ANNEXURE A

Draft Digital Terrestrial Television Regulations, 2025 :

Questions of Clarification

14 October 2025

Contents

1. Introduction

1.1. SENTECH thanks the Independent Communications Authority of South Africa (ICASA) ("Authority") for the opportunity to provide clarification on questions related to the outcome of the oral hearing on the *Draft Digital Terrestrial Television Regulations 2025*, published in Government Gazette No.52946 on 04 July 2025 ("Draft DTT Regulations").

2. Questions to Sentech

1. Sentech states in paragraph 3.1 of their submission that the draft White Paper proposes a regulatory environment that may require, in the future, the Authority to align with the broader converged framework to avoid duplication or conflicting obligations. Barring in mind that the document is still in draft form, how could the regulations be improved to align with the draft White Paper?

   The spirit of sub-section 4(5) of the EC Act, together with sub-section 4 (3) (a) of the ICASA Act, anticipates a consultative process between the Department and the Authority before the latter publishes final regulations. The Authority is also empowered to "*make recommendations to the Minister on policy matters".*

   ECA sub-section 4(5)

   4 (5) The Authority must, not less than 30 days prior to making regulations, inform the Minister in writing of its intention and provide the Minister with a copy of the proposed regulations.

   ICASA Act sub-section 4 (3) (a)

   4 (3) Without derogating from the generality of subsections (1) and (2), the Authority—

   (a) may make recommendations to the Minister on policy matters and amendments to this Act and the underlying statutes which accord with the objects of this Act and the underlying statutes to promote development in the broadcasting, electronic transactions, postal and electronic communications sectors;

   Taking into consideration the state of both processes, draft regulations and the White Paper, the best possible way forward is for the Department and the Authority to consult, discuss and agree on the general principles that must be included in both documents.

2. Sentech provided the Authority with a definition of a Transport Stream Multiplex operator and that of a Multiplex operator.

   a. Is it your position that we should include both definitions in the regulations?

Ideally, yes. In the event the Authority is concerned that this may be confusing, SENTECH proposes the following definition for multiplex operator:

> *"**Multiplex Operator**" means an ECS licensee responsible for aggregating (multiplexing) digital television or audio and data services from multiple broadcasters or content providers into a single transport stream (e.g. MPEG streams) that is not intended or ready for delivery over terrestrial transmission networks (e.g. DVB-T2-MI streams) and a gap-filler DTH network (e.g. DVB-S2).*

The intention is to ensure that there is no confusion with the network multiplexing operations undertaken by an ECNS licensee, providing final signal distribution data transmission ready for terrestrial or satellite reception.

b. What is the difference between a multiplex operator as contained in your proposed definition and a signal distributor?

The proposed definition explicitly states that network multiplex operation is part of the signal distribution value chain.

3. Sentech addressed Multiplex sharing in paragraph 6 of its submission, stating that mux sharing is not ideal for broadcasters who have different and competing business interests.

a. Since multiplex operation costs are largely fixed, wouldn't cost-sharing among multiple broadcasters who do not have different and competing business interest reduce the burden on each?

The Authority must understand the issues in the context that, even though DVB-T2 allows for efficient spectrum use, operationally, the technology introduces stringent technical and content synchronisation requirements. In an SFN, multiple transmitters broadcast the same signal over the same frequency channel at the same time.

The content rules in an SFN require transmission of the same/identical MPEG-2 Transport Stream (TS), bit-for-bit. This translates to the following, namely: 1) Same content (programmes, services, data); 2) Same PSI/SI tables (Program Specific Information / Service Information); 3) Same multiplex configuration; and 4) Same bit rate and structure. Even a minor deviation (e.g., different service order or null packet timing) will cause interference and decoding errors in receivers.

Therefore, centralised (network) multiplexing is intended to ensure identical content through: 1) A single multiplex (MUX) headend generating one T2-MI stream; 2) That

stream is distributed via IP or ASI links to all transmitters; and 3) Each transmitter's modulator converts that T2-MI into RF signals. It is on this basis that SFNs are typically managed by a network operator (not individual broadcasters), since it's impossible for separate entities to maintain perfect content synchronisation independently.

