## WEST AFRICAN COMMON MARKET PROJECT

Universal Access and Universal Service Report



Mandla Msimang











## **OVERVIEW**

- Part 1: Introduction & Overview
  - Scope & Objectives of Universal Access/Service Policy
  - Authorising & Enabling Universal Service Policy
  - Universal Access & Service Policies & Strategies
  - Social Elements of the Divide
  - Measuring Progress
- Part 2: Guidelines
- Part 3: Recommendations

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# SCOPE & OBJECTIVES OF UNIVERSAL ACCESS/SERVICE POLICY (1)



- Market/Sector Reform is a key & preferred first step in most instances for the achievement of universal access/service goals ("market efficiency gap")
- Market Reform is not a panacea there is a need to close the access gap through more direct government intervention in some instances
- In lieu of adopting a "wait and see" approach, the market access gap can be approximated before policy intervention is made
- The report focuses on addressing the access gap through defining the level and type of government intervention

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# SCOPE & OBJECTIVES OF UNIVERSAL ACCESS/SERVICE POLICY (2)



- Defining the Access Gap should take into account
  - Actual network coverage
  - Current network access/subscriber base
  - Future coverage/subscriber base
  - Affordability Assessment
- Once defined, and once policies developed they should be supported by:
  - Legislative Reform: UA/S policies enshrined in Policy, Legislation, Regulations, and/or Licences (South Africa, US, Australia)
  - Institutional Reform: Presence & roles of Ministry/Department & Regulatory Authority ("NRA") (South Africa, India, Malaysia)

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# AUTHORISING & ENABLING UNIVERSAL SERVICE POLICY



- Universal Service & Universal Access must be defined, generally through distance, population and time, at a national level:
  - Types of access: Goals for individual (or personal) sevice and community (or shared) access
  - Types of Services: Goals with respect to what services are being targets (e.g. voice, voice & data, mobile or others)
- Key concepts to be defined by the NRA:
  - "Basic" (US, Malaysia include advanced services/ internet access)
  - "Affordable" (Jamaica, South Africa have considered relevance of developing affordability definitions)
- Targeted Subsidies
  - Assistance for users— e.g. E-rate (South Africa, US, UK, Senegal); Lifeline (Us, EU)
  - Assistance for operators

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# UNIVERSAL ACCESS & SERVICE POLICIES & STRATEGIES



- Imposing Obligations "Pay"
  - · licence conditions or obligations; and
  - designating a Carrier of Last Resort (COLR)
  - Examples: Argentina, Brazil, Hungary, South Africa, US
- Obligations & Incentives "Pay or Play"
  - micro-credit programmes (Bangladesh);
  - 'build, operate and transfer' (BOT) or 'build, transfer and operate' (BTO) arrangements (Indonesia, Thailand);
  - cooperatives and community-owned networks (Bolivia, Poland);
  - regional operators (South Africa, Chile, Venezuela); and
  - telecentres and multi-purpose community centres (MPCCs)

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# UNIVERSAL ACCESS & SERVICE POLICIES & STRATEGIES: FUNDING



- Most common means of funding UA/S policies and strategies has been:
  - Cross subsidies (Traditionally used by monopolies, e.g. Sri Lanka, South Korea, Nepal)
  - Access deficit charges
  - Universal Service Funds
    - Manner of collecting contributions for the Fund (taxes, %of revenues, government funding)
    - Management and Administration of Fund. Controlled by: NRA, separate agency, fund administrator

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## SOCIAL ELEMENTS OF THE DIVIDE



- Need to think beyond infrastructure in designing policies, and take into account issues such as
  - Literacy and education
  - Accessibility
  - Local content
  - Gender
- As a result, need for:
  - establishment of private public partnerships
  - cross pollination and coordination between government departments which traditionally did not deal often with one another or ICTs

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# MEASURING UNIVERSAL ACCESS/SERVICE



#### Infrastructure: Quantitative Measurement

- Overall sector development: telephones (fixed, mobile), Internet hosts or users, Internet traffic, radios, computers, e-commerce, postal use, all on a per capita basis.
- Extent of competition: number of operators, & the market share of the largest ones, in main ICT market segments.
- Access for the excluded: phone/Internet/postal/broadcast access among poorest, access in rural areas, and percentage of land area/population with access.
- Cost and quality of service: cost of local/international calls, ISP service, & highbandwidth connectivity; waiting time for phone line; & percentage of calls completed successfully.
- Quality of content: size, number & relevance of local language websites, & frequency of hits.
- Availability of skills: number of students given Internet- based instruction.

