

West African Common Market Project:

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

Final Guidelines

adopted by the 3rd WATRA OGM, 9 September 2005



European Union



International
Telecommunication
Union

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GUIDELINES FOR ESTABLISHING A NATIONAL ICT POLICY AND LAW

1. GUIDELINES ON 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 cross-disciplinary 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

RECOMMENDATION:

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

RECOMMENDATION:

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

RECOMMENDATION:

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

COMMENT – 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

COMMENT – See Interconnection Guidelines for details.

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

PART VIII – UNIVERSAL SERVICE/ACCESS AND PRICES

COMMENT – See Universal Service/Access Guidelines for details.

- 41. Universal access and universal service.
- 42. Prices.

PART IX – SPECTRUM MANAGEMENT, NUMBERING AND INTERNET GOVERNANCE

COMMENT – 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

RECOMMENDATIONS:

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

RECOMMENDATION:

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

RECOMMENDATION:

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.

GUIDELINES FOR INTERCONNECTION¹

1 GUIDELINES ON ASPECTS RELATING TO INFRASTRUCTURE ACCESS

Guidelines 1.1 – Access to the point of interconnection

The reference interconnect offer (RIO) of the operators must include a list of the subscriber-serving exchanges that have not been opened to interconnection for valid technical or security reasons, along with the expected timeline for opening those subscriber exchanges to interconnection.

However, in some cases the forwarding of the expected operator traffic to and from subscribers connected to one of the listed exchanges may justify the operator being required by the regulator to establish a transitional offer. This transitional offer should allow the requesting operator to take advantage of a fee schedule that reflects the costs which, in the absence of the technical access restrictions, would have been incurred for switching communications to or from, first, the subscribers connected to that exchange, and second, the subscribers who would have been accessible without the need for routing through a higher-echelon exchange.

Guidelines 1.2 – Local loop unbundling

Giving all new entrants access to the local loop heightens competition and stimulates technical innovation in the local access market, boosting competitive provision of a full range of telecommunication services offered to users, from simple voice telephony to broadband services.

Users can then select from among operators the one which provides the best value for money for the particular service or services desired. However, it should be borne in mind that unbundling taken to excess may in fact inhibit development of the local loop infrastructure, particularly in West Africa, where fixed-line teledensity is among the lowest in the world.

The recommendation is, therefore, that new entrants should be obliged, under their terms of reference, to install some minimum infrastructure capacity; and that the dominant operators should also provide access to copper pairs to the new entrant. The latter can then install its own transmission systems on those pairs, against remuneration. The new entrant should install its transmission equipment at the very end of the local loop, in order to connect these lines to its own network. The operator providing unbundling should also provide for the possibility of co-location on its premises, to facilitate unbundling.

An unbundling offer must be established by the dominant operators, subject to approval by the regulatory authority in the same way as the RIO. The authority should provide a list of the services to be included in the RIO.

The regulator must ensure that the new entrant is provided with the information needed for unbundling purposes (address and coverage of splitters, space required for co-location, quality of lines, lead-time for providing unbundled lines).

¹ For purposes of these guidelines, each time the term “dominant” is used, Member States should define the relevant market(s) for which operator(s) are dominant and define the criteria to measure such dominance.

We recommend that the "scissor test" be used to compare retail prices and unbundling prices and eliminate any anti-competitive practices by the dominant operators..

We recommend that the regulatory authorities ensure that, to the greatest extent possible, unbundling-relevant information between dominant operators and competitors be exchanged rapidly and in an automated electronic form.

In preparation for the liberalization of fixed communications, a schedule must be set up for unbundling. It is better to begin unbundling with shared line access, and advance to full access at a later stage. Bitstream access, which does not require co-location, may be an attractive option for ISPs because it allows them to offer high-speed services. In addition, the automatic exchanges need to be prepared so as to support the offering of co-location.

Guidelines 1.3 – Co-location

There should be an obligation for dominant operators to provide co-location. A co-location offer should be included in the RIO for network interconnection and the unbundling offer for unbundling. The technical and financial conditions of the offer should not create barriers to new entrants. In the case of interconnection without the possibility of co-location, new entrants will continue to depend on the dominant operators for the provision of the interconnection links. This may be a serious handicap in that the cost of the interconnection links (2 Mbit/s links) may be prohibitive, and the technical conditions imposed through the interconnection contract may be unfavourable for the competitor operator (fixed or mobile).

Where physical co-location is not feasible, for some valid reason (e.g. lack of space), an alternative co-location offer must be prepared by the dominant operators (e.g. in-span or virtual).

We recommend that the regulatory authority should have a map of self-contained routing switches that are open to interconnection and are available for competitors' co-location. To this end, a working group composed of the regulatory authority, the dominant operators and other operators (competitors) should, in a transparent fashion, examine the problems of co-location and reflect on different solutions in order to solve problems that might arise. The industry could be involved in the work of this group so as to bring its technical expertise to bear.

We recommend that the regulatory authority encourage the use of the co-mingling option, which has a short lead-time and is considerably less expensive than solutions involving physical co-location.

We recommend that the regulatory authority should work in advance on problems relating to access to premises, uninterrupted power, cooling and patch cables.

We recommend that the regulatory authority stifle any attempts to create entry barriers inherent to co-location, and that it resolve conflicts relating to it as rapidly as possible, in view of the fact that delays in the provision of this service mean delays in unbundling and in the possibility for the competing operator to provide its own interconnection links.

In this regard, we recommend that the regulatory authority establish a decision on the minimal set of conditions that must be fulfilled in any co-location offer, following consultation with the operators of public telecommunication networks. These conditions may lead to the specification, in every co-location offer, of the following:

- information on co-location sites:
- precise location of the operator's sites suitable for co-location;
- publication or notification of an updated list of sites;

- indication as to the availability of alternative solutions in the event that physical space for co-location is not available;
- information on what types of co-location are available, and on the availability of electric systems and cooling equipment on the sites, as well as the rules governing sub-leases for the co-location premises;
- indications on the time required to conduct feasibility studies for any co-location request;
- information on equipment characteristics and any restrictions on equipment that can be accepted for co-location;
- measures that operators offering co-location must take to ensure the security of their premises and to identify and resolve problems;
- conditions under which competing operator personnel may enter the premises;
- conditions under which competing operators and the regulator may inspect a site where there is physical co-location, and those where co-location has been refused on the grounds of lack of capacity.

Guidelines 1.4 – Passive infrastructure sharing

Recommendations

To foster and entrench competition as rapidly as possible, we recommend that the regulatory authorities impose infrastructure sharing.

The authorities should ensure that sharing between the operators of public telecommunication networks takes place under conditions of fairness, non-discrimination and equality of access.

Thus, the regulatory authority, in consultation with the other players, is encouraged to elaborate a procedure for handling relations between the operators of public telecommunication networks in the matter of the conditions and the sharing of infrastructure, in particular lead-times and access to the information needed to put it into place.

We recommend that, following European and other international best practices², the dominant operators and other operators make provision for posts, ducts and elevated points to be made available mutually on a commercial basis, in particular where there is limited access to such resources (natural or structural obstacles).

