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**F.166**

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**NON-TELEPHONE TELECOMMUNICATION  
SERVICES**

**TELEMATIC SERVICES – PUBLIC FACSIMILE  
SERVICE**

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**SERVICE AND OPERATIONAL  
REQUIREMENTS FOR A FAX DATABASE  
SERVICE (FaxDB)**

**ITU-T Recommendation F.166**  
Superseded by a more recent version

(Previously “CCITT Recommendation”)

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## FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). The 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 their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

ITU-T Recommendation F.166 was prepared by ITU-T Study Group 1 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 19th of July 1996.

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## NOTE

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 F.166

## SERVICE AND OPERATIONAL REQUIREMENTS FOR A FAX DATABASE (FaxDB) SERVICE

(Geneva, 1996)

### 1 Scope

**1.1** This Recommendation defines the general principles of a FaxDB service provided by ROAs using computer-controlled storage. Although the major application will be within the ROAs domain, this Recommendation describes a minimum set of requirements to allow international and inter-ROA extension of this service.

**1.2** Technical requirements of the FaxDB service are defined in the relevant T- and X-Series Recommendations.

**1.3** Interworking between the FaxDB service and the COMFAX service is defined in 5.3.3 and 5.5.3.

**1.4** Interworking between the FaxDB service and other ITU-T defined services, such as MHS, is for further study.

**1.5** Fax delivery from other types of databases is generally not within the scope of this Recommendation but may make use of the provisions described in 5.5.

### 2 References

The following 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: all 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.

- ITU-T Recommendation F.162 (1996), *Service and operational requirements of store-and-forward facsimile service*.
- ITU-T Recommendation F.163 (1996), *Operational requirements of the interconnection of facsimile store-and-forward units*.
- ITU-T Recommendation F.902 (1995), *Interactive services design guidelines*.
- ITU-T Recommendation T.30 (1993), *Procedures for document facsimile transmission in the general switched telephone network*.

### 3 Terms and definitions

For the purposes of this Recommendation, the following definitions apply.

**3.1 service provider:** Service provider is the ROA who provides the storage, the access, the delivery infrastructure, the infrastructure for charging and the accounting to other ROAs where applicable.

**3.2 information provider:** The information provider provides and updates the Information. He is responsible for content and quality of the Information. The information provider is the customer of the service provider.

**3.3 information requester:** The information requester obtains Information provided by the information provider. This may be effected either in a single session or by separated access and delivery sessions. The information requester may be either customer of the information provider or customer of the service provider or neither of the two.

**3.4 information:** Within the FaxDB service information is provided by the information provider. The information is normally contained on FaxG3 documents, preferably using only the basic features as available on all FaxG3 terminals.

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**3.5 access session for information request:** The access session is initiated by the information requester to obtain one or more information documents. For confidence of the information and for charging purposes, identification of the information requester may be part of this session.

**3.6 delivery session:** The delivery session is an ordinary FaxG3 session for the delivery of documents, provided by an information provider, requested by an information requester.

**3.7 combined session:** Combination of access session and delivery session in one single session.

## 3.8 Information update

Information update is normally done by the information provider, using an infrastructure provided by the service provider. The provision of a control mechanism to avoid unauthorized information Update lies within the responsibility of the service provider, PWD (for transmission) and SUB as defined in Recommendation T.30 may be used.

## 4 Abbreviations

For the purposes of this Recommendation, the following abbreviations are used:

DTMF	Dual-Tone Multi-Frequency
FaxDB	Facsimile Database
FaxG3	Facsimile Group 3. See relevant T-Series Recommendations
FaxG4	Facsimile Group 4. See relevant T-Series Recommendations
Fax SFU	(Computer Controlled) Facsimile Store-and-Forward Unit. See Recommendation F.162
MHS	Message Handling System
PDN	Public Data Network
PWD	Password. See Recommendation T.30
ROA	Recognized Operating Agency
SEP	Selective Polling. See Recommendation T.30
SUB	Subaddress. See Recommendation T.30

## 5 Service description

**5.1** Information requesters may obtain information documents, containing information, provided by the information provider. The service provides facilities which may be used by information requesters to obtain the desired documents in a convenient and fast way. The service provides also facilities to allow the information provider to store the offered documents for the access by information requesters immediately after storage.

Documents stored in the FaxDB service are normally FaxG3 documents, using only the basic features for FaxG3. Support of optional features of FaxG3 and support for FaxG4 may be optionally provided.

**5.2** Access to and delivery from the service is available via public networks.

**5.3** Interworking between ROAs in the FaxDB service may be provided for:

**5.3.1** The access session for information request may involve several ROAs FaxDBs. This allows an information provider to provide his information to information requesters in other countries under the local conditions (charging, operation, support, and etc.) of the information requester.

**5.3.2** The delivery session as defined in 3.6 may alternatively be performed using the COMFAX service.

**5.3.3** If the service provider operates, beside the FaxDB, also a COMFAX Service and his Fax SFU is interconnected with other Fax SFUs, it may be desirable to use the same interconnection for the access session to the FaxDB. Details are for further study.

