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SERIES F: NON-TELEPHONE TELECOMMUNICATION
SERVICES

Definitions relating to telegraph, telematic and data transmission services

ITU-T F-series Recommendations – Supplement 1

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Supplement 1 to ITU-T F-series Recommendations

Definitions relating to telegraph, telematic and data transmission services

Source

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FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. 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 Conference (WTSC), 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 WTSC 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 publication, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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[1] The definition of Message Handling service as a telematic service and the use of the term public in the definitions of telematic services is for further study.

Supplement 1 to ITU-T F-series Recommendations

Definitions relating to telegraph, telematic and data transmission services

1 General definitions

1.1 Telematic services

1.1.1 telematic services

F: services télématiques

S: servicios de telemática (servicios telemáticos)

International telecommunication services, excluding telephone, telegraph and data transmission services, offered by Administrations and defined by CCITT for the purpose of exchange of information via telecommunication networks.

Note 1 – The definition of service covers the full range of functions according to the Open System Interconnection (OSI) model.

Note 2 – Examples of telematic services are teletex service, facsimile service, Message Handling services and videotex service.

Note 3 – The term "teleservice" belongs to the concept of ISDN. Telematic services provided on an ISDN may be considered as teleservices.

1.1.2 teletex service

F: service télétex

S: servicio teletex

An international telematic service offered by Administrations enabling subscribers to exchange correspondence via telecommunication networks.

1.1.3 public facsimile service

F: service public de télécopie

S: servicio público facsímil

An international telematic service offered by Administrations for the purpose of transmitting documents between facsimile terminals via telecommunication networks.

Note – The subdivision of this service is described in Recommendation F.160.

1.1.4 videotex service

F: service vidéotex

S: servicio videotex

A videotex service is an interactive service which provides, through appropriate access by standardized procedures, for users of videotex terminals to communicate with data bases via telecommunication networks.

Note – The videotex service includes the following set of characteristics:

1) information is generally in an alphanumeric and/or pictorial form;

2) information is stored in a data base;

3) information is transmitted between the data base and users by telecommunication networks;

4) displayable information is presented on a suitably modified television receiver or other visual display device;

5) access is under the user's direct or indirect control;

6) the service is easily operated by the general public as well as specialist users, i.e. the service is user-friendly;

7) the service provides facilities for users to create and modify information in the data bases;

8) the service provides data base management facilities which allow information providers to create, maintain and manage data bases and to manage closed user group facilities.

1.1.5   message handling service

F: service de messagerie

S: servicio de tratamiento de mensajes

A service provided by the means of message handling systems.

Note 1 – The service may be provided through administration management domains or private management domains.

Note 2 – Examples of Message Handling services are:
– Interpersonal Messaging service (IPM service)
– Message Transfer service (MT service).

1.2   Non-telematic services

1.2.1   public data transmission service

F: service public de transmission de données

S: servicio público de transmisión de datos

A data transmission service established and operated by Administrations and provided by means of a public network. Circuit switched, packet switched and leased circuit data transmission services are specified.

Note 1 – A public data transmission service may be subdivided into derived services.

Note 2 – A public data transmission service or a derived service consists of service elements forming a basic service and of other service elements which are called optional user facilities.

Note 3 – There is an implicit definition of data transmission services in Recommendations X.1 and X.2.

1.2.2   public telegram service

F: service public des télégrammes

S: servicio público de telegramas

The *telegraph service* offered by Administrations to the public for the transmission of *telegrams* and their delivery to the addressee.

Note – The service provides for the exchange of various classes of telegrams.

1.3   Terms and definitions on videography

1.3.1   videography

F: vidéographie

S: videografía

A form of telecommunication in which information generally in the form of digital data is transmitted in order to permit the selection and display of textual or pictorial information to a user on a visual display unit, for instance on the screen of a television receiver.

Note – Teletex and other forms of telegraphy are not forms of videography.

1.3.2   broadcast videography, teletext

F: vidéographie diffusée, télétexte

S: videografía radiodifundida, teletexto

Videography in which information is broadcast in a structured sequence within the framework of a television signal, and the desired part of this information is selected by the user.

