current illegal use of Starlink terminals in the Falkland Islands. However, considering the acceptance of global piracy of content such as movies, it is reasonable to believe that some illegal use of Starlink without proper licenses may exist on the islands. The extent of this activity, whether minimal or widespread, is not the primary issue.

The government's recent public statement threatening severe fines is concerning. While there may be a small number of violations of an existing law, potentially hundreds of individuals could be tempted to break the law and risk the consequences. Prosecuting all these individuals would likely overwhelm the courts, making widespread legal action improbable. Instead, authorities may target a few individuals to set an example. However, either action would have significant repercussions, given Starlink's advantages to its users and human nature in such situations.

It seems clear that the possible illegal use of Starlink by consumers registering in Chile or Argentina could have been avoided if Starlink usage had been addressed earlier, though hindsight is always easy.

I believe the Select Committee needs to seriously consider the consequences of not reducing VSAT license costs, considering possible consumer attitudes towards the illegal use of Starlink. Lowering the VSAT license fee to a reasonable level would remove these concerns.

6. What would be Starlink's attitude to FIG's £5,400 VSAT licence fee?

A decision by the Select Committee to reduce or eliminate the high cost of VSAT licenses will not only make Starlink affordable for islanders but could also be crucial for Starlink's decision to approve the use of its service in the Falkland Islands.

While I lack current specific knowledge of Starlink's stance on the £5,400 VSAT license fee, it is evident that FIG's Chief Executive's team, now in negotiations with Starlink, will be fully aware of the issue.

It is reasonable to conjecture how Starlink's marketing team might react to FIG's VSAT license cost. Starlink's pricing strategy typically aims to offer competitive rates for Internet access services in all the countries it operates in, aligning with or undercutting existing market prices.

I'll state with confidence that it is doubtful that Starlink's marketing team would accept a local pricing policy designed to deter sales of Starlink services no matter what the licence cost. The company would insist on reducing or removing the excessive license fee before approving Starlink's operation in the Falkland Islands. This would be the case even when regulatory approval from the Falkland Islands Governor is provided.

Therefore, to meet the first demand of the Petition, the second demand must be met first.

Conclusions

Sure is currently unable to satisfy the islands' need for fast Internet Access in Stanley and Camp using either the Intelsat-based GEO service or the proposed OneWeb-based LEO low-latency service. There has been recent silence about when the low-latency service round-time trip deficiency could be corrected. This opens the gate for consumers and businesses to apply for a VSAT licence to use Starlink as long as the cost is reduced to make the service affordable.

The Communications Regulator has already demonstrated that this is an accurate evaluation by issuing VSAT licenses to individual consumers and businesses—even without Starlink's full approval for service in the islands.

Its decision to use Intelsat's GEO satellite for Internet access made complete sense in 2017, but it became more questionable as the 2020s approached. Attempts to supplement their service portfolio with the low-latency OneWeb service has proved problematic from a technical and performance perspective. Sure International's choice of using OneWeb has directly resulted in the possibility of a profound change for the better for consumers through the full adoption of Starlink.

Sure, the Falkland Islands has had many years to update its local networks and innovate by developing its local infrastructure to support Gbit/s speeds in Stanley and local consumer and business Internet services. There has been little in-island development of the Internet infrastructure beyond what is minimally needed to support the basic Internet access service they currently provide.

Like many others who signed the Petition, I urge the Select Committee members to support the Petition's demands and enable the profound changes that Starlink's availability will bring to all the island's citizens. While this may seem risky, no significant transformation comes without risk. Can the islands really afford to ignore the Starlink evolution and maintain the compromised status quo for the next few years?

4. 4. 4.

Chris Gare

August 2024

Submission to the FIG Starlink Select Committee

Simon Verrechia MIET GCGI

simonv321@gmail.com

Overview of My Career

With over 25 years in the healthcare industry, I have developed a robust background in electronics and biomedical engineering. I began my career as a trainee and progressed to Senior Biomedical Engineer at Central Manchester & Manchester Children's Hospital Foundation Trust, where I managed a team servicing a wide range of biomedical equipment. Following this, I served as a Regional Service Manager at Medical Physics International, leading a team of engineers in maintaining medical devices across numerous hospitals. My role at Olympus Keymed as a Field Service Medical Engineer saw me develop a service software app that was adopted company-wide, earning me multiple customer service awards.

Currently, I own and operate iRepair in the Falkland Islands, addressing local needs for electronic repair services and providing first-line maintenance for the Islands' Water Treatment Plant. Additionally, I served as Senior Biomedical Engineer at King Edward VII Memorial Hospital, where I oversaw the maintenance of critical biomedical devices and managed the medical engineering budget. These roles have equipped me with extensive experience in both technical and managerial capacities, ensuring high standards of service and operational efficiency.

As Chairman of the Starlink Petition Group, I lead initiatives to enhance the Falkland Islands' connectivity, focusing on improvements in education, healthcare, and community development. This role has allowed me to engage deeply with the community and advocate for better infrastructure, aiming to bring significant benefits to the region, particularly in areas like telemedicine, digital education, and social inclusion.

Introduction

The Starlink Petition was formed to address the critical issue of internet connectivity in the Falkland Islands.

This submission details the rationale behind these objectives and highlights the potential benefits across various sectors, particularly education and healthcare. Additionally, I propose recommendations for the future of telecommunications in the Falkland Islands, including the potential nationalisation of services to eliminate monopolistic practices.

1. Objectives of the Petition

The petition sets forth two primary objectives aimed at facilitating the deployment and affordability of Starlink internet services in the Falkland Islands:

1.1 Abolish the VSAT Licence Fee

Current Situation: The VSAT licence fee imposed on users of satellite internet services, including Starlink, is prohibitively high, restricting access for many residents.

Request: For the Communications Regulator and MLAs to abolish the VSAT licence fee entirely. If complete abolition is not feasible which I believe it is, I urge a reduction to a reasonable and proportionate level, not exceeding £180 per year.

Justification: The existing fee places an undue financial burden on residents, hindering their ability to access affordable, high-speed internet. Abolishing this fee will democratise internet access, making it more affordable for all residents.

1.2 Approve Starlink Domestic Tariffs

Current Situation: Residents are currently forced to rely on expensive global roaming tariffs for Starlink services, making it unaffordable for many.

Request: For the Communications Regulator to grant regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands.

Justification: Approving domestic tariffs will significantly reduce costs, making fast and reliable internet access affordable for all residents. This change is essential for promoting a connected and inclusive society.

2. Community Impact

The successful implementation of Starlink internet services will have far-reaching benefits across various sectors of the community:

2.1 Education

Challenges: The current internet infrastructure in the Falkland Islands poses significant challenges to the education sector. Students face limited access to online resources, which hinders their ability to engage in research and interactive learning. Remote learning opportunities are constrained, making it difficult for students to participate in distance education programmes or attend virtual classes offered by institutions worldwide.

Additionally, the lack of reliable internet affects the implementation of digital literacy programmes, which are essential for equipping students with the skills needed in a digital age. Without high-speed internet, students and educators struggle with slow download and upload speeds, frequent disconnections, and limited bandwidth, all of which impede the educational experience and widen the digital divide.

Benefits: High-speed internet, such as that provided by Starlink, would revolutionise the education system in the Falkland Islands. The introduction of reliable and fast internet would enable seamless access to a vast array of educational materials, from e-books and academic journals to online courses and multimedia resources.

Students would be able to participate in virtual classrooms and webinars, connecting with educators and peers from around the world, thus broadening their learning horizons and cultural perspectives. Enhanced internet connectivity would facilitate access to global knowledge networks, allowing students to collaborate on international projects and participate in online competitions and forums.

Moreover, high-speed internet would support the integration of advanced educational technologies, such as interactive whiteboards, virtual reality (VR) & augmented reality (AR) learning experiences, and artificial intelligence (AI)-driven personalised learning platforms. These technologies can create more engaging and effective learning environments, catering to diverse learning styles and needs.

For instance, remote areas that previously struggled with teacher shortages could benefit from virtual teaching, where qualified educators conduct lessons in real-time over the internet. In addition, digital literacy programmes will ensure that students are proficient in essential digital skills, preparing them for future careers in a tech-driven world.

Furthermore, high-speed internet would facilitate continuous professional development for teachers, allowing them to access online training courses, educational resources, and global best practices. This would improve the overall quality of education and ensure that educators are well-equipped to teach in a modern, digital classroom.

In summary, the deployment of high-speed internet is not just a luxury but a necessity for the Falkland Islands' education system. It promises to enhance the quality of education, provide equal learning opportunities, and prepare students for success in an increasingly digital and interconnected world.

2.2 Healthcare

Challenges: The current slow and unreliable internet infrastructure significantly undermines the healthcare system in the Falkland Islands. One major challenge is the difficulty in sending large imaging files, such as Mammography or CT scans, to specialists in the UK for consultation and diagnosis. This delay can lead to prolonged waiting times for patients and potentially impact the accuracy of diagnoses and treatment plans.

Additionally, many patient record systems are now cloud-based, requiring robust internet connections for real-time data access and management. Slow internet speeds can lead to inefficiencies, errors, and delays in patient care.

Furthermore, a growing number of advanced medical devices rely on fast internet connections for diagnostic purposes, including telemedicine services and AI-driven diagnostic tools. The current internet limitations restrict the effective use of these technologies, which are vital for modern healthcare delivery.

Benefits: Improved internet connectivity, such as that provided by Starlink, would bring transformative benefits to the healthcare sector in the Falkland Islands. One of the most significant advantages would be the ability to transfer large imaging files quickly and reliably to specialists in the UK. This would enhance diagnostic accuracy, enable timely consultations, and improve overall patient care. For example, radiologists and other specialists could review high-resolution images remotely and provide immediate feedback, reducing the need for patients to travel for consultations and expediting treatment decisions.

Cloud-based patient record systems, which are becoming the standard in healthcare, rely on robust internet connections for real-time data access and management. With high-speed internet, healthcare providers could access and update patient records seamlessly, ensuring that all relevant information is available at the point of care. This would lead to better-coordinated care, reduce the risk of medical errors, and enhance patient outcomes.

Many advanced medical devices and technologies depend on internet connectivity for diagnostics and treatment. Al-driven diagnostic tools can analyse vast amounts of data quickly and accurately, assisting doctors in making more informed decisions. Telemedicine services, which allow patients to consult with healthcare providers remotely, would become more reliable and widespread, increasing access to healthcare, especially for those in remote areas. Additionally, 4K live streaming in operating rooms for remote consultations could become a reality, enabling surgeons to seek real-time advice from specialists worldwide during complex procedures.

Moreover, cloud-based healthcare solutions, benefit from high-speed internet by enabling seamless data sharing and collaboration among healthcare providers.

In conclusion, the deployment of high-speed internet is crucial for the healthcare sector in the Falkland Islands. It promises to enhance diagnostic accuracy, streamline patient care processes, and enable the adoption of cutting-edge medical technologies. This will not only improve the quality of healthcare but also ensure that residents have access to the best possible medical services, regardless of their location.

2.3 Economic Development

Challenges: The current state of internet connectivity in the Falkland Islands poses significant challenges to economic development. Businesses face inefficiencies in their operations due to slow and unreliable internet. This impacts everything from communication with clients and suppliers to the ability to conduct research and access online tools and services. The limited online presence of local businesses also restricts their market reach and reduces their competitiveness both locally and globally.

Additionally, the poor internet infrastructure hinders the ability to attract investment, as potential investors see reliable digital connectivity as a critical factor for business success.

Benefits: Reliable high-speed internet is essential for boosting business productivity and economic growth in the Falkland Islands. Improved connectivity will enable local businesses to operate more efficiently, utilise online tools, and streamline their operations. For example, businesses can benefit from cloud-based applications that facilitate inventory management, customer relationship management (CRM), and financial transactions. This will not only save time and reduce costs but also improve overall business performance.

Enhanced internet connectivity will also enable e-commerce, allowing local businesses to establish an online presence and reach a global market. This is particularly important for small and medium-sized enterprises (SMEs) that can use e-commerce platforms to sell their products and services beyond the local market.

Additionally, high-speed internet can attract investment to the Falkland Islands by creating a more favourable business environment. Investors are more likely to invest in regions with reliable digital infrastructure, as it ensures smooth business operations and access to global markets. This can lead to the establishment of new businesses, the expansion of existing ones, and the creation of job opportunities for the local population.

Improved internet connectivity can also support the development of innovative industries such as digital services, tech startups, and remote work opportunities. For example, the rise of remote work has shown that high-speed internet is crucial for enabling professionals to work from anywhere, providing new employment opportunities and reducing the need for migration.

Tourism is another sector that can significantly benefit from improved internet connectivity. Tourists increasingly expect reliable internet access for communication, navigation, and sharing their travel experiences on social media. Enhanced internet services can improve the overall visitor experience, making the Falkland Islands a more attractive destination. This can lead to increased tourist arrivals, longer stays, and higher spending, which will boost the local economy. Additionally, better connectivity can facilitate the promotion of the Falkland Islands as a tourist destination through digital marketing and online travel platforms, reaching a wider audience and attracting more visitors.

In summary, reliable high-speed internet is vital for driving economic growth in the Falkland Islands. It will enhance business productivity, enable e-commerce, attract investment, and create job opportunities, ultimately contributing to a more prosperous and resilient economy. The tourism sector, in particular, stands to gain significantly from improved internet services, further bolstering economic development.

2.4 Social Inclusion

Challenges: Limited internet access in the Falkland Islands exacerbates social isolation, particularly for remote and vulnerable populations. Many residents, especially those in camp, struggle to stay connected with family and friends, access essential services, and participate in community activities. This digital divide restricts their ability to benefit from online educational resources, healthcare services, and social platforms, contributing to a sense of isolation and exclusion.

Additionally, restricted internet access limits participation in the digital economy, which is increasingly important for accessing job opportunities and financial services. Without reliable internet, residents cannot fully engage with digital platforms that facilitate learning, employment, and civic participation. This digital exclusion not only affects individual well-being but also hinders community development and social cohesion.

Benefits: Affordable and reliable internet access is crucial for bridging the digital divide and promoting social inclusion in the Falkland Islands. Improved connectivity will enable all community members to participate fully in the digital world, ensuring that no one is left behind. For example, residents will be able to access online educational resources, participate in virtual classrooms, and engage in lifelong learning opportunities. This is particularly important for students and adults seeking to improve their skills and knowledge in a rapidly changing world.

Enhanced internet connectivity will also facilitate access to telehealth services, allowing residents to consult with healthcare providers remotely and receive timely medical advice. This is especially beneficial for those living in camp who may face challenges in accessing healthcare facilities.

Reliable internet access will enable residents to stay connected with family and friends, reducing feelings of isolation and strengthening social ties. Social media platforms, video calls, and online communities provide valuable opportunities for social interaction and support, particularly for vulnerable populations such as the elderly and those with disabilities.

Participation in the digital economy is another significant benefit of improved internet connectivity. Residents will be able to access online job portals, apply for remote work opportunities, and participate in e-commerce activities. This can lead to increased employment and income opportunities, contributing to individual and community prosperity.

Furthermore, reliable internet access will enable residents to engage with e-government services, making it easier to access public information and participate in civic activities. This provides a more inclusive and participatory society, where everyone has the opportunity to contribute to community development and decision-making processes.

In conclusion, affordable and reliable internet access is essential for promoting social inclusion in the Falkland Islands. It will bridge the digital divide, enhance access to education and healthcare, reduce social isolation, and enable participation in the digital economy. By ensuring that all community members can fully engage with digital platforms and services, we can create a more inclusive, connected, and resilient society.

3. Recommendations for Action

I respectfully submit the following recommendations for consideration by the Select Committee and the Legislative Assembly:

3.1 Abolish the VSAT Licence Fee

Action: Abolish the VSAT licence fee.

Rationale: Abolishing the fee will remove a significant financial barrier, making high-speed internet more accessible to all residents.

3.2 Approve Starlink Domestic Tariffs

Action: Grant regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands.

Rationale: Domestic tariffs will significantly reduce the cost of internet services, promoting greater affordability and connectivity.

3.3 Ensure Transparency and Community Engagement

Action: Implement a transparent decision-making process with regular updates to the community.

Rationale: Maintaining transparency and engagement will build trust and ensure that community needs and feedback are considered throughout the implementation process.

3.4 Monitor and Evaluate Impact

Action: Establish mechanisms to monitor and evaluate the impact of Starlink services on various sectors, including education, healthcare, and economic development.

Rationale: Continuous monitoring and evaluation will help assess the effectiveness of the initiative and identify areas for improvement.

4. Future of Telecommunications in the Falkland Islands

4.1 Nationalisation of Telecoms Services

Current Situation: The Falkland Islands' telecommunications services are currently monopolised by Sure, a private company, resulting in high costs and limited innovation.

Proposal: I recommend exploring the nationalisation of the telecommunications sector, either fully or partially, to eliminate the profit-driven monopoly and ensure better service delivery.

Benefits:

Cost Reduction: Nationalisation can lead to lower prices for consumers by eliminating the profit margin required by private companies.

Improved Service Quality: Government oversight can ensure that service quality standards are met and maintained, leading to more reliable and higher-quality internet and telecommunications services.

Enhanced Innovation: A nationalised telecoms provider can focus on long-term infrastructure investment and innovation without the pressure of short-term profitability. This can lead to faster adoption of new technologies and better overall service for residents.

Economic Stability: A nationalised service can reinvest profits into the local economy, supporting other public services and infrastructure projects.

Social Equity: Ensuring that all residents have access to affordable and reliable telecommunications services is crucial for social inclusion and economic development.

Conclusion: Nationalising the telecommunications services, either fully or partially, can provide the Falkland Islands with a more equitable, innovative, and reliable internet and telecoms infrastructure, eliminating the negative impacts of monopolistic practices by a private company like Sure.

7. Conclusion

The Starlink Petition reflects the collective aspirations of the Falkland Islands community for better internet services. The overwhelming support for the petition underscores the urgency of the situation and the need for immediate action. I believe that the proposed measures—abolishing the VSAT licence fee and approving Starlink domestic tariffs—are critical steps toward achieving this goal.

I urge the Select Committee to act swiftly and decisively to meet these goals by October 2024. This timeline is realistic and achievable, ensuring that the Falkland Islands can move forward with improved connectivity that benefits all residents.

Thank you for considering this submission. I remain committed to working collaboratively with the Select Committee, the Legislative Assembly, and the wider community to achieve a better-connected future for the Falkland Islands.

Contact Information:

Simon Verrechia Mobile: 53780

Email: simonv321@gmail.com

To Select committee;

It's a transcendental moment in our recent history as a country defending our freedom for any kind of oppression not only a foreign power dictatorship regime but in modern time defending the freedom of communication of a new era where connectivity must be a basic right for any individual and society we been capture for decades in a monopoly that in the early beginning could be understand by political and geographical situation but the time goes by with modernisation and better communication and the new generations need the new horizon tools for developed all fields of our society connectivity is master key for it.

Its in your hands give another liberation day to our country in terms of modernity connectivity and development in all the areas of our nation connectivity with fairly prices and speeds are the angular stone for the next generation future, people are tired of fails promises frustration for so long, we the Falkland Islands people deserve better

Kindly regards

Gonzalo Ibarra

Stanley resident

Mr. Marcus Morrison 5 Mink Park Stanley Falkland Islands

Select Committee Falkland Islands Government Stanley

06/08/2024

For the Attention of the Select Committee,

Starlink Petition - Submission

Thank you for allowing stakeholders the opportunity to provide views to the Select Committee on the current Starlink Petition presented to them.

The Falkland Islands Government I believe are now at a crucial crossroad in regards to telecommunications and their decisions will have significant impact on how the Falkland Islands moves forwards as a nation. It is important that any decision takes on board the desires and needs of the people its businesses, and of course the government. Government needs to move away from this "nanny state" approach to telecommunications in the Islands and allow freedom of choice for users.

With the introduction of Low Earth Orbit constellations, such as Starlink, it has transformed telecommunications by providing super-fast, reliable and unlimited data to users across the world. Users are able to access internet in remote places, on the go or simply from their home with ease. Why should the Falkland Islands be no different and be restricted to accessing such technology?

Sure, the current internet provider, are clearly unable to meet the desired needs of businesses, individuals and dare I say government. Within the Falkland Islands constitution Order 2008 under Fundamental rights and freedoms of the individual point 1.

"All peoples have the right to self-determination and by virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development and may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit and international law."

It is clear in the constitution that we as a people are free to pursue our economic, social and cultural development for their own ends, but why then should the people suffer due to the inabilities of the telecommunication company, and be forced down this one "rabbit hole" in relation to telecommunications. The current internet provision is stifling business growth, restricting medical procedures and diagnosis, restricting educational progression, causing travel delays, damaging the economical growth and reducing the social and cultural development of individuals. There is also an argument that it is increasing further mental health issues to users as the demands to utilise cheaper internet are restricted to off-peak hours from midnight to 6am by the current provider.

It is highly important that the Select Committee look to accept the requirements of the petition and reduce the licence to a much more affordable level. A good benchmark is that of Ascension Island where their government have a licence fee of only £10 per annum, something that would be more viable for all. It is important that all users are able to access affordable internet and should not be restricted to only utilise a Sure connection. A recent Facebook Poll on The People of the Falklands vs FIG: Human Rights and Freedom to Connect group highlighted that 79% of 600 votes, would use Starlink and use a cheaper Sure broadband package. Having a lower licence fee that is not financially restrictive will allow all to be able to access Starlink, and Sure, without breaking the bank.