### Services: Qualitative Measurement

- Status of reform: movement toward a wellregulated, competitive environment in the sector with strong provision for universal access & extent of privatization.
- E-readiness: passage of an appropriate package of e-commerce enabling legislation, financial reforms for Internet-based transactions, & improvements in service delivery.
- Improvements in entrepreneurial environment more businesspeople ready to make use of the opportunities presented by the new technology.
- Quality of content: content sites that overcome market barriers and are relevant.
- Improvements in knowledge: Well-disseminated studies and reports, with focus on developing economies, on best practices in telecommunications/ Internet/postal/broadcast areas.

Source: World Bank

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## **PART 2: GUIDELINES**



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## CREATING AN ENABLING ENVIRONMENT: ROLE OF GOVERNMENTS & REGULATORS



- Governments must, <u>at the highest level</u>, identify ICT as a tool for socio-economic development. In so doing, government should designate a national focal point (Ministry, government department, personality) to act as a "champion" for ICT development.
- NRAs must be <u>established and capacitated</u> 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.
- Governments & NRAs must:
  - undertake to develop their communications frameworks through sector, intuitional and legislation reform which is in line with international best practices, but sufficiently tailored to meet <u>local requirements</u>.
  - 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.

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# DESIGNING POLICIES & DETERMINING REGULATORY REFORM MEASURES (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.
- Conduct periodic public consultations to the extent possible with stakeholders to identify their needs and modify universal access/service policies accordingly, regulation and practices.
- Design universal access/service policies, regulations and practices in order to create incentives for the private sector to extend universal access to communications services.
- 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.

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## DESIGNING POLICIES & DETERMINING REGULATORY REFORM MEASURES (2)



- Establish 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 & only intervene where the market has, or is anticipated to, fail.
- Allowing the market to play a role necessitates:
  - Establishing an independent and well capacitated NRA
  - Promoting technologically neutral licensing practices enabling service providers to use the most cost-effective technology to provide services for end users.
  - Adopting a transparent and non-discriminatory interconnection framework of interconnection rates linked to costs.
  - Reducing regulatory burdens to lower the costs of providing services to end users.
  - Developing an effective regulatory body 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.
  - Promoting competition in the provision of a full range of ICT services to increase access, affordability, availability and use of ICTs.

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# DESIGNING POLICIES & DETERMINING REGULATORY REFORM MEASURES (3)



- Where it is necessary, due to market failure, for NRAs and policymakers to intervene to facilitate the delivery of universal access/service:
  - public access strategies should be explored in addition to private, universal service, strategies
  - Both pay and play strategies should be employed, but where possible operators should be incentivised to roll out to rural, remote and lowincome populations and areas.
  - 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.
  - Appropriate licensing schemes for rural service providers could be granted to meet the needs of un-served and under-served areas.

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## ACCESS TO INFORMATION AND COMMUNICATION INFRASTRUCTURES



- Provide services in a competitive framework, using new technologies that offer both innovative services & affordable pricing options
- Promote affordable ICT equipment could include national manufacturing of ICT equipment, reduced customs tariffs & duties, and end-user loans to foster affordability of ICT equipment
- A full range of public access options can be developed, including the creation of public telecentres and multi-purpose community centres
- Local input (including the content useful for local populations) into projects increases their relevance and therefore their long-term financial sustainability
- Education & 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

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# PROVIDING SUBSIDIES: FINANCE & POLICY (1)



- Any funding or subsidies provided must be targeted and determined and delivered in a manner that is transparent, nondiscriminatory, inexpensive, and competitively neutral.
  - Subsidies must be targeted.
  - Subsidies can be provided using several means including:
    - Universal service funds can be viewed as an option that complements regulatory reform and developed as a mechanism within a broader market-oriented approach to achieving universal access.
    - 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.

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# PROVIDING SUBSIDIES: FINANCE & POLICY (2)



- Governments may consider a full range of other financing mechanisms, including tax incentives for ICT providers and end users.
- 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.
- Public access projects can be designed to achieve long-term financial self-sustainability, especially where consideration is given to innovative low-cost technologies.

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### **GUIDELINES FOR COOPERATION**



- Cooperation must be explored on several levels:
  - Between the private sector and communities so that where possible the market can deliver universal access/service;
  - Between communities, governments and the private sector to ensure that the access gap is deal t with in a manner that is relevant to communities
  - 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.

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# **GUIDELINES ON MONITORING AND REVIEWING POLICIES**



 Review universal access/service policies, regulations and practices periodically to adapt to the evolving nature of ICT services and the needs of end users.

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## **PART 3: RECOMMENDATIONS**



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### Step 1: ECOWAS member states should facilitate telecom sector reform.

 NRAs and policymakers should take steps to encourage the liberalization and promotion of regulation in the communications sector. Policy measures such as introduction of competition, tariff reform, fair interconnection agreements, and transparent licensing are fundamental to achieving universal access.

