ITU Workshop on "Apportionment of revenues and international Internet connectivity"

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Internet connectivity in sub-Saharan African countries: Focus and perspectives

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Internet connectivity in sub-Saharan African countries: Focus and perspectives

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I. Internet users in sub-Saharan African countries

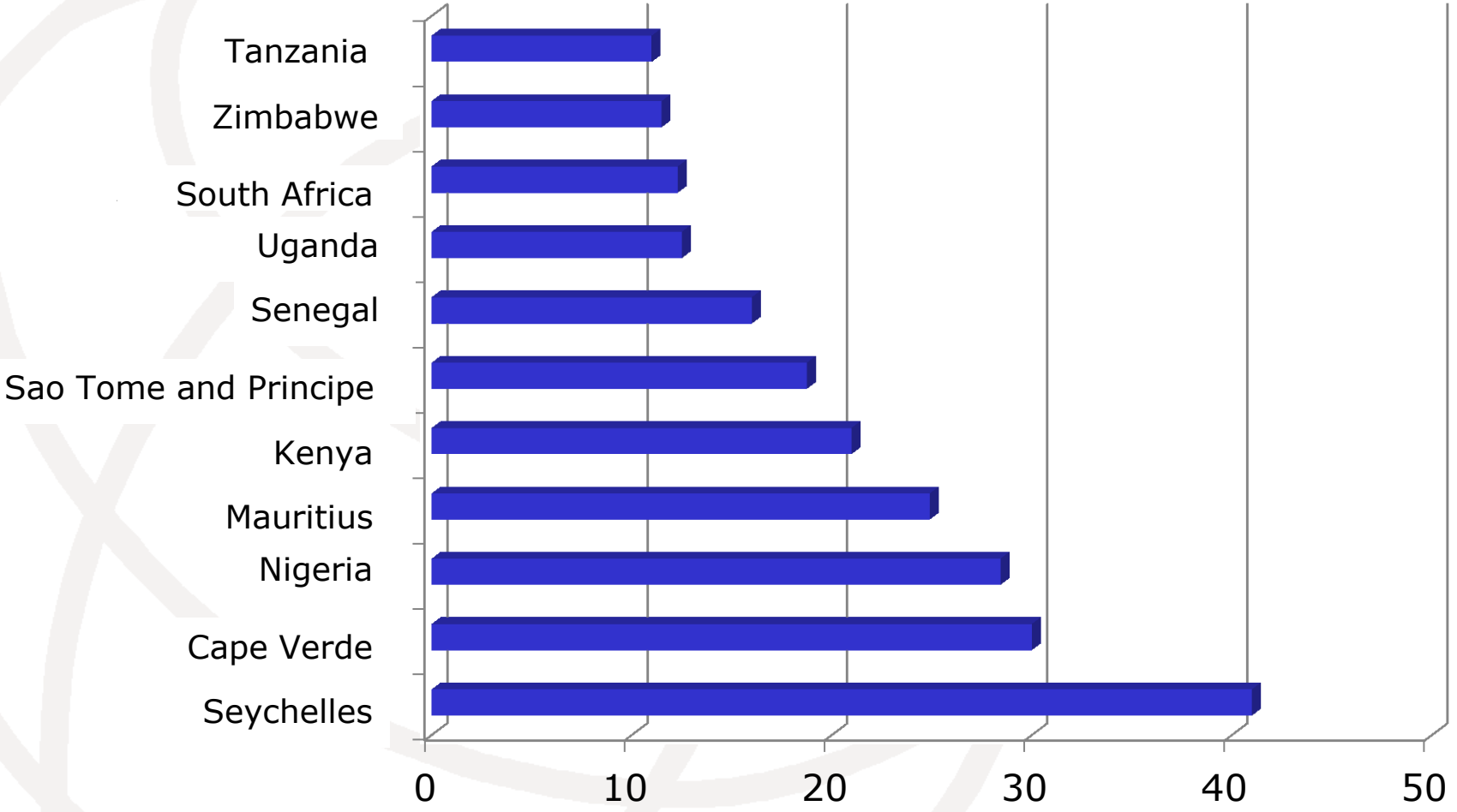
The number of Internet users in sub-Saharan Africa is among the lowest in the world.

The number of Internet users per hundred inhabitants does not exceed 45% for all countries.

