



ITU Telecommunication
Development Bureau (BDT)

Report Seminar on Costs and Tariffs for Study Group 3 Regional Group for Africa (SG3RG-AFR)

CairoEgypt, 4 - 5 February 2013

I. Introduction

The International Telecommunication Union (ITU) Regional Seminar on Costs and Tariffs, organized jointly by the Telecommunication Development Bureau (BDT) and the Telecommunication Standardization Bureau (TSB), in collaboration with the National Telecom Regulatory Authority (NTRA) was held in Cairo, Egypt, from 4 to 5 February 2013.

The seminar was followed by the meeting of Study Group 3 Regional Group for Africa (SG3RG-AFR). 47 participants from 19 countries took part in the meeting. The complete list of participants is available at: <http://www.itu.int/ITU-D/finance>.

II. Opening ceremony

The opening ceremony was presided over by *Dr Amr Badawi, the Executive President (NTRA) of Egypt*

With him were: Slaheddine Maaref representing the ITU Cairo Regional Director, Mr Makhtar Fall, Head of the Regulatory and Market Environment Division of BDT; Mr Abossé Akué-Kpakpo, Chairman of SG3RG-AFR and Mr Abdoukarim, *Secretary General, African Telecommunications Union (ATU)*

III. Summary of the discussions

All the sessions were moderated by Sherif Guinena, Advisor to the Executive President, National Telecom Regulatory Authority, Egypt.

Session 1: Strategies for the development of NGN and NGA in a broadband environment - Regulatory and economic aspects

ITU Expert Roger Steele opened the session with a presentation on the aspects of NGN and NGA by providing broadband and NGN definitions, as well as their effect on the economy: with more broadband usage, the higher the GDP will be. He also explained that government investment and involvement has returned in the telecommunications sector. Finally, Steele showed that emerging economies may need more intervention and external funding than developed markets as it is known that almost all countries need some intervention; and we should study the issues and learn from the mistakes and successes of others.

Huawei representative Mr A. El Okr gave a second presentation where he showed that LTE is a leading NGA because of the growing expectations of consumers, and that the need of a wireless NGA to fulfill

the pipe requirements leaves no choice but LTE. LTE is the answer for a wide and simple pipe: enhances experience for end-to-end quality, spectrum flexibility and lower cost.

Fellow panelist Mrs H. Mutseyekwa from Potraz Zimbabwe contributed to the session with relevant points by pointing out that we need to be driven by consumer expectations. Additionally, there should be a balance between the need for high speed and basic accessibility. We have situations where they need high speed and other not. We have to focus more on accessibility.

We have challenges in terms of affordability in developing countries; we don't have the critical mass to sustain the growth of high speed. We need to come up with very innovative options through government and private funding.

The session ended with the conclusion that there needs to a collaborative approach on the international level and appropriate Public Private Partnerships at national level.

Session 3: Regulation in a converged broadband world

The session started with a presentation by Mr Richard Hill, ITU expert, which discussed the importance of broadband as a key infrastructure, and highlighted the discrepancies between how developed broadband is in developed countries vs. developing countries. Mr Hill discussed the difference between ex-ante and ex-post regulation, and how this affects broadband in today's changing regulatory environment that is based on convergence, and on regulators with expanded mandates. He also highlighted the problem that African countries are facing with low broadband speed and high cost.

The second presentation was by Mr Abosse Akue-Kpakpo, Co-Chairman, African group SG3, and discussed the role of the state in adopting regulatory measures that stimulate the offer and the demand for broadband. He highlighted the initiatives to be taken on three levels: the level of the operators in providing submarine cables, the level of the regulatory authorities in encouraging the adoption of broadband, and on the political level in encouraging broadband and treating it as a basic service.

Attention was drawn to the African Union project to implement IXPs in all African countries. It was stressed that operators should participate in this project, and use the new IXPs once they are in operation.

The session ended with conclusion that broadband is a key infrastructure to be addressed by a broadband policy framework involving a number of policy considerations in particular: Ensuring investment in infrastructure; Fair return on investments; Affordable prices for consumers.