Additionally, synchronisation rules in SFNs operate on two critical levels, namely: 1) Time; and 2) Frequency Synchronisation. The purpose is to ensure that each transmitter is locked to a common frequency reference (e.g., 10 MHz from a GPS or atomic clock) and a common time reference (e.g., 1 PPS – One Pulse Per Second signal), therefore safeguarding all modulators transmit the same symbol at the same instant. Challenges in synchronisation result in overlapping signals arriving at receivers with destructive interference, and the SFN guard interval (part of the OFDM symbol) is exceeded.

Lastly, content/frame synchronisation in the DVB-T2-MI stream includes timestamps and frame IDs that define the *exact moment* each frame should be transmitted. This allows each modulator to buffer the incoming data and launch it at the precise time specified by the T2-MI header. This synchronisation is vital for SFN timing alignment — every transmitter must emit the same DVB-T2 frame at the same moment (within microseconds).

The experience during the migration witnessed broadcasters sharing a multiplex, targeting different sites (number and location) and configuration within an SFN. Due to the cost of an SFN being fixed, this choice extends the risks and burden to the signal distributor due to unused capacity whose cost cannot be recovered.

b. Given that under-utilised multiplexes still incur full operational costs, is it not more financially risky to allocate an entire multiplex to a single broadcaster, especially if they fail to use all the capacity?

This speaks to the importance of the ITA process. It is financially risky to allocate an entire multiplex to a single broadcaster if they cannot fully utilise it.
This is because multiplex operation involves fixed and high infrastructure costs, while the revenue or cost recovery potential depends on how much of that capacity is actually used. This challenge has been observed in several DTT markets globally — especially in countries where broadcasters operate with limited content portfolios or constrained budgets.

c. Would it be feasible to allow 'primary tenants' of a multiplex, where one broadcaster

maintains control but sub-leases unused capacity to others, thus balancing control with cost recovery?

It is feasible to allow a *"primary tenant"* broadcaster to control a multiplex and sub-lease unused capacity to other broadcasters, but this requires clear regulatory, technical, and commercial frameworks to ensure transparency, competition, and spectrum efficiency. This model has been used in several countries, particularly where public service or dominant commercial broadcasters initially control multiplexes, but with regulatory safeguards to avoid anti-competitive behaviour.

4. What is the status of Mux 3 - Is the infrastructure in existence?

SENTECH cannot roll out a network outside the Authority's licensing processes. The company can only make financial commitments through securing contracts, as the network is not government-funded. Currently, there is no regulatory framework for the licensing of multiplexes 3 to 7. Therefore, SENTECH does not have a basis for developing a business model, considering the Authority's current process, i.e., finalisation of the *Signal Distribution Services Regulations, 2025*.

5. Paragraph 12.8: SENTECH indicates that it provides a regionalisation technique where a national multiplex is reconstructed to include only community broadcaster services targeting the region or provincial transmission. Considering that the 7 MUX plan is made up of 7 Provincial SFNs and each province will have different community broadcasting services:

   a. Is functionality of **regionalisation (PLP replacement)** currently being used in particular for Community Broadcasting services?

   Context scenario for the answer

   1. Nine (9) provinces
   2. Mux 1 Capacity (Public Broadcaster (85%) and Community Broadcaster (15%)): 11 SFNs nationally

   - 11 SFNs: EC (1); FS (1); GP (1); KZN (1); LP (2); MP (1); NC (2); NW (1); and WC (1).
   - PLP structure:
     - **PLP 0** → National channel A (same nationwide)
     - **PLP 1** → National channel B (same nationwide)
     - **PLP 2** → National channel B (same nationwide)