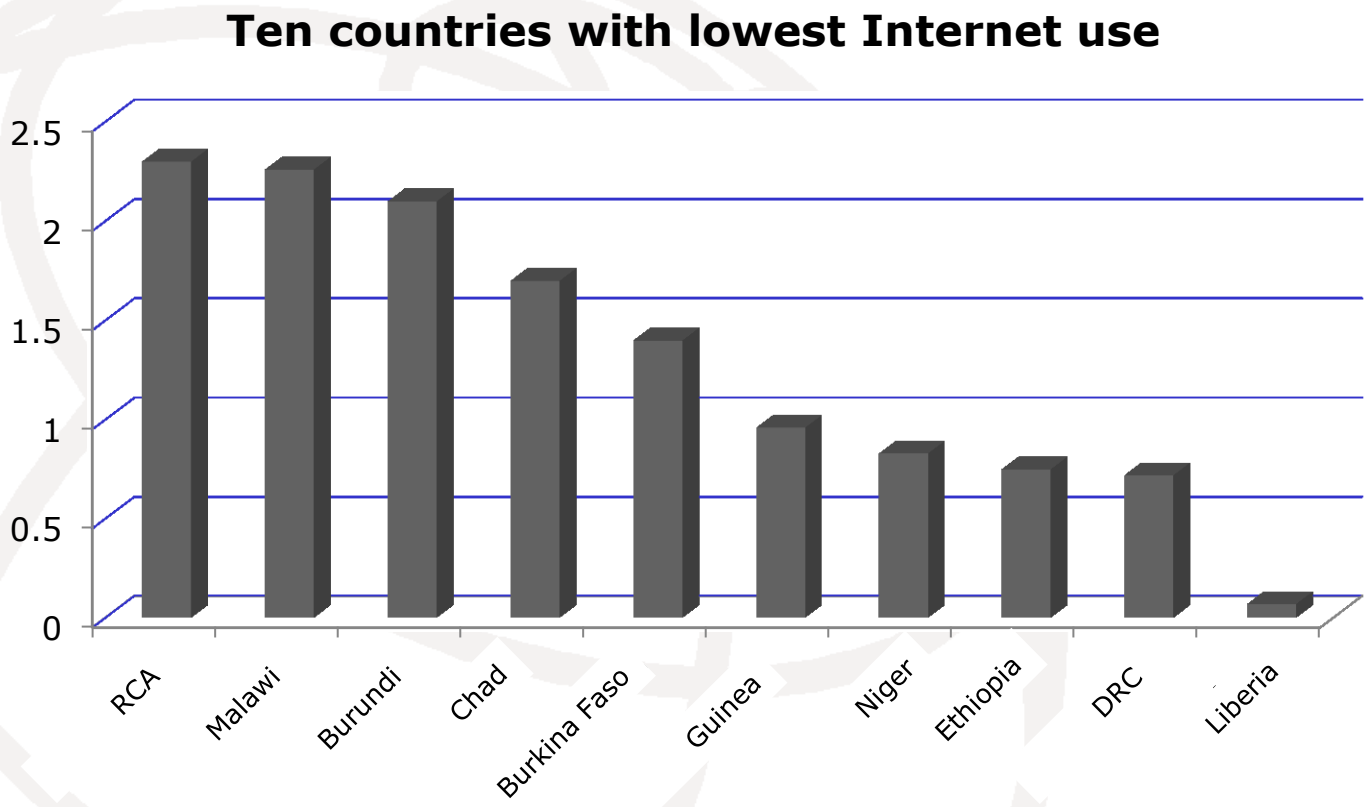
In most countries (more than half), the rate is under 10%.

