



Review of the Licensing Framework in Vanuatu

**Public consultation paper from the
Telecommunications Radiocommunications
and Broadcasting Regulator (TRBR)**

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1 EXECUTIVE SUMMARY

1.1 Aims and Objectives

The Telecommunications Radiocommunications and Broadcasting Regulator for Vanuatu ("TRBR") has embarked on a review of the regulatory framework for licensing of telecommunications and broadcasting. The objective is to identify any changes that would enhance socio-economic outcomes in Vanuatu and better align with international best practice. This consultation document presents initial findings and requests stakeholder feedback through a series of questions for public consultation.

In addition, the question of suitable licensing terms and conditions for Non-Geostationary Orbit (NGO) satellite services has been a matter under consideration within TRBR for some time. TRBR considers that it is expedient to include its proposals in relation to this matter in this public consultation.

1.2 Structure of the Report

The structure of the full report is as follows:

- **Section 2** contains an overview of relevant legislation in Vanuatu, specifically:
 - the Broadcasting and Television Act [Cap 214] consolidated edition of 2006, ("the Broadcasting Act")
 - the Telecommunications, Radiocommunications and Broadcasting Regulation Act No. 30 of 2009, as amended, ("the TRBR Act")
 - the Operator Licence Regulation Order No 221 of 2023 ("the Regulation"),and presents a summary of the current licence categories and the current licensees.
- **Section 3** identifies and analyses issues and concerns regarding the current framework that have either been identified by TRBR or raised by licensees and other stakeholders, and presents draft proposals to modify the licensing regime to simplify it and to bring it in line with current best practice.
- **Section 4** identifies and analyses issues and concerns relating the terms and conditions that should apply in relation to Non-Geostationary Orbit (NGO) satellite services, and especially for direct to device (D2D) mobile satellite services. TRBR's proposals are set out.
- **Section 4** presents a list of consultation questions for consideration by industry stakeholders.

1.3 Preliminary Findings

The preliminary findings of TRBR's licensing review are that:

- The overall licensing framework is fit for purpose, generally consistent with international best practice and with an appropriate level of simplification for a nation of Vanuatu's size and economic development.

- All telecommunications network and service providers are able to conduct their operations with just one individual licence (a unified licence). This is possible because there is a network operator licence that incorporates the rights to offer services and applications.
- Separate licences are currently required for broadcasting. However, broadcasting licences are focused on network and equipment rather than services. It is therefore appropriate for IPTV services to be provided under telecommunications content licences.
- The provision of any network, service or application should require a licence issued by TRBR. The use of “exceptions” or “exemptions” from the requirement for a licence should be phased out, reserved only for Government usage and cases where sale of telecommunications services is an insignificant and incidental part of another business, such as commercial accommodation.
- Individual licences should be standardised and employ equivalent wording to the largest extent possible. Standard clauses within licences may grant the licensee access to numbering, domain names, and radio-frequency spectrum, but the characteristics of the specific resources that are allocated (e.g. number ranges or spectrum bands) should be addressed outside the main licence (or be placed in an appended schedule to the licence that can be easily updated).
- The requirement for class licensees to register with TRBR is appropriate and should remain in place. The registration procedure should be limited to the provision of information (e.g. identity, contact details, services provided) essential for TRBR to conduct its supervisory role in the sector.
- In relation to NGO satellite services:
 - NGO satellite services are telecommunications network services and providers of such services need to be licensed in relation to services provided to customers in Vanuatu in the same way as other telecommunications network services are licensed.
 - To the extent that is reasonable and consistent with the national interest, NGO satellite service providers should be subject to the same licensing terms and conditions as other providers of telecommunications network services.
 - Additional terms and conditions should be included in licences for providers of NGO satellite services to the extent that the use of satellite technologies requires recognition and specific reference in the national interest. Proposals for such additional terms are set out in Section 4.

1.4 Consultation Process

TRBR seeks stakeholder feedback on the report, but also on the specific questions listed in Section 5. Responses should be submitted by email to enquiries@trbr.vu by 11th August 2026.

2 LEGAL FRAMEWORK FOR LICENSING TELECOMMUNICATIONS AND BROADCASTING

2.1 The Act and Regulations

The requirements specifying the process and considerations for licensing of companies to provide telecommunications and broadcasting in Vanuatu are set out in:

- the Broadcasting and Television Act [Cap 214] consolidated edition of 2006, (“the Broadcasting Act”)
- the Telecommunications, Radiocommunications and Broadcasting Regulation Act No. 30 of 2009, as amended, (“the TRBR Act”)
- the Operator Licence Regulation Order No 221 of 2023 (“the Regulations”).

2.2 Requirements of the Broadcasting Act

The Broadcasting Act defines broadcasting as “the transmission by radio, television or satellite of any message or other broadcast matter for reception by the general public”. The first part of the Act establishes and sets procedures for the Vanuatu Broadcasting and Television Corporation, while the second part deals with licensing of broadcasting stations.

No broadcasting station may be established except under licence from the Minister, and the Minister may make regulations in respect of such licences. A broadcasting station is defined as: “a station which transmits broadcast matter by radio waves, wire, cable, optical fibre, satellite or any other means or a combination of any of those means for reception by the general public and includes the studio, transmitting station and technical equipment used for transmitting broadcast matter”.

It is notable that the Broadcasting Act focuses on the licensing of stations: effectively the network rather than the service that it provides. In 2006 when the Act was consolidated these might have been assumed to effectively be the same thing. However, in 2026 that is no longer the case, and there is now a need the status of new forms of service that compete with traditional broadcasting (e.g. IPTV and video streaming services).

2.3 Requirements of the TRBR Act

Part 3 of the TRBR Act deals with licensing. Section 12(1) states that “a person must not provide a telecommunications service except under and in accordance with a licence or exception.” Licences are issued by the Regulator, may be issued to a person or a class of persons, and the award of licences must not unfairly discriminate between licensees.

Section 14(1) states that “exceptions may be given by the regulator were, in the regulator’s opinion, issuing a licence would not be necessary or efficient.” Exceptions operate only in respect of specific matters and circumstances, and the Regulator may withdraw an exception at any time.

The Regulator may amend the terms and conditions of a licence, or a revoke a licence (section 15), for example where the licensee has materially failed to comply with a licence,

or where changes to the laws of Vanuatu or to international treaties or commitments necessitate changes to licences. However, in general the Regulator can only amend or revoke a licence if the amendment or revocation has been requested or agreed by the licensee (s15(1)(a)).

Prior to amendment or revocation of a licence, the Regulator must notify the licensee in writing that it is considering the relevant action; and consider any comments made by the licensee within the time frame stated by the Regulator in the notice (s15(3)).

The original Act was focused on telecommunications, but when it was consolidated in 2021 further sections, numbered 16A-16G, were added to Part 3 specifically about Broadcasting Licences. These sections largely mirror the licensing requirement of the Broadcasting Act, but they extend to broadcasting apparatus as well as broadcasting stations. Further, the power to issue licences, prescribe licence fees, determine terms and conditions and suspend or revoke licences is now vested in the regulator rather than the Minister. Broadcasting licences are valid for a period not exceeding 10 years.

The TRBR Act also allows the Minister, in consultation with the Regulator, to grant an exemption from licensing requirements under certain circumstances (e.g. natural disaster, sports event), but any such exemption must not distort competition in the broadcasting market.

2.4 Requirements of the Regulations

The Regulations establish the prevailing types of licences that TRBR may issue. The Operator Licence Regulation Order No 221 of 2023 sets out the currently available licence types as:

- Individual general licence
- Individual network operator licence
- Individual service provider licence
- Individual content provider licence
- Class licence.

Individual network operator licences may be issued as unified licences, meaning that the licensee is also authorised to provide telecommunications services or content other than broadcasting service content.

2.5 Inventory of licensees

The TRBR maintains a register of all licensees in the country. The register is updated whenever a licence is issued, renewed, extended, cancelled or expires.

There are currently a total of 12 individual telecommunications licensees as follows¹:

¹ Based on TRBR website as at 8 May 2026

- Telecom Vanuatu Ltd – Mobile, Internet, Fixed (renewed 11/07/2023)
- Digicel (Vanuatu) Ltd – Mobile, Internet, Fixed (renewed 11/07/2023)
- Wantok Network Ltd – Mobile, Internet, Fixed (issued 19/11/2024)
- Interchange Ltd – Internet (issued 22/09/2009)
- Pacific Link Ltd – Internet (issued 29/01/2019)
- 3 Link – Internet (issued 27/04/2020)
- Aelan Internet – Internet (issued 23/11/2020)
- Kacific Vanuatu Ltd – Internet (issued 16/10/2023)
- Prima Ltd – Internet (issued 22/03/2024)
- Pacific Networks Ltd – Internet (issued 21/08/2024)
- Starlink Vanuatu Ltd – Internet (issued 21/08/2024)
- E-Space – Internet (issued 06/06/2025)

All individuals or businesses engaged in the provision, operation, or resale of telecommunications services, including internet services, are required to be registered with TRBR under a class licence. TRBR has only recently started issuing class licences and there are currently a total of two (2) registered class licensees:

- Island Link
- XSMOL Social Network

TRBR created the Class Licence category for small to medium businesses wishing to resell internet services. Under the Class Licence conditions, the license term is 5 years, with a maximum of 5 sites permitted.