- **PLP 3** → Placeholder for local news (to be replaced at each SFN regionally)
- **PLP 4** → Placeholder for local education channel (to be replaced at each SFN regionally)
- **PLP 5** → Placeholder for local entertainment channel (to be replaced at each SFN regionally)
- **PLP 6** → Placeholder for Community Broadcaster (to be replaced at each SFN regionally, with minimum provincial coverage)

Answer

"Regionalisation (PLP replacement)" refers to a network design and operational technique that allows different regional or local programme content to be transmitted within the same nationwide SFN, without breaking SFN synchronisation. In DVB-T2, services are carried in **Physical Layer Pipes (PLPs)**. Each PLP transports one or more services (TV channels, audio, data), and multiple PLPs can coexist in a single RF channel. PLPs can be addressed and processed independently. This feature enables service-level flexibility, which is crucial in regional broadcasting scenarios (e.g., national news and local news segments).

The Challenge in an SFN all transmitters use the same frequency and transmit the same T2-MI stream in synchrony. Introducing different content for different regions would normally break this synchronisation, forcing operators to use different frequencies per region. That would defeat the spectrum efficiency advantage of SFN.

Therefore, in practice at the T2-MI headend, the Public Broadcaster inserts:

- PLP 0, 1 and 2 with national content.
- PLP 3, 4, and 5 as *placeholders,* carrying either a null stream or a default signalling structure with no real content.
- PLP 6 as a *placeholder,* carrying either a null stream or a default signalling structure with no real content.

At each of the 11 SFNs, the placeholders PLP 3, 4, 5 and 6 are replaced locally with a different local feed:

- SFN 1: PLP 3 → Local news feed 1; PLP 4 → Local education feed 1; PLP 5 → local entertainment 1; and PLP 6 →Community Broadcaster 1.

- SFN 2: PLP 3 → Local news feed 2; PLP 4 → Local education feed 2; PLP 5 → local entertainment 2 and PLP 6 →Community Broadcaster 2.
- …
- SFN 11: PLP 3 → Local news feed 11; PLP 4 → Local education feed 11; and PLP 4 → local entertainment 11; and PLP 6 → Community Broadcaster 9.

All 11 SFNs transmit on the same frequency within their own coverage area, and SFN synchronisation remains intact.

b. Would this solve the issues faced by community broadcasters, with respect to the costs associated with being on a provincial SFN?

Simply put, the answer is no.

c. If not, what technical solution would Sentech propose to solve this dilemma?

The most effective process is spectrum replanning by reducing the size of the SFNs and creating a hybrid network (combinations of smaller SFNs and MFNs) within the coordinated frequencies.

d. Considering the refarming of MUX capacity due to PLP replacement, is Sentech still of the view that Community Broadcasters should be allocated 100% capacity within a mux?

SENTECH advocates for a multiplex dedicated only to Community Broadcasters. The number of Community Broadcasters licensed per multiplex must be determined through the ITA process, with the proposal that each licensed broadcaster can be assigned at least 25% of the available multiplex capacity dedicated exclusively to Community Broadcasters.

6. Paragraph 11.3: Sentech submitted that the content aggregation operation is an ECS and not an ECNS service, as the frequency-dependent equipment is part of the transmission network.

a. Is Sentech proposing the introduction of an ECS licence holder into the value chain?

Currently, broadcasters are doing their own content multiplexing as part of the BS license. Therefore, the Authority can adopt the Mobile Virtual Network Operators (MVNO) principles versus the Mobile Network Operator (MNO), thereby permitting the ECS licensee to also allow for multiplexing services.

b. If so, how is the ECS licence applicable in this instance?

Contextual Foundation is the definition of the Multiplex Operator, namely:

- Aggregates content from multiple broadcasters or content providers.
- Produces a digital transport stream (e.g. MPEG-2 TS).
- Does not transmit over terrestrial or satellite RF networks (e.g. DVB-T2-MI or DVB-S2).
- Instead, the output is handed over to a signal distributor (ECNS licensee) or potentially made available for IP-based delivery.