I. Internet users in sub-Saharan African countries

Ten countries with highest Internet use



I. Internet users in sub-Saharan African countries



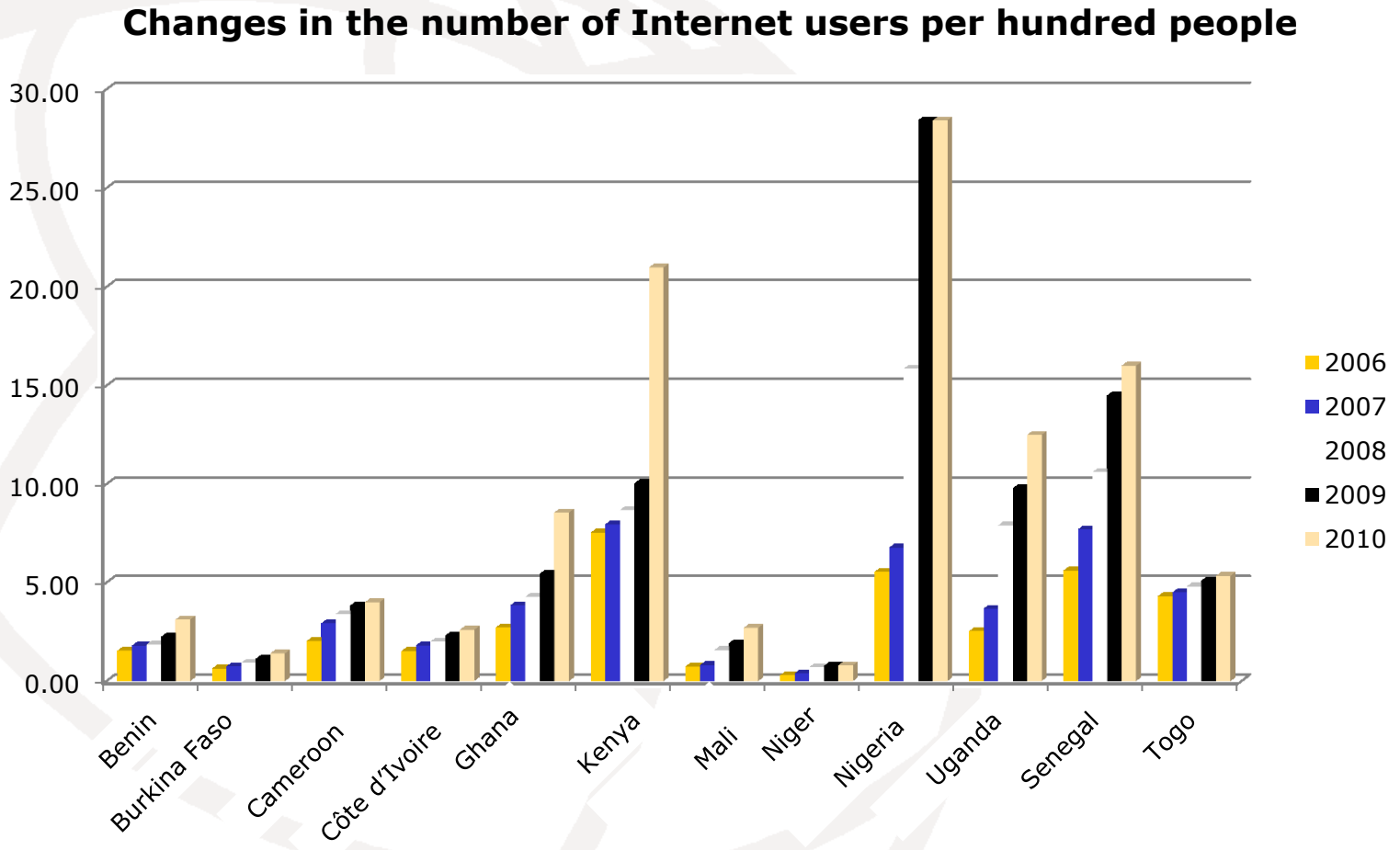
I. Internet users in sub-Saharan African countries

Growth in the number of Internet users was generally low between 2006 and 2010, but reached double digits in some countries.

There is no comparison between Internet users and mobile users. The ratio between the two is very high (1 to 35).

Compared to the rest of the world, the rate of Internet use remains low in sub-Saharan Africa, with the gap widening more gradually lower down the ranks.

I. Internet users in sub-Saharan African countries



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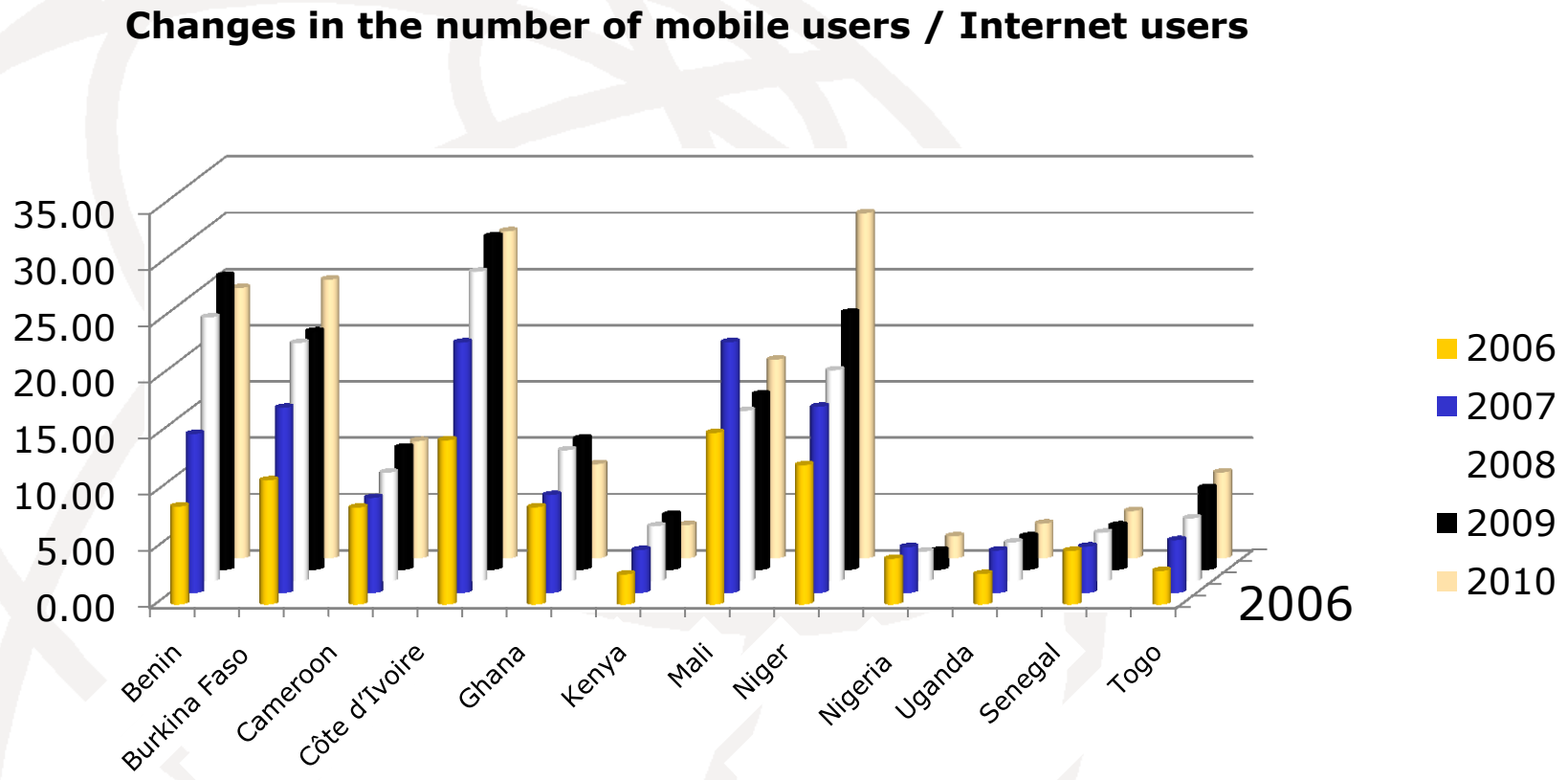