The revision of the telecommunication laws of the countries of West Africa must include a clause on the obligation of infrastructure sharing.

Recommendations

To foster and entrench competition as rapidly as possible, we recommend that the regulatory authorities encourage access to alternative infrastructure on the basis of commercial negotiations.

The authorities should ensure that such access is shared under conditions of fairness, non-discrimination and equality of access.

The revision of the telecommunication laws of the countries of West Africa must include a clause on access to alternative infrastructure.

The status of companies providing access to alternative infrastructure must be changed to include this service.

² Reference is made to international best practices that should be adapted to the sub-regional context.

2 GUIDELINES ON ASPECTS RELATING TO COMPETITION

Guidelines 2.1 – Carrier selection

We consider that one of the prerequisites for developing competition in a liberalized market is that consumers should be able to freely choose their operator, and have access to the services of an alternative operator. Carrier selection as explained above is one mechanism for achieving this.

For greater user convenience and effective competition, we recommend introducing carrier selection in the call-by-call form, as a minimum, from the very beginning of competition. We recommend that this obligation to offer selection should apply to all dominant/SMP operators.

We recommend inviting dominant/SMP operators to undertake the technical changes that are necessary to adapt its automatic exchanges so as to be able to offer call-by-call selection in the initial phase. Furthermore, this service should be included in the reference interconnect offer.

We recommend that the regulatory authority be authorized to assign prefixes to operators which fall within the category of carriers.

We recommend that the regulator be further authorized to take decisions on:

- type of carrier selection
- operators eligible to act as carriers
- operators subject to the obligation to offer carrier selection
- types of calls carried
- problems involved in carrier selection (e.g. invoicing, calling line identification)
- unfair competitive practices such as slamming

Pre-selection should be put in place once all the required technical changes have been made.

Guidelines 2.2 – Number portability

In view of the fact that competition in West Africa is largely restricted to the mobile sector, portability affects only mobile networks. It is of interest primarily to professional subscribers. Since, in most of the member countries, most subscribers use prepaid services, we do not consider that portability is a priority for those countries today. This observation is further supported by the fact that it would require major capital expenditure and large technical and processing capacity in the exchanges, with an intelligent network to ensure a good quality of service including the option of premium services. The impact of the technology is important in particular for portability between fixed mobile network, and portability within the mobile network.

Nonetheless, we recommend that regulatory authorities conduct market studies to assess consumers' portability needs and identify what categories of consumers are likely to request such a service (residential, professionals, etc.) and for which types of services.

Where a need has been clearly identified, it is both appropriate and legitimate for users to be given the option of exercising a free choice as to the public network carrier and services to which they wish to subscribe. To this end they should be able to keep their telephone number when they change operators, using the mechanism of number portability.

For these reasons we recommend a consultation between the market players and the regulatory authority, given that portability is relatively difficult to put into practice, particularly its technical and tariff aspects, and consultation is necessary.

We recommend furthermore that the numbering plan be revised so as to adapt it to the requirements of number portability.

Guidelines 2.3 – National roaming

As part of market liberalization in the countries of West Africa, we recommend that new entrants be given the possibility of offering their services throughout the territory currently covered by the existing operators, by means of national roaming. This will make possible the following:

- avoidance of duplication of infrastructure in areas that already have coverage which is particularly important in the case of third-generation operators;
- voice and data being made available across the entire national territory as rapidly as possible, for low-speed, medium-speed and high-speed (e.g., 3G) networks alike.

We therefore recommend that the regulatory authority arrange for existing operators to be put under an obligation to offer national roaming to requesting operators, at an affordable price, wherever it is technically possible to do so.

However, national roaming must in no event replace the coverage obligations undertaken in the framework of mobile service licensing by new entrants. Sunset clauses should be included in new entrant's licenses in order to avoid market entry by operators lacking a concrete telecommunication network deployment plan.

We recommend that operators be obliged to provide consumers with relevant information about national roaming tariffs.

This service is negotiated between the operators on a bilateral basis in the form of a national roaming contract. The regulatory authority should monitor national roaming offers for fairness and non-discrimination.

To this end, we recommend that the regulatory authority publish specific national roaming guidelines to help establish tariff and technical conditions and provide information on national roaming contracts, in consultation with the market players.

Guidelines 2.4 – International roaming

Following European practice, we recommend that the regulatory authorities of the West African countries, through the West African Telecommunications Regulators Assembly (WATRA), take the following measures:

- ensure the widest possible compatibility between mobile systems in terms of roaming, and take it into consideration when awarding mobile licences in the region;
- study roaming prices charged in the region;
- consult with the other players, with a view to arriving at reasonable tariffs to allow the greatest possible number of roaming users in the region to utilize those networks under the best price and quality conditions;
- identify operators engaging in applying prohibitive prices;
- consult with the national competition authority, where one exists;
- allow prepaid subscribers to use roaming (technical implementation) at reasonable tariffs;
- inform customers about the roaming charges in a clear and transparent manner;
- draw the necessary conclusion from the decision of the European Commission on the international roaming market and the definition of a dominant position in that market (to be published end-May 2005).

3 GUIDELINES ON ASPECTS THAT ARE SPECIFIC TO DOMINANT AND SIGNIFICANT MARKET POWER (SMP) OPERATORS

Guidelines 3.1 – Concept of relevant market and significant market power on a relevant market³

Recommendations for each regulatory authority in ECOWAS/UEMOA countries

Following the practice in Europe, we recommend that the regulatory authorities in West African countries:

- determine the relevant markets;
- collect information about each identified market so as to measure the extent of dominance;
- consult with the concerned players on the telecommunication market for the purpose of analysing those markets;
- seek the advice of the competition authority, where one exists;
- consult with the concerned players on the telecommunication market about obligations to be imposed on dominant/SMP operators (remedies such as the obligation to use cost-oriented tariffs) for each relevant market.

Recommendations

Following the practice in Europe, we recommend that a UEMOA/ECOWAS commission (corresponding to the European one) produce:

- directives adapted to the individual cases of the countries in question (like the European directives);
- guidelines for market analysis and assessment of market power;
- a recommendation on relevant markets in products and services in the telecommunication sector that can be regulated *ex ante*.

The authority should analyse the market in order to determine whether it is competitive or not and then draw the necessary consequences about regulatory obligations: if the analysis shows the market to be competitive, then any existing obligations can be abolished, otherwise the body must identify the dominant/SMP operators and impose appropriate regulatory obligations.

Guidelines 3.2 – Obligations that may be applied to dominant/SMP operators

Guidelines 3.2.1 – Obligation to set up cost accounting suitable for regulatory purposes

The regulatory authorities in the member countries must urge the dominant/SMP operators to set up cost accounting for the purposes of regulation.

The establishment of the new accounting must begin in 2005 and be completed by 2008 at the latest, in order to adequately prepare for the opening of the market for fixed communication.

