Authorization of Telecommunications Services
Module 3
ICT Regulation Toolkit

EXECUTIVE SUMMARY
AUTHORIZATION OF TELECOMMUNICATIONS SERVICES

Module 3 of
ICT Regulation Toolkit

www.ictregulationtoolkit.org

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Author:
Theresa E. Miedema
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The full module is available online at:

http://www.ictregulationtoolkit.org/en/Section.507.html

For more information, please see:


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<tr>
<th>Information for Development (infoDev)</th>
<th>International Telecommunication Union (ITU-D)</th>
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<tr>
<td>The World Bank</td>
<td>Telecommunication Development Bureau</td>
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<tr>
<td>2121 Pennsylvania Avenue N.W., MSN</td>
<td>Place des Nations</td>
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<tr>
<td>F5P-503</td>
<td>CH-1211 Geneva 20</td>
</tr>
<tr>
<td>Washington, D.C. 20433</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Tel: +1 202 458 4070</td>
<td>Tel: +41 22 730 5435</td>
</tr>
<tr>
<td>Fax: +1 202 522 3186</td>
<td>Fax: +41 22 730 5484</td>
</tr>
<tr>
<td><a href="mailto:info@infodev.org">info@infodev.org</a></td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>AMPS</td>
<td>Advanced Mobile Phone Systems</td>
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<tr>
<td>ANATEL</td>
<td>National Telecommunications Agency, or Agência Nacional de Telecomunicações (Brazil)</td>
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<td>BEE</td>
<td>Black Economic Empowerment (South Africa)</td>
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<td>BITS</td>
<td>Basic International Telecommunications Services</td>
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<tr>
<td>BOO</td>
<td>Build-Own-Operate</td>
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<tr>
<td>BOT</td>
<td>Build-Operate-Transfer</td>
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<tr>
<td>BSO</td>
<td>Basic Service Operator</td>
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<td>BTO</td>
<td>Build-Transfer-Operate</td>
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<td>CDMA</td>
<td>Code Division Multiple Access</td>
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<td>CMA</td>
<td>Communications and Multimedia Act (Malaysia)</td>
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<td>C&amp;W</td>
<td>Cable and Wireless</td>
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<td>CWJ</td>
<td>Cable and Wireless Jamaica</td>
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<tr>
<td>DSL</td>
<td>Digital Subscriber Line</td>
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<td>ECTEL</td>
<td>Eastern Caribbean Telecommunications Authority</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>FSS</td>
<td>Fixed Satellite Service</td>
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<td>GATS</td>
<td>General Agreement on Trade in Services</td>
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<td>GMPCS</td>
<td>Global Mobile Personal Communications Service</td>
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<td>GPRS</td>
<td>General Packet Radio Service</td>
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<td>GSM</td>
<td>Global System for Mobile Communications</td>
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<td>ICT</td>
<td>Information and Communication Technologies</td>
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<td>IMT</td>
<td>International Mobile Telecommunications</td>
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<td>IMT-2000</td>
<td>Third Generation Mobile Communications</td>
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<td>IP</td>
<td>Internet Protocol</td>
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<td>ISP</td>
<td>Internet Service Provider</td>
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<td>ITU</td>
<td>International Telecommunication Union</td>
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1. OVERVIEW OF TELECOMMUNICATIONS AUTHORIZATIONS

1.1 Introduction to Licensing and Authorization

One of the defining features of a country’s telecommunications sector is its authorization regime. A country’s authorization regime establishes the range of technologies and services that may be provided to consumers. The degree of competition in the sector is a function of how many service providers are authorized to service customers. Authorization processes also materially impact the ability to attract investments in the telecommunications sector. A well-designed framework for authorization creates a foundation for a healthy, competitive information and communication technologies (ICT) sector that is stable enough to provide consistent services to consumers, yet flexible enough to integrate new technologies. In an age of convergence, when service offerings are constantly evolving as a result of technological innovation, a country’s authorization regime plays a large role in determining whether the country will reap the benefits of technological innovation or lag behind.

The wave of telecommunications market liberalization that began in the mid-1980s significantly increased the relevance of authorizations in the sector. Since liberalization first began, the nature of authorizations and the authorization process has gone through a significant evolution. Convergence has also resulted in major changes to authorization practices and continues to drive trends in authorization regimes today.

There are significant differences in the authorization practices in force in different countries. At one end of the spectrum are wide-open authorization regimes, where no form of governmental approval is required to start a telecommunications service business or to operate network facilities. At the other end are individual licensing regimes with lengthy license documents customized to the circumstances of a specific service provider. In between are many forms of general authorization or “class licenses” that authorize and provide generally applicable regulatory conditions for classes of telecommunications service providers.

This Executive Summary provides an overview of the Authorization of Telecommunications Services Online Module of the joint ITU-infoDev ICT Regulation Toolkit. The ICT Regulation Toolkit is a free, online resource for regulators, policymakers, and practitioners that outlines best practices in the context of the current ICT environment. The Module contains over 400 pages of text based on a comprehensive analysis of authorization practices worldwide, information and studies by industry experts, and institutions such as the World Bank and the International Telecommunication Union, as well as extensive practice notes and reference materials. It is available at www.ictregulationtoolkit.org.

This Executive Summary focuses on recent trends in authorization and discusses related issues faced by regulators and regulated service providers. Many of the trends and practices described below illustrate reforms and innovations that improve the efficiency
of the authorization process and enhance the economic and social benefits of authorizing new information and communications technologies. While an effort has been made to highlight best practices, the implementation of these practices may vary from country to country, depending on local political, social, economic, and other conditions. These local conditions and circumstances should be given careful consideration when designing legal and regulatory instruments related to authorization.

1.2 Authorization Trends

The concept of licensing telecommunications services is a relatively recent development in many countries. Historically, in most countries outside of North America, state-owned incumbent service providers delivered telecommunications services on a monopoly basis. Telecommunications services were provided by government departments or agencies, in a similar manner to postal, road transportation, and other government services. These departments and agencies were often referred to as Post, Telephone and Telegraph Administrations (PTTs). PTTs were run as branches of government ministries, as autonomous state-owned commercial corporations, or somewhere in between. The mandate of PTTs was sometimes spelled out in a law or a policy document. However, specific authorizations or licenses were generally not considered necessary.

The global wave of telecommunications liberalization and privatization that began in the mid-1980s significantly increased the importance of authorization in telecommunications regulation. During this period, many PTTs were privatized. At the same time, private sector companies were often authorized to provide new telecommunications services, such as cellular mobile and value-added services. Separate authorizations (“individual licenses”) were generally issued to both incumbent service providers in the process of privatization and new private sector entrants. These authorizations set out the terms and conditions governing their provision of telecommunications service and dealing with other aspects of their operations. Because the telecommunications regulatory framework often had not yet been fully adapted to the conditions of a privatized or competitive market, these authorizations tended to be fairly detailed in order to fill the regulatory gap.

In recent years there has been a trend away from granting individual licenses. This trend is due to a number of factors, including the development of increased competition; the proliferation of service providers; and the dynamic nature of telecommunications and ICT technologies and markets, convergence, and the resulting deregulation and reform movements. Instead of issuing individual licenses, regulators are increasingly issuing general authorizations, or “class licenses,” that authorize provision of all telecommunications-ICT services of the same type, regardless of who provides them. While some countries continue to issue individual licenses in certain circumstances, such as the granting of a right to use scarce resources such as radio frequency, the trend is clearly towards general authorizations and uniform regulation of whole classes of service.

Today, three basic approaches are used to authorize telecommunications-ICT service providers: individual licenses, general authorizations (or "class authorizations"), and no
authorization requirement (i.e., open entry). These approaches will be discussed in greater detail below.

1.3 Authorization Objectives and Policies

The development and implementation of authorization policies is one of the most important steps in reforming the ICT sector. Authorization policies determine the structure and level of competition in telecommunications markets and, ultimately, the efficiency of the supply of telecommunications-ICT services to the public.

Historically, many countries developed authorization policies on an ad hoc basis. However, as the global regulatory experience evolved, an increasing number of countries have adopted explicit authorization policies. Many countries developed policies based on the experience of regulatory reform and telecom market liberalization in other countries. In developing and transitional markets, authorization policies often provide for (1) immediate opening of peripheral telecom markets to competition, and (2) phased opening of voice telephony and related “core” markets.

Clearly stated telecom policies remove uncertainty and regulatory risk for service providers and their investors. However, regulation is an art, not a mathematical science, and it is neither possible nor desirable to attempt to prescribe detailed policies for all situations that may arise. Telecommunications markets and technologies are too dynamic to permit that. An ideal telecommunications/ICT policy should establish the main objectives and approaches of government policy and deal with major issues of national concern to service providers and investors. However, the more detailed provisions are better left to subsidiary legislation or regulatory rules that can be amended to meet evolving market conditions.

Governments and regulators typically have a variety of reasons or objectives for licensing telecommunications-ICT service providers. Some common authorization objectives include:

- privatization or commercialization;
- expansion of networks and services and other universal service objectives;
- regulating provision of an essential public service;
- attracting investment in the telecommunications-ICT sector;
- regulating market structure;
- establishing a framework for competition;
- allocation of scarce resources;
- generating government revenues;
- consumer protection;
- establishing a framework for quality of service; and
- regulatory certainty.
1.4 International Trade Rules

In recent years, telecommunications services have played a larger role in international trade agreements, both at the multilateral and regional levels. The World Trade Organization (WTO) and its predecessors have promoted liberalization of trade in telecommunications services. The General Agreement on Trade in Services (GATS)\(^3\) and the 1997 WTO Agreement on Basic Telecommunications (ABT)\(^4\) both include specific rules that apply to telecommunications regulation and authorization. As a result, new signatories to the ABT, as well as countries wishing to join the WTO, must bring their regulatory and authorization practices into compliance with WTO trade rules.

The trade rules most relevant to the authorization process are summarized below.\(^5\) The central theme of these rules is the evolution towards more open competitive markets and transparent authorization processes.

1.4.1 GATS Authorization Requirements

All WTO member states are bound by the “general obligations and disciplines” of the GATS. Three Articles of the GATS are directly applicable to the authorization process: Article II, Most Favoured Nation (MFN) Treatment; Article III, Transparency; and Article VI, Barriers to Trade. More detailed information about these authorization requirements can be found in section 1.4.1 of the online Authorization Module.

1.4.2 ABT and WTO Regulation Reference Paper Authorization Requirements

The schedules to the GATS contain additional trade commitments by individual member countries concerning specific services, including basic telecommunications services. As part of the 1997 ABT, 69 developed and developing countries filed national schedules of commitments to liberalize or maintain open telecommunications markets. As part of their schedules of commitments, most of these countries agreed to adhere to certain telecommunications regulatory practices set out in the WTO Regulation Reference Paper (the “Reference Paper”).

The Reference Paper has had a major impact on the reform of telecommunications regulation, including authorization practice reform, in many countries. The Reference Paper contains two rules that specifically relate to the authorization process: Article 4, which relates to the public availability of authorization criteria, and Article 6, which outlines the requirements governing the allocation and use of scarce resources.

More information about the ABT and the WTO Regulation Reference Paper is available in sections 1.4.2 and 1.4.3 of the online Authorization Module and in Module 5, “Radio Spectrum Management” of the ICT Regulation Toolkit.
1.5 Who Authorizes Telecommunications Services?

Authorizations are usually issued and administered by telecommunications or ICT regulatory authorities. Until recently, Ministers or Ministries responsible for the telecommunications sector played a much more prominent role in authorization. They continue to do so in quite a few countries. However, the trend is clearly toward separating authorization from the political process. Telecommunications-ICT authorization responsibilities are increasingly carried out by independent professional regulators, who are expected to use objective criteria and transparent processes to authorize telecommunications services.

As part of the ITU’s 2004 regulatory survey, information was gathered on the allocation of authorization responsibility in 97 countries. In almost two-thirds of those countries (61 of 97), it was reported that the national telecommunications regulatory authority (NRA) was responsible for authorization. In another 14 countries, the NRA shared authorization responsibility with the Ministry. This occurs, for example, in countries like St. Vincent and the Grenadines, where the NRA reviews applications and advises the Minister, who then issues authorizations. In Australia, the NRA approves authorizations, but the Minister can attach conditions and approve exemptions from the authorization requirement. In Canada, the authorization functions are split between the NRA (international authorizations) and the Minister (cellular mobile authorizations).

