



INTERNATIONAL TELECOMMUNICATION UNION

**TELECOMMUNICATION  
STANDARDIZATION SECTOR**

STUDY PERIOD 2025-2028

**SG3RG-AO-C8**

**SG3 REGIONAL GROUP FOR ASIA AND  
OCEANIA (SG3RG-AO)**

**Original: English**

**Question(s):** 7/3

Virtual, 10 February 2025

### CONTRIBUTION

**Source:** ITU-APT Foundation of India (IAFI)

**Title:** Proposal for an updated baseline text for D.502R

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**Abstract:** This contribution proposes an updated baseline text for D.502R, “Regional Recommendation for Asia-Oceanic (AO) region on the aspects of International Mobile Roaming”.

## 1. Introduction

During the last SG3RG-AO meeting in June 2024, Republic of Korea submitted a contribution (C-28) proposing baseline text for proposed draft recommendation ITU-T D.502R regarding International Mobile Roaming. It has been pointed out that with the recent advancements in OTT technology, numerous services have emerged which effectively replaced traditional IMR services. Following challenges has been presented after inception of the various types of the OTT services.

- a. Cost - OTT services like WhatsApp, Viber, and Skype offer free or very low-cost voice and video calls over Wi-Fi, making international roaming charges seem exorbitant in comparison.
- b. Convenience - Using OTT apps is often more convenient than dealing with international roaming SIM cards, activation processes, and potential compatibility issues.
- c. Data accessibility - With widespread Wi-Fi availability in hotels, cafes, and airports, travellers can easily use OTT services without relying on expensive cellular data roaming.
- d. Value-added services - Many OTT services provide features beyond basic communication, like group chats, file sharing, and high-quality video calls, making them more appealing than traditional roaming.

The recent World Telecommunication Standardization Assembly (WTSA-2024) held at New Delhi saw significant progress on international mobile roaming (IMR). WTSA approved amendments to Resolution 88, incorporating suggestions from various ITU regional groups, including the Asia-Pacific Telecommunity (APT).

The revised resolution mandates that ITU-T Study Group 3 expand its focus beyond the economic effects of IMR rates. Specifically, it tasks the group with:

1. Continuing to study the economic effects of IMR rates - including principles and methodologies for facilitating fair and reasonable IMR arrangements.

2. Expanding its research to include the roaming aspects of IoT/M2M services - this reflects the growing importance of machine-to-machine communication and the need to address its unique roaming challenges.

This broadened scope underscores the commitment to ensuring affordable and accessible mobile roaming in an increasingly interconnected world, encompassing both human and machine communication.

## **2. Proposal**

Therefore, IAFI through this contribution suggested further updates in the proposed draft ITU-T Recommendations D.502R. It is further proposed to add one sub-Para as 6.5 – regarding roaming aspect of IoT/M2M services. Resolution-88 as adopted by the WTSA-24 can be seen [here](#).

International Telecommunication Union

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**D.502 R**

(00/2023)

SERIES D: TARIFF AND ACCOUNTING PRINCIPLES  
AND INTERNATIONAL TELECOMMUNICATION/ICT  
ECONOMIC AND POLICY ISSUES

Recommendations for regional application –  
Recommendations applicable to the Asia and Oceania  
Region

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**International Mobile Roaming**

## Recommendation ITU-T D.502 R

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*For further details, please refer to the list of ITU-T Recommendations.*

## Recommendation ITU-T D.502 R

### International Mobile Roaming

#### Summary

Needs to be filled.

#### History

Edition	Recommendation	Approval	Study Group	Unique ID <sup>1*</sup>
1.0	ITU-T D.502 R	2023-00-00	3	

#### Keywords

International Mobile Roaming

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<sup>1\*</sup> To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

## FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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## Introduction

Needs a contribution

## Recommendation ITU-T D.502 R

### International Mobile Roaming

#### 1 Scope

This regional Recommendation for Asia and Oceania covers the need for national and regional collaboration to mitigate the challenges posed by high international mobile roaming rates to ensure effective consumer protection and to reduce any economic barriers stemmed from international mobile roaming charges for better connectivity between member states.

#### 2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

None.

