International gateway liberalization

WSIS Facilitation Meeting on Action Line C6

Infrastructure sharing: extending ICT access to all

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Trends in Liberalization of ICT markets

Liberalization, which in general refers to fewer government restrictions in exchange for greater participation of private entities, has become more widespread, including by percentage of ITU Member States and types of ICTs.

Note: This figure reflects what is legally permissible
Promises and Expectations of Liberalization

<table>
<thead>
<tr>
<th><strong>Telecommunication sector in general:</strong></th>
<th><strong>International gateways:</strong></th>
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<tbody>
<tr>
<td>➢ Increased investment:</td>
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<tr>
<td>➢ Market players are able to take</td>
<td>➢ Investing in new gateways;</td>
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<td>rational “Buy or build” decisions.</td>
<td>➢ Upgrading existing gateways to meet</td>
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<tr>
<td>➢ Increased competition:</td>
<td>increased demand.</td>
</tr>
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<td>➢ New market players.</td>
<td>➢ Bigger choice of international</td>
</tr>
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<td>➢ Better and newer services</td>
<td>connectivity providers.</td>
</tr>
<tr>
<td>➢ Lower costs and lower prices</td>
<td>➢ Lower prices of international</td>
</tr>
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<td>➢ Faster growth of the market:</td>
<td>communications.</td>
</tr>
<tr>
<td>➢ Increased teledensity;</td>
<td>➢ Increased international bandwidth.</td>
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<tr>
<td>➢ Increased usage of services.</td>
<td>➢ Faster market growth:</td>
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<tr>
<td>➢ Contribution to economic growth</td>
<td>➢ Increased traffic and use.</td>
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<td>➢ Contribution to economic growth:</td>
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<td>➢ Decrease in grey markets;</td>
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<td>➢ Increase in state revenues.</td>
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</table>
Experience: Tanzania (1)

- Liberalization of IGW in 2005 together with introduction of converged licensing framework
- By May 2006 four new service providers were licensed that are rolling out wireless services

Fixed, mobile and Internet markets’ development in Tanzania, 1997-2007

Liberalization of IGW

ITU World Telecommunication/ ICT Indicators database

May 2008
Experience: Tanzania (2)

- Fixed international tariffs:
  - From 2000 - 2005 average tariffs of international calls dropped by 38 percent,
  - From 2005-2006, after liberalization of fixed telephony market and international gateways, they decreased by 57 percent.

- Mobile international tariffs:
  - 2000 - 2005 average tariffs of international calls dropped by 49 percent,
  - From 2005 - 2006 they decreased by 68 percent.
Experience: Tanzania (3)

- The cost of connectivity in 1999 was extremely high with a mere 32kbit/s link costing about USD 16,000. As a result of converged licensing framework and increasing number of ISPs the bandwidth prices have dropped to about USD 3,000 per Mbit.

- In developed countries, however, bandwidth of 1 Mbit is available for as low as USD 300.

- Like many other African countries, Tanzania lacks a cheap and high-capacity Internet connection. All ISPs are connected via expensive satellite connections.
Experience: Thailand (1)

- Liberalization of IGW in 2006.
- There are six international gateway operators in Thailand.
- After liberalization of international gateways, the number of Internet users increases.

Liberalization of IGW

Fixed, mobile and Internet markets’ development in Thailand, 1997-2007
Experience: Thailand (2)

- In line with Internet users, the number of broadband subscribers was growing.
- This means greater required bandwidth.
- In 2007 (right after liberalization of IGW) International Internet bandwidth increased by more than 2.5 times.
Experience: Botswana (1)

- In 2006 - Liberalization of IGW and new licensing framework.
- According to the Botswana Telecommunications Authority, during the period of March 2006 - March 2007, fixed telephony experienced a slight increase. The total number of subscribers (lines) increased from 132 to 137 thousand.
Experience: Botswana (2)

- From 2006 - 2007 mobile penetration increased from 47 to 76 percent

- Tariffs of mobile services were decreasing in neighboring countries. In Botswana they decreased by 65.9 percent during a three-year period
Experience: Botswana (3)

- 26 licensed ISPs in 2007.
- Internet access is very limited:
  - Half of all households have access to electricity;
  - Personal computers cost about USD 1,000;
  - Bandwidth costs are between USD 5,000-8,000 per month for 1 Mbit.

- The number of Internet users in the country is about 80,000 with an average bandwidth of 17 bits/s per capita or 375 bits/s per user.
Experience: Indonesia

- Liberalization of IGW in 2004
- Increase of the traffic (minutes in and out) by 200%.
- Increase of the total revenue by 94%.
- Decrease of the price of services.
Some other:

**Kenya:**
- Liberalization of IGW in 2005;
- Increase of total bandwidth available to the country by almost 700% in 2006;
- Decrease the price of international telephone calls (around 70%) and Internet connection and charges.

**Morocco:**
- Liberalization of IGW in 2002;
- Increase of bandwidth;
- Decrease of the price of services (Internet connection and roaming charges);
- 99% of Internet connection in 2007 are broadband;
- Broadband prices are the cheapest in Africa, at USD 18 per month for a 256 kbps package;
- Offers highest broadband speeds in Africa (20Mbit/s).
Liberalization of International gateways

- It is evident from the experience throughout the world that liberalization of international gateways has brought many benefits to the sector including the decrease of tariffs and boosting sector growth:
  - All analyzed countries to a certain extent experienced some or all expected benefits.
  - Liberalization of IGW alone could not address all challenges. Important challenges remain:
    - Dominance control;
    - Interconnection issues;
    - Cost of access to international bandwidth;
    - Security issues.
Monopoly of IGW, however, may cause additional challenges:

- IGW monopoly cannot entirely prevent bypass or arbitrage market practices (call back, illegal VoIP);
- Costs and energy to control illegal bypass and grey markets;
- Demand for international bandwidth is rapidly growing – is a single operator able to provide all required demand?

Monopoly of IGW is barely sustainable in the world of convergence, rapid technological development and globalization. Even if liberalization of the IGW is just one piece of larger system, it may significantly influence market development.
More Information

➤ GSR 2008 Discussion paper on *International Gateway Liberalization: the Singapore experience*
  
  http://www.itu.int/ITU-D/treg/Events/Seminars/GSR/GSR08/papers.html

➤ Trends in Telecommunication Reform 2008 (*forthcoming*)
Thank you!

International Telecommunication Union

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