³ According to Article 14 of the Directive (2002/21/EC) on a Common Regulatory Framework of the European Commission: An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers. http://europa.eu.int/information_society/topics/telecoms/regulatory/new_rf/documents/l_10820020424en00330050.pdf

Cost accounting must show separate accounts, in accordance with international best practices.

It is further recommended that costs relating to regulated and non-regulated activities be kept separate.

Accounting must be by activity (activity-based costing).

The cost accounting system of the dominant/SMP operators must be audited annually by an independent body, the costs of the audit to be incurred by the dominant/SMP operators.

It must allow the regulatory authority to set up a cost nomenclature prior to submission of the RIO for approval.

Guidelines 3.2.2 – Calculation of interconnection rates

The calculation of the cost of capital for emerging countries in general and the ECOWAS/UEMOA countries in particular

Pending the implementation of cost accounting by 2008, we recommend that interconnection rates be calculated as follows:

- using a regional benchmark, where available, to set the range of values within which interconnection rates must fall;
- using an existing calculation tool such as COSITU and, to the extent possible, trying to feed in existing and auditable data, or alternatively representative benchmark inputs.

In particular, the calculation of termination rates on a network must take account of the retail tariffs applied for calls terminating on the network.

For Member States which have audited cost accounting, international practice suggests that a top-down model based on forward-looking historical costs may be used initially (e.g., for three years) before moving to a model based on long run incremental costs (LRIC), thereby giving the dominant operators an incentive for greater efficiency.

We recommend that, for setting the appropriate rate of return based on the cost of capital, market data be used. This is the most theoretically sound method and the one most commonly accepted internationally, by both regulatory bodies and telecommunication companies.

For calculating the cost of equity, given that in the ECOWAS/UEMOA countries the telecommunication market is not very highly developed, sufficient historical data are lacking and operators are not quoted on the stock market, we recommend using the hybrid capital asset pricing model (CAPM), incorporating the country risk and a correction coefficient R.

We recommend recourse to external expertise for calculating the cost of capital.

Guidelines 3.2.3 – Publication of reference interconnect offer

The regulatory authorities should publish a clear and transparent procedure governing approval of the RIO (timetable, submission of the RIO to competitors for comment, etc.).

Regulatory authorities are entitled to request the dominant/SMP operators to add to or modify the services set out in their offers, when such additions or modifications are justified for compliance with the principles of non-discrimination and cost-orientation of interconnection.

We recommend that offers be as detailed as possible in order to facilitate and smooth interconnection contract negotiations.

As competition unfolds, and in particular as fixed network services are opened up to competition by 2007, RIOs must include, in addition to the minimum services listed above, the following services:

- third-party billing services;
- at the request of the regulatory authority, an alternative co-location offer if physical co-location is proven to be technically unfeasible;
- as needed, the technical and financial conditions governing access to the operator's resources, in particular those relating to unbundling of the local loop, with a view to offering advanced telecommunication services.

Guidelines 3.2.4 – Negotiation of the interconnection contract

Although interconnection contracts are of course freely negotiated by the operators concerned, the regulatory authorities of the Member States must exercise oversight over the agreements signed. We therefore recommend that the authorities be entitled, if necessary, to revise interconnection contracts in order to guarantee interoperability of services and fair competition, and to impose this as an obligation on the contracting parties within set time-frames.

A maximum contract negotiation time frame should be set by the regulatory authorities, after which they must intervene to bring the negotiations to a conclusion, so that negotiations do not become a barrier to the entry of new operators.

We recommend that operators which so request be allowed to consult, in the offices of the regulatory authorities, in the manner that the latter shall decide and respecting normal business confidentiality, the interconnection contracts concluded by operators.

Guidelines 3.3 – Expansion of the reference interconnect offer to promote development of the Internet

We believe that Internet cannot become widespread without liberalization of fixed services and the introduction of alternative operators.

As soon as fixed services are liberalized, alternative operators must have access to unbundling, in particular the bit stream option. Line sharing is indispensable with a view to expanding the offer of high-speed services to a mass market. It would also give the user a genuine choice among alternative high-speed service offerings for fast Internet access, for which line sharing is well suited.

We recommend that, through unbundling, alternative operators should be able to amortize their investments by offering "triple play" type services (high-speed Internet + voice + television).

We recommend that all the alternative operators' equipment necessary for the implementation of local loop access (DSLAM, related monitoring/management equipment, power supply, converters, batteries, routers and BAS) should be able to be co-located.

We recommend that the regulatory authority authorize the offering of bitstream-type services, which will promote development of the wholesale market and hence rapid expansion of Internet in the member countries.

We recommend that, prior to the liberalization of fixed services scheduled for 2007, the regulatory authorities negotiate with the dominant operators on the inclusion of standard offers, namely: flat-rate access, access via non-geographical freephone numbers, access via non-geographical paying numbers.

Guidelines 3.4 – Specific problem of fixed-to-mobile calls

We recommend that the ECOWAS/UEMOA regulatory authorities examine:

- interconnection and call termination charges on mobile networks and fixed networks;
- the difference in charges and tariff structures between retail prices and interconnection and the sharing of revenues between originating and terminating operators for fixed-to-mobile calls;
- possible adjustments to the tariff structures of retail and interconnection prices.

We recommend that the ECOWAS/UEMOA regulatory authorities evaluate:

- the relevance of the interconnection market
- the relevance of the mobile termination market
- the identification of dominant/SMP operators in these markets and implementation of the necessary corrective action to promote smooth development of the telecommunication market and the process of liberalization of the fixed network in particular.

4 GUIDELINES ON ASPECTS SPECIFIC TO THE SETTLEMENT OF DISPUTES

We recommend that the ECOWAS/UEMOA regulatory authorities:

- publish a referral procedure enabling players in the market to bring disputes before the regulatory authority in accordance with a clear and transparent procedure;
- ensure that the committee responsible for taking decisions is impartial, and comprises people recognized for their competence and appointed *intuiti personae*;
- set a maximum time-frame for the settlement of disputes;
- provide for the possibility of the authority initiating an action itself, and the possibility of injunction against an operator in the event of serious problems requiring urgent solution;
- cooperate as widely as possible, through WATRA, and establish a group for exchanging experience via the Internet and a database of past disputes and their solutions (e.g. tariff benchmark data).

SUMMARY OF GUIDELINES 1 – 4 ON THE EXISTING REGULATORY FRAMEWORK FOR INTERCONNECTION

Recommendation 1

Equally important tools, such as carrier selection, number portability, co-location and local loop unbundling, should be included in legislation, interconnection regulations, or orders and supplemented by necessary regulatory decisions.

Recommendation 2

A definition of relevant markets is needed, and a definition of dominant/SMP operators based on international best practice.

Recommendation 3

The obligations of dominant/SMP operators should be listed in detail, and rules and conditions promulgated for their implementation.

Recommendation 4

Dominant/SMP operators should be obliged to issue an interconnect reference offer every year, use cost-accounting oriented towards the needs of regulation, implement separate accounting, and undergo an annual audit of accounts, in addition to orienting their tariffs towards costs.