Session 4: Initiatives to stimulate demand for broadband services and development of local content

In this session there were discussions on the implicated relation between cost and demand, however to initiate demand in Africa, we can start with little or moderate bandwidth – better than nothing – thence, when demand is stimulated, full broadband can be implemented. Funding and investment in NGN should be encouraged by the governments by tax incentives to increase uptake, however direct government funding may cause imbalance between operators, so mechanisms for attracting and encouraging investment should be envisaged. It was highlighted that national strategy is of importance which comprises legal, regulatory and technical aspects. PPP is envisaged as a good mechanism for the

implementation of the BB strategy, including requirements for international connectivity and the associated landing points. It was emphasized that infrastructure sharing – in particular with utility suppliers and in between operators – can facilitate and expedite the implementation of the BB strategy especially in rural areas, however government intervention through proper regulatory measures should be envisaged to counter operators reluctance to share their facilities in some instance.

Session 5: Taxation pressures on the telecommunication sector

Mr V. Raval from GSMA discussed that telecommunication is a significant contributor to national economy. However, sector specific taxes on mobile telecom are not as favorable as expected, as they prevent take up of mobile services, discourage users, and hinder investments in networks and services. He explained that reducing sector specific taxes on mobile telecoms benefits citizen, businesses and governments. High taxes send the wrong signals on consumption and investment. Consequently, lowering the tax burden is a win-win situation. For example, Ecuador abolished the 15% luxury tax on mobiles, which triggered an increase in the sales of mobiles.

Moreover, additional taxes on international calls could harm the countries' business image. Instead, governments should move towards an optimal tax regime for mobile telecoms.

Mr Dut Acol, South Sudan, explained the taxation pressure on the telecommunication in South Sudan and how the ministry of finance is viewing telecom companies as a cash cow. On the other hand, ICT is striving to solve this problem that is harming the telecom industry.

Mr S. Toure, from Senegal, presented to the attendees the study done on 10 West African countries (UEMOA) to test the level of financial pressure when telecom tax is imposed on the operators. It was reflected that the operators suffered direct taxation, indirect taxation and sector deduction. The study also concluded that such tax harms investments in the telecom sector.

Session 6: Discussions sessions on the taxation situation in Africa

Mr J. Ntahondi, ARCT, Burundi ART representative, Djallo Amadou from ART of the Central African Republic started the session by providing a presentation on the fiscal situation in the country. He argued that unlike other African countries, the government budget relies heavily on fiscal revenue. Concerning the telecommunications sector, the operators contribute to the government budget through direct and indirect taxes as well as through fees for the regulation authority. After showing the fiscal issues concerns and their impact on the growth of mobile operators, Mr Amadou concluded by saying that putting a cap on the regulation fees would constitute a lever for investment for both development and innovation in order to satisfy the consumer's needs.

NTRA representative Mr M. El Ayouti from Egypt contributed to the subject at hand by highlighting the importance of taxes for any government (especially in developing countries). For the case of Egypt, he showed that the contribution of taxes to the GDP is below average compared to Africa, Europe and the US. This fact raises the question if there is a correlation between it and the quality of infrastructure. In the telecommunications sector, there are the Sales Tax (15%) and the Income Tax (25%), which is at a flat rate. He ended by showing that there's a strong debate about whether the flat tax is a suitable tax system for building a strong infrastructure or not as opposed as to having an accelerated tax system.

Fellow panelist NCA F. Asumanu from Ghana showed that taxes are not a pressure on operators, but they are passed on to consumers. CST is in the price of consumers. Furthermore, taxation should be appreciated in the industry because of the development the state does through it.

Mr J. Ntahondi ARCT gave the fiscal situation in his country and its different aspects.

In conclusion each panelist gave his view on the role of government in taxation and how enterprises should be encouraged to increase CSR.

Session 7: The Internet Ecosystem in Africa

Mr I. Hisham, Afrinic, gave a comprehensive situation on the critical internet infrastructure and resources in Africa. He explained the meaning and purpose of internet protocol addresses and the difference between IPv4 as a scarce resource and IPv6 as the future pool of addresses. He also discussed Regional Internet Registrars such as Afrinic and their purpose and how they operate in cooperation with IANA. His presentation also included a summary on Root Name Servers and Internet Exchange Points (IXPs). He highlighted that countries must have root name servers instances, country code top level domain name redundant servers, and IXPs within their borders in order to maintain autonomy and internal connectivity during periods when international cables are damaged.

