



WRITTEN REPRESENTATIONS OF Q-KON IN RESPONSE TO THE DRAFT AMENDMENT OF THE RADIO FREQUENCY SPECTRUM FEES REGULATIONS, 2010

Submitted to: The Independent Communications Authority of South Africa
For attention of: Mr Mandla Mchunu, Project Manager
By email: RRamendments@icasa.org.za; copied to mmchunu@icasa.org.za
Notice reference: Notice 3926 of 2026, Government Gazette No. 54677, 15 May 2026
Closing date: 16h00, 29 June 2026
Date of submission: 24 June 2026
Oral hearing: Q-KON requests an opportunity to make oral representations should the Authority elect to hold public hearings (see paragraph 12).

1. Introduction and overview

- 1.1. Q-KON welcomes the opportunity to make written representations on the Draft Amendment of the Radio Frequency Spectrum Fees Regulations, 2010, published under Notice 3926 of 2026 in Government Gazette No. 54677 of 15 May 2026 ("the Draft Regulations").
- 1.2. Q-KON is a satellite communications engineering and service-enablement business with direct operational experience of the high-throughput satellite ("HTS") systems, non-geostationary constellations, gateway earth stations and large-scale managed terminal networks that the Draft Regulations seek to regulate.
- 1.3. Q-KON supports the principal reforms in the Draft Regulations:
 - a) the introduction of a "blanket licence" for satellite terminal networks (regulation 1; Explanatory Memo paras 2.1, 2.7);
 - b) the Authority's confirmation that both the Gateway Earth Station licence and the User-Terminal Network licence are radio frequency spectrum licences and not a new licence type (Explanatory Memo para 1.6);
 - c) the introduction of the FREQ factor in the Satellite Hub Ground Station Formula, with the lower factors for higher bands (Explanatory Memo para 2.5); and
 - d) the Authority's stated objective of keeping South Africa an attractive destination for satellite operators while promoting efficient spectrum use (Explanatory Memo paras 2.3, 2.6).

- 1.4. These representations identify specific shortcomings in the Draft Regulations which, if left unaddressed, will produce legal uncertainty and fee outcomes that do not rationally reflect actual spectrum use. In summary:
- a) the definition of "blanket licence" does not identify who "operates" the network, and therefore who holds the licence and bears the fee, in the now-standard model where a local ISP's terminals connect to a foreign-operated satellite system;
 - b) the Satellite Terminal Network Formula (regulation 5(e)) does not specify how BWis measured for a blanket-licensed terminal network in which many terminals share, time-divide and dynamically access the same spectrum — leaving open a reading that grossly over-recovers; and
 - c) neither formula addresses multiple gateway earth stations, or multiple ISPs, using the same frequencies of one satellite platform — creating a risk of charging more than once for the same physical spectrum.
- 1.5. Q-KON's central submission is that the user-terminal side should attract a reduced fee regime that reflects the genuinely limited and shared spectrum impact of dynamically-shared terminals (sections 6 to 9 below).
- 1.6. Q-KON also draws to the Authority's attention a number of drafting and internal-consistency errors in the Draft Regulations that should be corrected before finalisation (section 10).

2. Legal and policy framework

- 2.1. The Draft Regulations are subordinate legislation made, as the Schedule records, under section 4(1) of the ECA, pursuant to the section 4B inquiry instituted on 14 August 2024 (Explanatory Memo para 1.1) and the Findings published in Notice 3144 of 2025, Government Gazette No. 52530 of 17 April 2025 (Explanatory Memo para 1.4).
- 2.2. As subordinate legislation, the fee regulations must be consistent with, and rationally connected to, the objects of the ECA, including the promotion of the efficient use of the radio frequency spectrum, competition, investment, affordability and universal access (section 2 of the ECA).
- 2.3. A fee that charges for spectrum which is not in fact exclusively or simultaneously occupied is in tension with the efficiency and affordability objects of the ECA. The exercise of public power must be rationally related to the purpose for which it is conferred — a foundational principle of South African administrative law.