Therefore, this situates multiplexing squarely at the service layer, an intermediate, content-neutral electronic service and not at the physical layer. Thus, classifying it as an Electronic Communications Service (ECS) is conceptually and legally consistent with both the Electronic Communications Act (ECA) and global trends in network convergence.

The ECS classification makes sense because the functional position in the value chain relates to the following, namely: 1) The multiplex operator does not provide *network infrastructure*; it provides a *communication service* that enables multiple broadcasters to reach transmission networks efficiently; and 2) It handles logical aggregation, bit-rate allocation, service information tables, and conditional access integration, all service-level (not network-level) functions.

There is clear consistency with the ECA defining an ECS as *"a service provided to the public, or sections thereof, which consists wholly or mainly in the conveyance of electronic communications over an electronic communications network."* The multiplex operator's role fits this: it conveys digital programme streams between broadcasters and signal distributors without owning the network.

c. And what ECS service is going to be provided by the MUX operator?

The SENTECH proposal is in alignment with convergence and hybrid delivery models. The convergence of broadcast, broadband, and OTT delivery mechanisms has transformed multiplexing into a platform service rather than a purely broadcast function.

Examples:

- DVB-I and HbbTV architectures treat multiplexing as an IP-addressable service layer.
- The same aggregated MPEG transport stream could be routed to:

- a terrestrial transmission chain (DVB-T2-MI),
- a DTH uplink (DVB-S2),
- or an OTT CDN (HTTP streaming).

By recognising multiplexing as an ECS, regulation becomes technology-neutral and future-proof, allowing operators to evolve from linear aggregation to hybrid broadcast-broadband service delivery.

7. Paragraph 16.6: Sentech posits that a Multiplex Operator shall not only be responsible for content aggregation but also for the full configuration, management, and technical optimisation of the multiplex transport stream, including support for dynamic service adaptation, mobile reception scenarios (e.g., FeMBMS), and hybrid IP-based enhancements (e.g., HbbTV, DVB-I)

a. What benefit would a mux operator serve in instances where broadcasters are allocated 100% capacity within a mux, respectively viz, resulting in broadcasters essentially controlling, managing and configuring their own muxes (considering multiplexing is a head-end function of a broadcaster)?

SENTECH vision and understanding is a platform that allows reception of services anywhere, anyhow and anyway. That is, in a converged environment, the same multiplex may carry:

- linear broadcast channels (traditional TV),
- data services or interactive applications (HbbTV, DVB-I),
- and signalling for IP-delivered or hybrid OTT services.

This means multiplex capacity is no longer a static, frequency-bound resource, but a dynamically shared digital pipeline. This is in line with the vision of the draft White Paper.

b. Further, why should a licence be issued to such an operator, in instances where a broadcaster opts to outsource its Head-end function to a 3 party?

Outsourcing does not determine whether a service is licensable or not. The current regulatory environment licenses radio frequency spectrum to broadcasters and not ECNS licensees. Network services licensees are deemed to comply with the use of the radio frequency spectrum in terms of the ECA on the condition that the

broadcasters have an agreement with the ECNS licensee. The Authority's question is confusing. SENTECH cannot own or operate frequency-dependent broadcasting transmitters without a contract with a valid license in compliance with section 62 of the ECA.

c. Furthermore, would it not be the responsibility of the broadcaster to ensure, through contractual/commercial agreements, that the T2-MI stream and/or head-end output conforms to the requirements of the signal distributor?
The main concern is not about conforming to the requirements of the signal distributor, but about the efficiency of the operational network design in a DVB-T2 environment. For an ECNS licensee providing signal distribution services (i.e. the entity responsible for transporting and feeding content to transmitters), handling multiple T2-MI streams has very different networking and processing implications compared to handling multiple MPEG Transport Streams (TS).

