ASIA-PACIFIC TELECOMMUNITY
The 3rd Meeting of the APT Preparatory Group for WTSA-20 (APT WTSA20-3)
13-17 July 2020, Virtual Meeting

Document No.: APT WTSA20-3/ TMP-27 (Rev.1)
16 July 2020

India (Republic of), Thailand

DRAFT PRELIMINARY APT COMMON PROPOSAL

PROPOSED MODIFICATION TO WTSA-16 RESOLUTION 88 "INTERNATIONAL MOBILE ROAMING"

Abstract

This document contains the proposal of modification to WTSA-16 Resolution 88 "INTERNATIONAL MOBILE ROAMING". It is based on the input contributions from India (APT WTSA20-3/INP-11) and Thailand (APT WTSA20-3/INP-15) and the meeting discussions of the Working Group 3 during the 3rd Meeting of the APT Preparatory Group for WTSA-20 (APT WTSA20-3) on 16 July 2020.

Introduction

International mobile roaming is a service that allows mobile users to continue to use their mobile phone or other mobile device to make and receive voice calls, text messages, browse the internet, and send and receive emails; while visiting another country. Roaming extends the coverage of the home operator's voice and SMS services, allowing the mobile user to continue using their home operator phone number and data services in visiting country. The seamless extension of coverage is enabled by a wholesale roaming agreement between a mobile user's home operator and the visited mobile operator network. The roaming agreement addresses the technical and commercial components required to enable the service. The most common international roaming services are:

1. Voice: Making and receiving calls to or from home country, visited country or a third country, while abroad;
2. SMS: Sending and receiving text messages to or from home country, visited country or a third country, while abroad;
3. Email: Reading and replying to emails while abroad;
4. Mobile broadband: Using mobile devices or dongles to access the internet, including to download images, MP3s, films and software, while abroad; and

Contact:	Mr. Abhay Shanker Verma Mr. Vijay Kumar Roy Ms. Ranjana Sivaram Telecommunication Engineering Centre Department of Telecommunications Ministry of Communications, India	Email: as.verma@gov.in Email: vk.roy@gov.in Email: ranjana.sivaram@gov.in
Contact:	Mr. Chutipong Keesookpun Office of the National Broadcasting and Telecommunications Commission (NBTC) Thailand	Email: chutipong.k@nbtc.go.th

5. Applications: Using mobile applications while abroad that require mobile data, such as location-based services and language translators.

International mobile roaming is one of a wider range of communications services offered to mobile users while travelling abroad. Other services include hotel services, Wi-Fi, national global SIMs cards, multiple SIM card mobile handsets, and local pre-paid SIMs cards.

To explain roaming in more detail, the mobile user (Mobile User A) has an international roaming service with their home operator (Home Operator) and is automatically connected to a visited network (Visited Operator A) while roaming. Mobile User A is automatically granted access to Visited Operator A's network when arriving in the visited country by an exchange of a data between Home Operator and Visited Operator A, where Visited Operator A confirms Mobile User A is a roaming customer with Home Operator. As such, the wholesale roaming agreement between Visited Operator A and Home Operator specifies how this data is to be provided to the visited operator. Home Operator usually has wholesale roaming agreements with more than one operator in the same visited country, which in this case is Visited Operator A and a second network, Visited Operator B. As a result, Mobile User A can call home using either visited operator networks, both of which use international transit services to carry the call back to Mobile User A's home country. Mobile User A pays a retail price to Home Operator for the roaming service and does not pay Visited Operator A. Provided Mobile User B is not also roaming, they will not incur any extra charges to receive a call from, or to make calls to Mobile User A. Visited Operator A sends transferred account procedure (TAP) files to a clearing house which forwards them to the Home Operator. TAP files are used for billing of calls while roaming. Home Operator can then pay Visited Operator A, the wholesale charges as per their agreement.

