



Public Consultation Paper
On
Telecommunication Licensing Framework
in Sri Lanka

Telecommunications Regulatory Commission of Sri Lanka

23rd JUNE, 2021

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1 INTRODUCTION

1.1 Legal background

Based on its powers under of the Telecommunication Act No 25 of 1991 as amended by the Act No 27 of 1996 (“the Act”) the Telecommunications Regulatory Commission (“the Commission”) hereby launches a public consultation on the telecommunications licensing regime in Sri Lanka.

In terms of Section 4 of the Act, the Commission shall exercise its powers in a manner which it considers is best calculated to promote the national interest and inter alia:

- to ensure the provision of a reliable and efficient national and international telecommunication service in Sri Lanka
- to promote the rapid and sustained development of telecommunications facilities both domestic and international
- to ensure that operators are able to carry out their obligations for providing a reliable and efficient service free of undue delay, hindrance or impediment
- to secure that every operator shall have and employ the necessary technical, financial and managerial resources to ensure the provision of the services specified in his licence
- to protect and promote the interests of consumers, purchasers and other users and the public interest with respect to charges, quality and variety of telecommunication services provided.

For the purpose of achieving these objectives, Section 5 of the Act grants the Commission certain powers and duties, inter alia:

- to ensure that the telecommunication services in the country are operated in a manner which will best serve and contribute to its overall economic and social development and advancement
- to advise the Minister in the granting of licences to operate telecommunication systems under the Act.
- To pay due regard to the public interest and the convenience and wishes of the general public as regards the telecommunication services provided by an operator.

1.2 The purpose of the public consultation

The purpose of this public consultation document is to investigate whether the current telecommunication licence framework is fit for purpose, and/or whether changes are required in order to fulfil the objectives highlighted above from Section 4 of the Act.

The current licensing framework has been in existence for approximately three decades and no significant changes have been introduced to suit the converging telecommunication industry and its evolution. Individual licences have been issued at various times to a wide range of companies authorizing multiple services to build up telecommunication systems and provide services. Each licence lasts for 5 or 10 years, and most have been renewed at least once, with changes made to the scope and to the licence conditions.

The Commission has noticed a number of international trends and best practices, that differ from the current arrangements in Sri Lanka and which stimulates the required industry growth in terms of digital economic transformation. These trends include moves:

- away from service specific licensing regimes towards service neutrality and unified licensing platforms (ie a single licence for all services)
- away from technology specific licensing regimes towards technology neutrality.
- class licensing (the same requirements for all providers of the same service)

The Commission therefore wishes to use this public consultation to investigate:

- what are the strengths and weaknesses of the current licensing regime in Sri Lanka
- whether greater consistency between licences is desirable and, if so, how it might be implemented
- whether to move away from service-specific to service-neutral licences
- whether to move away from technology-specific to technology-neutral licences.

1.3 How to respond to the consultation

TRCSL would like to invite responses in writing from all interested parties in relation to the issues raised in this Consultation Paper by 6th August, 2021. Respondents are encouraged to answer the specific questions included in this Consultation Paper in detail:

