ITU SEMINAR ON ESTABLISHING NEW REGULATORS IN THE ASIA PACIFIC REGION

Session 1.2: What is an Effective and Independent Regulator – General Overview (2)

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Agenda

1. Evolution of Telecommunications Regulatory Structures
2. Regulatory Structures:
    1. Institutional Design Options
    2. Hierarchical and Functional Structures
3. Administrative Structure
    1. Leadership organization for regulatory authorities
    2. Staffing
4. Internationally Adopted Regulatory Principles

1. Evolution of Telecommunications Regulatory Structures

- Governments have a range of options for regulating the telecommunications sector.
- As competition increases, new regulatory priorities *(e.g.*, market entry regulation) emerge, and issues of regulatory autonomy gain prominence (with the separation of regulation and operation) and can affect the choice of structure for the telecommunications regulator
- Initial consensus often led to the establishment of a specific sector regulator, but the growing force of convergence has prompted a new and growing trend towards creating converged regulators.
- Some countries have taken a different approach by including the regulation of the telecommunications sector in the mandate of a multi-sector utilities regulator, or by opting for an approach that veers away from sector-specific regulation and relies on the application of competition and antitrust rules to the communications sector.

2. Regulatory Structures

- Institutional Design Options

- **Single-sector regulator:** sole function is to oversee the telecommunications sector
- **"Converged" regulator:** tend to have oversight for information and communications technologies, including broadcasting
- **Multi-sector regulatory authority:** usually encompasses various industry sectors that are or were considered to be public utilities, e.g., telecommunications, water, electricity, and transportation
- **The fourth category** is not actually a regulatory authority at all, but an approach in which general competition policy is the main method of controlling or overseeing the telecommunications sector

2. Regulatory Structures

- Institutional Design Options – Single Sector

- The ITU-D website lists 131 countries with a “separate regulatory authority.”

- The majority can be described as focussing primarily on the telecommunication sector (Single Sector)

2. Regulatory Structures

- Institutional Design Options - Single Sector

  – Advantages of Single Sector NRA:

    - the main advantage of a single sector regulator is that it can focus on the technical challenges of the telecommunication network.
    - A single sector telecommunication regulator tends to be strong in engineering skills, an important core expertise in dealing with complex network issues.

2. Regulatory Structures

- Institutional Design Options - Single Sector

  – Disadvantages of Single Sector NRA:
    - The drawback is that many new network developments, policy emphasis and consumer interest are taking place in the Internet Protocol (IP) world.
    - Single sector regulators run the risk of being out of touch with these developments if they choose to focus purely on traditional public telecommunication services.
    - Single sector regulators are also often ill-suited to deal with the new mandate of promoting the information society.

2. Regulatory Structures

- Institutional Design Options - Single Sector

- **Single Sector vs. Converged regulator**

  - **Single Sector means a structure limited to (tele)communications**, where the NRA can either be structured horizontally or vertically or by sub-sector.

  - **A converged structure:**
    - As regulation is presently structured in most countries, industry specific telecom regulators cannot come to grips with the challenges of fostering a rapid and efficient roll-out of information infrastructures, and building the regulatory platforms needed to promote electronic trade, network and information security, consumer protection, and other requirements for widespread take-up of next generation services.

    - Introducing artificial regulatory differences between services could stifle technological development and the emergence of advanced services as well as the commercial development thereof.

    - As many studies and articles have shown, a converged structure seems to be more adapted to respond to a converged telecommunications market given the interdependency of such communications services.

2. Regulatory Structures

- Institutional Design Options - Converged

- **Advantages and Disadvantages of a converged structure:**

- Recently, both developing and developed countries have undergone important regulatory developments due to convergence. In many cases, converged regulators have been created to combine the role of the diffent entities which were previously seperated.

- Convergence in communications has called into question the service-based vertical regulatory system, with an increasing demand from the industry in particular to reorganize regulatory institutions in the light of convergence. This trend also came out clearly in the EU's 1997 Green Paper on the Convergence of the Telecommunications, Media and Information Technology Sectors, and in its "99 Review".

