West African Common Market Project:

Harmonization of Policies Governing the ICT Market in the UEMOA-ECOWAS Space

> Model ICT Policy and Legislation



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European Union

Model ICT Policy and Legislation

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1 INTRODUCTION

The International Telecommunication Union (ITU) launched a regional project, in cooperation with the European Union, to support the establishment of an integrated ICT Market in West Africa.

The project takes account of the UEMOA and ECOWAS vision for the telecommunications sector, shared by National Regulatory Authorities throughout the region, which is "to have a single liberalized telecommunications market in the Community, following on the adoption of uniform legislative and regulatory frameworks, and the interconnection and integration of national networks."

The project was designed based on several Government requests for assistance on Regulatory Reform aiming to harmonize the development of the telecommunications sector in West Africa. As such, it aims to build on existing initiatives and projects from other national, regional and international organizations such as UEMOA, ECOWAS and the World Bank, where applicable. Thus, the project will specifically take into account recent studies and recommendations such as the draft UEMOA Directives and the World Bank - ECOWAS Study on the Harmonization of Telecommunications Policies in ECOWAS. It also aims to build human and institutional capacity in the field of ICT through a range of targeted training, education and knowledge sharing measures.

The project focuses on a number of urgent regulatory issues of concern to the beneficiary countries. It recognizes that some of the constraints towards the objective of a common market are related to telecommunications regulations, but that other social and economic constraints to investment such as lack of information or of appropriate regulations or indeed lack of regulatory certainty also play a role.

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The present report focuses on the issue of ICT Policy and legislation, detailing in the following chapters: the objectives of ICT Policy, international and regional practices and the key issues relating to ICT Policy and Legislation. In conclusion, it makes a number of recommendations and proposes guidelines for model ICT Policy and Legislation for the Region.

2 OBJECTIVES OF ESTABLISHING A NATIONAL ICT POLICY AND LEGISLATION

2.1 Background

Reform in the telecommunications sector is occurring at an unprecedented rate. Regulatory change is being driven by technological change, market innovation, and by the needs of businesses to have access to sophisticated and seamless telecommunication services on a global and end-to-end basis. In the long term as markets liberalize, any service provider should be able to offer any communications service to anyone, anywhere, using any type of technology.

Globally, telecommunications services before the 80's were supplied mainly on a monopolistic basis. In most countries, the monopolistic operator was basically a state-owned enterprise, while a few countries opted for the system of issuing licenses to private and/or state monopolies on a territorial or functional basis. In short, government controlled all resources.

This model worked particularly well for many years in the more developed economies, where longdistance and international tariffs, which had stayed high despite technological changes decreasing their cost significantly, basically subsidized local, regional and rural telephony. Indeed, in the more developed economies, this model enabled the development of networks, increases in teledensity and industrial development in the sector. Financial sources for sector development and for the provision of universal service, in particular, were obtained from the government budget which supported this well. In the less developed countries, the scenario of cross-subsidization worked less well. Financial resources were obtained in some cases from multilateral lending or donor agencies as well as bilateral government or other government-sponsored sources.

Since the 80's and 90's, however, technological advancement, the perceived need to lower certain tariffs and the desire to increase the range of services available to consumers, to bring tariffs in line with costs and to expand businesses were among the factors that started to undermine "traditional" thinking about the telecommunications sector. This resulted in a liberalization and reform process in the telecommunications sector in many countries across the globe. The process started in the US with the break-up of the Bell system and this was followed by the UK, Japan, Australia and New Zealand, amongst others.

In the case of developing countries, besides the issue of technological developments, pressure from the World Bank and other international organizations also influenced the opening up of the sector through liberalization. To get access to funding resources from international agencies to complement meager public and institutional resources, a wave of major changes also took place in developing economies, particularly with regard to resource mobilization, utilization and management. In other words – a shift towards a properly defined and organized reform process, which typically included a clear programme for liberalization, became the norm in many countries and regions across the world.

In the majority of countries, liberalization measures dominated the reform process, with only few countries deciding to privatize their public operators without first deciding on a clear and properly planned liberalization process. Although there are cases where governments decided to privatize their public telecommunications operators before embarking on a liberalization process and before establishing an independent regulatory authority, this is mainly limited to countries with weak economies or with small markets that were generally perceived as not justifying more than one operator in the market.

2.2 **Objectives of Liberalization**

From these factors, one can easily deduce a number of macro-objectives that governments aim to achieve through liberalization. They are:

- 1) To increase the development of existing services by:
 - Providing more client-oriented services with better marketing;
 - Providing a better quality of service;
 - Increase the volume of traffic with more competitive prices.

These aspects can only be achieved through competitive service offerings.

2) To increase the offer of new services and facilities.

This objective can only be reached by introducing new operators into a competitive environment.

- 3) To increase the competitiveness of public owned services and industries and creating more attractive conditions for external investors.
- 4) To attract private investment to the sector.
- 5. To create new opportunities for the international expansion of the economies in question through opportunities to provide telecommunications services in other countries or through more openness in other sectors.
- 6) To boost economic growth.

7) To diminish the external deficit of telecommunications transactions.

2.3 The need for Regulation

Depending on the level of development of the country's telecommunications market, the priorities in terms of regulatory functions and objectives are likely to vary from country to country. Nevertheless, with telecommunications being regarded by all governments as an essential public service, the main objectives of telecommunications regulations are often very similar.

Such objectives usually include:

- ensuring the efficient provision of telecommunications services;
- ensuring good quality of service at reasonable price;
- encouraging the introduction of new telecommunications service;
- promoting universal access to basic telecommunications service; and
- guaranteeing the best use of the country's limited resources such as radio spectrum and numbering.

As evidenced by the number of countries liberalizing their telecommunications markets over the past decade, the overwhelming trend is towards greater reliance on market forces and competition for the efficient provision of telecommunications services. In order to ensure that viable competition is established and the benefits of competition are fully realized, regulatory measures will have to be undertaken based on the level of development of the market.

Once the principle of the liberalization of the sector is decided, it has usually been the case that countries have also taken key measures, both in terms of regulation and in the definition of policy, to make such liberalization efficient.

Such measures have included those aimed at:

- re-regulating the sector, thereby creating independent entities in the process in this case regulatory authorities so as to make the process efficient and to allow a proper follow up of the process, and creating practical solutions which will allow the efficient introduction of competition in the market, particularly with regard to interconnection with the existing network, licensing procedures, universal service, tariff rebalancing and security of the network,
- preparing the public operator to be able to face competition in the best way possible, including measures aimed at protecting the financial health of the incumbent,
- allocating, in a non-discriminatory way, and managing scarce resources such as numbers and spectrum resources within the liberalized market,
- protecting consumer interests, including quality of service and privacy rights.

Such measures have been taken within the framework of progressive changes that have defined the policy, legislation and regulation for the sector and have allowed the gradual adaptation of the system to the new rules of the game.

The reasons for increased regulatory measures in a newly liberalized market are simple: in order to allow new operators into the sector and especially in a market where there was usually already a dominant operator (the incumbent), measures must also be taken to ensure that such an incumbent does not act in an anti-competitive way and that it will allow access to its networks and services in a reasonable way.

At the same time the incumbent operator should also be given the same opportunities new operators are given to develop.

Regulatory intervention may also be needed to ensure that the competitive markets do not fail to serve high cost areas or low-income subscribers.

This has also been the trend in most ECOWAS countries. In the region most countries have adopted or reviewed their basic telecommunications law and/or regulatory and institutional frameworks to deal with the issue of the liberalization, the introduction of competition and convergence.

2.3 The need for a Clear Policy

Policy is the key determinant of legislation and regulation. It sets out the vision for ICT development and its links to national development goals. Although good legislation and regulation is essential to translate policy into reality, governments must first identify and prioritize their policy objectives. In turn, these policy objectives will have to be translated into policies, legislation and regulatory rules that the regulator can implement. *Legislation* establishes how policy is implemented by defining the basic regulatory principles (for example the right to access) and processes (for example, licensing) and by providing the statutory foundation and mandate for the required institutions (for example, consultative, advisory and regulatory bodies). Legislation also generally specifies the financial, staffing and reporting regimes under which the regulator operates and which define its functions and degree of independence. Regulatory agencies are responsible for developing *regulations* that detail the legal principles and that lead to the implementation of policy and policy objectives, such as, for example, new tariff structures and universal access programs.

This, for example, is clearly recognized in the 2004 Mauritius National Telecommunications Policy (See Box).

2004 Mauritius National Telecommunications Policy

Government, having recognized the potential of the ICT sector to become the fifth pillar of the economy to provide more remunerative employment, and to place Mauritius in the league of top performers in the global economy, has accelerated the liberalization of the telecommunications sector by an early termination of the exclusivity of the incumbent operator as from 1st January 2003. Government is also aware that policy formulation for the reform of the telecommunications sector must take into consideration the short- and long-term national objectives and the ever- changing social, economic, political, and technological conditions.

The current policies have thus to be revisited to make them more responsive to the new opportunities and challenges of the telecommunications sector through technological convergence and interoperability.

In order to achieve the objectives, it will be necessary to consolidate mechanisms and build upon marketoriented policies to create an enabling framework for the development of this industry as follows:

- To create the conditions for the adoption of cutting-edge and convergent info-communications technologies.
- To introduce by the end December 2004 a Convergence Act, which will combine information technology, media and telecommunications.
- To create conditions for sustained private investment in the telecommunications sector by ensuring transparent policies.
- To ensure the efficient management of scarce resources, including the radio frequency spectrum, telephone numbering, and info-communications infrastructure
- To expand the telecommunication services in a systematic and comprehensive manner to foster the development of innovative services.
- To ensure reasonable quality of service at affordable prices.
- To promote mechanisms of low-cost access to info-communications including wireless services.

In establishing policy and policy goals, it is also necessary to consider the macro environmental response to the question: "What is it in the social, economic, legal, and political environment that needs to be taken into account in order to ensure that policy is responsive and will be successful?" Policy can then be shaped, and specific policy objectives formulated in a realistic and achievable manner.

Within this context, key questions regarding ICT policy and regulatory issues are:

- What are the objectives of ICT policy?
- How does it link to legislation and regulation?
- Who are the key players nationally and globally?
- Who governs the Internet?
- How has telecommunications reform evolved?
- What are the objectives of regulation and how does it work?
- What are key reform and regulatory issues and their consequences?
- What can be done to make decision-making processes more participatory, democratic and transparent?

It is clear that a link between the major policy objectives of government and the necessary policies and regulatory rules for the sector must be drawn. While policies and strategies naturally address the extension of the communications infrastructure through telecommunications reform to stimulate private sector growth and create job opportunities, they must also incorporate social goals by building human capacity and creating the conditions for the development of relevant applications and content in order to ensure that ICTs contribute to the realization of national development goals.

2004 Tanzanian ICT Policy

As is stated in the 2004 Tanzanian ICT Policy: "ICT is both cross-sectoral and a sector in its own right. An ICT policy has to relate to other relevant sectoral policies, whether they are infrastructural (such as telecommunications or ecommerce), or vertical (such as education, tourism, manufacturing or health), or horizontal (such as information, or governance). Consequently, in addition to developing and implementing an ICT policy, other relevant sectoral policies and their related institutions and regulations must accommodate ICT and its multiple convergences. It is also necessary to review existing legislation, thereby enacting requisite changes while introducing new legislation to create the appropriate legal framework within which this policy will be implemented."

At the same time, sufficient consideration must also be given to the institutional framework governing ICT policies. A certain level of cooperation among the agencies responsible for the different sectors related to information and communication technology must take place initially, with the ultimate goal being a merger of such tasks under single political direction. Today in many countries, there are various bodies regulating or overseeing particular aspects of ICTs; such as NRAs for telecommunications including spectrum management, Broadcasting organizations for broadcasting, and agencies for IT for questions relating to information technology. Convergence however has led to a blurring in the boundaries of sectors under ICT. As a result, infrastructure falling under various ICT sectors can be utilized to provide services in other ICT sectors such as Internet over cable TV systems, TV over broadband, Internet telephony over the PC.

ICT policies and strategies also have to do with education, health, agriculture, culture and all other areas of activity that impact quality of life. They can be integrated into sectoral as well as broad national policies and strategies; for example countries may commit to introducing ICTs into schools in order to expand educational opportunities and increase the supply of ICT-literate graduates; they

may also extend Internet access to rural clinics to improve the delivery of health services. As the use of the Internet expands within a country a host of issues start to emerge: privacy and security, intellectual property rights, and access to government information are some examples.

Uganda's promotion of communication technology

Uganda, for example, is working within the scope of a comprehensive and integrated plan intended to promote the communications technology sector with a view to supporting the country's development effort and fulfilling the requirements for boosting investment and opening up the economy to the outside world in the context of an external environment characterized by economic globalization, competition in trade, industry and technology

As stated by Minister Nasasira in the Ugandan 2002 National ICT Policy Framework: "When the policy is successfully implemented, it will stimulate more participation in the socio-economic-political and other developmental activities, which should lead to improved standards of living for the majority of Ugandans and should ultimately enhance sustainable national development."

3 OVERVIEW OF ICT POLICIES

3.1 General Trends

In Africa several initiatives have been gaining momentum, particularly in the field of Information and Communications Technologies (ICTs). The transitions from the Organization of African Unity to African Union and the New Partnership for African Development (NEPAD) have re-ignited the interest in regional cooperation in Africa.¹

Fresh global initiatives like that of the Millennium Development Goals and the rising information society on global agenda are also driving regional cooperation. Both the Millennium Development Goals (MDGs) and the World Summit for Information Society (WSIS) have called for enhanced regional cooperation. Regional economic communities like the Southern African Development Community (SADC), the West African Economic and Monetary Union (WAEMU, hereafter referred to as UEMOA), the Economic Community for West African States (ECOWAS) and the West African Telecommunications Regulators Association (WATRA) are some good examples of clear progress being made in regional cooperation and harmonization.

Most recently African countries were engaged in formulation of either their telecom or broad-based ICT policies. According to the Economic Commission for Africa, by 2004, half of African countries completed their e-strategies in an effort to enhance social welfare and economic development. Another quarter of African nations (about 14 countries) were in the process of developing their ICT strategies.

3.2 General Regulatory Policy and National ICT Policies in the ECOWAS Countries

3.2.1 Initiatives regarding ICT in the Region

The UEMOA Council of Ministers adopted in 2001 a recommendation on a programme of action for improving ICT infrastructure and services in UEMOA. This recommendation aims at

¹ <u>http://www.**nepad**.org</u> <u>http://www.africa-union.org/</u>

harmonizing the regulatory frameworks, the creation of a committee of regulators, and a forum of operators and service providers, the promotion of new ICTs, and liberalization of the national telecom markets.

ECOWAS is carrying out a number of projects, including the ECOWAS Telecommunications Harmonization Project which includes the creation of a plan and draft timetable for harmonizing telecommunications policies in ECOWAS. A study which discusses various harmonization models and presents recommendations to achieve a harmonized telecommunications sector in the ECOWAS region has been carried out.

In addition, ECOWAS Ministers have as priority, resolved:

- To harmonise local regulatory frameworks and institutions.
- To evolve a regional regulatory framework The ECOWAS ICT Task Force has been established to harmonize ICT policies of member countries.
- To encourage competition.
- To facilitate the building of a Regional Backbone Infrastructure that is robust and big enough to support seamless cross-border connectivity.
- The installation of fibre optic cable on power lines that carry electricity supply between countries (where they exist) must be made mandatory to reduce costs associated with rights of way.
- Investors who have interest in setting up operations in several countries in the region should be accorded priority status in the Issuance of Operating Licences.

The West African Telecommunication Regulators Association (WATRA)², which was formed in 2002 with the purpose of establishing cooperation among West African States regarding telecommunications regulation also has aims to promote the continuing development of ICT in the West African sub region.

WATRA has identified the following challenges facing ICT regulation in the Region as being:

- Harmonizing existing national ICT Policies, including regional spectrum, licensing, etc.
- Evolving common principles for interconnection, universal access, etc.
- Establishing common responsibilities for NRAs.
- Safeguarding the interest of citizens (control of content, maintaining standards, etc).
- Encouraging investments to develop infrastructures & networks for access to services & information.
- Using ICTs to reduce barriers of distances among the dispersed populations.

Against this background, the objectives of WATRA have been defined as:

- Harmonize local regulatory frameworks and institutions.
- Evolve the regional regulatory framework.

3.2.2 Trends in the Establishment of ICT Policies in the Region

In collaboration with various partners, particularly the International Development Research Centre (IDRC), the United Nations Economic Commission for Africa (ECA) has finalized National Information and Communications Initiatives (NICI) development activities in the following West African countries: Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Guinea. With the cooperation

² See: <u>http://www.watra.org</u>

of the European Union (EU) and Finland, ECA has finalized the development of NICI plans in Ghana, Niger and Nigeria. The Gambia, Mali and Sierra Leone are at various stages of the policy formulation process.

3.2.2.1 Benin³

Since February 12, 2003, Benin has had a national ICT policy. The strategy document is entitled "**Politique et stratégie nationale des NTIC: Bénin 2025, une société de l'information solidaire, épanouie et ouverte**" (National NICT Policy and Strategy: Benin 2025, a Cohesive, Flourishing and Open Information Society). It consists of a declaration of the national policy, a description of the current NICT position, and a list of projects. The first phase of drafting this document consisted of compiling a report based on previous studies, written by various resource persons and institutions.