- 2.4. Q-KON's purpose is to assist the Authority in producing a regime that is technically accurate, administrable and defensible.

3. Definition of "blanket licence" — who "operates the network"?

- 3.1. Q-KON supports the introduction of the blanket licence. Terminal-by-terminal spectrum licensing is unsuited to satellite broadband, where a network may comprise thousands or hundreds of thousands of technically identical terminals operating under common parameters.

- 3.2. The proposed definition (regulation 1) reads:

***"Blanket Licence"** means an authorisation that covers the operation of a network that connect to an unlimited number of terminals with similar technical and operational characteristics.*

- 3.3. **"operation of a network" is undefined.** The Authority itself confirms, at Explanatory Memo para 2.7, that the licence *"should not be seen as the licence associated with the terminal stations/equipment, but instead as the licence of the network that makes it possible to connect those terminals"*, and that this is intended *"to ensure accountability of operations even in an event where the satellite network's gateway is not located in South Africa."* Q-KON supports that objective. But the definition does not give it effect, because it does not say who "operates" the network. In the modern value chain these roles are usually held by different entities, often in different jurisdictions:

Role In The Satellite Value Chain	Function Performed
Satellite / space-segment operator	Operates the satellite payload, network control centre and frequency coordination, often outside South Africa
Satellite capacity provider	Holds and allocates capacity over the Republic
Local ECNS / ECS licensee or ISP	Provides service to South African end-users
Terminal distributor / installer	Supplies and installs terminals
End-user	Owens or uses the terminal

- 3.4. In the scenario where a local ISP sells user terminals that connect to a foreign-operated global satellite network — the definition does not say whether the "operator" who must

hold the blanket licence is the local ISP or the global satellite operator. The Authority's stated accountability objective (para 2.7) suggests it intends the locally accountable service provider to hold the licence even where the gateway is offshore; if so, the definition should say so expressly. As drafted, the same network could be attributed to more than one party, producing either double liability or no clear liability.

- 3.5. **"unlimited number of terminals"**. The phrase is apt to create uncertainty. A spectrum licence is, by nature, subject to technical, geographic and interference conditions, and the fee under regulation 5(e) is bandwidth-based. The definition should make clear that "blanket" refers to the absence of a requirement for an individual licence per terminal, not to an absence of conditions or limits on the network as a whole.
- 3.6. **Requested amendment.** Q-KON respectfully proposes a definition to the following effect:

***"Blanket Licence"** means a radio frequency spectrum licence that authorises the operation within the Republic of a satellite terminal network connecting multiple terminals with similar technical and operational characteristics, without requiring an individual radio frequency spectrum licence for each terminal, subject to the conditions imposed by the Authority; and the holder of the Blanket Licence is the person authorised to provide the relevant service within the Republic and accountable to the Authority for the spectrum use of that terminal network, whether or not the satellite network's gateway is located within the Republic.*

- 3.7. This formulation gives direct effect to the accountability objective the Authority itself articulates in para 2.7.

4. Satellite Hub Ground Station Formula and the FREQ factor

- 4.1. Q-KON supports the Satellite Hub Ground Station Formula —

*Hub ground station Fee = Max (R_{ui}; UNIT * FREQ * BW * SEC)*

and in particular the FREQ factor. The lower factors for higher bands (0.15 for 17–23 GHz; 0.05 for 30–50 GHz) appropriately reflect the favourable spectrum economics of higher-frequency HTS systems and will improve the affordability of satellite broadband in underserved areas, advancing the ECA's objects. Q-KON also supports the alignment with the Point-to-Area formula noted in para 2.5.

- 4.2. **The FREQ table omits the 23–30 GHz band.** Explanatory Memo para 2.5 expressly states: "if the frequency band is between 23 GHz and 30 GHz, a factor of 0.1 will apply." But the FREQ table reproduced immediately below it runs "17 GHz – 23 GHz → 0.15" and then jumps to "30 GHz – 50 GHz → 0.05". There is no row for 23–30 GHz, and the

0.1 factor referred to in the text does not appear in the table. Given that this is precisely the band used by much Ka-band HTS capacity, the omission is material and must be corrected so that the table reflects the 23–30 GHz / 0.1 factor stated in the text.