There are currently a total of 8 broadcasting licensees as follows, with each licence valid for 15 years:

- Daily Post – Commercial Radio (issued 12/10/2021)
- Digicel (Vanuatu) Ltd – Commercial TV (renewed 12/10/2021)
- Telsat – Commercial TV (issued 24/10/2019)
- Canal+ – Commercial TV (issued 21/10/2021)
- Hope TV – Community TV (issued 2/09/2021)
- United Christian Broadcasters Vanuatu Committee – Community Radio (issued 15/01/2021)
- FM 107 – Commercial radio (issued 1/10/2018)
- VTBC Ltd – Commercial TV and Radio (issued 2/10/2024).

2.6 Inventory of exceptions and exemptions

Note that the TRBR Act talks in terms of exceptions and the Broadcasting and Television Act talks in terms of exemptions.

The TRBR has issued a number of exceptions (i.e. exemptions from the requirement for a licence to operate telecommunication services, although not necessarily exemptions from some licence or other conditions). Most of these were temporary exceptions that have now been revoked, and only three remain in force:

- Interchange Ltd
- Government Data Network
- Government of Vanuatu Educational Services (Colleges and Universities).

Each of these exceptions has a start date but no definitive end date. Nevertheless, TRBR has expressed its intention to revoke the exception the Interchange Ltd at the end of 2026 and to issue a licence in lieu.

There are no current exemptions from the requirement for a broadcasting licence.

2.7 Licence fees

The fee for an individual telecommunications licence is levied annually as 2.25% of net revenues² (i.e. total revenues less interconnection charges, both national and international, and any general business licence fees paid to the Government or the Regulator).

The fees for a class licence comprise an application fee of VT5000 and an annual fee of VT20,000.

² Unless earnings are less than VT 2m where a fixed annual fee of VT 40,000 applies.

3 EVALUATING THE LICENSING FRAMEWORK

3.1 Methodology

As part of its review of the licensing regime in Vanuatu, TRBR has undertaken desk research to compare the framework with a selection of other countries (see Appendix A) and international best practice such as the recommendations of the ITU. This has enabled a gap analysis, identifying differences between the regime in Vanuatu and international best practice, to develop a number of hypotheses for beneficial changes to the regime.

Based on this analysis, TRBR is now seeking the views of industry stakeholders and of the public, through a public consultation.

3.2 Aims and Objectives in Licensing

A key purpose of licensing is to enable monitoring of market entry and supervision of supplier behaviour through regulation. A good licensing framework enables effective competition, protects consumers and provides regulatory certainty to investors.

In an open, competitive market, prospective entrants need to assess for themselves whether they have an attractive product/service that they can profitably bring to market. There is often no need for any regulatory control. However, markets where competition is likely to be limited often operate under a licensing framework to ensure that new entrants can be admitted where they qualify, without obstruction, and incumbents do not adversely influence price, quality or other terms of supply to consumers.

The regulator might legitimately want to limit market entry, for example:

- to avoid excessive competition and its consequences
- to avoid wasted or stranded investment
- to manage the use of scarce resources such as radio spectrum or number ranges.

Whether a licence is needed and what type of licence is offered will depend on the extent to which these criteria apply. Licensing is also relevant to markets or sectors characterised by scarce resources, including telecommunications and broadcasting which use radio frequency spectrum, numbers and land – none of these resources can be duplicated or created.

A licence should be granted unless there is a specific justification for denying it. Questions that the regulator might legitimately ask before granting a licence include:

- Is there a need or demand for the proposed network facility or service – does the applicant have something to offer that will contribute efficiently to national policy goals, add to market diversity, and appeal to consumers?
- Eligibility of the applicant – are they a suitable candidate with technical and operational experience, and the necessary financial backing? (Note, however, that the regulator has no responsibility for ensuring the viability of the venture – that is the licensee's responsibility. Granting a licence is not a confirmation that the business plan is approved or affirmed in any way.)

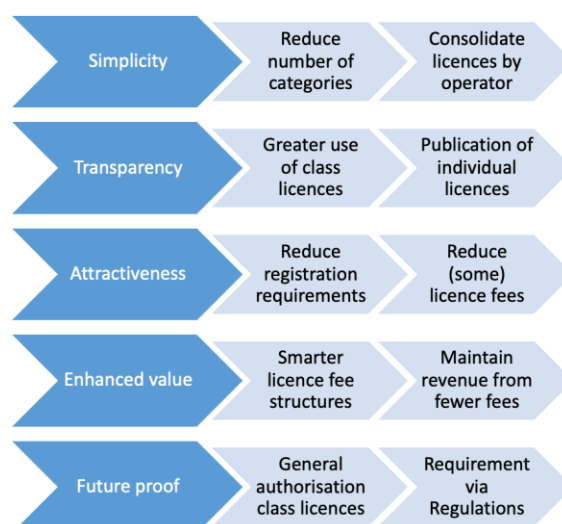
- What effect will the grant of this licence have on the TRBR's resources? Is it likely to be an administration-intensive service? This should be reflected in the licence fees.

3.3 Licensing principles

Unified licensing, also known as converged licensing (i.e. licences that are technology and service neutral) is one of the ITU's seven golden rules for digital transformation of fixed broadband markets³. The ITU defines unified licences as "a comprehensive authorisation that allows operators to provide various telecommunications services (voice, data, video) under a single licence, regardless of technology or network infrastructure used." The objective of unified licensing is to foster the growth of new, converged ICT applications and services. Case study examples are presented in Appendix A, including Uganda, Singapore, Somalia and Saudi Arabia.

The principles behind unified licensing are summarised in the figure below, along with their practical implications.

Figure 1: Principles behind unified licensing



3.4 Recent market developments

There are a number of recent developments in telecommunications and broadcasting markets that need to be taken into account in developing a modern best practice licensing regime. More often than not the best way to address these developments is through regulations or guidelines that apply to all industry participants. For example, this is the way that topics such as artificial intelligence (AI) and cybersecurity are being dealt with in most countries. However, there are two recent developments that require careful consideration and integration within the national licensing regime:

- The provision of satellite-based telecommunications including internet access and direct-to-device mobile services

³ Global ICT Regulatory Outlook 2020, available at: https://www.itu.int/pub/D-PREF-BB.REG_OUT01

- The provision of “Over The Top” (OTT) services provided over the internet, including content services where the request for a service session is made by the user (e.g. IPTV and other video streaming services)

3.4.1 Satellite services

The possibility of covering rural areas by satellite (with a footprint that can exceed national borders) means that there is increased interest in this technology and its ability to close the digital divide. In particular, the low earth orbit (LEO) constellation offered by SpaceX, called Starlink, has brought almost universal high-speed internet access at prices affordable to many users in many countries.

Satellite technology has now advanced to enable the use of spectrum typically reserved for mobile operators (IMT spectrum), allowing for direct communication with smartphones. The technology, also referred to globally as Direct-to-Device (D2D), Direct-to-Cell (D2C), or Space-Based Cellular Communication, is gaining momentum worldwide as part of the integration of satellite and ground networks. Successful D2D pilots have been operating for some time, especially in the United States. The barriers to more general spread of D2D voice and data services will be overcome within the next few years. They are international standardisation, local spectrum and other regulatory barriers, and the technical capability of handsets and other devices to be connected without significant adaptations or upgrades.

It is clear that Starlink and other similar LEO satellite services pose a considerable commercial threat to local network operator and service providers. In some countries, especially small island nations, Starlink has been able to offer internet access at bandwidths and prices superior to those of the terrestrial network providers. To some extent, this is the essence of competition and unless pricing below cost, which would be difficult to ascertain given Starlink’s worldwide coverage, specific competition regulation would be inappropriate. However, the advent of D2D satellite technology extends the competitive threat to mobile as well as internet services and has the potential to undermine the investment case for future terrestrial infrastructure. This in turn raises significant concerns about national security and sovereignty, as well as about terrestrial service viability and continuity.

Regulators are currently seeking to find appropriate ways to deal with this situation. One possibility is to require satellite providers to work in conjunction with national mobile networks when providing D2D services. This would enable satellite services to fill in current coverage black-spots without entirely replacing existing mobile networks. In Vanuatu, TRBR has issued a telecommunications licence to Starlink (and to other satellite providers) but the licence excludes the provision of mobile services.

3.4.2 Over The Top (OTT) Services

In the telecommunications sector, OTTs include virtual conferencing or calling platforms such as Teams, Zoom, and (until recently) Skype; social communication platforms and services such as Voice-Over-Internet-Protocol (VOIP), WhatsApp, Twitter, Facebook, Viber and Instagram. In the broadcasting sector, OTTs include film and television streaming or

video-on-demand services including Netflix, GooglePlay, YouTube, Amazon Prime, and Hulu (owned by Disney).