Having competition in any business area is highly important as businesses then have to work hard to improve their products, provide competitive pricings and increase quality. All of which benefits the consumer who then have choice and a variety of options to select from. As of now, the restrictive licence fee is not helping to breed competition and therefore the current Internet Provider is not motivated to improve on all of the above. I feel the following quote is very relevant to this topic.

Mark J Perry, AEIdeas, Senior Fellow Emeritus – Perry's Law says that "competition breeds competence." To maximise the competence of producers and suppliers, we have to maximise competition, and to maximise competition we usually need to reduce the government barriers to market competition. Government regulation typically reduces competition, which then reduces the competence of producers, and reduces their willingness to serve consumers and the public interest, which make us worse off. I say the more market competition the better, for consumers and for the human race."

Point 2 of the Petition is of course also crucial to increasing competition in the Islands with telecommunications provision. Granting regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands would allow consumers choice and the ability to select Starlink as their alternative or sole internet provision. Select Committees approach to this should be to simply request that Starlink services are made available in the Falkland Islands and then for Starlink and Falkland Islands Government to discuss those tariffs. It is important that these tariffs are kept in line with current prices within South America, which is the closest region and an area that Starlink is operating in. Residential packages are ranging from £47 - £63 per month in South American countries. This is a great opportunity for our government to do the right thing and negotiate affordable tariffs for the Islands to improve their quality of life.

To end, as an avid internet user myself, it is important to me and my family to have access to super-fast, unlimited internet. To be able to produce, create and develop YouTube business opportunities, connecting with other YouTube communities would help to grow a unique business in the Falkland Islands. Unfortunately, the current internet provision does not allow for this, with videos taking days to upload during the off-peak times and the inability to video chat with other creators, record their interviews and publish to my YouTube channel. Gaming requirements for my children cannot be met by the current internet provider with online gaming being very restrictive, and at times impossible to update games due to the large data requirements. Online gaming is huge worldwide and is another way that gamers can interact with each other and grow friendships. Internet for educational purpose is also a must with research needed not only for my children but for professional qualifications. Large educational files, videos etc are just unable to be accessed and so therefore development is stifled. Live sports are also an area that would be greatly improved on, especially as the Islands are very much a sport loving community, imagine everyone being able to stream local sports and overseas competitions like the Island Games online and getting to watch the Falkland Islands compete, live!

The Falkland Islands have a great opportunity to finally move into the 21st Century, reducing the licence fee to an affordable amount and approving Starlink availability with a fair tariff would ensure this is realised.

Kindest regards,

Marcus Morrison
5 Mink Park

Select Committee on the Petition – public submission

Kelly Moffatt 4 Pale Maiden Crescent Stanley

Thursday, 8th August 2024

Thank you for receiving this submission discussing issues the community of the Falkland Islands are facing due to the current and ongoing poor internet speeds and reliability.

Issues faced

- Unreliable internet outages and regularly very slow speeds, which can't support some internet functions e.g. videos
- High fee for small data package frequently causes conflict within families regarding data usage and data running out before the end of the month
- Limited data means that students are setting alarms for the free hours in the middle of the night. Disrupted sleep patterns hampers learning, concentration, development and the immune system, along with impacting on mental health
- Handicaps local businesses online booking systems, online shopping, and paying in person by card are not always working
- Restricts distance learning especially webinars as the internet speeds often cause webinars to freeze or not work. This impacts full time students and professionals who are needing to use distance learning as part of their required continuous professional development

Other points to consider

- The license fee should be abolished, or just apply to businesses. There are a high proportion of single parent families, and persons on a low income in the Falklands.
 Paying a license fee on top of other bills would add further pressure to monetary concerns
- Hardware is needed to use Starlink, amounting to £299 for domestic use, and £450 for businesses. This together with a license fee is a large outgoing sum just to get a decent internet package. Consider low income earners, single parent families, and small businesses, e.g. a self-employed hair dresser, where this would be a considerable outgoing sum

Having fast, reliable and unlimited internet creates many opportunities for the Falklands

- Distance learning for furthering personal and professional growth
- Reliable communication for those away from their families, which may be the decider whether a valued contract officer renews their contract, or leaves the islands
- The KEMH could have a cloud-based patient records system, which would be reliable, more secure, and technologically supported by the software provider (which is not currently happening)

- The schools would have a wealth of information, technology and media to draw from when educating our children
- Those wishing to complete online A levels and equivalents that are not wishing to study in the UK would have a huge range of courses to access, which would reliably work
- Businesses could more reliably and easily increase their customer base by selling items online, have online booking systems, offering online appointments and virtual media could be an option, e.g. for exercise classes, or Falklands College courses and talks

We as a nation are rapidly being left behind by the rest of the world when it comes to reliable, affordable, good value internet. It is affecting many aspects of our lives and will continue to hamper our growth as a nation if we continue to pay the high tariffs for low value, which is currently being offered by Sure.

We live in a democratic society where a single company is completely monopolising and blocking our ability to access good quality internet. This should not be permitted by our Government.

Thank you for reviewing the legislation and providing another way for our nation to thrive
Yours sincerely,

Kelly Moffatt.

Written Evidence Submission – Jeremy Poncet

In 1990, I was six years old and lived on Beaver Island when I developed a severe medical condition and required urgent hospital treatment.

Back then Sure was known as Cable & Wireless and the World Wide Web had only just been invented, the telephone network was unreliable and constantly going offline for days on end – my parents would have to wait until a FIGAS plane flew past so they could radio a message to Cable & Wireless to fix the problem. Nearly everyone in Camp self-provided their own communications in the form of a 2-meter set - which people knew to be reliable - so there was always someone listening.

During my illness, the phonelines were down and there was no way of calling for help. Had my parents not self-provided in the form of a long distance 2-meter set to reach a distant farm to request a Sea King helicopter, I would not be alive today.

Fast forward 34 years and I had returned briefly to my home in Camp while my wife was in Stanley due to give birth to our firstborn, without warning the Landline and internet shut down for nine entire days. Mobile signal was too poor to make calls and the text messages were 6 hours delayed.

Communications are a critical and essential part of life, today more than ever. In the event of urgent medical requirement, this is not a luxury to be monetized by a company with monopoly protection who do not fulfill their commitment of services. What makes this even more iniquitous is that FIG further reinforces this with license fees. It was a 2-meter license years ago and now a VSAT license preventing the Falklands from moving forward. Even under a different name, Cable & Wireless/Sure are still not providing the reliability and quality of service that is needed for communication after decades, yet our legislation prevents us from self-providing and using a form of communication that is not under Sure's control.

Oneweb is not the answer, despite it being falsely advertised as a new and improved LEO Satellite service for the Falklands. In the Penguin News Headline March 3rd 2023, it was stated:

'Expand and deliver improved 4G connectivity, enterprise broadband, quality internet, public wi-fi and streaming videos for all residents in addition to supporting connectivity for military and Government operations'

Not one of these from the list was honored, as the Oneweb connection is now targeted for customers who need the low latency – (which turned out to be not that low). Therefore the Oneweb service will not be available to residents at this time as they are targeting business customers first. This is such a flagrant breach of commitments, it would warrant a lawsuit were there more regulatory power enforced over our telecoms provider.

We should however still keep the existing mobile network and the current internet as a backup, because we know all too well what happens when you rely on one sole provider. The infrastructure is already in place, most of it likely funded by our government over the years. Have these existing services provide a backup for a more suitable form of internet based telecoms that can easily negate the problem of remoteness we have in the Falklands. Sure can continue this role if they agree, but if necessary, begin a nationalisation process if Sure refuses FIG's decision to allow self-provision.

After all, seeing as the current technology Sure uses is outdated and many of the outage issues experienced are due to difficulty in sourcing redundant parts, surely it would be better if this were in our hands for when this technology becomes completely obsolete?

If Sure cannot, or will not provide the services that is needed, then I see self-provision as being the only option. Regardless of the consequences if it means the safety of my family and neighbors. I implore you to make it so this is legal and realistic for the citizens of the Falkland Islands to do so. Make the right choice. Make the only choice.

Jeremy Poncet New House Falkland Islands FIQQ 1ZZ

Submission to the FIG Starlink Select Committee

Glynn McKay

glynnmckay@hotmail.com

Individual Submission to the Select Committee

I wish to present my submission as an individual to the Select Committee regarding the Starlink petition. As a member of the group that presented the petition, I stand by all points raised in the presentation. I wish that the presentation itself be considered as a joint submission from the group.

Professional Challenges

From my professional perspective as a heavy plant mechanic, modern equipment is becoming increasingly difficult to work on without a computerised diagnostic system. Most manufacturers are now transitioning their software to live link-based systems, making it impossible to work on new equipment without a stable internet connection. This is particularly challenging in the Falklands, whether out on a job site where the equipment has broken down or even in Stanley. Software updates on diagnostic systems often time out, requiring either the purchase of a new drive with the updated software or sending the system away for updates. Examples of these systems include JCB Service Master, Volvo Tech Tools, and Ford F-COM, among many others. This affects every mechanic and increasingly impacts everyone when cars, trucks, and plant machinery cannot be repaired.

Retail Challenges

Locating and ordering parts for equipment is also significantly delayed by slow page loading times. The time it takes to find a single part often equals the time that should be spent completing an entire quote and order. This issue affects all retail outlets, not just those in the automotive and heavy machinery sectors.

Personal Experience

From a personal perspective, my first issue is very close to my heart. My 101-year-old nan had a nasty fall a couple of months ago and was stuck on her kitchen floor for five hours until a neighbour noticed her light wasn't on. She repeatedly pressed her panic button, but it did not connect due to the poor phone line connection. This alone makes me wish there were better options here for connectivity, forcing Sure to improve their service quality.

Experiences from Overseas

Having lived overseas for several years, I have experienced firsthand what we are missing out on here. Now that I am home, I miss the ease of doing things I used to do and get frustrated with simple tasks like looking up a recipe or watching a movie without buffering. There is also the constant anxiety of worrying whether you've exceeded your daily data limit or if you will have enough data for the month. Staying up past midnight to update something on the computer or phone just to ensure it works is a common issue. I believe everyone in the islands can relate to this frustration

Impact on Young People and Contractors

The lack of reliable internet is a significant reason why our young people don't wish to return home after college or university. Considering the substantial investment in their education, it's

in the island's best interests to do everything possible to encourage them to come back.

Additionally, the poor internet service deters contractors from coming to the islands or making it

their permanent home.

Recommendations

I hope that whatever the outcome of the committee's deliberations, the decisions made are

forward-thinking and avoid repeating past mistakes.

I recommend that the wishes of the petition be honoured, as this is what the people of the

Falkland Islands want. If we still end up with a sensible licence fee, I believe the people will

agree to it, provided that applying for a license is as simple as going to the post office and filling

out a form.

Case Study: Ascension Island

They have successfully integrated both Sure and Starlink systems while only paying a £10 a year

license fee, and Sure continues to operate there.

Conclusion

I feel very strongly that it is time for the Falklands to catch up with the rest of the world, and a reliable internet connection is the first step towards development. It's time to move away from

single-operator control and give people a choice. Ignoring the wishes of the people would be a

grave mistake.

Thank you for receiving my submission. I respectfully await the outcome of the Select

Committee.

Contact Information:

Glynn McKay Mobile: 52209

Email: glynnmckay@hotmail.com

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Gilbert House Falkland Islands Government Stanley Falkland Islands

12th August 2024

Dear Select Committee,

Reference: Telecommunications

West Hillside, Stanley, Falkland Islandsmanager@commerce.co.fk

www.commerce.co.fk

00500 22264

The Falkland Islands Chamber of Commerce have frequently engaged with the Falkland Islands Government to express our concerns with the provision of telecommunications in the Islands.

The provision of good telecommunications, including broadband, is vital to the social and economic development of the Islands as a whole. The remoteness of the Islands means that greater emphasis is placed on telecommunications for purchases and banking as well as the ever increasing need for the use of cloud based applications. The Falkland Islands continually lags behind many other similar remote countries in the world as technology continually develops. As LEO (low-earth-orbit) technologies are becoming more readily available with not only One-Web but Starlink and Amazon's Project Kuiper the landscape is changing quickly, new technologies cannot and should not be ignored.

There are many newer technologies Falklands Business can enjoy, however these are poorly utilised by businesses because of the internet service levels they require. Likewise, Falkland Islands businesses have become so accustomed to such limited internet services that their strategies and plans seldom include anything that has a dependence on internet above that which is currently available. This holds back most businesses and curtails development. In each of the FIDC Business Climate Surveys conducted during the past decade, telecommunications is listed as one of the key barriers to growth by Falkland Islands businesses.

Internet and digital marketing have changed how businesses promote their products and services. Business websites, social media, email marketing are some of the modern tools to deliver their message to the right audience. Again, in the Falkland Islands this is stifled due to local restrictions.

Businesses throughout the world now have access to reliable and high-speed internet to accelerate their business operation and to allow growth. Local business industry has been heavily restricted due to restricted data capacity, unreliable connections and poor speeds. These restrictions have stifled innovation and hampered industry growth and production.

Today the possibilities that come along with the Internet make it easier for business to develop and diversify. Communicating with clients and vendors more efficiently, having access to information, and helping to provide a better service, all help to increase business productivity and economic growth.

It is impossible to imagine a world without a reliable internet anymore. It empowers businesses, transforms society, and paves the way for innovation. The benefits that unlimited

Telecommunications 12th August 2024

data, reliable and high-speed internet brings to businesses are essential for its development and growth. These restrictions impact many processes like cost efficiency, communication, and improvements in the daily workflow.

In today's society reliable and high-speed internet has become a necessity not a luxury. It can be argued that good internet has become just as important as electricity and running water.

The current license fee of £5,400 for VSAT services is an inhibition to growth and to the ability to work efficiently and effectively, and should not be applied to LEO systems which are new technology, and for which that fee was not designed or envisaged. LEO systems should be considered separately from VSAT, and should be available at a price that is affordable for all. The licence fee is unnecessary and in return contributes no value to the customer.

Yours sincerely,

Mike Summers OBE

Chair of the Chamber of Commerce

August 11th, 2024

Submissions to the Select Committee regarding the Petition concerning the Potential Abolishment of the VSAT Licence Fee and the Establishment of Starlink Domestic Tariffs

This submission consists of an overview statement and an attached 2021 Discussion Paper titled "Improving Performance & Disaster Recovery for Consumer-Level Broadband Access in the Falkland Islands," along with a "List of Questions for SURE," which the Select Committee MLAs and/or officials may find helpful when considering the broader issues of governance over the commercial and technical security and performance of the broadband network within the Falklands. While this attached discussion paper and question list is four years old, the issues remain as relevant as ever.

Regarding the points of the petition before the Select Committee, I would like to offer the following commentary on the two points raised:

1. **Abolish or Reduce the Licence Fee**: We call on the Communications Regulator and MLAs to abolish the VSAT licence fee for using Starlink entirely. If a complete abolition is not feasible, we urge you to reduce the fee to a reasonable and proportionate level, not exceeding £180 per year.

My Submission on Point 1: Any change in the ordinance regarding the licence fee should not be solely directed at or targeted toward a specific satellite internet service provider, such as SpaceX's "Starlink," and should be flexible enough to include any of the space-based broadband constellations, either existing or proposed. Furthermore, the principle of the fee level should be based on a government "cost-based" approach, not attributed to any commercial transaction for profit or revenue gathering by the FIG.

2. **Approve Starlink Domestic Tariffs**: We also call on the Communications Regulator to grant regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands. This would prevent residents from being forced to rely on the more expensive global roaming tariffs, making fast and reliable internet access more affordable for everyone.

My Submission on Point 2: Again, any change in policy regarding the introduction of additional satellite-based internet service providers licensed to operate in the Falklands should not be solely directed at or targeted toward one internet service provider, such as SpaceX's "Starlink," and should be open to all international operators willing to provide such services to the Falklands. Furthermore, my understanding of the commercial aspects of the existing local service contract with "SURE" is that it appears legally robust enough for the FIG to allow the provisioning of alternative wide-area network service providers to complement the existing SURE subscriber consumer experience during the contract run-out period through 2027 without potential litigation. I suggest that an independent legal opinion be obtained to confirm my observations.

Thank you for the opportunity to participate, and I look forward to being able to operate my overseas business interests from the Falklands in the future.

Neville Clifton

c/o 11 Davis street, Port Stanley, Falkland Islands.

Questions for **SURE** communications 2021

I have been provided various pieces of policy and regulations associated with the design of the terrestrial broadband network. For clarity can you confirm the following;

- 1. Within Stanley, is "**SURE**" installing Fibre to the Home or Business (FTTH) if so is it GPON? if not, what last mile (FTTX) are you using?
- 2. Within Stanley, please confirm if "**SURE**" is deploying UTP, Hybrid (includes Fibre/copper) or standard UTP copper only.
- 3. Within Stanley does any other entity excluding "SURE" retain any ownership over the cable infrastructure including MDFs, Poles, EPTs, Cables, Ducts, Manholes, Splitters and DSLAM cabinets. If so who?
- 4. Does "SURE" maintain field cable records including drawings of reticulation.
- 5. Does "**SURE**" operate and independent network monitoring Application to verify KPI's eg. PTRG, Solarwind etc?

Notes: Further reference documents that need to gathered.

- Latest FIG Telecommunication Ordinance/Policy
- Sure communications FIG contract including recent variations
- Sure KPI independent network Probe results (if any)

Discussion Paper

Improving Performance & Disaster Recovery for Consumer Level Broadband Access in the Falkland Islands

Technical Discussion Paper August 2021



Presented by
Neville Clifton
18 Brandon Road
Stanely
Neville@Alarmnz.com



Forward

The Author of this document is an Emergency Telecommunications Network executive with 35+ years experience in the field and is currently Director in PowerBrick International Ltd (INDIA/UAE) and Director CEO & CTO of Alarm New Zealand, a NZ Government accredited Fire & Emergency Service provider(AFASP) managing 5000 plus broadband connections nationwide. The information contained here specifically relates to the Falkland Islands cir. 2020-2027

This document is not inditement nor criticism of the existing service providers, or policy makers past or present. The purpose here is to demonstrate that fast reliable Broadband is not only possible but critical to the future economic viability and community wellbeing of the Falklands.

Disclosure

The author of this document is a Falkland Island citizen, not involved in service delivery or the trading of communication equipment or services within the Falkland's and is a ordinary consumer of broadband services in the Falklands and hereby declares no conflict of interest, legal, contractual, commercial affiliation or business proposals currently with any Falkland Island private or Legal entity or foreign communications company currently operating or wishing to operate in the Falklands. The author seeks no monetary return nor compensation for the details contained within this paper and is only providing the information for the sole purpose of obtaining affordable reliable broadband with unlimited data, fast internet access at speeds, charges similar with any city on town in the UK, US, Canada, Australia or New Zealand.

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1. Introduction

For Falkland Islanders, local residents/contractors and/or prospective new settlors or economic investors, the state of the internet connectivity within the Falklands is clearly sub standard (normally less than 5Mbps download speed/data caps) and the prospect of conducting serious international business out of the Falkland's is for most business activities users not sustainable. The social and economic impact of the current broadband situation is hard to calculate but it is widely understood that most Falkland Islanders are unhappy with the current internet service arrangements.

Apart from the obvious internet performance issues, additional DR (Disaster Recovery) methods are also discussed in order to support existing service providers & end users deploy broadband equipment used remote locations where it is impractical or not economic to provision technical staff skilled enough to quickly remedy small outages, with the objective to improve resilience and therefore retain the ability to have consistent internet connectivity until such expert assistance arrives.

1.1 About this document

This document has been assembled by the author for consumption by ordinary Falkland Island internet "end users" who want an improved internet connection with a greater level of reliability. Particular focus is placed on assisting Falkland Is business enterprises and remote camp locations that need a low cost disaster Recovery (DR) Network Access based on two independent Service providers in order to achieve better speeds and the highest possible level of reliable internet connectivity. The information here is intended not to undermine previous policy or technical decisions, rather instead enhance the current framework and provide a sensible discussion about the future of internet access in the Falklands together with some possible remedies and existing proven strategies.

The existing Falkland Island Communications contractor "SURE" were approached and requested to contribute information about the existing Falkland Islands communications network with the view to obtain a more accurate picture about the current situation, however there is a level of non-cooperation most likely due to a fear from the contractor that the premise of this document was designed to undermine their exclusive business model. This lack of cooperation while unhelpful does not interfere with the basic delivery of the information required to establish improvements to the overall Network design. SURE Communications has nothing to be concerned about as the author of this paper is supportive of a single terrestrial service provider, however that must not be at the expense of Falkland Islanders accessing other available Satellite networks.

1.2 Purpose & Objectives

The primary purpose of this document is to support commercial Falkland Is Business owners and residential/SME end users in their efforts to lobby FIG members to review the SURE communications monopoly policy in order provision faster internet access and create/maintain a more reliable network connection without damaging the viability of a terrestrial communications network.

This document has been developed to meet the following objectives:

- Provide overview of the existing Falkland Is Broadband network and its Key components
- Provide suggestions to improve end user internet reliability and performance
- Provide Contractual compliance and Policy framework to allow such improvements.