- 4.3. **"Rui"/"Ru"/"RUL" inconsistency.** Regulation 5(d) uses "Rui" in the formula and "Ru" in the explanatory sentence, while the Findings formula in para 2.5 uses "RUL". One defined term should be adopted and defined consistently — e.g. *"RUL" means the minimum applicable radio frequency spectrum fee for satellite uplink assignments as prescribed by the Authority.*
- 4.4. **Multiple gateways using the same spectrum is not addressed.** Modern satellite systems deploy multiple gateway earth stations for redundancy, site diversity, rain-fade mitigation (especially in Ka-band), load-balancing and disaster recovery. Two gateways being *capable* of operating on the same frequencies does not mean each independently sterilises a separate, equivalent block of spectrum. The Draft Regulations do not say whether each gateway attracts a full, independent fee. If they do, the regime over-recovers for resilience infrastructure that produces no proportionate increase in exclusive spectrum occupation — discouraging the very network resilience the Authority should encourage.
- 4.5. **Requested amendment.** Q-KON respectfully proposes that the Authority clarify that:
- a) the full fee applies to the primary / master gateway earth station; and
 - b) a reduced fee applies to secondary, standby, diversity or redundant gateways forming part of the same satellite platform that do not create additional simultaneous, exclusive spectrum occupation —
- so that secondary gateways are treated as secondary users of the same assigned spectrum rather than as independent full-fee assignments.

5. Satellite Terminal Network Formula — the central concern

- 5.1. Regulation 5(e) provides:

*Terminal network Fee = (UNIT * BW * SEC)*

"The fee is the multiplication of the unit price (UNIT) by the bandwidth (BW) in MHz."

- 5.2. The formula includes SEC, but the explanatory sentence describes the fee as "UNIT by BW" only and omits SEC. Para 2.7 likewise states the formula as "UNIT * BW * SEC" while the regulation text's explanation drops SEC. The final regulation should be made internally consistent.

- 5.3. The authority proposes in paragraph 2.7 of the explanatory memo that only the uplink is licensed. This does not appear in the draft regulations, and the final regulations should make it clear that only the uplink is licensed.
- 5.4. **How is BW measured?** The Authority states (paras 2.7, 2.8) that the fee is based on the uplink bandwidth of the terminal network. But the Draft Regulations do not say what bandwidth value applies where many terminals share spectrum. For example: If a single terminal's maximum uplink channel is 20 MHz and 100 terminals are deployed on a global satellite network with multiple 20 MHz inbound channels, what is the applicable uplink bandwidth? The Draft Regulations leave at least three readings open:

Possible Reading Of "BW" In Regulation 5(e)	Spectrum Value Implied (Worked On Q-Kon's Example)	Q-Kon's Assessment
Bandwidth of a single terminal channel	20 MHz	Understates aggregate simultaneous occupation
Single-terminal channel × number of terminals	20 MHz × 100 = 2 000 MHz	Materially overstates actual use; ignores sharing and time-division
All inbound channels on the constellation	Total platform capacity	Not applicable to the SA terminals; charges for capacity not exclusively used
Maximum aggregate bandwidth the SA terminal network can occupy simultaneously	The correct measure	Rational; reflects true spectrum impact

- 5.5. **Why the "× number of terminals" reading is irrational.** In a satellite broadband network, terminals do not each hold a dedicated, continuously-occupied channel:
- a) many terminals share the same uplink carriers;
 - b) terminals transmit intermittently, in assigned bursts or time slots, not continuously;
 - c) uplink capacity is dynamically assigned by a central scheduler according to demand;