While the offerings have exponentially increased choice for consumers, network operators and traditional broadcasters have expressed dissatisfaction with the fact that OTT players are not regulated, except in limited instances and in certain countries. This means there are no licensing obligations, no obligations in relation to quality of service, and no codes of conduct in relation to the type of content. In some countries, OTTs are able to evade taxation obligations, basing their operations in other jurisdictions with more favourable tax regimes.

The key question is whether the clear differences in regulation between OTTs and traditional telecommunication and broadcasting networks represent a playing field that is not “level”. However, it is by no means clear that this is the case. For example, universal service obligations cannot be relevant to OTTs by virtue of the nature of their services, which are entirely voluntary for consumers. OTT services accessed via the internet are often “best efforts” services and not subject to the service performance minimum standards that typically apply to carrier standard universal services. On the other hand, OTTs rely on universal service infrastructure and some have argued that they should therefore be obliged to contribute towards universal service costs in appropriate ways. The obligation to rollout infrastructure is part of the regulation of networks in general, and in return for valuable rights like spectrum and land use, universal service is a common obligation. The same cannot be said to apply to OTTs.

Also, OTTs do pay tax if they are registered in Vanuatu. National laws such as data protection and privacy are likely to apply regardless of whether an entity is licensed by TRBR or not.

While usage of existing networks by OTTs may be presented as a negative, the increase in demand for data and therefore increase in use of existing capacity increases revenue to operators as well. The demand for OTT services and the use of such services is essentially controlled by the end-user, and that it is the end user who would be responsible for the increases needed in capacity to support their choices. It is therefore a matter for the network operator to structure its connectivity services and their prices to ensure that retail customers are paying for the services that they use.

Many OTTs offer voice and messaging services that are displacing legacy telco voice and messaging services. Many of these OTT services are ‘free’, being funded by different business models to the “fee per service” approach in legacy telecommunications business models. This is the disruption of the normal competitive process at work. The responses that are most appropriate are commercial, rather than regulatory. In many countries, for example, mobile network operators have responded to “free” OTT voice and messaging services with bundled offerings that include unlimited national voice calls and SMS. This response has been generally effective.

Whilst there is some variety of practice, OTTs in most countries are lightly regulated and are not required to obtain network or service provider licences. Nevertheless, as content providers they are subject to regulation, as are the ISPs and platform providers (including

network operators) that host OTTs. In particular, the obligations undertaken by ISPs and platform providers should align with the constraints that are imposed on them in relation to net neutrality.

3.5 How does the licensing regime in Vanuatu match up?

There are a lot of good things in the current licensing regime which means that Vanuatu is already quite well placed by regional standards. The regime:

- Is technology neutral: licences do not specify which technology should be used to deliver licensed services
- Separates functional layers: network facilities, services, applications and content services
- Provides for class licences (the same requirements for all providers of the same or similar services) as well as individual licences
- Is simple and effective: (there is a relatively small number of licence categories and licensees).

There are, however, three areas of deviation from international best practice that cause some concern, particularly as regards providing a level playing field for competition:

- A lack of clarity concerning the licensing of over-the-top (OTT) services, specifically those which straddle the boundary between telecommunications and broadcasting. For example, how should IPTV services be licensed in Vanuatu. Although the service itself comes under the definition of a broadcasting service there is no requirement under the Broadcasting Act to obtain a broadcasting licence (because IPTV is not transmitted by means of radio, television or satellite) nor does it require a network operator licence (assuming the service provider does not own or operate public telecommunications network facilities in Vanuatu). An IPTV service provider would therefore need to be granted an individual content provider licence under the TRBR Act which allows for “the supply of television or radio broadcast services”. However, it would be better if the Regulations were clearer on the treatment of OTT services, especially broadcast services such as IPTV.
- The extensive reliance on individual licences for regulatory purposes, which leads to the possibility of different obligations and commitments on licensees under similar circumstances. International best practice would suggest that as far as possible:
 - Individual licences should be standardised as much as possible: the same structure and content (terms and conditions) should apply to all equivalent licences;
 - Where clauses need to be inserted that are specific to an individual licensee (e.g. allocations of spectrum or numbering resources) these are included as schedules to the standard licence; and
 - Wherever possible obligations that apply to all licensees, or to all licences in specifically defined service categories, are published separately by TRBR as Regulations.

- The continuing role of exceptions, specifically the exception for Interchange Ltd on the operation of the submarine cable between Port Vila and Suva, Fiji.

3.6 Proposals for Consultation

3.6.1 Amending the Regulation

There is a need for changing definitions within the Operator Licence Regulation Order No 221 of 2023 to clarify the position of OTTs particularly video streaming and IPTV services. It is therefore proposed to change two definitions with the Regulations as follows (proposed additions are *italicised and underlined*; proposed deletions are ~~scored through~~):

- **Individual content provider licence** means a licence that provides for the supply of ~~television or radio~~ *any broadcast~~ing~~ services*, or the supply of narrow-cast services that supply content intended for a restricted number of viewers or listeners, *provided over any public network irrespective of media and technology*
- **Individual service provider licence** means a licence that provides for the supply of ~~any certain telecommunication services using a network service such as PSTN telephony services, IP telephony services, internet access services, messaging services, and audio text services,~~ *provided over any public network irrespective of media and technology*

It should be noted that there is no need to define the terms “broadcasting service” or “telecommunication” service within these definitions, because these terms are already defined in the Broadcasting Act and the TRBR Act.

3.6.2 Standardising licences

The use of individual licences, and the large variations in structure and wording between those licences, creates at least the possibility of inconsistency and unintentional discrimination. It would therefore be helpful to establish a standard template for each of the main licence categories, with variations in the content of individual licences being restricted to what is strictly necessary to reflect the distinctive elements of that particular licensee.

Individual telecommunications licence documents are published on the TRBR website. It is therefore possible to compare and contrast the text of broadly similar licences. There are three licensees for mobile / internet / fixed services, so it may be expected that they would have similar licences. This turns out to be true for TVL and Digicel, but the newer Wantok licence has a very different scope and structure, as can be seen in Figure 1 below⁴.

One way of ensuring greater parity would be to reproduce all of the sections from the TVL and Digicel licences in the Wantok licence. However, this is not necessarily the best way forward, because there are many parts of the TVL and Digicel licences that could be

⁴ Some of the differences may be justified by Wantok’s providing a more limited service offering, but generally licences that provide similar permissions should also contain similar requirements and responsibilities.

removed, either because they simply replicate text from the legislation or because the conditions would better be applied as regulations applicable to all licensees. Figure 2 illustrates how these licences could be shortened and simplified to create a standard structure for individual network operator licences.

There are also different structures for Internet (ISP) licences, as shown in Figure 3. Many of the clauses are replicated between licences, and some may be omitted due to differences in the services being provided. However, a standard structure would be preferable, including a standardised numbering scheme, so that omissions and variations could be easily ascertained.

Figure 1: Structure of Wantok licence v TVL/Digicel licences

Equivalent clauses to those of TVL/Digicel licence		
Clauses in TVL/Digicel licence omitted for Wantok		
Clauses for Wantok that are additional to those of TVL/Digicel		
1 Scope of the licence 1.1 Authorisation 1.2 Licence to operate telecommunications facilities 1.3 Non-exclusive licence 1.4 Functions of the regulator 1.5 Basis of the licence 1.6 References to licensed operator 1.7 Actions of the regulator	9 Essential services 9.1 Provision of essential services 9.2 Provision of emergency service etc, free of charge Provision of services during disaster response	18 Access to property 18.1 Access to Government land and facilities 18.2 Access to private land and facilities 18.3 Access to customary land and facilities
2 Interpretation	10 Designation as a dominant service provider 10.1 Designation if greater than 40% market share 10.2 Designation if less than 40% market share 10.3 Determination of dominance 10.4 The regulator to specify the reasons	19 Disputes 19.1 Licensed operator disputes 19.2 Customer disputes
3 Term	11 Transfer of control 11.1 Prior approval of the regulator 11.2 Requirement for written approval 11.3 Response from the regulator	20 Monitoring and enforcement 20.1 Monitoring and enforcement 20.2 Maintaining books 20.3 Fines 20.4 Interest 20.5 Rights of appeal or review
4 Licence fees	12 Anti-competitive practices 12.1 Abuse of a dominant position 12.2 Other anti-competitive practices 12.3 Determination of abuse of dominance and anti-competitive practices 12.4 Remedies for abuse of dominance and anti-competitive practices 12.5 Enforcement of order	21 Force majeure 21.1 Force Majeure event 21.2 Meaning of Force Majeure 21.3 Circumstances where cannot claim benefit of Force Majeure 21.4 Remedy of the Force Majeure event
5 Conditions of Licence	13 Tariff filing and approval 13.1 Filing of tariffs etc 13.2 Removal of requirement to file or obtain approval	22 Coverage obligation and Performance Bond 22.1 Service coverage 22.2 Performance bond
6 Quality of Service Requirement 6.1 Provision of services 6.2 Licensee's Coverage Quality of Service Plan	14 Staffing 14.1 Employment of Vanuatu nationals 14.2 Permits for non-Vanuatu nationals	22 Governing law
4 Amendment and revocation of the licence 4.1 Ability to amend or revoke this licence 4.2 Steps to be taken prior to any amendment or revocation 4.3 Other matters	15 Fair dealing practices 15.1 Charging 15.2 Invoicing 15.3 False and misleading claims	Schedule: Radio spectrum
5 Renewal 5.1 Renewal of the licence 5.2 Renewal on different conditions etc	16 Confidentiality of customer information 16.1 Confidentiality of customer information 16.2 Confidentiality of customer communications 16.3 Protection of personal information 16.4 Access by Government authorities 16.5 Customer complaints 16.6 Terms of Service 16.7 Quality of service	
6 Interconnection 6.1 Development of reference interconnect offer 6.2 Entry into interconnection agreement 6.3 Right to interconnect	17 Numbering 17.1 Use of numbers 17.2 Allocation of numbers 17.3 Number portability 17.4 Service provider selection	
7 Radio spectrum 7.1 Right to use certain radio spectrum 7.2 7GHz spectrum 7.3 Right to request further spectrum 7.4 Reassignment of spectrum 7.5 Approvals for radio station sites etc 7.6 Environmental issues		
8 Universal service 8.1 Establishment of a UAP Fund 8.2 UAP Access Obligations 8.3 Levy of licensed operators 8.4 Restriction on reducing service		