The national policy document, entitled "Déclaration de politique de promotion des Nouvelles **Technologies de l'Information et de la Communication (NTIC) au Bénin**" (Declaration of the New Information and Communications Technologies [NICT] Promotion Policy in Benin), was adopted by the Government Council of Ministers, in its session of 12 February 2003. National popularization followed adoption.

Civil society has been associated in various ways with the production of the document. Issues existed, however, in relation to the identification of an operational entity with specific responsibility for NICT regulation. The Ministère de la Communication et de la Promotion des Communications Nouvelles (MCPTN) and the Office des Postes et Télécommunications (OPT) tended to take responsibility for telecommunications regulation, but this came under criticism after the liberalization of some telecommunications sectors like the mobile telephone network, and the Internet dial-up service (access via the traditional telephone network.) The Haute Autorité de l'Audio et de la Communication (HAAC) seems unable to deal with all the conflicts in this area. To resolve telecommunications-related conflicts, multiparty commissions are sometimes created around OPT and MCPTN. As a result of this situation, as well as reforms in the sector, the Government issued two Decrees on 31 January 2002, in a special session of the Council of Ministers: Decree 2002-002 which set forth several fundamental principles of the telecommunications system, and Decree 2002-003 which created the Autorité de régulation des Postes et Télécommunications (Posts and Telecommunications Regulatory Authority), and outlined its functions.

Compilation of regulations for the implementation of these decrees is still underway, as is the establishment of the Authority. After its establishment, the Authority should encourage the establishment of area-specific regulations. HAAC and the Observatoire de la déontologie et de l'éthique dans les médias (ODEM) may be delegated some responsibilities.

However, to date, the Regulatory Authority has not officially been created, and regulation can still be influenced by MCPTN and OPT, despite the establishment of multiparty commissions.

The Decree setting forth fundamental principles of telecommunications services defines the general regulations of telecommunications service provision and management. It endorses the liberalisation of the telecommunications sector, sets forth general regulations conducive to fair competition (management of the frequency spectrum, transparent resource allocation procedures, restriction of dominant positions, etc.), service regulation, methods of protecting State interest (defense, domestic security), and protecting users (including the principle of universal access, quality of service, etc.), and encryption methodology. It does not focus in particular on one type of service or one

³ See: <u>http://africa.rights.apc.org/research_reports/benin.pdf</u>

particular area. This focus must be achieved though implementation regulations, after the organisation is established. The 31^{st} of December 2005 is the date by which all telecommunication services should be liberalised (Article 35).

Authorities involved in NICT regulation This refers to institutions such as MCPTN, HAAC, ODEM (these last two are mentioned above), the future Regulatory Authority, and also the Bureau Béninois du Droit d'Auteur (Benin Copyright Office) (BUBEDRA), and the Commission Béninoise pour l'Informatique (Beninese Information Systems Commission) (CBI).

3.2.2.2 Cape Verde

The Government of Cape Verde in its 2005 Policy Statement defined the following objectives for information and communication sector in Cape Verde:

- a) To liberalize, in a gradual fashion, the installation of information and communications public networks and the provision of information and communications services of public use so as to extend the benefits of the sector to the public, create additional investment opportunities in the country and so as to reinforce competition and continuous and lasting economic and social developments;
- b) To ensure access to information and communication networks and services to the whole population and improve access economic and social activities in the information and communications sector, and this at reasonable tariffs and prices, in a non-discriminatory fashion and in conditions of quality and efficiency which are suitable to their respective needs;
- c) To assure the existence and availability of a universal information and communications service, especially to rural, remote and deprived zones;
- d) To ensure equality and transparency of competition, thereby promoting services diversification, and this in order to increase the offer and quality in line with present-day user requirements;
- e) To ensure interoperability of the public information and communications networks, as well as the portability of numbers;
- f) To promote the utilization of information and communications networks and services by public services, public institutes and other public entities, in order to raise the quality and efficiency of the services provided;
- g) To prepare by December 2005 draft electronic communications laws.

The implementation of such an information and communications policy is expected to assist Cape Verde in becoming a hub of international information and communications for the African Region within the first quarter of this century.

It is also necessary, as the Policy goes on to say, to consolidate the mechanisms to achieve such goals and to establish a market-oriented legal framework as follows:

- To create conditions for the new era of convergence of information and communications technologies;
- To prepare a draft law on electronic communications by June 2005;
- To improve the conditions to attract private investment in the information and communications sector;
- To ensure the effective management of scarce resources, including the radio electric spectrum, numbering, and information and communications infrastructure;

- To expand the information and communications services in a systematic manner in order to foster innovation development;
- To ensure good quality of service at affordable prices;
- To promote mechanisms of low-cost access to information technologies, including wireless telecommunications services.

To implement its information and communications policy, the Government has stated that it will further approve an Action Plan for the ICT sector. In carrying out this plan, preference shall be given to a new partnership between the public and private sector as well as to the mobilization of the civil society.

The Action Plan shall clearly define a number of clear targets and shall also define an exhaustive list of actions, which are aimed at urgently meeting such targets in all sectors of economic and social life.

The Government, in publishing its declaration, already established a number of such targets:

- Increase fixed telephone density from 15% to 20% by the year 2010;
- Increased mobile cellular telephone density from 11% to 40% by 2007;
- Assure free access to Internet for all schools by the year 2007;
- Guarantee access to Internet to 50% of households in urban area by the year 2008;
- Create public posts of access to Internet in every municipality seat by 2006;
- Guarantee access to broadband to 30% of the households in urban area by 2008;
- Ensure access to broadband in at least one telecommunication centre in every rural community with more than 500 people, by the year 2006;
- Extend broadband to all centres of municipalities by the year 2006;
- Extend broadband to all secondary schools, by the year 2006;

3.2.2.3 Ghana⁴

Following the successful development of the Ghana ICT for Accelerated Development (ICT4AD) Policy, Government developed a new Telecommunications Policy and Strategy and is developing detailed Regulations on priority issues.

The Policy aims to put forward well-defined objectives aimed at securing for the consumer the best possible telecommunication services in terms of quality, choice and value for money and also serve as the basis for effective liberalisation and fair competition in the industry.

As part of the Policy discussions, the Ministry of Communications in conjunction with the National Communications Authority (NCA) initiated industry meetings to encourage stakeholders to share their views and concerns regarding telecommunications policy in a common forum.

All stakeholders were invited to present their views on a range of topics and sub-topics which interested them. A preliminary industry workshop was organised on Monday, May 24, 2004 at the Busy Internet to solicit and review contributions from the industry. The draft Policy document was also submitted to a National Workshop on 22nd June 2004 for discussion. The new Telecom policy have since been finalized and approved by Parliament and published in January 2005.

⁴ See: <u>http://www.ict.gov.gh/Telecom%20policy/Ghana%20Telecom%20Policy%20Final.pdf</u>

3.2.3 General Regulatory Environment in the Region

At present, all ECOWAS countries have a draft telecommunication act, although some have not drafted or approved a Telecommunications Policy Document. With the exception of Sierra Leone, the Gambia and Liberia, all of them have now approved some form of basic telecommunications law. In terms of transparency and availability of information, where the National Regulatory Authority (NRA) has a web-site, some form of Basic Law is usually published. This is the case for Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Nigeria, Senegal and Togo. Most of the ECOWAS countries (all except Benin, Sierra Leone and Liberia) have established an independent regulator (most of them being focused on communications, with Niger and Gambia having a multi-sector regulator and Cape Verde having 2 - a telecommunications regulator dealing with the technical issues and a multi-sector regulator for the economic issues).

As an ICT marketplace, West Africa is a region in change, mainly due to the opening of national telecom sectors. Of all the major ICT components in the region, the most impressive growth has been in the uptake of mobile telephones. This, combined with the not insignificant use of the Internet (notably via wireless links), has undoubtedly had a substantial impact on the ability of entrepreneurs to do business in urban areas, as well as for more wealthy individuals to stay in contact with colleagues, friends and family. However, this is still a relatively recent development and opening of the markets has not progressed as quickly as might have been expected.

Major changes in the Western Africa Telecommunication Sector took place in 2004, with countries like Senegal and Cote d'Ivoire having faced the end of the monopoly of the incumbent and Nigeria and Ghana introducing new licensing and regulatory frameworks to accommodate convergence and make their respective markets more attractive to investors.

Ghana recently reviewed the telecommunication structure at the Ministry level. The former Ministry of Communication and Technology has now been split. The Ministry of Telecommunications is in charge of the telecommunication sector only. This new Ministry has a main priority on creating mechanisms and incentives to attract investors to the rural areas. Matters related to ICTs have been transferred to the Ministry of Science and Technology.

4 KEY ISSUES

4.1 Key ICT Policy Issues

4.1.1 Definition of ICT and ICT Policy

Information and Communication Technologies (ICT) – is a generic term used to express the convergence of information technology, broadcasting and communications. One prominent example is the Internet. ICT policy generally covers three main areas: telecommunications (especially telephone communications), broadcasting (radio and TV) and the Internet. ICTs are basically information-handling tools or rather a variety of goods, applications, programs, and services that are used to store, transmit, produce, process, distribute and change information. Some make a difference between the "old" ICTs, being radio, television and telephone, and "new" ICTs including computers, satellites, broadband access, wireless access and the Internet.

ICT are enablers of communication: regionally, nationally and internationally and enable information sharing, knowledge and development.

2001 Ugandan National Policy Framework

As stated in the Ugandan Policy framework:

There are three areas of focus of the ICT Policy:

- *1)* Information as a resource for development
- 2) Mechanisms for accessing information
- 3) ICT as an industry, including e-business, software development and manufacturing

However, the policy recognizes that the three areas are not mutually exclusive. Rather, the new ICT have led to convergence between the media and telecommunications. For instance, on a multi-media computer system, one can read online newspapers and other publications, watch television stations and listen to various radio stations as well as getting a wide variety of information from different websites.

Although the majority of the population is still dependent on the conventional and traditional information delivery systems, especially radio, new ICT can greatly enhance the efficiency of these systems in delivering development information.

ICTs need an appropriate framework in which to develop – such a framework must promote rather than hinder the development of these key technologies. Such a framework is defined in a Policy, which looks at the realities of the market and defines the vision and the enabling factors for the development of the sector. Although policies are formally put in place by governments, different stakeholders and in particular the private sector make inputs into the policy process and affect its out-comes. It may be national, regional or international. Each level may have its own decision-making bodies, sometimes making different and even contradictory policies

4.1.2 **Objectives of ICT Policy**

ICT evolution will take place with or without a systematic, comprehensive and articulated policy. However, the lack of a coherent policy is likely to contribute to the development (or prolonged existence) of ineffective infrastructure and a waste of resources. Listed below are some aspirations that ICT policies often try to meet:

- Providing citizens with a chance to access information,
- Increasing the benefits from information technology for the country,
- Providing information and communication facilities, services and management at a reasonable or reduced cost,
- Improving the quality of ICT services and products,
- Encouraging innovations in technology development and use of technology,
- Promoting information sharing, transparency and accountability and reducing bureaucracy within and between organizations, and towards the public at large,
- Attaining a specified minimum level of information technology resources for educational institutions and government agencies,
- Providing individuals and organizations with a minimum level of ICT knowledge, and the ability to keep it up to date, and
- Helping to understand information technology, its development and its cross-disciplinary impact.

COMESA suggests a policy framework that should be adopted by all member states and which should address the following objectives:

- Affordable, ubiquitous and high quality services,
- Building a competitive regional ICT sector, and
- Creating an enabling environment for sustainable ICT diffusion and development.

In order to achieve the above objectives, member states of COMESA are encouraged to adopt new approaches that can enable interconnectivity between all operators and service providers within the region, promote universal service/access, encourage competition in the sector through the removal of barriers to entry, and establish an appropriate licensing regime that is transparent and conducive to investment in the sector.

4.1.3 Scope of ICT Policy

Examples show that it is important that ICT policy remain focused and that policy makers do not get distracted by attempting to include too many issues and/or sectors to be covered by such a policy. As many countries are experiencing, an effective ICT Policy usually deals with the issues necessary to guarantee an efficient and effectively competitive communications (encompassing ICT) market so that the benefits created by an effective ICT Policy can then be beneficial and useful to other sectors. Fundamental issues include provision of access through competition, instituting incentives for foreign direct investments and building regulatory institutions that promote transparent and equitable entry to the ICT services.

The case of Mauritius

It is the policy of the Government of Mauritius, for example, to ensure that the National Information Infrastructure (NII) provides gilt-edged services that engender optimal performances in the rapidly emerging info-communications sectors. Mauritius currently has a relatively good telecommunications infrastructure that forms the basis for its own information highway and connectivity to the rapidly evolving Global Information Infrastructure (GII). Further development of NII will depend on the use of appropriate info-communications services, modern equipment and the availability of qualified manpower.

Some key features which will help in the further development of NII are:

- Provision of broadband capacity
- Availability of services at affordable costs
- *Establishment of international reliability and redundancy standards*
- Ensuring adequate capacity to provide service on demand
- Accessibility of services by the large majority of consumers
- Facilitating the delivery of a wide range of value-added services

COMESA calls the attention of its Member States to a Policy for the ICT sector. Indeed, in it ICT Policy guidelines, it states: "Information is increasingly becoming a critical enabler of development even for a developing area like COMESA. Information-based social and economic development is underpinned by information and communication technologies (ICTs) that support the exchange of information in a network of users in the form of voice, text, photographic image, sound, and video. This network comprises a variety of terminal devices, including telephones, receiving devices and computers, connected to an information infrastructure, incorporating broadcasting and telecommunications, of which Internet is an important component.

These three systems, although driven by converging technologies and common business interests have usually been kept separate at policy and regulatory levels. To fulfil the requirements of an information society, the information technology, broadcasting and telecommunications components

have to form part of a single, integrated network. Institutionally, there has to be close co-ordination if not integration at the policy level and, preferably, full integration at the regulatory level.

Creating an information society will involve the participation and contribution of stakeholders including governments, regulatory authorities, broadcast operators, national telecommunications operators and service providers, ISPs, private network operators, postal service providers, content developers/providers, software developers, vendors and end-users."

Examples from around the world show though that where ICT or e-strategies have been defined separately from a policy for the telecommunications sector, the benefits of defining such a strategy have not contributed towards liberalising the telecommunications sector, nor have they spread to other sectors – not even necessarily to the IT sector.

As mentioned a paper entitled: "National ICT Policies Making in Africa: Implications for CSOs," it has become clear that starting with policy and regulatory reform in telecommunications, broadcasting and ICT sectors and then advancing through to a broad-based ICT policies by complement telecom reform with other regulations and strategies like electronic transaction, human resource development is more likely to produce better results than ambitious list of actions. This implies that the design of e-strategies should move away from the so-called comprehensive policies and cover only a few areas. This would bring systematic reform and investment in the ICT sector including legal and regulatory reform, human resources development, infrastructure and access and trade facilitation and could also stimulate growth in other broader areas.⁵

Such an approach entails more attention to strengthening regulators, extension of the telecommunications infrastructure, lowering telephone charges, building community Internet access, improving the use of information technologies in education and promoting private sector strategies should be modest in their ambitions. They should be revisited on ongoing basis leveraging international good practices.

4.1.3 Adoption and Sustainability of ICT Policy

Key Challenges to the adoption of an acceptable and sustainable ICT Policy can therefore summarized as follows:

- Stakeholder awareness
- Broad-based Stakeholder participation and planning
- Political buy-in/champions on a local and national level
- Coordination with other policies/priorities
- Relevance and usefulness of policy and projects
- Access to ICT, including broadband through relevant universal access policies and programs
- Sustainability of projects (training, financing, appropriateness of technologies)

In order for ICT Policy to be successful it is essential that it is tailored to the needs of the country, fits in with other priorities and that stakeholders can buy into the process and ensure its sustainability. Key decision makers and stakeholders need to know about the benefits and possibilities of ICTs as well as about the offer and appropriateness of certain technologies and solutions.

Broadly speaking there are three groups of national stakeholders: government and other public sector bodies; civil society; and the private sector. All play a role in national ICT policy-making and

⁵ Paper by Lisham Adam, "National ICT Policies Making in Africa: Implications for CSOs", 2003.

its success. Government is usually the driver of ICT policy development, with the Ministry of Communications and/or ICT generally being in charge, and national telecommunications operators/leaders in IT development and industry and, of course the telecommunications regulator being closely involved.

As is the case in Senegal and Mozambique, leading the policy reform process from the office of either the President or the Prime Minister has been essential to the success of the process in that in both countries it has demonstrated high level commitment to ICT policy, ensured that the process is not captured by the narrow technical concerns of the communications sector and ensures that all interested ministries and public sector bodies were encouraged to participate. Negotiations should therefore aim at a consensus among the three groups on appropriate ICT policy; all share responsibility for ensuring that policy is carried through in legislation and regulation and for monitoring the implementation of the policy once the regulatory institutions have been established.

Understanding how ICTS can be useful to specific goals requires knowledge of the technologies and opportunities and how such technologies and solutions can be applied to particular situations. ICT development is a complex process and awareness campaigns aimed at different types of stakeholders are essential. Initiatives such as the organization of workshops or the creation of champions to promote developments are but a few of the elements of a successful ICT development.