1.3 Strategic & Defence Implications

This document does consider the full strategic military consequences of a multipath communications and independent communications for Falkland islanders however there is no doubt surveillance of internet activity of locals by various security agencies will be diminished in some respects however strengthened in others. The ability of the population to communicate directly with the MOD via satellite in the event of a military incursion where the Island internal communication infrastructure is damaged has obvious advantages for coordinating a response.

1.4 Relationship with other documents

This document should be read in conjunction with the following documents:

1	Falkland Regulations & Policy
	 FIG Communications Policy FIG Communications Ordinance FIG/SURE Contract * FIG VAT Sat Guidance
2	Product Profiles
	Power Server XGateway-(Multi Network Interface Router Appliances) Media Convertors
3	Endpoint Service Descriptions
	 Broadband ATA Modem ATA Voice DMC RS485/232 Digital I/O
4	Powerbrick Documents
	Powerserver SpecificationsNAD Overview
5	Drawings
	Disaster Recovery Network Overview Disaster Recovery CPE Network Access Standard Install

^{*}Not Provided by SURE under request



2. The FALKLAND Islands Broadband Network

The Falkland Island consumer level Broadband network in Stanley for end users is mainly delivered by ADSL (Asymmetric Digital Subscriber Line) via the copper Cable originally installed in homes and businesses for delivery of the Plain Old Telephone Service (POTS). At end users premises the Network Access device used to deliver WiFi and/or cable connectivity is referred as the "Gateway". The Gateway plugs into the premises telephone wiring in a similar way to an ordinary telephone does and the access device is powered from an AC plug pack wall socket so there no battery Backup meaning the internet fails during power outage. The existing POTS phone plugs into the same wall socket using a "splitter" device and when the Phone is not "Hands Free" (powered from AC Plug pack) the should remain operational during a power cut.

The Broadband performance for cable (ADSL) is theoretically 20 Mbps, however due to losses/latency in the telco infrastructure ADSL rarely delivers more than 6-10 Mbps locally and when using the current international data transfer speeds are 0.5-3.5 Mbps. End users are able to access various monthly data plans ranging between 5GB-100GB.

The incumbent ISP (SURE communications) has also set up some Broadband WiFi Hotspots at tourist locations where local end users can also access their Home/business Data plan using their Device without using the separate mobile data Plan. The Mobile Network data plans are typically more expensive than cable, so most end users prefer to limit the mobile data usage preferring the cable WiFi the majority of the time.

Broadband access outside of Stanley at camp is via similar type Gateway but instead of a copper DSL technology it's linked back to the ISP main Data Switch via a terrestrial Broadband microwave network installed on mobile towers needed to support Mobile Telephone services

From the Falklands all consumers are then connected to the internet via Satellite Access operated by SURE communications Ltd located behind their offices in Stanley where a single broadband bandwidth bundle carries every internet connection on the Island. A backup Dish is available however it does not carry the bulk Internet traffic.

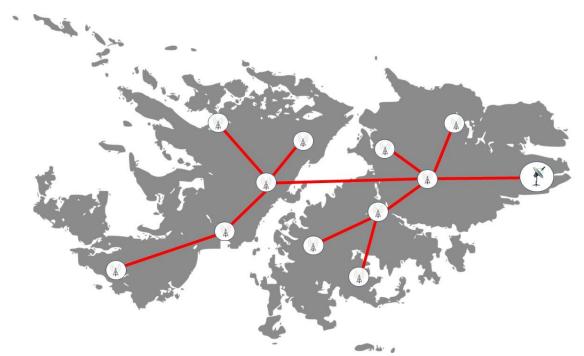


Figure 1: Current Falkland Islands Broadband Network High level Pictorial Schematic



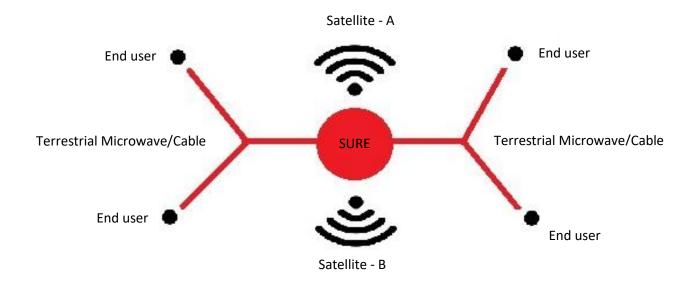


Figure 2: Current Falkland Islands Broadband Network Design High level Pictorial Schematic

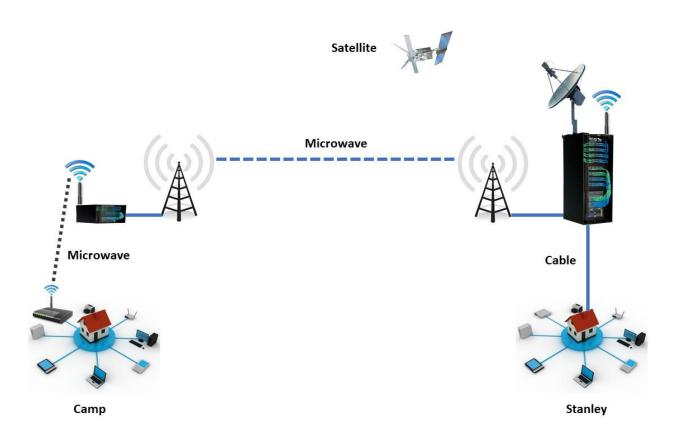


Figure 3: Current Falkland Islands Broadband Network Consumer Overview Schematic



2.1. FALKLAND IS GOVERNMENT COMMUNICATIONS POLICY

The Falkland Is Government in 2008 Created a policy to provide Broadband communications in the Falklands. The objective was to deliver a modern level of communications as the existing analogue infrastructure was obsolete.

2.2 CONTRACT OBLIGATIONS & REGULATIONS

The Falkland Is Government in 2008 entered into an exclusive contract with a foreign owned communications internet service provider (ISP) "SURE" in order to sustain a viable broadband & telephone service for the population. The FI government created an ordinance to prevent/limit Falkland Is end users to independently connect to the Internet via private Satellite.

In 2017 after Complaints from the Falkland Islanders the Falkland Is Government amended the SURE Contract in order to provide additional internet performance and capacity. Despite this effort the existing network is wholly deficient and seriously undermines the fragile Falkland Islands economy and population retention.

2.3 CONTRACT OBJECTIVES

The Falkland Is Government wanted a modern broadband communications network and realised that because the Falkland Islands has a small digital footprint, would mean a protectionist contract model would be needed to encourage competent viable internet service provider to engage and provide services. This perspective was certainly understandable however the control and limitation of satellite based access by ordinary citizens was an over reaction and not necessary to existing SURE subscribers who are already paying fees.

2.4 CONTRACT ISSUES

The Falkland Is Government SURE Communications exclusive service contract has clear deficiencies and some benefits. The perceived benefits of the current contract arrangement are seriously outweighed by the actual outcome;

- a) Slow Internet Speeds
- b) Unreliable Connectivity
- c) Slow Outage Response Times
- d) High Access Cost
- e) High Data Tarif Charges
- f) Local Data Traffic Charges based on International Rates
- g) Ownership of Cable Network infrastructure in Private Hands
- h) Copper Cable being deployed in New residential Areas
- i) No real-time Cyber Security services
- j) No FTA (Free to Air) Local Streaming Media Services
- k) No Cost effective International Streaming Media Services
- 1) Lack of Community based IT Personal Development
- m) Unmonitored energy management systems.
- n) No End User Disaster Recovery Plan or infrastructure

2.5 CONTRACT REMEDIES & DESIGN

Each of the issues identified in section 2.4 has a different and varying set of solutions, so in the context of this document the main issues being addressed here are primarily the end user Network Speed (item 1) and network Disaster Recovery(item 2) points. Other Issues will largely remedy themselves once the Speed issue is resolved.



3. FUTURE FALKLAND IS BROADBAND NETWORK

The Future Falkland Is broadband network will consist of four (4) primary features'

- Meshed Wide Area Network Topology
- High Speed Bandwidth (greater than 10Mbps)
- Nil or very Large Data Caps (100GB-10TB per month)
- High Availability (Disaster Recovery Network)

Global internet access from the Falkland Islands is currently very fragile and consists of a single point of failure, however in the future the Wide Area Network (WAN) will be meshed and there will be multiple global gateways spread throughout the Network.

Most users are familiar with the advantages of higher access speeds and no or Large data Caps, however the benefits of a High availability is are not commonly discussed as the aspect of maintaining a reliable Network connection for domestic/SME connections is normally handled by the individual ISP (internet Service Provider) whereas businesses users tend to utilise multiple ISP's as an extra precaution. The Falkland Is has a single ISP therefore the opportunity to have an independent Disaster Recovery Network is very Limited such that no large commercial business operation using continuous cloud services can reliably safely locate itself in the Falklands.

It is therefore essential and fundamental above all else that internet communications is funnelled via multiple ground stations connected to a "minimum of two" totally independent internet service provider network domains each of which do not rely on each other operationally. Please note that more than two ISP's is recommended.

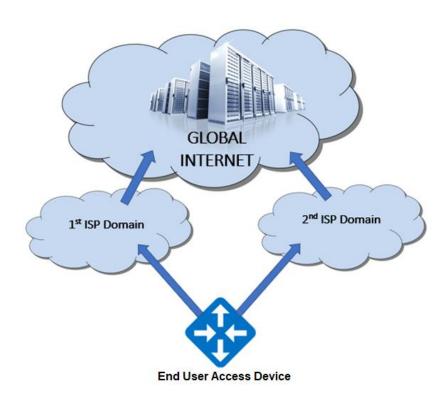


Figure 4: Dual ISP Access Gateway (Disaster Recovery Network)



3.1. Network Design Types

To easily identify the Network Design Improvements its helpful to be familiar with the Falkland Is Internet access infrastructure currently in place. The current Falkland Is end user Global Internet Access is all channelled thru Stanley where camp users connect via the terrestrial broadband microwave network to this central point. This existing type of Broadband network topology currently in place is defined as a "Star Network", while in the future the Falkland Is communications network will eventually move towards a "Mesh Network". A Mesh Network is far more robust as there is no Single point of failure and complies with the core Disaster Recovery principle of diverse access.

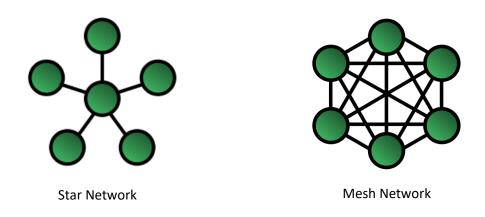


Figure 2: Types of Network Topologies discussed.

Current Falklands "Star Network"

In regards to the Falkland Is Network broadband Infrastructure design classified previously it is currently a Star Network. (Figure 1)

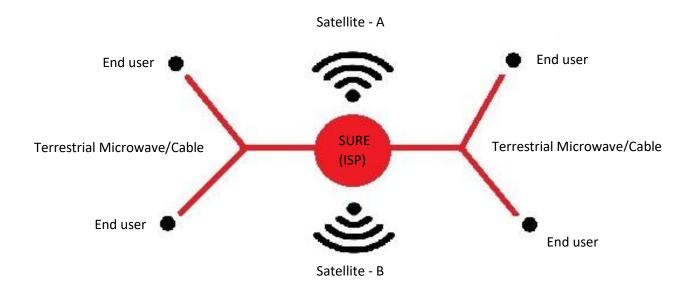


Figure 3: Falkland Is Current Star Network



Future Falklands "Mesh" Network

The Future Falkland Is Network broadband Infrastructure design will migrate from the previous Star Network to a Mesh Network using Multiple Satellite Access points (Mesh) distributed throughout the Islands and may include separate Satellite network access at each subscriber location.

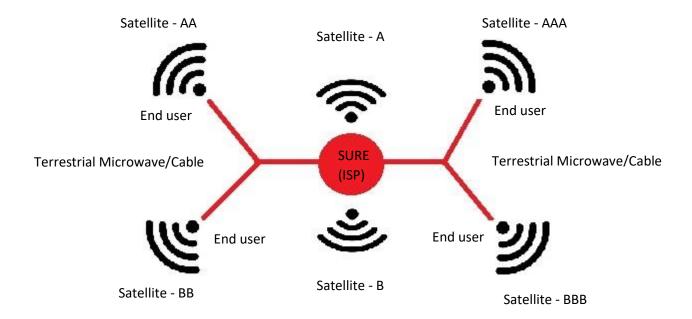


Figure 3: Falkland Is Future Mesh Network

3.2. Alternative Wide Area Network Service Providers

The are a number of global retail satellite based internet service providers either currently operating or intending to deploy LEO (Low earth orbit) or MEO (medium earth orbit) constellations that will be affordable to the Falkland Islander community.

Current Constellations

- **Starlink** operated by SpaceX deployed in several orbital shells 1000+ satellites (as of July 2020)at 550 km & 12000+ satellites at ~350-550 km (planned)
- IridiumNext operated by Iridium has 66 satellites at 780 km

Planned Constellations

- Project Kuiper to be operated by Amazon and involve 3200+ satellites are projected to use an orbit with a height between 590 and 630 km
- OneWeb to be operated by Oneweb deploying 648 satellites in 12 near polar orbit planes at 1,200 km



3.3 Terrestrial Network Service Provider Considerations

Reliable efficient communications and local and international network access is the main objective here and multiple ground-based satellite links in turn connected to multiple international gateways is clearly an advantageous position. That said its important to recognise the value and place of a terrestrial network. Pocket Mobile Smartphones do not yet communicate directly with Satellites (this ability is expected 2025-2027), rather are normally are currently connected via a WiFi or via 4G (XGSM Mobile). Maintaining a 4G terrestrial network in the Falklands is relatively simple due to the Topology and low number of users. Using a Mesh Network configuration will greatly improve terrestrial 4G reliability as each Mobile Cell tower can have backup "Satellite Bridges" meaning additional remote service access and Backup network connectivity.

In the following section 4 subscriber Network Access options are predominantly discussed as that is relevant to ordinary users. Details regarding network access or interconnectivity within Mobile or Cable based equipment used by SURE while briefly alluded to but can be simply characterised as broad Microwave links between Cell towers and to satellites. Commentary on the Sure Network access requires the existing service provider to fully cooperate with an Audit of these sites and infrastructure in order to assemble hardware configurations, power provisioning, schematics and general advice for improvements.

4 Network Access Devices

The Disaster Recovery (DR) and standard enhanced Network Access Devices (NAD) described in this document are deployed to support any normal non-critical or vital broadband connections. Correctly designed Network Access Devices can be used consciously or unconsciously for Disaster Recovery and either deployed as a multiple Wide Area Network equipment envelope (Dual Gateway) or as a standard robust/resilient Wide area network access method (Enhanced Single Gateway) where each method gives both the end user and the service provider assurance of a robust network broadband connection during any unforeseen or planned event.

4. 1 Network Components

The various Network Access components used to connect to the internet are a communications Modem, the Firewall/Router and a Network Switch. During the last decade these items have been largely combined and manufactured into a single device often referred as the "Gateway". When Combined with a battery backed up PowerServer (i-Class) then both items are referred to as a NAD. If the Gateway is not powered from a i-Class power server then its merely a UPS supported Gateway and does not have the proper DR attributes and is not denoted as a "NAD"



Network Access Device (NAD) is the end user and/or service provider premises demarcation point and always includes at least two base components, a network access gateway and Power server. End user Premises Network Access Device (NAD) hardware solution is made up of the key components shown below:

- Gateway (Dual for DR)
- Power Server & Battery
- Enclosure

4.2 Gateway Appliances

The network access Gateway (Edge Router/Modem) terminates the FTTx/xDSL/xG/xSAT WAN services in the end user premises and provides the end User legacy Voice and Broadband interfaces.

The standard Gateway typically includes four Ethernet ports, WiFi and two ATA legacy voice ports.

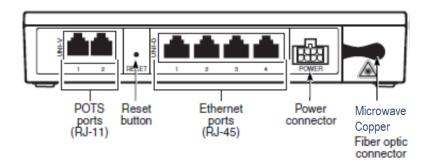


Figure 4 Typical Gateway back Panel and Typical Available interfaces

Terminology used to describe the Gateway hardware features includes;

Analogue Telephone Adaptor (ATA)

- The ATA is an RJ11 port on the Gateway that provides an analogue interface for voice.
- The ATA supports one Voice Channel (RXO) for compliant Legacy PSTN devices per Port.
- Voice is normally encoded/decoded at the User Agent using a G.711a/µ codec at 10ms sampling rate; One User Agent per ATA; and Traffic is delivered using High Priority Class of Service.



Ethernet -Local Area Network (LAN)

• LAN is an Layer 3 Connection, with the following characteristics:

Single VLAN per port High Priority bandwidth; and (optionally) Low Priority bandwidth.

WiFi -Local Area Network (LAN)

WiFi-LAN is an Layer 3 Connection, with the following characteristics:
 Access Point & Bridge mode (option)
 2.4 or 5Ghz Multi Channel

Ethernet -Wide Area Network (WAN)

WAN is a Layer 2 or 3 configurable Connection, with the following characteristics:
 Typically Up to 4093 VLANs to be passed transparently;
 High Priority bandwidth; and (optionally)
 Low Priority bandwidth

Gateway Network Termination Point (WAN)

The Gateway internal termination point for telecommunications services at an end User's premises can be either Wireless/cable based.

Radio Modem - Wide Area Network (WAN)

Wireless connection will consist of a coax antenna termination to match antenna needed for the selected Radio set

 Radio WAN is a Layer 2 configurable Connection, with the following characteristics:

Satellite/Microwave Transceiver; 2/3/4/5G Mobile Data

Legacy Wired Modem -Wide Area Network (WAN)

Copper based cable XDSL networks are single pair connected to an exchange or cabinet DSLAM terminated on the Gateway via an RJ11 $\,$

Optical Network Terminal -Wide Area Network (WAN)

Where Fibre is used it is normally shared (GPON) providing a fibre path from the gateway to the exchange OLT via a Passive Optical Splitter. A Passive Optical splitter is where multiple distribution fibres from 32 nodes attach to one feeder fibre to the exchange. Other forms of Fibre connectivity include Direct single Mode (long distance) or Multi Mode historically used for shorter distances.

Power Adapter

The Power input terminates on the Gateway either as 5 or 12volts DC.



4.3 Power Server

Standard Internet Gateways are normally powered by a low cost switch mode plug pack either directly connected via an AC wall socket or via a UPS (uninterruptable power supply). Important Gateway deployments as used in a NAD include a "Power server" which like a UPS has an internal battery, however to meet DR standards it also includes an IP Stack (I -Class) and built-in network probe which it uses to verify connectivity and should that ever be interrupted, the power server cycles power to the Gateway DC supply resolving 99% of general outages. Power server batteries are designed to keep the gateway equipment supplied with power for between 8-24 hours during an AC mains power outage.

Power servers are similar to Battery Banks, however power Home/SME networking equipment.

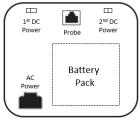






Figure 5: Typical Power Server

4.4 NAD Enclosure

It is important to secure Gateway equipment from accidental disconnection or tampering by unauthorised personnel. Commercial/Business NADs are normally locked and include a 24/7 alarm monitored door and wall mount tamper switch. A typical NAD enclosure includes extra venting and gear plate expansion plate and secure the Backup Battery mount.



Figure 6: NAD Enclosure Example includes 4GSM Gateway and Power Server



4.5 Dual Access & Fail Over Options

Fail over is normally a main feature of the Disaster Recovery NADs which by design must always include Dual Gateways able to provide uninterrupted internet access. In order to comply to DR standards the end user must have the capability to access and connect with the internet via two separately contracted service provider networks using at least two of the following access technologies:

Direct Fibre Access (EPON/GPON)

Direct Copper Access (ADSL/VDSL)

Direct Radio Access (WiFi/WiMax)

Direct Terrestrial BroadBand Access (MicroWave)

Direct Mobile Data Access (2/3/4/5G)

Satellite Access (LEO/MIO/GEO)

DR NADs can be set up as Automatic Fail over where to user network runs via Dual WAN port Router Fail over Switch halting traffic to the primary gateway and failing over to the Secondary Network. A Selectable Fail over set up is used where both Gateways are used to carry traffic constantly and the user application or appliance OS has to have selectable Fail over capabilities and support multiple Gateways within a single Network

Types of Dual Access Fail over NADs

- Single Appliance Dual Gateway Fail over
- Dual Appliance Dual Gateway Fail over

4.5 Gateway Solution (NAD) Wiring Examples

There are three main variations of the NAD using either Single Gateway Appliance, Dual Gateway Appliances and Dual Single Gateway Appliances. The selection of the appropriate solution is determined by the level robustness including number of service configurations the users requires;

- Single Gateway/Access NAD (Security, Fire, CCTV, Automation, Telephony, Safety)
- Single Dual Gateway Single Access NAD (Security, Fire, CCTV, Automation, Telephony, Life Safety, Domestic Grade DR Failover)
- **Dual Single Gateway Single Access NAD** (Security, Fire, CCTV, Automation, Telephony, Life Safety, Commercial Grade DR Failover)
- Dual Single Gateway Dual Access NAD (Security, Fire, CCTV, Automation, Telephony, Life Safety, Commercial Grade DR Online)



4.5.1 Single Gateway Access NADS normally have a single Power server and Batteries for backup. Below are examples of Standard cable and Wireless NADS less the enclosure.