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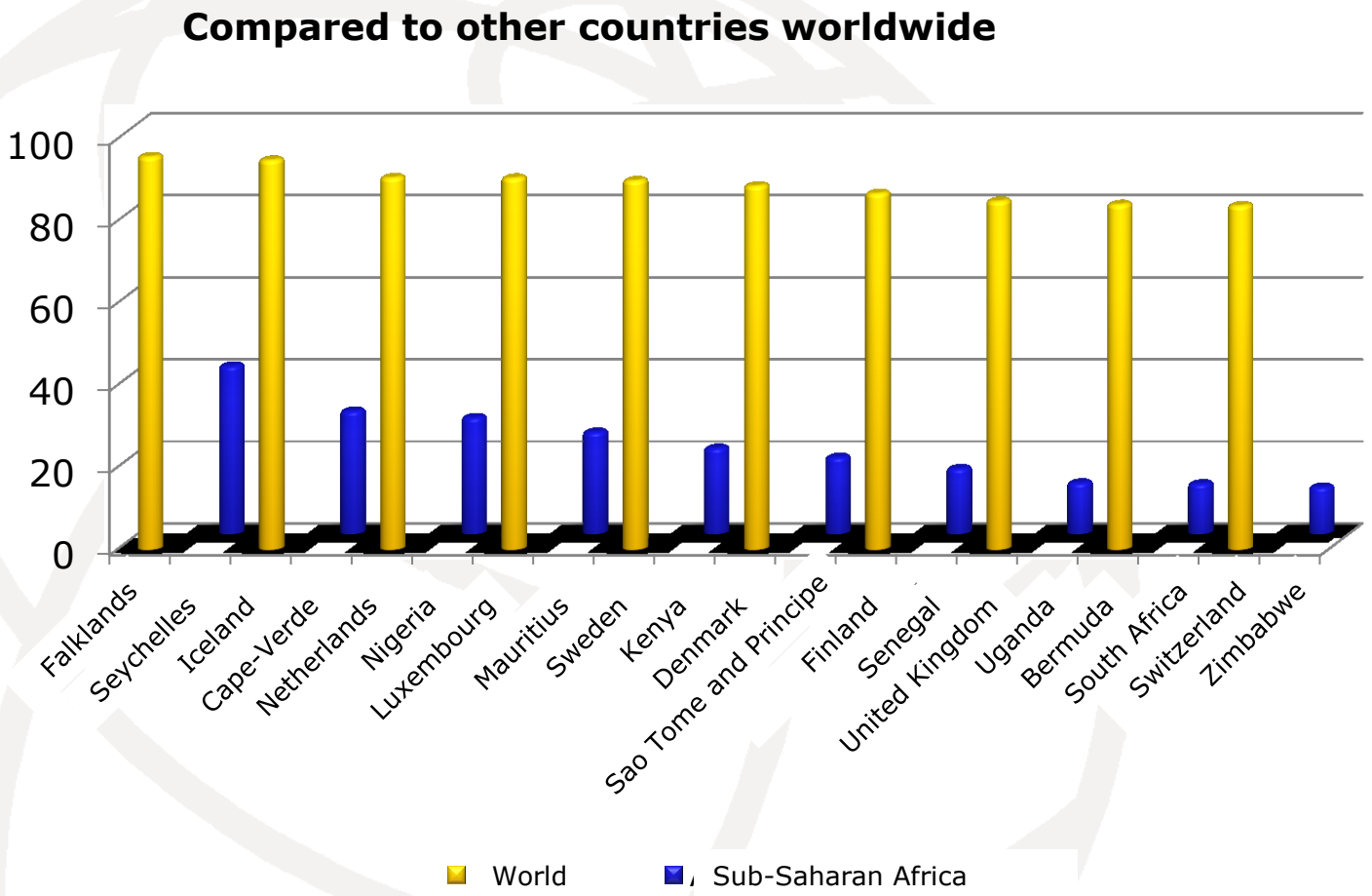