According to the 2004 ITU survey, the Ministry alone was responsible for authorization in 15 of the 97 countries. In another nine countries, entities other than the NRA or Ministry issued authorizations. These entities included the President (Suriname), the Congress (Costa Rica) and multi-sector authorization authorities (Seychelles).

1.6 Types of Authorization Regimes

Although countries have adopted various types of authorization regimes, there has been a convergence in the basic approaches to authorizing telecommunications service providers and services. Today, the main types of authorization regimes can be divided into three principal categories: individual licenses; general authorizations; and open entry – i.e., no authorization requirement.

There is a clear trend at present toward the use of general authorizations and open entry regimes, consistent with the general liberalization and convergence of telecommunications-ICT markets. However, individual licenses continue to be in place in a large number of countries. Table 1.6 provides an overview of the main features of each of the three principal categories of authorization regimes, as well as examples of when these regimes have been applied.
<table>
<thead>
<tr>
<th>Types of Authorization Requirement</th>
<th>Main Features</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual Authorizations</strong></td>
<td>• issued to a single named service provider</td>
<td>• basic PSTN services</td>
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<tr>
<td></td>
<td>• usually a customized authorization document</td>
<td>in a monopoly</td>
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<td></td>
<td>• often contains detailed conditions</td>
<td>market</td>
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<td></td>
<td>• frequently granted through some form of competitive selection process</td>
<td>• mobile wireless services</td>
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<td></td>
<td>• <strong>Useful where:</strong></td>
<td></td>
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<tr>
<td></td>
<td>• a scarce resource or exclusive right is to be authorized (e.g., spectrum), and/or</td>
<td>services using scarce spectrum resources</td>
</tr>
<tr>
<td></td>
<td>• the regulator has a significant interest in ensuring that the service is provided in a particular manner (e.g., where the service provider has significant market power)</td>
<td></td>
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<tr>
<td><strong>General Authorizations</strong> (Class Licenses)</td>
<td>• useful where individual authorizations are not justified, and where significant regulatory objectives can be achieved by establishing general conditions</td>
<td>• data transmission services</td>
</tr>
<tr>
<td></td>
<td>• normally set out basic rights and obligations, and regulatory provisions of general application to the class of services authorized</td>
<td>• resale services</td>
</tr>
<tr>
<td></td>
<td>• normally issued without a competitive selection process; all qualified entities are usually authorized to provide service or operate facilities</td>
<td>• international services</td>
</tr>
<tr>
<td></td>
<td>• All “electronic communications” services (EU)</td>
<td>• VSATs</td>
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<td></td>
<td>• private networks</td>
<td></td>
</tr>
<tr>
<td><strong>Open Entry</strong> (Services may be provided without an authorization)</td>
<td>• no authorization process or qualification requirements, beyond rules generally applicable to the ICT sector registration requirements or other rules of general application are sometimes imposed by regulation</td>
<td>• Internet service providers (ISPs)</td>
</tr>
<tr>
<td></td>
<td>• <strong>Value-added services</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Wireless Local Area Networks</td>
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*Source: Adapted from Hank Intven, Jeremy Oliver & Edgardo Sepulveda, Telecommunications Regulation Handbook (Washington, DC: infoDev/The World Bank, 2000).*
The online version of the Authorization Module contains numerous practice notes, case studies, and other examples of a variety of different approaches to the three principal types of authorization regimes. See sections 1.6, 1.6.1, 2, and 3 of the online Module for these resources.

1.7 The Legal Framework for Authorization

The form of an authorization depends on the national legal regime. The act of granting an authorization is treated in most countries as a unilateral administrative act of the regulatory authority. However, in some countries, a grant of authorization is treated as a form of mutually-negotiated agreement, concession, or public-private partnership (PPP).

The authorization is issued to one or more authorized service providers subject to the terms and conditions specified in the authorization or the general telecommunications regulatory framework. In most countries, authorizations comprise only one element of the regulatory framework. Other rules that govern service providers are included in ICT sector policies, laws, regulations, decrees, orders, decisions, guidelines, directions, and other regulatory documents.

In some countries, the right to provide services to the public comes in the form of a commercial contract between the regulator and the service provider or network operator. Examples of this approach include concession agreements and public-private partnerships (PPP) between governments and private investors. Although concession agreements and PPPs permit a private investor to provide certain services to the public, they are not “authorizations” in the sense that this Module uses the term, i.e., a regulatory instrument. Instead, concessions and PPPs are essentially commercial contracts in which private investors agree to provide some key input related to telecommunications services (e.g., construction and operation of a network, interfacing with consumers, technical expertise, or financial resources) in return for compensation from the government.

Concessions and PPPs generally set out the rights and obligations of both the government and the private investor/service provider. In the telecommunications sector, concessions and PPPs are most common and useful in countries where the legal and regulatory framework is less developed. Concession agreements and PPPs may be useful in cases where there is a perception of high regulatory risk or political country risk which may, in the absence of a contract, deter telecommunications investment. However, recent experiences in Lebanon, Indonesia, and other countries suggest that these types of arrangements have limited success. Concession agreements and PPPs are discussed in more detail below in section 7.1.

1.8 Developing Market Entry Policies

As countries prepare to liberalize their telecommunications sector, they must develop market entry policies. The particular authorization approach and process adopted by a country depends on national and regional sector policies, laws and market structure.
Increasingly, international trade rules, such as those established by the WTO, also impact the selection of authorization approach and process.

1.8.1 Typical Steps in Designing a New Authorization Process

Depending on the level of development of general telecommunications policies, the typical steps in designing a new authorization process might include:

- a review of market performance, including: measuring performance of existing service providers, considering existing legal exclusivity rights, studying demand for new services, benchmarking local market performance with similar economies and considering international authorization experience and trade commitments;

- development of a policy for authorization of new service providers, with options such as open-market policies, phased market-opening policies, and PPPs;

- development of a process for authorizing new service providers (e.g., competitive auction, comparative evaluation, or general authorization process);

- a public consultation on proposed new authorization policy and process, setting out considerations for existing service providers, new entrants, consumers, and the national economy;

- development and approval of any necessary legal and regulatory amendments to implement a new authorization policy; and

- commencement of the authorization process.

Sections 2, 3, and 4 of this Executive Summary and Sections 2, 3, and 4 of the online version of the Authorization Module discuss competitive authorization processes and general authorizations in more detail. Other pertinent information may be found in Module 5, “Radio Spectrum Management” of the ICT Regulation Toolkit. The online version of the Authorization Module also contains examples of authorization policies and other authorization documents that illustrate a range of approaches to implementing market entry policies. See section 1.8 of the online Authorization Module for links to these documents.

1.8.2 Defining Geographic Service Areas

One important issue normally considered when designing a market entry policy relates to the definition of geographic service areas to be covered by new authorizations.

Various approaches have been taken in defining the service area for a new authorization. In some cases, national authorizations are issued. In others, separate authorizations are issued in different regions or for rural and urban markets. In some cases, national
authorizations have been issued in parallel with competing regional authorizations for the same service.

There is no one right approach to designating service areas. However, some approaches are likely to be less successful than others. One approach used by several countries that had limited success is to preserve the profitable urban markets for a state-owned PTT, and to invite private sector service providers to serve only rural areas that are financially less viable. In some cases, the failure of the private sector service providers to perform well in such areas has been used as evidence to argue against further sector liberalization.

When defining the geographic service area of a new authorization, relevant considerations include the following: financial viability; trends in the mergers of regional licensees; possible cross-subsidization from high profit areas to less profitable ones and associated anti-competition concerns; consumer interests in national authorizations; and the benefits of holding a public consultation process during the design and implementation of an authorization process. Further details about these considerations are available in sections 1.8.1 and 6.2 of the online version of the Authorization Module.
2. GENERAL AUTHORIZATIONS

There is a clear trend today toward the use of general authorizations, or class licenses, and away from the issuance of detailed individual licenses. General authorizations are issued to all service providers that meet standardized eligibility criteria for the provision of certain categories of services. The terms and conditions of general authorizations are also standardized and not tailored to each particular licensee, as is usually the case with individual licenses.

Although many countries still issue individual authorizations for some services or facilities, such as those that use limited spectrum resources, it is likely that reliance on individual authorizations will decline. As markets become more competitive and as regulators seek to streamline and lighten regulatory intervention in the ICT sector, more regulators will likely begin to rely primarily, or even exclusively, on general authorizations. This is generally considered the best practice today in most markets where some form of authorization regime is still deemed necessary.

2.1 The 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).

2.2 Services Often Subject to General Authorizations or Open Entry

In more liberalized jurisdictions, such as in the European Union (EU), most services are subject to general authorizations. In many countries, where a comprehensive general authorization regime is not yet in place, selected services are subject to general authorizations or open-entry policies. Examples of these services include:

- Internet Service Provider (ISP) services;
- other value-added services, including information content services, intelligent digital network features (e.g., voice-mail, call-forwarding, call-waiting, audio-conferencing, etc.);
- Internet content and transmission services, including e-mail;
• resale-based services, such as calling card services, call-back services, pay phone and public call office services and, sometimes resale-based Internet Protocol (IP) voice services;
• fax services;
• private networks, including private virtual networks and private facilities-based networks (except for radio spectrum authorizations, which are usually granted on an individual basis, except for shared bands);
• customer terminal equipment, including very small aperture (VSAT) terminals, private branch exchanges (PBXs), routers and all data processing equipment; and
• wireless local access networks.

2.3 Issuing General Authorizations

While individual licenses are granted to a single service provider at a time, general authorizations provide authority for a whole class of service providers to provide service or operate facilities. A general authorization or associated regulations normally prescribes any eligibility conditions and ongoing regulatory conditions for provision of the service.

With general authorizations, the regulator normally has no discretion to grant or to withhold an authorization to a particular person. If a person complies with the eligibility requirements and the conditions of the general authorization, that person is automatically authorized. Accordingly, in many cases, applying for a general authorization is akin to a registration process, although in some cases (e.g., Canada’s basic international telecommunications services license) an application must be submitted and approved before a license is issued.

The regulatory framework governing the process for obtaining a general authorization or class license is often contained in a country’s general telecommunications legislation or in a regulation to such legislation. For example, in combination, sections 11(1)(h), 6(1)(h), 32 and 33 of the Telecommunications Act of Grenada establish the authority of the Minister to issue a class license and outline the basic process by which a class license is issued.7

Sweden has established the regulatory framework for general authorizations, including the process for obtaining a general authorization, into a piece of new legislation. In other countries, such as Norway and Ireland, the relevant requirements related to general authorizations are contained in regulations.

In some cases, as in Singapore and Malaysia, the regulatory framework for general authorizations is contained in both the general telecommunications act and the regulations to the act. The general telecommunications legislation gives the regulator or Minister the authority to issue a class license or to determine that a particular service will be subject to a class license. The regulations to the telecommunications legislation then establish the actual process for issuing a general authorization, along with relevant terms and conditions.
In rare cases, the regulatory framework governing the process for obtaining a class license is outlined in regulatory decisions or other regulatory instruments. For example, in Telecom Decision CRTC 98-17, “Regulatory Regime for the Provision of International Telecommunications Services” (“Decision 98-17”) the Canadian regulator determined that basic international telecommunications services (“BITS”) licenses should be issued pursuant to a general license scheme. The Canadian regulator also established the requirements and procedures for obtaining a BITS license in this decision.\footnote{8}

A few countries have introduced variations on the theme of general authorizations. For example, a general authorization may only permit a specified number of service providers of a specific class. These may be authorized on a first-come, first-served basis or through some other selection process. Nevertheless, all authorized service providers of the same class are subject to the same conditions, leaving intact one of the key principles of general authorizations. The Saudi Arabian Telecommunications Bylaw establishes several types of class authorizations that include some of the features described above.\footnote{9}

Introduction of a general authorization regime can raise complications where existing individual licenses authorize the same services as those covered by the general authorization. To promote competitive neutrality, regulators should ensure that differences between general authorizations and individual authorization conditions do not significantly favor one competitor over another.

One way to avoid complications and to ensure competitive neutrality is to indicate that individual authorizations do not authorize the offering of any service that can be offered under a general authorization. In this way, regulators can ensure that all providers of the services provided under the general authorization are subject to the same conditions.