#### 3 Definitions

##### 3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

**3.1.1 International mobile roaming (IMR)** is a service that a subscriber to postpaid or prepaid mobile services purchases from a mobile operator in their home country, that is, from the 'home operator'. It allows the subscriber to continue to use their mobile phone and phone number to access voice and the short message service (SMS) while visiting another country by accessing a mobile operator's network in the visited country, that is, the network of the 'visited operator'. Furthermore, there are IMR services that allow a subscriber to continue to use their mobile devices, such as mobile phone, to access data services while in another country by accessing a visited operator's network.

IMR wholesale and retail rates are the prices charged for IMR service where:

- a) IMR wholesale rates are the prices that the visited operator charges the home operator for allowing the home operator's subscriber to roam on the visited operator's network, and
- b) IMR retail rates are the prices that the home operator charges their subscribers for IMR services.

##### 3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

~~**3.2.1 International Mobile Roaming services** : the use of a mobile telephone or other device by a roaming customer to make or receive calls, to send or receive SMS messages, or to use~~



~~packet-switched data communications, while in a country other than that in which that customer's home network is located, by means of arrangements between the operator of the home network and the operator of the visited network.~~

**3.2.1 International Mobile Data Roaming services** (thereinafter data roaming services) : the use of roaming services for the sole purpose of packet-switched data communications.

**3.2.3. Mobile Network Operator : a company that owns and operates one or more mobile networks with its own licensed frequency allocation of radio spectrum in the territory of a member state.**

## 4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

IMR International Mobile Roaming

MNO Mobile Network Operator

## 5 Conventions

None.

## 6 General Principles

**6.1** Member States recognize that any regulation of the IMR must aim to maximize social benefits and harmonize national policies without unduly harming the business environment. In order to achieve these objectives, Member States recognize that the measures taken by each member state must aim to

- a) lower the retail roaming prices, while ensuring fair return of investment for the MNOs;
- b) any measures undertaken in regard to retail prices need to pay due regard to wholesale charges in order to ensure that the roaming service remains profitable; and
- c) MNOs should, subject to the above, enjoy as much freedom as possible to offer innovative retail pricing plans for IMR services.

**6.2** While designing the IMR policy, Member States should take into account policy initiatives, travelling levels, bilateral trades, geographic issues and cost of travel when defining a roaming area in bilateral, multilateral and regional initiatives.

**6.3** Member States should promote awareness of consumers and businesses (thereinafter customers) about the cost of IMR services and the availability of substitutes; and encourage them to compare the functionalities, limitations, distribution channels and cost of these various options, by making this information easily available and accessible, particularly at the main ports of entry and online.

**6.4** Member States should endeavour to:

- a) Obtain/collect data, such as those on retail and wholesale costs and prices, and other market situations related to IMR and **data roaming** services;
- b) Enforce measures to monitor development in the IMR markets retail and wholesale **rates**;
- c) **Provide information on rates for retail rates of IMR and data roaming services offered to consumers of the member states when visiting the territories of the other member states;**

- d) Periodically update the information offered to the consumers at clause c) above and make the information publicly available;
- e) Minimize impediments to the use of technological alternatives to IMR and data roaming services.

## **7 Consumer Protections**

**7.1** Member States should promote transparency of information provided to customers by IMR providers regarding the use and billing of roaming services, through information provided at the point of purchase, personalized messages, general online information or any other cost-effective means.

**7.1.1** In particular, customers should receive appropriate and timely pricing information, and choice to stop the IMR service if it reaches to certain financial limits independently decided by the customer.

**7.2** Data roaming customers should be provided with:

- i) Information on the risk of automatic and uncontrolled data roaming connections and downloads and explanations about how to switch off these connections;
- ii) Agreed financial limits, beyond which data roaming transmission would be stopped, unless the customer follows an indicated procedure;
- iii) Where available, personalized notifications when data roaming services have reached a certain proportion of an agreed financial limit.

## **8 Competition Principles**

**8.1** Member States are encouraged to introduce measures to harmonize IMR policies and regulations of the Member States, including regulatory interventions on IMR service prices for the benefit of consumers by encouraging competition.

**8.2** Member States are encouraged to liberalize international gateways, where appropriate. They should also ensure that the network operators maintain the principle of network neutrality and discourage blocking the use of VoIP and other messaging applications on devices including smartphones.