The success of policy also depends on how people use the new tools that become available to them – computers, fixed line or mobile phones, or the Internet – once the policy is implemented. Civil society organizations are one key link (parliamentarians are another) between the broad population and policy processes. They have unique experiences and values to contribute regarding the use of the tools for social objectives.

The case of Mauritius

In Mauritius, for example government stated in its 2004 Policy that it will set the example as a model user of communications and information technology especially in areas like Education, Health, Tourism, Finance and Corporate Affairs. Mauritius will use its information superhighway for educational curricula and retraining programmes for the workforce to transform itself into a highly sophisticated, knowledge-based, and technology driven society. Government shall continue to give high priority to capacity building to meet the needs of the new economy, particularly those of the emerging info-communications sector.

In this context, the University of Mauritius and other educational institutions will be encouraged to introduce new and appropriate courses to produce info-communications qualified personnel. In addition, Government will promote advanced training in info-communications for professionals and strengthen cooperation for the exchange and training of personnel and the conduct of research studies with friendly countries, as well as regional and international organizations.

Within this context, it is also important to provide a conducive socio-economic environment as a platform for inflow of foreign participation in the domestic economy, and have a stable political environment with appropriate and dynamic economic policies.

Mauritius 2004 Policy

The Mauritius Government, for example, in its 2004 Policy undertook that Government shall endeavour to pursue the creation of an Information Society to maximize the economic and social benefits and shall establish a trustworthy, transparent, and non-discriminatory legal, regulatory and policy environment, capable of promoting technological innovation and competition. This will favour the necessary investments, mainly from the private sector, in the deployment of infrastructure and development of new services.

Traditional limitations or barriers to market entry will be reduced or eliminated to enable a wider range of innovative, high-quality and cost-effective services to be offered in a liberalized environment. This will include the use of such new technologies like Internet Protocol (IP) telephony. The issues such as cross-media competition, access to networks, and technology neutral regulation will be placed at the center of the convergence policy.

Government will facilitate fair and effective competition in all market segments, while maintaining economic incentives and ensuring trust and confidence for business activities.

A new market environment will be developed to guide the sector towards accelerated development taking into account technological neutrality, openness and convergence. This will be achieved by the introduction of services-based competition in the short term, culminating in facility-based competition.

Government will ensure that the liberalisation of the telecommunications sector allows greater access to available technologies and services for businesses and consumers. This will encourage innovative action and promote more investment within the telecommunications sector.

Government shall intervene, as and when necessary, to ensure that market liberalization facilitates fair, effective and sustainable competition, and shall take appropriate measures to tackle market failures and curtail abuses of market power to improve the overall efficiency and performance of the telecommunications sector.

It is also important to continuously create basic and advanced infrastructure to support ICT diffusion in the economy. Obviously, the availability of cheap and reliable computers as well as high-speed access to Internet and broadband is essential within this context. The liberalization of the telecommunications sector in the economy has contributed tremendously to enabling the creation of a competitive and innovative environment and has enhanced economic growth in the great majority of countries.

In order to keep the momentum and ensure the acceptability and sustainability of an ICT Policy, it is also important to develop the skills and knowledge of the human capital in parallel with the evolution of the information economy. ICT based education and continuous upgrading of the syllabus to meet the need of the industry and economy as a whole is therefore not to be overlooked. Effective use of the ICT infrastructure and technologies will depend on the absorbability of the human capital in the country.

4.2 Key Legal and Regulatory Issues⁶

As stated above, legislation and regulation establishes how policy is implemented by defining and detailing the basic regulatory principles (for example the right to access) and processes (for example, licensing) and by providing the statutory foundation and mandate for the required institutions (for example, consultative, advisory and regulatory bodies.) Legislation generally

⁶ See ITU Trends in Telecommunication Reform: Effective Regulation 2002, <u>http://www.itu.int/ITU-D/treg/publications/PublicationIndex.html</u>

specifies the financial, staffing and reporting regimes under which the regulator operates and which define its functions and degree of independence. Regulatory agencies are responsible for developing regulations that lead to the implementation of policy and policy objectives, such as, for example, new tariff structures and universal access programs.

As mentioned above, most countries in the ECOWAS regions have already adopted some form of Basic Telecommunications Law.

Whereas most of the English-speaking countries, whose legal system usually is modelled on the Common Law system, have generally followed the SADC Model Telecommunications Bill of 1998, this is not the case for most French-speaking countries who, on the other hand usually follow the European/French approach, nor is it the case for the Lusophone countries who generally follow the European/Portuguese approach. The main difference is that where the English-speaking countries detail most of the regulatory issues in their basic law, the French-speaking countries generally refer to the regulatory principles in the basic law, and then work out the details in decrees or decisions of government and/or the regulator where there is a separate regulator (in most cases in the region). The Lusophone countries also generally follow the latter approach. Both the French-speaking and the Lusophone countries adapted more from the EU and Moroccan models than the to SADC model. Any model for the ECOWAS region would need to take this into consideration.

The paragraphs below describe some of the key issues identified.

4.2.1 Objectives and Scope of the Law

Recently, more and more countries are expanding the scope of their telecommunications laws and to adapt to the realities being faced by the countries in the region - it is important to be clear though and to make sure that any changes or additions to the Law are clearly defined and consistent.

International best practice shows that in revising telecommunications law to include ICT, it is important to make sure that the definitions too are completed. Indeed, in order to deal with convergence, it is important that the Law recognizes that there is not only the reality of transmitting, emitting or receiving signs, signals, writings, images and sounds or intelligence by any nature by wire, radio, optical or other electronic systems (which is the globally recognized definition of telecommunications as defined by ITU), but that there is also the act/reality of the actual generation, manipulation and storage of information using electronic means. Any term being added must, of course, be defined clearly.

In many cases, it does make sense to add the term ICT to the Law since it is a term which is recognized in the context of many countries Government Policy initiatives, and therefore a reality which must be dealt with. Obviously the technology and the content are a different issue, so it is also important to define what it is that needs to be captured in the definitions and indeed in the scope of the Law.

Adding a definition of ICT to the Law aims to compliment the definition of telecommunications in the strictest sense. It does not imply that information technology as defined must be regulated in exactly the same way as telecommunications. It also has nothing to do with IT as a technology, nor with the content of the information but rather with the identification of the fact that there are other realities that are linked to but not covered by a more traditional definition of telecommunications.

And when countries struggle with the different levels of regulation and conditions applying to the different realities of a converged market, they are faced with realities like ISPs or companies storing information using electronic means – some countries have included the latter reality in their definition of value added services.

So, for example, in Jordan, the definition of ICT has been added to the Law. The term "telecommunications" is not simply replaced with the term "ICT. The term Information

Technology was simply added where it was thought that this was relevant – for example to the provisions dealing with the tasks of the Ministry (Art.3) and of the Regulator (art. 4). An interesting illustration of this is also Article 6 of the Jordanian Law, which talks about the powers and duties of the TRC and states:

"·····

a. To regulate postal and telecommunications services in the Kingdom through the application of the declared general policy for providing reliable postal and telecommunications services to users in line with the development and deployment of postal, telecommunications and information technologies at just, reasonable and affordable rates.

b. To encourage investment and competition in the postal, telecommunications and information technology sectors.

c. To protect the interests of those making use of postal and **telecommunications services**, and to oversee the performance of the licensees to offer postal and telecommunications services, and to take the necessary measures for the licensees to observe the terms of the license, including the quality and standard of the services and the endeavors to develop the same."

4.2.2 Regulatory Functions

To a greater or lesser extent, the following regulatory functions will have to be assumed by the regulator:

- acting as a proxy competitor to the incumbent by preventing abuses of market power such as excessive pricing,
- promoting the introduction of new entrants into the market by:
 - instilling private sector confidence through the implementation of rational and transparent licensing processes
 - encouraging efficient inter-connection arrangements with the incumbent
 - encouraging the unbundling of the local PSTN network,
- establishing effective and equitable funding for universal service/access,
- creation of a favourable investment climate to promote investment in telecommunications infrastructure, services and networks,
- protection of consumers and users rights and interests.

4.2.3 Key Legal and Regulatory Issues

The following paragraphs enumerate a number of key regulatory issues that will need to be considered and incorporated in the basic Law or other implementing legislation.

4.2.3.1 KEY ISSUE 1: Object of the law and definitions:

Issues to be covered in this section of the Law are: Object of the Law – Describe Definitions – Add in generally acceptable definitions based on international standards and sources ITU As is normally the case in many countries around the world, the preamble to the Law must contain a statement relating to the objectives of the Law. These generally reflect the policy statement and contain general objectives.

A good example here is the example of Mauritius, as referred to in the APC ICT handbook⁷:

The Mauritius government began the reform of its telecommunications sector in 1997 with the publication of a discussion paper (Green Paper); following extensive consultation the policy (White Paper) was published; a new **Telecommunications Act** was passed in 1998.

The Policy of the Republic of Mauritius with respect to the telecommunication sector established a vision, being: "To develop Mauritius into a modern nation and to enhance the nation's competitiveness in the global market place so as to improve the quality of life of the people..."

The Policy also included a set of principles to govern development of the sector, namely:

- The active promotion by government of an information-based economy;
- The promotion of competition and network interconnection as circumstances permit;
- An effective and independent regulatory body with clearly defined powers and responsibilities;
- *Private sector participation to the greatest extent possible;*
- The termination of all exclusivity provisions by the end of 2004.

The regulator – the Information and Communication Technologies Authority – was established by the **Information and Communication Technologies Bill** which identified its objectives, structure, powers and functions. The bill also created advisory and dispute settlement mechanisms.

The Mauritius policy and legislation addresses both economic and social goals through the creation of a telecommunications regulatory authority as well as a national advisory body and appeals board. It aims to democratise access to ICTs and at the same time increase competition and link Mauritius firmly to the global information economy.

Mauritius' information and communication technologies bill (No. 38 of 2001) Explanatory Memorandum

The object of the above Bill is to provide for:

- (a) the establishment and management of an Information and Communication Technologies Authority;
- *(b) the regulation of the information and communication technologies sector including:*
 - telecommunications;
 - the use of the Internet;
 - the enhanced development of an information society and online services;
 - the protection and security of data;
 - the facilitation of convergence; and
 - the establishment of ICT Advisory Council and of an ICT Appeal Tribunal
- *(c) the democratisation of information and communication technologies for the promotion of a knowledge based society.*
- (d) the transition towards a fully liberalised and competitive market in the information and communication sector.

⁷ See: <u>www.apc.org</u>

The legislation sets out the structure, objectives, powers, functions and tools of the regulator, in this case the Information and Communication Technologies Authority. The legislation makes provision for the creation of an Internet Management Committee, which, *inter alia*, is responsible for organising stakeholder input into discussions related to the Internet and for advising the Authority on Internet issues. It is the responsibility of the regulator to implement the policies detailed in the legislation.

Although the definitions in the Laws of the English-speaking countries generally follow the example of the model SADC Bill, it must be kept in mind that this document dates back to 1998, and that the sector and technology have changed significantly since that time.

It is therefore useful to look at international examples so as to see how to improve such a list of definitions.

Thus, for example, the May 2002 Anguilla Telecommunications Bill contains a comprehensive list of definitions:

"access" means, with respect to a telecommunications network or service, the ability of a service provider or user to use the telecommunications network or telecommunications service of an operator or other provider;

"authorisation holder" means a person that is granted a frequency authorisation by the Commission pursuant to this Act;

"broadcasting service" means the offering of the transmission of programmes whether or not encrypted, by any means of telecommunications, for reception by the public, including sound, radio, television and other types of transmissions, such as those on a point to multipoint basis;

"class license" means a license, other than an individual license, granted on the same terms to each applicant in respect to a class of telecommunications networks, telecommunications services or radiocommunication services;

"closed user group" means a group of persons who have a common business, other economic or social interest other than the provision of a telecommunications service;

"closed user group service" means a telecommunications service, used by a closed user group, operated without interconnection to a public telecommunications network enabling telecommunications to persons other than the members of such group;

"Commission" means the Public Utilities Commission established under the Public Utilities Commission Act, 2002;

"Court" means the High Court;

"facility" means a physical component of a telecommunications network, other than terminal equipment, including wires, lines, terrestrial and submarine cables, wave guides, optics or other equipment or object connected therewith, used for the purpose of telecommunications and includes any post, pole, tower, standard, bracket, stay, strut, insulator, pipe, conduit, or similar thing used for carrying, suspending, supporting or protecting the structure;

"frequency authorization" means an authorization granted by the Commission under section 9;

"frequency band" means a continuous frequency range of spectrum;

"force majeure" means any of the following circumstances:

acts of God, riot or civil commotion;

strikes, lock-outs and other industrial disturbances;

wars, blockades or insurrection;

earthquake, hurricane, flood, fire or explosions;

outbreak of pestilence or epidemics;

government rationing of electricity or other wartime or emergency controls imposed by government; and

embargoes or trade restrictions;

"harmful interference" means interference with the authorised use of spectrum that impedes, degrades, obstructs or interrupts a broadcasting service or a radiocommunication service;

"interconnection" means the linking of public telecommunications networks and services to allow the users of one public telecommunications service to communicate with users of another public telecommunications service, and to access the services of that provider;

"ITU Treaties" means and includes the Constitution, the Convention and the Regulations of the International Telecommunication Union, as adopted from time to time and in force;

"licence" means a licence granted by the Commission under section 4;

"licensee" means a person granted a licence;

"Minister" means the Minister to whom responsibility for telecommunications is assigned;

"network termination point" means the point designated for connection of terminal equipment by a user to a telecommunications network;

"operator" means a person licensed under this Act to operate a public telecommunications network;

"private telecommunications service" means a telecommunications service used within one enterprise or any body corporate with which it is affiliated, to satisfy its or their internal needs and operated without interconnection to a public telecommunications network enabling telecommunications to persons other than within such enterprise or such body corporate;

"public ground" includes any open or enclosed space to which, for the time being, the public has or is permitted to have access;

"public utility" has the same meaning assigned to it under section 1(1) of the Public Utilities Commission Act, 2002;

"public telecommunications network" means a telecommunications network used to provide a public telecommunications service;

"public telecommunications service" means a telecommunications service, including a public telephone service, offered to members of the general public, whereby one user can communicate with any other user in real time, regardless of the technology used to provide such service, but does not include a service that modifies a communication, restructures, adds or supplies, or permits user interaction with, information;

"public telephone service" means the commercial provision to the public of the direct transport and switching of voice telephony in real time from and to network termination points;

"radiocommunication service" means a telecommunications service that is provided through the transmission, emission or reception of electromagnetic waves;

"regulations" means the regulations made in accordance with section 53;

"road works" means any activity that involves breaking open a road or public ground, or that removes, alters or affects any utility installation;

"service provider" means a person licensed under this Act to provide a public telecommunication service;

"significant interest," in respect of a company, means a holding or interest in the company or in any holding company of the company held or owned by a person, either alone or with any other person and whether legally or equitably, that entitles or enables the person, directly or indirectly –

- (a) to control 10 per cent or more of the voting rights of that company at a general meeting of the company,
- (b) to a share of 10 per cent or more in dividends declared and paid by the company, or
- (c) to a share of 10 per cent or more in any distribution of the surplus assets of the company;

"special licence" means a special licence granted by the Commission under section 16;

"special licensee" means a person granted a special licence;

"spectrum" means the continuous range of electromagnetic wave frequencies used for telecommunications;

"telecommunications" includes the transmission, emission or reception of signals, writing, pulses, images, sounds or other intelligence of any kind by wire, radio, terrestrial or submarine cables, optical or electromagnetic spectrum or by way of any other technology;

"Telecommunications Code" means such guidelines, standards and other requirements as the Commission may issue or specify in accordance with section 53(2);

"telecommunications network" means any wire, radio, optical or electromagnetic transmission, emission or receiving system, or any part thereof, used for the provision of a telecommunications service;

"telecommunications service" means a service providing telecommunications and includes a closed user group service, a private telecommunications service, a public telecommunications service, a radiocommunication service and a value added service;

"terminal equipment" means equipment on the user's side of the network termination point that is connected directly or indirectly to a telecommunications network by wire, radio, optical or electromagnetic means and with which a user can originate, process or terminate telecommunications;

"universal service" means any public telecommunications services as to which the Commission, in accordance with section 19, determines the requirements of universal service shall apply;

"user" means a customer or a subscriber of a telecommunications network or a telecommunications service and includes a customer that is an operator of a telecommunications network and a customer that is a provider of a telecommunications service;

"utility installation" means any physical component of a system owned or operated by a public utility to provide piped water or electricity, as each of those terms are defined in the Public Utilities Commission Act, 2002;

"utility installation owner" means the owner or operator of any utility installation; and

"value added service" means a service that combines applications provided to users with telecommunications, provided that a value added service does not include any public telecommunications service. Terms and words relating to telecommunications used in this Act but not defined in this section shall bear the meaning assigned to them in the ITU Treaties.

Although the new EU Regulatory Framework for the communications sector may not seem appropriate for many countries in the region at this stage, it may be worth looking at for the future and could provide for future developments at an early stage.

