

ITU Workshop on Policy and Regulations for Newly Established Regulators in the Asia Pacific Region

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Telecommunication Authorization- Session 3

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IN THIS SECTION

[1.2.1 More on Authorization Trends](#)[1.2.2 More on Authorization Trends: Recent Developments](#)[▶ ICT Regulation Toolkit](#)[▶ Module 3, Authorization of Telecommunication/ICT Services](#)[▶ 1 Overview of ICT Authorization](#)[▶ 1.2 Authorization Trends](#)[▶ 1.2.2 More on Authorization Trends: Recent Developments](#)

1.2.2 More on Authorization Trends: Recent Developments

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Liberalization of the ICT sector and increased competition have led to new trends in authorization practices. In developed economies, as ICT markets were liberalized and as market participants proliferated, the appropriateness of individual authorizations was increasingly called into question. Policy makers and regulators started to move towards sector-wide regulatory tools to replace the customized regulatory provisions of individual authorizations.

Again, the British, who had perfected the art of drafting comprehensive 'individual authorizations,' took the lead. The British popularized the concept of a 'class licence' (or general authorization) which would apply to more than one service provider – in fact to all who provided the same type or 'class' of services.

The move away from the individual authorization approach and toward sector-wide regulation accelerated when the European Union established its new electronic communications regulatory framework, through the series of Directives and other documents that came into force 25 July 2003. This framework generally requires member countries (now 27) to discontinue individual authorization in favour of general authorizations. (See links below to the EU Framework Directive and the EU Authorization Directive).

Under the EU's regulatory framework, regulators no longer grant individual authorizations. Instead, regulators issue general authorizations that permit anyone to run 'electronic communications' networks and to offer 'electronic communications' services, subject only to general conditions that are applicable to all similar service providers. More onerous conditions may only be imposed on service providers designated as having significant market power (SMP). In addition, the EU framework only permits regulators to limit the number of service providers in a market due to the limited availability of scarce resources, notably radio spectrum or telecommunications numbers.

The EU framework brings the EU closer in line with the traditional North American approach. As a result, there is a move towards less reliance on individual authorizations in the EU. Indeed, a number of EU member countries no longer require that service providers obtain any form of authorization to provide electronic communications services or to operate networks. Service providers are required only to provide the regulator with notification of the start and termination of the provision of services or the operation of a network. Exceptions to these open entry approaches to authorization exist, however, where service provider use the radio spectrum or numbering resources. All service providers are subject to similar regulatory conditions prescribed in sector-wide regulations (such as those required by the package of Directives and regulations that comprise the new EU framework).

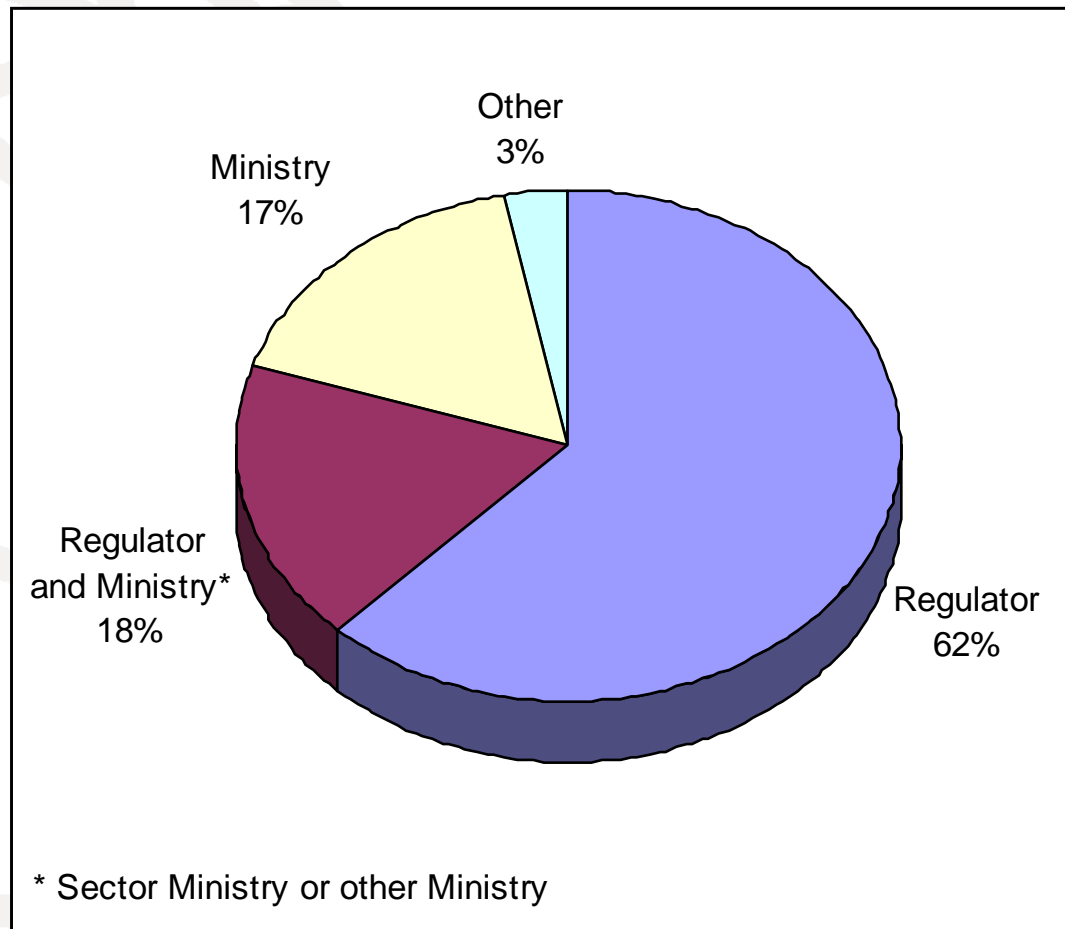
Why License?

