

Recommendation **ITU-T F.792 (03/2025)**

SERIES F: Non-telephone telecommunication services

Multimedia services

Requirements on accessible moveable communication systems in rural and out-of- home environments

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Recommendation ITU-T F.792

Requirements on accessible moveable communication systems in rural and out-of-home environments

Summary

Recommendation ITU-T F.792 describes the requirements of an accessible interactive mobile digital unit in rural and out-of-home environments. It is intended for areas where communication functions are not available or have been disrupted due to absence of infrastructure. This Recommendation builds on the use cases of accessibility described in ITU-T Technical Paper FSTP-ACC-Rural (2023), *Use cases of accessibility to multimedia systems in rural and out-of-home environments*.

It is applicable also when unavailability of communication functions is brought about by disasters, which have been increasing worldwide in recent years, or for areas where communication functions have not been provided or are insufficient. It standardizes the requirements of communication systems to enable the required communication functions to be up and running in the out-of-home environment resistant to harsh environment.

History*

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Accessibility, moveable communication systems, rural and out-of-home environments.

* To access the Recommendation, type the URL <https://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID.

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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In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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Recommendation ITU-T F.792

Requirements on accessible moveable communication systems in rural and out-of-home environments

1 Scope

This Recommendation describes requirements of the mobile communication unit (i.e., interactive digital mobile unit (IDMU)) reachable in remote areas and by large groups of people where it could be shared considering open sky environment, out-of-home environment and portable local cloud systems as an important means of accessibility in inaccessible areas as well as in emergencies.

This Recommendation builds on the use cases of accessibility described in the ITU-T Technical Paper FSTP-ACC-Rural (2023), *Use cases of accessibility to multimedia systems in rural and out-of-home environments* [b-ITU-T ACC-Rural] and describes the technical requirements for the features, including accessibility.

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.

- [[ITU-T F.790](#)] Recommendation ITU-T F.790 (2007), *Telecommunications accessibility guidelines for older persons and persons with disabilities*.
- [[ITU-T H.702](#)] Recommendation ITU-T H.702 (2020), *Accessibility profiles for IPTV systems*.
- [[ITU-T L.392](#)] Recommendation ITU-T L.392 (2016), *Disaster management for improving network resilience and recovery with movable and deployable information and communication technology (ICT) resource units*.

3 Definitions

3.1 Terms defined elsewhere

This Recommendation uses the following term defined elsewhere:

3.1.1 coverage area [b-ITU-R V.573-4]: Area associated with a transmitting station for a given service and a specified frequency within which, under specified technical conditions, radiocommunications may be established with one or several receiving stations.

NOTE 1 – Several coverage areas may be associated with one and the same station.

NOTE 2 – The technical conditions include the following: characteristics of the equipment used both at the transmitting and receiving stations, how it is installed, quality of transmission desired, e.g., protection ratios and operating conditions.

NOTE 3 – The following may be distinguishable: - interference-free coverage area, i.e., that limited solely by natural or artificial noise - the nominal coverage area: it is defined, when establishing a frequency plan by taking into account the foreseen transmitters - the actual coverage area, i.e., with allowance made for the noise and interference which exists in practice.

NOTE 4 – Furthermore, the term "service area" should have the same technical basis as for.

3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

3.2.1 local cloud: A cloud in which computer resources are closer to users and only the local network is used. It is also called intranet with server function.

NOTE – A normal cloud is a mechanism that uses computer resources such as data and applications via a network, and the Internet is usually assumed as the network.

3.2.2 social networking service: A type of online social media platform that people use to build social networks or social relationships.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

AP	Access Point
FWA	Fixed Wireless Access
IDMU	Interactive Digital Mobile Unit
LAN	Local Area Network
MLC	Moveable Local Cloud
ONU	Optical Network Unit
SCS	Satellite Communication System
SNS	Social Networking Service
WAN	Wide Area Network
WLAN	Wireless Local Area Network

5 Conventions

The following conventions are used in this Recommendation:

- The keywords "is required to" indicate a requirement which must be strictly followed and from which no deviation is permitted, if conformance to this Recommendation is to be claimed.
- The keywords "is recommended" indicate a requirement which is recommended but which is not absolutely required. Thus, this requirement need not be present to claim conformance.

6 Background

Lack of communication functions can result from various reasons. One common reason is the lack of infrastructure itself, such as in developing countries. Or it can result from temporary disruptions such as insufficient provision of electricity in rural areas or out-of-home situations. Still another case is abrupt disruption by disasters. In any of these situations, it is necessary to have an efficient, practical and robust communication equipment and systems to cope with such, often harsh, environments. This is especially important from the point of accessibility of persons with disabilities as they constitute the more vulnerable segment of communities and are more dependent on ICT accessibility. The IDMU is designed to ameliorate such situations and to provide better accessibility in rural areas. The use cases of accessibility are described in [b-ITU-T ACC-Rural]. Since IDMU is expected to provide multimedia information communication services, accessibility features described in [ITU-T H.702] should be considered as well. In addition, the guideline in [ITU-T F.790] is expected to be observed by functions of IDMU so that IDMU can operate to provide accessibility in rural, remote areas as well as in an emergency situation.