I. Internet users in sub-Saharan African countries

To understand why the number of Internet users in sub-Saharan African countries was low, we analysed the Internet provision value chain.

The various players and market segments were analysed in the second part of the study.

II. Analysis of the Internet provision value chain

Analysis of the Internet provision value chain in sub-Saharan African countries shows that all the actors are in place and try to play their role.

Three types of players:

Institutional players

Competitors

Interest groups

II. Analysis of the Internet provision value chain

Institutional players

- Regional economic communities
- State players
- National regulatory authorities

II. Analysis of the Internet provision value chain

Competitors

- Internet service providers
- National or international backbone providers
- Internet access providers

II. Analysis of the Internet provision value chain

Interest groups

- Associations of operators
- Associations of service providers
- Consumer associations

II. Analysis of the Internet provision value chain

The market is broken down into three main segments:

Internet service providers

Internet access providers

National, regional or international backbone providers

II. Analysis of the Internet provision value chain

The analysis revealed bottlenecks in the provision of Internet connectivity on the market:

Use of anti-competitive practices

No access to the wired local loop

Competition between service provider and incumbent operator

Refusal to hire international bandwidth

II. Analysis of the Internet provision value chain

Lack of infrastructure

Monopoly on the existing infrastructure

Failure to apply the law or the regulations

III. Reasons for the high cost of Internet provision

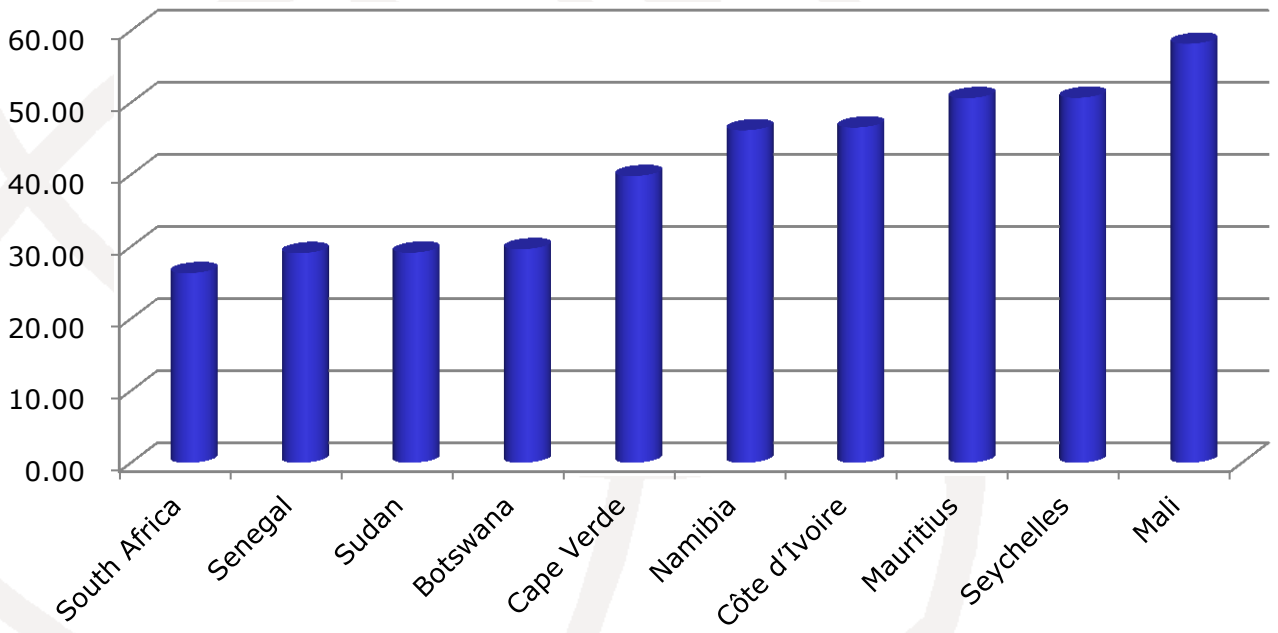
One reason the Internet is less used in sub-Saharan countries is the price of connectivity.

It appears that tariffs for Internet connectivity in the region are among the most expensive in the world.