Consultation question

1. What is your opinion on the Commission's current Licensing Regime? Please explain how if current Licensing regime affects the development of telecommunication services and development of telecommunication infrastructure in the country
2. What is your opinion on the current Licence fee structure adopted by the Commission? Please explain.
3. What is your opinion on the Commission's objective of a consolidated and unified licensing regime in Sri Lanka, and on its plan for a phased or simultaneous implementation of Unified Licensing?
4. Should any other service category be included? If so, give detailed suggestion with justification.
5. Will there be an industry impact due to consolidation of services? If so what precautionary measures can be taken? Describe in detail.
6. Application Services are not addressed in the current licensing regime. Please indicate whether this category of Licences should be introduced in the new Licensing framework? If so for what type of businesses or services? Explain in detail.
7. Should VAS services be included into above list? If yes Please give details of VAS services which can be brought into proposed Licensing framework.
8. What should be the fee structure for above Licence types? Please propose a methodology for determination with justification.
9. Should any other type of network categories be included? If so Please describe in detail.
10. Will there be an industry impact due to consolidation of networks? If so what precautionary measures can be taken? Describe in detail.
11. What is your opinion about network component sharing among operators? Should this be promoted? If so in what manner ? Describe in detail.
12. Should the operators be confined to a single system or be allowed to develop secondary networks? Justify your answer in detail.
13. Please comment on the proposed consolidated service and network categories in general, and the mapping from existing services and network type as defined in various licences.
14. Should all operators be authorized to provide wholesale and Retail services, or Separate Licence should be introduced to provide infrastructure based wholesale only Services.? Describe in detail.

15. What are the benefits or any issues that can be expected by issuing Reseller permits (Sec 18A) to operators to allow service providers to use their networks in terms of international best practices? What services or businesses can be brought into the purview of Reseller Permits (Sec 18A)? Describe in detail
16. What are the benefits or issues that can be expected in issuance of Sec 20 licences to private networks?
17. Do you think single and multiple authorization should be continued? Please justify
18. Please comment about above Licence types? Should any other Licence type be introduced? If so, justify in detail.
19. Do you think Unified Licensing is a good concept? Please describe in detail.
20. How do you think consolidated framework should be implemented? 1,2 or 3? Please describe your answer with details If you have alternative proposal
21. What benefits and impacts, consolidated licensing and unified licensing can bring to the telecommunication industry and public in general? Describe with ways to mitigate impacts. Should the Commission allow mergers between entities when unified Licensing regime is introduced? Justify your answer.
22. Do you think unified licences be issued simultaneously with consolidated Licences is a good suggestion. If so why?
23. Do you think unified Licence be issued to all operators? Provide detailed justification with benefits and impacts. Please indicate how above Licence types should be priced?
24. Please write your general comments, views alternative proposals with regard to introduction of a new Licensing Framework for telecommunication industry in Sri Lanka etc.

All submissions will be processed and considered as non-confidential. In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website www.trc.gov.lk.

Respondents are encouraged to submit responses electronically via email where possible to dgtsl@trc.gov.lk. Alternatively, responses may be submitted by post to the following address:

Director General
Telecommunications Regulatory Commission of Sri Lanka , No. 276,
Elvitigala Mawatha,
Colombo 08.

2 THE CURRENT LICENSING REGIME IN SRI LANKA

The licensing of telecommunication operators are governed by Sections 17-20 of the Act.

Section 17 stipulates that no person shall operate a telecommunication system except under the authority of a licence granted by the Minister, which may be on the recommendation of the Commission.

As per Section 18 of the Act, the Commission may recommend to the Minister the modification of a condition of a licence

As per Section 19 a person who operates a telecommunication system without obtaining a Licence under Section 17 of the Act ,shall be guilty of an offence under the Act.

As per Section 18 A of the Act, an operator shall not permit the use of the telecommunication system in respect of which a licence is issued to such operator, by any person for the purpose of sending and receiving messages by such person by way of business on the payment of a fee or reward, without obtaining the prior approval of the Commission. On the application being made by an operator, the Commission shall grant approval by the issue of a permit to the operator which shall be subject to such terms and conditions as may be specified therein.

As per section 20 of the Act, any private network that extends beyond the boundaries of an area corresponding to the premises occupied by the person operating the system, shall obtain a Licence from the Commission for the type of telecommunication system being operated.

2.1 Licences issued

The current Licensing regime in Sri Lanka are as follows,

- a) Facility based operators (FBO)- they are authorized to own network facility and provide services
- b) Non-Facility Based operators (NFBO) - they are authorized to own network facilities but Limited Resources are not assigned and such resources shall be shared with FBOs
- c) Facility Providers – they are authorized to own network facility but not allowed to provide retail services. Connectivity facilities can be provided only to operators and broadcasters.