Recommendation 5

It is recommended that a time limit should be established for settling disputes relating to interconnection, allowing a margin for the event that the allotted time proves to be inadequate. The referral procedure should be specified in a separate decree. Given limited staff resources, a time-limit of 45 calendar days may be inadequate in some cases, particularly if the problems raised are complex, or if there are several disputes to be resolved in parallel.

This text should allow for inquiries opened on the initiative of the regulator, and for staying measures.

Recommendation 6

The following subjects should be treated: QoS indicators for interconnection services; the obligation to open (PoIs); and the obligation to make a reasonably priced transitional interconnection offer, for exchanges closed to interconnection.

Recommendation 7

We recommend a revision of all the interconnection-related decrees of the West African countries. A special implementation calendar should be established for the regulatory tools, based on the opening to competition, of the fixed network in particular, within each of the countries concerned by this study.

GUIDELINES FOR LICENSING

Although licensing methods vary widely among countries, there are some common features that are considered to be among the best licensing practices.

Three general approaches to authorizing telecommunications services can be identified:

- 1) *Granting individual licenses*
- 2) *Granting general authorizations, including class licenses*
- 3) *Allowing open entry*

In recognition of the realities that exist in the market, there are a number of options to license the different types of networks and services. These options essentially relate to the level of regulatory intervention being introduced according to the type of network or service offered. At the same time market players must be treated in a transparent, non-discriminatory and proportional way; no undue burdens must be imposed on them

While more competition is to be introduced in the telecommunications sector, authorizations regimes remain necessary in order to ensure that certain public interest objectives are attained.

Undertakings in an open environment could still have to comply with requirements relating both to predominantly technical issues as well as to certain public service objectives.

The following guidelines have been inspired from international best practices and from renowned publications, text and documents such as the ITU 2002 Report on Effective Regulation, the World Bank Infodev Regulatory Handbook – Module 2 on Licensing, the UEMOA Directives⁴, the COMESA Licensing Guidelines, the 1997 EU Licensing Directive, the General Agreement on Trade in Services (GATS) and the 1997 Agreement on Basic Telecommunications of the World Trade Organization (WTO).

1. Basic Principles

1.1 Competition

- 1.1.1 Considering the need for new developments in the telecommunications market as well as the ECOWAS decision which promoted the process of total liberalization of telecommunications infrastructure and services by 1 January 2006, it is recommended that competition is introduced in all ECOWAS countries as soon as possible, thereby opening the market to new entrants.
- 1.1.2 Where transition periods are foreseen for certain member states, it is recommended that such be limited such as to permit these countries to follow the regional trend.

⁴ The UEMOA Directives were validated by experts from the eight UEMOA Member States in the presence of traditional UEMOA partners and ECOWAS representatives during a workshop held in Cotonou from 18 to 22 July 2005. These Directives will be presented to Ministers in charge of telecommunications for their approval before the end of 2005.

1.2 Harmonization of procedures

- 1.2.1 There is a need to harmonize the categories of telecommunications networks and services as well as licensing procedures.
- 1.2.2 ECOWAS Member States (“Member States”) will strive to define and adopt common classifications of telecommunications networks and services as well as common licensing procedures.

1.3 Provision of Service between ECOWAS Member States

- 1.3.1 Member States will facilitate the provision of services between Member States or in different Member States of the ECOWAS Region in the formulation and application of their respective licensing regimes.
- 1.3.2 In order to facilitate the establishment of such regional networks or networks in several Member States, the regulatory authorities of Member States shall coordinate to the extent possible their licensing procedures for companies wishing to establish or exploit a telecommunications network and/or a telecommunications service in more than one ECOWAS Member State so that a company need only to complete one authorisation request which it can subsequently submit in the various Member States.

2. Market Structure

2.1 Competitive Framework

- 2.1.1 It is recommended that infrastructure-based competition is promoted to the largest extent possible given that this model has the advantage of favorizing a maximum degree of competition while accommodating simultaneously the development of the sector in terms of universal service.
- 2.1.2 Nevertheless, and especially in the initial phases of competition, service-based competition must also be considered within the licensing approach given that such competition can be considered a mechanism to ensure rapid market access by allowing such entrants to complement the networks of infrastructure-based operators. Under this model, new entrants could, however, be inclined to offer just services on competing networks, and not deploy their own infrastructure.

2.2 Licensing Regime

- 2.2.1 Given the existing market realities, the proposal is to introduce a licensing framework which accommodates such realities and aiming to achieve the desired market structure.
- 2.2.2 This framework is aimed at being technology and service neutral so as to be able to accommodate convergence and the introduction of new technologies. Convergence between different telecommunications networks and services and their technologies requires a licensing framework which covers comparable services whatever the technology used.
- 2.2.3 The recommendation is to promote technology neutrality to the greatest extent possible (e.g., not specify technologies such as GSM, CDMA or UMTS) and/or service (e.g. unified license which does not limit the activities such as fixed or mobile).

- 2.2.4 Nevertheless, in the interests of transparency and simplicity, Member States may decide that fixed and mobile networks may be licensed separately.

Because of the nature of the mobile market, it is not generally considered appropriate to apply exactly the same conditions to that business. Certain market characteristics that are applicable in the fixed market and require regulation, do not necessarily exist in the mobile market. The following conditions, which are generally contained in fixed licenses should not be included in mobile licenses. These are:

- Public payphones
- Leased circuits
- Linked Sales

2.3 No Barriers to Entry

- 2.3.1 Member States should impose no limits which are not in conformity with their respective regulations on the number of operators or service providers in the market.

- 2.3.2 If a Member State limits the number of licenses, such a limitation must be justified by the Member State taking consideration of the following principles:

- The Member State will give due consideration to the necessity to maximize advantages for users and facilitate the development of competition;
- The Member State shall give interested parties the opportunity to express their opinion by conducting public consultations on planned limits in the number of licenses;
- Member States shall publish their respective decisions to limit number of licenses as well as the justification of such decisions;
- Member States will regularly re-examine such decisions;
- Where the number of licenses is limited, Member States will launch a public tender for such activities.

- 2.3.3 Where a Member State determines that the number of licenses can be increased, it will take the necessary actions to publish such a decision and launch a call for tender for additional licenses.

2.4 Level of Intervention

- 2.4.1 The Licensing Framework consists of three levels of intervention, ranging from individual licenses to class license (authorization or declaration) to open entry⁵.

- 2.4.2 Different telecommunications networks and services will be categorized into the different categories according to the adapted market structure.

- 2.4.3 The decision to require individual licenses in certain cases must take into market realities of individual ECOWAS countries into consideration.

⁵ There is a difference in terminology and legal systems between Anglophone countries, with legal systems based on “Common Law”, which distinguish between 3 levels of intervention going from individual license to class license to open entry, and, Francophone and Lusophone countries, with legal systems based on the “Civil Law” system, which tend to opt for four categories: license, authorization, declaration and open entry.

Such terminology should be clarified in the definitions contained in the legal texts to be adopted at ECOWAS level (such as has been done by UEMOA in the draft Directive No. [X+!]/2005/CM/UEMOA on the harmonization of regimes applicable to telecommunications network operators and service providers).