In ten countries with lower tariffs for Internet connectivity, the tariff represented up to 60% of the minimum wage defined by ILO.

III. Reasons for the high cost of Internet provision

Value of the ten lowest tariffs for wired broadband in 2008



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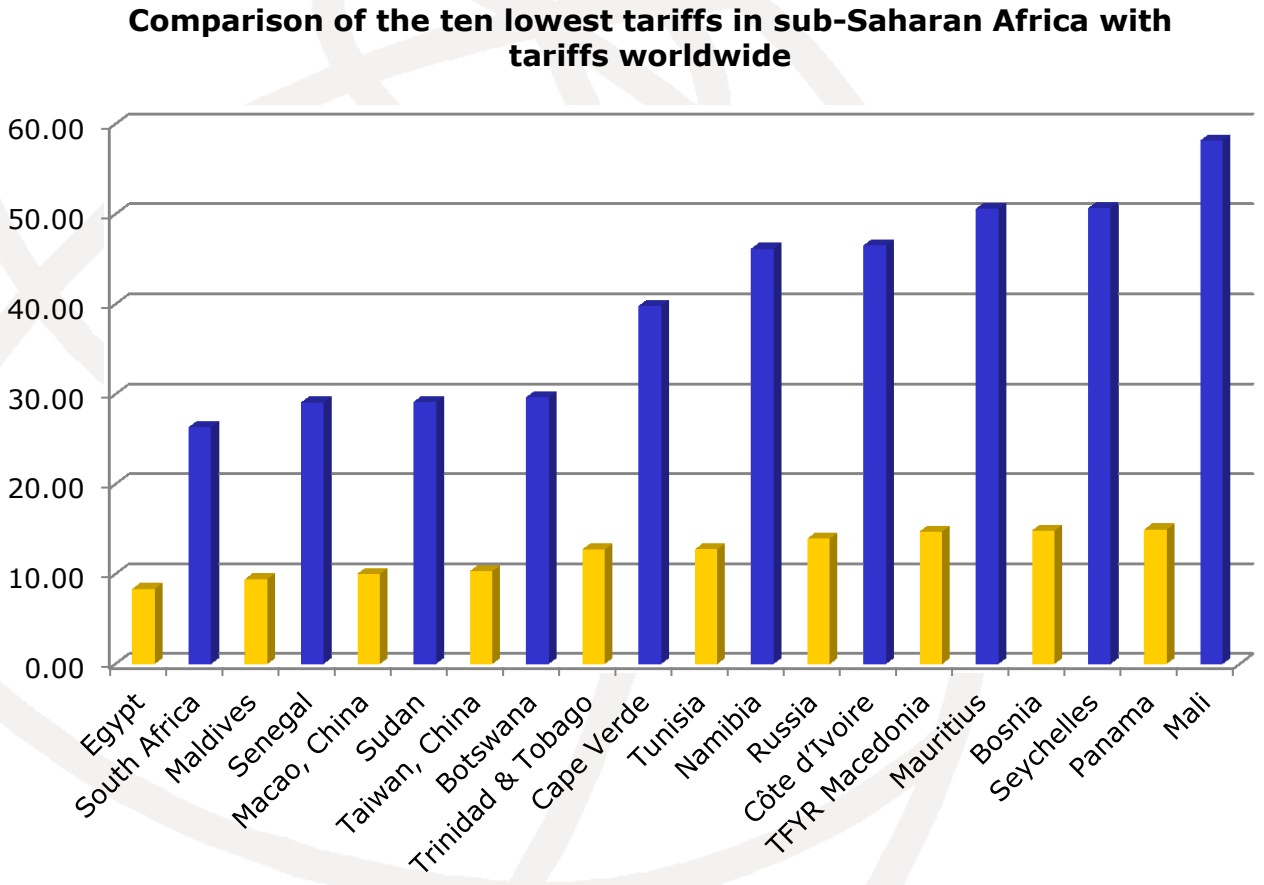