- d) multiple-access methods (MF-TDMA, DAMA and similar) allow many terminals to share one carrier; and
 - e) terminals are separated logically — by authentication and service profiles — not by exclusive frequency assignment.
- 5.6. Multiplying one terminal's channel by the terminal count therefore charges for spectrum that is never simultaneously occupied and that is not denied to any other user. A fee built on that measure would be difficult to defend as rationally connected to efficient spectrum use, and it directly contradicts the Authority's own observation that the regime should promote efficient spectrum use and affordability (paras 2.3, 2.6).
- 5.7. **Why the "all constellation channels" reading is equally wrong.** A South African terminal network uses only a defined subset of a global platform's capacity, dynamically and in common with others. Charging it for the platform's entire inbound spectrum bears no relationship to its actual use.
- 5.8. **The correct measure.** BW should be the maximum aggregate uplink bandwidth that the South African blanket-licensed terminal network is authorised and technically capable of occupying simultaneously, taking account of dynamic assignment, time-sharing, frequency reuse and the multiple-access technology in use.

6. Satellite technologies enabling multiple ISPs to share the same frequencies

- 6.1. Q-KON draws to the Authority's attention the established satellite technologies that allow many user terminals — and multiple ISPs — to use the same frequency resources of one satellite platform simultaneously, none of them holding an exclusive assignment. These technologies are the technical reason why a terminal-count or total-capacity measure overstates true use:
- a) **HTS spot-beam architectures** — frequencies are reused across many beams and managed at platform level, not assigned exclusively per terminal;
 - b) **MF-TDMA / TDMA return channels** — many terminals share one return carrier by transmitting in assigned time/frequency slots under scheduler control;
 - c) **DVB-S2X / DVB-RCS2 systems** — adaptive coding and modulation with shared, dynamically-assigned return capacity;
 - d) **Demand Assigned Multiple Access (DAMA)** — capacity is allocated on demand, so terminals never continuously occupy their maximum theoretical bandwidth;
 - e) **Beam-hopping and dynamic resource allocation** — capacity is allocated across beams and regions dynamically;

- f) **Multi-tenant / virtual network operator platforms** — multiple ISPs are logically separated on one platform while sharing the same physical RF carriers; and
 - g) **Software-defined payloads and network slicing** — capacity is allocated virtually to different providers over a common, dynamically-managed RF resource.
- 6.2. The unifying point is that the fee driver should be the actual, simultaneous, exclusive spectrum impact attributable to the South African terminal network — not the number of terminals, the number of ISPs, or the total theoretical capacity of the platform.
- 6.3. **Multiple ISPs on one platform — avoiding double-counting.** Where two or more ISPs use the same platform and the same RF carriers, each must not be charged as though it exclusively occupies that same spectrum; that would recover the fee for the identical physical resource more than once. The Authority should provide for one of:
- a) calculation at satellite-platform level, apportioned among the authorised providers;
 - b) calculation by reference to each provider's committed or maximum simultaneous capacity allocation; or
 - c) a prescribed sharing factor that prevents double-counting of the same physical spectrum.

7. A reduced fee regime for the user-terminal side

- 7.1. For the reasons in sections 6 and 7, Q-KON respectfully submits that the user-terminal side should attract a reduced fee regime, justified on genuine spectrum economics:
- a) user terminals operate at low power relative to gateways;
 - b) they transmit intermittently and share uplink resources dynamically;
 - c) no individual terminal sterilises a dedicated frequency assignment;
 - d) their use is scheduled and controlled by the network; and
 - e) they are frequently the only viable broadband path in remote and underserved areas, so an inflated terminal fee directly undermines the affordability and universal-access objects of the ECA — the very objects the Authority records it is seeking to advance.

7.2. Proposed principles for the terminal-side regime:

- a) **No multiplication of bandwidth by terminal count** — the regulation should state expressly that BW is not the single-terminal channel multiplied by the number of terminals;
- b) **Recognition of shared and time-divided use** — a sharing factor or duty-cycle adjustment to reflect dynamic sharing;
- c) **Fee based on simultaneous occupied bandwidth** — the maximum bandwidth the SA terminal network can occupy at once, not theoretical aggregate capacity;
- d) **No double-counting across ISPs** on a shared platform (section 7.3);
- e) a **nominal per-terminal administrative / registration component** may be appropriate, but the *spectrum* fee should be calculated at network level; and
- f) **technology-neutral drafting** — using "simultaneously occupied bandwidth", "shared satellite platform" and "dynamically assigned capacity" rather than prescribing any specific technology.