In some cases, individual authorizations may have to be amended to harmonize the conditions under which existing services are offered with the terms of new general authorizations. This may be achieved with the full cooperation of existing licensees, particularly where the conditions of general authorizations are less onerous than those of existing individual licenses.

Section 2.3 of the online Authorization Module contains a variety of practice notes, case studies, and other information related to the issuance of general authorizations.

\section{2.4 Conditions of General Authorizations}

There is no standard set of conditions for general authorizations or class licenses. The conditions attached to general authorizations in different countries are products of the individual circumstances and regulatory framework in each country.

In Canada, the conditions attached to the class license for the provision of basic international telecommunications services include an obligation to participate in the contribution (universal access) regime, a prohibition on anti-competitive conduct, and a requirement to maintain records of certain types of information. In the EU, some of the
conditions that may be attached to general authorizations include: an obligation to contribute to universal service funds; obligations relating to interconnection and the interoperability of networks; obligations related to privacy protection; obligations related to number portability; and the right of the regulator to impose administrative costs on licensees, among other conditions.

Section 2.3 and Practice Note http://www.ictregulationtoolkit.org/en/PracticeNote.762.html of the online version of the Authorization Module contains a range of examples of different sets of conditions for general authorizations.

2.5 The EU Authorization Framework

In 2002, the EU adopted a new regulatory framework for its telecommunications sector (renamed the “electronic communications sector” in the framework documents). This new framework has been effective since July 2003.10

The authorization procedures adopted by EU members must comply with the new regulatory framework, and particularly the provisions of two parts of the framework: the Authorization Directive and the Framework Directive. The Framework Directive contains general principles and guidelines that are applicable to ICT regulation as a whole.11 The Authorization Directive contains specific rules applicable to the authorization of ICT networks and services in the EU.12

The Authorization Directive applies to authorizations for all electronic communications networks and services, regardless of whether they are provided to the public. The requirements related to general authorizations do not apply to authorizations for use of scarce resources such as radio frequency and numbering resources. The Authorization Directive sets out different requirements for authorization of these scarce resources.

With respect to electronic communications networks and services, the Authorization Directive requires the replacement of individual authorizations with general authorizations. Pursuant to this Directive, electronic communications networks or services may only be subject to a general authorization requirement. Accordingly, a service provider may be required to submit a notification that it is providing services, but it may not be required to obtain a decision or be dependent on any other administrative act by the national regulatory authority before commencing operations under the authorization.

The Authorization Directive also dictates certain rights and obligations of authorized service providers. In addition, this Directive sets out conditions that may be attached to general authorizations. It also specifies the types of measures that countries may take to verify and enforce compliance with these conditions.

The Authorization Directive has been developed to conform to the more general regulatory requirements of the EU Framework Directive. While the Framework Directive
does not establish specific rules for the authorization process, several general provisions are relevant. These provisions include: requirements imposed on regulators to exercise their powers impartially and transparently; the adoption of a technology-neutral regulatory framework; and a prohibition on discrimination in the treatment of undertakings providing electronic communications networks and service on the basis of nationality.

Although the directives are binding only on EU members, other countries have found the EU approach useful in developing their own approach to regulation of the sector. In particular, countries that plan to join the EU, or to harmonize their economic approach with that of the EU, have adopted many of the features of the new framework.

Section 2.4 of the online Authorization provides access to various materials relating to the new EU regulatory framework, including further details about this framework, case studies on the implementation of the Directives, and excerpts from relevant Directives, legislation, and regulations.
3. **INDIVIDUAL LICENSES**

Notwithstanding the trend towards the use of general authorizations, individual licenses continue to have relevance in some contexts. In particular, individual licenses have an important role to play in emerging and transitional economies that have not yet developed a comprehensive or stable regulatory framework. In that context, licenses provide certainty for investors and lenders. This certainty is often required before investors will provide the millions or billions of dollars required to install or upgrade telecommunications infrastructure. Countries that have achieved certainty in their early authorization initiatives through the use of detailed individual authorizations include Hungary, Uganda, Morocco, and Jordan.¹³

Section 3.1 of the online version of the Authorization Module contains further information about the importance of licensing certainty in developing markets.

### 3.1 Contents of a Typical Individual License

The actual terms and conditions of individual telecommunications licenses vary considerably from country to country, depending on the local legal, regulatory, and industry environment, among other things.

In some countries, the individual licenses for certain services are very detailed. These licenses may contain provisions related to authorization fees; universal services fund contributions; prohibitions on anti-competitive conduct; customer service standards; requirements related to interconnection with other service providers; and license termination and renewal.

However, in other countries, some matters in the aforementioned list are already covered in laws, regulations, or other documents that form part of the regulatory framework. Examples include general regulations on universal service or authorization fees; interconnection regulations; a competition law or general rules of practice and procedure; governing authorized service providers; and information reporting or authorization termination and renewal. It generally does not matter which type of legal document is used to deal with these issues, as long as the requirements of the regulatory framework are stated clearly and are enforceable under local law.

Section 3.2 of the online version of the Authorization Module includes an outline of the sample contents of a detailed Public Switched Telephone Network (PSTN) license, as well as links to a number of examples of individual licenses from different countries around the world.
4. THE COMPETITIVE LICENSING PROCESS

Competitive licensing processes are generally used to issue an authorization to a single service provider or to a limited number of them. In a competitive licensing process, the regulator (or other licensing authority) typically describes the business opportunity and invites interested parties to submit applications for the license to enter the business. The successful applicant is normally selected through a form of competitive evaluation, such as a comparative evaluation process (sometimes called a “beauty contest”), an auction or some combination of the two.

A competition for the award of an individual license is frequently referred to as a “licensing” or “tender” process or a “request for applications” process. In this module, we use the term “competitive licensing process” to refer generally to a competitive selection process, in which a number of applicants compete for the right to hold a limited number of licenses.

Box 4 contains a checklist of typical steps that must be taken to issue an authorization through a competitive licensing process.

<table>
<thead>
<tr>
<th>Box 4: Checklist of Typical Steps in a Competitive Licensing Process</th>
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<tbody>
<tr>
<td>● Develop a market entry policy</td>
</tr>
<tr>
<td>• Establishes the goals of the authorization process and shapes the foundation for the process.</td>
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<tr>
<td>● Make key determinations about the structure of the licensing process</td>
</tr>
<tr>
<td>• Determine the schedule for the process, whether the process will include pre-qualification and qualification rounds, determine which selection mechanism to employ, and determine the criteria for pre-qualification, qualification, and selection, as applicable.</td>
</tr>
<tr>
<td>• Make policy determinations concerning the number of licenses to be awarded, the terms and conditions of license, and other key policy matters.</td>
</tr>
<tr>
<td>● Issue public notice of the license competition</td>
</tr>
<tr>
<td>• Use traditional media (business magazines and newspapers), online resources, and the regulator’s website to provide notice of the competition.</td>
</tr>
<tr>
<td>● Publish the guide to the licensing process</td>
</tr>
<tr>
<td>• The guide to the licensing process may be published at the same time as the issuance of public notice of the competition or shortly thereafter.</td>
</tr>
<tr>
<td>• If the licensing process includes a pre-qualification stage, the guide to the licensing process may be issued only to applicants who have successfully pre-qualified. In this case, the guide to the licensing process may be issued after the pre-qualification stage. In such a case, directions on how to pre-qualify and a high-level summary of the licensing opportunity should be issued along with the public notice of the opportunity.</td>
</tr>
</tbody>
</table>
4.1 Phases of a Competitive Licensing Process

Competitive licensing processes generally have a number of phases. After determining the basic objectives of a licensing process, the regulator will establish the schedule for the process and prepare a guide to be used by applicants in the licensing process. Typically,
the licensing process begins when the regulator issues a notice of invitation to apply for the license. A guide to the licensing process is often made available at the same time as this notice, or shortly thereafter.

In some cases, the licensing process includes a pre-qualification phase, in which potential applicants are screened to limit the competition to qualified applicants. The pre-qualification phase is followed by a qualification phase or the selection phase, where the regulator uses a competitive mechanism (or combination of mechanisms) to select the successful applicant. In other cases, however, the licensing process does not feature a pre-qualification phase and instead proceeds directly to the selection phase.

The licensing process culminates with the selection of the successful applicant and the award of license or licenses. More information about each of the phases mentioned above can be found below.

4.2 Scheduling the Licensing Process

In most cases, the guide to the licensing process includes a schedule for the process. Publishing a schedule for the licensing process facilitates compliance with one of the requirements set out in the *WTO Regulation Reference Paper*. The Paper requires that certain information about licensing, including the “period of time normally required to reach a decision concerning an application for a licensing,” be made publicly available.

The schedule sets out the framework for how the licensing process will unfold. It normally lists all significant steps in the licensing process and the date and time for such steps. The deadlines governing tasks that applicants are required to complete are a particularly important inclusion in the schedule. Many schedules also include the timelines for the review of the licensing applications and the date on which the decision concerning the award of licensing will be announced. Other important steps may be included in the schedule, for example, the effective date of the license.

Dates and deadlines included in licensing schedules are usually specific. In addition to noting the day, month, and year of a particular event, it is often advisable to include a fixed time (including relevant time zone) for certain steps.

In setting a schedule, the regulator should balance its own interests, the interests of the public, and the interests of potential applicants. For example, the interest in moving the authorization process ahead as quickly as possible after issuing the request for applications must be balanced against the need to provide potential applicants with sufficient time to conduct due diligence and to prepare the required materials for the application.

Section 4.3.1 of the online version of the Authorization Module provides further information about the scheduling process and contains links to examples of schedules from various licensing processes around the world.
4.3 The Guide to the Licensing Process

A regulator will typically issue some form of guide to the licensing process. Such a guide is sometimes referred to as a “Request for Applications for a License,” “Invitation to Tender,” “Licensing Guidelines,” or even “Licensing Tender.” We will refer to these documents collectively as the guide to the licensing process.

The guide to the licensing process typically includes important information about the licensing competition that allows applicants to analyze the prospective opportunity and to submit responsive applications. This information may include: background to the competition; market conditions; the scope of the license; the rights and obligations of the successful licensee; the procedures that will be followed in the competition; qualification criteria; selection criteria; fees; and the schedule for the licensing process. In some cases, the guide also includes a draft form of license, as well as information about relevant investment legislation and policies, interconnection guidelines, an application for spectrum, the existing tariff, the national numbering plan and a tariff guideline.

The guide to the licensing process is typically made available to the public or to qualified bidders as soon as a form of notice of invitation to apply for the license is released.

Section 4.4 of the online version of the Authorization Module contains further information about the contents of the guide to the licensing process, in addition to links to a number of good examples of guides from various countries.

4.4 Providing Public Notice

The licensing process generally begins with a public notice of the license competition. The public notice increases the transparency of the authorization process and is in keeping with current best practices in the ICT sector. Public notice is often issued in a preliminary or pre-qualification phase of the authorization process.

The public notice usually states the regulator’s intention to issue a license and provides a high level summary of the license and the licensing process. A public notice typically includes: a description of the services or facilities to be authorized; the geographic area of the license; the competitive process that will be used to award the license; and key dates in the licensing process, especially the deadline for submitting applications. Some longer notices include information about pre-qualification, qualification, and selection criteria; information about application and license fees; and other information usually left to the licensing guide. The public notice also provides information on where to obtain more information about the licensing process.

Some licensing authorities charge a sizable fee for the purchase of the guide to the licensing process. In such cases, it is necessary to provide enough information in the public announcement for interested persons to determine whether it is worth purchasing the full licensing package.
Public notices may be in print or electronic format, or both. Notices typically appear on the website of the regulator, in the trade press, magazines, newspapers, journals and other media where industry participants can be expected to learn of the notice.

Samples of public notices of authorization processes from various countries are available in the online version of the Authorization Module. See section 4.5.1 of the online Authorization Module for more information and links to these documents.

4.5 The Pre-Qualification Phase

It is sometimes desirable to limit the field of applicants to parties that have demonstrable financial and technical qualifications to achieve the objectives of the regulator. In these cases, the licensing process includes a pre-qualification phase. Some factors that are relevant to the decision about whether to include a pre-qualification phase include:

- **The nature of the telecommunications market and the level of competition in the market for which the license is being issued**: pre-qualification is less important in the case of highly-competitive services since consumers can switch away from a service provider that fails to provide adequate services with minimal cost and disruption;

- **The nature of telecommunications services**: pre-qualification is often prudent in the case of licensing processes for services that involve the use of valuable spectrum and other scarce resources in order to ensure that these resources are awarded to applicants who are financially and technically capable of providing the service; and

- **The type of selection mechanism to be applied in the licensing process**: pre-qualification is less important in comparative evaluation licensing processes since comparative evaluations are often structured to include an evaluation of the financial and technical merits of applicants.