- Goals of Licensing
 - Allocation of scarce resources, regulatory certainty, establishing a framework for privatisation and competition, universal access, etc
- The Evolution of Licensing
 - From monopoly to competition
 - Licensing in the era of convergence
- Is Licensing Necessary?
 - Non-spectrum related licences
 - e.g. ISP licensing
 - Spectrum related licences
 - A "Spectrum Commons" Approach

Licensing: Awarding Mechanisms and Who's responsible?

Mechanisms:

- Auctions
- Beauty Contest
- "first come, first served"



Source: ITU World Telecommunication Regulatory Database

Licensing

- Traditional regulatory frameworks were designed for a circuit-switched technology era when clear functional differences existed between services and infrastructure

Common types of licenses:

Individual licensing

- Customized and detailed document
- Often granted after a selection (or negotiation) process
- Used typically to assign scarce resources or control market entry and structure (E.g. to impose limitations on market entry)

Class licensing

- Sets out regulation of general application
- May require notification or registration with the regulator
- Number of licenses typically unrestricted

Open entry

- No licensing requirements

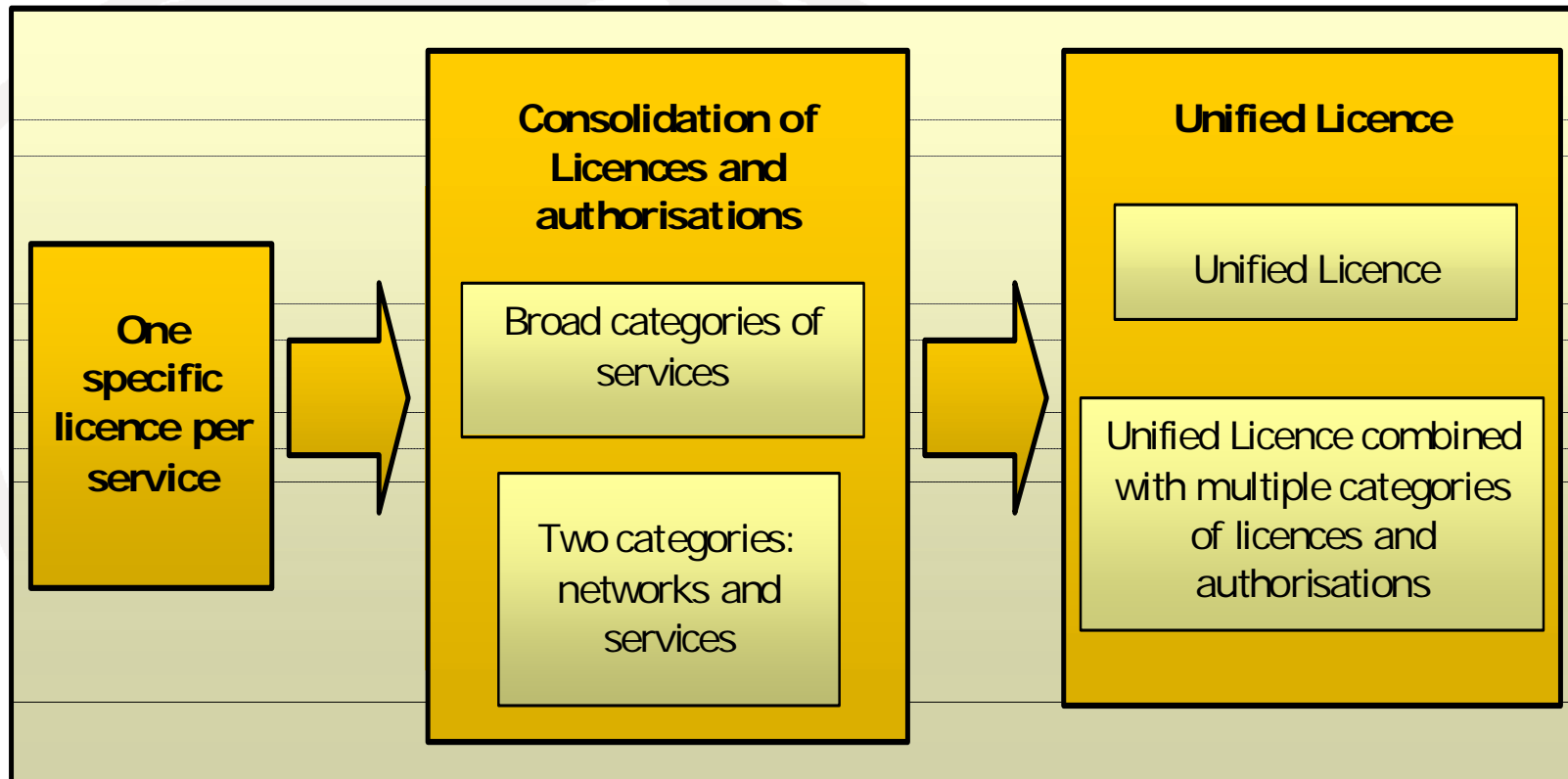
- Convergence erodes the service and technology specific concept

Trends in Licensing Reform

modification - simplification

- Service licensing reform towards convergence has followed two main trends that have been implemented both separately and jointly
- The first consists of **simplification of licences** that traditionally have been established for individual services, which would generally mean that a single telecommunications operator would have to hold as many licences as the different services it provided
 - Simplification involves the consolidation of different services in a generic categorisation or the unification of all services under a single licence or concession, what is often called a unified licence

Simplification of Licences



Trends in Licensing Reform

- The second trend is the **reduction or elimination of the administrative and formal requirements** to enter the market and provide a service