All above are system operators as per Section 17 of the Act and no service only permits are issued as per Section 18 A of the Act. Most of the Licences are of category (a) above, There are three Licences issued under category (b) and one Licence issued under category (c).

Current Service Authorization Regime

- Single Authorization (e.g. DTH)
- Multiple Authorization (Most of the Licences)

All are individual Licences and no class Licences have been issued.

A total of 29 licences have been issued to date under a variety of different network categories and most are under multiple service authorization regime.

- Fixed Telecommunication System Operators (“Fixed”) – 3 licences
- Mobile Telecommunication System Operators (“Mobile”) – 4 licences
- External Gateway Operators (“EGO”) – 6 licences
- Cable Distribution Network Operators (“CDN”) – 3 licences
- Data Communications system Operators (“Data”) – 2 licences
- Non-facility based Internet Service Providers (“ISP”) – 3 licences
- Direct-to-Home Satellite Broadcasting Service Providers (“DTH”) – 5 licences
- Trunk Mobile Communication Service Providers (“TMCS”) – 1 licence
- Infrastructure Service Providers (“Infrastructure”) – 1 licence
- Satellite Service Providers (“Satellite”) – 1 licence.

The table below details the licensees together with the scope, duration and expiry date of their licences. Full details of all the licences are available on the TRC website (<http://www.trc.gov.lk/2014-05-12-12-36-13/system-licence/licenced-operator-list.html>).

Licensee	Licences issued	Period of validity	Date of expiry
Sri Lanka Telecom PLC	Fixed	10 years	09.02.2022
	DTH	5 years	14.11.2024
Dialog Broadband Networks (Pvt.) Ltd.	Fixed	10 years	10.11.2025
	ISP	5 years	05.12.2023
	Infrastructure	10 years	08.05.2025
Lanka Bell Ltd.	Fixed	10 years	26.02.2026

	EGO	10 years	28.02.2023
Hutchison Telecommunications Lanka (Pvt.) Ltd.	Mobile	10 years	11.02.2022
	EGO	10 years	28.02.2025
Dialog Axiata PLC.	Mobile	10 years	28.09.2023
	EGO	10 years	28.02.2023
Mobitel (Pvt.) Ltd.	Mobile	10 years	10.02.2023
	EGO	10 years	07.03.2023
Bharti Airtel Lanka (Pvt.) Ltd.	Mobile	10 years	12.04.2027
	EGO	10 years	01.12.2027
TATA Communications Lanka Ltd.	EGO	10 years	06.06.2023
	ISP	5 years	10.02.2025
Lanka Communication Services (Pvt.) Ltd.	Data	10 years	04.07.2021
Société International Télécommunications Aeronautiques (SITA).	Data	5 years	06.08.2022
Lanka Education and Research Network.	ISP	5 years	01.09.2021
Ask Cable Vision (Pvt.) Ltd.	CDN	5 years	01.03.2023
City Cables Links (Pvt.) Ltd	CDN	5 years	01.06.2024
Trymas Media Network (Pvt.) Ltd	CDN	5 years	02.11.2023
Dialog Television (Pvt.) Ltd.	DTH	5 years	01.02.2022
DISH TV Lanka (Pvt.) Ltd.	DTH	5 years	18.10.2021
SATIS Agency (Pvt.) Ltd.	DTH	5 years	07.09.2021
US Cable Services (Pvt.) Ltd.	DTH	5 years	25.08.2022
Dynacom Engineering (Pvt.) Ltd	TMCS	5 years	25.02.2023
Supreme Sat (Pvt.) Ltd	Satellite	5 years	10.05.2023

In the above 29 Licences, different types of services are authorized including:

- Leased line service
- Public Payphone Service
- Backhaul Services
- Data Communication Service
- Facsimile Service
- International Television Transmission
- Maritime Services
- Network Access Service
- Next Generation (NGN) Services
- Satellite Services including INMARSAT.
- Voicemail service
- Voice Telephony Services
- Wireless Fidelity (Wi-Fi) Services
- Leasing of excess capacity on Microwave or Optical backbone to other licensed operators
- Data Service including circuit switch data SMS, USSD, WAP, MMS, GPRS, EDGE and future developments of cellular-related Data Services.
- GSM based service including location-based services and any future developments of GSM based services.
- Wireless Fidelity (Wi-Fi) based Data Communication Service for indoor application.
- Television Transmission Service
- Virtual Private Network (VPN) Service
- Internet services
- Switched and non-switched data communication service
- Telex
- Electronic mail
- Data Processing services related to air transport industry.
- SITAFAX-featuring multi addressing and multi-copy capabilities.
- Cable TV
- Group calling
- Priority call over-ride
- Fleet / Dispatch call
- Closed User Group
- Leased Line Services (restricted)

- Capacities associated with space stations on board of a space object for domestic/foreign operator
- Control, monitor and test functions related to use, maintenance, operation and control of space objects
- International Transit service
- Telemetry, tracking and command (TT&C)
- Colocation (Hosting) Services
- Maritime connectivity.

2.2 Services covered.

Under the above authorization regimes, services have been defined from time to time as and when required by the industry. However, services defined above can be treated as an authorization of a sub-category of a particular broader service category, which may by such definition, limit the capability of the operator to harness the full potential of a modern telecommunication network.

A definition of a broader or generic service category may encompass an authorization of a series of service sub-categories which a modern telecommunication system is capable of, due to technological convergence which would bring benefit to the public to experience a wide range and a variety of telecommunication services.

Therefore, migrating to a common broader and generic service category may bring service providers to a common platform and would facilitate their network optimization in terms of service provisioning.

2.3 Fees charged.

As per Section 17(6) a of the Act a licence under Section 17 of the Act shall be issued on payment by the Applicant of the licence fee. The current fee structure is given in the table below. As depicted, the Fee structure is based on multiple authorization Licence types and not based on individual service types authorized by the Licence.

For most licences the same fee is applied on renewal, however the renewal fee will be set at 3% of the average annual turnover of the past 3 years if that is higher than the stipulated fee.

Licensee category	Duration (years)	Licence fee (LKR m)
Fixed wireline/wireless	10	800
Fixed wireless	10	400

Mobile	10	500
EGO	10	150
CDN	5	5
Data	5	48
ISP	5	3
DTH	5	5
TMCS	5	5
Infrastructure (Fibre Cable & Microwave)	10	800
Satellite	5	10

Consultation questions

1. What is your opinion on the Commission's current Licensing Regime? Please explain how if the current Licensing regime affects the development of telecommunication services and development of telecommunication infrastructure in the country.
2. What is your opinion on the current Licence fee structure adopted by the Commission? Please explain.

3 IMPROVING THE LICENSING REGIME IN SRI LANKA

The Commission is of the view that as the country moves forward into a converged digital economy, there is need to adapt the current licensing regime towards a more holistic and sustainable licensing framework. The challenge for the Commission is to manage that transition so as to achieve the available economic and societal gains without creating substantial industry impact.

The aim of this public consultation is to establish a robust regulatory framework that implements international best practice in a manner that is consistent with the Act, which would create a level playing field and enables licensees to develop affordable and widely available services to meet the needs of corporate and retail customers throughout Sri Lanka.

International best practice (for example the case studies presented in Item 4) and ITU Recommendations suggest that Sri Lanka should move towards a licensing regime with:

- Technology consolidation and neutrality
- Service consolidation and neutrality
- Fewer licence categories
- Distinction between facility-based providers and service-based providers
- Greater use of unified licences (a single licence for multiple services) and general authorisation / class licensing (the same requirements for all providers of the same service).