2. Regulatory Structures

- Institutional Design Options - Converged

- **Examples of Converged Regulators:**

  - **The Independent Communications Authority of South Africa (ICASA)** is the regulator for the telecommunication and broadcasting sectors. It was established in July 2000 as a result of the Independent Communications Authority of South Africa Act No.13 of 2000. It took over the functions of two previous regulators, the South African Telecommunications Regulatory Authority (SATRA) and the Independent Broadcasting Authority (IBA).

  - In July 2003, the Saudi Arabian Council of Ministers issued a decision changing the name of the **Saudi Communications Commission** to the Communications and Information Technology Commission in light of new tasks it has assumed in information technology.

2. Regulatory Structures

- Institutional Design Options - Converged

- **Examples of Converged Regulators:**
  - In December 1999, the **Info-Communications Development Authority of Singapore** Act of 1999 disbanded the former telecommunication regulator (Telecommunications Authority of Singapore, TAS) and the information technology agency (National Computer Board, NCB), to create one new statutory board, the Info-Communications Development Authority (IDA).
  - Originally, the proposal to create a merged agency would have included SBA, as a reflection of the determination that multimedia services, including audio and video content, would be delivered via converged platforms such as the Internet or other packet-switched networks.
  - But SBA retained its status as a separate agency, largely because its defenders argued that it had a unique function, as a content regulator, that was not shared with any of the other agencies, which were concerned with content neutral issues of network build-out and operation.

2. Regulatory Structures

- Institutional Design Options - Converged

- **Examples of Converged Regulators:**

  - **The Office of Communications (Ofcom)** was established in the United Kingdom in December 2003 as a result of the Communications Act 2003] It is the regulator for television, radio and telecommunications. Ofcom combines five former agencies: the Broadcasting Standards Commission (BSC), the Independent Television Commission (ITC), the Office of Telecommunications (Oftel), the Radiocommunications Agency (RA) and the Radio Authority.
  - Both **Finland** and the **Netherlands** regulate the licensing of infrastructure across the telecommunications and broadcasting sectors through a single regulatory body.
  - In 1997, **Italy** created a single regulatory body with responsibility for all telecommunications and broadcasting matters.
  - **Austria** also established such a regulatory authority in the Spring of 2001

2. Regulatory Structures

- Institutional Design Options - Multisector

- **Multisector utility regulation** involves the integration of common regulation across a combination of utility sectors that are undergoing structural reform, e.g., telecom, energy, transport, water.
  - The obvious draw-back of the utilities-based regulator is that it cannot adequately cope with the challenges posed by ICT convergence. Indeed, it may make matters worse by having telecommunication regulated in an environment with utilities that are not as dynamic.
  - The argument is that telecommunication is considered to form part of the overall infrastructure sector along with other utilities such as electricity and water. The concept of convergence is different, with the idea that telecommunication has converged with infrastructure services rather than information and communication technology services. The rationale is that infrastructure services share certain aspects: they are aimed at providing basic needs to the public; they often use similar rights-of-way; and they typically involve the economic regulation of large monopolies.

2. Regulatory Structures

- Institutional Design Options - Multisector

Advantages and disadvantages of multisector regulator

- Reduce risk of "industry capture" and "political capture" because the creation of a regulator with responsibility for more than one sector can help avoid the rule-making process being captured by industry-specific or political groups respectively.
- Create more precedents, and therefore less uncertainty, for investors because a decision by an MSR in relation to one sector on a regulatory issue common to other sectors (e.g. the application of price cap regulation or cost accounting rules) will set a precedent that is valuable to potential investors in those other sectors.
- Increase risk of "industry capture" by a dominant industry player not only of the single sector regulator but of the entire MSR body.
- Increase risk of "political capture" by a dominant ministry of not only the single sector regulator but of the entire MSR body.
- Increase the risk that a precedent set in relation to one sector could be applied inappropriately in another sector (although this can also be mitigated by creating strong sector-specific departments underneath a central cross-sectoral decision-making body).

2. Regulatory Structures

- Institutional Design Options - - Multisector

Advantages and disadvantages of multisector regulator

- Economies of scale in use of one set of high-calibre professionals (e.g. economists, lawyers, financial analysts). Such economies are particularly important during the early stages of liberalization and privatization in a TDC when there is likely to be a scarcity of regulatory experience.
- Dilution of sector-specific technical expertise required where, for example, the skills of a tariff expert for one sector are not transferable to similar tariffing issues in another sector, or, for example, of a frequency engineer.