Within this context, one good set of definitions which can serve as a guideline/example is the set of definitions included in Directive 2002/21/ec of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive):

"For the purposes of this Directive:

(a) electronic communications network means transmission systems and, where applicable, switching or routing equipment and other resources which permit the conveyance of signals by wire, by radio, by optical or by other electromagnetic means, including satellite networks, fixed (circuit- and packet-switched, including Internet) and mobile terrestrial networks, electricity cable systems, to the extent that they are used for the purpose of transmitting signals, networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed;

(b) transnational markets means markets identified in accordance with Article 15(4) covering the Community or a substantial part thereof;

(c) electronic communications service means a service normally provided for remuneration which consists wholly or mainly in the conveyance of signals on electronic communications networks, including telecommunications services and transmission services in networks used for broadcasting, but exclude services providing, or exercising editorial control over, content transmitted using electronic communications networks and services; it does not include information society services, as defined in Article 1 of Directive 98/34/EC, which do not consist wholly or mainly in the conveyance of signals on electronic communications networks;

(d) public communications network means an electronic communications network used wholly or mainly for the provision of publicly available electronic communications services;

(e) associated facilities means those facilities associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service. It includes conditional access systems and electronic programme guides;

(f) conditional access system means any technical measure and/or arrangement whereby access to a protected radio or television broadcasting service in intelligible form is made conditional upon subscription or other form of prior individual authorisation;

(g) national regulatory authority means the body or bodies charged by a Member State with any of the regulatory tasks assigned in this Directive and the Specific Directives;

(h) user means a legal entity or natural person using or requesting a publicly available electronic communications service;

(i) consumer means any natural person who uses or requests a publicly available electronic communications service for purposes which are outside his or her trade, business or profession;

(j) universal service means the minimum set of services, defined in Directive 2002/22/EC (Universal Service Directive), of specified quality which is available to all users regardless of their geographical location and, in the light of specific national conditions, at an affordable price;

(k) subscriber means any natural person or legal entity who or which is party to a contract with the provider of publicly available electronic communications services for the supply of such services;

(1) Specific Directives means Directive 2002/20/EC (Authorisation Directive), Directive 2002/19/EC (Access Directive), Directive 2002/22/EC (Universal Service Directive) and Directive 97/66/EC;

(m) provision of an electronic communications network means the establishment, operation, control or making available of such a network;

(n) end-user means a user not providing public communications networks or publicly available electronic communications services.

(o) enhanced digital television equipment means set-top boxes intended for connection to television sets or integrated digital television sets, able to receive digital interactive television services;

(p) application program interface (API means the software interfaces between applications, made available by broadcasters or service providers, and the resources in the enhanced digital television equipment for digital television and radio services."

These definitions are completed by Directive 2002/20/EC of 24 April 2002 on the authorization of electronic communications networks and services (Authorisation Directive), which includes the following extra definitions:

"The following definitions shall also apply:

(a) general authorisation means a legal framework established by the Member State ensuring rights for the provision of electronic communications networks or services and laying down sector specific obligations that may apply to all or to specific types of electronic communications networks and services, in accordance with this Directive;

(b) harmful interference means interference which endangers the functioning of a radio navigation service or of other safety services or which otherwise seriously degrades, obstructs or repeatedly interrupts a radio communications service operating in accordance with the applicable Community or national regulations."

Directive 2002/19/EC of 24 April 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive), includes in its definitions:

"Article 2

....

(a) access means the making available of facilities and/or services, to another undertaking, under defined conditions, on either an exclusive or non-exclusive basis, for the purpose of providing electronic communications services. It covers inter alia: access to network elements and associated facilities, which may involve the connection of equipment, by fixed or non-fixed means (in particular this includes access to the local loop and to facilities and services necessary to provide services over the local loop), access to physical infrastructure including buildings, ducts and masts; access to relevant software systems including operational support systems, access to number translation or systems offering equivalent functionality, access to fixed and mobile networks, in particular for roaming, access to conditional access systems for digital television services; access to virtual network services;

(b) interconnection means the physical and logical linking of public communications networks used by the same or a different undertaking in order to allow the users of one undertaking to communicate with users of the same or another undertaking, or to access services provided by another undertaking. Services may be provided by the parties involved or other parties who have access to the network. Interconnection is a specific type of access

implemented between public network operators;

(c) operator means an undertaking providing or authorised to provide a public communications network or an associated facility;

(d) wide-screen television service means a television service that consists wholly or partially of programmes produced and edited to be displayed in a full height wide-screen format. The 16:9 format is the reference format for wide-screen television services;

(e) local loop means the physical circuit connecting the network termination point at the subscriber's premises to the main distribution frame or equivalent facility in the fixed public telephone network."

Finally, Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), includes the following definitions:

"For the purposes of this Directive, the definitions set out in Article 2 of Directive 2002/21/EC (Framework Directive) shall apply.

The following definitions shall also apply:

(a) public pay telephone means a telephone available to the general public, for the use of which the means of payment may include coins and/or credit/debit cards and/or pre-payment cards, including cards for use with dialling codes;

(b) public telephone network means an electronic communications network which is used to provide publicly available telephone services; it supports the transfer between network termination points of speech communications, and also other forms of communication, such as facsimile and data;

(c) publicly available telephone service means a service available to the public for originating and receiving national and international calls and access to emergency services through a number or numbers in a national or international telephone numbering plan, and in addition may, where relevant, include one or more of the following services: the provision of operator assistance, directory enquiry services, directories, provision of public pay phones, provision of service under special terms, provision of special facilities for customers with disabilities or with special social needs and/or the provision of non-geographic services;

(d) geographic number means a number from the national numbering plan where part of its digit structure contains geographic significance used for routing calls to the physical location of the network termination point (NTP);

(e) network termination point (NTP) means the physical point at which a subscriber is provided with access to a public communications network; in the case of networks involving switching or routing, the NTP is identified by means of a specific network address, which may be linked to a subscriber number or name;

(f) non-geographic numbers means a number from the national numbering plan that is not a geographic number. It includes inter alia mobile, freephone and premium rate numbers "

4.2.3.2 KEY ISSUE 2: The definition of the roles and responsibilities of entities involved in the telecommunications sector, including the Minister

Key Issues to be covered are:

FUNCTIONS OF THE MINISTER AND THE COMMISSION

- Functions of the Minister (e.g.: develop and review telecommunications policies consistent with the purposes of this Act; be responsible for matters of international telecommunications affecting the country, propose the policy related to the provision of Universal Service and to submit the same to the Council of Ministers for approval; and to follow up the development of this policy for the purpose of expanding the scope of coverage of telecommunications and information technology services, both horizontally and vertically, in such a way as to meet the requirements of economic and social development in the country; to draw up plans that encourage investment, on a competitive basis, in the telecommunications and information technology sectors ,...)
- Functions of the Regulator (e.g.: advise Minister on positions and policies relating to telecommunications issues at international, regional and national levels; *establish or monitor the implementation of national telecommunications standards and ensure compliance therewith; implement and enforce the provisions of this Act, the regulations and the Telecommunications Code; be responsible, where required, for the economic regulation of licensees and authorization holders and for ensuring fair competition among them; classify types of services as public telecommunications services, closed user group services, private telecommunications for licenses, special licenses and frequency authorizations for any of the purposes specified in this Act and shall monitor, enforce and ensure effective compliance therewith;...)*

The issue of the actual mandate of the Authority is really a question of delegation of powers of the State and the degree of delegation of such powers depends on the political tradition and context of the country, and on the political will to create an independent and competent Regulatory Authority. This will, in fact, determine the true future of the sector.

In practice, there is a wide diversity in how countries divide regulatory roles and responsibilities between the Ministry and the independent regulatory authority. This is partly due to a lack of a clear-cut distinction between policy functions and regulatory functions. To look at international examples, it has often been the case that where an independent regulatory authority has been set up, the establishment of the regulatory framework is, in principle, the responsibility of the Ministry and the implementation and administration of this regulatory framework is the responsibility of the independent regulatory authority.

In order to ensure regulatory clarity and confidence though, it is essential to define the institutional structure of the sector clearly. This has been appropriately described as: "Where a regulator exists, it is important to ensure clarity of jurisdiction and defined resolution mechanisms, adequate organizational competence, funding, and political insulation. Independence derives more from this latter factor than from a formal definition, and manifests itself by the regulators powers to dissent".8

Decision-making within communications policy is based on the expertise of the regulators, even if the regulators do not usually take part in the political aspects of communications. As experts, they participate in drafting laws and act as consultants to the appropriate Ministry or other authorities when necessary. The regulators of today not only need expertise in technical, financial and legal

⁸ McKinsey Quarterly of 1995.

aspects of communications, they also need to foresee future developments, and systematically analyze the present and the future, and be able to cooperate at the international level.

The independence of the regulators means that they can deal independently with the tasks assigned to them. In most countries, the Ministers in the field do not intervene with the decisions the regulators make, but in some countries the power of decision in politically important matters belongs to the Ministry. In spite of their independence, the regulators have to report their operations to the Ministry. The relevant Ministry monitors their operation and the Ministry of finance usually supervises their budget.

To give a few practical examples:

Portugal

In Portugal the government is responsible for the definition of the general communications policy. ICP- ANACOM (the regulator) acts in its advisory capacity when necessary. There are a few areas where a combined action between the Government and ICP is needed.

ICP- ANACOM is a public institute, which differs from public administrations as it has more powers in decisions concerning the internal management of the organization including financial and human resources.

The agency operates now under the auspices of the Ministério da Economia (the Ministry for Economic Affairs). The Ministry does not have a particular unit dealing with communications, but two advisers are working on issues related to the communications sector. In the earlier years of its existence, a Secretary of State was responsible for ICP ANACOM matters, but for the last ten years, ICP ANACOM reports directly to the Minister.

ICP ANACOM is not required to have the Minister's previous approval for its decisions. The Minister cannot change ICP ANACOM 's decisions, even if he has a different opinion. However, ICP ANACOM 's operation is coordinated in cooperation with the Minister. To this end, the Chairman of the Board of Directors of ICP ANACOM has unofficial meetings with the Minister whenever necessary.

ICP ANACOM usually promotes the public debate on communications policies (on matters such as, for example: local loop unbundling, number portability, fixed wireless access, and public telephones) by launching public consultations.

ICP ANACOM is also responsible for international representation advising the Minister when a high level representation is needed, as well as for cooperation activities related to the communications area.

To give a concrete example of how this is formulated in the Law, in Portugal, Article 5, entitled Telecommunications Tutelage, of Law no. 91/97, of 1 of August (the Basic Law) states that:

I It is the State's duty to define the strategic guidelines and the general policies, the approval of the applicable legislation to the sector, the supervision and inspection of telecommunications and of the activity of the telecommunications operators.

2 Within the carrying out of the State's responsibilities, it is the duty of the "Instituto das Comunicações de Portugal", as the sector's regulatory entity, and without prejudice of other duties under the law:

- *a)* to manage the radio electric spectrum and of the orbital positions;
- *b)* to normalize, approve and certify the telecommunications equipment and materials, according to the applicable legislation;

- c) to inspect the telecommunications apparatus for compliance with the respective legal and regulatory provisions concerning their use, as well as the application of corresponding sanctions; and
- *d)* to define the conditions of interconnection of public use telecommunications services and networks exploited by operators holding a significant position in the markets.

The Netherlands

In the Netherlands, administrative duties are handled by three authorities: the Ministry for the administrative area, the radio administration operating under it (RDR), and the postal and telecommunications regulator (OPTA) operating independently. The Ministry for the administrative area is the Ministry of Transport, Public Works and Water Management (Ministerie van Verkeer en Waterstaat). In the Ministry, communications related duties are handled by the Post and Telecommunications Department (DGTP).

RDR, the radio administration authority, is a part of the Post and Telecommunications Department, but it is relatively independent. OPTA, the agency responsible for postal and telecommunications administration, operates in the same administrative area as the Ministry, but is an independent regulator.

In principle, the division of responsibilities between the Ministry and the different authorities is quite clear: the Ministry is involved in political decision-making and preparatory legislative work; RDR and OPTA are responsible for implementing the decisions. However, OPTA does not have to obey the Ministry's decisions in individual cases, but only implements general legislative rulings. One arrangement that differs from most other European countries is that in the Netherlands, the Ministry draws up and publishes the numbering plans and OPTA is responsible for implementing them. RDR has no tasks in this area apart from collecting the yearly fee for numbers based on the figures from OPTA.

Interesting though is that when necessary, the Ministry can consult the specialists in OPTA and RDR on specific field-related issues and the cooperation is active in legal matters, for instance. The divisions in RDR and OPTA cooperate actively with the Ministry. Since RDR is part of the Ministry, the head of RDR takes part in the weekly meetings of the Ministry's Post and Telecommunications Department.

Norway

In Norway, PT (the regulator) operates under the Ministry of Transport and Communications (Samferdselsdepartementet). The Ministry is responsible for preparing laws. It also carries out research and development activities in telecommunications and information technology, and participates in international activities in the field.

Because human resources dedicated to PT's field of activity within the Ministry are limited, there is a natural active communication between the Ministry and PT and, even though the Ministry is responsible for law-drafting, PT has a significant role in this work.

PT negotiates its budget with the Ministry of Transport and Communications. The budget of the agency is monitored in negotiations arranged four times a year. In addition to this, PT submits annual reports on its operations to the state auditors.

The Ministry sets goals for the operation of PT, and PT submits quarterly reports to the Ministry on the implementation of these goals. The goals set are operational.

France

In France, the division of competences between the Ministry and the Agency is also clearly defined and an interesting example:

To implement European directives, the French law of 26 July 1996 opened up the telecommunications sector to full competition from 1 January 1998. This law thus provided for telecommunications activities to be carried out freely. Regulation involves the application, by the competent authority, of all legal, economic and technical arrangements that will allow for telecommunications activities to be exercised effectively.

In France, the law has entrusted this mission to the Minister responsible for telecommunications and an independent institution: the French Telecommunications Regulatory Authority (now the ARCEP), set up on 5 January 1997.

The Authority has its own areas of competence and shares some others with the Minister in charge of telecommunications.

Areas of competence shared with the Minister

The Authority is consulted on draft legislation or regulations relating to the telecommunications sector and takes part in implementation thereof.

The Authority may specify certain rules of a technical nature in terms of network and services operations, interconnection and terminals; its decisions are then approved by the Minister.

On behalf of the Minister for telecommunications, the Authority deals with licence applications for the establishment and operation of networks open to the public, and also for requests for licences to provide the public telephone service. It also deals with applications for licences required for the supply to the public of services using radio frequencies. It transmits the processed files to the Minister, who is entrusted with issuing licences.

The Authority assesses the net cost of the universal service and the contributions payable by operators and sends its proposal to the Minister, who records the amounts.

The Authority delivers a public opinion on universal service tariffs and multi-annual tariff objectives, and also on tariffs for services for which there are no competitors on the market.

As far as international aspects are concerned, the Authority ensures respect of legislative provisions relating to equivalent treatment of operators authorised to route international traffic. It is also associated, at the Minister's request, with Community and international negotiations.

Own areas of competence

The Authority issues licences for the opening and operation of private networks intended to provide telecommunications services reserved for closed user groups (networks internal to businesses or administrations, for example).

The Authority draws up and manages the national numbering plan and assigns frequency and numbering resources to operators and users in objective, transparent and non-discriminatory conditions.

Public network operators whose market share is greater than 25 % are declared to be "powerful" and must for that reason publish a standard interconnection offer. **The Authority draws up a list of** such operators every year and approves their standard offer. The Authority may request modification of interconnection agreements made between two operators, where this is necessary to guarantee equality of competitive conditions or the interoperability of services.

Power for Conciliation and Settlement of Disputes

The Authority is entrusted with settling disputes between operators in three areas :

- refusal to make an interconnection, conclusion and performance of interconnection agreements and telecommunications network access conditions;
- bringing into conformance of agreements with clauses excluding or making restrictions of a legal or technical nature on the supply of telecommunications services over cable networks;
- possibilities and conditions for shared use of existing facilities located in the public field or on a private property;

The Authority may be called upon to play a conciliation role, to settle disputes that do not come under the jurisdiction of the dispute settlement procedure. In addition to the Minister responsible for telecommunications, any individual or legal entity, any professional organisation or consumers association may thus refer matters to the Regulator, who informs the Competition authority thereof.

Power to Take Sanctions

The Authority may impose penalties on operators for any breech of legislative or regulatory provisions. It may thus take measures to suspend a licence temporarily or permanently or impose a fine up to 5 % of the operator's turnover, where the offence is repeated.

The following Table illustrates the difference of division of tasks and competences amongst the different entities in select European countries.