8. Proposed drafting for regulation 5(e)

- 8.1. Q-KON respectfully proposes that the Authority insert wording to the following effect into regulation 5(e):

For a satellite terminal network authorised under a Blanket Licence, the bandwidth (BW) used to calculate the fee is the maximum aggregate occupied uplink bandwidth, in MHz, that the licensed terminal network is authorised and technically capable of using simultaneously within the Republic, taking into account dynamic assignment, time-sharing, frequency reuse, multiple-access technology and any capacity-sharing arrangements on the relevant satellite platform.

- 8.2. To close the over-recovery risk expressly:

BW must not be calculated by multiplying the maximum occupied bandwidth of an individual terminal by the number of terminals deployed, unless the Authority determines that each terminal has been assigned separate and continuously available exclusive spectrum.

- 8.3. To prevent double-counting across providers:

Where multiple service providers use the same satellite platform or the same satellite frequency resources, the fee must be apportioned or calculated so as to avoid recovery of a fee for the same physical spectrum resource more than once.

- 8.4. Q-KON further requests that the Authority publish worked examples with the final regulations, including:

- a) a single ISP with 100 terminals sharing one 20 MHz return channel — confirming the fee is *not* 100 × 20 MHz;
- b) three ISPs on one platform sharing the same RF carriers — confirming whether the fee is calculated at platform, ISP or apportioned-capacity level;
- c) a local ISP reselling on a foreign-operated network — confirming who holds the Blanket Licence and pays (consistent with para 2.7);
- d) a primary Ka-band gateway plus a diversity gateway on the same frequencies — confirming the reduced fee for the diversity gateway; and
- e) a Ka-band GES in the 23–30 GHz band — applying the 0.1 FREQ factor referred to in para 2.5 (once the table is corrected per section 4.2).

9. Drafting and internal-consistency corrections

- 9.1. Q-KON respectfully draws the following matters to the Authority's attention for correction before finalisation:

Provision	Issue	Suggested Correction
Regulation 1	"a network that connect"	"a network that connects"
Regulation 1	"unlimited number of terminals" creates uncertainty	Clarify that "blanket" means no individual per-terminal licence, subject to network conditions (section 3.5)
Regulation 5(d)	"Rui" / "Ru" used in the formula and explanation; "RUL" used in para 2.5	Adopt and define one term consistently
Regulation 5(e)	Formula includes SEC; explanatory sentence omits it	Align explanation with formula (section 6.2)
Explanatory Memo para 2.5 / FREQ table	Text refers to a 0.1 factor for 23–30 GHz; table omits this row	Insert "23 GHz – 30 GHz → 0.1" into the table (section 4.2)
Schedule, item 1	Cites parent regulations as "Government Notice No. 33495 of 2010"; footnote 1 records the	Align the body with the Authority's own footnote 1

	notice as Notice 754 of 2010 (GG 33495)	
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10. Summary of requested amendments

10.1. Q-KON respectfully requests that the Authority:

- a) define "operation of a network" and identify, in the definition, who holds the Blanket Licence in the local-ISP / foreign-operator model (giving effect to para 2.7);
- b) clarify that "blanket" means the absence of a per-terminal licence, not the absence of network conditions;
- c) clarify that secondary, standby and diversity gateways using common spectrum attract a reduced fee, not a full independent fee;
- d) define the SEC factor, publish its values and scope, and consult on them;
- e) correct the SEC inconsistency in regulation 5(e) and the missing 23–30 GHz row in the FREQ table;
- f) provide expressly that terminal-side BW is **not** the single-terminal channel multiplied by the number of terminals;
- g) provide that terminal-side BW is the maximum simultaneous occupied uplink bandwidth of the SA terminal network;
- h) introduce a sharing / duty-cycle adjustment and a reduced fee regime for blanket-licensed user terminals;
- i) prevent double-counting where multiple ISPs share one platform and the same carriers;
- j) publish worked examples; and
- k) correct the drafting items in section 10.

