ITU Workshop on “Apportionment of Revenues and International Internet Connectivity”
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Internet connection in Sub-Saharan African countries: Focus and Perspectives

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Internet connection in Sub-Saharan African countries: Focus and Perspectives

**AGENDA**

- Internet users in sub-Saharan African countries
- Analysis of the chain value of Internet furniture
- Reasons of Internet provision high cost
- Recommendations
I - Internet users in sub African countries

The number of Internet users in sub African is one of the lowest in the world.

The statistics of Internet users per hundred inhabitants do not exceed 45% for all countries.

Most of the countries (more than the half) have a rate under 10%.
I - Internet users in sub African countries

Dix premiers pays pour l'utilisation d'Internet

- Tanzanie
- Zimbabwe
- Afrique du Sud
- Ouganda
- Sénégal
- São Tomé-et-Príncipe
- Kenya
- Maurice
- Nigéria
- Tanzanie
- Seychelles

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I - Internet users in sub African countries

Dix derniers pays pour l'utilisation d'Internet

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I - Internet users in sub African countries

The growth of Internet users, from 2006 to 2010, is low in general but some countries have had a growth with two numbers.

There is no comparison between Internet users and mobile users. The ratio between the users of the two services is very higher (1 for 35).

Compared to the rest of the world the rate of Internet use remains low in sub-Saharan Africa and the gap widens more gradually as one move down in the ranking.
I - Internet users in sub African countries

Evolution of the number of Internet users per hundred people

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I - Internet users in sub African countries

Evolution of the ratio number of mobile / number of Internet users.
I - Internet users in sub African countries

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I - Internet users in sub African countries

To understand this low Internet users in sub Sahara African countries, we did an analysis of the chain value of Internet provision.

The different actors and market segment were analyzed in the second part of the study.
II - Analysis of the chain value of Internet furniture

The analysis of the chain value of Internet provision in sub Sahara African countries show that all the actors are in place and try to play their role.

Three types of actors:

Institutional actors
Competitors
Group of interest.
II - Analysis of the chain value of Internet furniture

Institutional Actors
- Regional Economic Communities
- State Actors
- National Regulation Authority
II - Analysis of the chain value of Internet furniture

Competitors

- Internet Service Provider
- National or International Backbone Provider
- Internet Access Provider
II - Analysis of the chain value of Internet furniture

Group of interest

- Operator associations
- Service Providers association
- Consumers Association
II - Analysis of the chain value of Internet furniture

The segmentation of the market show mainly three types of segment:

Market of Internet Service Provider

Market of Internet Access Provider

Market of National, Regional or International backbone Provider
II - Analysis of the chain value of Internet furniture

This analysis shows some bottlenecks in the provision of Internet connectivity on the market:

- Use of anti-competitive practices
- No access to the wired local loop
- Competition to Service Provider by incumbent Operator
- Refusal to hire international bandwidth
II - Analysis of the chain value of Internet furniture

Lack of infrastructure

Monopoly on the existing infrastructure

No application of the law and regulatory rules
III - Reasons of Internet provision high cost

One of the reason of a lower use of Internet in sub Saharan countries is the tariff of the connection.

It is appears that the tariff of Internet connection in the region is one of the most expensive in the world.

Among ten countries, with lower tariff of Internet connection, this tariff represent up to 60% of the minimum wage defined par ILO.
III - Reasons of Internet provision high cost

Value of the ten lowest tariff of wired broadband in 2008
III - Reasons of Internet provision high cost

Comparaison des dix plus bas tarifs en Afrique subsaharienne avec le monde
III - Reasons of Internet provision high cost

Part en pourcentage du tarif de la connexion Internet haut débit filaire dans le salaire minimum

- Mali
- France
- Niger
- Luxembourg
- Ghana
- Pays bas
- Côte d’Ivoire
- Nouvelle Zélande
- Mauritanie
- Belgique
- Sudan
- Royaume Uni
- Mauritius
- Australie
- Senegal
- Chypre
- Botswana
- Canada
- South Africa
- Etats Unis

0 10 20 30 40 50 60
Many reasons explained the high Internet connection in sub Saharan countries:

- Insufficient investment in telecommunications.
- Insufficient market economic conditions.
- Lack of competition in some market segments.
- The cost of international Internet connection.
III - Reasons of Internet provision high cost

Insufficient investment in telecommunications.

Structural adjustment programs imposed to the states by Breton Woods institutions over the past 80’s decades prohibited any investment in telecommunications deemed "profitable".

the "shift in investments" of the former incumbents because of competition introduced into the telecommunications sector in the late 90s.
III - Reasons of Internet provision high cost

Insufficient market economic conditions.
Lack of production ICT industry.
Insufficient demand for Internet connection.
Narrowed markets.
III - Reasons of Internet provision high cost

Lack of competition in some market segments.

In west Africa, there is only one submarine cable to connect all the countries to Europe for Internet access.

In most of countries, the incumbent Operators are vertically integrated and try to false competition.
III - Reasons of Internet provision high cost

The cost of international Internet connection.

The cost of International Internet Connection is very high in sub-Saharan countries.

In the past years cost fall down but if you compare it with the cost between Europe and North America it remains higher.
III - Reasons of Internet provision
high cost

Rental price of 2 Mbps of international bandwidth on SAT 3 in 2006
IV - Recommendations

Optimization the use of International bandwidth.

Reducing the cost of International Internet Connection.

Facilitating the construction of the broadband basic infrastructure.
IV - Recommendations

Improving legislative and regulatory framework to promote competition.

Developing and implementing a plan of mass Internet access.

Implementation of strong acts and policies at regional level.
IV - Recommendations

Optimization the use of International bandwidth

• Promoting the use of country extension;
• Promoting national and regional Internet exchange points;
• Development of local content.
IV - Recommendations

Reducing the cost of International Internet Connection

Put in practice cost sharing in international level for International Internet Connection.

Implementing peering between Africa ISP and ISP from other regions.

Built national Internet backbone and regional infrastructure for interconnection.
Facilitating the construction of the broadband basic infrastructure

Promote public/private partnership to built the broadband basic infrastructure.

Encourage infrastructure sharing between the operators.
IV - Recommendations

Improving the legislative and regulatory framework to promote competition

Application of existing laws and regulations

Adoption of texts promoting infrastructure construction.
IV - Recommendations

Developing and implementing a plan of mass Internet access

It is proposed to launch a program that will in a few years (maximum 10 years) initiate more than 70% of the population to the use of ICT.

The program will be based on the education system with the introduction of information technology at all levels of education.
IV - Recommendations

Implementation of strong acts and policies at regional level

The adoption of a deadline for the transposition of Community legislation into national laws.

The inclusion of telecommunications in national investment budgets of states in a proportion at least equal to the contribution of the ICT sector to GDP.
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