- This trend involves modifying the general authorisation category to allow more services to be provided or the establishment of notification or registration systems that replace licences or general authorisations altogether, therefore simplifying the process of obtaining them and, in some cases, making the authorisation automatic
- Some countries have even opted for deregulation of services, which comprises the elimination of licences or concessions and even of the need to notify or register with the regulator

Licensing schemes around the world

Results of ITU World Telecommunication Regulatory Database Survey, 2008

- 11 countries have introduced unified licensing for at least some service
- 81 respondents use individual licences
- 28 respondents use general authorisations or class licences
- 10 allow some services to operate on licence exempt basis

Approaches to Authorisations

Service-specific authorisations

- Allow the licensee to provide a specific type of service.
- Usually, the licensee is required to use a specific type of network and technological infrastructure.
- However, some service specific authorisation regimes are technology neutral (*e.g.*, the fixed and mobile services authorisation regime in Saudi Arabia and the Canadian basic international telecommunications services licences).
 - These types of authorisations are sometimes issued as individual licences (particularly in developing and transitional economies) and sometimes issued as general authorisations.

Approaches to Authorisations

Unified (or global) authorisations

- Technology and service neutral
- Allow licensees to provide all forms of services under the umbrella of a single authorisation, using any type of communications infrastructure and technology capable of delivering the desired service.
- In most countries, unified authorisations are issued as individual licences.
- However, in some countries, the process for issuing the unified authorisation blends aspects of general authorisation processes and competitive licensing regimes.
 - These hybrid processes can best be described as non-competitive individual licensing processes: while applicants do not compete for a limited number of authorisations, they must meet a variety of criteria to qualify for a licence and their applications are subject to close regulatory scrutiny.