11. Conclusion and oral hearing

- 11.1. Q-KON supports the Authority's modernisation of the satellite spectrum fee regime, and in particular the Blanket Licence and the FREQ factor. With the refinements above — directed at ensuring that terminal-side fees reflect actual, simultaneous and shared spectrum use rather than terminal count or theoretical aggregate capacity — the amended regulations will be technically accurate, administrable, defensible on

rationality grounds, and consistent with the ECA's objects of efficient spectrum use, competition, investment, affordability and universal access.

- 11.2. In terms of the invitation in Notice 3926 of 2026, Q-KON indicates that it wishes to make oral representations should the Authority elect to hold public hearings, and would welcome the opportunity to provide technical input on the worked examples proposed above.

12. Introduction and overview

- 12.1. Q-KON welcomes the opportunity to make written representations on the Draft Amendment of the Radio Frequency Spectrum Fees Regulations, 2010, published under Notice 3926 of 2026 in Government Gazette No. 54677 of 15 May 2026 ("the Draft Regulations").
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- 12.4. These representations identify specific shortcomings in the Draft Regulations which, if left unaddressed, will produce legal uncertainty and fee outcomes that do not rationally reflect actual spectrum use. In summary:
- a) the definition of "blanket licence" does not identify who "operates" the network, and therefore who holds the licence and bears the fee, in the now-standard model where a local ISP's terminals connect to a foreign-operated satellite system;
 - b) the Satellite Terminal Network Formula (regulation 5(e)) does not specify how BW is measured for a blanket-licensed terminal network in which many terminals share, time-divide and dynamically access the same spectrum — leaving open a reading that grossly over-recovers; and
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14. Definition of "blanket licence" — who "operates the network"?

14.1. Q-KON supports the introduction of the blanket licence. Terminal-by-terminal spectrum licensing is unsuited to satellite broadband, where a network may comprise thousands or hundreds of thousands of technically identical terminals operating under common parameters.

14.2. The proposed definition (regulation 1) reads:

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14.3. **"operation of a network" is undefined.** The Authority itself confirms, at Explanatory Memo para 2.7, that the licence *"should not be seen as the licence associated with the terminal stations/equipment, but instead as the licence of the network that makes it possible to connect those terminals"*, and that this is intended *"to ensure accountability of operations even in an event where the satellite network's gateway is not located in South Africa."* Q-KON supports that objective. But the definition does not give it effect, because it does not say who "operates" the network. In the modern value chain these roles are usually held by different entities, often in different jurisdictions:

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 - b) terminals transmit intermittently, in assigned bursts or time slots, not continuously;
 - c) uplink capacity is dynamically assigned by a central scheduler according to demand;
 - d) multiple-access methods (MF-TDMA, DAMA and similar) allow many terminals to share one carrier; and
 - e) terminals are separated logically — by authentication and service profiles — not by exclusive frequency assignment.
- 16.6. Multiplying one terminal's channel by the terminal count therefore charges for spectrum that is never simultaneously occupied and that is not denied to any other user. A fee built on that measure would be difficult to defend as rationally connected to efficient spectrum use, and it directly contradicts the Authority's own observation that the regime should promote efficient spectrum use and affordability (paras 2.3, 2.6).
- 16.7. **Why the "all constellation channels" reading is equally wrong.** A South African terminal network uses only a defined subset of a global platform's capacity, dynamically

and in common with others. Charging it for the platform's entire inbound spectrum bears no relationship to its actual use.

- 16.8. **The correct measure.** BW should be the maximum aggregate uplink bandwidth that the South African blanket-licensed terminal network is authorised and technically capable of occupying simultaneously, taking account of dynamic assignment, time-sharing, frequency reuse and the multiple-access technology in use.