Figure 2: Proposed amendments to the TVL/Digicel licences

Clauses that could be removed from the licence			
Clauses to be retained as standard within the licence			
1 Scope of the licence 1.1 Licence to provide telecommunications services 1.2 Licence to operate telecommunications services 1.3 Non-exclusive licence 1.4 Functions of the regulator 1.5 Basis of the licence 1.6 References to licensed operator 1.7 Actions of the regulator	Standard format; detail may vary by licensee	12 Anti-competitive practices 12.1 Abuse of a dominant position 12.2 Other anti-competitive practices 12.3 Determination of abuse of dominance and anti-competitive practices 12.4 Remedies for abuse of dominance and anti-competitive practices 12.5 Enforcement of order	Remove from licence (covered in Part 5 of the Act).
2 Term	This should be a standard clause for all licences.	13 Tariff filing and approval 13.1 Filing of tariffs etc 13.2 Removal of requirement to file or obtain approval	Remove from the licence; covered in Part 7 of the Act. Separate Tariff Regulations could be published if more detail is required.
3 Licence fees	This should be a standard clause for all licences.	14 Staffing 14.1 Employment of Vanuatu nationals 14.2 Permits for non-Vanuatu nationals	This should be a standard clause for all licences.
4 Amendment and revocation of the licence 4.1 Ability to amend or revoke this licence 4.2 Steps to be taken prior to any amendment or revocation 4.3 Other matters	Superfluous - In the Act	15 Fair dealing practices 15.1 Charging 15.2 Invoicing 15.3 False and misleading claims	Remove from the licence; covered in Section 39 of the Act.
5 Renewal 5.1 Renewal of the licence 5.2 Renewal on different conditions etc	This should be a standard clause for all licences.	16 Confidentiality of customer information 16.1 Confidentiality of customer information 16.2 Confidentiality of customer communications 16.3 Protection of personal information 16.4 Access by Government authorities 16.5 Customer complaints 16.6 Terms of Service 16.7 Quality of service	Where included these should be standard clauses for all licences. Terms of Service may be removed as covered in section 43 of the Act. Quality of Service, if required, should be covered via a separate regulation.
6 Interconnection 6.1 Development of reference interconnect offer 6.2 Entry into interconnection agreement 6.3 Right to interconnect	Licence just needs to state that TVL is a "nominated service provider" under s27(1) of the Act. Separate Interconnection Regulations could be published if more detail is required.	17 Numbering 17.1 Use of numbers 17.2 Allocation of numbers 17.3 Number portability 17.4 Service provider selection	These should be standard clauses for all licences. Number block allocation could be included as a Schedule of the licence.
7 Radio spectrum 7.1 Right to use certain radio spectrum 7.2 7GHz spectrum 7.3 Right to request further spectrum 7.4 Reassignment of spectrum 7.5 Approvals for radio station sites etc 7.6 Environmental issues	This should be a standard clause for all licences (where applicable).	18 Access to property 18.1 Access to Government land and facilities 18.2 Access to private land and facilities 18.3 Access to customary land and facilities	These should be standard clauses for all licences.
8 Universal service 8.1 Establishment of a UAP Fund 8.2 UAP Access Obligations 8.3 Levy of licensed operators 8.4 Restriction on reducing service	Remove from licence and include in separate Universal Service Regulations (without repeating what is in Part 4 of the Act)	19 Disputes 19.1 Licensed operator disputes 19.2 Customer disputes	These should be standard clauses for all licences.
9 Essential services 9.1 Provision of essential services 9.2 Provision of emergency service etc, free of charge	This should be a standard clause for all licences (where applicable).	20 Monitoring and enforcement 20.1 Monitoring and enforcement 20.2 Maintaining books 20.3 Fines 20.4 Interest 20.5 Rights of appeal or review	These should be standard clauses for all licences.
10 Designation as a dominant service provider 10.1 Designation if greater than 40% market share 10.2 Designation if less than 40% market share 10.3 Determination of dominance 10.4 The regulator to specify the reasons	Remove from licence (covered in Part 5 of the Act). TRBR should regularly review and update its determinations of dominance in accordance with the Act.	21 Force majeure 21.1 Force Majeure event 21.2 Meaning of Force Majeure 21.3 Circumstances where cannot claim benefit of Force Majeure 21.4 Remedy of the Force Majeure event	These should be standard clauses for all licences.
11 Transfer of control 11.1 Prior approval of the regulator 11.2 Requirement for written approval 11.3 Response from the regulator	Standard clause for all licences	22 Governing law	This should be a standard clause for all licences.
		Schedule: Radio spectrum	Retain and potentially add Numbering.

Figure 3: Structure of Internet licences

Equivalent clauses across all licensees
Additional clauses (compared with Type A)
Clauses that are in some licences but no others (in Type A)

Type A - Prima, Pacific Networks, Starlink, E-Space

1 Scope of the licence
1.1 Authorisation
1.2 Licence to operate telecommunications facilities
1.3 Non-exclusive licence
2 Interpretation
3 Term
4 Licence fees
5 Conditions of Licence
6 Quality of Service (QoS) Requirement
7 Interruption to Service
8 National Security, Emergency and National Needs
8.1 Provision of essential services
9 Declaration of conflict of interest
10 Staffing
10.1 Employment of Vanuatu nationals
11 Access, Co-Location and landing facilities
11.1 Provide access as and when required by the Regulator
12 Maintaining records and accounts
13 Reporting
14 Environmental issues
15 Force majeure
15.1 Meaning of Force Majeure
15.2 Circumstances where cannot claim benefit of Force Majeure
15.3 Remedy of the Force Majeure event
16 Governing law

Type B - Kacific

1 Scope of the licence
1.1 Authorisation
1.2 Licence to operate telecommunications facilities
1.3 Non-exclusive licence
2 Interpretation
3 Term
4 Licence fees
5 Conditions of Licence
6 Essential services
6.1 Provision of essential services
6.2 Provision of essential services during disaster
6.3 Provision of services during disaster response
7 Declaration of conflict of interest
8 Staffing
8.1 Employment of Vanuatu nationals
9 Access to land and facilities
9.1 Access to Government land and facilities
9.2 Access to private land and facilities
9.3 Access to customary land and facilities
10 Maintaining records and accounts
11 Environmental issues
12 Force majeure
12.1 Meaning of Force Majeure
12.2 Circumstances where cannot claim benefit of Force Majeure
12.3 Remedy of the Force Majeure event
13 Governing law

Type C - Aelan and 3 Link

1 Scope of the licence
1.1 Authorisation
1.2 No licence to land or operate international submarine cable
1.3 Licence to operate telecommunications facilities
1.4 Non-exclusive licence
1.5 Licence subject to the Laws of Vanuatu
2 Term and Date of Effect
3 Licence fees and interest
4 Interconnection
5 Radio spectrum
5.1 Application for use of radio spectrum
5.2 Approvals for radio station sites etc
5.3 Environmental issues
6 Essential services
6.1 Provision of essential services
6.2 Provision of emergency service etc, free of charge
7 Transfer of control
7.1 Prior approval of the Regulator
7.2 Requirement for written approval
8 Employment of Vanuatu nationals
9 Access to property
9.1 Access to Government land and facilities
9.2 Access to private land and facilities
9.3 Access to customary land and facilities
10 Disputes
10.1 Licensed operator disputes
10.2 Customer disputes
10 Maintaining records and accounts
11 Rights of appeal or review
12 Force majeure
12.1 Force Majeure event
12.2 Meaning of Force Majeure
12.3 Circumstances where cannot claim benefit of Force Majeure
12.4 Remedy of the Force Majeure event
13 Governing law

Note: Interchange and Pacific Link have licence structures similar to those of Digicel and TVL

3.6.3 Limiting the use of exceptions and exemptions

Licence exceptions should be restricted to exceptional circumstances. A good example was the use of a licence exception to allow Starlink to provide services following a tropical cyclones Judy and Kevin in 2023. This allowed for speedy deployment on a temporary basis (the exception being limited to 6 months duration) and therefore did not unduly distort the competitive market.