2. Regulatory Structures

- Institutional Design Options - Multisector

Advantages and disadvantages of multisector regulator

- Economies of scale in administrative and support services (e.g. computers, office space, support staff), particularly important where the costs of regulation can have a real impact on the affordability of basic services.
- Flexibility in dealing with "peak load" periods, such as periodic prices reviews, where intensive regulatory expertise is needed which may spread across sectors if a multi-sectoral approach is adopted.
- Failure by the regulator, cascades to other sectors.
- Difficulty in achieving acceptance by relevant line Ministries of the concept of having an MSR.
- Subsequent difficulty in achieving consensus from the relevant line Ministries on the type of MSR to be established.

2. Regulatory Structures

- Institutional Design Options - Multisector

Advantages and disadvantages of multisector regulator

- Economies of scale in the development and implementation of the regulatory agency whereby, for example, uniform rules on license award or dispute settlement procedures can extend to more than one sector and, therefore, avoid the need to "reinvent the wheel" for each sector.
- Transfer of regulatory know-how between regulators responsible for different sectors; again, this is particularly important when a country has limited experience in regulation.

- Greater complexity in establishing the legal framework for the MSR, including the level of independence and allocation of functions as between the Minister and the regulator.
- Potential delays in the reform process due to the disadvantages mentioned above.
- Merging existing agencies may be problematic.

2. Regulatory Structures

- Institutional Design Options - Multisector

- **EXAMPLES:** A small number of countries have adopted multi-sector or utilities-based regulators.
  - In **Jamaica**, the Office of Utilities Regulation covers water and sewage, electricity, transport and telecommunication. A utility-based regulator leverages on what are perceived to be similar skills sets in areas of law, engineering and finance, an attraction for developing nations where there is often a shortage of qualified personnel for regulatory agencies
  - The **Law of the Republic of Armenia** on the establishment of a Regulatory Body for Public Services established a Public Utilities Commission in Armenia, including telecommunications.
  - Others who have adopted this model include a **small number of Latin American and developing countries (Niger, Gambia, Jamaica, Bolivia and Panama), as well as few European countries (Luxembourg and Latvia.)**

2. Regulatory Structures

- Institutional Design Options – No Authority

- An alternative approach is to rely on the application of competition and antitrust rules rather than on detailed sector-specific rules and institutional designs and to entrust antitrust authorities with the task of administering all rules controlling market power in telecommunications

- However, due to the perception that reliance on the Commerce Act and general competition authority was inadequate, the Telecommunications Act 2001, was passed in December 2001 to complement the generic competition provisions of the Commerce Act.

- A position of a Telecommunications Commissioner, a specialist stand-alone commissioner within the Commerce Commission, was also established, *inter alia*, to regulate the telecommunications sector, and in particular to resolve disputes over regulated services, to report to the Minister on further designations or specifications of additional services, and to monitor and enforce the Kiwi Share obligations. The Telecommunications Commissioner was also granted statutory responsibility for decisions made under the Telecommunications Act.

2. Regulatory Structures

- Institutional Design Options - No Authority

ADVANTAGES

- Simple to implement.
- Inexpensive.
- Reliance on economy-wide rules and institutions to regulate the sector promotes a coherent treatment between telecommunications and other sectors.
- Less risk of political capture where the judges are ultimately in charge of enforcing economic regulation in the telecommunications. Judges are seen to enjoy a clearer and more straight-forward protection against undue pressures from the government and are independent from industry.

DISADVANTAGES

- Non-specialized judges are ill-equipped to deal with complex telecom regulatory issues (*e.g.*, local interconnection cases in New Zealand)
- Legal processes are often not designed to give a voice to those who are not directly parties to the dispute.
- Costs of protracted litigation and regulatory mistakes can be very high.
- Sector-specific issues such as interconnection and number portability may be difficult to resolve in the absence of sector-specific requirements.
- There is no actual functioning example of this model.

2. Regulatory Structures

- Structure of the NRA

- Once the scope of work and type of management structure is established, a country must determine how the **functions of the regulatory authority will be organized** (*e.g.*, whether by industry/service, function or project).