17. Satellite technologies enabling multiple ISPs to share the same frequencies

- 17.1. Q-KON draws to the Authority's attention the established satellite technologies that allow many user terminals — and multiple ISPs — to use the same frequency resources of one satellite platform simultaneously, none of them holding an exclusive assignment. These technologies are the technical reason why a terminal-count or total-capacity measure overstates true use:
- a) **HTS spot-beam architectures** — frequencies are reused across many beams and managed at platform level, not assigned exclusively per terminal;
 - b) **MF-TDMA / TDMA return channels** — many terminals share one return carrier by transmitting in assigned time/frequency slots under scheduler control;
 - c) **DVB-S2X / DVB-RCS2 systems** — adaptive coding and modulation with shared, dynamically-assigned return capacity;
 - d) **Demand Assigned Multiple Access (DAMA)** — capacity is allocated on demand, so terminals never continuously occupy their maximum theoretical bandwidth;
 - e) **Beam-hopping and dynamic resource allocation** — capacity is allocated across beams and regions dynamically;
 - f) **Multi-tenant / virtual network operator platforms** — multiple ISPs are logically separated on one platform while sharing the same physical RF carriers; and
 - g) **Software-defined payloads and network slicing** — capacity is allocated virtually to different providers over a common, dynamically-managed RF resource.
- 17.2. The unifying point is that the fee driver should be the actual, simultaneous, exclusive spectrum impact attributable to the South African terminal network — not the number of terminals, the number of ISPs, or the total theoretical capacity of the platform.

- 17.3. **Multiple ISPs on one platform — avoiding double-counting.** Where two or more ISPs use the same platform and the same RF carriers, each must not be charged as though it exclusively occupies that same spectrum; that would recover the fee for the identical physical resource more than once. The Authority should provide for one of:
- a) calculation at satellite-platform level, apportioned among the authorised providers;
 - b) calculation by reference to each provider's committed or maximum simultaneous capacity allocation; or
 - c) a prescribed sharing factor that prevents double-counting of the same physical spectrum.

18. A reduced fee regime for the user-terminal side

- 18.1. For the reasons in sections 6 and 7, Q-KON respectfully submits that the user-terminal side should attract a reduced fee regime, justified on genuine spectrum economics:
- a) user terminals operate at low power relative to gateways;
 - b) they transmit intermittently and share uplink resources dynamically;
 - c) no individual terminal sterilises a dedicated frequency assignment;
 - d) their use is scheduled and controlled by the network; and
 - e) they are frequently the only viable broadband path in remote and underserved areas, so an inflated terminal fee directly undermines the affordability and universal-access objects of the ECA — the very objects the Authority records it is seeking to advance.
- 18.2. **Proposed principles for the terminal-side regime:**
- a) **No multiplication of bandwidth by terminal count** — the regulation should state expressly that BW is not the single-terminal channel multiplied by the number of terminals;
 - b) **Recognition of shared and time-divided use** — a sharing factor or duty-cycle adjustment to reflect dynamic sharing;
 - c) **Fee based on simultaneous occupied bandwidth** — the maximum bandwidth the SA terminal network can occupy at once, not theoretical aggregate capacity;
 - d) **No double-counting across ISPs** on a shared platform (section 7.3);

- e) a **nominal per-terminal administrative / registration component** may be appropriate, but the *spectrum* fee should be calculated at network level; and
- f) **technology-neutral drafting** — using "simultaneously occupied bandwidth", "shared satellite platform" and "dynamically assigned capacity" rather than prescribing any specific technology.

19. Proposed drafting for regulation 5(e)

- 19.1. Q-KON respectfully proposes that the Authority insert wording to the following effect into regulation 5(e):

For a satellite terminal network authorised under a Blanket Licence, the bandwidth (BW) used to calculate the fee is the maximum aggregate occupied uplink bandwidth, in MHz, that the licensed terminal network is authorised and technically capable of using simultaneously within the Republic, taking into account dynamic assignment, time-sharing, frequency reuse, multiple-access technology and any capacity-sharing arrangements on the relevant satellite platform.