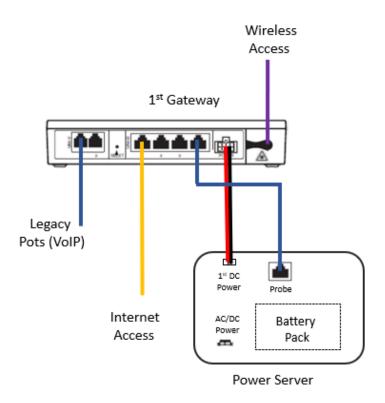


Figure 7: Single Appliance Wireless Gateway NAD

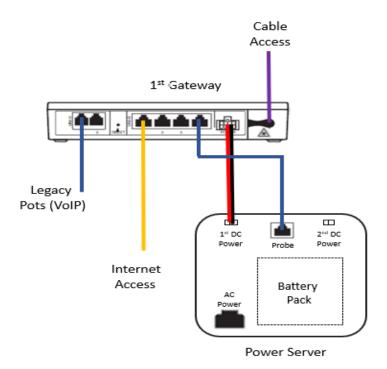


Figure 8: Single Appliance Cable Gateway NAD



4.5.2 Single Dual Gateway Single Access NADS involve two network connections and normally have a single Power server and Batteries for backup. Below is an examples of Standard cable and Wireless NAD less the enclosure both within a single appliance and dual gateway solution that includes Failover. Domestic Grade Disaster Recovery can be applied where the different service providers are used on the separate links.

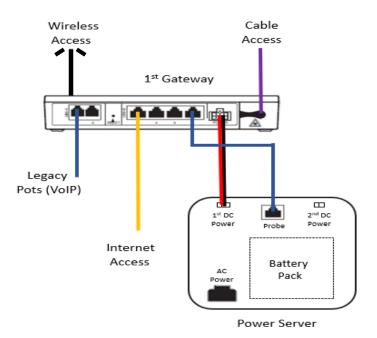


Figure 9: Single Appliance Dual Gateway Single Access NAD

4.5.3 Dual Single Gateway Single Access NADS involve two network connections and normally have a single Power server and Batteries for backup. Below is an example of Standard cable and Wireless NAD less the enclosure with two appliances and a dual gateway solution. Domestic grade Disaster recovery can be achieved with use of two separate appliances.

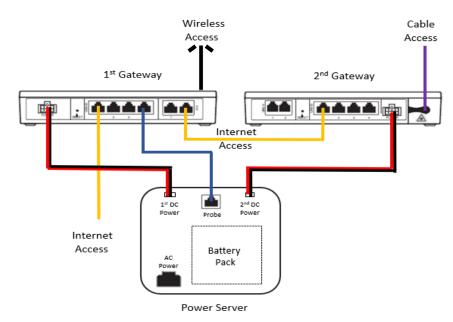


Figure 10: Dual Appliance Dual Gateway Single Access NAD



4.5.4 Dual Single Gateway Dual Access NADS involve two network connections and normally have a single/dual Power server and Batteries for backup. Below is an example of Standard cable and Wireless NAD less the enclosure with two appliances and a dual gateway solution. Commercial grade Disaster recovery can be achieved with use of two separate appliances where the Local network can access Both Gateways with or without fail over.

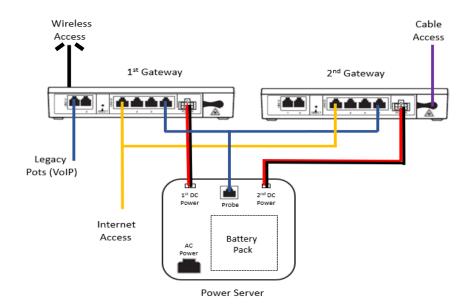


Figure 11: Dual Appliance Dual Access Gateway NAD (without Failover)

Fail over can be Logical within a single gateway appliance or Physical with multiple gateway appliances. Previously there was an example wiring schematic depicting a power server with a built-in network connectivity probe monitoring both links however the Local Network Failover function was not part of the NAD rather Routing was handed elsewhere. In the following example the DR routing is being handled by a third appliance that can Network access via both Gateways simultaneously and also fail over Traffic onto a single Link if required. This configuration allows Gateway servicing of a dual Access NAD appliances without any disruption to any services.

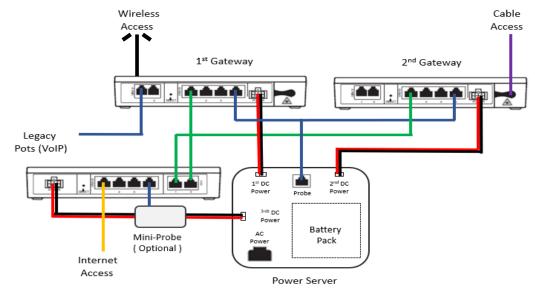




Figure 12: Dual Appliance Dual Access Gateway with Fail over (Full DR)

4.6. NAD Features And Profile

Common Features Contained in each NAD are

- Gateway Failover
- Gateway VPN
- Gateway V-LAN
- Gateway FTP proxy
- Gateway Ethernet Port Monitoring
- Gateway WAN Probe
- Gateway Remote Management
- Gateway WiFi Access Point and Bridge Mode
- PowerServer DC 5A charger
- PowerServer WAN Probe
- 7-22AH 12 volt Battery
- Dynamic Battery Test
- AC Failure Reporting
- Lockable Tampered cabinet

5.0 HOW THE NAD WORKS

What makes the NAD a unique network appliance is the Power server that acts both as a Battery charger/manager but also includes a Gateway network Probe. Using the probe the power server is able to determine network connectivity and if lost it attempts to reestablish the link by cycling power to the Gateway. When using a Dual Gateway NAD and a single Gateway fails, the Internet Service is still maintained via the Secondary Path and at the same time the Power Server just resets the Gateway in failure. While such outages it may not be always caused by a local Gateway OS/Hardware failure, the resetting the Gateway does often resolve many other connection issues caused by the network equipment operator or the cable network workforce.

Network Access Device (NAD) as used for standard (Single Gateway) reliable broadband connectivity and in a Disaster Recovery configuration (Dual Gateway) where both options provide a simple yet flexible Wide Area Network battery backed layer 3 broadband equipment package that provides a user with a range of service options from basic voice capability through to highly tailored, innovative broadband solutions for home and business.



5.1. Connectivity And Probe Operation

The network probe is configured to prove Network connectivity with Global network servers either via a single or multi gateway network access device. Probes are configurable both in sensitivity and timing as well as protocol selection.

Below is a Logic Flow diagram if the NAD probe operation based on a single Gateway.

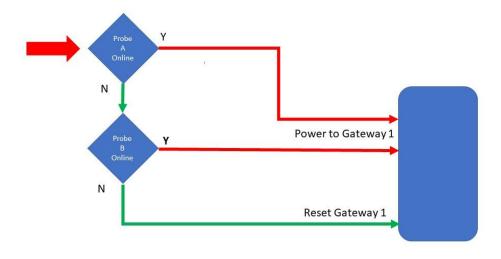


Figure 13: Basic Network probe function.



5.2. Power Server Overview

The Power server is best described as an AC/DC 12-48volt Battery Charger with a built-in IP stack. Normally Power servers have at least a single I/O able to switch or detect tampering or trigger auxiliary indicators. Power servers can be manufactured in various Voltage and Ampere ratings.

The Power Server is a precision hardware device and includes tight software code, ruggedly tested: to operate continuously beyond 5 yearly service inspection period of the battery.

Typical Specifications are;

- Switch Mode PSU/Battery Charger
- Input voltage: 110-240Vac 50-60Hz
- Output voltages:12 vdc & 5v USB
- Output current: 2 x 1.5 A 12vdc or 1A 5vdc
- Battery Protection Voltage 10.5 Vdc +/- 0.5v
- Output power: 30 W
- Dynamic battery test
- Power conversation mode (up to 24 hours)
- Built-in Alarm Server
- TCP/IP Ethernet Port
- Transmission Protocol CSV IPALARM
- DHCP, Static IP, ARP, BOOTP
- HTML, XML
- Modem Reboot Output
- Web Browser Support



Figure 14: Domestic Desktop Power Server (i Class).



5.3. NAD Power Server Applications

Service Providers & End users often deploy broadband equipment into remote locations where it is impractical or not economic to provision technical staff to quickly remedy outages and maintain constant connections.

Typical Service Provider, end user or 3rd party applications for this technology are;

- End User Broadband Internet Access (Domestic/Commercial)
- Fire & Sprinkler Systems
- Nurse Call & Medical Alarms
- Security and Access Control Systems
- Refrigeration and HVAC Systems
- Audio & Visual Displays
- Emergency Telephones
- Elevator Alarms
- ATMs & Banking Terminals
- General Vending Machines
- UPS & Power Generator Sets
- CCTV
- Lighting & Energy Monitoring
- Water Pumping & Metering
- Plant and Machinery
- Wireless links
- Manufacturing Process Alarms
- Public Hotspots

The NAD normally includes dedicated xDSL, FTTx, xG or xSat wireless network gateway devices and backup power equipment and operates independently from other networks. The NAD is either managed and supported by the building services infrastructure contactor or either one of the two Internet Service Providers, and is able to provide local network LAN isolation from each 3rd party contractors equipment working on the end users LAN.



24 Shackleton Drive,
Stanley,
Falkland Islands
FIQQ 1ZZ

To whom it may concern,

I was not going to write in but have reluctantly done so after been persuaded by a friend that I must, I was pretty much shut down in the public meeting and therefore felt my views were to be kept to myself. (I still have the message apologising to me for what happened).

My reason for requiring better internet is mainly to allow us to be in contact with family overseas and I'm sure that we are not the only family requiring this. This first came to light when my mother died during the 2020 pandemic, the hospital we're kind enough to put my mother on camera so I could say my goodbye's, the internet was good enough for verbal conversation but I remember the picture being very grainy. Then again in 2023 my father-in-law passed away on Tristan da Cunha, on that day the internet was particularly bad, we struggled to be in contact with family and ended up pretty much giving up. We are unable to receive telephone calls from Tristan da Cunha due to the telephone service in place, we believe they are using the UK Governments ECHO system and therefore all received calls go through Government house here in the Falkland Islands. Each time we receive a phone call we have to pay for receiving the call, strangely enough we know of other people here in the Islands who receive calls from Tristan but pay nothing to government house. Although the internet isn't great on Tristan da Cunha it seemed to work perfectly fine when we have visited UK and Chile.

I have contacted SURE on numerous occasions and have had little luck getting to the bottom of the problems. One engineer even came to our house, took some readings and was told yes, it is slow but you should only use one device at a time!

On the 15th May 2024 I wrote to the Communications regulator about the problems we are having and requested to be allowed to self-supply, to be really honest was not surprised by the response. (I will also attach his letter). It was very clear in the letter that contact with family is not a Human Right, personally I believe it is a very basic human right that even prisoners have.

Therefore, I request a change in the license as I would like to not replace my service with SURE completely, but want to self-supply a better, faster service to my home for my family to use.

Yours sincerely

Philip Mansell

Stanley

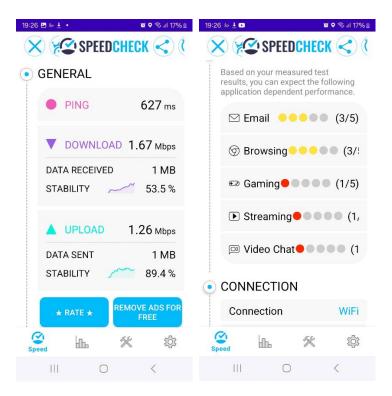
FIQQ 1ZZ

To whom it may concern,

I am writing this email after speaking to a member of your staff about the problems we have with our communications provider, SURE.

My wife is from the Island of Tristan da Cunha and all of her family live there, it is classed as the 'World's most remote inhabited island' and takes several weeks to travel there from here. Therefore, communication with family is very important to us, my mother-in-law, stepson, grandchildren are always trying to keep in contact with us but due to the telephone system available we are unable to call Tristan da Cunha, quite simply all calls just ring dead. The phone system on Tristan is via the governments ECHO system as is their internet, their telephone numbers are London based, we can phone London numbers but not ones linked to Tristan. We can receive calls from Tristan but they are directed via Government house here in Stanley, therefore, if we 'receive' calls from Tristan we are charged by government house for the privilege. I have numerous bills over the years to show this, quite simply I cannot in this day and age believe I am charged to answer my home phone as well as our family being charged to call us. I have brought this to SURE's attention many times over the last 7½ years but nothing has been done, nothing has changed and I very much doubt anything will be done. My last conversation asking for help was in the SURE shop whereby one of their staff simply said "It's easy isn't it, tell your family not to contact you", this is their customer service. It is to the point where we have told our family and friends not to phone us, if we see government house ringing our phone, we simply hit the red button and cancel the call. This however was especially hard last year when my wife lost her father, not being able to receive calls, internet not allowing us to keep in contact with family it was simply a situation you would have expected in the 1800's.

Our internet sometimes works enough to make calls on messenger but often fails and we give up, Christmas is especially bad where we have simply realised, we won't be able to speak to our grandchildren, Son or Mother-in-law. I recently reduced our SURE package as we simply cannot use the data allowance being supplied.



These two pictures were taken of the speed check test.

I have thought about getting Starlink as having seen the potential it has, I'm sure we would have better communication with our family overseas, however the £5,400 yearly to give us a license to use the system quite simply is out of our range. I don't want to bleat on about human rights or anything else but surely just being able to contact family is a simple request of anyone is such a position.

I have no hidden agenda, I have no personal problem with SURE, I would still keep a package with SURE as I would want to keep my phone line. I am simply asking you to look into this situation and consider a fairer deal whereby a system that would work for us as a family could become a reality allowing us this year to at least be able to say "Happy Christmas" to our loved ones.

Yours hopefully

Philip Mansell



C/O Attorney General's Chambers, Stanley Falkland Islands FIQQ 1ZZ

Telephone: (500) 28460

E-mail: regulator. telecoms@sec.gov.fk

Philip Mansell 24 Shackleton Drive STANLEY

By email only to energisephil@gmail.com

16 May 2024

Dear Mr Mansell

Re: Issue with Communications provider

- 1. Thank you for your letter received under cover of your email of 15 May 2024.
- 2. Your letter raises a number of issues, some of which I would like to discuss with Sure. I should be grateful if you would confirm you are content for me to speak to them directly about your circumstances?
- 3. You raise an issue about a comment allegedly made by a member of Sure's staff. If you are unhappy with the way you were treated, then you should in the first instance lodge a complaint directly with Sure. It would assist them to know when this occurred.
- 4. A speed test screenshot is of very limited use without knowing other relevant information, including the date this test was performed, please confirm. It appears from the screenshots that other apps may have been in use at the time the test was performed, which could have affected the results. If there might be a fault on your line, Sure should be given an opportunity to address that. You mention in your letter that you have reduced your Sure package. I should be grateful if you could let me know when this change took place, what package you previously subscribed to and what is your current package. The speeds shown in the test results seem to indicate that at least internet voicecalls (using Facebook Messenger or other apps) should work fine. Given your description of internet services in Tristan da Cunha, I imagine it might be difficult at that end also?
- 5. The arrangements in place for telephone calls to/from Tristan da Cunha appear to be issues with the communications set-up and arrangements in that place, rather than an issue which could be addressed in the Falkland Islands and by Sure. However, I am not familiar with the arrangements and will make enquiries about that.

- 6. The fee for a VSAT licence, which is required lawfully to use a Starlink terminal in the Falkland Islands, is set by regulations at £5,400. I do not have any discretion to waive or reduce that fee.
- 7. The fee was set at this level in order to act as a disincentive to "self-provision" of internet services, outside the exclusivity granted to Sure. The exclusivity given to Sure of course has benefits for the company, in restricting competition in the areas where they have exclusivity, but there are also obligations and benefits to the wider community – including the universal service obligations, the price cap regime, and the broadband obligations. Government policy recognised the broader interests of the community. Analysis concluded that many of those obligations and services would simply not be provided if left to open market forces. That could mean, for example, that there would be very limited mobile phone coverage outside Stanley, and that telephone and broadband services would cease to be available in most parts of Camp. Undermining any key part of the current regime creates risks to the whole. Taking all the circumstances into account, the decisions made by elected members were to grant the exclusive licence, and put in place the current legislative framework. The provisions of the licence, together with Government subsidies have led to huge increases in internet services – by my calculation, someone on what is now the XSML package (the smallest package offered by Sure) is paying less now than in 2015 (£15 in place of £17 then), and has 1200% of the former monthly data allowance.
- 8. It is not clear to me which human right you believe is engaged in the circumstances you describe, but even if a right or rights are engaged, it seems to me the current policy and legislative framework could be considered necessary and proportionate in all the circumstances, balancing the rights of individuals and the community as a whole.
- 9. I am sorry, but unless and until the legislative and policy framework is changed, I am unable to consider granting a licence to use a VSAT without payment of the full statutory fee. I will forward a copy of this letter to the same Members of the Legislative Assembly, who were copied in to your letter.

Yours Sincerely

Simon Young

Attorney General

Acting Communications Regulator

Cc MLA Spink, MLA Roberts, MLA Ford, MLA Biggs (by email)

Select committee.

Petition for all Falkland Islands residents to access Starlink and abolish or reduce the VSAT license fee and approve Starlink domestic tariffs. We are in desperate need to change a clearly broken system that has plagued us for some time. The current internet provided by Sure Telecoms is both expensive and slow. While the staff at Sure are commendable, even they acknowledge the limitations imposed by their parent company's inadequate support. I urge the elected councillors to act swiftly and decisively to rectify this longstanding issue.

I have to voice my concerns, as it is rare for such issues to reach this level. The current annual license fee of £5,400 for using alternative internet providers like Starlink is exorbitantly high and effectively prohibits most residents from availing of these alternatives. This, coupled with the threat of fines, is not just. It essentially aids in maintaining a monopoly for a company that provides subpar service, which is an apparent injustice. We can not continue to be a cash cow for Sure, it is time to stop continually topping up their profits for very little rewards in terms of telecoms and internet.

It is only logical to approve Starlink domestic tariffs until we can access fiber optic from the coast. I also implore the Communications Regulator to grant regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands. These actions will ensure that residents are not forced to rely on excessively costly global roaming tariffs and will make fast and reliable internet accessible and affordable for everyone.

By addressing these concerns, the Government would not only uphold our constitutional rights but also ensure that the residents of the Falkland Islands have access to the internet services they need and deserve.

Access to fast and affordable internet is essential for the island's economic and social development, and it is high time that we ensure that everyone, including our visitors, tourists etc has access to such services.

Let's make it affordable, easy and enjoyable for everyone and celebrate that we can offer this throughout the islands. Let everyone talk about the positives of our internet and remove the negative discussion of how slow and expensive it currently is.

Thank you for taking the time to listen to my concerns.

Best regards

Ruth Stewart

11 Biggs Road Stanley Select committee,

Petition for all Falkland Islands residents to access Starlink and abolish or reduce the VSAT license fee and approve Starlink domestic tariffs. We are in desperate need to change a clearly broken system that has plagued us for some time. The current internet provided by Sure Telecoms is both expensive and slow. While the staff at Sure are commendable, even they acknowledge the limitations imposed by their parent company's inadequate support. I urge the elected councillors to act swiftly and decisively to rectify this longstanding issue.

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Thank you for taking the time to listen to my concerns.

Best regards

Duane Stewart

11 Biggs Road Stanley

WE14

Written Submission to the Select Committee on the Petition

I, Alex Olmedo submit my views on the Petition and fully support the asks of the said Petition.

I have been a member of the community for the past 34 years and I have personally experienced the provision of SURE formerly Cable&Wireless telecom services since my arrival to the Islands.

Sure has provided good telephone services in Stanley and camp over the years, efficient enough to make local and international calls at a premium price, however the internet service has always been very poor in connectivity, speed and value.

The main reason why I support the petition is because I just can't see SURE being able to provide a 21st Century internet service that is fast, unlimited and economical for the community. SURE has not been able to provide a service that is so essential now for economic and social development of the Falkland Islands.

I also feel that the constraints of a telecoms legislation which limits our freedoms and rights for better internet access is just wrong and outdated in modern times.

Technology is moving so fast and our needs as individuals and businesses have changed dramatically in the last few years and it has a detrimental effect on visitor satisfaction. Visitors need to be connected and are so used to fast, reliable, cheap and unlimited internet access. The Falklands is a remote location and people find it very difficult not to be connected.

Nowadays all digital platform's are cloud based or online, the speed with which we have to work is just unacceptable and limiting for educational or work purposes.

SURE had enough time to find solutions for the demands and needs of individuals and businesses but this was not done. We now have a solution which is readily available at an affordable price which delivers fast and unlimited internet access. It is only right to change the legislation and allow us to freely use Starlink if we wish to do so.

Alex Olmedo Stanley

Written Submission to the Select Committee on the Petition: Improving Internet Access in the Falkland Islands

From: Andy Trish Date: 29/07/2014

Email: andy@hmshermes.co.uk

Capacity: Personal capacity as a concerned and invested visitor

Introduction

As a veteran of the 1982 Falklands War and a frequent visitor to the islands, I have witnessed the pressing need for improved internet access, particularly in the educational sector. My commitment to the islands includes donating IT equipment to schools in Camp, reflecting my dedication to advancing education. This submission supports the petition calling for the abolition or reduction of the VSAT licence fee and the approval of Starlink domestic tariffs. These steps are essential for providing fast and reliable internet access across the Falkland Islands. With over 20 years of experience running a global award-winning IT company, including support to FIG and FIG education plus many Falkland Island businesses, my insights are well-founded regarding the benefits of Starlink for the islands.