Session 8: Market definition and significant market power designation in a broadband world

Mr Hill, ITU expert, presentation tackled the issue of market definition and the significant market power. He emphasized on the importance of the ex-ante regulation and how it became a common practice in telecom and the limitation of regulatory intervention to the extent of the market failures such as barriers to enter the market.

He also added that the regulatory policy in a converging broadband world is facing a number of challenges. Not only does it become more difficult to define relevant markets and identify firms that enjoy market power - there are likely to be many forms of behavior that are of potential concern, but which cannot easily be addressed through regulatory obligations that can be clearly defined and relatively easily monitored and enforced.

Significant market power (SMP) can be defined as the power to: Set high prices, Provide low quality, not innovate or Lock out competition.

Markets in the broadband world are defined in terms of products, services and a given geographical area. On the other hand, Mr Hill discussed some of the criteria required to define the market such as distinguishing between retail and wholesale market, role of services, role of customer flexibility, geography and the one-way substitution that the customers may be willing to move from ADSL to fiber but not the other way.

The party with Significant Market Power usually has the power to set high prices with low quality. Lack of innovation is also one of the SMP characteristics. Finally he discussed the implications of convergence and its effect of SMP.

Mrs Zeinab, NTC Sudan, had a contribution about the importance of defining the market barrier and stimulating effective competition. She also mentioned that the regulator could play an important role in competition depending on effectiveness of the regulator.

Dr Reynolds, Tanzania, explained that in his country a detailed analysis resulted in the conclusion that there were 9 distinct markets for telecommunications, and that the dominant player had significant market power in three of those markets: international interconnections, leased lines, and the national backbone. The criteria used to determine whether there was significant market power included: The ability to control prices; Market share above 35%; Easy/privileged access to funding; Significant advantage in experience and track record; Control of/access to end-users.

During the discussions, it was stressed that a detailed analysis must be carried out in each country. For example, submarine cable landing points might or might not be a separate market from the cables themselves. Similarly, what is an essential facility in one country might not be an essential facility in another country.

In Ghana, one mobile operator has made significant investments in infrastructure, while others have not. That operator has recently raised its prices and introduced a volume cap. It would take a detailed analysis to determine whether there is abuse of significant market power, or merely an appropriate return on investments.

It was stressed that, in general, any regulatory actions should be taken prudently, after adequate study and consultation. That is, allow time for markets to develop and to react to changes before considering regulatory interventions.

Session 9: Presentation of WTSA and WCIT results

Mr Richard Hill, ITU Expert gave a presentation on the results of the World Telecommunication Standardization Assembly (WTSA) and World Conference on International Telecommunications (WCIT) 2012. He summarized the 6 new resolutions of that WTSA 2012 came up with and shed lights on the revised resolutions, such as Resolution 65 on Calling Party Number Delivery which was strengthened at WTSA 2012. He also highlighted that the participation from developing countries at WTSA 2012 was significantly high, and that many members of developing countries have assumed leadership positions.

WTSA-12 was the best-attended WTSA ever, attracting over 1000 delegates from over 100 countries. This 4-yearly event reviews the structure of the sector, appoints the leadership teams for our 10 study groups, and sets the priorities for the coming years. On this occasion it identified the need for increased activity in the area of e-health, software-defined networks, e-waste, conformity and interoperability, and engagement of academia in our work. It maintained the current study group structure.

Mr Hill then presented the main results of WCIT 2012. The conference welcomed over 1,400 delegates from 151 Member States, including over 60 Ministers, Deputy Ministers and Ambassadors. The ITRs, signed by 89 countries out of the 144 present and having authority to sign.

He stressed that although there was strong divergence of views on some topics, other articles were less controversial, such as the article on transparency of roaming charges. The preamble was expanded to

include respect for human rights in the implementation of the ITRs, and giving right to Member States to have access to international telecom services. Article 1 highlighted that the ITRs will not cover content.

Other new articles include the one on Security and robustness of networks, energy efficiency and e-waste, and accessibility. Article 6 has been restructured to include commercial agreements or accounting-rate principles and to encourage investment and promote competitive wholesale pricing.

WCIT came up with five new resolutions, including improving connectivity to landlocked developing countries and small island states, a globally harmonized emergency number, a resolution to foster greater internet growth, another on the periodic review of ITRs (every 8 years to be agreed by PP).