During the pre-qualification phase, potential applicants must demonstrate that they meet the pre-qualification criteria to be eligible to participate in the license competition. The pre-qualification criteria are usually minimum requirements that establish a baseline of financial capability and technical competence. In order to enhance transparency and certainty in the licensing process, it is preferable that the pre-qualification criteria be objective rather than subjective measurements of financial viability and technical competence. An objective pre-qualification criterion that is often used requires applicants to demonstrate that they, or an affiliated entity, have actually provided certain types of services or operated a network of a certain size.

Regulators sometimes impose a significant application fee instead of, or in addition to, relying on a formal pre-qualification. Such an application fee will discourage frivolous bidders. The fee may be tied to the submission of an application or may be charged for the purchase of the guide to the licensing process.
One potential disadvantage of requiring pre-qualification is that the pre-qualification round extends the licensing process and delays the actual issuance of the license. Potential delay can be minimized by adopting objective criteria that are relatively easy to adjudicate. In any event, the regulator may ultimately save time by requiring that applicants pre-qualify, since the regulator will then have fewer applications to review during the selection process.

Authorization processes that have included a pre-qualification phase include: the Kenyan GSM licensing process; the Kenyan licensing process for a Second National Operator; the Jordanian process for the issuance of a third mobile license; the Saudi Arabian cellular mobile services licensing process; and the Saudi Arabian data services licensing process. Information about the pre-qualification phases in each of these licensing processes and further information about pre-qualification generally is available in section 4.6 of the online version of the Authorization Module.

### 4.6 The Qualification Phase

Some licensing processes include a qualification phase during which applicants must demonstrate that they meet the qualification criteria for the license and are therefore eligible to be considered for selection for the award of license. The qualification phase is separate from the pre-qualification phase, although sometimes these two phases are combined.

In some licensing processes, the qualification phase and selection phase are dealt with separately. In this case, the evaluation of licensing applicants occurs in two phases. First, applicants are evaluated to ensure that they meet the qualification criteria. Successful applicants then proceed to the selection phase of the licensing process. During this phase, applications are assessed on the basis of the selection criteria and the license is awarded to the successful applicant.

A classic example of the use of a qualification phase and a selection phase is the “two envelope” approach. Under this approach, each applicant submits two envelopes. The first envelope contains an applicant’s submissions regarding its ability to meet the qualification criteria. The second envelope contains information provided by the applicant about the selection criteria. During the qualification stage, the first envelope is opened and the submissions of applicants are reviewed to determine which ones are technically, financially or otherwise qualified to proceed to the selection phase. Applicants are then informed about whether they have advanced to the selection phase of the licensing process. The second envelopes of non-qualified applicants are usually returned un-opened. Sometimes an explanation is given as to which qualification criteria the applicant failed to meet. Such an explanation is consistent with the requirement of the *WTO Regulation Reference Paper* to make reasons for denial of a license known to the applicant upon request.
During the selection phase, the second envelopes of qualified applicants are opened. The most common and objective selection criterion is the financial amount of a bid. This may be based on the highest bid, for example, for an IMT-2000 license. It may also be to the lowest bid, for example, in the case of a least-cost subsidy auction. Such auctions are discussed in Module 4, “Universal Access” of the ICT Regulation Toolkit. Selection criteria are discussed further below in this Executive Summary.

In some cases, the qualification and selection processes are held simultaneously, such as in a comparative evaluation process. More information about comparative evaluation processes is included below.

Transparency in the qualification phase is promoted by communicating clearly with potential applicants about how their submissions will be evaluated. In particular, it is advisable to inform potential applicants whether minimum compliance with the qualification criteria is sufficient to advance them to the selection phase of the competition. There has been litigation against regulators in some countries where the qualification criteria were specified but some otherwise qualified applicants were subsequently rejected on the basis that they were less qualified than others.

4.6.1 Distinguishing Between Qualification Criteria and Selection Criteria

It is important to distinguish between qualification criteria and selection criteria. Qualification criteria are requirements that all applicants must meet to be eligible to compete for the license during the selection stage. Selection criteria are used to determine which applicant will actually be awarded the license or licenses.

In the case of a general authorization, only the qualification criteria are relevant because no selection is made. In the case of a selection process for an individual license, both qualification and selection criteria are normally developed. It is generally advisable to conduct a licensing process in at least two phases. The qualification phase is completed first. For less complex licensing processes, the pre-qualification and qualification phases are sometimes combined as one. Only qualified applicants participate in the second phase – the licensee selection process.

4.6.2 Qualification Criteria

As noted above, qualification criteria are minimum requirements that all potential applicants must meet in order to be eligible to compete for the license during the selection stage. Various requirements may be adopted as qualification criteria. Qualification criteria vary considerably in how onerous it is to meet the requirements.

Qualification criteria should be published in advance of the commencement of the qualification phase. This is consistent with the provisions of the WTO Regulation Reference Paper, which stipulate that “all licensing criteria” must be made publicly available.
To maximize the transparency of the process, direction may be provided on how potential applicants may demonstrate that they have met qualification criteria, such as technical competence or financial backing. The most common type of evidence involves prior experience in operating a network with a specific number of subscribers.

There are potentially negative consequences to adopting very specific qualification criteria and to specifying in detail the type of evidence that will suffice to demonstrate that these criteria have been met. This specificity makes the process more rigid and constrains the regulator’s flexibility to address novel situations or unexpected but useful qualifications. Maintaining some degree of regulatory discretion in the qualification process may be appropriate.

Some of the considerations relevant to selecting appropriate qualification criteria include: the type of service being licensed; whether the license will include monopoly rights or other forms of exclusivity; whether the licensing process includes a pre-qualification phase; and the type of selection mechanism applied in the licensing process. Table 4.6.2 summarizes some considerations concerning possible qualification criteria for certain license types.

<table>
<thead>
<tr>
<th>Table 4.6.2: Considerations about Possible Licensing Criteria</th>
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<tr>
<td><strong>License Type</strong></td>
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</table>
| First new competitive fixed network (local or international service) | • Applicant not currently licensed to offer a competitive service; not associated with the incumbent  
• Applicant has a minimum number of fixed lines in service in other countries/markets (an international PTO as partner)  
• Relevant experience in similar markets (direct or by contract)  
• Financial comfort letter from recognized bank  
• Business plan, including pro forma financial statements and a marketing plan  
• Technical plan, including details of network planning and roll out, and technology selections | • Effective competition will not develop between related entities  
• Only experienced service providers can meet the significant challenges facing a start up fixed line competitor  
• Experience and contacts in local market increases prospects of successful start-up  
• Evidence of access to required financing  
• Evidence of financial viability and likelihood of success of the project; disadvantage in that it is costly to prepare plan  
• Business plan and technical plan can demonstrate detailed and viable service plans and knowledge of local economic and other conditions |
| Competitive cellular service (first new entrant in an emerging market) | • Similar to, but less onerous than, above | • Presence of competition reduces (but does not eliminate) public costs of failure  
• Significant economic and sector development objectives will be achieved by successful launch  
• Valuable and scarce spectrum will be allocated to the selected service provider on an exclusive basis |
| Data transmission service in highly competitive market | • None | • General authorization is best approach  
• No scarce resources involved  
• Existing competition makes success or failure of this service provider relatively unimportant |
|---|---|---|
| Broadband wireless services in highly competitive market | • Financial comfort letter  
• Evidence of experience in successful operation of similar businesses in any market | • Spectrum is a scarce and valuable resource. Regulator has a important role to play in ensuring efficient use and avoiding warehousing |

*Source: Adapted from Hank Intven, Jeremy Oliver & Edgardo Sepulveda, Telecommunications Regulation Handbook (Washington, DC: infoDev/The World Bank, 2000).*

Regulators around the world have adopted diverse sets of qualification criteria. For example, the Estonian regulator adopted three qualification requirements for its 3G tender process in 2004. Participants were required: (i) to have submitted an application for participation, along with all necessary documentation; (ii) not to be an operator to whom a technical authorization of 3G mobile telephone network had previously been given pursuant to an earlier proceeding; and (iii) to have transferred the deposit sum in the appropriate account of the Ministry of Finance by the deadline for such deposit.

Potential applicants in the Norwegian 3G tender process (2000) were required to meet three main “minimum requirements”: (i) conformity with the terms of the invitation to tender, including the requirements related to scope, form, and content of the application; (ii) certain financial requirements pertaining to development and operations; (iii) and a commitment to meet the specified coverage requirements and corresponding roll-out obligations.

The Federal Office of Communications (OFCOM), the Swiss regulator, included only one qualification criterion in the 2003 licensing process for licenses to provide telecommunications services based on the GSM standard. This criterion was that sufficient financing for the participant’s proposed project had been secured for the term of the license, based on commercial and technical planning. The tender document stipulated that OFCOM would consider that a participant had fulfilled this criterion if: the project was based on a consistent and realistic business plan; a consistent and realistic investment and financing plan exists for the project; and the financial means necessary for the realization of the project are available or can be made available, and this can be proven.

Participants in the 2003 Nepalese Rural Telecommunications Services (RTS) licensing process were required to meet four requirements in order to become a “Qualified Applicant,” and therefore eligible to compete for the award of license during the selection stage. First, the participant’s application package for the RTS license had to be complete and prepared in accordance with the terms of the Request for Applications (RFA) for the Issuance of an RTS License.
Second, the participant must have satisfied all eligibility requirements included in the RFA, including, *inter alia*, requirements relating to: the purchase of a copy of the RFA; the provision of all required information; company registration; Nepalese participation; financing capacity; operational experience; and field proven equipment. The RFA includes specific details about these eligibility requirements and how participants were to demonstrate that these requirements had been met.

Third, the information contained in the participant’s application for license must have demonstrated that the applicant met or was capable of meeting the RTS license requirements related to service quality and availability and network roll-out requirements, as specified in the RFA.

Finally, the participant must not have been disqualified for any other reason, including, *inter alia*, reasons relating to the failure to submit the application for license in a timely fashion; failure to submit a complete application; failure to provide the required bid security amount for the license; and failure to comply with any of the procedures outlined in the RFA.

### 4.7 The Selection Phase

The heart of the licensing process is the selection phase. During this phase, the competition for the license occurs and the successful applicant is selected. There are two main types of competitive selection processes: a comparative evaluation approach (or “beauty contest”) and auctions. Other approaches include lotteries and a variety of hybrid approaches that use elements of pre-qualification, comparative evaluation, and auctions or lottery approaches. A guide to a licensing process should provide details about the selection mechanism to be used in the licensing competition, as well as information about selection criteria and the process that will be followed.

#### 4.7.1 Comparative Evaluations and Auctions

**Comparative Evaluation Approach** – In a comparative evaluation, or “beauty contest,” the award of license is determined on the basis of a merit-based assessment of competitive applications. Each application is evaluated on the basis of a pre-set list of selection criteria or on the basis of the applicant’s ability to fulfill certain, more general, requirements. This approach allows regulators to award the license to the service provider that is best placed to meet the specific objectives of the licensing process.

There are many forms of comparative evaluation schemes. In some cases, licenses are awarded to applicants expected to make the best use of the limited resources associated with the license to serve the public. In other cases, the evaluation is based on criteria related to technical competence, experience, and cost efficiency. Some comparative evaluations rely in part on quantitative measures, such as the number of years of operational experience. Others rely on more qualitative (and thus subjective) criteria, such as the quality of management.
The Norwegian 3G license tender process in 2000 featured a comparative evaluation as the selection mechanism. Applicants were evaluated on the basis of two primary selection criteria: geographic coverage and coverage in terms of population of network and services, and network roll out.