Nature of the Streams

Aspect	T2-MI Stream	MPEG Transport Stream (TS)
Purpose	Final pre-modulation stream containing T2 framing, PLP mapping, timing, and SFN info.	Encapsulates compressed audio/video/data before modulation.
Where used	At the input of the DVB-T2 modulator	At the input of the T2-MI Gateway / multiplexer
SFN Synchronisation	Timing information embedded (L1, L2, SFN timestamps, frame structure).	No inherent SFN timing info — must be added later.
Granularity	Already multiplexed at the physical layer (PLPs).	Program layer multiplexing (services only).

The impact on the Signal Distributor's Network when distributing T2-MI streams (post-multiplexing), each T2-MI stream corresponds 1:1 to a DVB-T2 multiplex. The stream contains all PLPs: SFN timing info (Timestamps, Frame Index, Network ID); and Modulation parameters. It is no longer service-aware (only physical layer aware). Therefore, the signal distributor must carry a full pre-modulated T2 structure for each SFN, noting that there are 11 for each multiplex. There will be eleven (11) SFNs with

regional PLP replacement providing eleven (11) separate T2-MI streams after regionalisation.

It should be noted that the bandwidth per T2-MI stream is fixed and equal to the RF multiplex capacity (e.g., ~36–40 Mbps, typical for an 8 MHz DVB-T2). Operationally, the signal distributor will be required to provision for

- Higher backhaul capacity requirement: one full T2-MI stream per SFN.
- Complexity in synchronisation: Timestamps must remain accurate; distribution network jitter must be minimal.
- Minimal service layer flexibility — changes in programming require changes upstream.

For the scenario where the signal distributor receives MPEG TS streams (pre-T2-MI):

- MPEG TS streams carry service content (video/audio/data), not SFN timing.
- One or more MPEG-2 TSs can be fed into a single T2-MI Gateway to produce the multiplex.
- The signal distributor can deliver:
    - 1 set of MPEG TS to a central or regional T2-MI Gateway
    - The gateway then builds multiple T2-MI streams regionally, adding timing and PLP info.

Operationally, the following is experienced:

- Lower upstream bandwidth load — multiple SFNs can share the same national MPEG TS feed (especially for national PLPs).
- Greater service flexibility — channel line-up changes can be managed centrally.
- More processing required at the edges (regional T2-MI gateways must generate the final multiplex).
- Tight timing and control are required to ensure SFN synchronisation between different T2-MI gateways.
- PLP replacement must be carefully managed at regional sites.

Therefore, the scenario where the signal distributor receives multiple T2-MI streams results in a significantly increased cost for signal distribution, mainly due to the network backhaul capacity requirement.

d. Is Sentech proposing that the Mux Operator and Signal Distributor for a particular mux be the same entity? If so, please provide rationale and the limitation as to why these cannot be 2 separate entities?

SENTECH is advocating for regulatory language that recognises that operationally, there are a number of functions that must be understood and how those functions affect the type, capacity and operational cost of the network. Multiplex operator, as per the SENTECH definition, can be a non-ECNS entity. That is, it can be a service that is operated independently by an ECS licensee or by any other entity that has both ECNS and ECS licenses.

e. Is Sentech proposing that only 1 Mux operator be licensed for all 7 muxes, considering the risks i.e., posed to Sentech's DTH platform?

There seems to be a lot of support for a multiplex operator to be licensed separately. SENTECH is confident that the invitation-to-apply (ITA) is legally sufficient to determine the appetite for the number of licensees the market can accommodate. Again, not to belabour the point. SENTECH's response is based on adopting the proposed definition of a multiplex operator. It is important to note that the Authority has already committed to introducing a multiplex operator for digital sound broadcasting (DSB) services through an ITA.

8. How will the Mux operator make use of the unutilised spectrum? Is it on the provision that they hold a broadcasting service licence, and would they also be required to apply for channel authorisation?

SENTECH vision and understanding is a platform that allows reception of services anywhere, anyhow and anyway. That is, in a converged environment, the same multiplex may carry:

- linear broadcast channels (traditional TV),
- data services or interactive applications (HbbTV, DVB-I),
- and signalling for IP-delivered or hybrid OTT services.