In addition, certain countries in the region have evolved to a system of general authorizations especially as concerns class licensing, where operators are subject to conditions which are included in the general regulatory framework rather than being granted a written document stating their rights and obligations. The fact of having a document at the level of class licenses is an administrative choice which is really linked to the legal and administrative traditions of countries and does not change the legal nature of the rights and obligations of the parties concerned.

- 2.4.4 Individual licenses shall be required in the following cases:
- To exploit or offer public telecommunications networks or offer public voice telephony service.
 - If the government of a particular country, for reasons of public policy, determines that the service shall be offered in a certain way (e.g., measures concerning public order, public security or public health.)
- 2.4.5 Nevertheless, in order to promote the development of the sector in the Region and to allow more choice to consumers, ECOWAS Member States may decide to exempt certain activities, networks or services (e.g., ISP) from a particular licensing category or indeed determine that they are included in the open entry category. The aim of such a provision is to give flexibility to regulators.
- 2.4.6 In the interest of clarity, it must be understood that unauthorized is not unregulated. The activities which fall under the regime of open entry are subject to the general regulatory framework which includes, for example, conditions relating to, for example, terminal equipment approval or principles of non-interference.

2.5 Proposed Market Structure

- 2.5.1 The proposed licensing structure is as follows:
- Individual License: e.g.,: Network Operators – owning and exploiting any type of communications infrastructure (e.g., satellite, terrestrial, mobile or fixed); Public voice telephony service providers
 - Authorization:e.g.,: Private Networks
 - Declaration: e.g.,: Value Added Services, Reseller⁶s
 - Open Entry: e.g.,: WiFi Networks for private use ; Internal Networks

3. Form of the Licence

3.1 Form of the Licence

- 3.1.1 The recommendation is that the license text includes the principle without literally copying legal or regulatory texts applicable to the sector. Such an approach will effectively promote transparency and equal treatment of all licensees and give the regulator the flexibility to adapt regulation to changing market conditions. Nevertheless, it is clear that specific conditions of licensees will be an integral part of their license.
- 3.1.2 The text of the license should not also not include conditions which are already applicable but which are not specific to the telecommunications sector. Nevertheless, national regulatory authorities may inform network operators and service providers of any regulations affecting their operations by referring them to information published on their respective web-sites.

⁶ The difference between authorization and declaration is linked to the level of intervention of the regulator. In the case of authorization, applicants will be required to submit their applications (generally containing summary legal and technical information) and await the approval of the regulator to commence service. A declaration is more a simple registration with the regulator whereby applicant may be required to submit summary information to register, but will not be required to await approval prior to starting service.

4. Rights and Obligations

4.1 Principles

- 4.1.1 Conditions imposed upon operators and service providers must be non-discriminatory, proportional and transparent and must be justified in relation to the targeted network or service.
- 4.1.2 All holders of a telecommunications license will have a basic set of rights and these rights shall be applicable to all licensed operators regardless of whether they are service based or network based operators. However, the ability of a licensee to avail of those rights and entitlements may be conditional upon them being able to meet physical or technical requirements. For example, any incumbent fixed telecommunications operator may be required to set out certain conditions for access and interconnection to its network, including certain technical specifications. Any licensee capable of meeting those requirements should be entitled to enter into arrangements for such access or interconnection.
- 4.1.3 Certain other conditions which will be contained in all licenses will not be activated unless a specific determination or finding is made by the NRA.
- 4.1.4 For example there are a range of conditions that should only apply if a licensee is found to be dominant in a relevant market. Where the NRA intends to make a finding of dominance, there is a statutory consultation process that should be followed.
- 4.1.5 Where operators wish to have access to scarce resources (such as frequency spectrum, numbers or land), NRA's should retain the right to put in place additional regulatory requirements, including (but not limited to) the requirement to participate in specific application procedures or competitive selection processes. In addition, those conditions in the licenses of all licensees that relate to scarce resources should be activated where an operator gains access to such resources. The NRA shall consult separately in relation the allocation of scarce resources where appropriate.
- 4.1.6 Conditions regarding the regulation of the activities of a dominant operator shall not, in principle, apply to new entrants. Such conditions will in principle only apply where the regulatory authority determines, after appropriate market analysis, that a licensee is in fact in a dominant position.
- 4.1.7 Other licensees will only be subject to conditions linked to quality of service and consumer protection. Nevertheless, certain conditions relating to the provision of services to the public, and in particular including emergency calls, directory services and public payphones, may be applicable.
- 4.1.8 In addition, since it is not possible to foresee future market developments, regulatory authorities must have the ability to be able to designate an operator(s), other than the historic operator, as having a universal service obligation in the future.
- 4.1.9 Any licensee must make appropriate provisions to take into consideration the needs of disabled people.

5. Procedures

5.1 Fees

- 5.1.1 The fees associated with obtaining a license or authorization should not create a barrier to market entry. Therefore, to the extent that a Member State imposes fees on the issuance of a license or general authorization, the fees should seek to cover only the administrative costs incurred in the issuance, management, control and enforcement of the applicable

authorization scheme and in any case respond to public policy requirements as determined by government by means of Sectoral Policy.

- 5.1.2 Apart from entry fees, fees may also be imposed for the use of spectrum or numbers, with the aim of ensuring optimal use of resources. Such fees should not prevent the development of innovative services or competition in the market.
- 5.1.3 Charges must be imposed in a non-discriminatory manner so that one operator is not charged more than another without some objective basis for so doing. Any fees also shall be published in an accessible and appropriately detailed manner.

5.2 Public Consultations

- 5.2.1 To ensure fairness and transparency in the licensing or authorization process, the Member States should consult with industry, the public and other stakeholders.

5.3 Public Availability of Licensing Criteria

- 5.3.1 Where a license is required, the following should be published and made publicly available:
- all licensing criteria.
 - the period of time normally required to reach a decision concerning an application, and
 - the terms and conditions of individual licenses.
- 5.3.2 The reasons for the denial of any license must be made known to the applicant upon request.

5.4 Licensing Procedures

- 5.4.1 Member States shall define and apply licensing mechanisms that facilitate market entry and allow the progressive dismantlement of obstacles to competition and to the development of new services.
- 5.4.2 Any license conditions must be objectively justified, proportionate, non-discriminatory and transparent.
- 5.4.3 Member States generally should keep license conditions and filing requirements to a minimum. It would be unduly burdensome, for example, to require applicants for general authorizations to submit excessive amounts of business information to the regulator, such as: business plans; extensive technical filings; showings of experience; bank statements; or information detailing the source of funding.
- 5.4.4 Any entity that fulfills the conditions adopted and published by the Member State shall be entitled to receive an individual license.
- 5.4.5 Furthermore, all applicants shall be subject to the same procedures, unless there is an objective reason for differentiation.
- 5.4.6 Member States should adopt and adhere to reasonable time limits for acting upon license requests.
- 5.4.7 Refusal to issue a license or any decision to amend a license shall be taken in a transparent manner and the reasons should be communicated formally to the applicant.
- 5.4.8 A procedure also should be initiated to permit an entity to appeal any decision by the regulatory authority to an independent institution.
- 5.4.9 Licenses should be issued to the applicant personally. Transfer to third parties, if applicable, shall be done only with prior consent of the regulatory authority. However, a license obtained through competition or tender procedures should not be transferable. An exception to this condition is admissible when the applicant has declared in advance his intention to set up a company entirely owned by him to operate the licensed activities.