TRBR has now revoked nearly all exceptions been other than those applied (appropriately) for Government self-provision. The only other continuing exceptions is for Interchange Ltd on the operation of the submarine cable between Port Vila and Suva, Fiji. There is no good reason why Interchange does not operate under a standard licence, and in doing so it would enable TRBR more effectively to regulate an essential facility that most licensees require to access and use. This should be done at the end of 2026, when the current exception expires.

4 LICENSING TERMS AND CONDITIONS IN RELATION TO THE PROVISION OF NON GEOSTATIONARY SATELLITE SERVICES

4.1 Introduction

Non-Geostationary Orbit (NGO) satellite networks or constellations, as the name implies, orbit the earth, in contrast with Geostationary Orbit satellites which occupy a position above the Earth at the equator, and are fixed in relation to the Earth.

NGO satellite constellations are of two kinds:

- (a) Low Earth Orbit (LEO) satellite constellations, which have orbits between 160 km and 2,000 km above the earth. Starlink is a LEO satellite constellation, and is probably the best known at this stage in the Region.
- (b) Medium Earth Orbit (MEO) satellite constellations, which have orbits over 2,000 km above the earth.

TRBR's considerations to date have been with LEO satellites. The considerations that apply would also apply to MEO satellites, but no MEO satellite operator has indicated an intention to provide services in Vanuatu. This may change in future.

TRBR prefers to refer to NGO satellite networks and services, rather than to LEO satellite networks and services, because:

- (a) The term is inclusive of both LEO and MEO satellites, which, in TRBR's view, should be subject to the same licence terms and conditions; and
- (b) Recently Amazon has changed the name of its satellite network and service from Project Kuiper to Amazon LEO, and the use by TRBR of the initials, NGO, will avoid confusion in future.

4.2 Current licensing arrangements in Vanuatu

SpaceX's Starlink operation has an Internet Service Provider licence in Vanuatu. The licence holder is Starlink Vanuatu Ltd and the licence was issued in August, 2024.

TRBR took the view that, insofar as possible, that licence should have the same terms and conditions as other licensees providing internet services. The licence does not authorise Starlink to provide direct to device (D2D) mobile satellite services, and that is a major issue that now needs to be addressed for the future.

The current review and public consultation go beyond the issue of D2D and Mobile Satellite Services and covers all terms and conditions that might apply to NGO satellite service providers in the foreseeable future.

4.3 Issues that arise in relation to NGO satellite service providers

4.3.1 Benefits of NGO satellite services

NGO satellite services offer a range of benefits that most national administrations want to be able to access for the benefit of their nations, including:

- (a) Extended service coverage, effectively for the whole country, including rural, regional and remote areas for which terrestrial telecommunications infrastructure is unsuited or too costly, relative to the demand;
- (b) National security and resilience if terrestrial infrastructure is destroyed or damaged as a result of weather or other events. Satellite services can be readily deployed at short notice, as in the case of the Tonga volcanic eruption and tsunami in 2022 which disrupted cable communications for months;
- (c) Emergency communications services where other options might be limited or non-existent; and
- (d) Provision of cost effective national broadband and other services, which owe their cost competitiveness to there being no need for terrestrial infrastructure investment and operation.

4.3.2 Potential disadvantages and issues associated with NGO satellite services

The potential disadvantages and issues associated with NGO satellite services, particularly in a small, developing market such as Vanuatu, include:

- (a) Disrupted impact in a fragile market with the transfer of demand away from existing terrestrial network operators;
- (b) Causing stranded terrestrial investment through diversion of demand;
- (c) Undermining confidence in future terrestrial investment for expansion, upgrade and replacement of the current asset base;
- (d) National digital sovereignty and security issues resulting from processing of traffic and ni-Vanuatu data offshore, and because NGO satellite networks are controlled from other jurisdictions;
- (e) Potential reduction in employment for ni-Vanuatu nationals; and
- (f) Potential issues in terms of customer recourse in dispute situations, and application of foreign law and tribunals in the resolution of such disputes.

4.3.3 Striking an appropriate balance

TRBR is seeking, through the terms and conditions of licence, to strike an appropriate and viable balance in relation to NGO satellite service providers. It wants to maximise the benefits that may be achieved for customers in Vanuatu and for the country at large, while

at the same time avoiding the potential disadvantages and other issues, such as those listed above.

TRBR is aware that one possible approach to NGO satellite licensing is to permit entry without any special conditions, and let the market work through the consequences. History is replete with situations where innovative and new technologies and solutions have displaced existing industrial or transaction processes. At the extreme, such an approach would be to leave it to the market to determine the outcome, based on the economic and commercial merits involved.

TRBR rejects such a laissez faire approach, based on the following considerations:

- (a) The entry of NGO satellite services into the telecommunications market is not a case of displacement of existing terrestrial technologies. NGO satellite services are seen as complementary to existing terrestrial networks and services, in terms of serving regional, rural and remote communities better and more cost-efficiently than via the extension of coverage via terrestrial technologies. However, it would be inappropriate to limit the applications of NGO satellite services in this way by regulatory means. That would amount to an arbitrary delineation of territories within Vanuatu, and potentially would deny useful satellite applications to urban areas.
- (b) It has been argued that the cost of satellite services, and the resulting retail prices would limit the adoption of satellite services in markets such as Vanuatu with relatively low average incomes. This argument ignores the fact that many high volume and high value customers are enterprise and institutional customers who can readily afford satellite services. If they switched from current terrestrial service providers that would have substantial impact on the continued viability of those providers. In addition, it has been observed that NGO operators with global operations at this stage are likely to adjust their prices to suit local market affordability. They are under no obligation to offer global uniform prices, and the variations are unlikely to be predatory in the strict economic sense of that term. TRBR concludes that satellite service costs are not a guarantee of limited market penetration.
- (c) Economists have tended to encourage innovation notwithstanding the disruption that may result for end users, at least during a period of transition. Regulators such as TRBR cannot afford to be so relaxed. They have a broad responsibility in relation to service continuity, and need to exercise their powers, particularly in relation to licensing, with that in mind. Of course, service continuity is primarily the responsibility of individual licensed operators, but that needs to be facilitated by the regulatory framework developed by the regulator.
- (d) There are licensing options available that permit beneficial entry of NGO satellite service providers in conjunction with terrestrial network operators and service providers, and TRBR has explored these in its proposed approach.

4.4 Proposed specific terms and conditions of licence for NGO satellite service providers

The specific NGO satellite service licence terms and conditions that TRBR proposes to adopt, subject to considering stakeholder responses to this public consultation, are as follows:

4.4.1 Licensing

In order to provide any telecommunications service within, to or from Vanuatu, a NGO satellite network operator or service provider must do so in accordance with a licence issued by the Regulator.

This is a clear application of the requirement in Section 12 of the TRBR Act.

4.4.2 Standard conditions common to all network licensees

As far as is reasonably possible, NGO satellite service providers shall have the same or equivalent conditions (standard conditions) as other apply to other network licensees.

These include:

- Compliance with the laws of Vanuatu, including laws and regulations specific to telecommunications and radiocommunications, as well as orders of the Regulator in accordance with such laws;
- Meeting the licence eligibility requirements of the TRBR Act;
- Requirement to pay regulatory fees and charges;
- Obligations in relation to employment of ni-Vanuatu nationals;
- Prior approval to significant changes in ownership; and
- Obligations in relation to service provision, subject to force majeure exceptions.

4.4.3 Special licence terms and conditions relevant to NGO satellite services

(a) **Corporate presence:** To maintain a corporate presence in Vanuatu the management of which shall have full authority to represent the licensee on all matters relating to the network Licence and to accept full responsibility for the discharge of licence obligations and the operation of the network, including the NGO Satellite network components of that Network.

(b) **Minimum level of Network performance:**

- (i) The licensee must maintain a call drop-out rate of no more than 2% or as determined by the Regulator from time to time.
- (ii) The licensee must maintain a rate of call failure due to network congestion of no more than 2% or as determined by the Regulator from time to time.

- (iii) The licensee must maintain a rate of network availability of least 98% or as determined by the regulator from time to time, for all services which are delivered using NGO satellite networks or network components.

(c) Network fault repair

The licensee must repair 90% of Network faults occurring as a result of the operation of the NGO satellite network or network component within 6 hours of the fault being identified by, or reported to, the licensee, or within such other time as may be determined by the Regulator.

In assessing the licensee's compliance with these fault repair timeframes, the licensee's performance will be measured over the period of a calendar year.

