



ITU High Level Workshop on Regulatory and Economic Aspects of International Mobile Roaming

Geneva, Switzerland, 23-24 September 2013



Summary Report¹

About the Event

The ITU High-Level Workshop on the Regulatory and Economic Aspects of Mobile Roaming was held on 23-24 September 2013 in Geneva, Switzerland. Organized by the Telecommunication Development Bureau (BDT) in coordination with the Telecommunication Standardization Bureau (TSB), the event brought together 120 participants from telecommunication and ICT ministries, national regulatory authorities, recognized operating agencies, regional and international organizations, consumer associations and industry bodies from around the world. The complete list of participants is published on the event [website](#).

The objective of the high-level workshop was to review global industry and regulatory developments in mobile roaming, notably those that aim to reduce prices and improve competition. The workshop featured a report commissioned by the ITU entitled "[International Mobile Roaming services: Facilitating competition and protecting users](#)". An advance copy of the report is posted on the workshop's [website](#) together with workshop presentations and related links.

Opening Ceremony

The event opened with statements from senior ITU officials highlighting the phenomenal growth of mobile and its socio-economic impact in both the developed and developing world. It was noted that many people today have opted to use the mobile as their only communications device, particularly in the developing world where fixed line infrastructure is scarce and costly to build out. In the developed world, the use of internet-enabled smart phones is becoming increasingly widespread and is disrupting every industry from healthcare to banking. Despite these advances, there is still a long way to go to ensure that consumers are sufficiently well informed about the cost of mobile data and voice when traveling abroad. What was a luxury not so long ago is now seen as a necessary service to which everyone should have easy, unfettered and affordable access. In this context, it was noted that the ITU plays a vital role as a trusted global forum for the exchange of information on policy/regulatory approaches, industry initiatives and best practices. In a global economy, regulators and operators need to cooperate and harmonize approaches to mobile roaming through international dialogue and action.

¹ Prepared by Dr Lara Srivastava of the ITU-T Study Group 3 Secretariat in coordination with the BDT Regulatory and Market Environment Division (RME).

Indeed, the [World Conference on International Telecommunications \(WCIT\)](#) in Dubai last year addressed the roaming question and included specific treaty provisions in the revised International Telecommunication Regulations (ITRs) on pricing, information transparency, and quality. In May of this year, after the success of its [Recommendation ITU-T D.98](#) (2012) on mobile roaming, [ITU-T Study Group 3 on Economic and Policy Issues](#) renewed the mandate of its Rapporteur Group on the subject. Although much progress has been made, prices for roaming services remain high in many parts of the world. The outcome of the workshop will therefore provide invaluable input into the future work of the ITU in this area.

Session 1: Overview of the growth of mobile services and their increased importance for economies

Session 1 of the workshop, entitled “*Overview of the growth of mobile services and their increased importance for economies*” explored three main areas: mobile market development, economic impact of mobile growth, and the source of high roaming prices. The session was moderated by Ms Carole Hage of the Telecommunications Regulatory Authority of Lebanon. The panellists in this first session were as follows: Secretary-General of the African Telecommunications Union, Mr Soumalia Abdoulkarim; Director, Economics, Consumer and International Affairs of the National Information and Communication Technology Authority of Papua New Guinea, Mr Kila Gulo-Vui; and the Sub-Director for Telecommunications and ICT Regulation at the Ministry of Posts and Telecommunications of Cameroon, Mr Antoine Pokam.

In order to set the stage for the event, the session began with a presentation of the ITU report on roaming by its author, Mr Dimitri Ypsilanti. A number of figures were cited as evidence of the growth of mobile networks worldwide. The drivers of such growth were highlighted as well as the positive impact this has had on the economies of both developed and developing member states. Worldwide penetration of mobile subscriptions, for instance, now stands at 96.2 per cent². Consumers are increasing their use of bandwidth-hungry applications on their mobile devices: mobile data traffic is forecast to grow by 66 per cent CAGR between 2012 and 2017³. International tourist arrivals worldwide are set to increase by 3.3 per cent a year from 2010 to 2030 to reach 1.8 billion by 2030. Tourism continues to diversify and expand, representing a growing share of GDP notably in emerging economies⁴. A recent Deloitte study for the GSMA found that in developing markets, a 10 per cent expansion in mobile penetration increases productivity by 4.2 per cent⁵. The study also found that a doubling of mobile data use increases GDP per capita by 0.5 per cent, and that a 10 per cent increase in 3G penetration increases GDP per capita growth by 0.15 per cent. However, these positive social and economic impacts are being stifled by high prices, with customers restricting their use of mobile roaming services when travelling (e.g. by switching off services or turning to alternative solutions). The problem of high international roaming prices, therefore, must be tackled rapidly. This is all the more

² ITU World Telecommunication/ICT Indicators Database, 2013. See also [ITU ICT-Eye](#).

³ Cisco VNI Mobile Forecast, 2013

⁴ [UN World Tourism Organization](#), see in particular UNWTO Tourism Highlights, 2013 Edition, available at http://dtxqt4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_highlights13_en_lr.pdf

⁵ See Deloitte Press Release, “GSMA and Deloitte release comprehensive research into the impact of mobile telephony on economic growth: Mobile offers unprecedented economic growth opportunity globally”, available at http://www.deloitte.com/view/en_XB/xb/news/421661aaaa91b310VgnVCM2000003356f70aRCRD.htm

important as Machine2Machine (M2M) traffic grows steadily and users become more and more dependent on timely and critical mobile services.

Many participants and speakers noted that roaming prices remain high with respect to costs. Any improvements have only occurred in response to direct government action exerting pressure on operators (combined in some cases with media attention). Changes have not been made in direct response to growing consumer demand for roaming.

Panellists identified the following factors as contributing to high roaming rates in their countries:

- the limited level of competition provided by resellers;
- the lack of awareness on the part of consumers of the roaming costs they are likely to incur (and the resulting consumer “bill shock”);
- the lack of understanding on the part of regulators and consumers of possible alternatives to roaming;
- large differences between countries (even within a single region) in terms of economic development, regulatory framework, and patterns of consumption.

Some regulators remarked that they have not yet enabled the development of alternatives to mobile roaming because such alternatives are fairly new, and not because there is a lack of will. From the emerging markets perspective, the regulation of wholesale markets through a multilateral process was seen as an option, when in compliance with existing trade obligations. Given differences in policy and regulatory approaches, multilateral negotiations may be a protracted exercise but one worth undertaking. The ITU was seen to provide invaluable guidance for harmonizing regulatory practices and encouraging regulators to raise consumer awareness. A good second option is engaging in bilateral negotiations. However, participants recognized that identifying specific countries and operators with whom to engage comes with its own set of challenges. A particular challenge is that operators with higher traffic volumes are in a better position to lower their prices. The question of inadvertent and cross-border roaming was also discussed briefly during this session. It was noted that most mobile devices are set to roam automatically. It was suggested that manufacturers design devices that enable users to turn off voice/data roaming more easily.

The panel emphasized the need to clarify the responsibilities that operators have to inform customers about roaming in easy-to-understand language. Many argued that a one-size-fits-all approach to roaming regulation may not be advisable, although the development of general standards or guidelines would be useful. It was generally felt that the regulation of wholesale roaming charges, in and of itself, did not have the effect of reducing retail prices for roaming. Participants and panellists called for ITU to be more actively involved in understanding roaming costs and setting standard cost structures and models which member states could apply in their own country. Most panellists pointed to the positive effects that competition has had on the mobile market in their country and the socio-economic benefits of mobile services as a whole.

Session 2: ITU activities related to roaming issues

Session 2 of the workshop, entitled “*ITU Activities related to roaming issues*”, examined specific activities and initiatives undertaken by ITU to address the issue of international mobile roaming. The session reported on the results of WCIT-12, the ITU-T D.98 Recommendation on mobile roaming, the activities of ITU-T Study Group 3 and BDT surveys and information dissemination on this topic. The session was moderated by Mr Leslie Martinkovics, Director of International Public Policy and Regulatory Affairs with Verizon Communications, and Vice-Chairman of ITU Study Group 3. The panellists included the rapporteur for the Mobile Roaming Rapporteur Group of ITU-T Study Group 3, Ms Eriko Hondo (KDDI, Japan) and the Chief of the TSB Study Group Department, Dr Bilel Jamoussi.

The session began with a presentation on key mobile statistics, regulatory reform, roaming challenges, and relevant ITU mandates, presented by the Chief of the BDT [Regulatory and Market Environment Division](#) (RME), Mr Makhtar Fall. The presentation identified three main factors as the source of high roaming prices: jurisdictional issues, lack of pricing transparency and lack of customer awareness. The speaker underscored the need to develop an enabling environment for the development of roaming services in order to bring retail prices more in line with costs. He presented the BDT Survey on Tariff Policies⁶ including, *inter alia*, responses from Member States on measures taken to reduce bill shock. The survey forms part of the [ITU ICTeye database](#), which contains statistical data and information on regulatory and tariff policies. It was made clear from the responses to the survey that member states are unable to deal effectively with the roaming problem in a unilateral manner. Roaming is by its very nature a global challenge. Mr Fall reminded the participants of the mandate of the ITU relative to roaming, namely the creation of tools for effective regulation, cost models, studies, and consensus-building. Overall, the mission of the ITU is to foster equitable and affordable access to communications services. The empowerment of consumers, in both developed and developing countries, through planned and regular interaction between regulators and consumer organizations, was specified as a key objective. This was echoed by a number of participants: one regulator from the African region remarked that it is mandatory in his country for at least two representatives of consumer organizations to sit on the regulatory board.

The Rapporteur on mobile roaming for ITU-T Study Group 3, Ms Eriko Hondo, presented the history and background of the SG3 roaming rapporteur group (first established in January 2009). She introduced [Recommendation ITU-T D.98](#) on mobile roaming, approved in September 2012. The recommendation covers consumer empowerment, market-based solutions and regulatory intervention. The mandate of the rapporteur group was renewed for the current 2013-2016 study period. The terms of reference for the group include an evaluation of various options for regulatory intervention, as well as the identification of information to be included in any potential new guidelines

⁶ More information is available on: <http://www.itu.int/en/ITU-D/Regulatory-Market/Pages/SurveyTariff.aspx>. Questions may be addressed to Ms Carmen Prado-Wagner at tariffs@itu.int.

to Recommendation ITU-T D.98⁷. The rapporteur encouraged members to submit contributions on roaming to [ITU-T Study Group 3](#) in order to move this important work forward⁸.

The Chief of the TSB Study Groups Department, Dr Bilel Jamoussi, began his intervention by highlighting the fundamentally global nature of mobile roaming. He noted that [Study Group 3 of ITU's Standardization Sector](#) provides a unique global forum to improve the understanding of the financial and economic impact of the growth of ICT among a wide range of stakeholders - particularly in light of recent developments such as the exponential rise in mobile communications and data⁹. The membership of Study Group 3 (SG3) is diverse and includes Member States as well as service providers (Sector Members) and international organizations (e.g. WTO). As such, it is an optimal forum for members to come together and build consensus on issues that are of growing concern to regulators, operators and consumers alike. ITU-T SG3 is responsible for international telecommunication service tariffs (including costing methodologies) and related economic and policy issues. Roaming, and notably the cost of roaming services, fits squarely within this mandate. Moreover, the speaker noted that the structure of ITU-T Study Groups enables significant work to occur in the regions: Study Group 3 has four regional groups (AFR, ARB, AO, and LAC) that are all actively working on challenges and best practices specific to their region, before sharing them with the global community. Global issues should be tackled without undermining local and regional concerns or bottlenecks through the promotion of regional differences and an overall spirit of consensus. Key documents from the most recent meeting of ITU-T Study Group 3 (in May 2013), that might be of interest to the participants of the workshop, were noted: [Chairman's Discussion Paper on Working Methods and Structure of SG3 \(TD80\)](#), [WTA-12 and WCIT-12: Significant items of relevance for the work of Study Group 3 \(TD36\)](#), and [Terms of Reference for the Mobile Roaming Rapporteur Group \(TD60\)](#). Dr Jamoussi went on to elaborate on the outcomes of the 2012 WCIT held in Dubai, namely the International Telecommunication Regulations (ITRs) - the successor to a long line of treaties, going back to the original ITU Convention of 1865. In general, the idea behind the ITRs is to establish general principles for facilitating global interconnection/interoperability, promoting efficiency and ensuring the availability of international telecom services. Article 4 of the new ITRs contains provisions on roaming transparency, quality and competitive pricing. The ITRs represent an important and formal affirmation of the commitment of member states at the national level to implement these key roaming principles. They serve as an important framework for governments to apply when implementing their own legal and regulatory measures. Just as importantly, the WCIT process itself brought unprecedented public attention to the different and important perspectives that govern global communications. It proved once again that there is not a single world view, but several, and that these views need to be accommodated and converged.

Discussions during this session focussed on the need for universal and international consensus-building through the work of ITU. Interventions from the floor called for ITU to assist in developing a better

⁷ The terms of reference of the mobile rapporteur group of ITU-T Study Group 3 are available at <http://www.itu.int/md/T13-SG03-130527-TD-PLN-0060/en>

⁸ Contributions can be sent via the ITU-T Study Group website at <http://www.itu.int/net/ITU-T/ddp/Default.aspx?groupid=T13-SG03> the or via email to TSB SG3 Secretariat at tsbgs3@itu.int. Questions may be addressed to Dr. Lara Srivastava at lara.srivastava@itu.int.

⁹ For an overview of the work of ITU-T Study Group 3, see <http://www.itu.int/en/ITU-T/about/groups/Pages/sg03.aspx>

global understanding of the costs of roaming services. Identifying the main cost elements of roaming was seen as essential to more effective price regulation at both wholesale and retail levels. Regulators commented that they continue to find it difficult to collect relevant data from operators - data that is necessary for the development and use of effective cost models (e.g. cost, traffic and revenue information).

The growing importance of mobile data was also noted during the session, particularly for critical applications such as healthcare. Roaming for M2M services was flagged as a major challenge. In this context, participants were informed of ITU-T's standardization [Focus Group](#) covering the M2M service layer as well as its [Global Standards Initiative on the Internet of Things](#). It was noted that [ITU-T Study Group 2](#) now receives the largest proportion of numbering requests for M2M services. The roaming rapporteur confirmed that the scope of [ITU-T Study Group 3](#) is fairly wide and covers the study of substitutes and the take-up of new technologies such as M2M. In addition, Study Group 3 can examine how operators differentiate themselves from service providers when it comes to tariffs, and also provides an ideal forum for cooperation between regulators and operators. It was noted that the next regional meeting for Study Group 3 will be for the Arab region ([SG3RG-ARB](#)) and that roaming is likely to be high on the meeting's agenda. The Vice-Chairman of SG3 also reminded participants that the ITU-T Study Group 3 looks at wide range of charging and tariff issues, that contain valuable information and guidelines (e.g. in the form of supplements). NGN charging, interconnection and fraud are just some of the many issues being examined in this new study period by ITU-T Study Group 3. [Recommendation ITU-T D.98 on Charging in international mobile roaming service](#) was approved last year. Therefore, members were invited to come forward with contributions to ITU-T Study Group 3 on roaming, and other related economic and policy questions¹⁰.

The participants were further informed that the ITU Global Symposium of Regulators (GSR) provides an excellent platform for Heads of regulatory authorities to examine and discuss cross-cutting topics such as roaming. Every year, the GSR sets out thematic best practice guidelines identifying state of the art regulatory measures. These landmark guidelines are developed through a consultation process that is run by ITU.

Session 3: Responding to High International Mobile Roaming Prices

Session 3 of the workshop, entitled "*Responding to High International Mobile Roaming Prices*", examined the cost structure of roaming, economic models, roaming substitutes and alternatives. The session was moderated by Mr Philippe Metzger, Deputy to the BDT Director. The panellists for this session were as follows: Ms Maitha Ali Jaffar, Senior Economist, Telecommunications Regulatory Authority of Oman, Mr Nick White, Executive Vice-President, INTUG, Mr Theis Gjedsted, Head of Section, Danish Business Authority and Dr Simon Forge, Consultant, SCF Associates.

¹⁰ Contributions can be sent via the ITU-T Study Group website at <http://www.itu.int/net/ITU-T/ddp/Default.aspx?groupid=T13-SG03> the or via email to TSB SG3 Secretariat at tsbsg3@itu.int.

The session began with an overview of Part 2 of the ITU Report by the author of the report, Dimitri Ypsilanti. He indicated that although some progress has been made in the area of roaming prices, this has been insufficient overall: prices have not dropped to an acceptable level, regions are taking action but at differing paces, and alternative technologies are developing but not yet optimal. He further noted that as early as 2002, [ITU-T Study Group 3](#) clearly established that the cost elements for wholesale prices are the same for fixed line termination as they are for mobile termination. Thus, for some time now, there has been evidence and scope to reduce roaming prices. The author underscored the importance of developing a costing methodology to reduce wholesale and retail rates. He cited a number of key actions that countries could take to respond to high roaming prices, namely: a) regulatory action to reduce both wholesale and retail prices; b) imposition of obligations on mobile operators to ensure a protected and empowered customer base; c) elimination of obstacles in the market in order to maximise opportunities for competition; and d) initiation of, and engagement in, bilateral and multilateral actions for the development of a competitive IMR market. He noted that price regulation in the area of roaming cannot be effective unless undertaken with partner country/countries. He also pointed out the responsibility that mobile operators have to phase out “bill shock”, through mechanisms such as pricing transparency, appropriate consumer warnings, information on alternatives, and mechanisms for the avoidance of inadvertent border roaming. The ITU report recommends that obstacles in the market be eliminated through such measures as: adoption of technology-neutral policies, ensuring that phones are unlocked, facilitating the market entry of MVNOs, fostering the development of new services, increasing availability of Wi-Fi and liberalizing international gateways.

Simon Forge of SCF Associates presented a pragmatic approach to roaming charges, from the perspective of mobile network operators. He questioned whether infrastructure costs are a sufficient justification for mobile operators to charge higher rates for roaming, and whether a call across the European Union really costs up to four times the price of a domestic national call. In this context, an illustration of the key cost elements of mobile roaming infrastructure was presented, based on a bottom-up approach identifying the network and business support system elements, and their cost directions today. A brief description of the structure of wholesale and retail markets followed, showing where regulation was required to pursue effective capping of retail pricing. The final part of the presentation covered the main aspects of the latest proposals for a European regulatory package, as they relate to roaming. Looking longer term, the speaker argued that the decrease of prices would increase the volume of traffic and be beneficial for the bottom line of operators.

The Executive Vice President of the International Telecommunications Users Group (INTUG), Mr Nick White, spoke on the regulatory and economic aspects of roaming from the user viewpoint. He called for an end to roaming charges, arguing that they are a major barrier to online and cross-border trade, have a negative impact on economic welfare and are unworkable for innovative and emerging M2M services. He went on to say that short term fixes, such as bundles, caps on usage, decoupling and regulatory price controls, are insufficient, as they address the symptom and not the real cause of the pricing problem. The way forward, in his view, is to adopt internet-style traffic exchange, allow multinational operator consolidation, encourage multinational MVNOs, enable national roaming and

expose current charges. He noted that the ITU is the ideal forum to facilitate the introduction of this new era, following on the good work done by its Study Groups and the WCIT/ITRs.

Ms Maitha Ali Jaffar of Oman's Telecommunications Regulatory Authority (TRA) shared her country's experience with roaming. Roaming was first addressed by the TRA following a number of consumer complaints of exorbitantly high charges. In 2012, a transparency measure was introduced, whereby operators were to inform mobile users that data roaming would be charged at a different rate from subscription data packages. Although national initiatives were helpful, the TRA found that working at a regional level was absolutely necessary. As a consequence, a GCC (Gulf Cooperation Council) initiative on roaming was established between Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and UAE. The initial approach was to base call charges on local IDD (international direct dialing) rates in the visited countries, and to place a cap on roaming based on these charges. With time, this evolved into a more unified approach: call charges were based on the highest IDD rates prevailing at the time, regardless of the visited country in question. These efforts led to a 59 per cent reduction in rates overall and for calls made within the GCC, 78 per cent. The GCC roaming working group is currently developing a new model for the regulation of mobile broadband roaming that should be available by mid-2014.

Mr Theis Gjedsted of the Danish Business Authority spoke of the reaction of Danish consumers to high roaming charges. Denmark is an interesting case to consider: the country is small and relatively wealthy, its population travels frequently and mobile penetration is very high. A 2010 survey showed that the majority of Danish consumers use roaming services and that the main alternative to roaming is SMS.

The session went on to explore the economics of roaming, in particular the lack of incentives for operators to reduce prices. Some participants expressed concern that operators can claim subject matter expertise in the area of network costing, which regulators often cannot. It was felt that there is a significant gap in staff knowledge and know-how between operators and regulators. Experts re-iterated the need for regulation to be cost-based in future, i.e. for any roaming charges to be clearly justified by the underlying costs. In order to achieve this, it is vital to have qualified engineers as part of regulatory staff.

Roaming is a difficult question to address due to the fact that there are two wholesale and retail markets involved, sitting in two different economies (home network and visited network, with customers 'roaming in' and 'roaming out'). This leads to what is known as 'double marginalization'. In other words, if there are two operators involved, and both have market power, consumers typically end up having to pay even more than they would in a monopoly market structure. The crux of the problem lies in inter-operator wholesale tariffs. It was suggested that a standard and accurate cost model is required, in order to fully understand the cost elements of providing a roaming service. Regulators with access to such a model would be in a much better position to tackle the roaming question.

The author of the ITU roaming report reminded participants that the European Union found the regulation of wholesale prices alone to be insufficient. He noted that [BEREC](#), the body of European Regulators, completed significant background work (including benchmarking) on underlying costs and

methodologies that is worth consulting (see Session 5 below). He emphasized once again that international mobile termination rates must not differ substantially from domestic mobile termination rates, for which most countries have cost models in place.

A clear case was made during this session for a standard cost model on roaming to be developed at the global level. Although a daunting task, it was nonetheless seen as an important step. ITU could indeed provide an optimal platform for moving the work forward, as it brings together players from both the regulatory and industry side. It was further argued by some that if roaming prices were to drop, the effect would be a surge in demand for such services, and a corresponding increase in network assets and return on investment (ROI). This would be a win-win situation for all concerned.

Session 4: Private Sector Initiatives on International Mobile Roaming

Session 4 of the workshop, entitled “*Private Sector Initiatives on International Mobile Roaming*”, examined pricing transparency and operator initiatives in IMR. The session was moderated by Dr Bilel Jamoussi, Chief of the TSB Study Groups Department. The panellists were as follows: Ms Mercy Ndegwa, Senior Manager, Regulatory Economics & Compliance, Safaricom Limited, Kenya; Mr Nezh Dincbudak, Director of Regulatory Affairs Africa, Middle East & Asia, Orange, France; and Mr Richard Anago, Directeur de la Coopération et des Organisations Internationales, Ministère du Développement, de l'Économie Numérique et des Postes, Burkina Faso.

The session began with a presentation from Mr Vikram Raval of the GSMA, outlining GSMA's Roaming Transparency Initiative. The GSMA board launched the initiative in June 2012 in an effort to increase price transparency and reduce customer bill shock. Mechanisms included push notifications, usage limits and temporary “cut-offs” when customers exceeded limits. Twenty-five operators (members of the GSMA Board) agreed to adopt measures across their global footprint, bringing greater transparency to customers in many parts of the world. A Latin American transparency scheme was adopted by 40 operators in that region.

The Kenyan operator representative, Ms Mercy Ndegwa, drew attention to the unique characteristics of pre-paid markets. She felt that regulatory action is only part of the solution and a short term one at best. She mentioned that the roaming problem is exacerbated in cases when additional taxes are placed on international calls. A commercial approach stimulated by market competition and light-touch regulation was also advocated by the panellist from Orange, Mr Nezh Dincbudak. The government representative from Burkina Faso, Mr Richard Anago, noted that roaming prices remain excessively high in Burkina Faso primarily due to high wholesale tariffs. The great diversity in regulatory approaches and economic development across the region was noted as an additional complicating problem. Transparency measures implemented by operators were nonetheless hailed as positive developments.

The discussion focused on the extent to which market forces alone bring about competition in the retail roaming market. Some operators felt that caps on retail and wholesale prices do not solve the problem. For them, a one-size-fits-all approach did not seem advisable. Others, however, pointed to

the fact that regulation is necessary, given that there is a lack of competitive pressure in retail roaming markets and little incentive for service providers to lower prices (due to inelastic demand). It was further argued that tariff transparency measures do not always create a more informed customer base.

Session 5: Policy and Regulatory Actions

Session 5 of the workshop, entitled “*Policy and Regulatory Actions*”, explored a number of policy actions and options that governments might consider when addressing the roaming problem.

The session was moderated by Lee Tuthill, Counsellor, Trade in Services Division, WTO. The panellists were as follows: Mr J. Scott Marcus, WIK; Mr Jorge Infante, Chair of the BEREC Expert Working Group on International Roaming; Mr Robert Clarke, Senior Policy Advisor, Communications and IT Policy, Ministry of Business, Innovation and Employment, New Zealand; and Mr Albert Lewis, Special Counsel, Federal Communications Commission (FCC), USA.

At the start of the session, the author of the ITU report presented Part 3 of the ITU report on roaming. The policy options discussed included transparency initiatives, market-friendly solutions and pricing regulation. The session also looked at the creation of competitive conditions in the market (including facilitating substitutes), and structural solutions to the roaming problem.

J. Scott Marcus of WIK outlined his view on the root causes of the roaming problem, namely the quasi-oligopolistic structure of the roaming market, the cross-border nature of roaming, and the low demand elasticity for roaming voice services. He outlined some of the regional differences in the approach to roaming and presented details of the regulatory package at the European level. He noted that despite the reduction in wholesale and retail prices within Europe, roaming regulations have not created a competitive dynamic that would make further regulation unnecessary. He called for more work to be done¹¹.

Mr Jorge Infante, Chair of the BEREC Expert Working Group on International Roaming spoke of the smooth introduction of transparency measures and the collaborative efforts of operators. He pointed to the need for both retail and wholesale regulation. He also noted that the real impact of the structural measures taken at the European level remains to be seen. Participants were informed of some topical studies conducted by [BEREC](#), available on their website¹². A selection of these studies is also available on the [roaming workshop website](#).

Mr Robert Clarke of New Zealand’s Ministry of Business, Innovation and Employment began his talk with a short video that showed how differences in the balance of traffic affect tariff negotiations between operators in different countries. He went on to underscore the fact that operators lack the

¹¹ See also J. Scott Marcus and Imme Philbeck (2010), “Study on the Options for addressing Competition Problems in the EU Roaming Market”, available at: http://ec.europa.eu/information_society/activities/roaming/regulation/consult2011/index_en.htm

¹² See for example the International Roaming BEREC Benchmark Data Report (01.05.2012) available at http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/65-international-roaming-berec-benchmark-data-report-july-2011-december-2011. See also the 2010 International Mobile Roaming Regulation BEREC Report available at http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/206-international-mobile-roaming-regulation-berec-report

incentives to set lower wholesale prices, and that they are often reluctant to share traffic and revenue information with regulators, particularly for fear that this information would be shared across borders. The panellist also spoke of the specific approach taken by countries, like his own, that are not subject to any supranational regulatory structure (such as the EU). New Zealand and Australia decided to proceed bilaterally to come to an agreement on roaming prices. In some African countries, the intention has been to proceed multilaterally. In either case, countries must adhere to the MFN (Most Favoured Nation) principle when negotiating agreements. Australia and New Zealand have used the exception contained in Article 5 of the GATS and implemented their regulations within the scope of a comprehensive free trade agreement.

The moderator of the session, Ms Lee Tuthill of the WTO, made a few points of clarification regarding the MFN principle. In the case of bilateral agreements, if a government provides discounted rates to some operators, they cannot discriminate against other operators by charging them higher rates. Governments must make sure that their regulations are reasonable and non-discriminatory. The WTO is responsible for ensuring that the fundamental principles of the GATS are observed and that market access commitments carry due weight.

Mr Albert Lewis, Special Counsel, Federal Communications Commission (FCC), USA, described the history of mobile competition in the US and the regulatory approach taken from the early days of the mobile market. In 2007, the FCC felt it was necessary to require all providers to enter into commercial agreements to provide automatic voice roaming. In 2010, that same kind of obligation was adopted for data roaming. The FCC did not establish specific rates, but required commercial negotiations to be undertaken with FCC backing. If providers could not reach an agreement, the FCC would determine which operator was being unreasonable. The panellist also mentioned that charges for inadvertent roaming had been lowered with Mexico and Canada, and that customers enjoy a seamless experience in these border areas.

The taxation of telecommunication services was touched on briefly during this session. There are different approaches to taxation around the world. Some members are of the view that taxation should take place where consumption takes place. The EU has decided that taxes will be incurred in the user's home country. However, in other countries, such as India for instance, inbound roaming customers are taxed in the country they are visiting.

Session 6: Best Practices and Recommendations put forward at the national, regional and international levels

The final session of the workshop, Session 6, entitled *“Best Practices and Recommendations put forward at the national, regional and international levels”*, looked at pricing regulation, transparency, customer awareness and regulatory best practices. The session was moderated by Mr Tomas Lamanuskas, Head of the ITU's Corporate Strategy Division. The panellists were as follows: Mr Filipe Batista, Associação de reguladores de Comunicações e Telecomunicações da Comunidade dos Países de Língua Portuguesa (ARCTEL-CPLP), Mr Agustín Díaz-Pinés, Telecommunication Economist, Policy Analyst, Directorate for Science, Technology and Industry (OECD), Mr Abilé Romain Houehou,

Coordonnateur, Réseau des Consommateurs Africains des TIC (RÉCATIC), and Mr Ramunas Linartas, European Union (EU).

At the start of the session, the author of the ITU report presented best practices and recommendations from the ITU report on roaming. He focused on best practices for pricing regulation and transparency and key recommendations for regulators. Some of the regulatory approaches to pricing include the following: collection of wholesale/retail pricing data to benchmark progress; use of mobile termination rates as benchmarks for setting wholesale roaming charges; coordination between regulatory authorities; removal of unjustifiable obstacles limiting availability of substitutes. In terms of pricing transparency, he suggested that information to consumers should include differences in pricing structures for roaming services as well as information on the average data usage per application. In addition, there should be dispute resolution procedures in place for billing issues related to roaming. The author concluded by urging [ITU-T Study Group 3](#) to elaborate further [Recommendation ITU-T D. 98](#) by including such best practices within its scope.

The representative from the EU, Mr Ramunas Linartas, spoke of the biggest challenges faced by the telecommunication industry in the immediate future in the context of roaming. He also presented the structural measures at the retail and wholesale level that will come into effect in the EU as of 1 July 2014. Customers will have the option to sign up with an Alternative Roaming Provider (ARP) for a separate mobile contract for roaming whilst keeping the same phone number. The ARP can be different from their local mobile provider. Mobile Virtual Network Operators (MVNOs) and resellers will have the right to access other EU/EEA mobile network operators' networks at regulated wholesale prices in order to provide roaming services (and national services) to their customers.

The representative from the African Consumers Network RÉCATIC, Mr Abilé Romain Houehou, noted complaints by consumers in his region relating to both taxation of services and roaming prices. He noted the importance of ensuring that consumers are adequately informed of prices and fully aware of their rights. It was often stated, particularly by participants from the African region, that regulators face an uphill struggle in obtaining adequate information from operators on roaming prices and roaming traffic. They noted that this information is vital for regulatory transparency, predictability and effectiveness. The RÉCATIC panellist also mentioned the important role that all stakeholders must play, including ITU, governments, regional organizations, operators and consumers, in order to enhance the development of international mobile roaming in developing countries in general and in African countries in particular.

Mr Agustín Díaz-Pinés of the OECD commended the pricing transparency measures put into place in many regions, while noting that these should have been put into place years ago. Participants also discussed the proportion of mobile operator revenues that roaming is likely to represent. It was again argued that if roaming prices would drop, usage would increase and this would have a positive effect on operator revenues.

The representative from ARCTEL, Mr Filipe Batista, presented the ARCTEL approach to pricing regulation, which consists of three phases: “reduce, evaluate and decide”. This approach is based on

an initial reduction of prices followed by market analysis and further reductions if and when traffic volumes increase. The panellists called for ITU to establish clear standards for roaming charges. It was argued that legal certainty is necessary for operators to tackle roaming, and that information must be shared globally. The usefulness of benchmarking and cost modelling was noted as a way for regulators to better grasp underlying costs.

Concluding Remarks

At the end of the meeting, Mr Philippe Metzger, Deputy to the BDT Director, thanked speakers and participants for a fruitful debate and frank exchange of ideas. He reminded the audience that ITU provides a unique platform to enable regulators and operators to share information and build consensus on important international issues, such as roaming. Although some progress has been made, roaming prices remain high in many parts of the world. The meeting called for the development of standard costing tools and methodologies to address the problem. In closing the event, Mr Metzger assured participants that ITU will respond to calls for increased international coordination in this area and continue its work on best practices and global standards for roaming.