- Determining the ideal organizational structure for a regulatory authority requires an assessment of various factors including: the country's needs and objectives; political environment; legal requirements; and available expertise in the labor market

2. Regulatory Structures

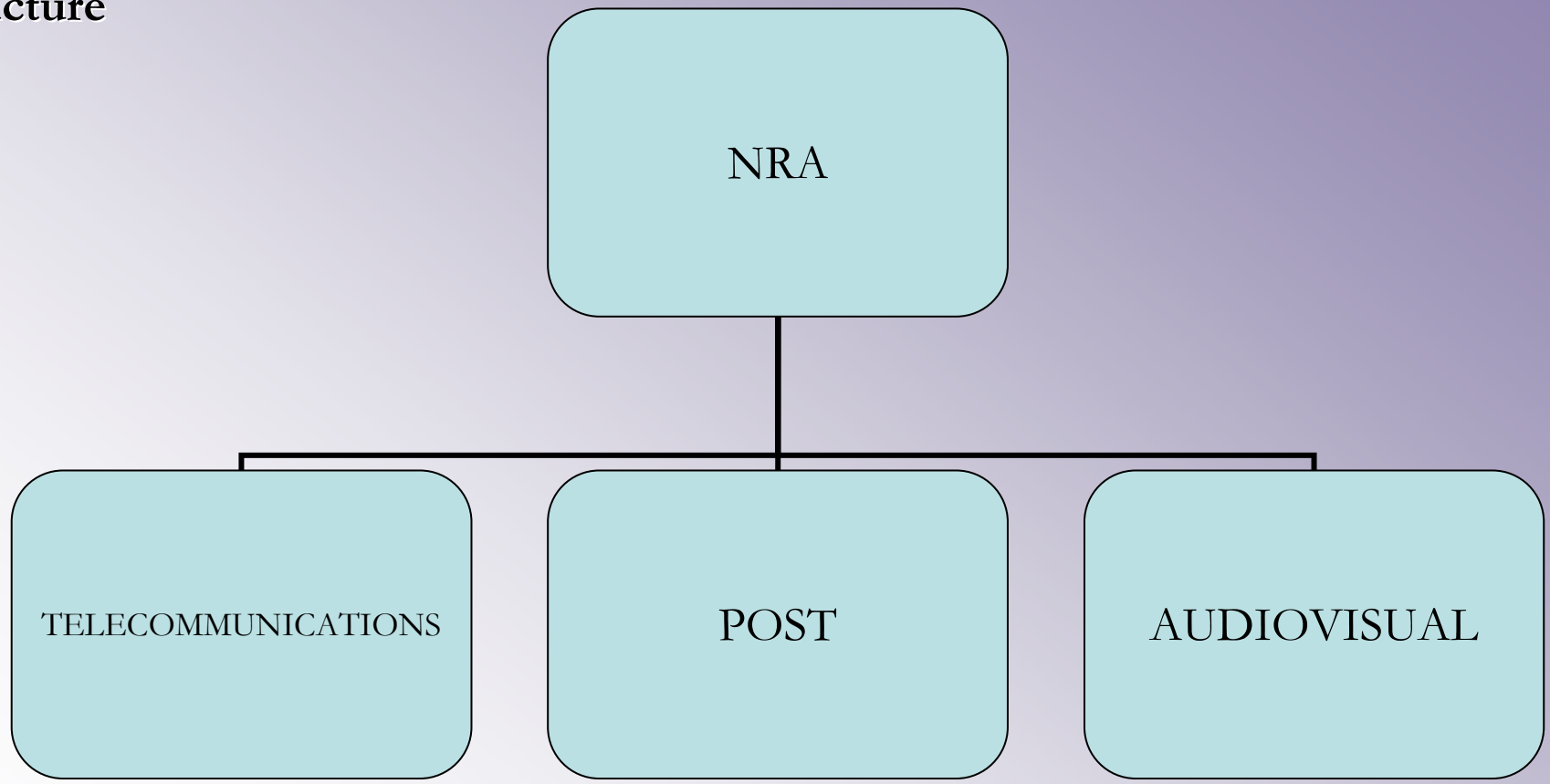
- Functional vs. Industry-based Structure

  - **Industry-or service based structure:** consists of departments linked to specific services or industries (e.g.: telecommunications, post, broadcasting). This strucutre is seen to be bypassed especially because of the convergence of industries where, for example a cable TV company can offer telephony services

  - **A function-based structure:** where the regulator is organized according to functions such as for example: licensing, administration and human resources, interconnection, economic questions, frequency management, technical department.