(d) Earth Stations

The licensee shall commission and commence operation of one or more earth stations to be located within the territory of Vanuatu, or in the territory of another country approved for the purpose in advance by the Regulator, for the provision of services connecting its user terminals in Vanuatu.

(e) Reporting of traffic and other information to the Regulator

The licensee shall provide information on the volume of data and other traffic originating to and from Vanuatu on a quarterly basis, in the form specified by the Regulator from time to time.

The licensee shall provide the number of terminals sold to customers by itself and its sales outlets and agents in Vanuatu and the numbers of terminals in operation on a quarterly basis or other basis in the form specified by the Regulator from time to time.

(f) Unlicensed terminals

The licensee shall ensure that unlicensed terminals are not connected to its network.

(g) Provision of Network Services in Vanuatu

The licensee shall ensure in the provision of network services in Vanuatu that:

- (i) Only provide NGO network services to residential, business, or institutional customers in Vanuatu in partnership with a licensed provider of network services. The contract of service will specify that the customers involved are the customers of the partnering licensee, and not of the NGO network operator;
- (ii) All contracts for service in Vanuatu, whether wholesale or otherwise, shall be subject to the laws of Vanuatu and to the jurisdiction of the courts of Vanuatu;
- (iii) The licensee shall provide NGO services to partnering ni-Vanuatu licensees on a non-discriminatory basis, subject to the terms of a reference offer that the licensee will publish on its public Vanuatu website;

- (iv) “Satellite to device” or “direct to device” mobile satellite services shall only be provided via partnering licensees after the successful completion of public pilots or trials and after specific authorisation to commence commercial service has been given by the Regulator.

5 CONSULTATION QUESTIONS

Stakeholders in the telecommunications and broadcasting sector in Vanuatu are invited to provide TRBR with their view on anything in this consultation paper, and on the licensing framework more generally. Stakeholders are encouraged to provide their comments on any aspect of this paper. Responses are particularly sought to the following consultations questions:

A. Licensing framework

1. What problems or limitations are you aware of in the current licensing framework?
2. The TRBR has identified a lack of clarity in the licensing of OTT services, especially IPTV. What are your views on the proposed amendments to the definitions of individual content provider and individual service provider licences (see section 3.5.1)?
3. Do you think that there is value in TRBR seeking to develop unified licences that include broadcasting as well as telecommunications? Please explain your reasons.
4. Do you believe that any changes to the primary legislation (the Broadcasting Act or the TRBR Act) are required at this time? Please bear in mind that changes to primary legislation are complicated and time-consuming, so should be avoided unless absolutely necessary.
5. Do you agree with the proposal to standardise individual licences as far as possible? How might existing licensees be encouraged to migrate from their current licence to an equivalent licence in the standard format?
6. Do you agree with the proposal to limit licence exceptions and exemptions?
7. Should Class Licensing be extended to include licences for services other than resale and limited site operations (see section 2.5)?
8. Is the arrangement under which a fixed annual fee applies to class licences appropriate for the future and for new services that might be subject to class licensing? If not, what alternatives should be considered? Please explain your reasons.

B. NGO Satellite Service licence terms and conditions

9. Do you agree that, as far as reasonably possible, NGO satellite network operators and service providers should be subject to the same or equivalent standard licence terms and conditions that apply to other terrestrial licensees? Please explain your reasons.
10. In relation to Section 4.3.1 of this paper, do you agree with the benefits listed in relation to NGO satellite services? Are there other benefits that the Regulator should take into account, and, if so, what are they?
11. In relation to Section 4.3.2 of this paper, do you agree with the potential disadvantages and issues listed in relation to NGO satellite services? Are there other

disadvantages, problems or issues that the Regulator should take into account, and, if so, what are they?

12. In relation to section 4.3.3 of this paper, is the balance between potential advantages and disadvantages of NGO satellite services that TRBR seeks to strike the right one? Please state your reasons, and outline any alternative approach that you prefer.
13. Do you agree with the proposed specific licence terms and conditions for NGO satellite network operators and service providers in Vanuatu as set out in Section 4.4 of this paper? Please consider each proposed condition in turn, and also indicate any additional or amended condition that you consider should be included in the relevant licences, together with your reasons.

ANNEX A: LICENSING ARRANGEMENTS IN OTHER COUNTRIES

This Annex firstly reviews international trends and best practice developments in licensing of telecommunications, and then presents a number of case study examples illustrating their implementation in practice.

A1 International trends and best practice

The initial phase of the telecommunications sector reform in the late 20th century focused on the introduction of competition and the privatisation of the incumbent monopolist in some countries. Until then, most of the countries used licensing as a way to restrain market access and to impose regulatory obligations. But even after the initial stage of market liberalisation, the licensing process in most of the countries created considerable barriers to market entry.

Things began to change in the first decade of the 21st century. As the pace of technological innovation accelerated the need to reform existing licensing schemes became more obvious for national regulatory authorities. As the Internet Protocol became an issue on the agenda of policymakers and convergence in specific elements of the value chain started to materialize, increasingly policymakers were forced to question the usefulness of existing licensing frameworks and initiated the necessary procedures for licensing regimes to be adapted in order to achieve policy goals without jeopardizing market development and technological advancement.

As reported by the ITU⁵, these concerns started two significant trends:

- simplification: an expansion in the number of services subject to simple authorisation or even no licensing; and
- reducing or eliminating the administrative and formal procedures required to enter the market – where for example the general authorisation category is enhanced to allow the provision of more services and only requires registration or a simple notification. Some countries even proceeded a stage further and opted for full deregulation of services, which includes the elimination of licences or concessions and even the need to notify or register with the regulator.

Converged or unified licences

Perhaps of greater impact was the development of converged licensing frameworks that abandoned the traditional service-based and technology-based types of licences. In most countries the starting point was a licensing framework where most licences were technology-specific and service-specific thus providing the Authority overall control of the market structure. Liberalisation offered several strategic alternatives with different impact in

⁵ Global ICT Regulatory Outlook 2020, available at: <https://www.itu.int/en/ITU-D/Regulatory-Market/Pages/Outlook/2017.aspx>

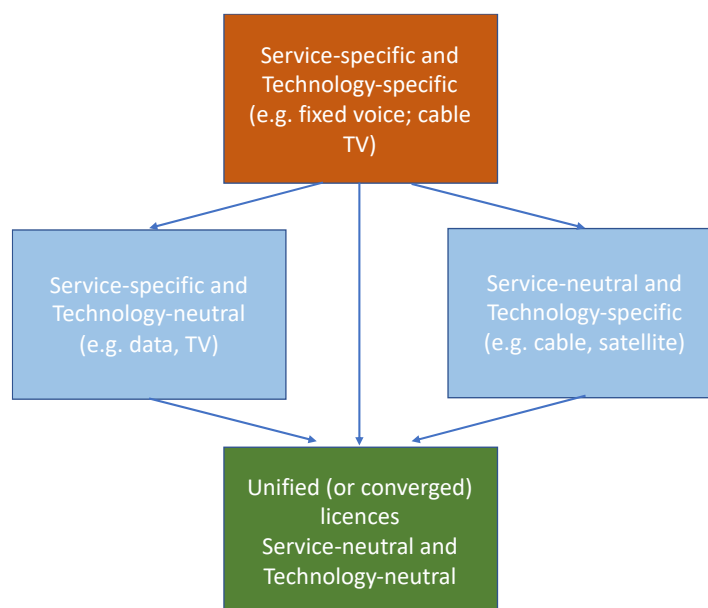
the country telecommunications sector development. The fundamental choices were usually between:

- A move towards a technology-neutral and service-specific licensing framework, in which licences specify a range of services that can be offered, while leaving the choice of technology to the service provider. This choice restricts the scope of services a player could offer (e.g. fixed vs mobile) while leaving the licensee to specify the technologies it uses. Service-specific, technology-neutral licences provide flexibility to the operators without compromising regulatory control in the context of a cautious liberalisation process.
- A move towards a technology-specific and service-neutral licensing framework, in which licensees are only allowed to use a specified technology (e.g. satellite, wireless) but can offer any services that the technology is capable of supporting as are adequate for the market segments it wants to address. Service-neutral, technology-specific licensing may stifle the operator's ability to implement more advanced innovations, because operators cannot migrate to a new technology without obtaining a new licence.
- Implementing a technology-neutral and service-neutral licensing scheme, the so-called "unified licensing" regime. This is a framework in which licences specify a maximum range of services (or do not specify services at all) that can be offered using as wide as a choice of technologies as possible. With this licensing framework operators can combine fixed and mobile technologies to offer services such as fixed voice, mobile voice, data services and video streaming, without the need to apply for any additional licences. A slightly restricted form of unified licensing, known as multi-service authorisations, allows service providers to offer a limited set of services under the umbrella of a single individual licence (or authorisation), using any type of communications infrastructure and technology capable of delivering the services in question.