Personal Experience and Observations

My views are informed by daily interactions with Falkland Islands residents, assisting Liberty Lodge with charitable efforts, advising on IT issues, and maintaining regular communication with friends living on the islands.

Key Issues and Recommendations

The current VSAT licence fee imposes a significant financial burden on users. Abolishing this fee is crucial for several reasons:

- 1. Economic Impact: The high licence fee for a VSAT service limits the ability of residents and businesses to access fast and affordable internet services. Abolishing these fees would alleviate financial strain, promote economic growth and enhance the quality of life. This fee was openly introduced to deter potential users from requesting the license and without it introduced a crippling criminal fine. It was not introduced to cater for an admin fee or as a source of revenue to assist telecoms on the Islands, there were few businesses take it up so there would be no need for a reduced fee and it would make financial and political sense to abolish it. I also propose any fee already paid be refunded to the paying business.
- **2. Educational Advancement:** Schools, particularly in Camp, struggle with inadequate internet access provided by the Islands current suppliers. Every visit I have made to the schools in Camp show to me the dedication of the teachers and parents in ensuring the children get the very best experience given the tools available to them. Unfortunately the number one tool (fast and unlimited internet access) remains elusive. Globally children and adults benefit from the

interaction on websites, chat rooms, software usage, security, backups and many other services available to them, using Starlink or a comparative service would allow this on the Islands. Children are not the only people to benefit, teachers and staff could reliably attend training from educational bodies, they could share work from each school or home, mark homework and would feel a part of a team rather than out on their own. Many teachers come from abroad and fast, reliable internet access would allow them more interaction with home making them feel more settled. I am currently in the process of donating Ipads to each child in Camp schools and by allowing Starlink I would be assured each Apple application would work as it was meant to and children would get the best use of them. When I donated Interactive screens to each Camp school I was aware that using Sure internet the updates were either not done due to their size or were problematic. At the same time I tried to introduce a means for all the schools to use an educational based intranet which I had persuaded the company to provide free of charge but to this day that software which was cloud hosted can't use the service provided by Sure for bandwidth and latency reasons so the idea was abandoned. Education doesn't stop in schools, medical staff, doctors, government officials, businesses, home users, fast, unlimited internet access would transform the capabilities of so many professions.

- **3. Equity in Access:** Abolishing the fee would ensure that all residents, regardless of their location, have equitable access to essential internet services, promoting social inclusion and cohesion.
- **4. Tourism and business:** Starlink is fast becoming the standard on cruise ships, having good internet communication between ships and the Islands would ensure a smooth and trouble free tourism experience. All businesses would benefit from unlimited and fast software updates from life saving hospital machines through cash facilities including payments and airport facilities. In todays modern world some hardware manufacturers will block usage if updates are not done in a timely fashion. By having up to date software and firmware you are less likely to be affected by malware which targets old and out of date software. By having a fast unlimited service you would be more likely to have scheduled updates rather than worry about file sizes and how much of your quota would be used for the month. Remote access to equipment for installation or support from outside the Islands would be invaluable as proved by the test case done by FIG IT department, this is simply unreliable and unachievable using the Sure service.

I recommend you abolish the VSAT licence fee entirely.

2. Approve Starlink Domestic Tariffs

Granting regulatory approval for Starlink to offer domestic tariffs is a critical step towards enhancing internet access. The reliance on expensive global roaming tariffs is unsustainable and unfair to residents. The benefits of approving domestic tariffs include:

1. Domestic tariffs would significantly lower the cost of internet services for residents, making high-speed internet more affordable and accessible.

- 2. Starlink's technology offers the potential for fast, reliable internet access across the islands, addressing the current inadequacies in the existing infrastructure.
- 3. As stated earlier, reliable internet access is essential for modern education and business operations. Approving Starlink domestic tariffs would provide schools, businesses, and individuals with the connectivity needed to thrive in a digital world.
- 4. Looking back in history just to 1982. If there was any chance of that war happening again then invading forces would be looking to either take over or disable the single source of major communications in the Islands, currently the Sure network. If each home had control of their own internet then surely that increases the security of the whole islands.

I recommend you grant immediate regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands, eliminating the dependency on more expensive global roaming tariffs.

Current Situation: The internet service provided by Sure has been insufficient and troublesome, particularly in remote areas and schools in Camp, which hampers educational and economic progress. The current service provided by Sure is incapable of reaching the speeds available now by Starlink and the new Oneweb service that has yet to be implemented can only provide a fraction of the capabilities and is not suitable for all residents. It was stated by Sure that they had approached Starlink to become a reseller but they could not meet Starlinks terms for resale. It is not the duty of the Falkland Islands government to cater to the wants or needs of a private company but to ensure the right thing is done for it's people. It currently looks to the outside world as if Sure Falkland Islands does whatever it wants including not having filed any published accounts since 2018. Please review your Communications Bill 2017 with Select Committees amendments Part 2 Objectives and Principles and you will find every clause points you to approving Starlink. Very few, if any, relate to the Islands experiences with Sure.

Case Study: My personal experience donating IT equipment to schools highlighted the gap in digital access and the potential benefits of improved connectivity.

Recommendation for Government Action: The government should prioritise the abolition of the VSAT licence fee and the approval of Starlink domestic tariffs as strategic initiatives to enhance internet access across the Falkland Islands.

The implementation of these measures will have a profound impact on the Falkland Islands' residents, education system, and overall economic development. I urge the Select Committee to consider these recommendations seriously and take swift action to improve internet access

for the benefit of all Falkland Islanders. Public opinion has been proved by the very existence of a huge amount of signatures, I ask you now do the right thing for the future of the people of the Falkland Islands.

Contact Information

Andy Trish

Carnpessack, Gwenter, Coverack, Cornwall, TR12 6SN, UK andy@hmshermes.co.uk

44 7730 535111

WE 16

Written Submission - Rosie King

From: Rosemarie King <prrking@horizon.co.fk> Sent: Tuesday, August 13, 2024 11:37 AM

To: Cherie Clifford (Clerk of the Legislative Assembly) <clerkofassembly@sec.gov.fk>

Subject: Evidence to the Select Committee on the Petition re Starlink

Dear Select Committee,

I think this is a very important subject and therefore great to hear that a Select Committee is imminently ready to receive evidence.

Mine will be swift —I put myself in the basket of folk absolutely requiring the education of those presenting the petition. And as such, thank goodness there are people in the Falklands' stepping up and challenging for progress.

Whilst I might happily bumble along with the current provision from Sure, for the Falklands' to lift itself to the speed of change, doing nothing less than dramatic, seemingly Starlink, really cannot be an option. The only area I'm yet to hear enough about is 'security'. So I will keep listening.

Good luck and thanks,

Rosie King

Mrs Rosemarie King 10 Jeremy Moore Avenue Stanley Falkland Islands FIQQ 1ZZ

Telephone: (+500)21451

WE 17

Written Submission to the Select Committee on the Starlink Permission

This written submission is from myself as an individual.

I am currently nearly two thirds of the way through my BA (Hons) Business and Management degree, which I am studying online through distance learning with the University of Essex.

The following issues have had a negative impact on my studies:

- When attempting to attend the live tutor question and answer sessions, the connection is
 too slow, the video and audio lose quality or go out of sync, and sometimes the connection
 will drop. I must therefore wait for the recording to be posted online to download so that I
 can watch it without interference, however this prohibits me from engaging in real-time
 with my tutor and peers.
- A lot of the journal articles that I need to read as part of the research require subscription
 access, which can be gained through Microsoft Office authentication process by logging in
 with my student email address and password. However, if the internet is slow, the
 connection drops out and therefore the authentication process cannot be completed, and I
 am unable to access the relevant articles needed for background reading or as part of the
 research process.
- All research needs to be carried out online. There are many periods throughout the day
 when the connection is slow and trying to work through which articles are relevant becomes
 too cumbersome and I have to stop studying until later in the day. I have a three year old at
 home, so trying to balance family commitments with studying when the internet is not at
 peak capacity can be difficult.
- The connection at Falkland College is even worse and although the megabytes are 'free' there, it is much slower than studying at home and I cannot use my own IT equipment, so therefore is usually not worth the trouble.
- Using the Broadband Hotspots is even slower, Sure have now added a disclaimer above the
 forms where people put in their home package username and password stating if people
 wish to have faster internet, they should use the 4G service, which is much more limited in
 megabyte allowances and more expensive.

Access to suitable education should not be dependent on whether or not people can afford the annual Starlink licence fee, especially in a community as remote as the Falkland Islands.

Thank you,

Siân Ferguson 13th August 2024

Written Submission of Evidence to the Select Committee on the Starlink Petition

09 August 2024

Submitted by: Bruce Wilks

Location: Stanley

Email: brucewilks@hotmail.com

Introduction

Thank you for the opportunity to submit evidence to this committee. In the 2020s, access to reliable, high-quality internet in the Falkland Islands is more crucial than ever to keep pace with global communication standards. This sentiment is shared by at least 2,416 people across the Islands.

In 2009, the Falkland Islands Government (FIG) made a bold decision to regulate telecommunications with the primary goal of improving the broadband service provided by Sure. However, despite these efforts, the intended impact of this regulation has not been fully realized. This is partly due to Sure's decision to adopt a defensive stance rather than collaborate with the Falkland Islands to implement the necessary improvements that were clearly needed.

Over time, Sure has lost my trust, as well as the trust of many others in the community, in their ability to deliver the substantial improvements required. Their failure to do this can be attributed to a combination of factors: a lack of genuine commitment - driven by the pursuit of excessive profit margins - and an overreliance on FIG service obligations and key performance indicators (KPIs) that have consistently fallen short. The recent OneWeb debacle is just the latest example of their incompetence.

It has become clear that the exclusive provider model is no longer the optimal solution for the Falkland Islands. Introducing competition is now essential to drive the necessary advancements in internet service provision. The most effective way to achieve this is through the introduction of easily accessible and affordable Low Earth Orbit (LEO) satellite options, such as Starlink.

The petition rightly calls on FIG to eliminate the fee for a Very Small Aperture Terminal (VSAT) licence and to collaborate with SpaceX to establish local Starlink packages tailored to the needs of the Falkland Islands community.

Sure Has Failed the Falkland Islands

For the past 15 to 20 years, it has been glaringly evident to anyone in the Falkland Islands that significant improvements to broadband internet services are urgently needed. While the Falkland Islands Government (FIG) has made some efforts to regulate the situation, forcing Sure to implement marginal enhancements to broadband package sizes and speeds, these changes have been insufficient. They have barely kept pace with the global rate of improvement required to maintain even the status quo. Consequently, the internet service in the Falklands has effectively stagnated, with demand continually outstripping supply.

When the current licence was being negotiated in 2016, emerging Low Earth Orbit (LEO) satellite providers offered promising, game-changing alternatives. However, Sure convinced FIG to maintain the status quo, leading to a new 2017 license that included a 'midway clause'- a provision allowing both parties to review emerging technologies midway through the license period.

Unfortunately, a combination of factors hindered progress: the rushed introduction of a new telecommunications ordinance, the absence of a technically proficient telecoms regulator, the lack of technical expertise within the civil service (resulting in no "intelligent client" capability), an overdue license renewal, and a generic report from an external consultancy firm that was seemingly guided by a brief with no real appetite for change. These conditions made it difficult for Members of the Legislative Assembly (MLAs) to consider alternative options. Despite substantial evidence presented during the 2017 select committee on the new telecommunications ordinance, FIG opted for caution, sticking with the familiar and placing undue reliance on the 'midway clause' to persuade Sure to adopt new technologies and improve services.

Failed OneWeb Solution

Sure's attempt to introduce a Low Earth Orbit (LEO) satellite service through a collaboration with Intelsat and OneWeb has ended in failure, despite more than a year of effort. The original plan was to integrate LEO and Geostationary Earth Orbit (GEO) services as a transitional solution to upgrade to newer technologies and fulfill licensing requirements. However, Sure has seemingly abandoned the OneWeb service after repeated issues.

Industry experts agree that even if the OneWeb solution was to eventually become operational, it would likely suffer from unacceptable levels of latency due to the routing chosen to connect back to the UK. As a result, the expected improvements in internet service quality compared to the existing GEO service would not be realized.

This initiative was a new and untested concept, and when it was first implemented, it led to a complete shutdown of internet services for several days on multiple occasions before it was ultimately disconnected. This represents a significant failure on Sure's part, and it is imperative that they are not allowed to continue with vague promises of improvements "just around the corner," as they have done in the past.

It is crucial for FIG to recognize that continuing to invest in this failing arrangement, including the questionable decision to pay Sure an additional £1 million per annum, is not a sensible solution. The best way to ensure that Sure makes meaningful improvements is to hold them accountable by encouraging alternatives and allowing people to self-provide their own internet solutions.

Regulation Alone is Not the Answer

Sure should have seen this moment coming years ago; their customers were growing increasingly dissatisfied. Instead of proactively listening and making necessary improvements to their services, they did the bare minimum to protect their position with FIG, ignoring the mounting concerns. They have treated both their customers and FIG with contempt, operating as if their position was untouchable as long as they appeared to meet service obligations and KPIs.

This short-sighted behaviour is not only disappointing but also disingenuous, especially given the privileged position they hold. A monopoly offers a golden opportunity to serve a small community through a secure, long-term relationship. It should function as a partnership, not merely as a means to extract 40% to 50% profits at the expense of providing a decent service to a population with no alternatives.

Giving customers free and easy access to self-provision LEO services will compel Sure to take their responsibility seriously and truly consider improving their offerings.

Why Scrap VSAT Licence Fees and Allow Starlink?

The licence fee should never have been set as high as it was. FIG were afraid to leave no option for self-provision because they were not confident that decision could stand up to a legal challenge. So there had to be an option for self-provision, but it also had to be a very unattractive option to act as a deterrent. So, an annual licence fee of £5,400 was suggested and approved.

How can a £5,400 annual licence fee be just? How can it be considered morally right and fair in a democratic society to force consumers to pay so much money simply to access the level of service they need; a level of service Sure is failing to offer?

The goal was to discourage self-provision while still technically allowing it. However, this strategy has proven ineffective and unjust.

Currently, the only legal way to self-provide a Low Earth Orbit (LEO) service like Starlink is if Sure, the local service provider, cannot meet the customer's needs. The formal agreement states that self-provision is permissible "if the licence agreement cannot be met." Clearly, Sure is failing to meet these needs, as evidenced by the significant number of Starlink dishes in use and the fact that over 2,400 people have signed a petition supporting the use of Starlink in the Falkland Islands.

If Sure could provide an adequate service, there would be no demand for alternatives like Starlink. The fact that people are going to great lengths and significant risk to install these dishes demonstrates that Sure is not meeting the needs of its customers.

The £5,400 annual licence fee is not justifiable. In a democratic society, it is neither morally right nor fair to force consumers to pay such an exorbitant fee simply to access the level of service they require - especially when Sure is failing to provide it. Moreover, most consumers cannot afford this fee, which was the intended purpose: to deter people from self-provision. This approach is fundamentally unjust.

Allowing competition, such as Starlink, would incentivize Sure to improve its service. If Sure were to decide not to continue beyond the current licence period, there are ample experts ready to help FIG implement alternative solutions. The efforts of the petition group have already drawn attention from numerous subject matter experts with extensive experience and connections, who are willing to assist FIG in making this work.

FIG should not let concerns over Sure's potential exit prevent them from abolishing the licence fee and allowing Starlink to operate freely in the Falkland Islands. Doing so would benefit consumers and encourage a higher standard of service.

As Sure Falkland Islands' own website claims, their "Broadband Price Plans are designed to suit your every need and budget." It's time for their service to reflect that promise.

Shortcomings of the Current Service

I'm certain many others will highlight the various deficiencies in Sure's broadband service in their submissions. However, I'd like to emphasize a few critical points:

Inadequate Bandwidth: The service struggles to handle more than one stream simultaneously, making it nearly impossible to support multiple users effectively.

High Cost for Low Performance: Despite subscribing to the 'Pro' package, which costs as much as a mortgage payment, the service still fails to meet the needs of a four-person household.

Unreliable Service: Frequent downtime and slow periods significantly impact the service's reliability, with the situation in Camp being even worse.

Broken Promises: The OneWeb 'midway clause' solution has been a complete failure, offering no tangible improvement.

WE 19

Submission for the Attention of the Starlink Petition Select Committee August 2024

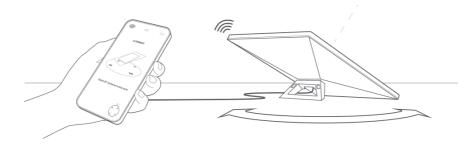
Brian N Jamieson B.Sc., Grad.I.Biol, M.Sc(Dist.)

South Harbour, West Falkland

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Within a few years a simple and inexpensive device, readily carried about, will enable one to receive on land or sea the principal news, to hear a speech, a lecture, a song or play of a musical instrument, conveyed from any other region of the globe. The invention will also **meet the crying need for cheap transmission** to great distances, more especially over the oceans. The **small working capacity** of the cables and the **excessive cost** of messages **are now fatal impediments** in the dissemination of intelligence which can only be removed by transmission without wires.

A Means for Furthering Peace (1905) Nikola Tesla Archives



Smartphone with Starlink battery operated Mini-dish High Speed Internet Access Anywhere

Introduction

My wife and I moved from the UK to South Harbour, West Falklands in November 2009. Kerri is an islander born in Stanley Hospital. I have "FI Status" through marriage to Kerri in 1995.

I have worked in business I.T. consultancies since the late 1980's. In the UK, I had a variety of clients including Oxford, Brent and Surrey county councils, H.M. Land Registry, ESSO, the D.T.I., Barclays Bank, Price Waterhouse Coopers, Hewlett Packard and I.B.M. I have carried out consultancy work both for, and also on behalf of Hewlett Packard, and I.B.M. I have a variety of professional qualifications and certifications from Lotus, I.B.M. and Microsoft.

My particular area of expertise is in creating business applications that take advantage of the connectivity of the internet. I wrote the first e-commerce donations application for the Salvation Army. I led a team that designed and created a world wide multi-lingual warranty management application for OKI International, and I was part of the team at Price Waterhouse Coopers who designed and documented the installation and use of I.B.M.s Websphere Portal Server for a non-professional audience.

I have held an interest in Starlink connectivity since the first test satellites were launched in February 2018 and the first commercial set of satellites which were launched in May 2019.

The Petition

The Petition was devised to have two simple aims:

- Petition to the Communications Regulator and The Honourable Members of the Legislative Assembly are respectfully requested by the undersigned to take immediate steps to abolish the VSAT licence fee entirely or to reduce it to a proportionate level, not exceeding £180 per year (£180 represents the smallest of Sure's tariffs).
- We also call on the Communications Regulator to give regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands rather than forcing people to rely on (more expensive) global roaming tariffs.

The VSAT licence fee

The notion of a VSAT licence fee was introduced in the 2017 Communications Legislation, published in the Falkland Islands Gazette March 2017.

The actual fee £5,400 per year, was finally documented in the Communications (Fees) Regulations 2019 publication.

During the 2016 Select Committee meeting, MLA Dr Barry Elsby noted the following:

...That still gives people, VSATs and self-provisions hasn't been outlawed, it just says that you have to have an extraordinary licence from the Regulator.

The Honourable Roger Edwards At a very high level of licence fee.

The Honourable Dr Barry Elsby I total disagree with this, I think if the regulator feels that you need an extraordinary licence because the provider can't provide then you shouldn't be penalised for that.

During the same meeting, Mr Dick Sawle said:

I note that paragraph 14 of appendix B to this Bill states that "The Attorney General is aware of Queen's Counsel's opinion that suggests that a failure to recognise this possibility [i.e. an alternative to the exclusive provider] in legislation may be unconstitutional".

I believe therefore that our Government has recognised that to prohibit self-provision by means of an exclusive licence is unconstitutional.

However, the policy as agreed by Executive Council is that the fees for obtaining a VSAT licence will be set so high and the application made so difficult, that **effectively a licence becomes unobtainable**.

Licence fee set as deterrent

THE £5,400 cost of an independent VSAT (very small aperture terminal) satellite was set to "effectively discourage" Islanders, Attorney General Simon Young told Legislative Assembly this week.

MLA Roger Spink read the licence fees for radio communications licences into the record at the meeting, which took place on December 12. MLA Barry Elsby stood to question the VSAT fee.

"Most of the licence fees for telecommunications are very small, ranging from £20 to £150," he said. "But I noticed that the VSAT licence is £5,400. VSATs are allowed in the Islands if Sure cannot provide the service that the customer needs or demands. I wonder if it's possible ... to explain how we arrived at that fee of £5,400 annually?

MLA Spink offered "I believe it is to do with the renegotiation of the telecommunications." before passing the question to the Attorney General.

Mr Young said that the fee was set with "regards to the fact that an exclusive licence is in operation and VSATs are available from the exclusive licensee, and therefore the fee that was set was a policy decision taken at the time the ordinance and the new licence was agreed, to effectively discourage people from seeking an independent VSAT licence and to encourage them to obtain it through the exclusive licensee."

Responding, MLA Elsby said: "I am slightly worried that we are setting a high fee to discourage someone that has the right under the ordinance to request this if the provider is not able to meet the requirements."