Note 1 – Information may be transmitted simultaneously with normal television pictures.

Note 2 – The terms "teletext" and "teletex" refer to two different concepts.

1.3.3 videotex, interactive videography

> *F: vidéographie interactive, vidéotex*
>
> *S: videotex, videografía interactiva*

Videographic service in which telecommunication networks are used for transmission of the user's requirements as well as the answers to his requests.

2 Definitions from different Working Parties[2]

2.1 Working Party I/1 (telex, radiotelex and mobile telematic services)

2.1.1 international store-and-forward

> *F: enregistrement et retransmission au niveau international*
>
> *S: almacenamiento y retransmisión internacional*

Where a subscriber in country A accesses the store-and-forward unit in country B for the transmission of messages to that country.

2.1.2 interconnected store-and-forward

> *F: enregistrement et retransmission avec interconnexion*
>
> *S: almacenamiento y retransmisión con interconexión*

Where the store-and-forward unit in country A is connected to the store-and-forward unit in country B for the transmission of messages between the two countries.

2.1.3 international transit store-and-forward

> *F: enregistrement et retransmission en transit au niveau international*
>
> *S: almacenamiento y retransmisión internacional en tránsito*

Where a subscriber in country A accesses a store-and-forward unit in country B for the transmission of messages to other countries.

2.1.4 interconnected transit store-and-forward

> *F: enregistrement et retransmission en transit avec interconnexion*
>
> *S: almacenamiento y retransmisión en tránsito con interconexión*

Where the store-and-forward unit in country A accesses the store-and-forward unit in country B for further transmission of messages to other countries.

2.1.5 Draft terms and definitions on telex

Reference should be made to Supplement No. 2 for draft terms and definitions on telex, which will be studied, inter alia, under Question 7/I in the 1989-1992 study period.

2.2 Working Party I/2 (telegram and message switching services)

The definitions for the terms "store and forward", "message switching" and "message handling" are for further study.

2.3 Working Party I/3 (teletex service)

2.3.1 Common definitions

For the list of terms and definitions used in the teletex service, refer to Annex B to Recommendation F.200.

2.3.2 Definitions of terms related to interworking

Note – The terms below are provisional, and can also be found in Annex C to Recommendation F.201.

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[2] The Working Parties mentioned refer to the Study Group I organization during the 1981-1984 study period. The definitions in § 2 are relevant to the scope of each specialist area only.

2.3.2.1 interworking

> *F: interfonctionnement*
>
> *S: interfuncionamiento*

Same as B.7 definition in Annex B to Recommendation F.200.

2.3.2.2 conversion facility (CF)

> *F: unité de conversion (UC)*
>
> *S: unidad de conversión (UC)*

Fully automatic system performing the necessary conversion between the teletex service and the telex service (see Recommendation F.201, § 2.1).

2.3.2.3 one-stage/two-stage selection procedure for telex to teletex direction of interworking

> *F: procédures avec la sélection en une ou deux étapes pour l'interfonctionnement dans le sens télex vers télétex*
>
> *S: procedimientos con marcación mono o bietapa para el interfuncionaminto de télex a teletex*

Addressing of the teletex terminal by the telex terminal can be done, either by sending the total selection information in one phase to the CF or by calling first the CF (first stage of the selection), and by sending the teletex address after the connection to the CF has been established (second stage of the selection).

2.3.2.4 store-and-forward conversion facility (CF using store-and-forward principles)

> *F: unité de conversion avec enregistrement et retransmission (UC utilisant les principes d'enregistrement et retransmission*
>
> *S: unidad de conversión con almacenamiento y retransmisión (UC que utiliza los principios de almacenamiento y retransmisión*

CFs that "store" the received telex (or teletex) messages before "forwarding" them to the called teletex (or telex) terminal (see Recommendation F.201, § 3.1 and § 4; see also § 2.3.2.5 below).

2.3.2.5 real-time conversion facility (real-time interworking)

> *F: unité de conversion en temps réel (interfonctionnement en temps réel)*
>
> *S: unidad de conversión en tiempo real (interfuncionamiento en tiempo real)*

Such a CF shall transfer a message, in a unique communication, from a telex terminal to a teletex terminal, and from a teletex terminal to a telex terminal, without storage of the message (see Recommendation F.201, § 3.2).

2.3.2.6 validation of the called teletex terminal [validation result (positive or negative)]

> *F: validation du terminal télétex demandé [résultat de la validation (positive ou négative)]*
>
> *S: validación del terminal teletex llamado [resultado de validación (positivo o negativo)]*

This validation is performed by the CF to verify that the teletex terminal is an available one, i.e. either the teletex terminal has been called with this address (validation call) or this address has been controlled in a data base (see Recommendation F.201, § 4.1.3).

2.3.2.7 message deposit/message delivery (text deposit/delivery)

> *F: dépôt du message/remise du message (dépôt du texte/remise)*
>
> *S: depósito de mensaje/entrega de mensaje (depósito/entrega de texto)*

The message "deposit" is the sending by the calling terminal of the whole message to the store and forward CF before its further "delivery" to the called terminal (see Recommendation F.201, §§ 2.4.5 and 2.4.6).

2.3.2.8 on-line delivery acknowledgement: (ODA)

> *F: avis de remise de ligne*
>
> *S: acuse de recibo de entrega en línea (ODA)*

The on-line delivery acknowledgement facility gives to the waiting telex (i.e. having maintained the connection with the CF after its message deposit) the opportunity to receive "on-line" a proof of the CF's message delivery to the teletex terminal, provided the call establishment to the teletex terminal has been performed within 30 seconds counted after the end of the message input (see Recommendation F.201, Note 10 to Figure 2/F.201, Note 9 to Figure 5/F.201 and § 4.1.6).

2.3.2.9 non-delivery notification (NDN)/positive delivery notification: (PDN)

> *F: avis de non-remise (NDN)/avis de remise (PDN)*

> *S: notificación de no entrega (NDN)/notificación de entrega positiva (PDN)*

If the CF has not been able to deliver the message to the called terminal despite the performance of a defined cycle of delivery attempts on the called terminal network (each network has a specific cycle) and within a maximum of a T2-defined duration, the CF should send an NDN to the calling user to indicate to him that his message has not been delivered to the called terminal and that no further delivery action will be taken by the CF (see Recommendation F.201, §§ 3.1.3.4 and 4.1.6).

> *Note 1* – The NDN facility is not provided in the first method of interworking for the telex to teletex direction (see Recommendation F.201, §§ 3.1.1, 3.1.2, 3.2.1 and 3.2.2).

> *Note 2* – The PDN facility, i.e. the ability of the CF to send back a proof of the delivery, is for further study.

2.3.2.10 Specific glossary to one-stage selection procedure

CF prefix

> *F: préfixe de l'UC*

> *S: prefijo de UC*

In the first method of interworking, the "CF prefix" is the special number (up to 7 digits) to be put before the called teletex number, to indicate that the total telex selection is for reaching a teletex terminal (see Recommendation F.201, §§ 3.1 and 3.2).

2.3.2.11 Specific glossary to two-stage selection procedure

i) CF national number

> *F: numéro national de l'UC*

> *S: número nacional de UC*

In the second method of interworking, the "CF national number" is the national telex number of the CF, given to the called telex users at the beginning of the telex delivery phase of the teletex to telex exchange for further use of interworking with the teletex of the CF's country (see Recommendation F.201, § 4).

ii) input message acknowledgement (IMA)

> *F: accusé de dépôt (IMA)*

> *S: acuse de recibo de mensaje introducído (IMA)*

The IMA message sent by the CF to the telex user is used to indicate that the message has been well received by the CF and to give to the telex user a unique reference for this message. This reference should be used again when sending an NDN (see Recommendation F.201, § 4.1.5).

2.3.3 mixed mode of operation

> *F: mode d'exploitation mixte*

> *S: modo mixto de explotación*

In the teletex service, the mixed mode of operation provides the user, in addition to the basic features of the teletex service, with means for transferring documents containing graphical information encoded using techniques other than those defined for the basic teletex service.

2.4 Working Party I/4 (facsimile and telewriting)

2.4.1 Facsimile

Facsimile terminal (facsimile machine)

group (of facsimile terminals)

> *F: groupe (de télécopieurs)*

> *S: grupo (de terminales facsímil)*

Set of compatible facsimile terminals which conform to certain CCITT Recommendations.

2.4.1.1 group 2

F: groupe 2

S: grupo 2

Facsimile terminals which ensure the transmission of an A4 document in 3 minutes over the public telephone network and which conform to CCITT Recommendation T.3.

2.4.1.2 group 3

F: groupe 3

S: grupo 3

Facsimile terminals which ensure the transmission of an A4 document in about 1 minute over the public telephone network and which conform to CCITT Recommendation T.4.

2.4.1.3 group 4

F: groupe 4

S: grupo 4

Facsimile terminals mainly intended for operation on public data networks but also usable on the public telephone network and conforming to CCITT Recommendation T.5.

2.4.2 Classes of group 4

There are three classes of group 4 facsimile terminals:

i)   *Class I* – Minimum requirement is a terminal able to send and receive documents containing facsimile encoded information (in accordance with Recommendation T.6 and T.73).

ii) *Class II* – Minimum requirement is a terminal able to transmit documents which are facsimile encoded (in accordance with Recommendations T.6 and T.73). In addition, the terminal must be capable of receiving documents which are facsimile coded (in accordance with Recommendations T.6 and T.73) or teletex coded (in accordance with the basic coded character repertoire as defined in Recommendation T.61) and mixed-mode documents (in accordance with Recommendation T.73).

iii) *Class III* – Minimum requirement is a terminal which is capable of generating, transmitting and receiving facsimile coded documents (in accordance with Recommendations T.6 and T.73), Teletex coded documents (in accordance with the basic coded character repertoire as defined in Recommendation T.61) and mixed mode documents (in accordance with Recommendation T.73).

2.4.3 telefax

F: téléfax

S: telefax

International public facsimile service between subscriber stations on the public switched telephone network or on circuits intended for DATEL (Recommendation F.180, § 5).

2.4.4 FAX 4

F: FAX 4

S: FAX 4

International facsimile service between subscribers with Group 4 terminals (see Recommendation F.161).

2.4.5 bureaufax

F: bureaufax

S: burofax

International public facsimile service between public bureaux (see Recommendation F.170). Administrations may adopt another more commercial name (for example, Publifax) for the bureaufax service which they offer to their users.

2.4.6 **public telefax station**

F: *poste téléfax public*

S: *estación telefax pública*

Equipment made available to the public by an Administration for the operation of the telefax service, comprising a facsimile terminal and access to the appropriate networks. These facsimile terminals may be used exclusively for transmission or reception, or for both transmission and reception (see Recommendation F.180, § 5).

2.5 **Working Party I/5 (videotex service)**

(*Note* – These definitions are based on the ones contained in Recommendation F.300.)

2.5.1 **videotex service**

F: *service vidéotex*

S: *servicio videotex*

A videotex service is an interactive service which provides, through appropriate access by standardized procedures, for users of videotex terminals to communicate with data bases via telecommunication networks.

The videotex service includes the following set of characteristics:

1) information is generally in an alphanumeric and/or pictorial form;

2) information is stored in a data base;

3) information is transmitted between the data base and users by telecommunication networks;

4) displayable information is presented on a suitably modified television receiver or other visual display device;

5) access is under the user's direct or indirect control;

6) the service is easily operated by the general public as well as specialist users, i.e. the service is user-friendly;

7) the service provides facilities for users to create and modify information in the data bases;

8) the service provides data base management facilities which allow information providers to create, maintain and manage data bases and to manage closed user group facilities.

2.5.2 **videotex service profile**

F: *profil du service vidéotex*

S: *perfil del servicio videotex*

A videotex service profile is the set of functionalities required by videotex service.

2.5.3 **videotex service facility**

F: *services complémentaires vidéotex*

S: *facilidad del servicio videotex*

A videotex service facility is an application layer implementation in a videotex service, providing a specific, clearly defined facility to videotex users. Videotex service provides users with a number of such service facilities.

2.5.4 **videotex information retrieval**

F: *recherche d'information vidéotex*

S: *recuperación de información videotex*

A videotex service facility in which a user obtains information by means of a dialogue with a data base.

2.5.5 **videotex transaction**

F: *transactions vidéotex*

S: *transacción videotex*

A videotex service facility which allows users to create and/or modify information stored in a data base. Access to these facilities will generally require special functions and procedures to authenticate the authority to access. This service facility includes, but is not limited to, transactions leading to or influencing a commercial relationship between users and information providers.

2.5.6   videotex messaging [videotex message handling]

> *F: messagerie vidéotex [traitement des messages vidéotex]*
>
> *S: mensajería videotex [tratamiento de mensajes videotex]*

A videotex service facility which allows users to communicate with each other by storing messages in a commonly accessible database. These stored messages may either be retrieved by the user or delivered automatically.

2.5.7   videotex conferencing [videotex terminal-to-terminal messaging]

> *F: conférence vidéotex [services de messages entre terminaux vidéotex]*
>
> *S: conferencia videotex [mensajería entre terminales videotex]*

A videotex service facility which, by providing routing and switching functions, enables users or terminals to send and receive messages in a conversational manner. This does not preclude direct terminal-to-terminal messaging using existing networks.

2.5.8   videotex data processing

> *F: traitement des données vidéotex*
>
> *S: procesamiento de datos videotex*

A videotex service facility which allows the user to employ processing and storage capacity either at the host computer or by downloading a program or other data into suitable videotex terminal equipment.

2.5.9   videotex service provider

> *F: prestataire de service vidéotex*
>
> *S: proveedor del servicio videotex*

A videotex service provider is a party responsible to the user for the provision and operation of a videotex service.

2.5.10   videotex information provider

> *F: fournisseur d'information vidéotex*
>
> *S: proveedor de información videotex*

A videotex information provider is a party responsible by agreement with a videotex service provider for providing information or transaction facilities to videotex service users. The information provider may or may not operate the host computer on which the data base is stored.

2.5.11   videotex terminal

> *F: terminal vidéotex*
>
> *S: terminal videotex*

A videotex terminal is the equipment by means of which the user interacts with the videotex service. The terminal may also provide a direct terminal-to-terminal capability, and may include other components, such as a hard copy output unit, magnetic or optical storage devices, and additional processing and/or storage devices.

2.5.12   videotex host computer

> *F: ordinateur principal vidéotex*
>
> *S: ordenador (computador) principal videotex*

A videotex host computer is a computer (or network of computers provided by a single party) on which one or more data bases are stored and/or one or more other videotex service facilities are provided.

2.5.13   videotex service centre

> *F: centre de service vidéotex*
>
> *S: centro de servicio videotex*

A videotex service centre is a computer used by the videotex service provider to authorize access to a videotex service. Other functions of the service centre may include assistance to users in selecting the particular data base required (either provided by the service centre or by other host computers), as well as management facilities such as billing, statistics gathering, etc. The same computer may also be a host computer and/or provide a gateway function.

2.5.14 videotex gateway

F: accès multiple vidéotex

S: función de multiacceso videotex (cabecera videotex)

A videotex gateway is a function of a computer providing access to data base(s) of other host computer(s). This may include selection and/or protocol conversion and/or dialogue handling functions.

2.5.15 external videotex host computer

F: ordinateur principal externe vidéotex

S: ordenador principal videotex externo

An external videotex host computer is a host computer not operated by the videotex service provider.

2.5.16 videotex frame

F: feuillet vidéotex

S: trama videotex

The information that is retrieved by a single user function from a terminal and presented as a complete entity by the terminal (full screen contents or parts of the screen e.g. areas on the screen) but may include information that requires scrolling before it is displayed and may include dynamic effects such as overwriting. Local user action may take place within a frame.

2.5.17 videotex page

F: document vidéotex

S: página videotex

A videotex page is an organized set of one or more frames.

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