In this chapter the Commission lays out its vision for the future licensing regime in Sri Lanka so as to implement these principles as per provisions in the Act. It proposes a two-step implementation:

- Step 1: The current individual operator licences are to be consolidated in terms of service categories and network categories.
- Step 2: Unified licences are to be introduced based on the consolidated Licence framework with either a phased or simultaneous migration process.

Consultation question

3. What is your opinion on the Commission's objective of a consolidated and unified licensing regime in Sri Lanka, and on its plan for a phased or simultaneous implementation of Unified Licensing?

3.1 Step 1: Consolidation of existing licences (Framework)

3.1.1 Service consolidation

As depicted above, there are 39 service categories defined in 29 system Licences issued by the Commission. Most of services are sub-categories of a generic service type. The Commission is of the view that detailed service specific Licences, stifle the market innovation and the benefits of technology convergence cannot be harnessed properly from a modern telecommunication system. Therefore, the Commission proposes the consolidation of services to sufficiently generic categories by types indicated below that they do not exclude or constrain new service developments by the operator. This will enable innovation while also ensuring fair and effective competition between licensees.

Furthermore, the Commission believes that this would develop consistency across all licences with regard to the services that each category of licence permits the licensee to offer. The generic categories for future consolidated Licences are as follows.

- Fixed Telephony Services
- Mobile telephony Service
- Trunked Mobile service
- Data Services
- Content Services (TV, VoD, Audio, Information etc)
- Value Added Services.
- Application Services (OTT, Cloud services etc)

However, for regulatory purposes the Commission may define sub-categories and request operators to maintain separate accounts for such sub-categories which are required for market evaluation. As an example, operators may be required to maintain separate accounts for Internet Services which is authorized under Data Services. However, this would not limit the operator to provide any service falling within the definition of generic categories given above.

Consultation questions

4. Should any other service category be included? If so, give detailed suggestion with justification.
5. Will there be an industry impact due to consolidation of services? If so what precautionary measures can be taken? Describe in detail.
6. Application Services are not addressed in the current licensing regime. Please indicate whether this category of Licences should be introduced in the new

Licensing framework? If so for what type of businesses or services? Explain in detail.

7. Should VAS services be included into above list? If yes, please give details of VAS services which can be brought into proposed Licensing framework.
8. What should be the fee structure for above Licence types? Please propose a methodology for determination with justification.

3.1.2 Network consolidation

The Commission notes that a particular service can be provided by using multiple technologies and with development in the industry most of the technologies are converging towards a common platform. Therefore, binding services to its legacy network types would stifle the market innovation and enhancements. Therefore, the Commission proposes to re-define network types also to sufficiently generic categories to enable operators to provide innovative services to the public and are as follows.

- **Terrestrial Systems** (built by wired/wireless/satellite network components) which may be restricted by the availability of limited resources such as spectrum and numbering.
- **Gateway System** providing international connectivity between one or more points in Sri Lanka and one or more points in another country. This category is defined due to Half Circuit Nature and also to keep track of international activities.
- **Satellite System**, providing connectivity via satellite capacity that may be owned or leased by the licensee. This also includes standalone satellite-based systems such as DTH, VSAT etc.

In addition, two further network categories may be needed for specific communications purposes:

- **Maritime System** which facilitate communication between two or more points in the sea.
- **Aeronautical System** which facilitates communication between aircraft stations and/or between an aircraft station and land.

Although most of systems are converged into terrestrial category, the development of owned systems are restricted by the availability of limited resources such as Frequency Spectrum, Rights of Way, Numbering etc. Therefore, the Commission suggests this generic category to promote sharing of network components among operators.

Therefore Commission suggest to promote network sharing such as Local Loop Unbundling, Full or Shared Access, Bitstream Access, RAN sharing, Backhaul Ring sharing, Roaming, Core network component sharing or similar sharing methodologies.

Further all operators are suggested to be authorized to provide both Wholesale or Retail services to any person.

Commission further suggests that all operators shall be authorized to deliver their authorized service to the public via their primary system and also on any number of secondary systems built using other networks shared by other Facility Based Operators. (e.g. DTH over Data network, Trunking over Data, Use mobile networks to provide Fixed etc).

Commission believes that all above initiatives will promote industry innovation, flexibility, network optimization, and avoid duplicated networks

Consultation questions

9. Should any other type of network categories be included? If so, please describe in detail.
10. Will there be an industry impact due to consolidation of networks? If so, what precautionary measures can be taken? Describe in detail.
11. What is your opinion about network component sharing among operators? Should this be promoted? If so in what manner? Describe in detail.
12. Should the operators be confined to a single system or be allowed to develop secondary networks? Justify your answer in detail.

3.1.3 Migration of existing Licences to new Consolidated Framework

The table below proposes a mapping between the different services that are mentioned in existing licences to the new service and network categories that might be included in future licences.

Licence	Existing Services	New Services					Network Type
		Voice	Data	Content	Appli- cation	VAS	
Fixed	Voice Telephony Service, Data Communications Services, Backhaul Services, Network Access Services, Leased Line	Yes (Fixed)	Yes			Yes	Terrestrial

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	Services, Public Payphone Service, Maritime Service, International Television Transmission, Satellite Service including Inmarsat. Voice Mail services, WIFI service, Facsimile Service						
Mobile	Voice Telephony Service, Voice Mail Services, Leasing of Excess Capacity to other operators, Data Service including circuit switch data, SMS, USSD, WAP MMS, GPRS, GSM base service including Location base services, Wi-Fi services.	Yes (Mobile)	Yes			Yes	Terrestrial
Gateway	Voice telephony Services Data Communications Services Leased Line Services Television Transmission Services	Yes	Yes	Yes		Yes	Gateway
Data	Data, VPN, Internet, Switch and Non-Switch Data Service, Telex, Sita Fax, Data Processing Service		Yes			Yes	Terrestrial
ISP (Non-Facility)	Internet Service		Yes			Yes	Terrestrial
Cable	TV, data service including Internet.			Yes		Yes	Terrestrial
DTH	TV Broadcasting and Sound Broadcasting Services.			Yes		Yes	Satellite
Trunking	Group calling, Priority call override, Fleet /Dispatch call, Closed user group.	Yes (Trunk Mobile)				Yes	Terrestrial

Infrastructure	Leased Circuit to the Other licensed operators of telecommunications systems sound broadcasting and television system including the provision of last mile connectivity including fiber.		Yes			Yes	Terrestrial
Satellite	Capacity Associate with the space station, Control, Monitor, and test functions related to the use, Maintenance, operation and control of space objects, International Transit Service, Telemetry tracking and command services, colocation services and maritime connectivity.	Yes	Yes			Yes	Satellite

The advantage of this approach is that it may create a level-playing field for all operators and from which the move to technology-neutral licences can proceed to stimulate industry innovation.

Consultation question

13. Please comment on the proposed consolidated service and network categories in general, and the mapping from existing services and network type as defined in various licences.

3.2 Licence Authorization Regimes

The existing Licensing regime include single and multiple service authorizations in the Licence and Commission proposes to continue such authorization under new licensing consolidated regime as well.

However, as per current regime one facility-based operator has been restricted to provide retail services and authorized to provide services to operators and broadcasters only. Commission wish to explore requirement of such licences and rather make such opportunity to all operators to provide both wholesale and retail services.

After streamlining the existing Section 17 licences, the Commission also wish to explore the industry requirement to issue Reseller Permits (Section 18A permit) to operators to authorize service providers such as VAS providers in a bid to initiate issuance of such permit with an intention to widen the scope of such permits as a service licence in the future if required. However, as per the international regulatory trends provisions of services continue to be less regulated.