The figure below illustrates these options for developing the licensing regime. The first two options may be seen as intermediate steps towards a unified licensing regime that was often considered a too dramatic change to be implemented in a single step. However, if it is reached, the end goal of unified licensing is one of the ITU's seven golden rules for digital transformation of fixed broadband markets⁶.

⁶ Global ICT Regulatory Outlook 2020, available at: https://www.itu.int/pub/D-PREF-BB.REG_OUT01

Figure 8: Development of a unified licensing regime



Scope and types of licence

In parallel with the technology and service segmentation criteria, many countries, when reforming licensing regimes, also introduced a two-pronged licensing approach that differentiated between licensees based on the nature of their operations.

- A **facilities-based** licence is for operators that own and operate network infrastructure, a so-called facilities-based licence. Facilities-based licences are almost always **individual licences**, and they may sometimes restrict the type of network technology or geographical scope of the network.
- A **services-based** licence is for those that provide retail services but lease network infrastructure from facilities-based operators. A services-based licensee could also be a pure reseller. Service providers could either be individually licensed or subject to a **class licence**, in which the same licence conditions apply to all providers of the same or similar services.

The facilities-based licence may incorporate an authorisation to provide services or it may be necessary for the operator to obtain a separate licence for retail service provision.

The division between operators that own a network and those who lease network components from other operators allows the regulator to set a balance between the two types of operators that determines developments in the telecommunications markets. Through this lever regulators can, to a certain extent, favour or reward operators that built their own networks while at the same time supporting competition in retail service provision. A regulator wanting to promote broadband infrastructure investment could, for example, only award facilities-based licences and delay the award of pure service-based licences (resellers) for a later stage.

To summarize, as the ITU points out⁷:

"Converged licensing frameworks – featuring unified licenses and simplified administrative procedures – are playing an important role in the app economy, rendering the market attractive, enhancing ease of doing business, and helping unlock market potential. Such reforms are most effective if technology neutrality and flexibility are applied to the rights and obligations of ICT operators, and to elements such as interconnection, numbering, universal service, and spectrum use."

Whilst there has been a clear trend towards the introduction of more flexible and simple licensing regimes⁸, regulators are still faced with a considerable number of challenges and choices. The adoption of a converged licensing model raised several issues that a regulator also has to analyse: spectrum management, setting up the appropriate level of licence fees, ensuring an adequate number of licences, safeguard previous and recent investments and the pursuit of public policy goals, including universal access policies.

In the following sections recent examples of licensing reform are described.

A2 Uganda

In line with the National Broadband Policy, the Uganda Communications Commission⁹ (UCC) designed a new licensing regime in 2020. The main objectives of the new licensing framework include a requirement for national telecom operators to float at least 20% of the shares on the Uganda Securities Exchange within two years of acquiring the new licence. The other highlighted objectives of the new licensing framework include:

- Ease market entry and increase competition
- Effective utilisation of resources
- Increased broadband roll-out.

The new framework comprises three main types of licensees:

- National Telecom Operators (NTOs);
- Public Infrastructure Providers (PIPs); and
- Public Service Providers (PSPs).

According to the UCC the NTO's licence:

- allows it to establish and provide both telecommunication infrastructure and services across the entire country for 20 years.
- must at minimum cover and provide services in 95% of the geographical area of Uganda.

⁷ Regulatory Challenges and Opportunities in the new ICT Ecosystem, ITU 2018, available at: https://www.itu.int/pub/D-PREF-BB.REG_OUT03-2018

⁸ For a comprehensive overview see for example ITU, *Trends in Telecommunication Reform, 2004/05. Licensing in the Era of Convergence*, available at: <https://www.itu.int/itudoc/itu-d/trends04/86755.pdf>

⁹ <https://uccinfo.blog/2019/11/04/ucc-sets-new-framework-for-telecom-licensing/>

- will be eligible for national spectrum allocation based on technical expansion/development plan, legal and regulatory framework, public interest and availability of the respective resources.
- obliges the licence holder to host and/or lease infrastructure to or from other NTOs, PIPs for network roll-out and provision of infrastructure within licensed zones.
- requires the licence holder to host and/or lease infrastructure to PSPs for regional and national roll-out of services within their respective licensed zone.
- obliges the licence holder to share active and passive infrastructure and provide national roaming.

PIPs and PSPs can be national or regional in terms of geographical scope (Uganda is split into four regions). However, PIPs are not allowed to provide services to final consumers. In order to provide services directly to end consumers they must also hold a PSP licence.

PIPs are licensed to roll out and provide infrastructure for 15 years. They will be eligible for spectrum allocation and they shall lease to and from NTOs and other PIPs for roll out of infrastructure in licensed zones. It is mandatory to host and/or provide infrastructure services to PSPs for roll out of their services. It is also obligatory to share active and passive infrastructure and provide national roaming services. National PIP licensees must be 20% locally owned.

PSPs are licensed to offer telecommunication services, provide all communication value added services, and capacity resale services for five years. They need to obtain infrastructure services from NTOs and PIPs in licensed areas, and the licensee shall not be allowed to install or otherwise provide infrastructure services. PSPs are not eligible for spectrum assignment. National PSP licensees must be 20% locally owned. Regional PSPs must cover 95% of the region where they are licensed.

A3 Singapore

Singapore, where the telecommunication services markets was fully liberalized from April 2000, is perhaps the best example of an early licensing streamlining effort. In Singapore, the licensing reform approach implemented by IMDA (at the time IDA), adopted a simplified telecommunications licensing framework based on whether an applicant seeks to provide services based on its own network, a facilities-based operator¹⁰ (FBO) or relying on FBOs network assets to provide services, the services-based operator¹¹ (SBO).

The licensing framework in Singapore is formulated on a hierarchical basis with FBOs being at the higher level. Thus, licensees who are licensed as FBOs are able to offer the services that SBOs can offer, but not vice versa. The objective is that an entity can be issued a single licence for all the networks/services it intends to operate/offer. Licences are technology-neutral within their respective categories.

¹⁰ <https://www.imda.gov.sg/regulations-and-licensing-listing/facilities-based-operations--fbo--licence>

¹¹ <https://www.imda.gov.sg/regulations-and-licensing-listing/services-based-operations--sbo--licence>

Facilities-Based Operator (FBO)

Facilities-based operations refers to the deployment and/or operation of any form of telecommunications networks, systems and/or facilities by any person for the purpose of providing telecommunications and/or broadcasting services outside of their own property boundaries to third parties. Such third parties may include other licensed telecommunication operators or the general public. Parties intending to deploy such operations will require an FBO Licence from IMDA. Examples of telecommunications systems that will be licensed will include mobile communications systems (e.g. base stations, mobile switching centres) needed to offer public mobile phone, paging, trunked radio and mobile data services, and fixed telecommunications systems (e.g. exchanges, fibre, submarine cables, frontier stations, international gateways) to offer services such as local and international voice and data services, and leased circuit services.

IMDA adopts a technology neutral approach towards the licensing of FBOs to ensure that licensees will continue to strive to innovate and respond competitively to meet the needs of users. The configuration of the system deployed and the technology platform (wired or wireless) adopted are left to the choice of the licensee, subject to spectrum and other physical constraints.

IMDA awards individual FBO licences based on the merits of the applications. Licence fees are payable. The licence duration is set to give the licensee sufficient certainty in its operations. The licences may be renewed for a further period as IMDA thinks fit.

Licensees may also be required to comply with interconnection and access obligations as well as the applicable minimum quality of service (QOS) standards set by IMDA. Depending on the scope and requirements of their operations, services offered and reach of customers, licensees may be designated as Public Telecommunications Licensees which status facilitates the installation and maintenance of telecommunications networks, systems and facilities.

Service-Based Operator (SBO)

SBO licences are given to operators intending to lease telecommunication network elements (such as transmission capacity services) from any FBO licensed by the authority so as to provide their own telecommunication services, or to resell the telecommunication services of FBOs to third parties.

Service based licenses were subdivided into two categories: individual and class licences. In general, operators who lease international transmission capacity for the provision of their services are required to hold an individual licence. For SBO Class licences interested parties will only be required to register with the authority before they start providing the stipulated services.

The range of services that requires SBO (Individual) Licence category includes, but is not limited to, the following:

- International Simple Resale (ISR)
- Resale of Local Leased Fixed-line Connectivity Services
- Public Internet Access Services

- Internet Exchange Services
- Virtual Private Network Services
- Managed Data Network Services
- Mobile Virtual Network Operation
- Live Audiotex Services
- Prepaid Services for other telecommunication services such as:
 - Call-back / Call Re-origination Services
 - Internet Based Voice and Data Services
 - International Calling Card (ICC) Services
 - Resale of Public Switched Telecommunication Services
 - Store-and-Retrieve (S&R) Value-Added Network Services
 - Store-and-Forward (S&F) Value-Added Network Services
- IP Telephony Services
- Voice and Data Services with Masking of Calling Line Identity
- Satellite Mobile Telephone or Data Services
- Mobile Communications on Aircraft
- Machine-To-Machine (M2M) Services
- White Space Geo-Location Database Services.