Approaches to Authorisations

Multi-service authorisations

- Allow service providers to offer multiple services under the umbrella of a single authorisation, using any type of communications infrastructure and technology capable of delivering the services in question
- Technology neutral -- like unified authorisations
- More limited than unified authorisations -- licensees are permitted to provide any of a designated set of services, but not any and all services
- Multi-service authorisations issued as general authorisations or as individual licences.
 - Not uncommon to have both general authorisation and individual licence regimes for their multi-service authorisations
 - Individual multi-service authorisations are often issued using a non-competitive individual licensing process

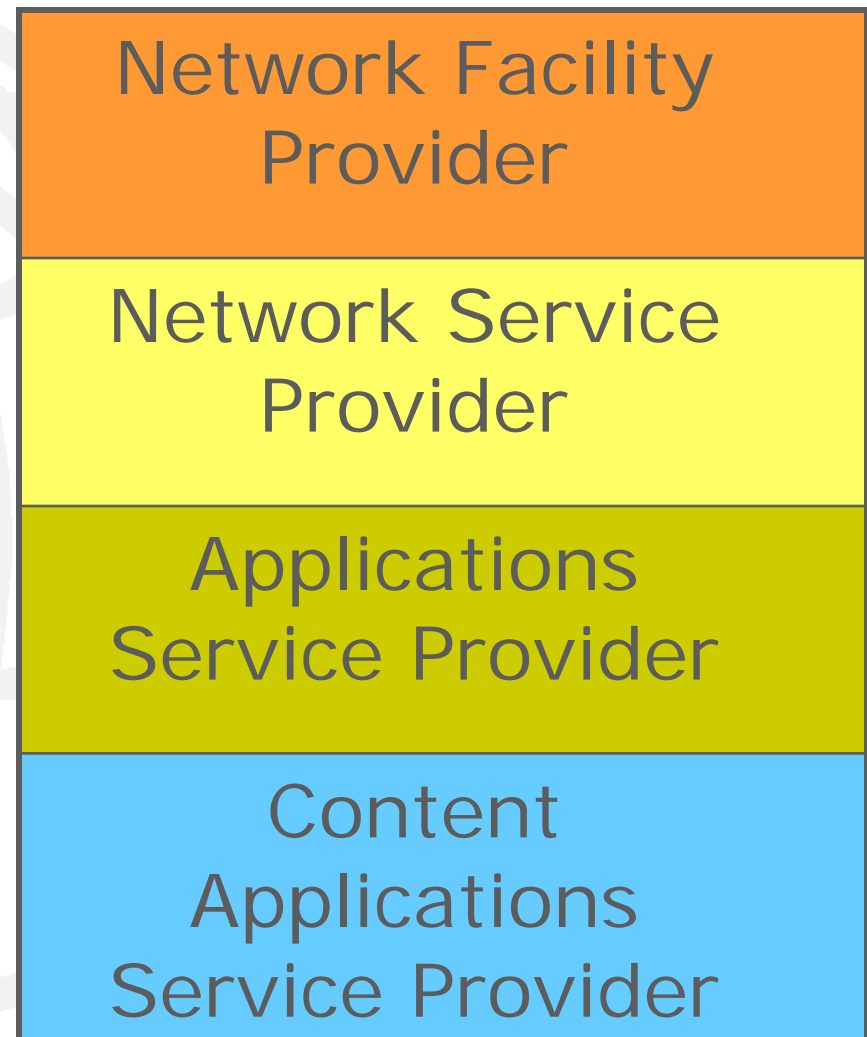
Simplification/Consolidation of Licences

- Examples of:
 - Uganda – January 2007 implemented streamlined technology-neutral licensing regime
 - Malaysia – 31 categories to 4 categories
 - Tanzania – February 2005 to 4 categories
 - Singapore: only two categories –
 - Facilities-based operators (FBOs)
 - Service-based operators (SBOs)