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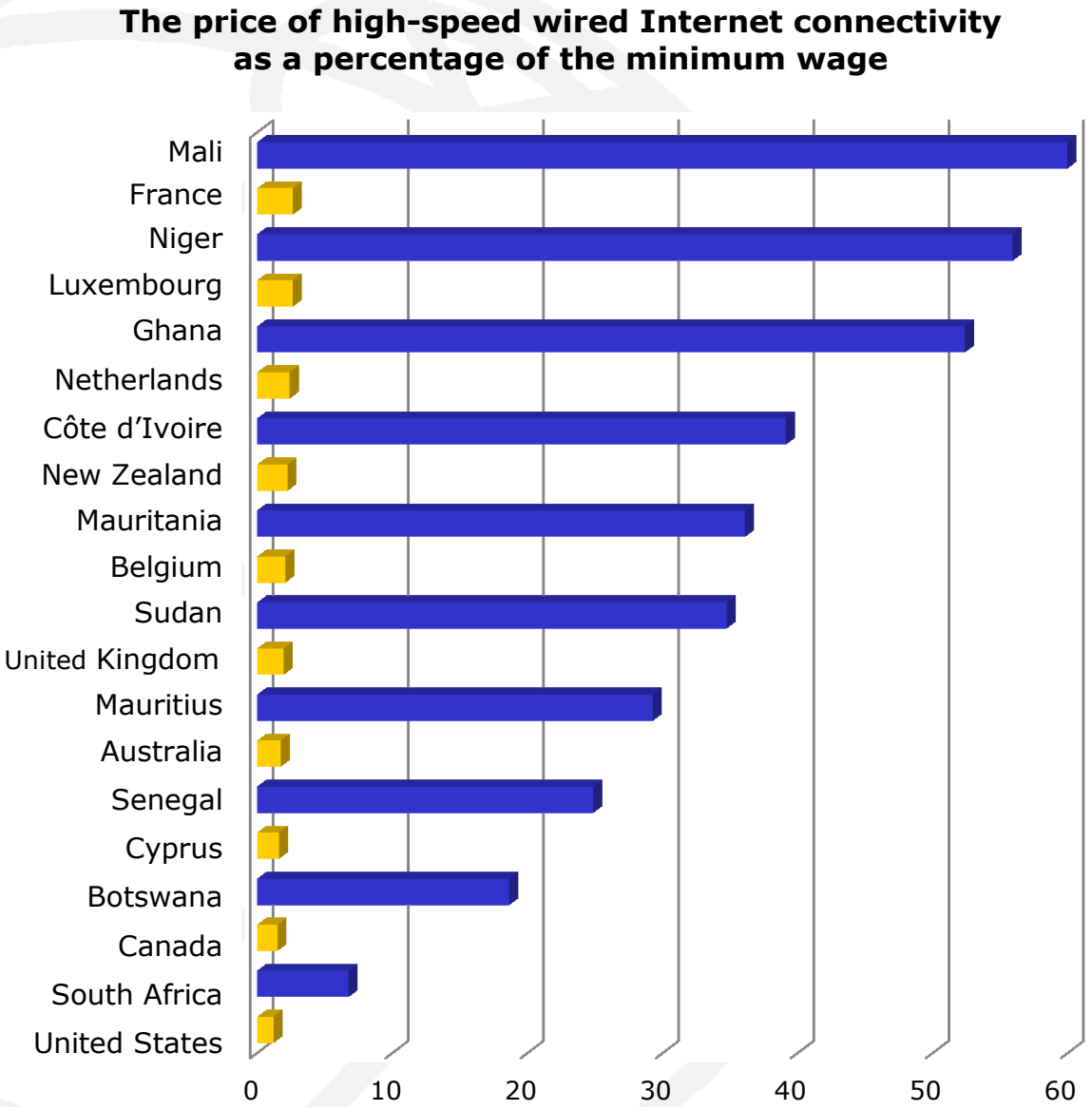


III. Reasons for the high cost of Internet provision

There are many reasons for the high cost of Internet connectivity in sub-Saharan countries:

Insufficient investment in telecommunications

Poor market conditions

Lack of competition in some market segments

The cost of international Internet connectivity

III. Reasons for the high cost of Internet provision

Insufficient investment in telecommunications

Structural adjustment programmes imposed on States by Bretton Woods institutions in the 1980s prohibited any investment in telecommunications deemed "profitable".

The "shift in investments" of the former incumbents brought about by competition introduced into the telecommunication sector in the late 1990s.

III. Reasons for the high cost of Internet provision

Poor market conditions

Lack of production in the ICT industry

Insufficient demand for Internet connectivity

Narrow markets

III. Reasons for the high cost of Internet provision

Lack of competition in some market segments

In West Africa, there is only one submarine cable connecting all countries to Europe for Internet access.

In most countries, the incumbent operators are vertically integrated and try to distort competition.