In the 2002 South African tender process for a license to provide public switched telecommunications services (PSTS), a comparative evaluation was used to select the successful applicant. The South African regulator evaluated each valid and eligible application based on a set of somewhat unusual criteria that had particular relevance to the political, socio-economic context in the country. The seven selection criteria for the license were:

- financing and business plan;
- experience in the provision of PSTS, strategic vision regarding the integrated provision of the service and a competitive strategy;
- human resource development policy and practices for training and promotion, especially entry level positions;
- technical feasibility of the project;
- proposed integration of the Black Economic Empowerment (BEE) into management of the licensee company and board representation;
- proposed integration of Eskom and Transnet into management of the company and board representation; and
- empowerment of women, disabled person, and youth.

In the 2003 Swiss GSM telecommunications services licensing tender, the selection of the successful applicant was also based upon a comparative evaluation of the applicants. OFCOM conducted a weighted assessment of four selection criteria: the quality of the applicant’s business and service plan; technical concept and implementation; market stimulation and innovative strength; and coherence and plausibility of the project.

Specific selection criteria should be clearly described in the guide to the licensing process. Best practices also suggest that the weighting for each criterion should be determined in advance and communicated to applicants. This promotes transparency in the licensing process. This also helps applicants to prepare more responsive applications to ensure that the regulator selects the best qualified applicant for the award of license. Norway, South Africa, and Switzerland all communicated the relative weights of each selection criteria in advance of the selection phase.

**Auctions** – While the comparative evaluation approach involves the selection of an applicant based on merit, auctions involve little or no qualitative analysis of the merits of the applicant. Instead, selection is based on a single evaluative criterion, namely the amount bid by qualified applicants.

Many different types of auctions are possible. The most common approach involves selection of the qualified applicant who submits the highest bid for the right to hold a
license. This type of auction was used in several GSM licensing processes in Europe, including the German, British, Dutch, and Italian authorization processes.

In the 2004 Estonian 3G licensing process, the successful application was selected using a multi-stage tender auction with an unlimited number of stages. The sole selection criterion was the amount of the tender offer. The applicant that bid the highest tender offer was awarded the license.

In least-cost subsidy auctions, a selection is made based on which qualified applicant requires the lowest subsidy to provide a non-economic service. The services authorized using a least-cost subsidy auction are generally subsidized as part of a country’s universal access program. In a least-cost subsidy auction, applicants make offers of the subsidies they would require to provide the authorized services. The applicant that bids the lowest subsidy is awarded the license, along with the right to the subsidy it has proposed. Such auctions have been used successfully on a number of occasions to license subsidized rural telecommunications services in Latin America, and more recently in other regions. For example, the Nepalese regulator recently used this mechanism to issue a rural telecommunications services license in its country.

Auctions can also be based on any other measurable indicator that is financial or based on financial considerations. These might include the lowest consumer tariff to be charged, the highest quality of service or the greatest level of service to non-economic areas.

In many auctions, bidders are pre-qualified using criteria similar to those used in comparative evaluation processes. As a result, participation in these auctions is limited to bidders with proven financial and technical capabilities.

Regulators have frequently relied on auctions to issue spectrum authorizations. A discussion of various auction procedures in the context of spectrum authorizations will be included in the online version of Module 5, “Radio Spectrum Management” in the ICT Regulation Toolkit.

**Hybrid Approaches** – There are many variations of the two main selection approaches. In some cases, hybrid approaches blend elements of a comparative evaluation with elements of an auction. For example, applicants may be scored on a number of quality-based criteria and market-based criteria, such as the amount of their bid for the license, financial security, technical competence, and operational experience. In this case, the applicant with the highest combined score may be awarded the license.
Table 4.7.1 compares the advantages and disadvantages associated with different types of selection mechanisms.

<table>
<thead>
<tr>
<th>Selection Mechanism</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
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</table>
| Comparative Evaluation – based on subjective assessment and comparison by the regulator of applications based on a list of qualitative and/or quantitative criteria | Maximum flexibility and discretion to select the most attractive application  
- Allows applicants to focus on factors they believe are important and to convince regulator accordingly | Non-transparent  
- Subject to accusations of bias or corruption from losing bidders which are hard to refute and damage regulatory credibility  
- Risk of confusion among bidders who may not clearly understand regulatory priorities |
| Pure Auction – selection from among qualified bidders based on the highest financial bid | Maximum transparency  
- Market efficiency – license awarded to the bidder which values it most  
- High bidder will have strong incentive to roll out service quickly to recover its bid  
- Suited to licensing in competitive markets | Payment of fee can divert financial resources from service provision to auction fees (government revenue)  
- Encourages applicants to minimize resources devoted to other important priorities (i.e., rollout, coverage etc.) |
| Pure Auction – selection based on quantitative criteria, other than cash, relating to the service (i.e., time required to meet roll-out target, commitments on maximum prices for consumers) | As above  
- Regulator can focus bidder resources on service development or other priorities as opposed to government revenues | Encourages applicants to minimize resources devoted to priorities which are not selection criteria, unless they make business sense |
| Combined auction/comparative selection via weighted scores | A compromise which has many of the benefits of both auction and comparative selection  
- Applicants are awarded points based on selection criteria | Difficult to develop a sound formula that compares “apples to apples”  
- Compromise has disadvantages of both comparative selection and auctions  
- Less transparent than pure auctions |

*Source: Adapted from Hank Intven, Jeremy Oliver & Edgardo Sepulveda, Telecommunications Regulation Handbook (Washington, DC: infoDev/The World Bank, 2000).*
4.7.2 Selection Criteria

As noted above, selection criteria are used in the assessment of qualified license applicants to determine which one will be awarded the license or licenses. A wide range of criteria can be used in the selection process, including quantitative and qualitative criteria. A comparative evaluation procedure may involve one or the other or both types of criteria.

The type of selection criteria that should be used in a licensing process depends on the objectives of the licensing process and the relative advantages and disadvantages of each type of criteria in the particular license circumstances.

The selection mechanism also plays an important role in shaping the selection criteria featured in a licensing process. While auctions require a set of criteria that are largely quantitative, beauty contests, by contrast, may feature more qualitative criteria. Hybrid approaches typically feature both qualitative and quantitative criteria. The decision whether to include a pre-qualification or a qualification stage also impacts the type of selection criteria that are applied in a licensing process.

Regulators around the world have adopted diverse selection criteria. Sections 4.8.2 and 4.8.4 of the online Authorization Module contain further information, case studies, practice notes, and reference documents related to selection criteria and selection mechanisms more generally.

4.7.3 The Selection Process

The selection process concludes with the award of license. It is a good practice to specify when and where the award of license will be announced. It is also good practice to require the successful applicant to confirm its acceptance of the award in writing within a prescribed amount of time. If the successful applicant is required to comply with any conditions before the license is issued (e.g., the payment of a license fee), such requirements should be clearly identified.

To increase confidence in the licensing process, it is important to build as much transparency and certainty as possible into the selection process. There are a number of ways that regulators can enhance transparency and certainty:

- Describe the selection mechanism in the guide to the licensing process, along with the selection criteria and the weight that will be given to each criterion.
- Provide a coherent and complete set of selection procedures that will be followed during the selection process, including an outline of all of the major steps in the process and any required action of applicants at each step, along with the deadlines associated with each step.
- Specify all the materials that must be submitted for review during the selection process, as well as the acceptable form for submitting such materials.
• Address contingencies that frequently occur (e.g., ties in the selection process) in the information provided in the guide to the licensing process.
• Consult openly with applicants about any unanticipated circumstances and communicate the proposed course of action clearly.

Sections 4.8.3 and 4.8.4 of the online Authorization Module contain further information about the selection phase, case studies, practice notes, and reference documents.

4.7.4 Choosing Selection Mechanisms and Criteria

Choosing appropriate selection criteria and processes can be very challenging. Consideration must be given to such factors as: local market conditions; policy objectives; compliance with WTO rules or other transparency requirements; the underlying legislative framework; the nature of the authorization being issued; the capacity of the regulator; and the time frame for the issuance of authorization. Section 4.8.4 of the online Authorization Module discusses the challenge of choosing selection mechanisms and criteria in greater detail.
5. FEES

Many different kinds of authorization fees have been imposed on the telecommunications industry. At present, however, the most notable trend in the ICT sector is the reduction of fees to make services more affordable.

Fees differ in a number of material respects, including their purposes, how they are calculated, on whom or on which services they are imposed, and whether they are recurring or paid on a one-time basis.

The main types of authorization fees include:

- **administrative fees** that compensate a regulator for its costs of regulation and are therefore set on a cost-recovery basis. These fees are increasingly common, and are often considered the “best practice.”
- **spectrum management fees**, which are typically based on similar cost-recovery principles as administrative fees. These fees are usually charged separately from “operating authorization fees.”
- **discretionary administrative or spectrum fees** established on a one time or periodic basis (e.g., annually). These fees are not cost-based. Instead, they are set on an arbitrary “value of authorization” basis or established using some type of benchmarking of other rates;
- **royalties, premium or “rent” to a government or regulator** for the right to operate a network, provide a service or use a limited resource, such as radio spectrum or numbers. These types of fees may be set arbitrarily, by using benchmarking, or by using market-based “auction fees.”
- **other special-purpose fees** that have been bundled with authorization fees. Examples include access deficit charges, universal service fees, industry taxes, etc. Transparency and good authorization practice requires such fees to be separated from authorization fees. Special-purpose fees are discussed further in Module 4, “Universal Access” of the ICT Regulation Toolkit.

Where more than one type of authorization fee is charged, it is good practice to unbundle them – that is to calculate them separately. This improves transparency and makes it easier to verify that the administrative charges related to cost recovery are indeed cost-based. Unbundling fees has particular relevance for transparency and accountability when different ministries or agencies impose fees on the same service providers. For example, authorization fees imposed by the regulator should be separated from spectrum management fees, which may be imposed by a wholly separate ministry or agency.

While some authorization fees are levied on a one-time basis only (e.g., a one-time, initial authorization fee), other types of fees are recurring and must be paid on a periodic basis (e.g., royalty payments, universal service fees, and administrative fees). In some cases, an authorization may be subject to both a one-time fee and a recurring fee. Most regulators provide details in tender documents about what charges, if any, will be levied...
on licensees and how such charges will be calculated in order to promote greater
transparency and certainty.

Non-recurring fees such as one-time authorization fees are often payable in one lump-
sum amount within a certain amount of time after an authorization has been awarded. However, some regulators have attempted to ease the payment burden by allowing
licensees to pay the fee in installments at set intervals after the authorization has been
issued. The two most common payment schemes are “split payments”, where unequal
portions of the fee are payable over the term of the license, and the payment of equal,
periodic installments over a set number of years.\textsuperscript{16}

One-time initial authorization fees may be fixed fees or fees that are set according to the
market value of the authorization. Fixed fees are set at an arbitrary amount determined
by the regulator or Minister. These fees are commonly used in comparative evaluation
processes (“beauty contests”). In order to promote transparency in the authorization
process, however, it is prudent to adopt a market-set fee.

Market-set fees are developed by using common telecommunications valuation
methodologies. Examples of measurements that may be used to determine a market-set
fee include: a measurement of discounted cash flow; a measurement of net present value;
benchmarking against regional or international results for comparable licenses and
markets; previously applied license fees (in the case of multiple licenses issued at
different time periods); and a specific amount set to address government revenue
objectives.\textsuperscript{17}

Recurring fees are payable at regular intervals throughout the life of the authorization. In
many cases, recurring fees must be paid on an annual basis. The basis on which recurring
fees are set varies. In some countries, licensees are required to pay a portion their annual
revenues or “turnover” to the government. In other cases, where the recurring charge is
designed to compensate the regulator for its costs, the recurring fees are set on a cost-
recovery basis.

Authorization fees paid for the right to operate a network, to provide certain services, or
for the right to use a scarce resource have evolved considerably over the past five to
seven years. According to the ITU Trends Report on Licensing, authorization fees
remained fairly stable between 1992 and 1998, with a few exceptions.\textsuperscript{18} Fee structures
began to change radically, however, with the development of wireless technology.\textsuperscript{19}

The ITU Trends Report on Licensing includes further information about the fluctuation
of one-time initial authorization charges levied on wireless operators.\textsuperscript{20} Relevant portions
of the Trends Report in this regard are excerpted in a Practice Note in the online version
of the Authorization Module (see section 5.1.1 and Practice Note
\url{http://www.ictregulationtoolkit.org/en/PracticeNote.1226.html}).