- 19.2. To close the over-recovery risk expressly:

BW must not be calculated by multiplying the maximum occupied bandwidth of an individual terminal by the number of terminals deployed, unless the Authority determines that each terminal has been assigned separate and continuously available exclusive spectrum.

- 19.3. To prevent double-counting across providers:

Where multiple service providers use the same satellite platform or the same satellite frequency resources, the fee must be apportioned or calculated so as to avoid recovery of a fee for the same physical spectrum resource more than once.

- 19.4. Q-KON further requests that the Authority publish worked examples with the final regulations, including:

- a) a single ISP with 100 terminals sharing one 20 MHz return channel — confirming the fee is *not* 100×20 MHz;
- b) three ISPs on one platform sharing the same RF carriers — confirming whether the fee is calculated at platform, ISP or apportioned-capacity level;
- c) a local ISP reselling on a foreign-operated network — confirming who holds the Blanket Licence and pays (consistent with para 2.7);

- d) a primary Ka-band gateway plus a diversity gateway on the same frequencies — confirming the reduced fee for the diversity gateway; and
- e) a Ka-band GES in the 23–30 GHz band — applying the 0.1 FREQ factor referred to in para 2.5 (once the table is corrected per section 4.2).

20. Drafting and internal-consistency corrections

20.1. Q-KON respectfully draws the following matters to the Authority's attention for correction before finalisation:

Provision	Issue	Suggested Correction
Regulation 1	"a network that connect"	"a network that connects"
Regulation 1	"unlimited number of terminals" creates uncertainty	Clarify that "blanket" means no individual per-terminal licence, subject to network conditions (section 3.5)
Regulation 5(d)	"Rui" / "Ru" used in the formula and explanation; "RUL" used in para 2.5	Adopt and define one term consistently
Regulation 5(e)	Formula includes SEC; explanatory sentence omits it	Align explanation with formula (section 6.2)
Explanatory Memo para 2.5 / FREQ table	Text refers to a 0.1 factor for 23–30 GHz; table omits this row	Insert "23 GHz – 30 GHz → 0.1" into the table (section 4.2)
Schedule, item 1	Cites parent regulations as "Government Notice No. 33495 of 2010"; footnote 1 records the notice as Notice 754 of 2010 (GG 33495)	Align the body with the Authority's own footnote 1

21. Summary of requested amendments

21.1. Q-KON respectfully requests that the Authority:

- a) define "operation of a network" and identify, in the definition, who holds the Blanket Licence in the local-ISP / foreign-operator model (giving effect to para 2.7);

- b) clarify that "blanket" means the absence of a per-terminal licence, not the absence of network conditions;
- c) clarify that secondary, standby and diversity gateways using common spectrum attract a reduced fee, not a full independent fee;
- d) define the SEC factor, publish its values and scope, and consult on them;
- e) correct the SEC inconsistency in regulation 5(e) and the missing 23–30 GHz row in the FREQ table;
- f) provide expressly that terminal-side BW is **not** the single-terminal channel multiplied by the number of terminals;
- g) provide that terminal-side BW is the maximum simultaneous occupied uplink bandwidth of the SA terminal network;
- h) introduce a sharing / duty-cycle adjustment and a reduced fee regime for blanket-licensed user terminals;
- i) prevent double-counting where multiple ISPs share one platform and the same carriers;
- j) publish worked examples; and
- k) correct the drafting items in section 10.

22. Conclusion and oral hearing

- 22.1. Q-KON supports the Authority's modernisation of the satellite spectrum fee regime, and in particular the Blanket Licence and the FREQ factor. With the refinements above — directed at ensuring that terminal-side fees reflect actual, simultaneous and shared spectrum use rather than terminal count or theoretical aggregate capacity — the amended regulations will be technically accurate, administrable, defensible on rationality grounds, and consistent with the ECA's objects of efficient spectrum use, competition, investment, affordability and universal access.

In terms of the invitation in Notice 3926 of 2026, Q-KON indicates that it wishes to make oral representations should the Authority elect to hold public hearings, and would welcome the opportunity to provide technical input on the worked examples propose transparency and alignment throughout the project lifecycle.