Mr Young replied that "I don't think there's a situation where that would arise," and said that FIG were "seeking to preserve the exclusivity of that licence."

The simple truth is that the fee was designed as a deterrent, to lock Falkland Islanders into a situation where they could not afford to "self provide" irrespective of the level of service Sure offered.

Ironically, this came up later in the same Select Committee meeting when "commercial" pressure had been brought to bear on Sure by the residents of Moody Brook, prior to the existence of the deterrent fee:

Roger Spink

We didn't want to do it (threaten with self provision) but it was the only way we could get SURE to actually provide the service that we wished to have.

The Honourable Dr Barry Elsby

I suppose I must declare an interest, Chair. I was one of the people at Moody Brook. We couldn't get any form of internet and C&W said no, no, no, no until Roger said we will get in a VSAT and literally within days they changed their minds from it can't be done to yes its happened.

The Honourable Roger Edwards
A good example of where you have used pressure to get a service.

Sadly, enshrining the VSAT fee in law has had the consequence of robbing many other Falkland Islanders of their ability to apply commercial pressure to Sure. Starlink offers a service that will remain technically and financially unmatched by Sure S.A. Ltd, despite all of FIG's fiscal underwriting efforts.

It should be noted that SpaceX's first test satellites were launched in February 2018 and the first set of 60 satellites was launched in May 2019. The fee was intended to disincentivise people using "like-for-like" satellite services in 2016. There were two high profile VSAT users in situ at that time. Those individual's contracts gave them benefits of tariff free evening AND weekend usage. Sure chose not to compete at that level of granularity, but grudgingly introduced midnight-6am tariff free traffic by comparison.

As a software developer, FIG have stated in writing that they cannot make use of my services, since I am a "single entity supplier". This effectively means that I need to sell my services and products over-seas. To that end, there is no tariff that Sure offers, at any price, that allows me to upload my products to "the internet" reliably. Furthermore downloading digital assets and tutorials uses prodigious amounts of data, of the order of 2Tb per month. Again, there is no tariff that covers this particular requirement. By contrast, with a £400 Starlink terminal and a residential fee of perhaps £80 per month, I would have quota free, reliable, high speed internet that allows me to earn my living.

Other people and organisations are in exactly the same situation:

- KEMH, looking to upload data for diagnostic purposes to the UK.
- research groups like SAERI who have to resort to posting hard disks to the UK.
- Content creators unable to upload high quality streamed events to Youtube.

The onerous licence fee of £5,400 sticks in the craw for several reasons;

- there is no offering from Sure at any price which is suitable for this use case
- FIG does not pass on any part of that fee to Sure SA Ltd.

This last point makes one wonder about the argument surrounding FIG "working to protect the integrity of the exclusive licence with Sure" (1). If the fee was passed on to Sure, then an argument might be made as to what appropriate level of fee should

¹ Communications Regulator Annual Report 2023 (144/24)

be applied in a particular licence application. That issue was specifically questioned by members of the public at a meeting with MLAs:

Tim Cotter

Am I right in thinking that for a situation that Neil suggests, the licence fee for an extraordinary licence would be £5,400 PA payable in advance?

Mike Summers

Not necessarily Tim, the regulator would have the authority to make a contrary judgement.

Fitzroy River

Thank you for your reply Mike, I was concerned for everyone that it wasn't an option. Will FIG be forcing a charge on individuals who do have to self provide because the exclusive provider can't for what ever reason?

Mike Summers

There may be a license fee, but it would not be at the level of that charged for purely discretionary self provision.

The previous Regulator, John Whitby, confirmed that he had no powers to vary the licence fee. Simon Young also confirmed in an interview on FITV that no part of the fee goes to Sure SA Ltd. It is purely an administrative exercise designed to put Islanders off from bettering their communications circumstances.

Conclusions to £5,400 licence fee

I look to MLAs to consider several aspects in reducing the VSAT licence fee.

- Ascension Island now operates a trivial fee of £10 per year. Sure SA Ltd, still
 operate their protected monopoly. This is the closest situation to our own, and we
 would do well to follow it.
- In the Falkland Islands, anyone with a boat can get a licence to operate a Starlink dish. What would be more idyllic than going out with customers on a whale watching tour, and live streaming the event around the world. That scenario costs a £45/yr licence fee. Why should land based companies be penalised?
- If the fee is not to be diverted to Sure SA Ltd, then it should be recognised as the indefensible policy that it is to skirt around Queen's Council advice that the exclusive licence was going directly against the Falkland Islands constitution.
- If the fee is to be diverted to Sure SA Ltd, to compensate for the loss of a customer, it should be no more than the lowest tariff that Sure operates. Why should anyone in the Falkland Islands be legally obliged to buy a communications service that is of no use to them, thereby shoring up the £8M profits of a foreign company?

Regulatory Approval for Starlink

We also call on the Communications Regulator to give regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands rather than forcing people to rely on (more expensive) global roaming tariffs.

Starlink is a globally available constellation of satellites numbering some 6200 individual satellites, at the time of writing (August 2024). There are currently 4 "shells" in place (43,53,70,97 degree inclination shells). These provide coverage to every part of the globe, 24 hrs each day, including Antarctica.

The satellites travel around the globe, so it makes commercial sense for Starlink to sell their services to every possible country in the world. This is the only way for SpaceX to maximise their profits from their investment. Currently there are over 100 countries that make use of Starlink to help provide broadband connectivity to their citizenry.

For the shell that is most suitable for Falkland Islands connectivity - the 53 degree inclination group, there are approximately 5600 satellites in this particular shell. There is full 24 hr per day coverage. Furthermore, when the satellites are flying over the Falkland Islands, they are effectively no use to any other country on the planet; they are best positioned to provide maximum possible service to the islands.

It makes complete commercial sense for SpaceX to provide Starlink connectivity here. Effectively, they "already have" whether we use it or not. Now they just need to be allowed to supply their goods, at a cost that they deemed commercially viable. No-one needs to be forced or coerced into purchasing a subscription.

SpaceX described Starlink as being "disruptive" technology, they also described it as "better than nothing" technology.

In the States, rural locations that were not being served by fibre took up Starlink technology and older, slower, legacy service providers lost customers. In states and countries served by third rate satellite communications, many customers have migrated in droves to Starlink. Many sent their old equipment back in the boxes that their Starlink equipment was delivered in.

It is only since these commercial pressures have been brought to bear upon incumbent ISP's, have they realised perhaps too little and too late, that they need to raise their game and work within a competitive market.

And then there's us, the Falkland Islands.

£4560 (for global roaming) + £5,400 (for a "licence") for 12 months access to reliable internet... almost £10,000 each year.

A 4x4 vehicle... Each year.

£9960 each year. What does that buy you?

From FIG, the £5,400 fee each year will get you this paragraph from the regulator:

"It is important to note that Starlink itself has not been licensed to provide services in the Falkland Islands, so there can be no guarantee of how well its services work, and you would have no regulatory protection in terms of customer service or price. The commercial arrangements between you and Starlink would be entirely at your own risk."

We will move on swiftly from the regulatory protection in terms of service or price from Sure SA Ltd, just about the most expensive ISP on the planet.

I was lucky because I argued that, since there was no data about Starlink's actual connectivity, here on island, I was not prepared to pay for a full VSAT licence, and that I should be granted a Test & Trial Licence (£150/yr), on the provisor of submitting documented test results from various places around the Falklands.

"At long last, I have an answer for you. I spoke with Simon yesterday and we agreed that it would be reasonable to grant a Trial and Innovation Licence to you for the purpose of demonstrating whether and how well the Starlink service might operate in a remote part of the Falkland Islands. The licence would be granted for a 12-month period, during which we would like you to report back on your experience e.g. service speed, reliability, latency, service limitations and requirements – basically anything that might inform future users of Starlink terminals and/or a decision to licence Starlink as a service provider in the Falkland Islands.

Finally, given the sensitivity of this matter, I would ask you not to make any public statements about this Trial and Innovation licence without prior notice and approval from Simon."

When I was granted my Test & Trial licence, I understood and accepted that everything about acquiring and running a dish would be risky in nature.

I took possession of a Starlink terminal on the 22nd August 2023, and a draft report was submitted by the 10th Sept 2023. The initial tests were run between 23/8/23/ and 3/9/23. I suspect that after getting results sent through to FIG (Median Download: 245.94 Mbps, Median Upload: 28.33 Mbps), there was now documented evidence that Starlink worked in a more than satisfactory manner in the Falklands.

On 10 Sep 2023, at 22:05, Brian Jamieson

 krian@shc.co.fk> wrote: Hello Simon and David,

Well, I suppose the honeymoon is over and I'm now needing to write up my findings. Please find attached an initial draft of my report...

The simple truth is that the $\mathfrak{L}5,400$ per year licence gets you nothing at all. The regulator suggests that Starlink does not need permission to operate here. Is this thinking worthy of a licence fee of $\mathfrak{L}5,400$ each year? I cannot be the only person to think that if FIG are going to charge people ANY fee, then two things must fall into place:

- Starlink must have a licence to operate here.
- Fees collected should be transferred to Sure SA Ltd.

If the argument made is to protect Sure's revenue stream, then monies should be transferred to Sure. Currently this is not the case, so for Government to try to make the point that the fee was put in place to protect Sure's licence is questionable.

Since Starlink have still not been given a licence, FIG should not be in position to charge a licence fee. Imposing a fee on Starlink's use is contradictory and problematic. Requiring the public to pay a fee for using an unlicensed service, may face significant legal challenges and it may not be legally justifiable in 2024.

From Starlink, the £4560, global roaming fee for a year, gets you:

- · an internet package that is quota free,
- able to be used at any point on the planet,
- able to be paused and resumed on a month by month basis,
- and can be cancelled without penalty at one month's notice.

The same terms and conditions apply to their standard residential tariff, which in the U.S. works out at some \$US100 per month, or in Chile around \$US 60 per month. These prices are independently set by SpaceX.

For FIG to continue to shore up a dying technology that is being massively undercut and threatened by modern technologies puts the island as a whole into a technological deficit that can be measured in decades; the "Zhone" ADSL modems with their analogue phone-line filters, beloved of the Stanley citizenry, point to technology that is some 25 to 30 years old.

During a TDG meeting, Sure SA Ltd stated that they have no plans to replace the use of Zhone ADSL modems in Stanley. In short, you will never get to upload data to your consumers, or to the cloud, or to your medical professionals, at anything more than 1Mbps, even if you elect to pay Sure SA Ltd £5,604 each year. Those analog devices, and the company that provide them are simply not fit for purpose in 2024.

I leave you with two thoughts:

"Things do not happen.
Things are made to happen" - John F. Kennedy

"The most dangerous phrase in the language is, We've always done it this way" - Grace Murray Hopper



20 August 2024

FAO: Select Committee on the Starlink Petition

Re: Written evidence from eLink (a division of Atlink Ltd.)

Globe Office PO Box 851 Stanley Falkland Islands FIQQ 1ZZ

Tel: +500 22934 info@elink.co.fk www.elink.co.fk

To Whom it may Concern:

As a provider of technology-based solutions in power generation, electric vehicles and charging, we are often reliant on electronic communications with our various sites and plants in order to deliver a reliable and good quality of service to our customers.

As a business we also require a fast and stable connection to the wider internet for access to portals, cloud-based data repositories (i.e. one drive), training and technical materials, and software. Many of these are becoming more data intensive as the complexity and quality of our provision grows.

Installation of systems is only part of the solution, many customers are now looking for a longer term service provision. In order to provide that kind of solution effectively, remote monitoring of sites is absolutely essential. It not only allows us to monitor sites without travelling, thereby saving time and reducing our own fossil fuel use, but also gives customers the peace of mind that they can also remotely monitor their own sites if they are away from their homes for long periods or even abroad.

Our current provision from Sure SA allows us to deliver our business, but in a highly constrained way, with regular issues related to connection stability, speed and latency which can and do have a detrimental impact on delivering our services. There are regular outages from remote sites which makes delivering a quality service to customers in those places challenging. We have also had regular difficulties in connecting to portals, online monitoring software and cloud based services which many software service providers have now moved to. Furthermore downloading and updating software at install sites is often impossible in practical terms (i.e. waiting for download of new firmware should normally be minutes, but has taken hours on many occasions).

A solution for us would be utilising a roaming Starlink system. This could then offer a high-speed internet at our office for much of the time there by mitigating many of our issues with latency for software services, and cloud systems. This would also allow us to have a solution which we could take to customer sites for install, commissioning, and updating. We would potentially retain a Sure package for our office and also hold a Starlink system, rather than one or the other.

This kind of opportunity to use technology would allow us to deliver the best possible service and solutions to our customers. Furthermore for customers in the far reaches of the Sure network, availability of connection is often poor, so a Starlink system for them would allow us to not only install the best system possible, but also allow our customers to remain connected for the majority of the time.

Registered Number: 14919

Directors: J M Meade, J B Wallace, T P Blake, S P J Freer, M A Cockwell

Registered offices: 56 John Street, Stanley, Falkland Islands

Certificate Number 15108

ISO 9001:2015, ISO41001:2015, ISO 45001:2018



In order to deliver the best quality service to our customers we would like to see the approval of Starlink domestic tariffs, and the removal of the licence fee requirement for using Starlink (or other) LEO services.

Signed:

m

Sam Cockwell – eLink Projects Manager

Who are eLink?

A division of Atlink, eLink are an ISO 9001:2015, 14001:2015, and 45001:2018 certificated local company. eLink was established in 2020 with focus on environmental solutions which allow the Falkland Islands to transition away from the current reliance on imported fossil fuel. We are the leaders in electrified transport and charging solutions in the Falkland Islands, and are working with industry partners in the UK, Europe, and elsewhere to develop technologically sound and practical solutions to deliver enhanced renewable power, greater energy efficiency, and a cleaner environment.

Registered Number: 14919

Directors: J M Meade, J B Wallace, T P Blake, S P J Freer, M A Cockwell

Registered offices: 56 John Street, Stanley, Falkland Islands

Certificate Number 15108

ISO 9001:2015, ISO41001:2015, ISO 45001:2018



WE 21

Dear Select Committee,

I would like to submit this letter of support for the Petition recently submitted for access to Starlink and approve Starlink domestic tariffs.

As a household we regularly find the current service provided by sure to be unsatisfactory and outdated for the modern world we live in. With so many services now relying on a stable and fast online connection we struggle to use everyday applications such as online banking, streaming, cloud services which most households worldwide now have access to. Appliances are data hungry for updates (including security updates) and the connection we currently have often see the very basic browsing fail. During the COVID period working from home became frustrating and for those in the house needing to take part in video conferences were at a disadvantage due to slow and unreliable connections. Online learning courses and children's homework is data hungry and difficult with current speeds.

We give businesses every credit for being able to manage the way they do... if they do at all.

We are strongly of the view that MLAs need to act soon to rectify the ongoing issues of an outdated Internet Service that is currently provided to the Falkland Islands. We understand the expense a Satellite link is but ships at sea have a better service than our islands.

We were encouraged to see the support the petition received, and the number of signatures gathered; the people of the Falklands would now like the choice to access alternative services available without being stung by extortionately high license fees of £5,400. We do not see this fee being re-invested back into the islands but only adding to Sures profits.

As many others have said we would continue to use other Sure services but we would like the freedom of choice to explore other options for our Internet.

As Falkland Islanders we are proud to 'Desire the Right' so please can FIG/MLA's now give us the right to have access to up-to-date technology and a fast, reliable internet service so we can catch up with the 21st century and not be tied to this outdated monopoly who have simply not kept up with the times and the service they promised.

Kind Regards Angus Macaskill 11 Short Street Stanley 18th August 2024

Select committee,

Petition for all Falkland Islands residents to access Starlink and other internet providers and abolish or reduce the VSAT license fee and approve domestic tariffs for external internet providers e.g. Starlink. We are in desperate need to change a clearly broken system.

The current internet provided by Sure Telecoms is both expensive and slow. While the staff at Sure are commendable, even they acknowledge the limitations imposed by their parent company's inadequate support.

The current annual license fee of £5,400 for using alternative internet providers like Starlink is extremely high and effectively prohibits most residents from using alternatives. This, along with the threat of fines, is not just. It essentially aids in maintaining a monopoly for a company that provides subpar service, which is an apparent injustice.

It is only logical to approve domestic tariffs for external internet providers(e.g. Starlink) until we can access fiber optic from the coast.

I also implore the Communications Regulator to grant regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands. These actions will ensure that residents are not forced to rely on excessively costly global roaming tariffs and will make fast and reliable internet accessible and affordable for everyone.

By addressing these concerns, the Government would not only uphold our constitutional rights but also ensure that the residents of the Falkland Islands have access to the internet services they need and deserve.

Access to fast and affordable internet is essential for the island's economic and social development, and it is high time that we ensure that everyone, including our visitors, tourists etc has access to such services.

Let's make it affordable, easy and enjoyable for everyone and celebrate that we can offer this throughout the islands. Let everyone talk about the positives of our internet and remove the negative discussion of how slow and expensive it currently is. Hoping to hear positive results.

Best regards

Aikeah Alburo 4 Police Cottages Stanley 18th August 2024

Select committee,

Petition for all Falkland Islands residents to access Starlink and abolish or reduce the VSAT license fee and approve Starlink domestic tariffs. We are in desperate need to change a clearly broken system. I urge the elected councillors to act swiftly and decisively to rectify this longstanding issue.

The current internet provided by Sure Telecoms is both expensive and slow. While the staff at Sure are commendable, even they acknowledge the limitations imposed by their parent company's inadequate support.

The current annual license fee of £5,400 for using alternative internet providers like Starlink is extremely high and effectively prohibits most residents from using alternatives. This along with the threat of fines, is not just. It essentially aids in maintaining a monopoly for a company that provides subpar service, which is an apparent injustice.

It is only logical to approve Starlink domestic tariffs until we can access fiber optic from the coast. I also implore the Communications Regulator to grant regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands. These actions will ensure that residents are not forced to rely on excessively costly global roaming tariffs and will make fast and reliable internet accessible and affordable for everyone.

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Best regards

4 Police Cottages

Stanley

JV Alburo

FIG Starlink Select Committee 20 August 2024

Stanley A & D Gould

Falkland Islands Pebble Island

To all Concerned

Please note that we feel that the lack of Starlink availability severly restricts and impedes our business and social activities, for the following reasons –

As a business we use software programs, to record our animal data, that really require a cloud based internet connection to operate effectively. These systems have been proven to increase profits and we can not even update effectively with the sure connection even when not operating on a cloud based system, which is increasingly unsupported.

Business calls and machinery support via Teams or similar, is very variable and costly with the Sure package.

Sure does not give us the full flexibility we need for future development of the cruise ship tourism in remote locations with mobile retail.

Live reliable webinars from farm buildings, particularly for the shearing, are simply not possible via our Sure package.

In short the lack of being able to use Starlink is a real financial impediment to our business.

Yours Sincerly

Alex and Dot Gould

Ross James 5 Pioneer Row, Stanley. rossbrentjames@gmail.com 55750

21st August 2024

Dear Members of the Select Committee,

I am writing to express my views on the communications petition, specifically addressing the calls to abolish the VSAT license fee and to approve domestic tariffs for StarLink. I wish to clarify that these views are expressed in a personal capacity and solely reflect my own perspective. Recognising the volume of submissions you are receiving, I aim to keep mine succinct. Should further information be required on any aspect of my submission, please do not hesitate to contact me.

Having lived in the Falkland Islands for 12 years with my family of five, after relocating from the UK where we maintain close ties, I must highlight the persistent challenges posed by the unreliable and limited high-speed internet access here. This issue not only hampers our ability to stay connected with friends and family abroad but also severely restricts our access to educational resources, online gaming, entertainment, and the broader benefits of internet usage. While these concerns are widely shared among Falkland families, I would like to focus on specific, less generic use cases.

In my spare time, I write children's books, which involves uploading large illustration files and downloading substantial proof copies. On one occasion, due to inadequate internet speeds, I was unable to download a 400MB manuscript proof for final revision, resulting in a costly error in a print run, amounting to approximately £2,000 in losses and a delay of three months in publishing, leading to further financial setbacks. Additionally, I faced significant challenges when attempting to upload a manuscript to Kindle for digital sales, a task that remained impossible despite prolonged efforts over several months, only becoming feasible during a brief visit to the UK, where internet capabilities allowed completion in just 20 minutes.

Another critical aspect relates to my professional role as Programme Manager for the New Island Restoration Programme. Here, reliable high-speed internet is indispensable for various project aspects, particularly for utilising cloud-based software. For instance, we require the capability to upload thousands of images captured by trail cameras across New Island to achieve accurate, near-real-time population density estimates of target species crucial to our restoration efforts. Unfortunately, current internet limitations in the Falklands render this method unfeasible, necessitating less precise and more labour-intensive alternatives. StarLink offers a transformative solution to this challenge.

Fundamentally, the demand for high-speed, reliable, and reasonably priced internet services in the Falkland Islands should not require justification. The potential benefits for our community are immense and should not be delayed further. I believe that the people of the Falklands have been underserved by Sure, FIG, and the Regulator, and I urge you to seize this opportunity to rectify the situation. Please do not let this opportunity go to waste.