The ITU Trends Report on Licensing also notes that the annual recurring revenue charges
that were first introduced in the telecommunications sector were quite high. Regulators
have recognized, however, that a reduction in the level of revenue-percentage payable to the government is prudent to avoid imposing barriers to entry. Both India and Venezuela have taken measures to reduce the level of revenue-sharing with the government imposed on telecommunications operators.

Policy considerations sometimes play a central role in determining what type of fees will be levied on services providers and how such fees should be calculated. The ITU Trends Report on Licensing notes that regulators can advance a number of policy objectives by setting license fees at reasonable levels during the first years of market development. This Report identifies in particular the objective of promoting economic or social goals such as universal access or service affordability and the objective of stimulating competition in the sector by lowering barriers to market entry. With respect to this latter objective, the Report also advocates maintaining the stability of license fees during the initial years of market development since increases to license fees are disruptive and may threaten the financial viability of operators. Further discussion of the socio-economic benefits of establishing low authorization fees is set out in a Practice Note in the online Authorization Manual. See section 5.1.1 of the Module for a link to this practice note: http://www.ictregulationtoolkit.org/en/PracticeNote.1227.html.
6. AUTHORIZATION PRACTICES AND PROCEDURES

While authorization practices vary from country to country, there are frequently common features. The following sections review practices and procedures commonly employed to improve the effectiveness, efficiency, and transparency of authorization processes.

6.1 Transparency

Procedural transparency is one of the hallmarks of a good authorization process. Transparency increases the confidence of service providers, investors, and other stakeholders in the authorization process. Accordingly, transparency reduces investment risk and increases the attractiveness of investment in national ICT markets. This in turn stimulates the expansion of ICT infrastructure and services. The importance of transparency in the authorization process is emphasized in the WTO Regulation Reference Paper.

In transparent authorization processes, authorizations are generally issued, amended, or revoked based on criteria published in advance. Some of the most common means of increasing transparency used by virtually all regulators today involve effective use of the Internet.

6.2 Public Consultations

It is good practice to engage in public consultations before and during an authorization process. Consultation with telecom sector stakeholders helps to foster a transparent regulatory environment. Consultations also provide the regulator with valuable feedback directly from industry members and other stakeholders on a proposed authorization initiative. Receiving input from these stakeholders helps the regulator make fully informed decisions about the proposed authorization procedures and the proposed authorization terms and conditions in order to maximize the prospects for a successful authorization process. Indeed, consultation is often the least expensive form of “research” a regulator can use to improve the information base on which its decisions are made.

Even where regulators choose, for commercial or other reasons, to conduct some discussion with potential applicants out of the public eye, it is useful to conduct public consultation early in an authorization process. This improves the design of the authorization process. Consultation can be particularly important where a general authorization is to be issued. Advance publication of proposed conditions of general authorizations provides an important opportunity for public comment – especially comment by interested service providers.

6.2.1 The Public Consultation Process

Public consultation may occur both before and during the authorization process. It can be formal or informal. However, in the context of any major authorization initiative, it is
generally advisable for the regulator to establish a formal and transparent consultation process.

A good approach for a more formal consultation process involves the publication of a notice or public consultation paper that states the regulator’s intention to launch an authorization process, and invites comments on the proposed approach. The notice should set forth reasonable details of the proposed authorization approach and any specific issues on which comments are sought. Where the regulator is unsure of the best approach, comments may be invited on different options. The Consultation Paper on the Unified Licensing Regime published by the Telecommunications Regulatory Authority of India (TRAI) in 2004 is a good example of this type of formal consultation process.

Notices should be sent to all interested parties, including prospective applicants, existing licensees, and consumer and industry interest groups. Notices are sometimes published on the regulator’s website, as has been the case in Jordan, Saudi Arabia, and Ireland, for example. Notices are sometimes also published in official gazettes or the popular business press.

Notices may be in a short form that invites interested parties to request copies of a more detailed notice or consultation paper. A less formal “call for comment” may be included in a public notice issued by a regulator. In some cases, a call for comment refers interested parties to a particular website or document where such parties can find more information about the consultation process. Calls for comment may also include some background information or analysis concerning the issue or issues raised for consideration. Although simple calls for comment may not be formally published as a government white paper or include analysis as detailed as consultation papers, they may be just as effective as promoting transparency and soliciting feedback from stakeholders.

The Jordanian public consultation on the licensing of a new mobile operator is a good example of a public consultation document that takes the form of a call for comment. Another good example of a simple call for comments-type approach to a public consultation is the ECTEL consultation on draft Telecommunications (Fees) Regulations that it proposed for adoption in its Member States.

A practice that promotes the regulatory objectives associated with public consultations is to allow stakeholders to participate in the consultation process. One of the most basic ways to achieve this is to ensure that the public consultation document clearly identifies how interested parties can contribute their comments. Although some regulators prefer to receive contributions by post or by e-mail only, other regulators, such as the Irish regulator, invite responses to be filed by post, e-mail, facsimile, or online.

In some cases, regulators may hold a public hearing or meeting to discuss the issues raised in the public consultation. For example, the Jordanian regulator held a public forum as part of its consultation concerning the issuance of a mobile telecommunications license. The Jordanian regulator issued a press release announcing the public forum that provided key details, including the date and location of the forum. The regulator also
posted information about the public forum on its website, including schedule for the event, some background information, and a link to the public consultation document. The web page also contained a link for online registration for the forum.

Copies of written comments may be published to foster greater transparency. An opportunity is sometimes provided for a round of reply comments. This keeps parties more honest and accurate in making their initial submissions, and assists the regulator in assessing the merits of positions taken or information supplied in parties’ comments.

The follow-up taken by the regulator after the deadline for filing comments has passed is an important part of the public consultation process. The regulator should give fair consideration to such submissions and comments, even if the proposals contained therein are not adopted. To this end, regulators may consider publishing a report on the public consultation that summarizes the submissions received during the consultation and that sets out the regulator’s determinations about the matters raised in the consultation. Such a report provides certainty about the regulatory direction that will be taken on the matters raised in the public consultation, as well as bolsters the transparency of the process through which determinations are made.

Alternatively, the regulator may choose to use the submissions as input for the next stage of its licensing process, for example, the issuance of a licensing regulation or a call for applications for licenses. TRAI integrated the comments that it received in public consultations it conducted during the initial stages of the Indian transition to a unified licensing regime into the public consultation held during the latter phase of this transition. TRAI made reference to submissions that had been made in earlier public consultations in the public consultation document issued in 2004 concerning the unified licensing regime. The 2004 public consultation document also included an annexure that summarized comments received during earlier stages in the transition to a unified licensing regime.22

Section 6.2.1 of the online Authorization Module contains further information about consultation processes, as well as links to a number of good pre-licensing consultation documents on the authorization of different types of services.

6.3 Authorization Renewal, Amendment, and Renegotiation

Individual licenses are normally granted for fixed terms, and thus issues arise regarding handling of renewals at the end of a license term. Licenses may be renewed, renewed with amendments, or simply terminated at the end of a license term. Termination is extremely rare, since it would deprive customers of service. It is seldom used except in the case of non-operational licenses or serious and continuous breaches of license conditions, laws or other regulatory instruments.

The legal framework for license renewals and amendments is normally prescribed in national telecommunications laws or regulations. Sometimes it is found in the conditions
of the license 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. Such reforms raise the issue of how to treat licenses granted under a previous regime. In some cases, existing or new laws grant regulators the right to amend licenses unilaterally under the new regime. In others, incentives are provided to continue licenses under the new regime, or to amend license conditions to harmonize with the new regime. Various approaches have been taken to the continuation of licenses to reflect changing authorization regimes.

Public consultations often play an important role in managing transitions to a new authorization regime. These consultations can provide the regulator with useful feedback about the concerns of stakeholders and practical matters related to developing and implementing a new authorization regime. These consultations also provide a useful means of disseminating background information on the transition. Both Ireland and India have included public consultations in the process of transitioning to new authorization regimes.

Perhaps the most difficult cases are those involving the termination of monopoly or exclusivity rights granted under previous regimes, but are no longer consistent with the telecommunications market liberalization policies featured in new authorization regimes. In a number of countries, the introduction of competition has run counter to the incumbent operator’s legal rights to exclusivity in the provision of a certain services or operation of certain types of networks. In some cases, governments or regulators have not wanted to wait for the incumbent’s monopoly rights to expire, since they perceive this could delay the introduction of competition and the benefits that could bring in terms of sector development.

Terminating monopoly rights can be a difficult and controversial process. Monopoly rights are generally highly valued by incumbents, and, failing agreement, many incumbents are prepared to take legal action to defend these rights. Arbitrary exercises of regulatory power to revoke or amend exclusivity rights or other license conditions may result in litigation and complaints under international trade agreements.

In some cases, new legislation is introduced that mandates the termination of the incumbent’s period of exclusivity. However, such legislation may be subject to legal challenge in some countries on the grounds that it constitutes an illegal “taking” or cancellation of property rights.

In other cases, governments or regulators have negotiated mutually acceptable arrangements with incumbent operators to terminate or amend their exclusive rights. In some cases, it is possible to agree to phase out an incumbent’s monopoly over a period of time in return for concessions, such as tariff reform, rate rebalancing, and the right to be issued additional operating rights under a new authorization scheme.
In Jamaica, for example, the first phase of telecommunications liberalization involved the negotiation of an agreement with the incumbent operator, Cable & Wireless Jamaica Limited (CWJ), for the early termination of CWJ’s monopoly rights. In September 1999, the Jamaican regulator successfully concluded an agreement with CWJ that provided for the termination of CWJ’s monopoly and the liberalization of the telecommunications sector on a phased basis.

Similarly, Dominica, Grenada, St. Kitts and Nevis, and St. Lucia and the Grenadines, acting under the auspices of the Organization of Eastern Caribbean States (OECS), negotiated with the Cable & Wireless (C&W) companies operating in each of these states for the termination of the C&W exclusivity rights in their countries. The agreement between the OECS states and the C&W companies was signed in April 2001. This agreement featured a phasing out of the C&W exclusivity rights over two periods.

In cases where the government or regulator enters into re-negotiations to amend license conditions, it is often prudent to apply sound, generally accepted dispute resolution principles. These principles have been widely documented in books and articles on negotiation, including the books and other materials produced by Roger Fisher, William Ury, and the Harvard Negotiation Project. The following three basic principles of good negotiation strategy are worth keeping in mind: (i) focus on the parties’ long-term interests, and avoid focusing on positions; (ii) develop options for mutual gain; and (iii) use objective criteria to assess options.

Further information on these negotiation principles, tactics for negotiation, case studies and license amendment agreements are available in Section 6.3 of the online version of the Authorization Module.

6.4 Balancing Certainty and Flexibility

Telecommunications authorization should balance regulatory certainty with the flexibility necessary to address future changes in technology, market structure, and government policy. This balance is never easy to achieve. Regulators in countries with higher telecommunications sector risks should generally favor regulatory certainty to attract investment. Those with more stable economic and regulatory environments normally have the luxury of increased flexibility to introduce reforms without undue market impacts.

One way for a regulator to balance certainty and flexibility is to rely primarily on legislation, regulations, and regulatory decisions rather than the terms and conditions of authorizations to set the regulatory framework for operators and service providers. Legislation, regulations, and regulatory decisions are typically easier for a government, Minister, or regulator to amend without violating rights accorded to service providers in a license agreement. In this case, licensees enjoy a fair amount of certainty that the terms and conditions of their license are not subject to change, while the Minister and the regulator retain the flexibility to respond to key changes in the sector.
In some cases, it is not possible to rely on instruments such as legislation or regulations to set the regulatory framework. Where a country’s regulatory regime is not well developed, it has often been necessary to include a reasonably comprehensive codification of the basic regulatory regime in an authorization. This is necessary to provide the certainty required to attract new entrants and substantial investment to the sector. In this case, the terms and conditions of the authorization must be crafted to ensure a reasonable balance between certainty and flexibility.

There are several ways of interjecting flexibility into the terms and conditions of authorizations, including:

- permitting unilateral authorization amendments by the regulator;
- establishing short authorization terms;
- permitting authorization amendments with the mutual consent of the licensee and regulator; and
- permitting unilateral amendments by the regulator of specific types of authorization conditions considered key to the general regulatory regime, provided such amendments are made in a procedurally fair and competitively neutral manner.

The first two approaches are not consistent with regulatory certainty. They will generally make it difficult, if not impossible, to attract the investment and financing required for a major authorization, such as a fixed line or cellular authorization. The third approach increases regulatory certainty, but can constrain the introduction of regulatory reforms.