This means multiplex capacity is no longer a static, frequency-bound resource, but a dynamically shared digital pipeline. This is in line with the vision of the draft White Paper.

9. On what basis should the spectrum licence be issued to an ECNS licensee/s providing transmission services as opposed to a broadcaster? In your response, please consider a scenario where muxes are shared and fully (100%) allocated to a particular broadcaster, respectively.

When considering whether the spectrum licence should be issued to an Electronic Communications Network Service (ECNS) licensee (i.e. the signal distributor) rather than the broadcaster, it is important to distinguish clearly between two regulatory layers:

- Spectrum rights of use (control of the radiofrequency resource)
- Content rights and service authorisations (broadcasting licence / ECS/ECS authorisation)

In a digital network environment, especially with multiplexing, spectrum is no longer tied one-to-one with individual broadcasters. Instead:

- The spectrum licence enables the operation of the physical layer (transmission infrastructure, SFN, multiplexing, coverage).
- The broadcasting licence enables the provision of content services, which are carried on that network.

This structural separation aligns with technology-neutral, efficient spectrum use and promotes infrastructure sharing. When issuing spectrum to an ECNS licensee:

- Spectrum is assigned per multiplex, not per broadcaster.
- One multiplex may carry multiple programme services from different broadcasters.
- If broadcasters held spectrum directly, fragmentation and underutilisation would likely occur.
- ECNS licensees (signal distributors) are better positioned to plan, manage, and optimise multiplex capacity across multiple broadcasters.
- Shared multiplexes require neutral and non-discriminatory access for multiple broadcasters.
- An ECNS licensee can be regulated to provide wholesale access on fair, reasonable, and non-discriminatory terms (FRAND).

- This is more difficult to enforce if a single broadcaster controls the spectrum.
- Multiplexing and SFN operation require strict coordination and timing.
- Centralising this under the ECNS licensee ensures technical stability and network integrity.

Even if 100% Multiplex Allocation to a Single Broadcaster, the rationale to assign the spectrum to an ECNS licensee still applies:

- Even if capacity is dedicated to one broadcaster, the multiplex is still part of a shared spectrum environment (e.g., SFN coordination, adjacent channels, interference management).
- The ECNS licensee ensures compliance with technical obligations (e.g., SFN operation, guard intervals, modulation modes).

10. With the introduction of Multiplex Operator, who should hold the Radio Frequency spectrum licence? Please have regard to the relevant provisions of the Electronic Communications Act, including, but not limited to sections 31 and 63.

The answer to 6a) is applicable with respect to SENTECH's understanding of a multiplex operator. As an ECNS licensee, the Radio Frequency spectrum licence should be assigned to the signal distributor in compliance with section 31 of the ECA. With respect to section 63 of the ECA, the Authority must acknowledge that the Regulatory framework for self-provisioning in the context of single-frequency networks (SFNs) is yet to be broached. It is important to note that any broadcaster that previously self-provisioned an ECNS license is still required before being assigned any Radio Frequency spectrum licence.

11. When Sentech refers to a technology-neutral regulatory regime in paragraph 5 of Sentech's submission, does Sentech mean that ECNS licensees should have flexibility to deploy FeMBMS, 5G Broadcast or other technologies as they see fit; and if so, how would broadcasters' strategic choices be protected in such an arrangement?

The Authority must understand the issues in the context that SENTECH's success is directly tied to the progress, sustainability and growth of broadcasters. SENTECH has historically collaborated with broadcasters on issues of technology trends and applicability. The Authority is aware of the numerous trials SENTECH, as part of the NAB members, has undertaken in technology deployment.

12. Would assigning spectrum directly to ECNS licensees not risk limiting the independence of broadcasters, who may then have reduced leverage in negotiating their transmission needs?