2. Regulatory Structures

Industry-Based Structure



2. Regulatory Structures

- **Horizontal or Vertical Structure**

  - **A Hierarchical Vertical Structure:**

    - this kind of structure is made up of departments which are themselves sub-divided into groups corresponding to stable and long-term tasks and well-defined specializations in terms of required competences.

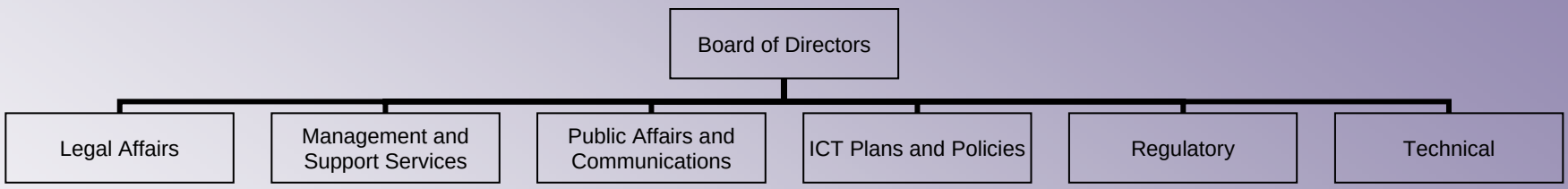
    - This type of structure allows an effective chain of command for processes where all activities are undertaken within thesame unit, but creates some coordination difficulties where a precess requires input from various departments.

2. Regulatory Structures

- **Horizontal or Vertical Structure**
  - **A Horizontal project-based Structure:** Such a structure allows direct collaboration between positions spread over various units so as to allow multidisciplinary activities requiring several types of competences for the process. Such a type of organization can run into hierarchical difficulties where unit heads resist such a type of approach. Under this structure staff in fact report to several chiefs: the hierarchical superior and the project manager. Such a structure requires a spirit of collaboration between unit heads and project managers

2. Regulatory Structures

Vertical Structure



Legal Affairs

Duties
- Enforcement
- Contractual obligations
- Administrative and regulatory Litigation

Management and Support Services

Duties
- Finance
  - Fees
  - Budget
- Admin
- Human Resources
- IT

Public Affairs and Communications

Duties
- Public relations
- Media relations
- Parliament/ government relations
- Informal complaints
- Consumer relations
- Advisories and consumer alerts
- Public notices
- Receipt and distribution of documents

ICT Plans and Policies

Duties
- Strategic Planning
- International coordination
- Research and studies
- Universal service
- Competition policy
- New technologies

Regulatory

Duties
- Licensing
  - Public
  - Private
  - Wireless/ spectrum
  - Broadcasting
- Industry analysis
- Tarifing
- Postal

Technical

Duties
- Quality of Service
- Type approval and standards
- Interconnection
- Spectrum management
- Numbering

2. Regulatory Structures

- Project-based Units:
  - Evolution of the Legal and Regulatory Framework
  - Establishment of New Licenses and Authorizations
  - Management of Stakeholder Conflicts

3. Administrative Structure

The administrative structure of the regulator, provides key insights into several characteristics of the regulator:

- Appointment and removal processes for leadership positions can indicate the influence wielded by other government agencies
- Legal status of staff indicates the protections afforded, particularly regarding liability for decisions made by the regulator
- Remuneration principles highlight multiple issues, including the status afforded to the leadership and staff as compared to other state employees and the regulator's flexibility to offer salaries that will attract and retain qualified personnel
- The ability of regulators to contract outside experts is another important enhancement to the regulator's ability to act independently and efficiently, providing the potential for impartial analysis, enhancement of capacity that is lacking within the regulator, and solicitation of advice from concerned stakeholders

3. Administrative Structure

- **Leadership organization for regulatory authorities**

- There are essentially two models of leadership organization for regulatory authorities: the collegial body (a board or commission composed of multiple members) and the single regulator (often given the title of chairperson or president).
- Each has its advantages and disadvantages, and variations of each model are in use around the world.