The fourth approach is more attractive as regards regulatory certainty. To implement it, a distinction can be made between authorization conditions that are of a regulatory nature and those which can only be amended with the agreement of the licensee. For example, authorization conditions on industry-wide universal service mechanisms or general terms of interconnection may be subject to amendment by the regulator.

Other conditions of a purely contractual nature or which are fundamental to the economic value of the authorization may be subject to modification only with the consent of the service provider. These would normally include conditions such as the term of the authorization and the authorization acquisition fee payable.

Where the regulator has the right to amend the general regulatory conditions of an authorization, such amendments should be made in a transparent and competitively neutral manner. Any amendments should be preceded by consultation with the licensee and other affected parties. In some cases, a right of appeal or review may be warranted.

**6.5 Distinguishing Authorizations from Procurement**

The act of authorizing a telecommunications service provider should be distinguished from the government procurement process. The government procurement process involves the purchase by the government of goods or services using public money. These
goods or services are sometimes used internally by the government and sometimes used
by the government to fulfill its public duties. By contrast, a regulator is not buying goods
or services using public money when it authorizes a telecommunications service provider.
Authorization involves the granting of certain rights and obligations to an authorized
service provider. It can be seen as the granting of a business opportunity to qualified
investors who agree to comply with certain authorization conditions and regulations. In
the case of authorizations, then, the regulator is more a seller than a buyer.

Two important recommendations for the authorization process flow from the recognition
that authorization is, in essence, the offering of a business opportunity. First, the regulator
must offer an opportunity that is financially attractive to experienced and competent
service providers. While some authorization opportunities sell themselves, others,
particularly those in emerging and transitional markets, must be carefully structured and
marketed to attract qualified applicants. Experience shows that almost any call for
applications for authorizations will attract some bidders. However, many are not
financially or technically capable of meeting the regulator’s objectives to expand and
improve services.

Second, government procurement procedures are generally not suitable for a
telecommunications authorization process. Many countries have bureaucratic, centralized
procurement administrations. Detailed government procurement procedures are often
developed for good reason – to reduce corruption. However application of these
procedures can cause legal and administrative headaches, delay, and confusion about the
real goals of the authorization process.

### 6.6 Spectrum Auctions

The provision of ICT services that use radio frequencies generally require two
authorizations: one to provide the ICT service and a second authorization for the use of
the radio frequency. A cellular service provider, for example, must receive
authorizations to use the required spectrum and to operate the cellular networks.
Spectrum authorizations required to provide a service are often granted as part of an
individual authorization process.

Authorizations to operate an ICT service and use the required radio spectrum should be
granted at the same time. There should be no delays or risks of inconsistent regulatory
requirements as between the two types of authorizations. If two separate authorizations
are issued, they should be issued simultaneously. A good approach is to attach a draft
spectrum authorization as well as a draft service provider’s authorization to a request for
applications for authorizations.

One reason for retaining two separate authorizations is administrative convenience in the
management of spectrum resources. In most countries, spectrum management is
delegated to a different administrative group from the group that regulates other aspects
of telecommunications operations, such as price regulation or anti-competitive conduct.
By having a separate, consistent form of spectrum authorization, technical, reporting and compliance requirements can be standardized for all users of the radio spectrum.

More information on spectrum management is available in Module 5, “Radio Spectrum Management” in the online ICT Regulation Toolkit.
7. SPECIAL AUTHORIZATION SITUATIONS

While authorization practices may have common features, there are frequently particular circumstances that require the use of special authorization practices. In this section, we review a number of special authorization processes used in specific circumstances.

7.1 Public-Private Partnerships, Concessions, and Similar Arrangements

In most countries today, the authorization of ICT services involves a unilateral grant of authorization from a regulator to a private sector operator. However, there have been many variations on the theme of authorizing ICT operations. In some countries, private sector investors have entered into business arrangements with governments or state-owned service providers that are more in the nature of joint ventures with government entities than simple grants of rights to operate telecommunications facilities or provide services. These may be referred to as concessions, franchises, Build-Operate-Transfer (BOT) schemes, Build-Transfer-Operate (BTO) schemes, Build-Own-Operate (BOO) schemes, and a number of other variants, limited only by the imagination of project finance lawyers and bankers.

Collectively, many of these arrangements have been referred to as PPPs, which are increasingly common vehicles for the financing and operations of large infrastructure projects, such as highways, airports, and ports. In the past, PPP arrangements were useful in attracting private investment to markets where privatization or private-sector participation in the telecommunications sector was legally or constitutionally restricted. However, they have become less common in the telecommunications sector, as a result of a growing recognition that there is little public benefit to state ownership or operation of telecommunications service providers. PPP schemes are generally seen to be inconsistent with the promotion of liberalized telecommunications markets and comparatively-neutral regulation and policies.

7.1.1 Concessions and License Agreements

In most countries, the term “concession” refers to a commercial agreement between a government and the private builder, owner, or service provider of an element of public infrastructure (such as a toll road or power plant) or a business located on public property. Concession agreements were once fairly common in the telecommunications sector in some regions, particularly where there were legal or constitutional restrictions against private sector ownership or operation of telecommunications facilities. However, such agreements are becoming increasingly less common in the telecommunications sector. They are generally seen to be inconsistent with the promotion of liberalized telecommunications markets and comparatively-neutral regulation and policies. The reasons for the decline in such agreements are similar to those for the decline in use of PPP arrangements generally (see above).
Concession agreements had several advantages in attracting private sector investment, particularly in markets with high levels of political or regulatory risk. Such agreements sometimes granted governments an ownership stake and revenue-sharing interest, therefore providing governments with an incentive to support the growth of the telecommunications business in question. Also, the legal remedies available for breach of contract normally applied to concessions, such as money damages and arbitration. Negotiations often fine tuned concession terms to establish the protections and incentives necessary to attract investors and to guarantee performance by the concession holder in each particular situation.

A related approach adopted in some countries is to grant “license agreements.” In many cases, license agreements were relatively similar to the detailed individual licenses granted in other countries. However, they typically included some obligations – often regulatory rather than commercial – on the part of the government, regulator, or other government signatory. For example, a license agreement might establish the basis of setting tariffs during the license period, by way of a specific price cap formula. By including such mutual obligations in an agreement, the licensee received additional legal protections against changes in its basic operating environment. A major disadvantage of license agreements was that many had quite long terms, therefore effectively restricting sector-wide regulatory reforms from being implemented without the consent of the parties to existing license agreements.

Some license agreements have both regulatory and commercial concession features. It is often important to distinguish between the two. A good approach is to deal with the concession features in a concession contract between the host government (not the regulator) and the investor. In project finance terms, such an agreement would be called a government support agreement.

It should be noted that the terms concession and license agreement have different meanings in different countries. In some Latin American countries, concessions contain most of the features and types of conditions contained in individual licenses in other countries. They might be called license agreements elsewhere. An example is the Telmex concession in Mexico. Some other countries, particularly in Asia, have granted “concessions” that are in the nature of joint venture agreements rather than granting full authorizations to operate telecommunications networks independent of the government. Examples include the Thai BOT, the Indonesian BTO, and the Malaysian BOO.

7.1.2 Public-Private Partnerships

In the past, PPPs were often structured as BOT schemes (e.g., Thailand, Philippines), BTO schemes (e.g., Lebanon, India, Indonesia – Joint Operating Schemes or KSOs – East Timor), BOO schemes (e.g., Malaysia, Solomon Islands), or similar arrangements. In general, BOT, BTO and BOO arrangements are all project finance structures aimed at attracting investment and management expertise required to develop telecommunications infrastructure in countries with state-controlled telecommunications sectors.
A variation on these structures involves contracts where an investor does not build or own any facilities, but shares in revenues from a state-owned service provider in return for providing financing, management or both. Financing contracts of this type have been entered into in China and Indonesia. An example of a management contract with revenue sharing is the Vietnamese “Business Cooperation Contract.”

Most of the PPP structures discussed in this Section experienced initial success in promoting network expansion. In part this was because they were not characterized as authorizations to private service providers but rather as contracts under which private contractors would build and operate telecommunications services “owned” by the government or by a state-owned service provider. This arrangement allowed for private sector participation in telecommunications service providers without breaching laws or policies that prevented private sector ownership of service providers.

However, experience in Lebanon, Indonesia, and elsewhere suggests that these models are not viable in the long term. Investors in BOT projects, for example, lack the long-term security and equity interests of a full network licensee. They are therefore motivated to maximize short-term profitability at the expense of long term network or service development. A BOT must either terminate, with the resulting withdrawal of the private investor, or it must be converted into a true authorization. If the investor withdraws, the service provider may or may not be able to continue to expand and manage the service on its own. If the concession is converted to an authorization, serious questions may arise regarding the fairness and transparency of the authorization process. In all cases, the conversion of BOT-types schemes into conventional ICT authorizations can be problematic.

Most countries now realize that there is little public benefit to state ownership or operation of telecommunications service providers. With the liberalization and privatization of the global ICT industry, joint venture arrangements between governments or PTTs and private sector investors have become less common in the ICT sector in recent years. PPPs also raise concerns about whether public policy and regulation will be competitively neutral if the government holds a stake in one or more of the commercial players in the ICT sector. Nevertheless, some PPP arrangements remain in place, and a few new ones have recently been initiated.

7.2 **Reauthorization of Incumbent Service Providers**

The telecommunications reform process in most countries includes privatization of PTTs and the granting of competitive authorizations in various market segments. Many countries have completed this process; others are in the midst of implementing it, and a few have not started.

A major step in the privatization and liberalization process in many countries is the issuance of an authorization to incumbent service providers. Prior to privatization and liberalization, many incumbent service providers were PTTs that may have operated for half a century or more without a formal authorization. Special consideration must be
given to the process of authorization of an incumbent and to the definition of the incumbent’s rights and obligations to facilitate a successful transition to a liberalized telecommunications market.

New telecommunications laws or amendments often authorize the issuance of a license or licenses to the incumbent service provider. In some cases, incumbent service providers may receive a mix of individual authorizations and general authorizations. This approach can be useful in cases where it is considered necessary to issue an individual authorization to establish the basic rights and obligations of a PTT to operate the fixed public switched telecommunications network (for example where a privatization is pending). In such a case, the rights of the incumbent PTT to provide other services that have been opened to competition, such as VSAT, data transmission or value added services, may be subject to general authorizations. These general authorizations would apply equally to all other service providers of the same class of service.

The rights and obligations set out in new authorizations for an incumbent operator must generally be adapted to a new and evolving sector policy and regulatory regime. In particular, the rights and obligations must often be adapted to the realities of a market-based economy, especially where the service provider is to be privatized and is to face competition for the first time in some markets.

In some countries, incumbents are granted authorizations for new services (e.g., cellular, data communications, ISP, value-added services) around the same time as authorizations are granted to new providers for those services. The incumbents sometimes receive the authorization outside the competitive selection process that may be used to choose new entrants. This has been the case for cellular mobile authorizations in both developed and less-developed countries.

A concern about fairness may arise if the incumbent service provider is automatically entitled to be authorized to provide services for which other service providers must obtain an authorization through a competitive authorization process. Concerns about competitive fairness may also arise with respect to the fees payable for these authorizations. Often the new entrant pays a significant amount for the authorization under a competitive selection process but the incumbent does not.

Concerns about unfair advantages given to the incumbent relating to fees has sometimes been addressed by requiring incumbent service providers to pay a fee equal to the amount of the winning bid or a fixed percentage of that amount. This occurred when Jordan authorized a second GSM service provider in 2000. When Colombia authorized second cellular service providers in each of three regional markets, the existing service providers were required to pay 95 percent of the amount of the winning bid in the applicable region. In other countries however, the incumbent service provider has not been required to pay authorization fees, even though new entrants do pay these fees.

While there is not always a right answer in these situations, care must be taken to promote a competitively neutral environment. If preferential treatment is given to an
incumbent, there should be clear benefits to the public for doing so. These may include maintenance of extraordinary network rollout obligations or other specific universal service objectives.