Yours sincerely,

Ross James

Submission by Stephen Luxton to the Petition Select Committee 05 September 2024

The Petition makes two demands and the first Select Committee made it clear that the consideration would be limited to those two demands:

- 1. Abolish or Reduce the Licence Fee: We call on the Communications Regulator and MLAs to abolish the VSAT licence fee for using Starlink entirely. If a complete abolition is not feasible, we urge you to reduce the fee to a reasonable and proportionate level, not exceeding £180 per year.
- 2. Approve Starlink Domestic Tariffs: We also call on the Communications Regulator to grant regulatory approval for Starlink to offer domestic tariffs in the Falkland Islands. This would prevent residents from being forced to rely on the more expensive global roaming tariffs, making fast and reliable internet access more affordable for everyone.

Overview

The most important single consideration in processing the petition is for all parties involved – users, the Government and Regulator, and the exclusive licensee – to accept that the 2016 position (upon which the previous decision was made) has changed. Blind defence (or sweeping criticism) of a decision made eight years ago in a different set of circumstances does not particularly help address the current situation, although it is informative to review some of the comments and predictions made in representations to the 2016 Select Committee which were remarkably perceptive in predicting some of the current difficulties being experienced with the exclusive licence arrangement.

Regardless of that, what is clear is that the communications landscape in the Falkland Islands has now changed, and we (consumers, the Government as regulator, and service providers) must look forwards to where we want to be, not backwards to where we may have come from.

A further consideration is how to deliver the demands of the Petition. This submission focuses on the most straightforward legislative and procedural options. Other more complex legislative options are available, and would raise issues that should be considered ahead of the 2028 exclusive licence award, but for brevity these are not discussed in detail.

To V, or not to V?

There remain differences of view on whether Starlink constitutes a VSAT terminal. I personally remain of the view that 1) it is not and therefore 2) a licence (free of any licence fee) could be issued under other provisions of the Communications Ordinance, but for the rest of this submission I will focus on the "approved reality" where FIG's position is that Starlink is a VSAT and can operate under a VSAT licence, as that appears unlikely to change. One of my recommendations therefore makes provision to regularize this discrepancy.

Demand 1: The VSAT Fee: What was the purpose of the VSAT fee?

The primary intention of the VSAT licence fee at the time it was approved, was to price consumers out of using VSAT as a viable option. Indeed, there was not even an application process for a VSAT licence for several years. No provision was therefore made for the ultimate beneficiary for the penalty fee, as the expectation was that no revenue would accrue. By default, revenue will be paid into the Consolidated Fund. Importantly, this means that the fee levied does not in any way compensate the exclusive licensee (currently Sure South Atlantic Ltd) for any real or perceived loss of revenue.

Is the fee consistent with FIG policy on fee-setting?

Wider FIG policy has - for decades - been to levy fees on the basis of "user pays". It is not known whether this was ever a formal ExCo-approved policy, but nevertheless it is how fees have been generally determined and remains in place.

The inevitable corollary of this must be "payer uses", which means that the fee-payer must actually expect to get something worthwhile for the fee they are paying, and the fee must fairly reflect the cost of service provision, and not be something arbitrary and unjustified.

The current VSAT fee of £5,400 utterly fails this test, being based on nothing other than a desire to create a disincentive to application. Neither FIG nor the exclusive licensee make any contribution to providing either the Starlink constellation, or the end user terminals, or any technical support or backup. The fee is not paid to the exclusive licensee by way of compensation. If the fee is calculated on the cost base for providing nothing, then the fee should be set at zero.

Administrative costs for issuing a licence are minimal (likely to be less than £100 per licence) which sets the maximum justifiable fee. A comparable administrative licence fee would be the amateur radio licence fee which is currently £20, though that buys a lifetime licence.

What effect does the fee have now?

Events over the last 12 months have demonstrated that the development of satellite-to-consumer technology has progressed to the point where the penalty fee is no longer a disincentive. A number of larger businesses (who can easily afford to pay the fee) now have Starlink terminals, and one assumes are paying FIG the £5,400 fee to maintain this.

Ability to pay has no effect on what the user may wish to do online. The effect of the fee is now not a disincentive, but to introduce a two-tier market for consumers, the "can affords" who are able to access modern high-speed low-latency internet, and the "cannot affords" who may have exactly the same requirement but for whom the cost of the licence fee is simply a barrier to access. This is unacceptable, and potentially unconstitutional. There is unfortunately insufficient space available within submissions to fully explore that argument.

What needs to change?

The mechanics of reducing or removing the fee are straightforward, but require minor legislative change.

The Attorney General has previously advised (email pers. comm. dated 7 Feb 2024) that he does not consider that he has discretion to charge an alternative or reduced fee under the current legislative provision. This provision is contained within the *Communications (Fees) Regulations 2019* (hereafter referred to as CFR2019 or "the Fees Regulations").

He wrote: "I believe that the provisions of the Regulations and of Part 8 of the 2017 Ordinance are such that I have no power to vary or waive the fee as prescribed. If a VSAT licence is to be granted, I must collect the full fee."

If correct, this means the Regulations must change. The most straightforward way to deliver the change would be to amend the Fees Regulations to:

- Update the VSAT definition in section 3, to clarify inclusion of Starlink and other future LEO and MEO terminals under the definition, and
- Update the Schedule to the Fees Regulations to alter the £5,400 fee to £0 (or an administrative amount).
- Optionally, but preferably, also amend the Schedule to the Fees Regulations to remove the charge from being an annual charge, and replace it with a longer duration (or lifetime) period of validity.

My rationale for the last point is that given the wider landscape – the current Exclusive Licence is due to expire on 31 Dec 2027 – it may be appropriate for the current purposes to issue all near-term VSAT licences for Starlink users to expire with the Exclusive Licence. This would be administratively simpler than an annual renewal, but would protect options for the future provision of communications in the Falkland Islands beyond 2028. How (or indeed if) to require licensing arrangements for direct-to-consumer satellite internet services can then be considered along with the other complex matters that need clear policy direction before 1 January 2028.

Delivering the above bullet points would require a short set of amending secondary Regulations to be approved. No change is required to the primary legislation (the Communications Ordinance 2017) as no mention of the concept of a VSAT, or the fee or fee level, appears in the primary Ordinance.

An alternative approach would be to alter the Fees Regulations to introduce discretion to the Regulator to alter or waive the fee for a VSAT Licence in cases where it was deemed appropriate. However this risks that discretion will not be applied where intended, because the policy and legislation is decided by elected Members, whereas the exercise and application of the powers conferred by that legislation, once approved, is independent to the Regulator. It is therefore not the recommended option.

Demand 2: Starlink domestic tariffs and regulatory approval

Starlink does not currently have regulatory approval to operate in the Falkland Islands and it is therefore not currently possible to order a Starlink dish for delivery to a residential address in the Falkland Islands. The author first paid a Starlink deposit in May 2021, with service then shown as "during 2022". Service is currently shown as being "in 2025" although this date is highly volatile and has changed many times (sometimes to "unknown").

The current situation appears to be that in order to be 'legal' a user is required to opt for a Starlink global roaming package registered elsewhere, which costs £200 a month, and is about to rise to £380 per month. This allows roaming use almost anywhere on the planet, but does not buy any better service level than the residential packages which are, for the UK market, typically priced at £75 per

month. Latin American markets have a significantly cheaper residential package as the pricing structure varies between markets.

Regulatory approval would enable Starlink to offer residential, business and (hopefully) regional land mobile packages within the Falkland Islands as a specific market. It is assumed that the cost of the standard residential package for one address would be somewhere in the range £50 to £75 per month, the upper figure being defined by the UK market price.

Regional roaming

It would be very beneficial for users who regularly move between addresses if the Starlink residential package either enabled access across the Falkland Islands, or there was a slightly higher "regional roaming" package that did so. If the opportunity arises for FIG to make representations to Starlink to enable this during discussions, this would be sensible. There are a number of people that move around between farms or islands, and may not necessarily have reliable communications available in all locations in which they live and work, but would not wish to have multiple Starlink dishes and subscriptions for occasional use.

Camp communications are challenging at the best of times with fairly regular outages of services provided by the exclusive licensee, and variable coverage in remote areas. Cross-island usability would be highly beneficial for these users and would generally also serve to enhance the safety and welfare of people living and working in remote parts of the Islands by providing an independent means of communication when the service provided by the exclusive licensee is not operating or unable to provide service.

Will Starlink apply for regulatory approval?

The author believes that it is fairly unlikely that Starlink will seek regulatory approval while a substantial end-user licence fee is in place levied by FIG as it goes against the Starlink business ethos of affordable internet anywhere. Equally, it seems unlikely that Starlink would be willing to pay a substantial licence fee to FIG to gain regulatory approval when even the fee for the exclusive licence is nominal.

Although considering Starlink's possible reaction to FIG action/inaction on fees is necessarily speculative, these factors should be taken into account, and if possible confirmed with Starlink, when considering how to enable services for users in the Falkland Islands in line with the petition aims. It is understood Starlink's view has been sought by the Select Committee, which is helpful.

Effect on the exclusive licensee

The Select Committee will no doubt receive representations from the exclusive licensee, which will probably demonstrate some loss of revenue. However, the author does not believe that this is catastrophic for the business model of the exclusive licensee. Published information suggests that current profit levels are excessively high, and certainly not commensurate with what would reasonably be expected for a company in a protected monopoly trading position. As such, a significant reduction in profit should not only be tolerable, but expected. Such profits should never have been allowed to occur if the regulatory principles contained in the Communications Ordinance 2017 had been applied rigorously.

What would I do as a customer?

As an individual end user my own expenditure on fixed and variable fees is currently approximately £260.00 per month. This is comprised of:

Landline rental 2 properties @ £11.00	£22.00
AIS service subscription	£11.00
MED broadband package 2 properties @ £82.50	£165.00
Mobile SML monthly plan 2 people @ £30.00	£60.00

Call charges are usually nominal and less than £10.00 per month in total so have been discounted.

Total monthly fixed charges paid to SSA Ltd £258.00

Given freedom of choice, and in an unrestricted situation, my most likely choice would be to reduce each Sure internet package by one (from MED to SML) and maintain those as a backup while maintaining all the other Sure services. This would result in the monthly spend being:

Landline rental 2 properties @ £11.00	£22.00
AIS service subscription	£11.00
SML broadband package 2 properties @ £37	£74.00
Mobile SML monthly plan 2 people @ £30.00	£60.00
Total monthly fixed charges paid to SSA Ltd	£167.00

The saving of £91.00 per month would then be sufficient to fund a Starlink subscription, meaning a substantial uplift in overall service with no additional expenditure. <u>Importantly, the remaining</u> contracted Sure Internet bandwidth would be lightly used or not at all, in this scenario.

How would this affect the exclusive provider? Satellite connectivity has always been portrayed as the very expensive part of the service, which is why we are so restricted and cannot just "have more". There is obviously a loss of revenue but the expenditure on international bandwidth can then be reshaped to substantially reduce the cost base.

Should my own usage intent be reflected across many users, the nett effect would be:

- Contracted bandwidth provision would be reduced in line with reduced revenue
- International satellite bandwidth (and thus cost) could be reduced to maintain the same headline contention ratios
- A significant proportion of international bandwidth that is being paid for by users who also maintain Starlink as their primary connection, will be unused for the majority of the time
- Remaining users who are depending on Sure services should therefore experience a substantial improvement in effective contention ratio, and improved overall network performance and experience

This is surely a win win situation for everybody except SSA Ltd shareholders.

Will a Sure LEO/MEO alternative solve the problem?

It is well known that Sure has invested in the OneWeb network and installed hardware during 2023, with significant technical problems having since been uncovered. Knowledgeable commentators suggest that even if the technical issues are resolved, the Oneweb service is unlikely to provide latency much below 300msec. Low-latency is generally defined as less than 150msec, while Starlink services are tested and proven to be able to consistently and reliably deliver 70msec.

What might a new Sure service provide?

The author first requested visibility on new services as far back as December 2023 but the position remains wholly opaque. However it seems very unlikely to improve significantly in the near term.

For most users, the end user connection is still through a phone line using ADSL technology. Download speeds may increase somewhat, although it is worth noting the multitude of public complaints from Stanley users who are often unable to achieve even the current modest MED package line speed of typically 6Mbit/sec, using an ADSL connection and the supplied white Zhone modems.

Regardless of international network capacity, the highly constrained upload speed (currently 1Mbit/sec) is unlikely to increase significantly on any ADSL connection due to the underlying limits of what is now quite an old technology. This will therefore mean that cloud-based storage such as Onedrive remains effectively unusable. Upload speeds are already a substantial constraint which make advanced social media use difficult, particularly where video material requires to be uploaded to websites that are often not tolerant of slow or unreliable upload connections. It can take 45 minutes to upload a minute or two of video material if it works at all, and often multiple attempts.

Unless and until the last-mile network feeding end users moves to some alternative technology (such as "fibre to the premises"), there does not appear to be any convincing proposal to upgrade the existing delivery model based on a central hub and the existing copper network. The vast majority of ADSL users will be stuck with a technology that is 20 years old, so even if the Oneweb service is rolled out quickly and to all users, it will not provide competitive latency or upload bandwidth, and seems unlikely to provide particularly competitive download bandwidth. At best it might achieve 10% of what Starlink can provide, with untested and unproven reliability.

The only credible alternative for users to enable <u>effective access to modern services now</u> is a direct-to-satellite service. Allowing use of LEO services like Starlink is therefore essential to facilitate access to modern services for those who demand it. There seems to be no merit in requiring this access to be provided through the exclusive licensee.

Supporting policy and legislation

The Communications Ordinance 2017 helpfully sets out guiding principles. It is considered that the principles highlighted in **bold** in the list below are particularly aligned with, and met by, delivering the demands of the Petition:

4. Electronic communications objectives

The electronic communications objectives for the purposes of this Ordinance are —

(a) to promote the public interest generally in relation to electronic communications;

- (b) to facilitate effective communication in the Falkland Islands and between the people of the Falkland Islands and the rest of the world;
- (c) to ensure effective regulation of the supply and operation of electronic communications services;
- (d) to enhance the efficiency of the Falkland Islands' commercial electronic communications sector;
- (e) to support the growth and development of the Falkland Islands' economy;
- (f) to promote investment and innovation in electronic communications networks and services;
- (g) to promote optimal use of radio spectrum;
- (h) to provide affordable access to high quality networks and carriage services in all regions of the Falkland Islands so far as reasonably practicable;
- (i) to maintain public safety and security;
- (j) to contribute to the protection of personal privacy;
- (k) to avoid public nuisance through electronic communications so far as reasonably practicable;
- (I) to limit adverse impact of networks and carriage services on the environment so far as reasonably practicable;
- (m) to ensure access to all key electronic communications services;
- (n) to encourage infrastructure investment into the Falkland Islands;
- (o) to provide continued growth in international capacity to support increasing usage levels, so far as economically feasible;
- (p) to support the delivery of public sector services (including education and healthcare);
- (q) to strengthen the regulatory environment that supports development of the Falkland Islands' electronic communications sector; and
- (r) to promote innovative services to support the needs of the people of the Falkland Islands; and
- (s) to promote and support the use of up to date technologies in providing electronic telecommunication services.
- 5. Regulatory principles

The regulatory principles for the purposes of this Ordinance are —

- (a) that public policy in relation to electronic communications should aim to pursue the electronic communications objectives;
- (b) that the needs of the people of the Falkland Islands are the paramount consideration in operating the licensing regimes under this Ordinance;
- (c) that additional regulatory or administrative measures should be introduced only —
- (i) where the Regulator is satisfied that the existing licensing regimes are insufficient for the efficient and effective pursuit of the electronic communications objectives;

(ii) having regard to the costs and impact of those measures on affected parties (including consumers, licensees and other undertakings);

(iii) if the Regulator is satisfied that the measures are proportionate, transparent, accountable, fair and non-discriminatory.

Conclusion

The Petition has over 2,400 signatures. This is highly likely to be the biggest formal expression of public opinion on a matter in the Falkland Islands in history, comfortably beating the number of votes cast in the 2013 referendum. It underlines the deep-seated public dissatisfaction with the current service levels and the need for change.

Delivering on those demands by enabling licensed and legal Starlink usage at a domestic tariff both supports the wishes of the people and delivers an outcome that aligns with the approved principles contained in the Communications Ordinance 2017.

Stephen Luxton

21 August 2024

WE 27

WRITTEN SUBMISSION - MIKE TRIGGS

-----Original Message-----

From: Micheal Triggs <trigger@horizon.co.fk> Sent: Wednesday, August 21, 2024 2:52 PM

To: Cherie Clifford (Clerk of the Legislative Assembly) <clerkofassembly@sec.gov.fk>

Subject: Starlink

Dear sir/madam.

I wish to give my opinion on Starlink. This is by far a superior system than Sure South Atlantic Falklands are prepared to supply. Within the interest of developing the Falklands, starlink should be available to all in the Islands at a sensible affordable rate.

Sure South Atlantic supply an expensive outdated slow internet system which is useless at uploading or downloading very often timing out before the completion of an upload or downloads using up megabits that Sure South Atlantic Falklands has charged the customer for, increasing their own profits at the cost to their customers.

Thank you for your consideration into allowing Starlink to be available to all in the Islands at a sensible affordable rate.

Kind regards, Mike Triggs, 3 fieldhouse close, Stanley.

WE 28

From: Smokie <smokiemc@horizon.co.fk> Sent: Thursday, August 22, 2024 9:38 AM

To: Cherie Clifford (Clerk of the Legislative Assembly) <clerkofassembly@sec.gov.fk>

Subject: Starlink

Dear Assembly.

Requirement for Starlink as follows.

With the current system we have all eggs in the one basket situation, mobile, internet and land line on the one station at Inlet Hill, recent upgrade has further added to this problem with internet and land line being the same system, with the previous system the was a chance one could stay on but usually didn't.

Mobile coverage patchy and no way reliable and mostly doesn't work in the house.

Starlink would give us OAPs the necessary backup for safety.

As I perversely said to Roger and Leona I have no intention of giving up or reducing the current med package we have with Sure, assuming there is no fee for a licence Starlink will be additional.

Kind regards

Fraser McKay Teal River Farm West Falkland Rob Burnett 4 Dairy Paddock Road Stanley 64114 rsburnett@gmail.com

20 August 2024

Falkland Islands Legislative Assembly Select Committee on Starlink petition Gilbert House Stanley

Dear Select Committee members,

No doubt you have had many submissions in relation to this petition, but I wanted to give my perspective as a sole trader whose livelihood depends on a reliable and reasonably fast internet connection – and who cannot afford the current VSAT licence fee.

I returned to the Falklands in late 2021 after many years working in London. My most recent job there was editor for the official Formula 1 racing website. When I left that job to return home, my boss at the time asked if I'd be interested in freelance work, working remotely from here in the Falklands. I had to turn him down on the basis that I wasn't confident the internet here could cope with the demands of what would be required in a live publishing environment, with millions of fans depending on the information being right up to date – to the second.

Eventually my boss persuaded me to try to cover a few shifts for him – and the internet was *almost* just about good enough, though there were plenty of moments when I was unable to follow the live track action because my feed froze, thanks to the slow speed internet here.

Since then I've been engaged to do more and more work for F1 to the point that now it is virtually my sole income.

The work includes a variety of writing and editing tasks, but to illustrate the point about internet speed, over the course of a Grand Prix weekend I'm required to stream all practice, qualifying and race sessions live – while at the same time editing and publishing short video clips to the official website, all via online publishing platforms.

As you can imagine, this places a big strain on my internet connection – and there hasn't been *one single weekend* in the past two-and-a-half years when it has worked entirely properly for the whole weekend. For almost every track session the picture is not clear enough for me to read all the key information on the screen – and that is when it's not buffering or freezing. Usually I can just about get around that and make-do, but it is far from ideal – especially in a live sport publishing environment when the pressure is very high to make sure articles/videos are 'live' as soon as possible, right down to the second.

There have also been at least four occasions when the internet completely cut out for a significant period of time while I was in the middle of a shift. I have been left helpless and unable to do my job – on one occasion for two hours and in the middle of the night (during the Australian Grand Prix) – when Sure no longer has a night watch person so I was unsure if they were even aware of the fault.

Not only could I not work – and had no idea when or if the fault would be corrected – but I could not even contact my boss or colleagues to let them know, since the international phone lines were out as well. On one occasion I was forced to borrow a satellite phone to call my boss, because the internet/phone lines were down and I was unable to start work when required.

After the worst of these outages last year I did make an official complaint to Sure, and received this reply: "We are sorry about the issues that you experienced from midnight on the 1st April and do appreciate your feedback."

That was hardly reassuring – and I find myself often stressed that the internet is going to suffer an outage at any moment. If that happens too often, or my work suffers because of the poor speeds, then my company in UK will simply stop using me (I'm freelance so they can do this at any time), and I will be out of a job.

Frankly, I live in constant fear that one more bad weekend with the internet could see my income disappear. As I say, there have already been times when this has been critical – and only some creative thinking on my part and some discretion from my (very understanding) boss has prevented me losing this job entirely. Yes I have an understanding boss, but that understanding will only extend so far, and I hate having to rely on it, or be an unreliable worker.

I also live in fear that one day Formula 1 will introduce a new system or software package that simply won't work with the internet as it is here. This has already been an issue but thus far I've just about been able to get around it by switching browsers and other work arounds. But I'm sure one day soon my luck will run out on that front

Then there is the problem of metering as well. In June, for example, there were three Grands Prix – which means I had to be extremely frugal with my internet as a huge chunk of my allowance was sucked up by those three race weekends.