3. Administrative Structure

- Leadership organization for regulatory authorities – Collegial Bodies

- The collegial body model usually involves a board or commission made up of individuals with different areas of expertise, potentially bringing those varied perspectives to bear on each regulatory issue.
- A collegial body could be seen as more independent, as it is less likely that all members would be influenced by the same actors, whether in the government or the private sector.
- Collegial bodies also often impart a sense of legitimacy in decision-making, as it is less likely that a single individual was responsible for any particular decision.
- However, as in any decision-making process involving more than one actor, the development of regulatory decisions can be a slower process and more subject to internal struggle.

3. Administrative Structure

- Leadership organization for regulatory authorities – Collegial Bodies

- Almost two-thirds of the 131 countries that submitted responses to the 2005 ITU survey indicated that their regulatory agencies are collegial bodies
- These multi-member commissions or boards of directors are composed of a varying number of members (usually an odd number from three to seven to minimize tie votes) that oversee and direct all activities of the regulatory authority.
- One member is the chairperson or president of the commission/board and sometimes has a “casting” or deliberative vote that counts twice and acts as a tie-breaking vote, if necessary.
- Depending on the appointment process of the regulatory agency, collegial body members can be appointed by one single branch of government, multiple branches of government and/or other industry stakeholders.
- Collegial bodies can be composed of full-time or part-time members or a combination of both.

3. Administrative Structure

- Leadership organization for regulatory authorities – Collegial Bodies

- The day-to-day management and administrative functions of the regulator are handled in varying combinations by:
  - an executive director,
  - chief executive officer (CEO),
  - the chairperson, and/or
  - managing director (collectively referred to herein as managing director).
- In some countries, like Botswana, Brazil, Canada, Greece, Ireland, Jordan, Malaysia, Mexico, Portugal, South Africa, and Venezuela, the managing director of the regulatory authority is the chairperson of the commission/board

3. Administrative Structure

- Leadership organization for regulatory authorities – Collegial Bodies

- The managing director acts as a liaison between the commission or board of directors and the departments/divisions that comprise the regulatory authority.
- The duties and responsibilities of the managing director differ from country to country.

3. Administrative Structure

- Leadership organization for regulatory authorities – Single Regulator

- Single individual regulatory agencies are headed by a CEO, president or director general (collectively referred to herein as CEO) who oversees all policy, management, and administrative activities of the regulatory authority.
- In most cases, the CEO is appointed by the central government, often the minister responsible for communications.
- The term of office is fixed and generally varies from two to six years. However, in certain countries, including Estonia, Ethiopia, Iran, Liechtenstein, Norway, Oman, and Sudan, the CEO does not have a specific term of office.
- The duties and responsibilities of the CEO differ from country to country, but they are generally granted a broad scope of authority and responsibility.
- The CEO is typically assisted by one or more deputies to whom he can delegate responsibilities.

3. Administrative Structure

- Leadership organization for regulatory authorities – Single Regulator Model

- The single regulator model has the potential benefit of a consistent approach to regulation and decision-making, as decision-making authority is vested in a single individual who may have a unified plan for the telecommunications sector.

- In contrast to the collegial body model, single regulators can make decisions much more quickly, even when constrained by due process regulations.

- The single regulator is also potentially more vulnerable to undue influence exerted by external actors, whether in the government or in the private sector.

- A single individual may also not be able to match the expertise of a collegial body made up of individuals from different backgrounds, although experienced staff can provide substantial expertise.

3. Administrative Structure

- Staffing of NRA

- Composition of staff affected by numerous factors: market conditions, established objectives and goals, scope of the regulator's responsibility, selected management structure, distribution of responsibilities/duties within the regulator, and available resources

- Remuneration for regulatory authority leadership and staff often lower than equivalent positions in private sector
  - Can affect ability to recruit and retain qualified candidates

- Regulatory agencies, particularly new agencies, often engage external experts to carry out specific functions
  - Some cases are to build internal capacity and eliminate need for external consultants
  - Other cases are to engage impartial experts to avoid real or perceived bias

4. Internationally Adopted Regulatory Principles

Several legal elements must be in place to ensure the success of the regulatory body:

- Legal framework for telecommunications must be implemented (i.e., telecommunication law and regulations).