7.3 Service-Specific Authorizations

The scope of services authorized by an individual authorization or a general authorization varies considerably from country to country. Unlike spectrum and technology standards, there have not generally been any standardized authorization classifications. A mobile services authorization in one country may authorize a wide range of mobile voice, data, and even video services, including paging, wireless application protocol (WAP), and universal mobile telecommunications services (UMTS) services. In other countries, mobile service authorizations only authorize the provision of GSM standard voice services and some related general packet radio service (GPRS) or short message services (SMS).

In the early days of telecommunications authorization, incumbent operators were often granted authorizations with a very broad scope, authorizing provision of many if not all types of telecommunications services. With the introduction of competition, new entrants were often authorized to provide services based on specific technologies, such as those based on the advanced mobile phone systems (AMPS), GSM, code division multiple access (CDMA), or time division multiple access (TDMA) standards. Other new entrants were authorized to provide specific services, such as paging or trunking services, pay telephone services, data and Internet access services, and the usually vaguely defined “value-added services.”

Over the last decade there has been a trend towards convergence and harmonization in the regulatory treatment of different technologies and services. As a result, there have been initiatives to standardize the authorization approaches and authorization conditions for different types of technologies and services. These initiatives have included attempts to bring technologies and services that had previously been considered “broadcasting” or “media” transmission services under the same authorization rules as telecommunications or “carrier” services. Examples of such initiatives include the EU’s move to standardize the approach to authorization of all “electronic communications services” in its Authorization Directive, and Malaysia’s 1999 Communications and Multimedia Act.

Despite these initiatives, most countries continue to grant authorizations or general authorizations based on different service classifications, and to a lesser extent today, based on technology classifications. The ITU World Telecommunications Regulatory Database indicates that at least 24 authorization classifications are commonly used today.
Box 7.3: Common Authorization Classifications

- Fixed local services
- Digital Subscriber Line (DSL)
- Fixed domestic long distance services
- Cable Data
- Fixed international long distance services
- Leased lines
- Mobile local services
- Very Small Aperture Terminal (VSAT)
- Mobile domestic long distance services
- Fixed Satellite Service (FSS)
- Mobile international long distance services
- Mobile Satellite Service (MSS)
- Public voice telephony
- Global Mobile Personal Communications Service (GMPCS)
- Mobile cellular network
- Third Generation Mobile (IMT2000)
- Cable TV network
- Paging
- Cable TV service
- Public Mobile Radio Trunked Services (PMRTS)
- Wireless Local Loop
- Internet service provision
- Value-added services (e.g., email, database access, electronic data interchange, etc)
- Data


Section 7.3.2 of the online Authorization Module contains further information and links to a good variety of Reference Documents that include examples of specific authorizations issued for a variety of different types of services or technologies.

### 7.4 Convergence and Multi-Service Authorizations

Convergence refers to the moving together or joining of things. Convergence has become a popular concept in ICT policy debates for various reasons. One key reason is that ICT technologies have gradually permitted previously different types of services to be offered over the same networks. This is particularly true of IP-based networks that can provide data, voice, and video services – services that were previously offered over separate circuit-switched voice telephone networks, packet switched data networks such as the Internet, and broadband video networks such as cable television and satellite networks.

In general, convergence-based, telecommunications-ICT policies promote equal treatment of services or technologies that had previously been licensed or regulated in different ways. Many observers have promoted such “regulatory convergence” as being more technologically and competitively neutral – and therefore involving less regulatory intervention or determinism in communications markets.
Around the world, the implementation of convergence-based policies has very different implications, depending on the local environment and national policies. It has been a particularly hot policy concept in countries that maintained licensing distinctions between different types of technologies or services.

A prime example is India, where two types of service providers that were licensed under very different licensing regimes started to compete with each other in the mobile wireless market. On the one hand, cellular mobile operators held licenses that required them to pay very substantial license fees and to use GSM technology. On the other hand, a subsequently licensed class of service providers called Basic Service Operators (BSOs) was permitted to use copper wireline technologies or CDMA wireless technologies. They were charged much lower license fees than the original cellular licensees. Yet their license conditions allowed them to provide “limited mobility,” effectively allowing them to compete with the GSM cellular licensees. Competition between BSOs and the cellular carriers grew into a bitter dispute that eventually spilled over into litigation.

The TRAI and the courts had to find a balance between promoting service penetration and ensuring a level playing field among operators. In an effort to seek a solution, TRAI issued its “Consultation Paper on Unified Access Services Licensing (UASL)” for basic and cellular services on July 16, 2003. On Oct. 27, 2003, it produced a blueprint for a UASL regime that called for a single license for BSOs and cellular carriers. The UASL regime thus essentially represents an approach based on regulatory convergence, under which two types of service providers competing in the same market are treated in the same way for authorization purposes, notwithstanding the use of different technologies. On Nov. 11, 2003, the government endorsed the UASL plan. As a result, both BSOs and cellular carriers gained the freedom to offer basic and/or cellular mobile services using any technology.

With the introduction of unified access licensing, existing BSOs and cellular carriers can either continue to operate under the old licensing regime or migrate to the new regime. Operators migrating to the UASL regime continue to provide wireless services over existing allocated spectrum, with no additional spectrum allotted under the migration process. No additional entry fees are charged for cellular carriers to migrate to the new UASL license. BSOs, however, are required to pay an entry fee for migration. The BSO entry fee for a particular service area is based on the difference between the entry fee paid by the fourth cellular mobile service provider in that area and the entry fee already paid by the BSO to provide its existing services in that same area. License fees, service areas, rollout obligations, and performance bank guarantees under the UASL regime are identical to those specified in the license granted to the fourth cellular mobile service provider.

In other countries, the term “convergence” is used to refer to different types of policy issues than those that arose in India. For example, in Canada, Malaysia, the EU, and some other countries, the convergence debate has centered on the different regulatory treatment of traditional telecommunications (i.e., transmission) services and broadcasting (i.e., content) services. New policies in some countries have “converged” the regulatory
treatment of transmission services, whether they transmit broadcasting content or other information.

The EU’s new regulatory framework is premised on converging the regulatory treatment of transmission services. The framework uses the term “electronic communications services” rather than “telecommunications,” to signal a converged regulatory approach to a broader range of communications services. Following the introduction of the new EU framework, the United Kingdom responded to the increasing convergence of its communications industries by creating a single communications regulator, OFCOM, to carry out the functions previously carried out by five separate regulators responsible for telecommunications, radio spectrum, and broadcasting.

Malaysia has also adopted a converged regulatory approach to telecommunications and broadcasting services. Enacted in 1999, the Malaysian Communications and Multimedia Act (CMA) established a regulatory framework explicitly designed to reflect and to accommodate the phenomenon of convergence. The CMA introduced a technology- and service-neutral licensing regime for telecommunications and broadcasting that abandoned conventional service-specific classifications for four generic classifications. The services falling under these categories are further subdivided into services requiring individual licenses, services requiring class licenses, and exempt services.

The process for obtaining class licenses involves a lower level of regulation than individual licenses, which require ministerial approval. Class licenses require registration. Licensees are allowed to hold more than one type of license at a time.

The national regulatory authority, the Malaysian Commission for Multimedia and Communications (MCMC), began migrating telecommunications and broadcasting providers to the new regime in 1999. A total of 56 categories of licensed services and 24 categories of licensed facilities were reorganized into the four generic licensing classifications established by the CMA. The migration process was completed in 2002.

Brazil has also adopted a converged regulatory framework. The Brazilian regulator, ANATEL, issued a resolution in 2001 that established a new licensing category for Multimedia Communication Services, or Serviços de Comunicação Multimídia (SCM). According to this resolution, SCM refers to “audio, video, data, voice (corporate voice) and other sound, image, text and related signals, conveyed, sent and received through fixed telecommunication services rendered by the private sector in the collective interest, on a domestic or international basis and in any format, to subscribers within a certain service area.” SCM licenses, however, do not authorize holders to provide public fixed telephone services, free-to-air television and radio broadcasting, or paid TV services.

The new classification was established to avoid having multiple authorizations for a wide range of information transmission modes. It replaced the previous licensing classification system, which was based on specific service types, including “specialized limited services” categories of network and circuit services, telecommunication transport
network services, packaged commuted network services, and circuit commuted network services.

SCM licenses are granted for an indefinite term, without bidding. The interested party simply submits an application, and if certain minimum requirements are met, the license is granted. SCM licenses are non-exclusive, and licensees are obliged to comply with regulations applicable to all telecommunication operators. In addition, the SCM provider must comply with terms that clarify the conditions under which SCM providers can transmit video, voice, and data. These terms differentiate SCM services from those of pay TV operators. There is no limit to the number of SCM licenses that ANATEL may issue. However, if the SCM provider uses radio frequencies to render its services, it must pay an additional spectrum fee.33

Section 7.4 of the online version of the Authorization Module contains further information about convergence and authorizations, case studies, and Reference Documents.
8. CONCLUSION

This Executive Summary has outlined key information about current trends and best practices in authorization regimes and processes. Given the importance of a country’s authorization regime to the vitality of its ICT sector, it is crucial that countries establish a sound authorization framework that is both stable enough to provide certainty to service providers, operators, investors, and consumers, and flexible enough to respond to technological innovation. The ICT Regulation Toolkit provides ministries and regulators with free online resources that can assist them in the challenging task of managing their countries’ authorization regimes and practices. Ministry staff and regulators are encouraged to review the contents of the Toolkit regularly so that they stay abreast of new developments in authorization trends and practices.

1 This module uses the term “authorization” to refer to all forms of licensing, permission or approval required from telecommunications regulatory authorities to carry on business as a telecommunications service provider.

2 Please note that issues related to authorization of rural and universal access services and authorization of rural and universal access services are addressed Modules 4 and 5, respectively, of this Toolkit.


5 Other WTO rules relating to telecommunications services are dealt with in other ICT Regulation Toolkit modules (e.g., Module 1, “Regulating the Telecommunications Sector: Overview”, Module 2, “Competition and Price Regulation”, Module 4, “Universal Access”, and Module 5, “Radio Spectrum Management”).

6 Please note, however, that a number of South American countries use the term “concession” instead of “authorization”. In these countries, the “concession” is more akin to a traditional authorization than a contractual arrangement between the government and the service provider.


13 Please note that since the publication of the online Authorization Module, both Jordan and Uganda have introduced forms of converged licensing and are therefore relying less on individual authorizations.


15 WTO Regulation Reference Paper, Article 4.


19 Ib. at 66-69.

20 See ibid. at 60 and 66-69.


See also Program on Negotiation at Harvard Law School, online:
http://www.pon.harvard.edu/. There is a wealth of information and materials available on this website.


25 Malaysia, Communications and Multimedia Act 1998, Act 588, available online:

26 Information about the Indian experience was reported in ITU Trends in Telecommunications Reform – 2004/05: Licensing in an Era of Convergence (Geneva: ITU, 2004), and was adapted from the Guidelines For Unified Access (Basic & Cellular) Services Licence dated 11 November 2003, and issued by the Department of Telecommunications, Government of India, available online at:

27 Telecom Regulatory Authority of India, Consultation Paper on Unified Access Services Licensing (UASL) (New Delhi: TRAI, 2003). For further discussion of these recommendations, see Department of Telecommunications, Government of India, Guidelines For Unified Access (Basic & Cellular) Services Licence, No. 808-26/2003-VAS, November 11, 2003, available online:


29 See Department of Telecommunications, Government of India, Guidelines For Unified Access (Basic & Cellular) Services Licence, ibid.


31 Information about the Malaysian experience was adapted from the website of the Malaysian Commission for Multimedia and Communications, available online at: http://www.mcmc.gov.my/, and was reported in ITU Trends in Telecommunications Reform – 2004/05: Licensing in an Era of Convergence supra note 16.

32 Information about the Brazilian experience is adapted from Dale N. Hatfield & Eric Lie, “Options for Telecommunication Licensing” in ITU Trends in Telecommunications Reform – 2004/05: Licensing in an Era of Convergence, supra note 16 and from ITU Brazil Mini Case Study 2003 “Brazil’s SCM Licensing Service Category; A Step Toward Convergence” (Geneva: ITU, 2003), available online at:

33 Information about the Brazilian experience is adapted from Hatfield & Lie, “Options for Telecommunication Licensing” in ITU Trends in Telecommunications Reform – 2004/05: Licensing in an Era of Convergence, supra note 16 and from ITU Brazil Mini Case Study 2003 “Brazil’s SCM Licensing Service Category; A Step Toward Convergence” (Geneva: ITU, 2003), available online at: