

# Recommendation **ITU-T F.760.2 (04/2024)**

SERIES F: Non-telephone telecommunication services

Multimedia services

---

## **Guidelines for user interface of first responders in emergency response support systems**

ITU-T F-SERIES RECOMMENDATIONS  
**Non-telephone telecommunication services**

|                                                                 |                    |
|-----------------------------------------------------------------|--------------------|
| TELEGRAPH SERVICE                                               | F.1-F.109          |
| Operating methods for the international public telegram service | F.1-F.19           |
| The gentex network                                              | F.20-F.29          |
| Message switching                                               | F.30-F.39          |
| The international telemesssage service                          | F.40-F.58          |
| The international telex service                                 | F.59-F.89          |
| Statistics and publications on international telegraph services | F.90-F.99          |
| Scheduled and leased communication services                     | F.100-F.104        |
| Phototelegraph service                                          | F.105-F.109        |
| MOBILE SERVICE                                                  | F.110-F.159        |
| Mobile services and multideestination satellite services        | F.110-F.159        |
| TELEMATIC SERVICES                                              | F.160-F.399        |
| Public facsimile service                                        | F.160-F.199        |
| Teletex service                                                 | F.200-F.299        |
| Videotex service                                                | F.300-F.349        |
| General provisions for telematic services                       | F.350-F.399        |
| MESSAGE HANDLING SERVICES                                       | F.400-F.499        |
| DIRECTORY SERVICES                                              | F.500-F.549        |
| DOCUMENT COMMUNICATION                                          | F.550-F.599        |
| Document communication                                          | F.550-F.579        |
| Programming communication interfaces                            | F.580-F.599        |
| DATA TRANSMISSION SERVICES                                      | F.600-F.699        |
| <b>MULTIMEDIA SERVICES</b>                                      | <b>F.700-F.799</b> |
| ISDN SERVICES                                                   | F.800-F.849        |
| UNIVERSAL PERSONAL TELECOMMUNICATION                            | F.850-F.899        |
| ACCESSIBILITY AND HUMAN FACTORS                                 | F.900-F.999        |

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

# Recommendation ITU-T F.760.2

## Guidelines for user interface of first responders in emergency response support systems

### Summary

Recommendation ITU-T F.760.2 provides guidelines for the user interface for first responders in emergency response support systems, which facilitates the use of information and devices supporting the activities of first responders at the scene of an emergency. This Recommendation identifies the human factors in emergency response services and the user interface guidelines in emergency response support systems based on the characteristics of first-response activities. These user interface guidelines are specified to support the functional modules and usability of emergency response support systems for first responders. By meeting these guidelines, developers can create user interfaces that are optimized to support the needs and tasks of first responders, resulting in more effective and efficient use of the system.

### History \*

| Edition | Recommendation | Approval   | Study Group | Unique ID          |
|---------|----------------|------------|-------------|--------------------|
| 1.0     | ITU-T F.760.2  | 2024-04-26 | 16          | 11.1002/1000/15611 |

### Keywords

First responder, emergency response service, human factors, user interface.

\* 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

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

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.

## NOTE

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

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

## INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents/software copyrights, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the appropriate ITU-T databases available via the ITU-T website at <http://www.itu.int/ITU-T/ipr/>.

© ITU 2024

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without the prior written permission of ITU.

## Table of Contents

|                                                                                                          | Page |
|----------------------------------------------------------------------------------------------------------|------|
| 1 Scope.....                                                                                             | 1    |
| 2 References.....                                                                                        | 1    |
| 3 Definitions .....                                                                                      | 1    |
| 3.1 Terms defined elsewhere .....                                                                        | 1    |
| 3.2 Terms defined in this Recommendation.....                                                            | 1    |
| 4 Abbreviations and acronyms .....                                                                       | 2    |
| 5 Conventions .....                                                                                      | 2    |
| 6 Background.....                                                                                        | 2    |
| 7 Concept of the human factors in emergency response services .....                                      | 3    |
| 7.1 Perception .....                                                                                     | 3    |
| 7.2 Contextualization.....                                                                               | 3    |
| 7.3 Comprehension.....                                                                                   | 4    |
| 7.4 Projection.....                                                                                      | 4    |
| 7.5 Decision-making.....                                                                                 | 4    |
| 7.6 Collaboration .....                                                                                  | 4    |
| 8 Concept of emergency response support systems .....                                                    | 4    |
| 8.1 Multimodal resources .....                                                                           | 4    |
| 8.2 Functionality of emergency response support systems .....                                            | 5    |
| 8.3 Usability of user interface in emergency response support systems .....                              | 6    |
| 9 Guidelines of user interfaces in emergency response support systems .....                              | 7    |
| 9.1 Intuitive and easy to use .....                                                                      | 7    |
| 9.2 Mobility features .....                                                                              | 8    |
| 9.3 Clear feedback .....                                                                                 | 8    |
| 9.4 Consistency.....                                                                                     | 8    |
| 9.5 Customizability.....                                                                                 | 8    |
| 9.6 Prioritized information display .....                                                                | 8    |
| 9.7 Responsive and fast-loading design .....                                                             | 8    |
| 9.8 Quick search and filtering .....                                                                     | 8    |
| Appendix I – Use cases of user interface for first responders in emergency response support systems..... | 9    |
| I.1 Introduction .....                                                                                   | 9    |
| I.2 User interface of situational awareness for police officers in law enforcement .....                 | 9    |
| I.3 User interface of patient identification for paramedics .....                                        | 10   |
| I.4 User interface of situational awareness for firefighters.....                                        | 11   |
| Bibliography.....                                                                                        | 13   |



# Recommendation ITU-T F.760.2

## Guidelines for user interface of first responders in emergency response support systems

### 1 Scope

This Recommendation specifies the concept, guidelines and application of the user interface of first responders in emergency response support systems.

The scope of this Recommendation includes:

- Characteristics of human factors in emergency response services;
- Concept of the user interface of first responders in emergency response support systems;
- Guidelines for the user interface that reflects human factors in emergency response services.

Emergency procedures are country-specific activities subject to local laws, regulations and operating procedures. This Recommendation specifies the guidelines for user interfaces in emergencies that are independent of country-specific regulations.

In addition, use cases of the proposed guidelines in the emergency scenarios are provided in the appendices.

### 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.760.1] Recommendation ITU-T F.760.1 (2022), *Requirements and reference framework for emergency rescue systems*.

### 3 Definitions

#### 3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

**3.1.1 interactive system** [b-ISO 9241-210]: A combination of hardware, software and/or services that receives input from, and communicates output to, users.

**3.1.2 first responder** [b-ISO 17840-3]: [An] individual who is authorized, trained and qualified to provide primary response to victims of a traffic accident, fire or submersion.

NOTE – Included, but not limited to, fire departments, rescue squads, emergency medical personnel, law enforcement personnel, and in some instances military personnel where the personnel are trained in assessing and treating injuries.

#### 3.2 Terms defined in this Recommendation

None.