- Law must give regulator the authority and means to effectively define and apply regulations in a market. These characteristics are important, especially in markets where incumbent operators have extensive political and financial power.

4. Internationally Adopted Regulatory Principles

1. Structural Independence
   - Reduces possibility of political or industry capture
   - separation of regulator from operator, insulation from external pressure, not being wholly dependent on the related ministry in charge of telecom policy
2. Financial Independence
   - Funding should be free from political and private interest influence
   - Two main sources of budget: (1) allocation from government budget; (2) collection of regulatory fees for licenses, fines, spectrum usage etc.
3. Functionality
   - Ability of regulator to carry out its daily activities effectively

4. Internationally Adopted Regulatory Principles

- Independence is a critical attribute for a regulator to be effective. However, effectiveness has additional dimensions.

- In a broad sense, an effective regulator is structurally and financially independent, but the real effectiveness of the regulator will lie in how it achieves successful functionality, ideally in an independent and autonomous manner

- Despite best attempts, a government may establish a regulator that is structurally and financially separate from the other branches of government but yet may not function in an effective manner. In contrast, a regulator may not be legally separate from the other government agencies (*i.e.*, it may report to a particular ministry) but may have functional effectiveness. There is no single feature that determines functionality, rather, it is comprised of a combination of elements.

4. Internationally Adopted Regulatory Principles

- The choice of institutional design *per se* will not guarantee success of the regulator. Whatever the institutional design option chosen, several important principles should be kept in mind, including:
  - Regulators must be perceived by industry to be independent – thus the importance of transparency and accountability of the regulator;
  - Regulators should have the expertise to assess and make sound judgments on both technical and industry-specific issues – thus the importance of appropriate appointment and staffing mechanisms;
  - The regulator must take into account various viewpoints and interests, including economic, social and political objectives. This balance should be reflected in the institutional structure and in the system of checks and balances;
  - The institutional design, internal structure, and administration must be flexible enough to allow the regulator to adapt to market realities.

4. Internationally Adopted Regulatory Principles

- **Accountability of NRA**

- Accountability provides legitimacy and credibility to regulatory activities, promotes public confidence in regulator, and ensures that regulatory decisions can withstand challenges and public scrutiny

- Accountability to state
  - Annual reports and reporting obligations to sector ministry or legislature
  - Appeal of regulatory decisions for judicial review

- Accountability to consumers
  - Dealing with consumer complaints
  - Protecting consumers in case of market failures
  - Consumer education

5. Internationally Adopted Regulatory Principles

- **Transparency of NRA**

- Transparency refers to the openness of the process of exercising regulatory power
- Provides accountability and legitimacy and ensures fairness and credibility of regulatory decisions
- Public consultation procedures may vary from country to country, but generally minimum procedural safeguards are undertaken to ensure that there is maximum participation in the decision-making process:
  - Issuing public notice of consultations
  - Allowing for adequate comment & reply period
  - Publishing the consultation results and final decisions

- **Rules on Conflict of Interest**

Main Types of Conflicts

1. Acceptance of Gifts
   - Improper acceptance of gifts between employees or from outside sources which can influence the independent judgment and performance of official duties is generally prohibited
   - Exceptions: low monetary value, gifts from friends or relatives on birthdays
2. Personal and Financial Conflicts of Interest
   - Disclosure of employee's financial and personal interests and divestment of conflicting interests
   - Civil employees should not take advantage of their positions to further their own private interests
3. Post-employment Prospects
   - Disclosure of any outside employment if there is a potential conflict
   - Former employees may be required to either avoid certain proceedings or obtain permission from a former employer prior to taking a new appointment for a specified time period after termination of employment

5. Internationally Adopted Regulatory Principles

- **Rules on Conflict of Interest**

- Ability of regulator to govern legitimately and effectively is based on the real and perceived integrity, honesty, and ethical behavior of its officials and employees and their decisions.

- There are four general approaches to avoiding or mitigating ethical conflicts:
  (1) avoidance;
  (2) disclosure;
  (3) divestment or resignation; or
  (4) recusal

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