	Licensing public telecommunica- tions networks and services	General Authorizations/ class licenses	Operators with Significant Market Power	Interconnection	USO	Frequency allocation and assignment	Consumer protection	Tariff control	Number management and allocation
Austria	NRA	NRA	NRA	NRA	NRA	MIN	NRA	NRA	NRA
Belgium	MIN	NRA	NRA	NRA	NRA	MIN	NRA	NRA	NRA
Denmark	NRA	N/A	NRA	NRA	NRA	NRA	NRA	NRA	NRA
Finland	MIN	MIN	MIN	NRA	MIN	NRA	MIN	N/A	NRA
France	MIN	NRA	NRA	NRA	NRA	ANF		Comp. Dir.	NRA
Ireland	NRA	NRA	NRA	NRA	NRA	NRA	NRA	NRA	NRA
Portugal	NRA/Min	NRA	NRA	NRA	NRA	NRA	NRA	NRA/Dir. Gen Comp.	NRA
Spain	MIN	NRA	NRA	NRA	NRA	Min.Dev.	NRA	NRA	NRA
Sweden	NRA	NRA	NRA	NRA	NRA	NRA	NRA	NRA	NRA
Italy	MIN	NRA	NRA	NRA	NRA	MIN	NRA	NRA	NRA

NRA= National Regulatory Authority

MIN = Ministry in charge of Communications

COMP.DIR = Competition Directorate

MIN. DEV= Ministry of Development

Such divisions must be reflected in any Law governing the sector as it will determine the relationship between the different entities in the future and really determine the credibility of each in fulfilling their roles. Too many countries do not spell this out clearly from the start and thus set the scene for power-struggles in the worst case or uncertainty about who does what in the "best" case.

To give a few examples of how this is reflected in various texts:

Anguilla

Part 2 of the May 2003 Anguilla Act clearly defines the role of the Ministry and of the Regulator for Anguilla. This is illustrated below:

PART 2: FUNCTIONS OF THE MINISTER AND THE COMMISSION

Functions of the Minister

The Minister shall –

- 1) develop and review telecommunications policies consistent with the purposes of this Act;
- 2) be responsible for matters of international telecommunications affecting Anguilla, include international, regional and bilateral frequency coordination;
- *3) manage the spectrum;*
- *4) administer the numbering plan;*
- *5) administer domain names; and*
- 6) *in the exercise of his powers, consult with the Commission.*

Jordan

Where the policy decision is made to leave a certain degree of power with the Ministry, a good and clear description of the functions of the Minister is reflected in the Jordan Telecommunications Law⁹. It states:

CHAPTER II

TASKS OF THE MINISTRY

ARTICLE 3

The Ministry shall under take the following duties:

a) To prepare the general policy of the telecommunications and information technology sectors in the Kingdom, coordinating with stakeholders in these sectors as circumstances require, to submit such policy to the Council of Ministers for approval, and to set a biennial national strategic plan for these sectors in accordance with this policy.

b) To propose the policy related to the provision of Universal Service and to submit the same to the Council of Ministers for approval; and to follow up the development of this policy for the purpose of expanding the scope of coverage of telecommunications and information technology services, both horizontally and vertically, in such a way as to meet the requirements of economic and social development in the Kingdom.

c) To draw up plans that encourage investment, on a competitive basis, in the telecommunications and information technology sectors in the Kingdom, creating an atmosphere for the provision of services to users at just, reasonable and affordable prices, in accordance with the latest technological developments in these sectors.

d) To strengthen the competitive position of the Kingdom internationally in the areas of information and communications technology.

⁹ Telecommunications Law #13 of 1995 of the Hashemite Kingdom of Jordan

e) To follow up the implementation of the Kingdom's commitments in international treaties in the telecommunications and information technology sectors.

f) To safeguard the Kingdom's interests with states, regional and international organizations, unions, and commissions concerned with telecommunications and information technology; and, in cooperation with the Commission, the ministries, and concerned parties, to oversee the representation of the Kingdom before those official bodies.

g) To promote the advancement of research and development in the areas of telecommunications and information technology.

h) To encourage the setting of advanced education and training programs in telecommunications and information technology, including the use of the Internet, electronic commerce, and electronic transactions.

i) To spread public awareness of the importance of the role of telecommunications and information technology to the overall economic and social development and advancement of the Kingdom.

j) To provide the necessary facilities to allow the Commission and designated members of the armed forces and security services to prepare the National Plan for Frequency Assignment and the National Register of Frequencies; to maintain these in the Ministry and prepare procedures for the coordination among these parties so as to ensure the optimal use of the radio frequencies and to prevent harmful interference between frequencies assigned for civilian and military uses.

k) In consultation with the Commission, to prepare draft laws in the areas of telecommunications and information technology, and to present them to the Council of Ministers.

l) To collect relevant information from the Commission and other government departments or private entities for the purpose of accomplishing The Ministry's duties.

m) To work towards the elimination of impediments in the information technology and telecommunications sectors through cooperating with the Commission and other parties, so that the Ministry can discharge its duties.

Once the Functions of the Minister have been defined, it is also important to spell out the general duties and specific functions of the Commission. Some good examples for this are listed below.

Anguilla

Thus, for example, the 2003 Anguilla Act lists the functions of the Commission as being:

Functions of the Commission

Subject to the provisions of this Act, the Commission shall –

- 1) advise the Minister on positions and policies relating to telecommunications issues at international, regional and national levels;
- *2) establish or monitor the implementation of national telecommunications standards and ensure compliance therewith;*
- 3) implement and enforce the provisions of this Act, the regulations and the Telecommunications Code;
- 4) be responsible, where required, for the economic regulation of licensees and authorization holders and for ensuring fair competition among them;
- 5) classify types of services as public telecommunications services, closed user group services, private telecommunications services, value added services, broadcasting services, or any other services;

- 6) determine applications for licenses, special licenses and frequency authorizations for any of the purposes specified in this Act and shall monitor, enforce and ensure effective compliance therewith;
- 7) determine which telecommunications services should be provided, pursuant to section 19, throughout Anguilla and establish and monitor the funding mechanisms therefore;
- 8) collect all fees and any other charges levied under this Act;
- 9) investigate and resolve any dispute relating to interconnection or to the sharing of facilities or utility installations or any other matters arising under this Act, as provided in Part 5 of the Public Utilities Commission Act, 2002;
- 10) investigate and resolve all complaints of harmful interference made to the Commission or of which it has knowledge;
- 1) investigate complaints by users of their failure to obtain redress from providers of public telecommunications services in respect of rates, billings and services provided generally and to facilitate relief where necessary;
- 12) establish quality of service indicators, reporting requirements for operators and service providers and otherwise monitor and protect the interests of users of telecommunications services;
- *13) certify and ensuring the testing of telecommunications equipment for compliance with*
 - *a) international standards; and*
 - b) environmental health and safety standards, including electromagnetic radiation and emissions;
- *14) ensure the systematic development of telecommunications throughout Anguilla;*
- 15) issue such guidelines and standards as it deems necessary, from time to time, in the form of and which shall constitute the Telecommunications Code;
- 16) obtain such information from persons as is needed to carry out any of its functions; and
- 17) prepare draft regulations, in accordance with section 53, and the Telecommunications Code to give effect to its functions specified in paragraphs (a) to (p).

Jordan

The Jordan Law defines the tasks of the Minister and of the Commission as being:

TASKS OF THE MINISTRY

ARTICLE 3

The Ministry shall under take the following duties:

a) To prepare the general policy of the telecommunications and information technology sectors in the Kingdom, coordinating with stakeholders in these sectors as circumstances require, to submit such policy to the Council of Ministers for approval, and to set a biennial national strategic plan for these sectors in accordance with this policy.

b) To propose the policy related to the provision of Universal Service and to submit the same to the Council of Ministers for approval; and to follow up the development of this policy for the purpose of expanding the scope of coverage of telecommunications and information technology services, both horizontally and vertically, in such a way as to meet the requirements of economic and social development in the Kingdom.

c) To draw up plans that encourage investment, on a competitive basis, in the telecommunications and information technology sectors in the Kingdom, creating an atmosphere

for the provision of services to users at just, reasonable and affordable prices, in accordance with the latest technological developments in these sectors.

d) To strengthen the competitive position of the Kingdom internationally in the areas of information and communications technology.

e) To follow up the implementation of the Kingdom's commitments in international treaties in the telecommunications and information technology sectors.

f) To safeguard the Kingdom's interests with states, regional and international organizations, unions, and commissions concerned with telecommunications and information technology; and, in cooperation with the Commission, the ministries, and concerned parties, to oversee the representation of the Kingdom before those official bodies.

g) To promote the advancement of research and development in the areas of telecommunications and information technology.

h) To encourage the setting of advanced education and training programs in telecommunications and information technology, including the use of the Internet, electronic commerce, and electronic transactions.

i) To spread public awareness of the importance of the role of telecommunications and information technology to the overall economic and social development and advancement of the Kingdom.

j) To provide the necessary facilities to allow the Commission and designated members of the armed forces and security services to prepare the National Plan for Frequency Assignment and the National Register of Frequencies; to maintain these in the Ministry and prepare procedures for the coordination among these parties so as to ensure the optimal use of the radio frequencies and to prevent harmful interference between frequencies assigned for civilian and military uses.

k) In consultation with the Commission, to prepare draft laws in the areas of telecommunications and information technology, and to present them to the Council of Ministers.

l) To collect relevant information from the Commission and other government departments or private entities for the purpose of accomplishing The Ministry's duties.

m) To work towards the elimination of impediments in the information technology and telecommunications sectors through cooperating with the Commission and other parties, so that the Ministry can discharge its duties.

TASKS OF THE COMMISSION

ARTICLE 6

The Commission shall under take of the following duties and responsibilities:

a) To regulate telecommunications and information technology services in the Kingdom in accordance with the established general policy so as to ensure the provision of high quality telecommunications and information technology services to users at just, reasonable and affordable prices; and, by so doing, to make possible the optimal performance of the telecommunications and information technology sectors.

b) To establish the basis for regulation of the telecommunications and information technology sectors, in accordance with the approved general policy, in such a way that services meet the comprehensive developmental needs of the Kingdom; in accordance with rules and instructions issued by the Board for this purpose.

c) To specify the minimum level of service quality which must be offered by licensees to meet the needs of Users; this shall be done in consultation with Licensees and shall be without the imposition of any specific technology.

d) To protect the interests of users and oversee the actions of persons and Licensees to ensure that the conditions of Licenses are observed, including specified service standards, service quality, and prices; and to take the necessary steps in this regard to provide for the punishment of those who violate these conditions.

e) To stimulate competition in the telecommunications and information technology sectors, relying on market forces, and so regulating them as to ensure the effective provision of telecommunications and information technology services and to ensure that its regulations is effective and efficient; to forbid anti-competitive behavior or practices; to forbid actions by any person to abuse a dominant position in the sector, and to take all necessary actions in this regard.

f) To participate in the representation of the Kingdom in meetings, conferences, delegations, workshops and other international gatherings having to do with telecommunications and information technology.

g) To encourage self-regulation by the telecommunications and information technology sectors.

h) To prepare and adopt the terms and conditions and criteria for the granting of Licenses for networks and telecommunications services, and for the use of the radio frequency spectrum

i) To manage the use of the Radio Frequency Spectrum, whether terrestrial, maritime, aviation, or satellite-based, including:

- 1) Preparing and maintaining the "National Table of Frequency Allocations."
- 2) Preparing the "National Plan for Frequency Assignment" and "National Register of Frequencies," in coordination with Armed Forces and Security Agencies.
- *3) Maintaining the civilian portion of the "National Plan for Frequency Assignment" and the "National Register of Frequencies," and making it publicly available.*

j) To regulate access to telecommunications networks and conditions of interconnection therewith in accordance with instructions issued by the Commission for this purpose, and to approve the interconnection agreements mentioned in paragraph (e) of Article 29 of this Law; and to ensure that there are no infringement in these agreements, and to ensure that there are no infringement and the above instructions, taking into consideration the terms and conditions of any License previously granted by the Commission or any agreement with the Government entered into prior to the effective date of this Law.

k) To establish technical rules and standards for the interconnection of wire line or wireless equipment, including Telecom Terminal Equipment, with the Public Telecommunications Network, and to set the regulation procedures for importing such equipment into the Kingdom with regard to principles prescribed in the effective Standards and Metrology Law.

l) To grant the necessary type approvals and regulate the import and usages of Telecom Terminal Equipment for individual and private uses, or use in special zones, and to monitor such usage.

m) To gather information related to the telecommunications and information technology sectors in order to prepare and publish reports, pamphlets, and instructions for users, as well as to prepare media programs to increase the public's awareness of the importance of these sectors and their positive impact on the economic and social development of the Kingdom.

n) To prepare and publish an annual report describing the Commission's activities, achievements, technical development, and any changes in the general policy relating to telecommunications services, and the future plans of the Commission.

o) To assess the need for the adjustment of the level of, regulation of any telecommunication service, or specific type or group thereof, with regard to competition or any other factor that may require such adjustment or forbearance, and to recommend the same to the Board for approval.

p) To propose draft laws dealing with the telecommunications and information technology sectors, to present them to the Ministry, and to prepare the bylaws and issue the instructions related thereto.

q) To perform any other task entrusted to it in accordance with any other legislation in force.

Uganda

The Uganda Bill is also clear. It defines the functions and powers of the Commission as follows:

Functions of the Commission

- 5 The functions of the Commission shall be—
 - (a) to implement the objectives of this Act;
 - (b) to monitor, inspect, licence and regulate communications services;
 - (c) to allocate and licence the use of radio frequency spectrum and to process applications for the allocation of satellite orbital locations;
 - (d) to make recommendations to the Minister in relation to the issuance of major licences under this Act;
 - (e) to supervise and enforce the conditions of those licences;
 - (f) to establish a tariff system to protect consumers from excessive tariff increase and avoid unfair tariff competition;
 - (g) to draw up, establish, amend and enforce a national numbering plan and perform block number allocations;
 - (h) to conduct, or authorise any person to conduct under supervision, technical evaluation relating to communications services;
 - *(i)* to set national communications standards;
 - (j) to ensure compliance with national and international communications standards and obligations laid down by international communication agreements and treaties to which Uganda is a party;
 - (k) to establish and run frequency and other monitoring stations;
 - (1) to receive and investigate complaints relating to communications services and to take necessary action upon them;
 - (m) to promote the interests of consumers and operators as regards the quality of communications services and equipment;
 - (n) to promote research into the development and use of new communications techniques and technologies;
 - *(o) to improve communications services generally and to ensure equitable distribution of services throughout the country;*
 - (p) to ensure that basic network operators provide leased lines for value added and other services as may be appropriate;

- (q) to safeguard the rights of operators and enforce the performance of their obligation;
- (r) to grant operators' rights to utilise public rights of way to construct facilities for the provision of services regulated by the Commission, and to be responsible for coordination with the relevant bodies to effect compulsory purchase or utilisation of private property for the provision of these services for public use;
- (s) to promote competition, including the protection of operators from acts and practices of other operators that are damaging to competition, and to facilitate the entry into markets of new and modern systems and services;
- (t) to regulate interconnection and access systems between operators and users of telecommunications services;
- (u) to comply with policy guidelines on sector policy given by the Minister, in accordance with section 12 of this Act;
- (v) to advise the Government on communications policies and legislative measures in respect of the provision and operation of communications services;
- (w) to represent Uganda's communications sector at national and international fore and organisations relating to its functions and to co-ordinate the participation of any interested groups;
- (x) to represent the Government at international conferences or international and other Organisations in the field of communications services to which Uganda is a member;
- (y) to collaborate with educational institutions in order to promote specialised education in the field of communications;
- (z) to establish, manage and operate a communications services training centre; and
- (aa) to carry on any other functions that are related or connected to the foregoing.

Powers of the Commission.

- 6 (1) The Commission may—
 - (a) borrow money, purchase, hold, manage and dispose of any property whether moveable or immovable;
 - (b) enter into any contract or other transaction as may be expedient;
 - (c) charge for services provided by it;
 - (d) arbitrate disputes arising between operators and consumers and to enforce its decision;
 - (e) institute a levy on the gross annual revenues from services licensed under this Act from operators as provided under the Third Schedule; or
 - (f) impose a fine on a person who unlawfully possesses, installs, connects or operates any communications equipment or apparatus, or unlawfully provides or performs any communication services.

(2) The Commission may confiscate any apparatus that is unlawfully possessed, installed, connected, or operated provided that the owner of the confiscated apparatus may appeal against the confiscation of the apparatus to the Tribunal.

In addition, it is important to bear in mind that amongst the regulatory functions, there are different regulatory responsibilities that may be shared among regulatory institutions in different ways.

Regulators with the same functions can be organised in different ways. In many European countries, the administration of telecommunications, radio and the postal sector was traditionally

assigned to one agency. In some countries the functions were separated among different agencies. To give a few European examples, in Ireland and Sweden, the respective regulators are responsible in their entirety for most regulatory functions. In the Netherlands, there is a separate agency handling radio administration issues. In the other EU member states, the regulatory responsibilities are split between ministries and NRAs.

Possible tasks and competences which can be granted to a regulator include:

In the Field of Telecommunications:

- Policy and legislation
- International Representation
 - *Regulation of the Market*
 - Prices
 - Quality of service
 - Competition
 - Interconnection
 - Universal Service
 - Fines
 - Consumer interests
- Licensing
- Spectrum Management
- Type Approval
- Fundamental Plans (e.g. numbering ...)

In the Field of Postal services:

- Policy and legislation
- International Representation
- Quality of Service
- Consumer interests

In the Field of Media and Broadcasting:

- Broadcasting carriage regulation
- Broadcasting spectrum allocation
- *Content Regulation*

In Other Sectors (e.g. electricity, transport, gas, and other public utilities...)

As can be seen from examples globally, there is currently a highly fragmented and inconsistent pattern of regulatory responsibilities amongst countries around the world for telecommunications, postal services, broadcasting and media matters. In addition, the communications market has become an increasingly important part of the global economy, and there is constant development and convergence in communications technologies. This has created new administrative tasks and a need to reorganize the administrative functions within the communications sector. There is also a need for new political solutions, and the division of tasks within the public administration is being re-defined in several countries so as to be more specifically determined.