The second presenter, Dr. Sherif Guinena, Advisor, NTRA, Egypt, gave a brief history of the ITRs and their relation with the WTO through the GATS agreement and the BTA, and introduced the consequences of the 1988 ITRs, such as having 90% special arrangements, and commercialization of service provisioning. He also highlighted the expectations of Africa for WCIT 2012, and at that not all of Africa's expectations were included in the treaty due to the divergent views about critical issues.

With regards to the WTSA results, Dr. Guinena, as the Chairman of Study Group 2, welcomed the cooperation with Study Group 3, especially with WTSA mandating cooperation between the two Study Groups on several topics. He urged participants to join the correspondence group on a working definition for the term "ICT".

In conclusion to the discussions, it was noted that national and regional workshops/debriefings should be organized to review the implications of the new ITRs, their interpretation and their implementation and to explore ways to narrow the differences in the points of view expressed at WCIT.

It is expected that the ITU leadership will discuss with non-signatory Member States to understand better their concerns and to try to find ways to address them.

It was agreed that it is not desirable to have a split international treaty regime, so efforts should be made to find ways to bridge the differences in points of view between the various stakeholders

It was noted that WCIT Resolutions invite further study of some of the African proposals that had not been accepted as treaty provisions. Thus, African countries should consider submitting contributions to the relevant study groups (in particular SG3) so as to facilitate further discussion of these issues.

Session 10: Economics of ICT (relationship between GDP and ICT)

Mr S.Maaref (ITU Cairo) tackled the importance of Investment in ICT and how it could lead to economic development. ICT in many situations come to open horizons to investors to succeed in their businesses. It also offers the opportunity to be more competitive. ICT is an extra ordinary tool in our lives that leads not only to improvement in our business but also improvements in our living especially in education and health. Countries where the penetration of ICT is high, they have high GDP per capita.

In the same context, increase in the penetration of broadband played an important role on the economic growth of many countries. Governments have to increase investments in ICT especially broadband. In times of crises the ICT sector could help in creating solution in order to overcome this crisis.

Tunisia is a clear example of the contribution of ICT in the economic development. The contribution of ICT in the Tunisian GDP increased from 13% to 16% in 2010. Tunisia is working on encouraging the development of ICT industry through improving employees' skills and the investment environment.

Mr I.Hisham, Afrinic, discussed the Relationship between GDP and ICT. He paid attention to the obvious relation between infrastructure and Internet prices. Mr Hisham also gave examples of some of the African countries and how the presence of IXP has affected these countries in terms of latencies, Cost saving and increasing revenues but South Africa remains the most developed data market with most of the capacity located there.

Based on Mr Hisham's presentation Africa lacks interconnection routes between them that 2% only of Africa's traffic is local and we end paying up more to countries outside the continent and this lead the attendants to discuss the initiatives that aims at connecting Africa such as ITU Connect Africa Summit.

Mrs Aziza Khalil from the National Telecom Regulatory Authority of Egypt and Mr Rutimirwa from Rwanda gave a brief presentation on the importance of ICT and its impact on the economy in their countries. The presentations showed how ICT led to economic growth Egypt and Rwanda and plans adopted by the governments to support the ICT industry especially that it had direct economic effects such as education and health and indirect economic effects such as capital productivity growth, labor efficiency and total factor productivity.

IV. Group discussion and conclusions

The session included a "round the table" session to hear comments on the current seminar and suggestions for possible topics for discussion at the next seminar.

All participants who took the floor find the seminar very beneficial and helpful. For them, the experts were very good and the topics of great relevance. They wish BDT to continue its support in the framework of the capacity building for the development of costs models that comply they specific needs.

For the next sessions, the main proposals were as follows: tools to regulate rates of operators, roaming issues, issues related to IP networks, markets definition for backbones and landing points.

V. VI. Closure

The next BDT seminar on costs and tariffs together with the SG3RG-AFR meeting was planned for February 2014 in Republic of Congo.

The seminar warmly thanked and paid tribute to the authorities of Egypt and *Dr Amr Badawi* for hosting this important ITU event.

The seminar thanked Dr Sherif of NTRA for his capable chairmanship, thanks to which it had been possible to complete the agenda within the time allowed and with excellent results.

Closing the discussions, Dr Sherif thanked all the presenters and especially the ITU Experts for their high-quality presentations over the course of the two-day seminar, and all the seminar participants for their diligence and active participation in the debates.