The range of operations and services that falls under the SBO (Class) Licence category includes, but is not limited to, the following:

- Call-back/Call Re-origination Services
- Internet Based Voice and Data Services
- International Calling Card (ICC) Services
- Resale of Public Switched Telecommunication Services
- Store-and-Retrieve (S&R) Value-Added Network Services
- Audiotex Services
- Public Chain Payphone Services
- Store-and-Forward (S&F) Value-Added Network Services.

Licensees may also be required to comply with interconnection and access obligations as well as the applicable minimum quality of service (QOS) standards set by IMDA.

A4 Somalia

The National Communications Authority (NCA) has recently introduced a new ICT licensing framework¹² in pursuit of its mandate as the supervisor of the communication services in the Federal Republic of Somalia. The new licensing framework, which is effective from December 2020, is guided by the National Communications Law of 2017, which confers powers to issue licenses for the provision and operation of communications infrastructure

¹² <https://nca.gov.so/licenses/>

and services within the borders of the Federal Republic of Somalia to the NCA. The NCA's new licensing framework is a recent example of the Converged Licensing type and aims to achieve the following objectives:

- **Efficiency of Convergence:** multiple services would be delivered on a single network or platform embracing convergence of networks, services and technologies. This factor will drive efficient use of networks through economies of scope;
- **Technology Neutrality:** networks will not be distinguished by technology; rather they would be licensed as networks capable of delivering multiple and multimedia products;
- **Service Neutrality:** no preference is given to any particular type of service or technology, while ensuring the use of common standards and protocols that enable interoperability; and
- **Consumer Choice:** as more players and more applications and products are introduced in the market, consumers will be able to shop for suitable solutions.

Under the new Unified Licensing Framework, the NCA will issue technology and service neutral licences to ICT/ telecommunications network operators and service providers in the Federal Republic of Somalia. Licences can be Individual or Class Licences.

There are three types of Individual Licences:

- **Communications Infrastructure Provider (CIP) Licence.** This type of licence shall be issued to licensees who own, operate or provide any form of physical infrastructure used principally for carrying service and applications and content. The infrastructure may include fixed links, radio communication transmitters, satellites and satellites station, submarine cable, fibre/copper cable, towers, and switches, base stations. The facilities are for own use or for availing to other licensed operators on a commercial basis. Private telecommunications networks shall fall in this category and shall further be specified in the appropriate licence type to distinguish them from major networks.
- **Applications and Services Provider (ASP) Licence.** The ASP licence is for non-infrastructure-based service providers who could provide all forms of services and applications to end users using infrastructure of Communication Infrastructure Providers. The services and applications may be based on speech, sound, data, text and images and deliver functions to the end users. The services may include among others voice services, Internet Access, data services, mobile money services, MVNO services, IPTV and Value-Added Services. These service application providers typically use leased facilities from Communications Infrastructure Providers to offer services.
- **Communications Infrastructure and Services Provider (CISP) Licence.** This licence category allows operators to obtain a combined licence for communications infrastructure, services, and applications in one licence. It is essentially a licence that give a licensee combined CIP and ASP license privileges. This type of licence eliminates the need for operators to go through multiple licensing procedures if they desire to provide multiple communications infrastructure and applications and services. Terms and conditions for this licence will include all the terms and conditions for individual CIP and ASP licences.

CIP Individual Licences are further sub-divided in three categories:

- **International Communications Infrastructure Provider Licence.** The licensee or service provider has international scope of operation only and shall be licensed to provide network facilities for connectivity to destinations outside Somalia. International network facility will be connected to national network facility to facilitate seamless connectivity and conveyance of services, applications and content. The Terms and Conditions of the licence will stipulate further details of operation; for instance, the licensee may provide only wholesale communication infrastructure which means they would only sell to other licensees, who will in turn sell to end users.
- **National Communications Infrastructure Provider Licence.** A licensee with this type of licence has national scope of operation and may connect to the infrastructure of International Communications Infrastructure Provider if there is need for connectivity to destinations outside Somalia. The Terms and Conditions of the Licence will stipulate further details of operation, for instance, the licence may be licensed to sell to other licensees or to retail consumers.
- **Regional Communications Infrastructure Providers.** The service provider is licensed to build local networks or own private networks. A local network shall be confined to a city, town or village if it is meant to serve the public. Otherwise, it shall be confined to ownership and use by a business/company (i.e. private network). Non-private network Licensees could provide wholesale or retail connectivity. The Terms and Conditions of the Licence will stipulate further details of operation, for instance, the licence may be licensed to sell to other licensees or to retail consumers.

As for the CIP licences, ASP licenses are further sub-divided in two types of individual licences:

- **Applications and Service Licence.** This licence type defines the services and applications to be carried in communications infrastructure and covers among others voice, data, Internet, SMS, IPTV and value-added services. GMPCS services fall in this license type. Licensees can operate at both national and international scope. However, licensees who seek to provide services to other licensed operators only are issued wholesale application and service licences, which shall then define the wholesale application and service.
- **Mobile Virtual Network Operator (MVNO) Licence.** This licence type is specifically designed to accommodate a network operator that offers mobile services but does not own infrastructure or its own radio frequency; it leases radio access from its hosting Mobile Network Operators (MNO). MVNO operates through commercial arrangements with licensed Mobile Network Operators.

Three types of Class Licences are foreseen within the new licensing framework:

- **Terminal Equipment Providers** This class licence is classified into:
 - a) Class A: Big companies who manufacture and distribute Telecommunications terminal equipment's, installations and Maintenance.
 - b) Class B: Small companies who resell Telecommunications terminal equipment, installations and Maintenance.

- **Private Very Small Aperture Terminals (VSAT).** This class licence includes VSATs operated through foreign hub operators.
- **Onetime Authorization (Class Licence).** This is a onetime authorization class license; it includes the Global mobile Personal Communications by satellite and .SO sub-domain name registrar service providers.

A5 Saudi Arabia

Back in 2006, in the context of the liberalization of the telecommunications sector, the Saudi Arabia's Communications and Information Technology Commission (CITC) responsible for regulating the information and communications technology sector in the Kingdom, implemented a technology-neutral and service-specific regime. Later, in 2016, Saudi Arabia made a further step towards the migration of the regulatory framework from the introduced in 2006 to the 'best practice' technology-neutral and service-neutral framework, by making available unified licences to qualified facility-based service providers. In January 2019, the incumbent was also migrated to a unified type of licence.

In April 2019 the CITC issued a public consultation¹³ in order to discuss further improvements and proposing an update of the existing licensing framework, deemed to be too complex and inadequate for observable market changes. As mentioned in the public consultation issued by the CITC, it further studied a variety of approaches to enhance the regulatory framework, and better match recognised international "best practice". It also took into account the need to align identified objectives with the Kingdom's Vision 2030. Key defined objectives by the CITC in the public consultation included:

- **Simplicity:** The new regulatory and licensing frameworks should offer a streamlines approach to the regulation of the industry and the provision of licensed services
- **Transparency:** All providers of the same services should enjoy identical terms and conditions
- **Attractiveness:** The resulting market environment should be attractive to new investment and reduce barriers to market entry by new providers
- **Enhance Value:** The change should have minimal impact on existing service providers while maximizing the opportunities for providers and consumers to benefit from the planned change
- **Future-proof:** The new environment should permit the swift launch of any new services and technologies and ease migration to any potentially future licensing framework.

The proposed licensing structure set out in the consultation paper contemplates replacing the existing regime with three new licences:

- the 'Unified Licence',
- the 'Wholesale Licence' and

¹³ Available at: https://www.citc.gov.sa/en/new/publicConsultation/Documents/144006_1_E.pdf

- the 'General Class Licence'.

In order to implement the regime all existing licences will be migrated to one of these three licences. Under the proposed framework a Unified Licence is an individual license permitting a duly authorized service provider to provide any telecommunications services using any type of telecommunications infrastructure and technology capable of delivering the desired service. Unified Licence holders can provide their services to retail end-users, as well as wholesale customers namely, other Unified Licence holders, Wholesale Licence holders and General Class Licence holders.

The Wholesale Licence is an individual licence permitting the service provider to build, own and operate a public telecommunication network for the provision of public telecommunication services only to other Individual Licensed Service Providers. According to the CITC perspective this type of licence is part of a number of measures destined to encourage new investment into fibre-to-the-home rollout and to extend coverage in both urban and rural areas. As the CITC highlights, in many developed countries, non-telecom players such as energy & utility companies have been very successful as wholesale carriers by leveraging their own fibre infrastructure. A Wholesale licensee cannot hold a Unified Licence or a General Class Licence. It cannot provide its services to General Class Licence holders or to retail end-users.

Finally, the General Class Licence is a class licence allowing the service provider to supply any telecommunications services authorized under that licence. Under the proposed framework, a single General Class Licence would replace the multiple Class Licence approach existing under the current regulatory regime. A General Class License holder would only be able to provide its services to other General Class Licence holders or to retail end-users. It would not be able to provide services to Unified Licence and Wholesale Licence holders.