It must be remembered though that the issue of competences of the Authority is really a question of delegation of powers of the State and the degree of delegation of such powers really depends on the political tradition and context of the country.

Taking into account the points mentioned above, it is suggested that for the ECOWAS countries, it is vital that the powers of the Minister be clearly defined and added to the legislative section on the Powers and Duties of the Commission.

4.2.3.3 KEY ISSUE 3: Structure and functioning of the regulator

Key issues relating to the structure and functioning of the Commission include:
Commission and Board
Establishment of the Commission and of its Board
– establish timing
 establish structure (DG/Commission/)
Composition of the Board
– number of members
 appointment mechanism (who, how)
 background and criteria for choice (e.g. experience, professional background)
Duties of the Board
- enumerate duties of Board within context of duties of Regulator
Meetings of the Board
 how often how
 agenda and powers
Creation of Technical and Advisory Committees
Foresee possibility
Term of office of Board Members
- term
– stacking, if appropriate
– re-appointment
– schedule
Qualification for and termination of membership of the Board
– criteria for disqualification
Remuneration of Board Members
Vacation of Office
– reasons for vacation
Resignation
Reasons and procedures for resignation
Removal from Office
 procedures and reasons for removal
Suspension
– procedures
Filling Vacancies
– procedures
Meetings of the Board
 who regulates timetable for meetings
 place and time of meetings
 calling of meetings
– quorum
– procedures for vote (majority vs. unanimity and procedures for tie)
 chairing of meeting
 minutes of meetings
Declaration of interest
– procedures
Signification of Documents
Penalty
Directorate and Staff of the Regulator:
 Appointment and tasks of the Directorate/Staff Director General (nomination, qualifications, mandate, duties)
 – Director General (nonination, qualifications, mandate, duties) – Staff (appointment, qualifications, etc.)
Sum (appointment, quameations, etc.)

The structure and functioning of the Regulator merits careful consideration and will determine the real independence and effective powers of the Regulator. Basically, this relates to the leadership of the Regulatory Authority and how it functions and will impact on the organization of the Regulator as a whole.

International Best practice shows that, as regards the appointment of the Head of the Regulatory Authority, a number of principles are particularly relevant, namely:

- Members should be appointed on the basis of their competence and integrity rather than on political considerations.
- A consultative process in the selection of the members and of the CEO of the Authority seems to ensure the appointment of the best people.
- The appointment of the Members by different branches of the government can help in guaranteeing independence.
- Members should have appropriate professional qualifications.
- Members should be free from disqualification relevant to appointments to high public office as such, the office of Board Member or Director General of the NRA should be incompatible with offices in those organizations from which legal separation from the NRA is required.

As regards the term, it is clear that with a guaranteed and sufficiently long term of office, the head of the regulatory body can exercise regulatory power without considering political interests from outside his office. A possible solution is a term of 5 years with a mechanism for rotating members to ensure continuity.

Protection against arbitrary removal of any member of the Regulatory Authority is essential to ensuring the independence of the Authority. Some mechanism must be included to protect the integrity of the Authority though. One possible solution is to enable removal of a member for just cause (e.g. misconduct or incapacity), by providing for a mechanism similar to the case of the removal of ombudsmen, electoral officials, etc. whereby a recommendation by a judicial committee is sought.

The text of the Law will also depend on a number of decisions relating to the structure chosen.

In theory, collegial bodies offer a broader perspective for decision-making and allow for thorough consideration and debate of the issues. It should also allow the Regulator to be more independent, more objective, and less susceptible to regulatory capture.

That being said, there are variations on the model chosen, with collegial bodies differing in terms of number of members (varying from 3 to 15), authority of the collegial body, dedication of members (part-time or full-time), the background of members, and the nomination and possible termination of the duties and contract of the members. These are all issues which must be considered in the drafting of an ICT Law. This is also the case in the region, where a variety of models are present. Burkina Faso, for example has a Director General. Cape Verde has a full time 3-person Board. Côte d'Ivoire has a Director General and a Board consisting of 7 people, and Mali has a Director General with an Administrative Board. The Regulator of Niger has 5-person Board, and Senegal has a Director General and Regulatory Council. Togo has a 5-person Board.

Another example of how a Commission is structured is OPTA in the Netherlands. The supreme power of decision in OPTA in the Netherlands lies with a Commission. The Commission has three members (incl. the Chairman) who only work part time for OPTA and the head of OPTA is also the secretary of the Commission.

The Minister for the administrative sector appoints the members of the Commission and the head of OPTA. The Chairman works in OPTA four days a week, the second member works three days a week and the third member is a full-time employee outside OPTA. In practice, OPTA is led by the head of the organization itself, but he operates under the Commission and in line with its decisions.

In Portugal, the model is a 3-5 man full-time Board. Within ICP Anacom, the supreme power of decision lies with the Board of Directors, appointed by the Council of Ministers for a three-year period according to a proposal from the Minister. The Board of Directors has three members (Directors) and one of them acts as Chairman. The Board of Directors decides how the powers are assigned to the different units within the organization.

A clear example of the description of tasks and competences for the model which seems to be predominant in ECOWAS (Director General/Executive Director) is clearly reflected in the Uganda Communications Act, Part III, which states:

PART III—THE DIRECTORATE AND STAFF OF THE COMMISSION.

The Directorate

14 There shall be a directorate of the Commission which shall carry on the day to day implementation of the decisions of the Commission.

Executive Director.

15 (1) There shall be a full time Executive Director who Director shall be appointed by the Minister on the recommendation of the Commission on terms and conditions that the Commission may be determine.

(2) The Executive Director shall be a person having considerable knowledge and experience in communications, commerce, finance, law or administration.

(3) The Executive Director shall hold office for a period of five years and shall be eligible for re-appointment for a second term.

(4) The Minister may, on the recommendation of the Commission, terminate the services of the Executive Director before the expiration of five years for sufficient cause.

(5) The Executive Director shall be responsible for the day to day operations of the Commission.

(6) Subject to the provisions of this Act and the general supervision and control of the Commission, the Executive Director shall—

- (a) be the chief executive of the Commission:
- (b) implement the policies and programmes agreed upon by the Commission;
- (c) manage the funds and property of the Commission;
- (d) administer, organise, supervise and generally control the staff of the Directorate;
- (e) keep the Commission informed on the activities of the Directorate:
- (f) keep records of all the transactions of the Commission.
- (7) The Executive Director shall in the performance of the duties of the office be answerable to the Commission.

Secretary to the Commission.

16 (1) There shall be a Secretary to the Commission who Secretary to shall be appointed by the Commission on terms and conditions Commission that the Commission may determine.

(2) The Secretary shall be responsible for the taking of all the minutes of the meetings of the Commission and shall perform all other duties that may be assigned to the Secretary by the Commission or the Executive Director.

(3) The Secretary shall, in the discharge of the duties of the office be answerable to the *Executive Director*.

Other staff.

17 (1) The Directorate shall have other of ricers and employees as the Commission may deem necessary for the effective discharge of its functions.

(2) The Commission may establish pension or superannuation schemes and such other financial schemes as it may determine for the benefit of its officers and employees.

Protection of employees

18 No act or omission by any officer or employee of the Commission done in good faith in the execution of that officer or employee's duties shall render that officer or employee personally liable to any civil action or other civil proceedings in respect thereof.

This model has the benefit, if properly implemented, of providing the (Executive) Director with the necessary power to be able to get on with his work, but still with a Commission (collegial body) to provide the necessary checks and balances on key issues so as to help prevent biased or hasty decisions.

The key here is really to properly implement the model, amongst others by defining clearly who does what so that each of the organs and all other stakeholders understand clearly where each of the organs respective mandates begin and by ensuring that the mandate of the Executive Director in particular is as stable as possible, and is as protected against political capture as far as possible. Such provisions will provide a mechanism to avoid that the organization grinds to a halt because of political influences or personal conflict between the Commission and its Executive Director.

Within this context, it is also very important to ensure that there is a difference in the appointment mechanism of the Executive Director as opposed to the Commission.

In Kenya, for example, the Chairman is appointed by the President, while the DG and other Board members are appointed by the Minister.

The approach that has most recently been adopted by Saudi Arabia is to have the head of the Commission appointed by the head of state, and the other members of the Commission appointed by Cabinet. This approach may lead to greater independence, since no single group in government has authority to appoint the whole Commission.

In Malawi, it is the President who appoints the members of the Authority and who appoints one of the members of the Authority as chairman. The Minister, on the other hand, on the recommendation of the Authority, appoints the Director General of the Authority, who is responsible for the direction of a supervision body over the work and staff of the Authority.

It is essential to ensure that the Executive Director cannot be shut out of the decision-making process except under very specific circumstances. An example of how this is worded is in the Malawi Act, where it is provided that:

(3) the Director General or, in his absence, the Deputy Director General, shall attend meetings of the Authority and of any committees of the Authority and may address such meetings, but shall not vote on any matter: Provided that the person presiding at any meeting may, for good cause, require the Director General or the Deputy Director General to withdraw from such meetings. What is also important is that the Executive Director participates in Board meetings but that he does not have voting rights.

Another issue which is of particularly importance is to ensure that only people with the requisite experience are appointed in the positions of Director General and indeed in the Commission positions too and that the appointment process ensures the competence, proper functioning, independence and accountability of the Commission.

A good example of such requirements is Paragraph 122 of Austria's Telecommunications Act, which stipulates that of the three Commissioners, one member shall belong to the judiciary. Of the two other members, one member should have relevant technical knowledge and the other should have relevant legal and economic expertise.

The Malawi Act, for example, states:

- 6 Membership of the Authority
- (1) the Authority shall consist of a Chairman and -
 - (a) Six other members appointed in accordance with the provisions of section 7;
 - (b) The following members ex officio-
 - (i) the Secretary to the President and Cabinet
 - (ii) the Secretary for Information.
- (2) Members of the Authority shall be persons who-
 - (a) are citizens resident in Malawi;
 - (b) possess qualifications, expertise and experience in any of the fields of posts, telecommunications, broadcasting, frequency planning, law, economics, business, finance, public administration and public affairs.
- (3) Members of the Authority shall serve part-time.
- (4) Any person who--
 - (a) is a member of Parliament;
 - (b) is Minister or Deputy Minister;
 - (c) is a member of a committee of a political party regional or national level, shall be disqualified from being appointed as a member Authority.

It is important to consider the term of appointment of the Commissioners. An appropriate term based on international best practice is between 3 and 5 years. A difference in terms between the Chairman and the deputy Commissioners also follows international best practice and is good since it will help ensure a balance between stability/continuity and new people/fresh ideas on the Commission.

The size of the Commission also has an impact on its practical functionality. Although it is sometimes argued that members of the Commission must represent all the different stakeholders in the sector to take account of the different views (like in Zambia, where members are nominated by the Minister responsible for communications, one by the Minister of Defense, one by the Minister of Home Affairs, one by the Farmers Union, one by the Zambian Consumer Protection Association, one by the Law Association of Zambia, one by the staff's Trade Union, and one having, in the opinion of the Minister, relevant qualifications or experience), international examples have shown that collegial bodies that are too large sometimes reduce cohesion and consistency and do not facilitate the decision-making process. It is therefore recommended that a 5-man Commission is the most appropriate structure.

It is also very important and especially in the early stages of its existence that the Executive Director/Director General have the necessary expertise and political clout at Commission level so as to be able to draft the Basic texts, put the organization in place, recruit the necessary staff, and lobby with government to get the necessary funding and additional resources, such as appropriate office space, etc. The Commission must, at the same time, be able to convince the stakeholders of their independence and credibility.

Although the organizational structure as such does not need to be detailed in the Telecommunications Act, it is important that the basic decisions are taken at this stage so that the necessary framework can be a part of the Telecommunications Act.

Along the lines of international best practice, it is suggested that issues relating to the protection of employees are also dealt with in the Basic Law such as:

xx. The Commission may establish pension or superannuation schemes and such other financial schemes as it may determine for the benefit of its officers and employees.

xx No act or omission by any officer or employee of the Commission done in good faith in the execution of that officer or employee's duties shall render that officer or employee personally liable to any civil action or other civil proceedings in respect thereof.

Regarding the Directorate and Staff of the Regulator, which will, "de facto" be the body of the organization and carry out the work, the Law should foresee (generally in the Common Law countries – Francophone countries will deal with this through decree – the principles remain the same though wherever they go.) a number of issues, namely:

- Appointment and tasks of the Directorate/Staff

Director General

- Nomination of the Director General
- Qualifications
- Mandate (timing and possibility of renewal)
- Duties and Responsibilities of the Director General

e.g.:

- be the chief executive of the Commission, implement the policies and programmes agreed upon by the Board ; manage the funds and property of the Commission; administer, organise, supervise and generally control the staff of the Directorate;
- keep the Commission Board informed on the activities of the Directorate:
- keep records of all the transactions of the Commission.

Other possible clauses:

- The Director General shall participate, in an advisory role, in the meetings of the Board of Directors during which he shall assume the sole role of reporter.
- The Director General shall represent the Regulator in relation to the State, the public administration and third parties.
- The Director General may delegate, for specific questions, part of his powers and prerogative to staff holding administrative posts.

Other staff

e.g.:

- The Directorate shall have other officers and employees as the Commission may deem necessary for the effective discharge of its functions.
- The Commission may establish pension or superannuation schemes and such other financial schemes as it may determine for the benefit of its officers and employees.
- Protection of Employees: No act or omission by any officer or employee of the Commission done in good faith in the execution of that officer or employee's duties shall render that officer or employee personally liable to any civil action or other civil proceedings in respect thereof.

The size of the authority usually depends on political direction and also on the size and complexity of the market. The principle is usually that the regulatory institution should:

- be lean
- comprise members and core staff to perform core functions
- have the freedom to appoint, exercise discipline, and remove staff
- be free to recruit staff on the basis of merit and should not be bound solely to recruiting staff from market operators and/or from the government departments
- be able to offer salary and terms of service, in line with responsibilities.

Several of these principles can and should be reflected in the Basic Law.

4.2.3.4 KEY ISSUE 4: Financing and other related provisions

Key issues to be included in the Law:

- The accountability should include mechanisms, such as annual reports or legislative hearings, in which the regulator must demonstrate in a transparent manner that it has properly exercised its mandate
- funding

Clauses to be included are:

- funds of the Commission
- annual budget
- annual report
- auditors

The independence of the Regulatory Authority does not mean independence from the laws and politics of the country. As such, the Regulatory Authority should be accountable to legislatures or other government bodies. Reporting is useful in the sense that it summarizes results of regulatory activity and the associated costs and this should be provided for in the Law.

The accountability should include mechanisms, such as annual reports or legislative hearings, in which the regulator must demonstrate in a transparent manner that it has properly exercised its mandate.

In order to promote the independence of the Regulatory Authority, though, it must be guaranteed that these reporting obligations do not re-enforce influences which the institutional separation intended to exclude.

It is also essential to provide adequate funding for the regulatory process- funding is required to create the necessary infrastructure and hire good staff to implement regulatory objectives.

There are basically two ways to finance the regulators budget:

- Through the provision of general government budget appropriations this is the mechanism which was used in the past, particularly when the functions were carried out within Ministries or by the PTT Administrations. Some countries still use government appropriations examples are Australia, the Czech Republic, France, Japan, Korea, Mexico, New Zealand, Poland and Turkey. Of these examples, it is interesting to note that the Regulatory Authority in Australia and France are financed directly from the national budget, with the Australian Regulator's cost of operation being provided by the budget and all its revenue being returned to the budget.
- Through the levying of license and spectrum fees in this case, the cost of regulation is divided amongst the sector. A typical case is through a levy where licensed telecommunications operators will pay a levy in proportion to their gross telecommunications revenue.

In order to promote independence, a number of principles are important:

- In case of financing by levies or fees paid by market operators, the obligation to pay must be such that it is guaranteed that the NRA actions and judgments will not be affected by the financing method.
- Where financing occurs through the State budget, it must be guaranteed that there is no influence by the government department responsible for holding government shares in the incumbent and other market operators.

4.2.3.5 KEY ISSUE 5: Regulatory Functions

Regulatory Functions and Issues usually covered in the Basic Law (or in the Decrees) generally include provisions relating to:

LICENCES AND FREQUENCY AUTHORISATIONS

- Requirement for a licence
- Obligations with respect to licences
- Conditions of licences
- Obligations of licensees
- Obligations of all operators of telecommunications networks and providers of telecommunications services
- Requirement for a frequency authorisation
- Obligations with respect to frequency authorisations
- Conditions of frequency authorizations
- Authorisation to operate in territorial waters or airspace
- Suspension and termination of licences and frequency authorisations
- Amendment of licences and frequency authorisations
- Renewal of licences and frequency authorisations
- Special licences

INTERCONNECTION AND ACCESS TO FACILITIES

- Interconnection
- Access to facilities

UNIVERSAL SERVICE/ACCESS AND PRICES

- Universal service/access
- Prices

SPECTRUM MANAGEMENT, NUMBERING AND DOMAIN NAME MANAGEMENT

- Spectrum
- Allocation of frequency bands
- Exercise of functions
- Monitoring
- Harmful interference
- Space segment
- Numbering plan
- Domain name management

The present project is proposing guidelines on a number of these key regulatory issues, including licensing, interconnection, scarce resources management (numbering and spectrum) and universal service/access. These separate reports will include guidelines on the key regulatory issues.