Further, Commission wish to explore the industry requirement to issue Section 20 Licence to private network that extends beyond the boundaries of an area corresponding to the premises occupied by the person operating the system. This process can be initiated as an example by issuing Licence to such networks which have got VOIP unblocking facility to international network components.

Consultation question

14. Should all operators be authorized to provide wholesale and Retail services, or Separate Licence should be introduced to provide infrastructure-based wholesale only Services.? Describe in detail.
15. What are the benefits or any issues that can be expected by issuing Reseller Permits (Sec 18A) to operators to allow service providers to use their networks in terms of international best practices. What services or businesses can be brought into the purview of Reseller Permits (Sec 18A)? Describe in detail.
16. What are the benefits or issues that can be expected in Issuance of Sec 20 licences to private networks?

3.3 Step 2: Unified licences & future Licence types

The future Licence Types are proposed as follows.

1. Consolidated Licensing (service specific) – Multiple/Single Authorization

a) Facility Based Operators FBO (Restricted)

b) Service Based Operators SBO (Restricted) (Authorized to construct network but No Limited Resource Allocation and to be shared with FBO)

as indicated above, single and multiple service authorization will continue to exist under consolidated licensing regime.

Although the network and service consolidation framework is developed with more network neutrality, Fixed and Mobile Service distinction still exists. Therefore, Commission also proposes to introduce Unified Licensing concept to promote Fixed-Mobile Convergence (FMC) to facilitate wide spectrum of service offering emerging

from FMC. Operators will be authorized all types of services defined in consolidated licensing framework (not limited to) and network types under unified licensing. Therefore, following type of FBO Licence will be introduced in future.

a) Facility Based Operator FBO (Unified)

Consultation questions

17. Do you think single and multiple authorization should be continued? Please justify.
18. Please comment about above Licence types. Should any other Licence type be introduced? If so, justify in detail.
19. Do you think Unified Licensing is a good concept? Please describe in detail.

3.4 Roadmap

Consolidated Licences

Should the conversion of the current licences into consolidated licences be obligatory or optional? If the consolidation step is to provide an effective springboard to unified licences, it could be argued that all licences need to be converted.

However, how the existing licence to be migrated into new Consolidated Licensing framework should be looked at. Following are the possibilities.

1. Commission can upgrade current licences into consolidated licence at the time of renewal
2. Commission can set a deadline to operators to upgrade to consolidated Licence.
3. Commission can entertain request from respective operator to upgrade at any time they wish.

Unified Licensing

Commission is of the view that with proper consolidated framework in place, Unified Licensing regime can be introduced simultaneously or later stage to promote Fixed Mobile Convergence (FMC). Commission initially can request Fixed operators to upgrade their Licence to either Consolidated or Unified Status. After augmenting their Licence to unified status, mobile operators can also be requested to upgrade their Licences to unified status as well. Under such context, it can also be expected a trend to request for mergers between entities.

Consultation questions

20. How do you think consolidated framework should be implemented? 1,2 or 3? Please describe your answer with details if you have alternative proposal.

21. What benefits and impacts, consolidated licensing and unified licensing can bring to the telecommunication industry and public in general? Describe with ways to mitigate the impacts. Should the commission allow mergers between entities when the unified licensing regime is allowed? Justify the answer.
22. Do you think unified licences be issued simultaneously with consolidated Licences is a good suggestion.? If so why?
23. Do you think unified Licence be issued to all operators? Provide detailed justification with benefits and impacts. Please indicate how all above licence types should be priced?
24. Please write your general comments, views alternative proposals with regard to introduction of a new Licensing Framework for telecommunication industry. In Sri Lanka etc.

4 LICENSING ARRANGEMENTS IN OTHER COUNTRIES

This chapter 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.

4.1 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. 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 it became more obvious for national regulatory authorities the need to reform existing licensing schemes. As the Internet Protocol became an issue in 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 ITU¹, 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.