Now, you could of course argue that it's my choice to A) live here and B) do the work that I do – and that I have to make do with what is available

But I spent years in UK building up the knowledge, experience and contacts to work in this specialist field – and in that time I always wanted to come home, but never felt it was feasible to do both.

As you may know, I grew up here in the Islands. My family's history here goes back to the early 1970s. I am a Falkland Islands status holder. This is my home. I'm now a home owner and a tax payer here and this is where I want to be.

Some years ago it was a legitimate argument that living somewhere like the Falklands comes with sacrifices and compromises – like a poor internet service. That made sense then, because of the combination of the tiny population and the technology available at the time.

But things have changed – technology has moved on. The reason we are struggling in this way is now *not* a technology problem, but a regulatory one. I could and did accept the compromise when there was little in the way of realistic alternatives – but now there are low cost alternatives I find it very difficult to accept we must simply accept the situation at least until 2027. I have ridden my luck far enough with this

over the past few years – I just don't believe it will hold out for another three years without a serious effect on my work, and a very real risk of loss of employment.

I know that MLA Roger Spink has spoken in the past about being keen to explore enticing so-called 'digital nomads' to live and work here in the Falklands.

I think this is an excellent idea – I'm sure there are plenty of people who now work remotely and who would love to come and live in somewhere as beautiful as the Falklands. I can imagine there are also plenty who would love to live out in camp.

But I have to tell you, that idea is utter fantasy unless the internet issue addressed.

The only reason I'm doing it is because this is my home and I'm willing to try to make it work despite the frequent and restrictive issues I face. But there is no way you are going attract people with no real connection to the place unless there is a vast improvement in the internet service here.

I imagine there are also other Islanders working abroad who, like me, would like to come home and are perhaps already work remotely elsewhere, but feel they cannot take the chance and return to the Falklands until this issue is properly resolved.

Many people in the Islands know what I do for a living and I've lost count of the number of times people have said "well you *must* have Starlink to do your job". I do not have Starlink or any equivalent – I only use my Sure broadband package.

Many businesses and fishing companies here can afford the current FIG licence fee to get around this issue, but as a sole trader I simply cannot afford to do that.

If that licence fee was removed or greatly reduced, I would absolutely get a Starlink dish/package as soon as possible – but I would also keep a Sure package.

For me, the security of having both would mean I can continue my work with peace of mind that I have a back-up for when either goes wrong.

I know the big issue here is the exclusive contract with Sure but there *has* to be a way round this. I don't think it is an exaggeration to say that this is the most contentious issue in the Falklands right now – and one that is holding back the community and growth of the economy more and more with every passing month.

We've also seen recently that Ascension Island have managed to overcome this issue, with Sure still in place there.

I'm well aware my particular circumstance is hardly significant in the grand scheme of things when there must be far more important issues like the hospital having access to experts and consultants overseas, and the education system being able to access all the tools they need, but I thought it might be instructive to let you know my experience as a remote worker wanting to make the Falklands my long term home while at the same time trying to cope with an insufficient service.

This is not a moan about not being able to watch Netflix or browse Facebook – this is a critical livelihood issue from a tax payer here in the Islands.

I really hope we can see some action on this front very soon. In my case at least, 2027 is going to be far too late.

Yours sincerely,

Rob Burnett

Dear Starlink Select Committee

My views on the petition to abolish or reduce the VSAT licence fee for Starlink.

I appreciate the opportunity to present my views on the petition calling for the abolition or reduction of the VSAT licence fee for using Starlink. The petition highlights a significant amount of residents are in favour of purchasing a Starlink antenna plus subscription. The petition, whilst well signed by many really only catered for the general public and businesses but would also be transforming for all departments within FIG and education as well as transforming the needs of the hospital. There were FIG employees who felt signing the petition could look unfavourable on them and would have also signed it had this not been the case increasing the numbers even further.

1. Starlink offers satellite internet that is crucial for the Falkland Islands where the current internet infrastructure offered by Sure is lacking or non-existent at times. High licence fees act as a barrier to entry, exacerbating the digital divide and hindering socioeconomic development and are designed to make the use of Starlink unaffordable and difficult to obtain. Abolishing the fee can significantly enhance internet accessibility, promoting digital inclusion and ensuring that more people on the Islands can benefit from reliable internet services. Whilst any fee may bring in an ongoing income I feel it has gone beyond raising revenue given that the high costs of any service from Sure have been endured for many years and subsidised by FIG. For this reason I feel it would be only right to abolish any fee for VSAT access (Starlink and potentially any future provider).

Abolishing the VSAT licence fee can have positive economic impacts. Improved internet access can boost local economies by enabling remote work, e-commerce, and access to global markets. Furthermore, it can attract new residents and businesses to rural areas, fostering economic growth and diversification. While a licence fee generates revenue for the Communications Regulator, the potential economic benefits of broader internet access would outweigh the revenue loss.

Starlink's satellite internet service represents a technological advancement that can complement existing communication infrastructure. Encouraging the adoption of such technologies with no licence fees can spur innovation and competition in the telecommunications sector. This can lead to improved services, lower prices, and increased investment in new technologies, benefiting consumers and the industry as a whole.

2. Approving Starlink would significantly lower the cost of internet access for Falkland Islanders whilst also providing a more reliable and faster service. Starlink subscriptions globally are currently significantly lower than Sure fees with unlimited data packages compared to Sure's highly limited speed and data offerings. Residents may be paying higher

Starlink rates due to the reliance on global roaming tariffs given that no regulatory approval has yet been signed. Domestic tariffs would provide a more economical alternative, easing the financial burden on households and businesses.

Improved internet access can significantly benefit education and healthcare services. Students can access online learning resources, and healthcare providers can utilize telemedicine, enhancing the quality of education and healthcare on the islands.

Allowing Starlink to offer domestic tariffs would introduce competition into the local internet service market. This could drive down prices and improve service quality as Sure may also seek to enhance their offerings to remain competitive.

Approving Starlink domestic tariffs in the Falkland Islands presents a promising opportunity to enhance internet access, reduce costs, and stimulate economic and social development. While there are challenges to address, the potential benefits for residents, businesses, and essential services make a compelling case for regulatory approval.

Yours Sincerely

Christine Ford



Select Committee Gilbert House Stanley

21 August 2024

Dear Committee Members

Thank you for the invitation and the opportunity for Sure South Atlantic Ltd (Sure) to submit a written document to the Select Committee.

We note the petition addresses two main areas:

- 1. The abolishment or reduction of the current VSAT licence fee
- 2. To request regulatory approval for Starlink to offer domestic tariffs in the Falklands.

Separately, we have received a letter dated 2nd August from the Select Committee that poses three specific questions to Sure and which cover the same themes as the petition. We therefore set out our responses to those three questions below and in doing so, would ask that you treat this as our written submission.

Background Context

As you are aware Sure holds an exclusive licence that was issued under sections 33 and 62 of the Communications Ordinance 2017 on the 7th April 2017 with an effective date of the 1st January 2016. The exclusive Licence continues for an initial period of twelve years and whilst the Licence may be terminated by either party serving 2 years written notice to the other party, this notice cannot expire before the end of the Initial Period, that is before 31st December 2027.

The Licence grants Sure exclusivity in the provision of Fixed Services (defined to include fixed line access services and fixed line internet access services – that is broadband); mobile services including internet access services, and commercial telephony Satellite services for the Falkland Islands.

Responses to Select Committee's questions

 What is Sure's view on the merits or otherwise of this petition? Please explain how you think the Legislative Assembly should respond and why it should respond in this way.

Sure is disappointed that the Select Committee is considering the petition given that it should be aware that, as summarised above, Sure has an exclusive licence that does not end until 31st December 2027 (should FIG serve 2 years' notice on the 1st January 2026). As such, the request to approve Starlink – that is, to issue it



with a licence – so that it can offer domestic tariffs, cannot be considered within the current exclusive licence period. To do so, would be a breach of Sure's exclusive rights and against the provisions of the Communications Ordinance 2017 ("the Ordinance").

That is not to say that we are unsympathetic to the sentiments that have been the driving force behind the petition. We understand that some members of the community want to experience faster broadband speeds and lower prices. However, the question of how best this can be achieved in small, isolated economies such as the Falkland Islands, needs to be given careful consideration. In particular, broadband services cannot be considered in isolation of other communication services including mobile and fixed line telephony services. The ability to provide telecommunications services to residents in all parts of the Falkland Islands – including its most remote islands – also needs to be taken into account.

Indeed, we are aware that the Falkland Islands Government ("FIG") has only recently issued a tender for consultancy support to undertake a wider strategic view of the Falkland Islands' telecommunications needs for the period from the end of 2027. We note that the tender document states:

"This tender seeks a telecommunications consultancy to lead work on engaging with all users on future needs, providing advice to FIG on its options and possible routes for future provision"

We understand that the appointed consultant will provide an assessment of current and future telecommunication needs in terms of the services and connectivity outcomes required for the Falkland Islands, as opposed to any particular technologies that may be required. The consultant is expected to engage with a range of stakeholders and Sure will be very keen to engage with them to help them to understand the current environment. We understand that the consultant will be expected to deliver their initial recommendations towards the end of 2024, and to then support FIG throughout 2025 in terms of identifying potential suppliers that can deliver the outcomes that have been identified for the post 2027 period. We would very much hope that Sure would be considered a potential supplier for that period.

Our main point, however, is that we believe it is this review that should be considering the questions raised by the increasing (and currently often unlicensed) use of VSAT and the potential implications of licensing a provider such as Starlink. As quoted in the recent tender document with regard to end user VSAT licences:

"There is a slow but steady number of requests for VSAT licences..... Primarily this is around Starlink systems. Recent action by Government has reminded the public of the need for a licence for Starlink, and of the risk of enforcement action if this requirement is not met."

It is also worth noting that a similar strategic review of Falkland Islands telecommunications needs was conducted in the period leading up to the grant of Sure's current licence. This was undertaken by Cartesian and Preiskel & Co and the findings of this — which are published on the FIG website - showed that the Falklands was too small to have more than one telecommunications provider, thereby resulting in their recommendations for an exclusive licensee. Whilst we are now 8 years on, in 2024 there would seem to have been little change in the demographics and economics of the islands which would significantly change these findings. However, we believe it is right and proper that a new, comprehensive review is conducted, and we



will be more than happy to engage with the appointed consultants and provide the assistance needed so they can make their recommendations to FIG.

A focus on the implications of allowing a provider such as Starlink to "cherry pick" and only provide broadband services, needs to be a central part of that review. It will go to the heart of what this will mean for the ability of all customers within the Falkland Islands to access other telecommunications services in addition to broadband, including mobile.

It should also consider important issues such as the cyber-security and law enforcement implications of extensive use of VSAT. Sure plays an important role in assisting with potential criminal investigations as well as ensuring the overall security of the Falkland Islands and it is not obvious to us that this is being recognised and properly considered as part of the current debate around the use of VSAT.

- 2. What would be the impact on Sure's commercial operations in the Falkland Islands if:
 - a. The VSAT licence fee was abolished
 - b. The VSAT licence fee was reduced to £180 per annum

In answering this question, we believe it is relevant to give the context to the current VSAT fee. Throughout 2016 and the start of 2017, there were extensive discussions between Sure and FIG leading up to the grant of Sure's exclusive licence, where the circumstances under which VSAT licences could be issued and the fee for any such licences, were a central feature. This resulted in the approval in 2016 by FIG of the VSAT Policy and the subsequent publication of VSAT Licence Guidance Notes in November 2019, that were based on and referenced that policy. The Guidance Notes state that a VSAT Licence should only be available under exceptional circumstances, given that the policy had recognised the communication needs of the Falkland Islands were best served through an exclusive licence. As such, any applicant for a VSAT Licence would need to demonstrate the exclusive Licence arrangements were not adequate for their needs and, crucially, that they could provide evidence that they had engaged with Sure to establish that was the case before submitting an application. The Guidelines also set out the principle used to set the Licence fee of £5,400, which was to encourage people to participate within the exclusive Licence fee, noting: "Operating outside the exclusive Licence regime usually disadvantages the general public interest as collective purchasing provides benefits for the population at large."

It is important for the Committee to recognise that an acceptable VSAT policy — including an appropriate fee was a significant factor in Sure agreeing to proceed with the exclusive licence. Sure was reassured by FIG that the policy would ensure that throughout the term of Sure's exclusive licence, any VSAT licensing would be very limited and subject to the applicant meeting the strict criteria as set out in the policy and the subsequent Guidelines. This was to ensure that Sure's exclusive rights were upheld so that Sure could continue to serve the telecommunications needs — fixed line, broadband and mobile - for all the Falkland Islands' communities including those located in the most remote areas.

The possibility that the VSAT policy would not be upheld by FIG, or that it would be fundamentally watered down in the manner that is now being requested by the petition, was not something that either party



contemplated would happen during the exclusive licence period. Sure has copies of the meeting notes and draft documents leading up to the policy paper and the Licence and the Ordinance being finalised – as we would assume does FIG - which demonstrate how important this issue was to the satisfactory conclusion of the Licence negotiations. Sure also engaged with FIG when they were drafting the Guidance Notes so that both parties could be assured that they reflected the intentions of both parties, as expressed in the legally binding Licence and Ordinance.

Sure's exclusive Licence has meant that we have been able to continue to offer services to customers in the more remote areas of the Falkland Islands, which would otherwise be uneconomical to serve, as these customers can be cross subsidised from those customers located in easier to serve areas. This means that all customers can be charged the same price for their communications needs, regardless of any differences in the actual costs of providing service to different customers. That is, exclusivity has allowed Sure to meet its universal service obligations including the provision of access to basic services to all customers at reasonable and uniform prices, regardless of a customer's location. It has also ensured that we have had the incentives and ability to make ongoing investments.

The increasing use of VSAT – which would be exacerbated under a lower or no licence fee approach – would undermine Sure's ability to provide a full range of telecommunications services to all customers at affordable, uniform prices, and to do so regardless of how costly it is to provide services to individual customers due to their location.

There are also national security issues associated with VSAT use. The Ordinance contains important provisions for legal interception and data retention, which were a major focus of attention by FIG during the 2016/17 Licence negotiations. Given the current geo-political landscape along with ever increasing cyber-security threats, they would seem even more important today. At the most basic level, Sure already assists the relevant authorities in the Falkland Islands in terms of law enforcement and "life at risk" situations and it is not clear how these important functions would be fulfilled if "traditional" fixed and mobile telecommunications services could no longer be sustained. The extent to which these important aspects of the Ordinance could/would be complied with by Starlink is also questionable. What is currently of greater concern to Sure is the extent to which how the increasing use of unlicensed VSAT equipment is already compromising these important aspects of the Ordinance.

3. For regulatory approval to be given for Starlink to offer domestic tariffs it would first require that Starlink were licensed to provide services in the Falkland Islands. What are Sure's view on licensing Starlink: is it a natural consequence of offering VSAT licenses (to end users); is it compatible with Sure's exclusive licence?

As noted above, under the current telecoms legislation as set out in the Communications Ordinance 2017, FIG cannot issue a licence to Starlink when there is already an exclusive licensee in place. Sure's exclusive licence continues until the 31st December 2027 and will only end on that date if 2 years' notice has been served on the 1st January 2026. The question as to whether such notice should be served is, we understand, one of the questions that the appointed consultants for the current FIG tender will be considering. We would



therefore respectfully like to take this opportunity to remind the Committee that when assessing the merits of the petition, they cannot ignore the legal framework that currently exists in the Ordinance. To suggest that regulatory approval could be given to licence Starlink to operate within the Falkland Islands would not be compatible with the fact that Sure has been granted an exclusive Licence under Part 7 of the Ordinance. Consistent with Part 7, section 62 of the Ordinance, the Governor entered into a written agreement (namely, through the Licence issued in April 2017) whereby Sure was licensed to provide electronic communications services (the definition of which includes data and internet services) on an exclusive basis. In agreeing to that exclusive Licence Sure accepted and has met various obligations that include a universal service obligation; obligations to protect subscribers (including a price control mechanism), and date retention and interception requirements, etc. As stated in section 62(3) of the Ordinance there can only be one exclusive licence in effect at any time. As such, it is not possible to also issue Starlink with a licence for the provision of data and internet services when Sure is the exclusive licensee for these services.

We note the requests in the letter sent to Sure from the Select Committee to provide financial modelling. This is something which Sure would discuss with FIG as opposed to the Committee. As noted above in response to question 1, FIG has already tendered for a telecommunications consultant to understand the future needs of the islands and the successful bidder will advise FIG on future telecoms provision. Sure will work with the appointed consultant and FIG and we will ensure that we directly provide them with the financial information that may be required to support them in the decision-making process. Sure believes the information requested from the Committee does not fall within the Committee's terms of reference. The Committee is limited to the demands of the petition, and this does not include the financial and commercial details of Sure.

We would highlight, however, that only 18 months ago a five year contract was signed between FIG and Sure for Broadband Provision within the Falkland Islands. This contract is reviewed on a regular basis with FIG. Since the signing of this contract, Sure has:

- provided additional capacity and speeds to customers
- funded the whitelisting of 17 educational websites for FIG
- added additional capacity to local businesses and FIG during a business review
- and will very shortly announce some new Broadband packages

The above enforces our commitment to continually improve the services we provide to the Falkland Islands community. We have seen the feedback from the petition and from our own customer survey which was conducted in February of this year, and we take the results of both very seriously. We acknowledge that customers want a better broadband service and increased speeds and whilst we are trying to achieve this, we do know that we need to work harder in these areas. Our ability to do this will be seriously compromised should Starlink be licensed or the current rate of VSAT use – including what we believe is a significant and increasing amount of unlicensed VSAT use - be allowed to continue to grow.

We would urge Committee members to be mindful of the legal implications of this petition and ensure that they consider what is right for the entire Falkland Islands community. The acceptance of this petition would be a breach of Sure's current exclusive licence. Agreement to the demands of the petition would address only



one aspect of the current suite of telecommunications services which Sure offer and put in jeopardy all other services which are being provided. We understand technology has moved on significantly in recent years, as proven when only 18 months ago Members of the Legislative Assembly agreed, and FIG signed the current broadband agreement with Sure. However, as Sure continues to work in partnership with FIG for the remainder of the licence period we confirm our commitment to improve, invest and further develop island-wide connectivity for all sectors of the community.

Yours sincerely

Roma Stewart

Chief Executive

STARLINK

September 1, 2024

Ms. Cherie Clifford
Clerk of the Legislative Assembly
Falkland Islands Government
Office of the Legislative Assembly, Gilbert House
PO Box 754, Ross Road
Stanley, Falkland Islands, FIQQ 1ZZ

Dear Ms. Clifford:

Thank you for the opportunity to provide responses to the questions for the upcoming Select Committee meeting. If there is anything more that the Committee may request, please let me know.

1. Is Starlink currently considering applying for a service provider license in the Falkland Islands?

If not, under what circumstances would Starlink consider such an application?

Starlink would very much like to apply for a service provider license in the Falkland Islands. The only reason we have not to date is the exclusive contract in place with the incumbent telecommunication company. We were previously told we were not able to apply.

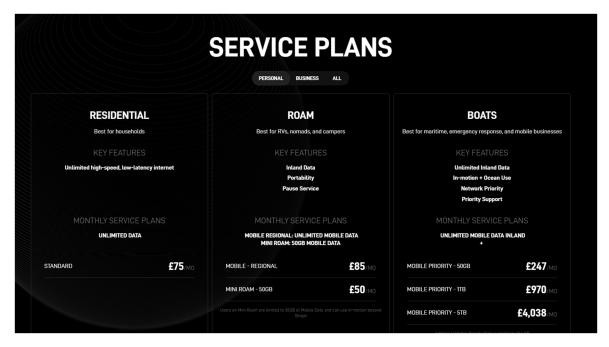
- 2. What would be the impact (if any) on Starlink's decision (i.e. whether or not to apply for a service provider license in the Falkland Islands) if:
- a. The VSAT license fee was abolished
- b. The VSAT license fee was reduced to £180 per annum.

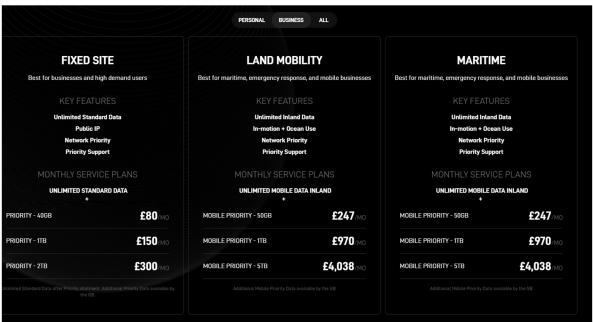
Starlink believes accessibility and affordability of our internet service are paramount to reaching the un- and under-connected. Per user fees ultimately increase the costs for subscribers. We encourage the removal of all per terminal fees, as is the norm in the 100+ markets Starlink operates in.

3. If Starlink were to apply for and be granted a service provider license in the Falkland Islands what would be the likely impact on the tariffs paid by end users for accessing Starlink services? We understand that this is a purely hypothetical question as no domestic tariff yet exists in the Falkland Islands, but we would appreciate any relevant comparisons between domestic tariffs and international roaming tariffs from other jurisdictions.

For example purposes only, here are the current available plans in the United Kingdom. The first is for Personal users and the second is for Business users. The most up to date plans and pricing can always be found at www.starlink.com and choosing the country of order.

STARLINK





Thank you for your consideration.

Rebecca Hunter

Rebecca Hunter
Director, Starlink Market Access