SENTECH argues that the final DTT Regulations will be implemented within a Regulatory framework that will include the final version of the *Signal Distribution Services Regulations (2025)*, with the following proposed rationale:

> ***PURPOSE OF THE REGULATIONS***
>
> *The purpose of these Regulations is to: (a) define the relevant wholesale markets for the provision of terrestrial signal distribution services; (b) determine whether there is effective competition in the defined markets; (c) determine which, if any, licensees have significant market power in those markets where there is ineffective competition; (d) determine whether there is any market failure; (e) impose appropriate pro-competitive licence conditions on licensees with significant market power to remedy the market failure; (f) set out a schedule in terms of which the Authority will undertake periodic review of the markets, taking into account regulation (8) and the determination in respect of the effectiveness of competition and application of pro-competitive measures in those markets; and (g) provide for monitoring and investigation of anti-competitive behaviour in the defined markets.*

SENTECH is confident that the Regulatory framework has sufficient countermeasures that ensure the following, namely: 1) Separation of infrastructure and content; 2) Regulatory safeguards, like must-carry obligations, wholesale access requirements, and the introduction of price controls can protect broadcaster interests; 3) Commercial incentives, ECNS licensees need broadcaster customers, creating mutual dependence; and 4) Technology convergence, modern networks support multiple services, potentially increasing competition. In addition to the existing Regulatory framework, the *Signal Distribution Services Regulations (2025)* are intended to ensure that the independence of broadcasters is not negatively affected in far as ECNS licensee activities.

13. Sentech submits that “reduce transmission cost by reducing timeline from 36months to 24 months”, is Sentech saying the concerns of broadcasters that they need time to procure content and considering other factors, is not valid? Is Sentech implying that they have evidence that what broadcasters are complaining about can be done in 24 months?

The principal objective behind the Electronic Communications Act (ECA), 2005, requiring the Independent Communications Authority of South Africa (ICASA) to institute a public participation process as part of its regulation-making process, is to ensure transparency, accountability, and inclusivity in regulatory decision-making.

In essence, the goal is to make sure that all stakeholders who may be affected by a proposed regulation, including licensees, consumers, civil society, and industry experts, have a fair opportunity to present their views, evidence, and objection**s** before the regulation is finalised.

Therefore, SENTECH is simply presenting the aspects that affect signal distribution services for the Authority to consider as part of "a diversity of views broadly representing" the entire broadcasting industry value chain. SENTECH's reasonable expectation is that when the Authority "regulate broadcasting in the public interest", all views will be fairly considered. The company is advocating for a regulatory process that does not disproportionately transfer the risk of carrying an idle network to an ECNS licensee.

14. Under Key recommendations, Sentech advises ICASA to remove DVB-T2/MPEG4 Mandates, even though Reg. 3.1 States that DTT must use the DVB-T2 and MPEG4 compression and any other advanced compression standard, please clarify what you mean.

Interpretation of the proposed sub-regulation 3.1 implies that this provision standardises the technology required for all DTT broadcasts in the post-Analogue Switch-Off (ASO) environment. Sub-regulation 3.1 **establishes the minimum technical baseline for the deployment of all terrestrial digital television broadcasts in South Africa, specifically the DVB-T2 Standard (Second-Generation Digital Video Broadcast Transmission).** The provision further states that the DTT must use the Moving Picture Experts Group (MPEG-4) compression standard. This standard is defined as a fourth-generation Moving Picture Experts Group (MPEG-4) compression standard adopted by the ITU. To enable some flexibility, the regulation includes the phrase **"or any advanced compression standard"**. This flexibility ensures the regulatory framework is adaptable and future-proof, but it is limited only to the compression standard.

SENTECH argues that flexibility and future-proofing must be applied to both the transmission standard (DVB-T2) and the compression standard (MPEG-4), to enable a hybrid terrestrial broadcasting architecture as an element of broadcast–broadband

convergence under the umbrella of Next-Generation Terrestrial Broadcasting Systems. For example, the combination or integration of DVB-T2 and FeMBMS forms a hybrid or integrated terrestrial broadcast ecosystem that merges traditional DTT networks and mobile 5G broadcast delivery, aimed at providing seamless, spectrum-efficient, multi-device content delivery within a unified terrestrial ecosystem.