### Step 2: Identify or approximate the market efficiency gap:

 NRAs should identify the market efficiency gap, and by default the market access gap so that universal access/service strategies can be designed in a targeted manner which allows the private sector to provide services where possible.

## Step 3: Identify and promote universal access/service opportunities through market studies.

 It is important that the nature of the universal access/service challenge is properly definined in order to develop targeted universal access/service strategies. As such, research and market studies should be encouraged by NRAs and policymakers at national and regional levels to enable decisions on technology, affordability and levels of obligations, amongst others.

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## **RECOMMENDATIONS (2)**



## Step 4: Development of basic standards and steps for universal access/service policy development.

 Harmonization or standardization of essential components for universal access/service initiatives throughout the region in order to guide policy makers, NRAs, donor agencies, research institutions and private sector companies is important. The existence of a basic level of standards which all universal access/ service strategies must aspire to should take into account.

### **Definition of Targets:**

- Universal access should be the primary goal of ECOWAS Member States
  - All communities of over 200 inhabitants should have telecommunications facilities in their localities.
  - Public telephones should be installed so that no citizen should have to walk more than 3 kilometres for phone access.
- Universal Service must also be a key consideration for the longer term:
  - Regional teledensity of 3 percent (fixed) and 7 percent (mobile) to be achieved by 2008.
- The divide between rural and urban areas must be reduced annually
- Universal Access/Service targets should be measured annual nationally and reviewed by ECOWAS every three years.

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### (Step 4, cont'd)

### **Definition of "Basic" Services**

- The definition must evolve from time to time and must thus be put in subordinate legislation which can give NRAs more flexibility and can be changed more readily than definitions contained in an Act.
  - At a minimum voice-grade services and ISDN lines should be included in the definition
  - Access to emergency, operator and relay services must be included in the definition of basic.
  - Advanced services must be added to the basket of services, as an when appropriate
- Public operators must provide access to emergency services and directory services. Directory services must be updated periodically.

### **Obligations and Incentives**

 NRAs should seek to impose market-based obligations so that operators are incentivised to rollout to underserved areas at the least cost to governments, and on a commercial basis

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## **RECOMMENDATIONS (4)**



## Step 5: Encourage the development and implementation of Universal Service Funds.

NRAs, policymakers and operators should promote and support the
establishment of universal access/service funds to assist in financing selected
universal service operators or segments of the population. It should be ensure
that the Funds are not just created in legislation, but are appropriately structured
with respect to administration and governance, amongst other things.

### Structure of the Fund

- Given human and financial resource constraints in the region, and the complementary nature of regulation and universal service provision the Universal Service Agency/Administrator should be housed within the NRA;
- There should be clear separation of the management and accounts of the Administrator/Agency from the NRA. A separate department should be established within the NRA to manage the Fund.
- Accounts of the USF should be independently audited on an annual basis, and the results of the audit should be made publicly available.

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### **Contributors to USF**

- The Fund should be financed from state, donor, and operator contributions. Generally, operators who hold telecommunications licences, both dominant and non-dominant, should contribute to the USF. Operators who provide services in a sector that will benefit from USF monies should be included in the scope of contributors (e.g. broadcasters, publishers, etc if regulatory/legislative convergence has occurred).
- Levels of operator contributions will be determined nationally through an analysis of the demand for services and of the market access gap. The method of collection of monies must be stipulated in regulations/directives.
- Operators who are licensed specifically to provide universal service (regional operators, rural licensees) or provide services in locations and to users who fall within the scope of the universal service mandate should be exempt from contributing to the Fund or should pay only a nominal fee.
- Levels of subsidies should determined through analysis of USO costs, competitive bidding processes, or a combination of both approaches and beneficiaries may include:
  - Operators with universal service obligations, only if universal service obligation costs can be properly calculated;
  - Rural/underserved area licensees;
  - Educational institution:
  - Health care facilities and institutions
  - Projects and Programmes (e.g. telecentres, MPCCs, local content development, training)

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## **RECOMMENDATIONS (6)**



### Step 6: Identify multi-sector partnerships

 Partnership across sectors and between government and private sector, as well as within government should be encouraged in pursuit of a universal access policy that will impact across the economy and using all forms of ICTs.

## Step 7: Focus on gender and universal access, and on youth and universal access

 A focus on historically marginalized population groups will ensure that greatest impact of universal access/service policies.

### Step 8: Focus on applications and services, as well as infrastructure

 NRAs and policymakers should consider strategies that address education, language, content and broadly the relevance of ICTS to communities to ensure the uptake of ICTs for soci-economic development.

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