Licensing Categories in Malaysia



- 1) Domestic Network Operators
- 2) International Network Operators
- 3) Mobile/ Personal Communications Services
- 4) CT2 / Telepoint Service
- 5) Financial Electronic Transaction
- 6) Paging Services
- 7) Trunk Radio System
- 9) Radio Maritime Service
- 9) Mobile Satellite Services
- 10) Tele-communications Satellite Network Services
- 11) Very Small Aperture Terminal Services
- 12) Radio Location Services
- 13) Satellite Broadcasting Services
- 14) Mobile Data Services
- 15) Mobile Radiocommunications Services
- 16) Private Information Services
- 17) Public Electronic Data Interchange Services
- 18) Value Added Network Data Services
- 19) Value Added Services (Premium Rate)
- 20) Telecommunications Personal Services
- 21) Public Internet Kiosk Services
- 22) Internet Service Providers
- 23) Power Line Carriers
- 24) Payphone & Public Facsimile Services
- 25) Wireless Video Communications Network
- 26) Private Telecommunications Network
- 27) Common Subscriber Directory Services
- 28) Community Interactive Multimedia Services
- 29) Amateur Satellite
- 30) Broadcasters Radio
- 31) Broadcasters Television



Licensing Categories Malaysia



Malaysia -- Licensing under the new regime

Licensing Category	Individual Licence	Class Licence	Exempt/ Unlicensed
Network Facility Provider	Earth Stations; Fixed links and cables Public payphone facilities; Radio-communications transmitters and links; Satellite hubs; Satellite control station; Space station; Submarine cable landing centre; Switching centre Towers, poles, ducts and pits used in conjunction with other network facilities	Niche or limited purpose network facilities	Broadcasting and production studios; Incidental network facilities; Private network facilities
Network Service Provider	Bandwidth services; Broadcasting distribution services; Cellular mobile services; Access applications service; Space service	Niche customer access; Niche connection service	Incidental network services; LAN services; Private network services; Router; Internetworking
Applications Service Provider	PSTN; Public cellular services; IP telephony; Public payphone service; Public switched data service	Audiotext hosting services provided on an opt-in basis Directory services Internet access services Messaging services	Electronic transaction service; Interactive transaction service; Networked advertising boards and Cineplex; Web hosting or client server
Content Applications Service Provider	Satellite broadcasting subscription; Broadcasting; Terrestrial free to air TV Terrestrial radio broadcasting	Not issued	Internet content applications services

Licensing Types and Categories in Uganda

Type of Licence	Services Covered Under Licence
Public Service Provider Licence	<p>Category 1: Public Voice and Data - Cellular, Fixed voice, GMPCS, Internet access (including IP telephony + Virtual Private Networks), Internet exchange services, Virtual Private Networks (VPNs) that are not provided over the Internet</p> <p>Category 2: Capacity Resale - Local and international capacity resale, calling cards</p>
Capacity Provider Licence	<p>Category 1: Licensees already permitted to install infrastructure of the type they have already invested in, for example Internet Access Providers with wireless networks</p> <p>Category 2: Persons whose core business is not in telecommunications but who possess private communications facilities with surplus capacity and wish to resale this to third parties</p> <p>Category 3: New entrants in the Internet Access market operating their networks using the Industrial, Scientific and Medical frequency (ISM) band, e.g., 2.4 GHz and 5.7 GHz bands</p>
Infrastructure Provider Licence	<p>Public Infrastructure Provider</p> <p>Private Network Infrastructure</p>
General Authorisation	<p>Category 1: Public Pay Communication Services (e.g., Internet Cafés, Payphones, telephone bureaus, etc.)</p> <p>Category 2: Private Networks</p>

Tanzania's Converged Licensing Framework

- Principles: Technology and service neutrality
- License categories:
 - Network Facility License
 - Network service license
 - Application Service license
 - Content Service License

Lessons learned: dialogue, flexibility,
incentive regulation



Home **Toolkit** About Search

Search... 

IN THIS SECTION

- 2.1 Introduction
- ▶ **2.2 Advantages of General Authorizations**
- 2.3 Issuing General Authorizations
- 2.4 The New EU Authorization Framework

TOOLKIT

- ▶ [Table of Contents](#)
- ▶ [Table of Practice Notes](#)
- ▶ [Table of Reference Documents](#)

- ▶ [ICT Regulation Toolkit](#)
- ▶ [Module 3. Authorization of Telecommunications Services](#)
- ▶ [2 General Authorizations](#)
- ▶ **2.2 Advantages of General Authorizations**

2.2 Advantages of General Authorizations

Regulators have increasingly adopted the practice of using general authorizations for a number of good reasons. Most important, general authorizations:

- eliminate individual differences in the treatment of service providers and create a level playing field;
- are more consistent with technological neutrality principles;
- are more consistent with open market entry policies;
- simplify the regulatory process;
- reduce regulatory and administrative costs; and
- facilitate the introduction of industry-wide regulatory changes to reflect changing technologies and sector conditions (i.e. no need to amend individual authorizations).