- 5.4.10 Member States should prescribe the maximum license period and indicate the conditions of its renewal.
- 5.4.11 Member States should promote the principle of technology neutrality and refrain from imposing limitations of service offered over a given network except in the case of the protection of public safeguard or moral standards.
- 5.4.12 Member States should ensure that license targets to further universal service goals do not discourage competition.
- 5.4.13 Member States should refrain from granting licenses with exclusivity, except when mandated by the legislation or the country's policy, and when dictated by unavailability of necessary resources or other relevant reasons.
- 5.4.14 The terms of a license should be considered fixed at the time the license is officially delivered. Should the need to change the terms arise, the agreement should require the regulator or licensee to notify the other party in a timely and reasonable fashion of any such changes before they are implemented.
- 5.4.15 A license agreement should not require the licensee to adhere to unspecified terms in a separate agreement between the Member State and a third party unless the terms are fully reiterated in the current license.

5.5 Reviewing, Terminating and Revoking Licenses

- 5.5.1 When a licensee fails to comply with a condition attached to the license, the regulatory authority may withdraw, amend, or suspend the individual license or impose, in a proportionate manner, specific measures aimed at ensuring compliance.
- 5.5.2 The regulatory authority shall, at the same time, give the entity a reasonable opportunity to state its view on the application of the conditions and, except in the case of repeated breaches by the entity, the entity shall have an opportunity, within a defined period of time, to remedy the breach. If the breach is remedied, the regulatory authority shall, within a defined period of time, annul or modify its decision and state the reason for its decision. If the breach is not remedied, the regulatory authority shall, within a defined period of time after its initial intervention, confirm its decision and state the reasons for its actions. The decision shall be communicated to the entity within a defined period of time (i.e., one week).
- 5.5.3 A license agreement should provide termination rights that are appropriate to each party.

5.6 Authorisation Regime

- 5.6.1 Service providers may be required to notify the regulator before providing the intended service. Service providers also may be required to provide information to the regulator to ensure compliance with any applicable conditions of operation.
- 5.6.2 In such instance, the service provider may be required to wait for a reasonable and defined period of time (e.g., up to four weeks) before starting to provide the services covered by the general authorisation.
- 5.6.3 Information that may be included for general authorizations include:
 - “Legal” information: Individuals may be required to show that they are registered as single businessmen. Commercial partnerships, however, can be required to show by means of a statement accompanied by a certificate from the relevant commercial registration office that they are legally established and that their contract of partnership includes the business of providing telecommunications services. Individuals or partnerships whose registration or license has been suspended or has been revoked should not be allowed to register.

- “Technical” information: The entities may also be required to previously inform the NRA of the services they intend to commence and to provide the information that shows that they can fulfill the applicable conditions and modes applicable to the licensable activity, namely:
 - Detailed description of the service they propose to provide.
 - Technical project stating the equipment's to be used.
 - Indication of the entity in whose network the service is based.

5.6.4 NRAs may retain the right to request further clarification.

5.7 Right of Review, Remediation and Appeal for Authorisations

- 5.7.1 If the regulator finds that a service provider does not comply with the conditions of a general authorization, it may inform the service provider that it is not entitled to use the general authorization and/or impose on the service provider proportionate measures to ensure compliance. The service provider shall have an opportunity to state its views on the application of any such conditions and to remedy any breaches within a defined period of time.
- 5.7.2 If the service provider is able to correct the breaches or deficiencies within a specified period of time, the regulator shall annul or modify its initial decision and state the reasons for this decision. If the service provider is unable to correct the deficiencies, the regulator shall, within a defined period of time (e.g., two months of its initial decision) confirm its decision and state the reasons for its decision. This subsequent decision shall be communicated to the service provider within a defined period of time (e.g., one week).
- 5.7.3 A procedure also should be established to permit the regulated entity to appeal the regulator's decisions to an independent institution.

5.8 Enforcement

- 5.8.1 License conditions should be enforceable and clear on the rights and obligations of the licensee.
- 5.8.2 The regulatory authority should undertake, when deemed necessary, reasonable and appropriate methods to enforce the terms and conditions of a licensee's operations.
- 5.8.3 A license agreement should include provisions to facilitate enforcement processes and access, when deemed necessary, to a licensee's documents, provided that privacy and confidentiality are respected.
- 5.8.4 A license agreement should require the regulatory authority to give the licensee notice of any suspected or alleged license violations that come to the attention of the regulatory authority and allow a reasonable time for the licensee to investigate and take corrective action, if appropriate.
- 5.8.5 A licensee should be provided with an opportunity to present his views before changes of the terms of the license take effect.

5.9 Sanctions

- 5.9.1 Where license conditions are not respected, sanctions may be imposed. A range of sanctions may be foreseen, including:
- Fines
 - Restriction of the scope and/or the duration of the license
 - Suspension
 - Withdrawal of Licence

- 5.9.2 Where one of the sanctions mentioned above is imposed, it will be widely communicated amongst ECOWAS Member States.

5.10 Dispute Resolution

- 5.10.1 Disputes must be handled according to national legislation.
- 5.10.2 Parties may, however submit their case to the Judicial entity of ECOWAS or to any other competent judicial authority.

GUIDELINES FOR NUMBERING

Although numbering practices vary widely among countries, there are several common features that are considered to be among the best numbering practices which apply both to circuit-switched and IP-based networks.

The following general approaches can be identified:

- 1) numbers are a national resource.
- 2) the mandate for managing this national resource for the public good is vested in the national regulatory authority.
- 3) the national regulatory authority can delegate administrative responsibility for this national resource.
- 4) numbering plans should be developed following public consultations led by the national regulatory authority with all stakeholders, including operators, service providers and end users.
- 5) national regulatory authorities should develop a single national database for the assignment of numbers.
- 6) national numbering plans can adopt 112 as an emergency code alongside existing national emergency code(s).
- 7) promoting number portability where considered appropriate by the national regulatory authority.
- 8) assigning lower initial digits to fixed lines and higher to mobile.
- 9) allocating number blocks against a rental charge.
- 10) planning for direct allocation to end users.
- 11) assigning numbers using geographical, network or service codes.
- 12) allowing for migration to a closed plan

These general approaches can be used to ensure that development meets eight key points that can be applied to any Numbering Scheme.