Further, the emerging technologies and applications, particularly the internet telephony and related Over The Top (OTT) applications, have been evolving at a very fast pace, eliminating the difference between local, national and international usage of various telecom services by consumers and the traffic between and amongst countries has become more packetized, internet protocol (IP) driven compared to switched circuit and the concept of distance driven charging has been replaced by delivery of packets anywhere by any routing.

Global commerce and cross-border travels have been and will inevitably be increasing due to more connected activities enabled by advancements in telecommunications. International mobile roaming (IMR) services have always been a reliable means of international communications. Indeed, every traveler – either with business or personal purposes – is accustomed to using any or all of the IMR services, namely voice call, SMS, MMS, and data roaming. These IMR services are regarded as traditional IMR services on which most people still rely as of usage conveniences and high security. However, it is widely accepted that IMR services – voice, SMS, MMS, and data roaming – are costly. In fact, they can be more than 10 times expensive than similar domestic services, or even more expensive than domestic mobile services in some countries.

Since it is agreed that IMR services are a necessary means of international communications and a partial cost of doing business or traveling across countries, the attempt to lower IMR tariffs is witnessed at various stages, especially within ITU framework in the form of ITU recommendations in order to facilitate international businesses, travels, and lower the cost of cross-border connections to benefit all consumers – both individuals and corporates. Measures to lower IMR tariffs have been recommended and countries are transforming the recommendations into their practical implementations with different perspectives and progress.

Regulatory interventions are needed in case IMR tariffs need to be lower to serve policy purposes and to ensure consumers' benefit is realized. However, due to the fact that nowadays, the IMR service is not the only means of international communications. There are various applications that utilize faster speed and more reliable internet connection to provide voice call, text messaging, and multimedia services. These applications are regarded as over-the-top (OTT). The OTT applications are most of the time offered at free of charge, so travelers can just purchase a data roaming plan – or even use the visiting country's WiFi – allowing them to call and text (and do multimedia communications) when roaming in another country. The OTT applications are gaining popularity and increasing in adoption rate among frequent travelers emphasizing the fact that they compete to provide more choice for consumers; hence, gain more and more momentum in substituting the IMR services, especially for voice service, SMS, and MMS.

The emergence and increased development of OTT applications that can be used as IMR service substitutes are a powerful alternative way to lower the IMR tariffs because of the induced competition arising from substitution effect. Market mechanisms will take place and regulatory interventions to lower IMR tariffs will require less effort or become unnecessary. Therefore, relevant ITU recommendations to foster the lowering of IMR tariffs should take into account the OTT applications and their impact.

Proposal

It is proposed to update the Resolution 88 by adding specific references to the emerging technologies and their likely impact on roaming rates. The proposal also calls upon ITU-T to review and revise Recommendations ITU-T D.98 and ITU-T D.97, taking into account current IP technologies, with a view to lowering the IMR rates among the Member States as well as promote capacity-building programs, workshops and guidelines for international agreements between operators.

In addition, it is proposed to update and add specific texts to take into account new technologies and OTT applications. The proposal asks to include Recommendation ITU-T D.262 into the resolution to realize the OTT impact of lowering the IMR tariffs. Moreover, it is proposed to add some text to Recommendation ITU-T D.98 to emphasize the endorsement of the use of technologically-enabled IMR service substitutes. Lastly, the text to provide collective intention to take measures allowing substitutable IMR services is added in order to allow market mechanisms to help drive down the IMR tariffs along with necessary regulatory interventions.

Annex:
Resolution 88

Annex

MOD

RESOLUTION 88 (~~Hammamet, 2016~~Hyderabad, 2020)

International mobile roaming

(~~Hammamet, 2016~~Hyderabad, 2020)

The World Telecommunication Standardization Assembly (~~Hammamet, 2016,~~ Hyderabad, 2020),

considering

a) the results of the ITU High-Level Workshop on international mobile roaming (IMR), held in Geneva on 23-24 September 2013;

b) the results of the ITU Global Dialogue on IMR, held in Geneva on 18 September 2015;

c) that the tasks undertaken in the ITU Telecommunication Standardization Sector (ITU-T) cover Recommendations, conformity assessment and matters having policy or regulatory implications;

d) that the economy is increasingly dependent on reliable, cost-effective, competitive and affordable mobile communications technology on a global scale;

e) that wholesale IMR tariffs are decoupled from underlying costs, which may have an effect on retail rates, including inconsistent and arbitrary charges;

f) that a competitive international telecommunication market may not exist if significant differences persist between national prices and IMR prices;

g) that there are differences in costs between countries and regions;

h) that developments in telecom physical media as well as radio communications (including satellites and Wi-Fi) have reduced the economic viability gap for provision of telecom services in ~~large cities as compared to~~ rural & remote areas, island communities and other difficult terrains;

i) that telecommunication technologies and applications, particularly the internet telephony (VoIP) and related Over-the-Top (OTT) applications, have been evolving at a very fast pace, eliminating the difference between local, national and international usage of various telecom services by consumers;

j) that there is an increasing usage of internet-enabled over-the-top (OTT) applications as alternatives or substitutes for IMR services, particularly voice service, SMS, and MMS; Moreover, OTT applications can be regarded as a complimentary service to IMR;

k) that the OTT applications providing internet telephony (VoIP) and messaging service are gaining popularity and affordability as of their low, or free cost of use;

l) that the traffic between and amongst countries has become more packetized, internet protocol driven compared to switched circuit;

m) that the concept of distance driven charging has been replaced by delivery of packets anywhere by any routing;

n) that IMR tariffs may be lowering in nature - without or with less effort of regulatory intervention - due to the availability of OTT applications that can provide competitive and substitutable IMR services,

[Suggested alternate text] that regulatory interventions may be required for lowering of IMR rates for sustainable IMR services and consumer convenience so as to make it competitive with alternate means of communication e.g. VoIP, OTT applications, etc.,

noting

a) that Recommendation ITU-T D.98 is an agreement concluded between Member States and Sector Members in 2012 to encourage the development of effectively competitive markets for IMR on a commercial basis by supporting the use of services enabling substitutes as well as take-up of new technologies in order to increase user choice;

b) that Recommendation ITU-T D.97 contains possible approaches to the reduction of excessive roaming rates, highlighting the need to encourage competition in the roaming market, educate consumers and consider appropriate regulatory actions such as the introduction of caps on roaming rates;

c) that Recommendation ITU-T D.262 addresses that OTT applications may be a direct technical or functional substitute for traditional international telecommunication services, suggesting Member States and Sector Members should participate and contribute to standardization efforts to ensure affordable services and applications for consumers;

d) that due to high IMR charges, global consumers resort to alternative means of communication ~~in legitimate ways~~ such as internet telephony and related OTT applications, buying bundled tariffs or temporarily acquiring local SIM,

resolves

that ITU-T Study Group 3 must continue to study the economic effects of IMR rates,

instructs the Study Group 3

~~2~~ to review ~~and revise~~ Recommendations ITU-T D.98 and ITU-T D.97, taking into account current IP technologies.~~;~~

instructs the Director of the Telecommunication Standardization Bureau

1 to organize initiatives, in collaboration with the Director of the Telecommunication Development Bureau (BDT) and the Director of the Radio Communication Bureau, to raise awareness of the benefits to the consumer of lowering IMR rates;

~~2 to review and revise Recommendations ITU-T D.98 and ITU-T D.97, taking into account current IP technologies;~~

2 to propose cooperative approaches to foster the implementation of Recommendations ITU-T D.98 and ITU-T D.97, and to lower IMR rates among the Member States, by promoting capacity-building program~~me~~s, workshops and guidelines for international cooperation agreements,

invites Member States

1 to take measures towards the implementation of Recommendations ITU-T D.98 and ITU-T D.97;

2 to collaborate in the efforts to lower IMR rates by taking regulatory measures when applicable;

3 to take measures towards the implementation of the use of substitutable IMR services provided by other technological means in the form of over-the-top (OTT) applications.