CONTENTS

- ▶ [2.2.1 Services Often Subject to General Authorizations or Open Entry](#)

 [Print this page](#)  [Email this page](#)

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[Home](#) | [About](#) | [Contact](#)

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Notification Forms in the EU*

Notification Form for a General Authorisation

Section 3 - Network and Service Description

(1) Network	(2) Service	(3) Further Details of Network and/or service ¹	(4) Geographical area where network and/or service is available	(5) Publicly Available? Yes/No	(6) Commencement Date	
					Planned	Actual

Network –

- **Fixed Telephony Network** (e.g. fixed network used primarily for publicly available telephony services)
- **Mobile Telephony Network** (e.g. wireless network used primarily for publicly available mobile telephony services)
- **Satellite Network** (e.g. satellite network used for broadcast transmission, SNG, provision of other electronic communications services)
- **Broadcast Network** (e.g. cable, MMDS, terrestrial FTA, deflector)
- **Electricity Cable System** (only where used for the purpose of transmitting signals)
- **Other Fixed Network** (please specify in Column 3)
- **Other Wireless Network** (please specify in Column 3)
- N/A where network elements are not provided by notifying person

Service –

- **Publicly available telephone services** (note this includes telephone services provided by resellers e.g. CPS, WLR, etc please also state if Single Billing is offered)
- **Other Voice Services** (e.g. community repeater service)
- **Broadcast Services** (e.g. provision of transmission services to broadcast content providers established in Ireland or transmitting content to, from or within Ireland)
- **Data Services** (e.g. data transmission services) specify details in Column 3 if necessary
- **Internet Access Services** (e.g. dial-up or broadband; specify details in Column 3 if necessary)
- **Other Electronic Communication Service** (please specify details in Column 3)
- N/A where electronic communications services are not provided by notifying person

*Example from Ireland

Source: Commission for
Communications
Regulation

Licensing Service Areas

- National or Regional Service Areas
 - Economies of scale vs. ease of market entry
- Universal Access and Rural Licensing
 - Packaging different regions and services
 - “Starting small” - focusing on SMEs
 - e.g. South Africa’s “Under-Services Area Licence”
 - Lowering licensing and regulatory hurdles
- Cross-border Licensing
 - Common licensing guidelines
 - e.g. Guidelines on licensing for COMESA countries

Transparent licensing requirements and procedures

- Publicly available and pre-established licensing requirements and procedures
- Public consultations on new or revised licensing procedures

[Home](#)[Toolkit](#)[About](#)[Search](#)

Search...

IN THIS SECTION▶ **5.1 Authorization and Other Fees****TOOLKIT**

- ▶ [Table of Contents](#)
- ▶ [Table of Practice Notes](#)
- ▶ [Table of Reference Documents](#)

- ▶ [ICT Regulation Toolkit](#)
- ▶ [Module 3. Authorization of Telecommunications Services](#)
- ▶ [5 Fees](#)
- ▶ **5.1 Authorization and Other Fees**

5.1 Authorization and Other Fees

Many different kinds of authorization fees have been imposed on the telecommunications industry. Transparency in the authorization process is enhanced by differentiating between different kinds of authorization fees and by clearly identifying which authorization fees apply in each authorization situation. The main types of authorization fees include:

- administrative fees, based on cost-recovery for regulators;
- cost-based spectrum management fees;
- discretionary administrative or spectrum fees (i.e. not cost-based); established on a one time or periodic basis (e.g. annually);
- royalties or highest bid 'auction fees' paid to a government or regulatory authority for a authorization, and unrelated to the administrative costs of regulation; and
- other special fees bundled with authorization fees, such as access deficit charges, universal service fees, industry taxes etc.; such fees should be separated from authorization fees.