III. Reasons for the high cost of Internet provision

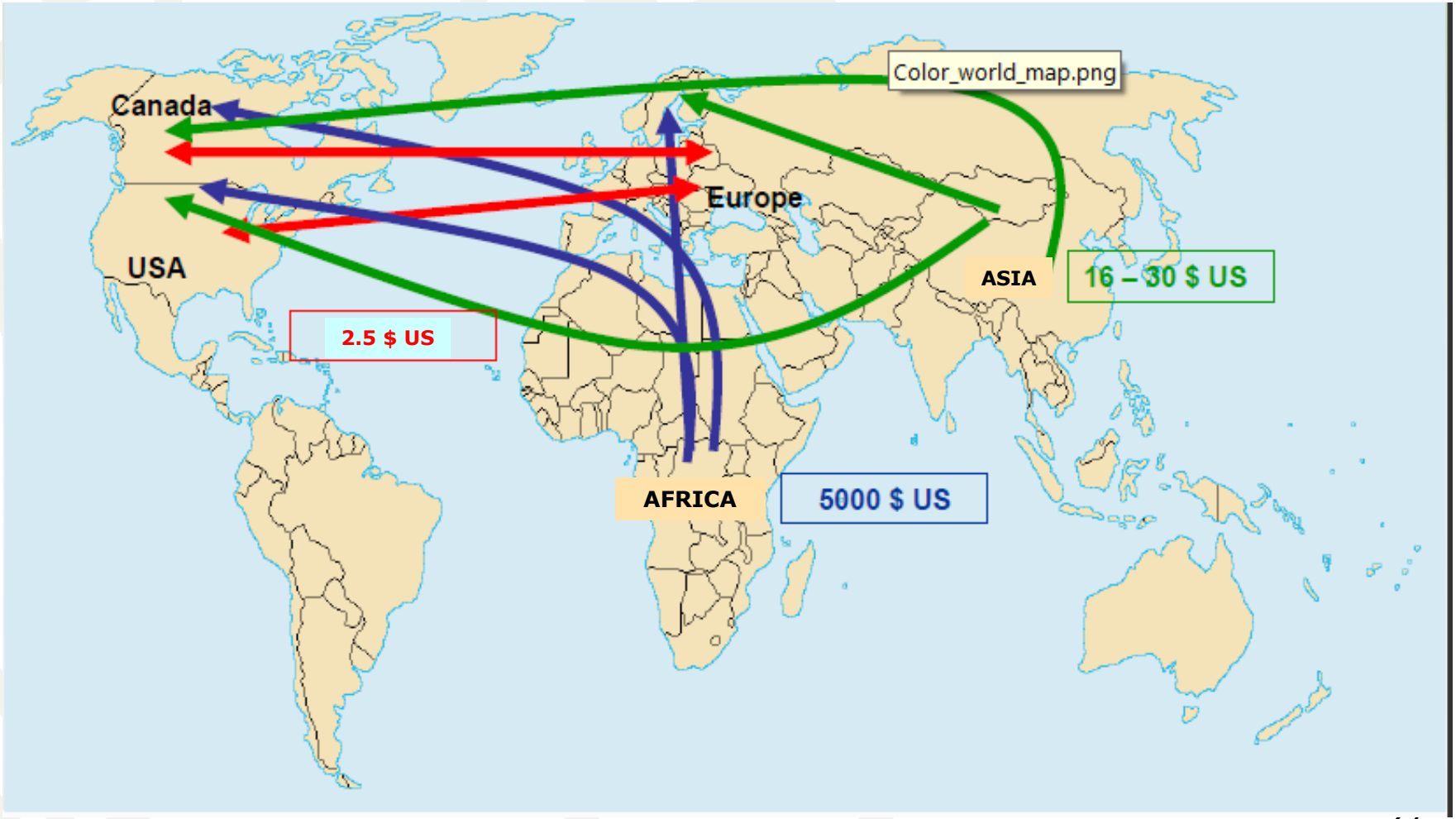
The cost of international Internet connectivity

The cost of international Internet connectivity is very high in sub-Saharan countries.

In recent years, the cost has come down, but it remains higher than the cost in Europe and North America.

III. Reasons for the high cost of Internet provision

Rental price of 2 Mbit/s of international bandwidth on SAT 3 in 2006



IV. Recommendations

Optimize the use of international bandwidth

Reduce the cost of international Internet connectivity

Facilitate the construction of basic broadband infrastructure

IV. Recommendations

Improve legislative and regulatory frameworks to promote competition

Develop and implement a plan of mass Internet access

Implement strong acts and policies at regional level

IV. Recommendations

Optimize the use of international bandwidth

- Promote the use of country extensions
- Promote national and regional Internet exchange points
- Develop local content

IV. Recommendations

Reduce the cost of international Internet connectivity

Practice cost-sharing at international level for international Internet connectivity

Implement peering between African ISPs and ISPs from other regions

Build national Internet backbones and regional infrastructure for interconnection

IV. Recommendations

Facilitate the construction of basic broadband infrastructure

Promote public/private partnerships to build basic broadband infrastructure

Encourage infrastructure-sharing between operators

IV. Recommendations

Improve legislative and regulatory frameworks to promote competition

Apply existing laws and regulations

Adopt texts promoting infrastructure construction

IV. Recommendations

Develop and implement a plan of mass Internet access

There is a proposal to launch a programme that will introduce over 70% of the population to the use of ICTs in a few years (max. 10).

The programme will be based on the education system, with information technology introduced at all levels of education.

IV. Recommendations

Implement strong acts and policies at regional level

Adopt a deadline for the transposition of Community legislation into national laws

Include telecommunications in national investment budgets in a proportion at least equal to the contribution of the ICT sector to GDP

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THANK YOU FOR YOUR ATTENTION!