¹ Global ICT Regulatory Outlook 2020, available at: <https://www.itu.int/en/ITU-D/Regulatory-Market/Pages/Outlook/2017.aspx>

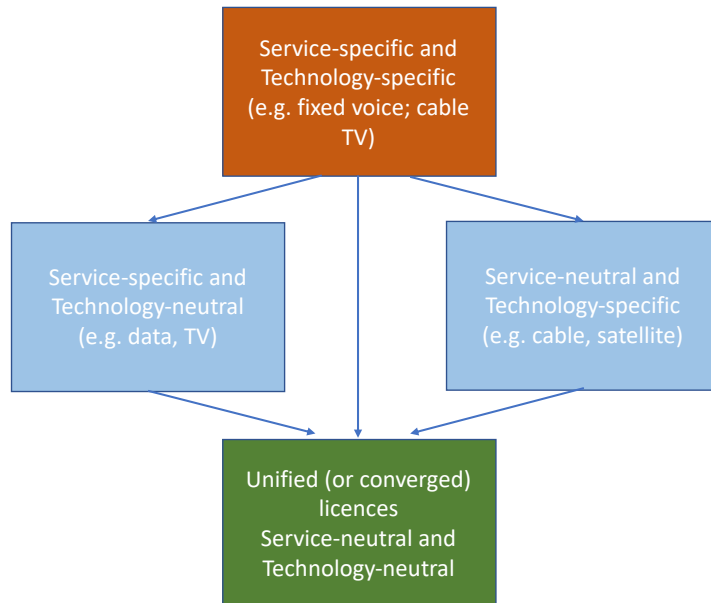
4.1.1 Converged or unified licences

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 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 (GSM, CDMA, 3G, 4G, 5G, WLL etc) to offer services such as fixed voice, mobile voice, data services and TV broadcasting, 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 it is reached, the end goal of unified licensing is one of the ITU's seven golden rules for digital transformation of fixed broadband markets².



4.1.2 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 a 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.

² Global ICT Regulatory Outlook 2020, available at: https://www.itu.int/pub/D-PREF-BB.REG_OUT01

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 out³:

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 regimes⁴, 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.

4.2 Uganda

In line with the National Broadband Policy, the Uganda Communications Commission⁵ (UCC) designed a new licensing regime in 2020. The main objectives of the new

³ Regulatory Challenges and Opportunities in the new ICT Ecosystem, ITU 2018, available at: https://www.itu.int/pub/D-PREF-BB.REG_OUT03-2018

⁴ 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>

⁵ <https://uccinfo.blog/2019/11/04/ucc-sets-new-framework-for-telecom-licensing/>

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.
- 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.

4.3 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, 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 operator⁶ (FBO) or relying on FBOs network assets to provide services, the services-based operator⁷ (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.

4.3.1 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 a 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

⁶ <https://www.imda.gov.sg/regulations-and-licensing-listing/facilities-based-operations--fbo--licence>

⁷ <https://www.imda.gov.sg/regulations-and-licensing-listing/services-based-operations--sbo--licence>

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.

4.3.2 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 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.

4.4 Somalia

The National Communications Authority (NCA) has recently introduced a new ICT licensing framework⁸ 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

⁸ <https://nca.gov.so/licenses/>

communications infrastructure and services within the borders of the Federal Republic of Somalia to the NCA. The NCA 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 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 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 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. 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 network. 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. Licensee 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 licence, 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 resells Telecommunications terminal equipment's, installations and Maintenance.
- **Private Very Small Aperture Terminals (VSAT).** This class licence includes the VSAT 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.

4.5 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 consultation⁹ in order to discuss further improvements and proposing an update of the existing licensing framework, deemed

⁹ Available at: https://www.citc.gov.sa/en/new/publicConsultation/Documents/144006_1_E.pdf

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 streamlined 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
- 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.