CONTENTS

- ▶ [5.1.1 More on Authorization Fees](#)

PRACTICE NOTES

- ▶ [Recurring Authorization Fees in Selected Countries](#)

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Licensing Fees

- Transparency
 - Provision of rationale for the levying of licensing and administrative fees: e.g. cost recovery, efficiency pricing, etc.
 - Observation of principles of charging: proportionate, justifiable, etc.
- Consistency
 - Setting of a standard and consistent basis of calculation of fees that apply uniformly
- Efficiency and fees for the use of resources
 - Seeking an “economic rent”
 - Ensuring a fair return on private use of a public asset
 - Rationing scarce resources to ensure efficient use, highest value use and fair and transparent allocation
- Today, regulators recognize that lowering revenue percentage paid to government helps ease market entry
- Administrative fees should not impose unnecessary costs



- TOOLKIT**
- ▶ [Table of Contents](#)
 - ▶ [Table of Practice Notes](#)
 - ▶ [Table of Reference Documents](#)

PRACTICE NOTE

Socio-Economic Benefits of Lower Authorization Fees

Editors' Note:

The following is excerpted from Chapter 4, "Licence Fee Practices: Historical Perspectives and New Trends," *ITU Trends in Telecommunications Reform - 2004/05: Licensing in an Era of Convergence* (Geneva: ITU, 2004). The authors of Chapter 4 are Lynne Dorward and Clayton Rogers.

4.8 Socio-Economic Benefits of Lower Licence Fees

The social and economic benefits of lower licence fees are indisputable. Lower licence fees allow operators to invest resources in infrastructure and innovations in services and applications. Moreover, they lead to lower prices for consumers.

The trade-off between licence fees and other considerations must be analyzed. All operators' revenues are capped by demand factors in the countries where they operate. These factors include demographics such as the size of the potential customer base, per capita GDP and the price elasticity of demand. To the extent that regulators charge high licence fees, this affects the viability of an operator's business case by increasing the costs of supply. If the costs of supply exceed revenues, the viability of an operator's business will be doubtful. So regulators must understand the factors affecting both demand and supply before undertaking a licensing initiative. If they decide that social and economic objectives such as universal access, lower consumer prices and technological innovation are key policy objectives, they have to realize that imposing high licence fees may jeopardize the operators' ability to achieve these objectives. And conversely, larding licences down with heavy socio-economic mandates may undercut the operators' ability to pay high licence fees.

Lower licence fees also allow regulators to ensure that capital remains within the telecommunication sector. In many countries, licence fees are paid directly into the government's general treasury and are not available to the regulator or telecommunication ministry. But by structuring a tender as a beauty contest -- with a low licence fee and sector specific licence obligations (such as network build-out mandates) -- a regulator can ensure

Understanding licensing disputes

- Diminishing of license rights
 - Disputes over licensing typically arise when regulatory reform diminishes the value of an investor's stake (or license) in the sector
 - E.g. early termination of monopoly rights, rate-rebalancing, mandatory interconnection, other changes to terms and conditions of licenses
 - Such disputes can also arise from the introduction of new technological services that offer competitive alternatives to traditional services
 - E.g. e.g. India – Limited Mobility (WLL) Dispute
 - Note – periods following the introduction of new technologies are typically characterized by regulatory flux where regulators struggle to come up with appropriate responses – this can lead to disputes as investors (and licensees) struggle to determine (or safeguard) their rights and obligations
- Legal basis of disputes can include:
 - Breach of investor-government contracts that may include “regulatory guarantees”
 - Unlawful seizure of property
- This poses a challenge to the regulator who is caught between introducing regulatory reform and honouring contractual commitments
 - Investment disputes can become intertwined with regulation

IN THIS SECTION

6.1 Transparency

6.2 Public Consultation

▶ **6.3 Authorization Renewal, Amendment and Renegotiation**

6.4 Balancing Certainty and Flexibility

6.5 Distinguishing Authorization from Procurement

6.6 Spectrum Authorizations

▶ ICT Regulation Toolkit

▶ Module 3. Authorization of Telecommunication/ICT Services

▶ 6 Authorization Practices & Procedures

▶ **6.3 Authorization Renewal, Amendment and Renegotiation**

6.3 Authorization Renewal, Amendment and Renegotiation

This section deals with a number of issues related to the renewal, amendment and renegotiation of authorization conditions – particularly conditions established in individual licences. The issues discussed in this section involve both renewals and amendment at the end of licence terms and amendment of licence conditions before the end of a licence term

Individual licences have normally been granted for fixed terms, and thus issues arise regarding how to handle renewals at the end of a licence term. Licences may be renewed, renewed with amendments, or simply terminated at the end of a licence term. The latter option is extremely rare, since it would deprive customers of service. It is seldom used except in the case of non-operational licensees or serious and continuous breaches of licence conditions, laws or other regulatory instruments.