Any Numbering Scheme should:

- be long-term and balanced
- have support from the industry (operators, users and the regulator)
- have a coherent, clear and published strategy
- be capable of adequate management
- enable future development
- remember and consider neighbours (continental and world neighbours)
- not be anti-competitive to Telecommunications Operators
- not be anti-competitive to users

GUIDELINES FOR RADIO SPECTRUM MANAGEMENT

Guideline 1 – Spectrum demand in the ECOWAS/UEMOA region

Although the use of economic instruments to manage the demand for and supply of radio spectrum may not be at the forefront of policy today, it would be prudent for the countries to establish a common radio spectrum management framework that permits the development of an effective economic management regime of spectrum. This will also complement the objective of promoting liberalized ICT markets.

Guideline 2 – Managing spectrum

A high policy priority in the region is the development of a common framework for documenting and monitoring the use of spectrum. It would be desirable, perhaps under the auspices of WATRA, to establish a common methodology for documenting and monitoring spectrum, and for the countries to share the costs of developing a software tool for these purposes.

Furthermore, it is suggested that a forum be established within WATRA, to bring together those responsible for spectrum management, to:

- Exchange information and experiences to foster the harmonization of spectrum management rules;
- Prepare common positions to be presented to regional, then global instances;
- Pool existing expertise.

Guideline 3 – Interference issues

The countries in the ECOWAS/UEMOA region should establish a common framework for developing a public register (i.e., database) of technical and locational information about radio systems.

Guideline 4 – Challenges for Interference management in the ECOWAS/UEMOA region

The countries in the ECOWAS/UEMOA region should in the near future populate a common template for a national frequency table in each country.

Guideline 5 – The objectives of radio spectrum management

Radio spectrum management policy in the region should have the following objectives:

Economic efficiency

- Market allocation of spectrum to users, and to uses, that derive higher value from the resource.
- Provide for responsiveness and flexibility to changes in markets and technologies, accommodating new services as these become technically and commercially feasible.

- Transactions costs, entry barriers and other constraints on the operation of efficient economy activity should be minimized.

Technical efficiency

- Intensive use of scarce spectrum consistent with adherence to technical interference limits.
- Promote development and introduction of new spectrum-saving technologies where the cost of such technologies is justified by the value of the spectrum saved.

Public policy

- Consistent with Government policy.
- Safeguard interests of spectrum use for efficient functioning of defence, emergency and other public services.
- Changes to spectrum use in a member state should remain consistent with international and regional obligations.

Guideline 6 – Global and regional regulatory framework

The countries of the ECOWAS/UEMOA should manage spectrum by promoting flexibility while respecting the ITU international allocations.

Guideline 7 – Role of regulators

The countries in the ECOWAS/UEMOA region should vest radio spectrum management powers in the new independent NRAs overseeing telecommunications. Ideally these NRAs should have remits to embrace electronic communications broadly defined. By doing this the countries will enable a management regime that embraces technological neutrality.

Guideline 8 – Coordinating spectrum management across civilian uses and government uses

Countries in the ECOWAS/UEMOA region should aspire to the establishment of a framework which permits the effective coordination of all spectrum use, nationally, bilaterally, regionally and internationally.

Guideline 9 – Civilian use of spectrum

Countries in the ECOWAS/UEMOA region should merge separate regulatory authorities dealing with spectrum use in broadcasting and telecommunications. This will facilitate more effective coordination and realise efficiencies that will help promote and sustain economic development.

Guideline 10 – Government use of spectrum

Where government requirements for a particular frequency band are negligible or even zero, then such spectrum could be permanently reallocated to civil uses, following a definitive renunciation by the government.

Guideline 11 – radio spectrum coordination

Countries in the ECOWAS/UEMOA region that manage radio spectrum according to the *multi-jurisdictional model* should establish an inter-departmental committee to facilitate the coordination of effective spectrum utilization. The committee established should in the first instance focus on establishing a policy agenda and guidelines for regulations (e.g., interference issues EMC). The committee should comprise members of key government agencies involved in spectrum management, as well as key non-governmental stakeholders. The meetings of the committee should be recorded and made public (except where national security interests may be compromised). The government members on the committee should be appointed by a key member of government (a Minister, Prime Minister, President, etc.), and membership should not exceed five years. Reappointment may occur for a further five years. The appointed governmental committee members should elect a Chair. The person holding the position of Chair cannot hold the post for more than two years. The committee should also comprise non-governmental members, chosen from applicants responding to a government advert. Non-governmental committee memberships cannot exceed more than three years. Ideally the committee should not exceed more than 12 persons, including the Chair. The Committee should also publish its reports, all work it commissions, and all other relevant material, subject to confidentiality clauses, on a dedicated website. Each participating governmental committee member's department's website should contain a link to the Committee's website. The Committee should produce an annual report to Government, which should also be published on its website. Finally, two members of each Committee should be nominated to sit on a regional committee comprising members from the ECOWAS/UEMOA region. The regional committee shall meet once a year in one of the ECOWAS/UEMOA states, to discuss matters of international relevance in the context of spectrum management, and to discuss areas of mutual interest.

Guideline 12 – Economic principles of spectrum management

All classes of users should face incentives to economize on the spectrum they occupy. For the majority of frequency bands, where demand exceeds supply, this will entail paying a positive price to obtain access to spectrum, provided there are potential alternative users or uses of a block of spectrum (i.e. the opportunity cost is greater than zero). Where demand does not exceed supply, the price may be set equal to the costs associated with its administration or to a value consistent with government policy.

Guideline 13 – Service restrictions

Spectrum agencies in the ECOWAS region should aim to minimize the licence conditions to those necessary for efficient spectrum use. Existing licences should be amended to remove restrictions which are not needed for reasons of international co-ordination or interference management, and new licences should be issued with the minimum number of restrictions possible.

Guideline 14 – New approaches to spectrum licensing

(Generic) licensing of spectrum should be adopted for some frequency ranges in the ECOWAS/UEMOA states. Moving to a generic spectrum licensing regime would permit more flexibility and benefit users, and therefore aid economic development.

Guideline 15 – Auctions

Auctions should be considered as a means of assigning major spectrum licences between competing users, to achieve an efficient market-driven outcome. Using auctions enables the assignment process to be more transparent and objective and is less susceptible to corruptive influences.

Guideline 16 – Spectrum pricing

Spectrum pricing should be adopted where demand exceeds available supply, and where auctions have not been used and where trading is not practiced. The determination of the cost calculation method, which is generally based on spectrum opportunity cost, could equally take into consideration objectives defined by the State..

Guideline 17 – Coordinating spectrum deployment for wireless communications

The countries in the ECOWAS/UEMOA region should establish a special committee to establish a common approach towards BWA radio systems. The committee should examine spectrum assignments and allocations, and recommend policy for promoting BWA service provision across the region. The committee should report its findings by the end of 2006.

GUIDELINES FOR UNIVERSAL ACCESS AND UNIVERSAL SERVICE

1 CREATING AN ENABLING REGULATORY AND POLICY ENVIRONMENT: THE ROLE OF GOVERNMENTS AND REGULATORS

Guideline 1.1 – Governments must, at the highest level, identify ICT as a tool for socio-economic development. In doing so, government should designate a national focal point (Ministry, government department, personality) for ICT development.