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**5.3.4** If an information provider intends to offer his information in more than one country, it may be desirable to offer him the option to parallel the information in more than one FaxDB. The simultaneous update of the information may be subject of an agreement between the providers of the FaxDBs.

## **5.4 Access management**

**5.4.1** In agreement with the information provider, the service provider may provide access to the FaxDB via:

- freephone number;
- premium rate number;
- ordinary telephone number;
- other means, e.g. PDN.

## **5.4.2 Access procedure**

The method of access may be one or several of the following. The choice is up to the ROA providing the service.

**5.4.2.1** Interactive, using voice guidance and DTMF responses, following the guidelines in Recommendation F.902. This method may be used for separated or combined access and delivery sessions.

**5.4.2.2** Interactive, using an automatic device, such as personal computer, videotex terminal or autodialer. In this method the interactions are between the automatic device and the access point of the FaxDB. This method may be used for separated or combined access and delivery sessions.

**5.4.2.3** Where a separate access number can be provided for each single document, a normal telephone set combined with a fax terminal can be used. This method allows also users with pulse dialling telephone sets easy access to the desired document. This method can only be used for a combined session.

**5.4.2.4** Access via a proforma. The proforma should contain as a minimum:

- the document number(s) of the requested information;
- the Facsimile address of the information requester;
- necessary information for the identification of the information requester.

This method applies only for the case of separated access and delivery sessions.

**5.4.2.5** Access by polling using polling (send) commands as defined in Recommendation T.30.

- Digital Transmit Command (DTC) contains the standardized capabilities of the document(s) to be polled.
- Password (for polling) (PWD) may contain a password or an access code (transaction number). It may be used to provide additional security to the facsimile procedure.
- Selective Polling (SEP) may be used to access a mailing box containing facsimile documents or may contain a reference to the requested document. A specific reference may be used to request the complete list of documents (the table of content) relevant to the information provider.

For details refer to Recommendation T.30 and T.ApplicationRules (for further study).

**5.4.2.6** Interactive access using the Enhanced Negotiation Procedure as defined in Recommendation T.30 (for further study).

This access procedure may provide a table of content (see 5.6.3) so that the information requester may choose from the table of content within a single session.

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**5.4.3** Where a separated delivery session is applied, the FaxDB needs to obtain the Fax number of the information requester. This can be done:

- on a per call basis;
- on subscription basis. This can only apply when the information requester is a customer of the service provider.

## **5.5 Delivery**

Delivery may be done in the same session with the access session. Alternatively delivery can be done in a separated session, either direct or via COMFAX.

### **5.5.1 Delivery in the same session as the access session**

As soon as the information requester has completely defined the desired information, he will be invited by the FaxDB to enable reception of the documents. The delivery session will use the standard protocol for FaxG3, as defined in Recommendation T.30.

### **5.5.2 Direct delivery in a separated session**

As soon as the information requester has completely defined the desired information, the FaxDB will clear the access session. Immediately after clearing the access session the FaxDB initiates a call to the information requesters fax number, captured in the access session as described in 5.4.3.

### **5.5.3 Delivery via COMFAX**

As soon as the information requester has completely defined the desired information, the FaxDB will clear the access session. Immediately after clearing the access session the FaxDB submits the requested documents to the COMFAX service. Where the Fax SFU (see Recommendation F.162) and the FaxDB is operated by the same ROA, the protocol for access and processing of notifications is a local matter. Where the Fax SFU and the FaxDB are operated by different ROAs, the protocol for access and processing of notifications is for further study.

### **5.5.4 Combined delivery**

It may be desirable for an information provider to provide information to selected fax users immediately via COMFAX and store it for others in a FaxDB. The method to provide this type of delivery is a local matter.

### **5.5.5 Physical delivery**

Instead of a delivery session by facsimile means, it may be advantageous for an information requester to receive the requested information by physical delivery. The choice of this type of delivery may be made:

- on a per call basis, e.g. in case of access by proforma (see 5.4.2.4);
- on a per subscription basis for specific information requesters;
- on a per document basis.

Details for this method are for further study.

## **5.6 Information documents**

**5.6.1** The information documents consist of one or more basic FaxG3 pages. The information provider is responsible for content and quality of the information documents. However, some assistance by the service provider may be necessary. Detailed agreements are a local matter.

**5.6.2** To avoid operational problems with terminal and/or transmission resources, there shall be a limit for the size of the information documents.

NOTE – It is recommended to limit the number of pages to 20.



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**5.6.3** Related to each information provider a separate document showing a table of content shall be available. This table of content shall show the following information for each information document:

- access information (document number);
- title;
- number of pages;
- date/time of last update (optional);
- date/time of next update (optional).

**5.6.4** It may be desirable for the information provider to inform potential information requesters about new updates of the information. This information may be distributed by:

- paging;
- predefined distribution lists, residing in a Fax SFU of the COMFAX service;
- advertising in public media, e.g. newspapers;
- any other means, e.g. electronic mail, bulletin boards.