The legal framework for licence renewals and amendments is normally prescribed in national ICT laws or regulations. Sometimes it is found in the conditions of the licence itself, or in the terms of privatization-related agreements, such as shareholders agreements between governments and strategic investors.

Many countries have introduced reforms in their authorization regimes, such as the move from individual licensing to general authorizations or the introduction of unified or multi-service authorization regimes. Such reforms raise the issue of how to treat authorizations granted under a previous regime. In some cases, existing or new laws grant regulators the right to amend licences unilaterally under the new regime. In others, incentives are provided to continue authorizations under the new regime or to amend licence conditions to harmonize with the new regime. A variety of approaches have been taken to the continuation of licences to reflect changing authorization regimes. Perhaps the most difficult issues are those involving the termination of monopoly or exclusive rights that have been granted under previous regimes, but that are no longer consistent with market opening policies of the new regimes that have been adopted around the world today.

◀ Previous Page

▶ Next Page

CONTENTS

▶ 6.3.1 Transition to New Authorization Regimes

▶ 6.3.2 Termination of Monopolies

▶ 6.3.3 Renegotiation of Licences

Transition to New Authorization Regimes

- Transitioning existing licensees to the new authorization framework is important even when there are no substantial differences between the terms and conditions of existing authorizations and those of the new unified or multi-service authorizations.
- Maintaining different authorization frameworks imposes costs and administrative burdens on regulators.
- Transparency, efficiency, and regulatory certainty are increased when all service providers are subject to the same authorization regime.
- However, requiring existing licensees to migrate to the new, converged authorization framework may trigger legal challenges and allegations of unfairness.

Transition to New Authorization Regimes

- Use of public consultations and in some cases multi-stage consultation
 - Feedback from industry stakeholders on:
 - the proposed licensing framework;
 - the types of authorizations to be issued in the new regime;
 - the terms and conditions of the proposed new authorizations;
 - the proposed process for issuing authorizations;
 - the schedule for implementing the new regime; and
 - the transition to the new licensing regime.
- Automatic migration
- Continuation of operation under old regime until the end of the term or transfer immediately to the new authorization regime

GSR 2009 and 2007 Best Practice Guidelines

2009 - In order to stimulate investment to grow converged markets, regulators need to further:

Build an adaptive regulatory framework by adopting a technology neutral approach, administratively simplified and flexible licensing regime providing for easy market entry of new players, such as through general authorizations and multiservice/unified licences.

2007 - Authorization: We encourage regulators to simplify procedural requirements to obtain a license by introducing registrations, notifications, and in certain instances, deregulation and to secure rights of way in order to facilitate the roll-out of NGN access networks. This will ultimately allow market players to make use of NGN to access global markets and consumers to benefit from such global competition in the provision of services.

Guidelines and Recommendations

- The implementation of unified and multi-service authorisation regimes requires careful planning. Regulators must address many issues, including:
 - whether a unified or multi-service authorisation regime is appropriate for the local ICT market;
 - whether to adopt a unified or a multi-service authorisation regime;
 - the categories of authorisations in a multi-service regime;
 - the licensing procedures for issuing the new authorisations;
 - the terms and conditions attached to these authorisations; and
 - how to transition existing licensees to the new licensing regime.

Source: Draft final report ITU-D Question 10-2/1: Regulation for licensing and authorisation of converging services

Guidelines and Recommendations

- Regulators are encouraged to consider the following principles when transitioning to and adopting a converged licensing framework:
 - Fostering technology neutrality;
 - Ensuring flexibility to allow the new licensing regime to accommodate future technological and market changes;
 - Simplifying the number of licence categories;
 - Reducing administrative burdens and fees on market players;

Guidelines and Recommendations

Principles (continued):

- Applying incentive mechanisms that encourage existing operators to transition to the converged licensing framework, *e.g.*, fee holiday;
- Ensuring transparency with regard to converged licensing responsibilities;
- Fostering close collaboration amongst appropriate entities with regulatory and oversight responsibilities regarding a converged licensing framework; and
- Referring to international best practices and international regional organisations to help harmonise licensing approaches.

ITU- infoDev ICT Regulation Toolkit

ITU-D Question 10-2/1: Regulation for licensing and authorisation of converging services, Draft final Report

www.itu.int/ITU-D/study_groups/SGP_2006-2010/SG1/SG1-index.html



Trends in Telecommunication Reform 2004/05





Thank you!

www.itu.int/ITU-D/treg