Other issues generally covered in a Basic Law (or the decrees):

- Terminal Equipment, Standards and Testing Issues
- Competition Policy
- Sanctions
- Enforcement of the Law and Investigation and Inspection Powers of the Regulator
- Miscellaneous issues such as transitional provisions, emergency communications, etc.

Annex 1

International Practices

1 European Union

A new regulatory framework was adopted in 2002 by the EU, in particular in order to respond to **convergence** trends (i.e. the trend for similar services to be delivered over different types of network) by **covering all electronic communications networks and services within its scope**. It builds on the conclusions of a process of public consultation and review.

The central feature of the new system is that a coherent regulatory framework applies to **all transmission infrastructures**, irrespective of the types of services carried over them (a 'horizontal' approach). The new framework therefore covers all electronic communications networks (including those used to carry broadcasting content such as cable television networks, terrestrial broadcasting networks, and satellite broadcasting networks), associated facilities and electronic communications services.

It should be noted that **content services** (eg broadcast content, e-commerce services) are **outside the scope** of the framework. Thus the regulation of content broadcast over electronic communications networks (e.g. radio and television programmes or TV bouquets) remains outside the scope of the framework.

The 2003 regulatory framework is contained in seven texts:

- Directive 2002/.../EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, ("Framework Directive");
- Directive 2002/.../EC of the European Parliament and of the Council on the authorisation of electronic communications networks and services, ("Authorisation Directive");
- Directive 2002/.../EC of the European Parliament and of the Council on access to, and interconnection of, electronic communications networks and associated facilities ("Access Directive");
- Directive 2002/.../EC of the European Parliament and of the Council on universal service and users' rights relating to electronic communications networks and services ("Universal Service Directive"); and
- Directive [2002/.../EC] of the European Parliament and of the Council concerning the processing of personal data and the protection of privacy in the electronic communications sector ("Data Protection Directive").

In addition, there is a further Directive consolidating the existing « liberalisation » directives applicable to telecommunications. Finally, there is also an EU Decision on a regulatory framework for radio spectrum policy in the European Community, which establishes a policy and legal framework in the Community in order to achieve the harmonisation of the use of the radio spectrum (« **Radio Spectrum Decision**").

2 Mauritius

Government, having recognized the potential of the ICT sector to become the fifth pillar of the economy to provide more remunerative employment, and to place Mauritius in the league of top performers in the global economy, has accelerated the liberalization of the telecommunications sector by an early termination of the exclusivity of the incumbent operator as from 1st January 2003. Government is also aware that policy formulation for the reform of the telecommunications sector must take into consideration the short- and long-term national objectives and the ever-changing social, economic, political, and technological conditions.

The current policies have thus to be revisited to make them more responsive to the new opportunities and challenges of the telecommunications sector through technological convergence and interoperability.

The National Telecommunications Policy of 2004 outlines the overall policy objectives and targets for the telecommunications sector and spells out the strategies to be adopted. It also sets out the methodology to ensure fair, effective and sustainable competition for the new market paradigm.

The salient features of this policy comprise the following:

- Transformation of the telecommunication market structure and regulation towards a more liberal, technologically-neutral and competitive one
- Creation of a conducive environment to attract new investments and players
- Establishment and promotion of the National Information Infrastructure
- Consolidation of the independence of the regulatory authority
- Provision of adequate info-communications services access at affordable prices
- Development of management strategies for the use of scarce resources
- Introduction of code of practice for service providers.
- Promotion of technology innovation and competition

The major pillars of the NTP-2004 include implementing and fostering competition in the telecommunications services market, over the coming years and paving the way for the adoption of the concept of convergence of Information Technology, media, telecommunications and consumer electronics.

The Ministry of IT and Telecommunications is responsible for the elaboration of policies to ensure that challenges facing telecommunications businesses are adequately dealt with. Government recognizes the importance of continuously monitoring its policies and the value of the national ICT assets in linking to the sector reform programmes.

To achieve this objective, a new IT strategy for an innovative and coordinated implementation of Government IT initiatives and other IT projects will be announced shortly by this Ministry.

The Vision of the 2004 Policy

To create a telecommunication environment that allows optimal opportunities for all, citizens and businesses alike, to participate fully in the modern global information economy.

The Mission of the 2004 Policy

The National Telecommunications Policy (NTP) purports to provide the means to achieve such growth and development in the telecommunications sector to make it a modern and dynamic component of the economy

Objectives of the 2004 Policy

- To promote Mauritius as a key info-communication hub in the region
- To create a modern, secure, robust and efficient telecommunication infrastructure taking into account the convergence of info-communications, media, telecommunications and consumer electronics
- To ensure ubiquitous access to affordable info-communications services
- To provide wider consumer choice
- To promote smooth entry of new operators in the telecommunications sector
- To attract private investment for the development of the telecommunications sector through effective competition
- To ensure equitable access to scarce national resources
- To reinforce national security interests in the new liberalized telecommunication environment
- To encourage research and development (R & D) to facilitate the absorption of new technology and to upgrade the telecommunication facilities and services

In order to achieve the above objectives, it will be necessary to consolidate mechanisms and build upon market-oriented policies to create an enabling framework for the development of this industry as follows:

- To create the conditions for the adoption of cutting-edge and convergent infocommunications technologies.
- To introduce by the end December 2004 a Convergence Act, which will combine information technology, media and telecommunications.
- To create conditions for sustained private investment in the telecommunications sector by ensuring transparent policies.
- To ensure the efficient management of scarce resources, including the radio frequency spectrum, telephone numbering, and info-communications infrastructure
- To expand the telecommunication services in a systematic and comprehensive manner to foster the development of innovative services.
- To ensure reasonable quality of service at affordable prices.
- To promote mechanisms of low-cost access to info-communications including wireless services.

Targets of the 2004 Policy

In order to ensure that measurable progress is made in the achievement of these objectives, specific targets have been identified as set out hereunder:

- Increase fixed telephone density from 28% to 35% by 2005
- Increase mobile cellular telephone density from 37% to 50% by 2005
- Extend broadband connectivity to all business hubs within the country by 2006
- Provide at least 30% of household with broadband connectivity by 2008
- Provide at least 50% of household with Internet connectivity by 2008.

3 COMESA

This document formulates a policy model for the harmonious development and application of ICTs within member states with a view to turning COMESA into an information society. It is meant to motivate the COMESA region to embark on a programme for the development and application of ICTs that will eventually turn COMESA into an information society in the footstep of the developed economies. To achieve, this goal COMESA has to modernise its information infrastructure, promote the extensive use of telephones, computers, delivery, receiving and other intelligent devices, the development of local content, and pay attention to other relevant issues.

The absence of a number of factors currently inhibits the development and application of ICTs in COMESA. These inhibiting factors will have to be removed immediately to allow COMESA to enhance its information and communications processing capacity.

The driving factors that are needed are the following:

- a) A facilitative policy, legal and regulatory framework;
- b) Encourage research and development in ICTs;
- c) Investment capacity of network and service providers;
- d) Technology challenges;
- e) Management of competition;
- f) Recognition and development of skills in ICTs;
- g) Affordability of users;
- h) Universal service/access;
- i) Awareness and literacy of population and potential users;
- j) Human Resources Development;
- k) Mainstreaming of gender and other empowerment issues to ensure inclusivity, internalisation, participation and achievement of the right to communicate by all; and
- 1) Effective participation in regional and global e-governance.

The policy proposed covers the promotion of the development of telecommunications infrastructure and services, as well as certain aspects relating to the development of infrastructure for information services. The institutional regulatory framework proposed applies to all communications services including broadcasting, posts, telecommunications, and Internet based services. However, separate regional policies/guidelines will be developed to address the specific requirements of broadcasting, Internet and postal services.

Similarly, policy guidelines on the promotion and use of ICT applications, for example, e-commerce, e-education, e-government, e-agriculture, e-health etc, will be addressed in separate documents in the future.

BACKGROUND, CHALLENGES AND OPPORTUNITIES

The vision of the Common Market for Eastern and Southern Africa (COMESA) is to have a fully integrated, competitive regional economic community, through increased co-operation and integration in all fields of development, particularly in trade, customs, and monetary affairs; transportation, communications, broadcasting, industry, information, technology, energy, gender, agriculture, environment and natural resources.

A large scale and modern infrastructure in COMESA, capable of delivering information and communications technology (ICT) services, is recognised as an enabler of economic growth, regional integration and social development. The availability of adequate communications links

within both individual countries, the region and internationally is accepted by stakeholders as an essential instrument to facilitate intra-COMESA and extra-COMESA trade.

Furthermore, the third millennium, which is an information and knowledge-exchange Driven millennium, raises the importance of reliable ICT services as a key national and regional resource. The effort of COMESA toward regional integration, in the light of fundamental changes in information and communications technology and global market processes, is to pursue the economic betterment of its population.

To do so, one of the key enabling factors is an adequate and efficient ICT infrastructure. A number of studies have shown the relationship between ICTs and economic growth. Economic studies for the ITU, for instance, indicate that each line added in Africa contributes approximately US \$ 4500 to Gross National Product (GNP). However, it is acknowledged in the region and confirmed through various studies, including those of the International Telecommunication Union (ITU), that there is a serious inadequacy of ICT infrastructure and applications capacity in Africa.

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The COMESA Treaty mandates the adoption of a common telecommunications policy as a strategy for the development of the national and regional telecommunications infrastructures from their present state of under-capacity to an integrated and modern telecommunications networks.

A study on regulatory frameworks in the COMESA region, which was completed in the Year 2001, found that the member states are at different stages of implementing ICT policies in efforts to improve infrastructure and services through enhanced efficiency and increased investment. Therefore, the need to harmonize such policies through the adoption of a common policy becomes urgent.

A common policy on ICTs becomes even more crucial in this period of globalisation of the world economy where, one of its elements, telecommunications, is reckoned as both a tradable service and a transport medium for ICT services. In this context, the capability of individual countries to participate effectively in the delivery of services is likely to contribute to stronger regional co-operation, leading to two benefits.

Firstly, as a region with a population of 357 millions, COMESA could use its combined strengths, on one hand, to resist competitive threats and, on the other hand, to take advantage of the opportunities that emerges in the global market, such as the transport of international ICT traffic. Secondly, the region presents a larger market to private investors who could find an opportunity to achieve standardization and economies of scale, factors that may be decisive in investment decisions.

The COMESA agenda is to deepen and broaden the integration process among Member States through the adoption of more comprehensive trade liberation measures such as the complete elimination of tariff and non-tariff barriers to trade and elimination of customs duties; through the free movement of capital, labour, goods and the right of establishment; by promoting standardized technical specifications, standardization and quality control; through the elimination of controls on the movement of goods and individuals; by standardizing taxation rates (including value added tax and excise duties), and conditions regarding industrial co-operation, particularly on company laws, intellectual property rights and investment laws; through the promotion of the adoption of a single currency and the establishment of a Monetary Union; and through the adoption of a Common External Tariff (CET).

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The Information and Communications technologies (ICTs) constitute a possible response to that situation. They offer in fact the ability to connect vast networks of individuals across geographic

boundaries. This is why policies and decisions about the promotion of the use of ICT are critical in determining which way to be followed for a faster development.

While Article 96 of the COMESA Treaty mandates the adoption of a common telecommunications policy, Article 97 calls for co-operation among member states on technical matters and the electronic media that will promote the development of the Common Market through the establishment of direct radio and television links. This means that a regional policy cannot address content. Article 95 of the Treaty require COMESA to promote close co-operation among its postal administrations and to devise ways and means to achieve fast, reliable, economic and efficient postal services across the region.

In executing the above mandate, some projects to improve the telecommunications sector have been designed, such as the interconnectivity of the telecommunications network within the region, with the aim of offering to the end user a reliable and affordable service and the ongoing project of Harmonization of ICT Regulatory frameworks.

With the recent phenomenon of convergence of technologies, it becomes imperative to launch an ICT policy and concrete actions with a view to respond, on the one hand to COMESA's objectives, and on the other hand to the bigger issue of how the economically disadvantaged sections of the region, particularly in rural areas, which constitute the majority of the population, will be able to benefit from new ICT applications considering the twin limitations of ability to pay and lack of sufficient education.

The prevailing level of investment has been insufficient to satisfy demand. The scaling-up and modernization of ICT infrastructure to provide the requisite bandwidth to meet current and future demand for national, regional and global ICT services, require major capital injection, far above current trends. Unfortunately, domestic, bilateral and multilateral investment in ICTs has been either not forthcoming or grossly inadequate and, in many cases, declining. The recent economic down turn has worsened the situation.

From a government's budget perspective, sectors, like housing, education and health, usually consume a larger proportion of any government's budget and demand for funds from ICTs is consequently relegated to lower priority. The attitude adopted is that ICT enterprises are in a position to raise funds from their own operation and from external sources. However, at the same time, the enterprises in most countries are undercapitalized, they are not entirely free to raise capital and cannot get access to external resources without guarantee from government. Consequently, the enterprises have had generally to rely entirely on their inadequate internally generated funds and direct or indirect government subventions for their expansion and operations, with the result that they are out of phase with market evolution. Furthermore, in the past it was not recognized that the wise management of the ICTs sector through facilitative policies could greatly improve ICT infrastructure and services as well as the utilization of available resources for social services.

The lack of a harmonized regional ICT policy framework will continue to limit the ability of the region to attract investment in regional and national ICT operations if timely remedial measures are not taken.

VISION, GOALS AND OBJECTIVES

Vision

COMESA, a sub-region where the effective use and application of ICTs enhances and accelerates economic growth, social development and regional integration and contributes to the achievement of the objectives of the African Union and NEPAD.

Goal

To promote the development and application of ICTs, through the implementation of facilitative and harmonized policies, with a view to achieving the widest use of and access to information throughout the sub-region within a reasonable period.

This document formulates a policy model for the harmonious development and application of ICTs within member states with a view to turning COMESA into an information society.

Goals

The objectives of the information-based development:

- a) Facilitate economic growth, sustainable development and wealth creation in COMESA;
- b) Improve the quality of life of citizens in COMESA through better education, improved health services and job creation;
- c) Create an engine for socio-economic development;
- d) Address development gaps as they relate to women, the youth, and rural and other disadvantaged groups;
- e) Achieve progress towards the social goals of ICTs policy e.g. the provision of universal service and universal access;
- f) Ensure the provision of a wide range of ICT services to stimulate and support sustainable social economic growth;
- g) Stimulate investment in the public ICT network;
- h) Stimulate innovation in the ICT industry with a view to provide advanced information services;

POLICY OBJECTIVES

For the timely provision of reliable, effective, adequate and sustainable basic and advanced ICT services as a crucial tool for meeting the developmental needs of the region, as well as a trade in services in its own right, a new policy framework seeks to achieve the following objectives:

1.3.1 Affordable, ubiquitous and High Quality Services

To ensure affordable, ubiquitous and high quality services in response to the diverse needs of commerce and industry, and in support of general social and economic growth; and to enhance regional service inter-connectivity

1.3.2 Building a Competitive Regional ICT Sector

To build a regional ICTs industry that is continentally and globally competitive by expanding and strengthening of government's capacity to provide predictable strategic development policy framework; developing regulatory and investor-friendly legislation for attracting local and foreign investors; promoting competition where it is allowed; promoting the viability of public ICT operations; monitoring compliance with such policy and legislation; and effective participation in fora of governance.

1.3.3 Creating an Environment for Sustainable ICT diffusion and development

To create an attractive and dynamic business environment for sustainable industry development through economic and institutional restructuring of the industry, including capital investment options; promotion of a fair competitive and stable environment; management of scarce resources; development of local manufacturing facilities; encouragement of indigenous participation; enhancement of capacity and capability of operators and service providers; provision of network access on reasonable and non-discriminatory terms and conditions; technology transfer and the development of a general framework for trade in ICT services.

The achievement of the above objectives will call for adoption by member states of new approaches including those which are summarised below.

Interconnectivity between operators and services providers

Now that in a majority of member states there is no longer only one supplier for all services, the new providers of service will have to interconnect with the existing supplier's network for provision of services and share existing infrastructure with the latter. The principle that interconnection cannot be denied to the applicant has to be laid down in legislation as well as the modalities thereof.

– Universal service/Access

With the introduction of new entrants, national objectives such as the attainment of universal service/access goals cannot be left only to the incumbent operators. Although all players in the market will be required to share the "burden" of universal service/access obligations, the implementation of these obligations must be managed in such a way as not to become counter productive, so as not, for example, to defeat the ends of competition.

– Regulatory reform

Provisions relating to the transition from a monopoly regime to a competitive environment will have to be introduced in legislation, and, as competition develops and is eventually established, regulation should progressively be reduced or reformed.

– Trade in Services

One of the overall objectives of COMESA is to promote trade of goods and services at regional level. The ICT sector offers not only a big opportunity for the investors, but also constitutes the pillar of trade. The exchanges of goods and services are made possible and are facilitated by reliable networks of info-communications, which drives the need to stimulate investments in the ICT sector.