Guideline 1.2 – National Regulatory Authority's (NRAs) must be established and capacitated to play a key role in implementing universal access policies first through addressing the market efficiency gap (letting the market deliver universal access/service), and second through the true access gap. NRAs should be responsible for implementing policies directed towards assuring the best quality reliable services at the most affordable prices that meet the needs of consumers—existing and future.

Guideline 1.3 – Governments and NRAs must undertake to develop their communications frameworks through sector, institutional and legislation reform which is in line with international best practices, but sufficiently tailored to meet local requirements.

Guideline 1.4 – Governments and NRAs must include all citizens, and in so doing must engender their universal access/service policies and must include all elements of the population regardless of ethnicity, socio-economic level or geographic location.

2 DESIGNING POLICIES AND DETERMINING REGULATORY REFORM MEASURES

Guideline 2.1 – Formulate a national policy that identifies appropriate and realistic universal access/service objectives that take into account the differences between universal access—public access to ICTs—and universal service—household or private access to ICTs.

Guideline 2.2 – Conduct periodic public consultations to the extent possible with stakeholders to identify their needs and modify universal access/service policies, regulation and practices accordingly.

Guideline 2.3 – Design universal access/service policies, regulations and practices in order to create incentives for the private sector to extend universal access to communications services.

Guideline 2.4 – Use a multi-pronged approach to addressing universal access/service challenges and opportunities. That is, rely on complementary strategies to meet the objectives targets that have been set out.

Guideline 2.5 – Establish a fair and transparent telecommunication regulatory framework that promotes universal access to ICTs. Allow the market to address universal access/service to the greatest extent possible and only intervene where the market has, or is anticipated to, fail. This includes:

Guideline 2.5.1 – Promoting technologically neutral licensing practices enabling service providers to use the most cost-effective technology to provide services for end users.

Guideline 2.5.2 – Adopting a transparent and non-discriminatory interconnection framework of interconnection rates linked to costs.

Guideline 2.5.3 – Reducing regulatory burdens to lower the costs of providing services to end users.

Guideline 2.5.4 – Promoting competition in the provision of a full range of ICT services to increase access, affordability, availability and use of ICTs.

Guideline 2.6 – Where it is necessary for NRAs and policymakers to intervene to facilitate the delivery of universal access/service:

Guideline 2.6.1 – public access strategies should be explored in addition to private, universal service, strategies

Guideline 2.6.2 – Both pay and play strategies should be employed, but where possible operators should be incentivised to roll out to rural, remote and low-income populations and areas.

Guideline 2.6.3 – Countries can use regulatory reform as the first step in achieving universal access, recognizing that further steps may be necessary to achieve ubiquitous access to ICTs, e.g., in rural areas or to users with special needs.

Guideline 2.6.4 – Appropriate licensing schemes for rural service providers could be granted to meet the needs of un-served and under-served areas.

3 PROMOTING INNOVATIVE REGULATORY POLICIES

Guideline 3.1 – Promotion of access to low cost broadband interconnectivity should be integrated from the local level to the international level. Governments, business, non-governmental organizations and international organizations should be involved.

Guideline 3.2 – Adoption of regulatory frameworks that support applications such as e-education and e-government.

Guideline 3.3 – Adoption of policies to increase access to the Internet and broadband services based on their own market structure and that such policies reflect diversity in culture, language and social interests.

Guideline 3.4 – NRA should consider working with stakeholders to expand coverage and use of broadband through multi-stakeholder partnerships. In addition, complementary government initiatives that promote financially sustainable programs may also be appropriate, especially in filling in the market gap that may exist in some countries.

Guideline 3.5 – Adoption of regulatory regimes that facilitate the use of all transport mechanisms, whether wireline, power line, cable, wireless, including Wi-Fi, or satellite.

Guideline 3.6 – NRA to explore programs that encourage public access to broadband and Internet services to schools, libraries and other community centres.

Guideline 3.7 – NRA to implement harmonized spectrum allocations consistent with the outcome of ITU Radiocommunication Conference process and each country's national interest. Participation in this well-established framework will facilitate low-cost deployment of equipment internationally and promote low-cost broadband and Internet connectivity through economies of scale and competition among broadband vendors and service providers.

4 ACCESS TO INFORMATION AND COMMUNICATION INFRASTRUCTURES

Guideline 4.1 – Provide services in a competitive framework, using new technologies that offer both innovative services and affordable pricing options

Guideline 4.2 – Promote affordable ICT equipment could include national manufacturing of ICT equipment, reduced customs tariffs and duties, and end-user loans to foster affordability of ICT equipment.

Guideline 4.3 – A full range of public access options can be developed, including the creation of public telecentres and multi-purpose community centres.

Guideline 4.4 – Local input (including the content useful for local populations) into projects increases their relevance and therefore their long-term financial sustainability.

Guideline 4.5 – Education and training programmes should be instituted to encourage the use and impact of ICTs on local people on the benefits of ICTs and their use increases their long-term financial sustainability

5 GUIDELINES IN REGARD TO PROVIDING SUBSIDIES: FINANCE AND MANAGEMENT OF UNIVERSAL ACCESS POLICY

Guideline 5.1 – Any funding or subsidies provided must be targeted and determined and delivered in a manner that is transparent, non-discriminatory, inexpensive, and competitively neutral.

Guideline 5.2 – Subsidies must be targeted.

Guideline 5.3 – Subsidies can be provided using several means including:

Guideline 5.3.1 – Universal service funds should be developed as a mechanism within a broader market-oriented approach to achieving universal access.

Guideline 5.3.2 – Universal service funds can be financed by a broad range of market players, managed by neutral bodies such as regulators, and be used to kick-start public access projects that meet the needs of the local community.

Guideline 5.3.3 – Governments may consider a full range of other financing mechanisms. .

Guideline 5.3.4 – Competitive minimum subsidy auctions could be used, as an option, to reduce the amount of financing necessary for public access projects financed by a universal service fund.

Guideline 5.3.5 – Public access projects can be designed to achieve long-term financial self-sustainability, especially where consideration is given to innovative low-cost technologies.

6 GUIDELINES FOR COOPERATION

Guideline 6.1 – Cooperation must be explored on several levels:

Guideline 6.1.1 – Between the private sector and communities so that where possible the market can deliver universal access/service;

Guideline 6.1.2 – Between communities, governments and the private sector to ensure that the access gap is dealt with in a manner that is relevant to communities

Guideline 6.1.3 – Within government to ensure that the full benefits of ICTs, beyond infrastructure and technology, and extending to health, education, agriculture and other sectors are accrued.

7 GUIDELINES ON MONITORING AND REVIEWING POLICIES

Guideline 7.1 – Countries should adopt measurable targets for improving connectivity and access in the use of ICTS which can be based on distance, population density or time taken to have access to ICTs .

Guideline 7.2 – Countries should review universal access/service policies, regulations, targets and practices periodically to adapt to the evolving nature of ICT services and the needs of end users.

8 EMERGENCY SERVICE

Guideline 8 – Countries should endeavour to provide free access to emergency service from end user terminals where practicable.