– Licensing

An appropriate licensing regime, which is transparent and conducive to investment in the sector, will have to be set up and consideration may have to be given to allowing a simple authorisation procedure such as class licensing or mere registration in specified services. Tariffs that will promote affordability and competition should be encouraged.

- Removal of barriers to new entrants

The new entrant will also be having a claim to national scarce resources such as frequency spectrum and numbering plan, which previously used to be available for the exclusive use of the incumbent operator.

Technical Standards and workmanship

The fact that a diversity of service providers will enter the market will require that adequate technical standards be set, high levels of workmanship enforced and regulation be geared to encouragement of the introduction of new and emerging services.

- Human Resources

It is widely recognised that ICT applications, when used in the right way and for the right purposes, can have a dramatic impact on achieving specific social and economic development goals as well as playing a key role in broader national development strategies. For that reason, attention should be given to raising ICT awareness and ICT literacy levels amongst all citizens so that they can take

advantage of the developing ICT tools. It is particularly important to ensure that there are adequate skilled human resources available to handle effective and transparent policy-making and regulation; and to promote and develop the use of /access to ICT services in all socio-economic sectors.

Public and private sector organisations should be encouraged to introduce and foster strategic human resources development plans that will empower people to participate fully in the ICT sector The development of ICT skills to promote efficient and cost-oriented delivery of ICT services is also essential.

- Regulatory Framework

The regulatory framework and the business environment will be expected to promote and foster both best business practices and the code of conduct of the sector.

– Partnerships

As the ICT sector is still changing rapidly and continuously, best practices to create and develop partnerships, including sub-regional partnerships, and partnerships between public and private sectors, consisting of both local and foreign institutions, must be facilitated.

Establishment of regulatory authorities

It will be necessary to set up regulatory bodies which adequately convey to the market the perception of being independent supervise the implementation of the above policies and regulate the industry where required, whilst bearing in mind that regulation has to be facilitative, minimal and geared towards the objectives of ICT as a tool for sustainable and successful development of a liberalised market. The regulatory bodies where they exist may require to be strengthened so that they may fully their mission.

- Gender Equity and Empowerment

Employment of women and men at all levels in the public and private sectors should be on equitable basis. ICT services should similarly be accessible on equitable basis. Also, policies of recruitment, training and advancement of women and men should be conceived and implemented on a fair and equitable basis.

– Institutional Rationalisation

Institutional arrangements for co-ordinating the implementation of the common policy at national and regional level, leading eventually to the establishment of a regional regulator or mechanism with jurisdiction over the regulation of cross-border services and related issues as envisaged in Article 96 (j) of the Treaty should be put in place.

– Information Security

The rapidly expanding use of ICT tools is introducing new security challenges to exchanged information through peer-to-peer applications. The later carry many potential security risks and by their nature, undermine precautions taken by many enterprises/organisations, and more recently individual users.

The regulatory authorities should develop in close collaboration with the professional in Information Systems Security, a policy framework of sharing information on products and software weaknesses so that vendors, providers and users participate in the development of up-to-date mechanisms and regulation of Information Security.

Efforts should be made to raise awareness on the dramatic impact of misusing information and/or bypassing security systems for harmful purposes. Serious sanctions should be determined and made publicly known for those who don't comply with the rules and conventions.

The above may be considered as the minimal issues that need to be addressed in a new policy framework. The appropriate policies may then be reflected in legislative provisions to be adopted by each country so as to adjust the national legislation and regulations to the needs of ICT development and a buoyant ICT sector and industry, thus setting up a pro-competitive environment not only for the ICT sector but also for other economic sectors.

Annex 2

Examples of useful websites regarding ICT policies and laws

The Following links can provide useful examples of ICT Policies and Laws around the world:

Chile - Agenda Digital, 2004 (SUBTEL), this document lists and describes the 34 initiatives Chile intends to carry out between now and 2010, in particular those that will be carried out during the 2004-2006 period. The Agenda Digital website is completely dedicated to keeping everyone informed on the accomplishments/laws/policies in this area.

http://www.agendadigital.cl/agenda_digital/agendadigital.nsf/vwDocumentosWeb

http://www.agendadigital.cl

India - Information Technology Act, 2000 (Department of Information Technology)

http://www.mit.gov.in/itbillonline/it_framef.asp and/or http://www.mit.gov.in/it-bill.asp

Lithuania - Electronic Communications Law, 2004 (came into force May 2004; Parliament of the Republic of Lithuania)

http://www3.lrs.lt/cgi-bin/pres2?Condition1=242679

Mauritius - 2001 ICT Law

http://www.icta.mu/icta/documents/laws/ictact.pdf

Tanzania - National ICT Policy (March 2003)

http://www.moct.go.tz/ (and click on National ICT Policy to get to PDF document)

Other countries which have ICT/Electronic Communications laws/policies, etc., but which unfortunately cannot be found online are:

Angola: Strategy for the Development of Information Technology 2000-2010

Argentina: Programa Nacional para la Sociedad de la Información, 2000 (Decreto 252)

Cyprus: Electronic Communications and Postal Regulation Law, 2004

Estonia: Information Society Service Act, 2004

(The) Gambia: The National Information and Communication Technology Infrastructure Policy (currently being reviewed)

Annex 3

Guidelines for establishing a national ICT policy and law

1 GUIDELINES FOR A MODEL ICT POLICY

1.1 Introduction

- 1.1.1 In establishing ICT policy and policy goals, it is necessary to consider the macro environment responds to the question: "What is it in the social, economic, legal, and political environment that needs to be taken into account in order to ensure that policy is responsive and will be successful?" Policy can then be shaped, and specific policy objectives formulated in a realistic and achievable manner.
- 1.1.2 At the same time, sufficient consideration must also be given to the institutional framework governing the ICT policies. A certain level of cooperation among the agencies responsible for the different sectors that make up information and communication technology must take place initially, with the ultimate goal being a merger of such tasks under single political direction.
- 1.1.3 Key questions regarding ICT policy are:
 - What are the objectives of ICT policy?
 - How does it link to legislation and regulation?
 - Who are the key players nationally and globally?
 - Who governs the internet?
 - How has telecommunications reform evolved?
 - What are the objectives of regulation and how does it work?
 - What are key reform and regulatory issues and their consequences?
 - What can be done to make decision-making processes more participatory, democratic and transparent?

1.2 Guidelines

- 1.2.1 Within this context, ECOWAS Member States have adopted the following guidelines relating to a model ICT Policy:
 - ICT policy must give prime focus to the sector so that policy makers do not get distracted by attempting to include too many issues and/or sectors to be covered by such a policy.
 - ICT Policy should address the following objectives:
 - Increasing the benefits from information technology for the country
 - -Building and contributing to a competitive national and regional ICT sector respectively
 - Providing affordable, ubiquitous and high quality services
 - Creating an enabling environment for sustainable ICT diffusion and development
 - Providing wide-spread access to ICT, including broadband through relevant universal access policies and programs. Some key actions which generally help in the further development of NII and the fulfilment of universal access goals are:
 - Provision of broadband capacity
 - Availability of services at affordable costs

- Establishment of international reliability and redundancy standards
- Ensuring adequate capacity to provide service on demand
- Accessibility of services by the large majority of consumers
- Facilitating the delivery of a wide range of value-added services
- Facilitating the chance to access information
- Encouraging innovations in technology development and use of technology
- Promoting information sharing, transparency and accountability and reducing bureaucracy within and between organizations, and towards the public at large
- -Attaining a specified minimum level of information technology resources for educational institutions and government agencies
- Providing individuals and organizations with a minimum level of ICT knowledge, and the ability to keep it up to date
- -Helping to understand information technology, its development and its crossdisciplinary impact.
- Key Challenges to the adoption of an acceptable and sustainable ICT Policy include:
 - Promotion of Stakeholder awareness
 - Promote stakeholder participation and constitution building throughout society
 - Start early e.g. through Internet to school programs
 - Guarantee of broad-based Stakeholder participation and planning
 - Promote ICT capacity-building throughout the sector through workshops, seminars, media events and pilot projects to show practical benefits of ICTS
 - Cultivate ICT champions
 - Political buy-in/champions on a local and national level
 - Ensure communication between interested parties (regulator, ministries, private sector, NGOs, beneficiaries)
 - Ensure local politics participation and buy in
 - Ensure that ICT Policy is tailored to realities of market, amongst others through prior analysis of situation and participation of local actors in process
 - Coordination with other policies/priorities
 - Stay focused on objectives of ICT Policy but do not ignore the synergy between sectors
 - Relevance and usefulness of policy and projects
 - Aim for innovation (e.g Grameen-type projects)
 - Define targets (e.g.: Internet to municipalities, broadband to rural areas,...)
 - Provide for revision clauses so that the ICT Policy can be amended to be adapted to market realities
 - Transparent Decision Making Procedures
 - Member States in the Region should aim to adopt transparent decision-making and rule-making procedures relating to ICT Policy and Regulation.
 - Where ICT Policy is revised, Member States should strive to undertake public consultation, which could include market studies, so as to ensure a transparent rule-making and decision-making process.

- Sustainability of projects (training, financing, appropriateness of technologies)
 - Ensure sufficient training- make it part of the package
 - Technologies introduced through ICT initiatives must take account of realities
 - Timing must be appropriate
- Regional and International Framework

Coordinate with regional initiatives

2. GUIDELINES FOR A MODEL ICT LAW

2.1 The Following table of contents list the issues which are generally included in the basic telecommunications or ICT Law. In the French-speaking countries, the issues will be listed as principles and those principles will then be detailed in full in decrees or other implementing legislation. In the Common Law system, the Basic Law will generally contain detailed provision, with the regulator making further determinations and rules, as required.

2.2 TABLE OF CONTENTS:

PART I—PRELIMINARY

- 1. Short title
- 2. Objectives of the Act
- 3. Definitions

<u>RECOMMENDATION</u>:

Recently, more and more countries are expanding the scope of their telecommunications laws to adapt it to the realities being faced by the countries in the region - it is important to be clear though and to make sure that any changes or additions to the Law are clearly defined and consistent. Any term being added must, of course, be defined clearly.

Use international references and/or definitions such as those used in official ITU texts (e.g. Radio Regulations)

PART II – FUNCTIONS OF THE MINISTER

4. Functions of the Minister

RECOMMENDATION:

The responsibilities and mandate of each player must be clearly defined so that misunderstandings or duplication of efforts are avoided.

The division of tasks must be reflected in any Law governing the sector as it will determine the relationship between the different entities in the future and really determine the credibility of each in fulfilling their roles.

PART III—ESTABLISHMENT AND FUNCTIONS OF THE COMMISSION

<u>RECOMMENDATION</u>:

In the French-speaking countries, the details of these issues are generally dealt with in a separate Decree or other regulatory text. Procedural issues can be detailed in a schedule or in a separate Decree, as required.

Be clear and precise on the responsibilities and mandate of the regulator: this will assist the regulator in maintaining its independence, especially from political influence.

As regards the appointment of the Leadership of the Regulatory Authority, a number of principles are particularly relevant, namely:

- Members should be appointed on the basis of their competence and integrity rather than on political considerations.
- A consultative process in the selection of the members and of the CEO of the Authority seems to ensure the appointment of the best people.
- The appointment of the Members by different branches of the government can help in guaranteeing independence.
- Members should have appropriate professional qualifications.
- Members should be free from disqualification relevant to appointments to high public office as such, the office of Board Member or Director General of the NRA should be incompatible with offices in those organizations from which legal separation from the NRA is required.

Other issues to be covered are listed below:

- 5. Establishment of the Commission.
- 6. Functions of the Commission.
- 7. Powers of the Commission.
- 8. Composition of the Commission.
- 9. Disqualification from membership.
- 10. Vacation of Office of Commission.
- 11. Meetings of the Commission.
- 12. Remuneration of members.
- 13. Independence of the Commission.

PART IV—THE DIRECTORATE AND STAFF OF THE COMMISSION

- 14. Nomination of the The Directorate.
- 15. Powers and Tasks of the Executive Director/Director general.
- 16. Provisions relating to other staff.
- 17. Protection of employees.

PART V—FINANCIAL AND RELATED PROVISIONS

<u>RECOMMENDATION</u>: This is essential for the independence of the regulator and should be carefully worded.

ECOWAS Member States shall strive to ensure that the ICT Law provides sufficient power, independence and authority to the NRA for it to gather information and acquire the human and financial resources for it to impartially, swiftly and transparently carry out the will of the legislature.

In terms of funding, given the difficulties Member States have encountered with government appropriations to provide NRA funding, preference should be given to NRA self funding.

Issues to be covered include:

- 18. Funds of the Commission.
- 19. Annual accounts.

- 20. Audit and Control
- 21. Financial year.

PART VI - LICENCES AND FREQUENCY AUTHORISATIONS

<u>COMMENT</u> – The provisions relating to licensing are outlined in the licensing guidelines.

- 22. Requirement for a licence.
- 23. Obligations with respect to licences.
- 24. Conditions of licences.
- 25. Obligations of licensees.

26. Obligations of all operators of telecommunications networks and providers of telecommunications services.

- 27. Requirement for a frequency authorisation.
- 28. Obligations with respect to frequency authorisation.
- 29. Conditions of frequency authorisation.
- 30. Authorisation to operate in territorial waters or airspace.
- 31. Suspension and termination of licences and frequency authorisation.
- 32. Amendment of licences and frequency authorisation.
- 33. Directions to remedy breach of licence conditions.
- 34. Recourse.
- 35. Renewal of licences and frequency authorisation.
- 36. Special licences.

PART VII - INTERCONNECTION AND ACCESS TO FACILITIES

<u>COMMENT</u> – See Interconnection Guidelines for details.

- 37. Interconnection.
- 38. Access to facilities.
- 39. Infrastructure Sharing.
- 40. Dispute Resolution.

PART VIII - UNIVERSAL SERVICE/ACCESS AND PRICES

- <u>COMMENT</u> See Universal Service/Access Guidelines for details.
- 41. Universal access and universal service.
- 42. Prices.

PART IX - SPECTRUM MANAGEMENT, NUMBERING AND INTERNET GOVERNANCE

<u>COMMENT</u> – See Scarce Resources Guidelines for details.

- 43. Spectrum.
- 44. Allocation of frequency bands.
- 45. Exercise of functions.
- 46. Monitoring.

- 47. Harmful interference.
- 48. Space segment.
- 49. Numbering plan.
- 50. Internet Governance.

PART X TERMINAL EQUIPMENT AND TECHNICAL STANDARDS

- 51. Terminal equipment.
- 52. Standards.

PART XI TESTING AND INSPECTION

- 53. Power to request information.
- 54. Pre-installation testing
- 55. Standards for testing.
- 56. Entry, search and inspection.
- 57. Magistrate may issue warrant.

PART XII—DISPUTE RESOLUTION, ENFORCEMENT OF THE LAW, INVESTIGATION AND INSPECTION

<u>RECOMMENDATIONS</u>: Ensure that the ICT Law contains clear and unambiguous language describing the jurisdiction of the NRA in terms of dispute resolution and enforcement and describes, in particular the judicial or quasi-judicial powers of the regulatory authority and, where relevant, of other government agencies. Jurisdiction over service providers which are not licensed should also be provided for.

The ICT Law should also enable the regulatory authority to address new technologies and give powers to the regulatory authority to adjust to changes in the industry.

58. Dispute Resolution Mechanisms (mandate, definition, identification of alternative dispute resolution mechanisms, process, appeal).

- 59. Annual report on operations of licensee.
- 60. Investigation of complaints.
- 61. Power to institute inquiries.
- 62. Report on investigations.
- 63. Appointment of inspectors.
- 64. Powers of an inspector.
- 65. Search warrant.

PART XIII—FAIR COMPETITION AND EQUALITY OF TREATMENT

<u>RECOMMENDATION</u> –This is one of the key elements for regulation and should be defined clearly so that the regulator has the appropriate mandate and instruments to impose and accompany such a framework.

- 66. Commission to encourage fair competition.
- 67. Prohibition of acts exhibiting unfair competition.
- 68. Exceptions to fair competition.
- 69. Breach of fair competition.

- 70. Non-denial of service.
- 71. Equality of treatment.
- 72. Interconnection of network facilities.

PART XIV—CONSUMER RIGHTS AND OBLIGATIONS

- 73. Consumer Rights.
- 74. Consumer Obligations.

PART XV—SANCTIONS

<u>RECOMMENDATION</u>: Ensure that the ICT Law provides the regulatory authority with a wide range of sanctions to include those appropriate for minor, mid range and maximum offences.

- 75. Sanctions and penalties for unlicensed persons.
- 76. Interception and disclosure of messages.
- 77. Interception of Government communications.
- 78. Sending false distress signals, etc.
- 79. Sanctions in respect of radio communications.
- 80. Protection of telecommunication installations.
- 81. False advertisement.
- 82. Prosecution under other laws.
- 83. Action for damages.
- 84. General penalties.

PART XVI - ROAD WORKS AND ACCESS TO LAND

- 85. Road works.
- 86. Repair and restoration.
- 87. Access to lands for inspection and maintenance.
- 88. Installation of facilities on private land or buildings.

PART XVII-MISCELLANEOUS

- 89. Transitional provisions.
- 90. National Security and Public Policy Considerations.
- 91. Emergency Communications.

SCHEDULES:

e.g.: Meetings of the Commission.