5i’

FASCICLE II.5

Recommendations F.160-F.353, F.600, F.601, F.710-F.730

TELEMATIC, DATA TRANSMISSION AND TELECONFERENCE SERVICES

:

OPERATIONS AND QUALITY OF SERVICE

Blanc

The term ‘‘telematic services’’ is used provisionally.

MONTAGE: PAGE 2 = PAGE BLANCHE

PROTECTION OF THE COMMON NAMES OF

CCITT DEFINED INTERNATIONAL PUBLIC SERVICES

Resolution No. 13 published in Volume I is reproduced below for the convenience of the reader.

Resolution No. 13

PROTECTION OF THE COMMON NAMES OF CCITT DEFINED INTERNATIONAL PUBLIC SERVICES

(Geneva, 1980)

The CCITT,

considering

(a) that CCITT has defined, *inter alia* , the international public services ‘‘ teletex telefax ´bureaufax ´.PP (b) that those international public services are characterized by complete end-to-end compatibility;

(c) that it is desirable to use on a worldwide basis for those CCITT defined international public services their respective common name, i.e. ‘‘teletex’’, ‘‘telefax’’ or ‘‘bureaufax’’, to qualify any service provided in that respect as complying completely with the CCITT definitions for the respective international public service in order to guarantee end-to-end compatibility;

(d) that it is essential to protect the use of the aforementioned common names;

noting

(a) that within a number of countries, several Recognized Private Operating Agencies (RPOAs) may provide such CCITT defined international public services and may also wish to add further optional user facilities in addition to the respective basic international public service as defined by the CCITT;

(b) that, for the preceding reason, some RPOAs may wish to use service designations, e.g. XXX/teletex, indicating a combination of a basic international public service as defined by the CCITT with additional optional user facilities;

resolves to request Administrations

(1) to ensure that any such international public service offered by an Administration be denominated by its respective common name, i.e. ‘‘teletex’’, ‘‘telefax’’ or ‘‘bureaufax’’ and comply completely with the respective CCITT definitions for such service;

(2) to endeavour to protect the common names of the CCITT defined international public services ‘‘teletex’’, ‘‘telefax’’ and ‘‘bureaufax’’, *inter alia* through the communication of those names to the national, regional and international authorities for the registration and administration of trade marks and service marks in order to ensure that the said names be not made the subject of trade marks or service marks or if claimed in an application for the registration of trade marks or service marks be made the subject of a disclaimer;

(3) to ensure that in the case of a combination of any such CCITT defined international public services together with further optional user facilities in addition to that basic service, the trade mark or the service mark for such a combined service offered by any RPOA be always combined with the respective common name of the basic CCITT defined international public service, i.e. ‘‘teletex’’, ‘‘telefax’’ or ‘‘bureaufax’’, and that the latter names, in the case of registration of such a trade mark or service mark, be made the subject of a disclaimer;

(4) to inform the Director of the CCITT continuously about the measures taken with regard to resolves (1) to (3) above;

requests the Director of the CCITT

to compile the information received in respect of such measures and to make this information available on request for consultation by Administrations.

SECTION 1

PUBLIC FACSIMILE SERVICE

Recommendation F.160

GENERAL OPERATIONAL PROVISIONS FOR THE INTERNATIONAL PUBLIC FACSIMILE SERVICES

1 General considerations

Considering:

a) the growing importance of facsimile (see § 2.1) as a means of communication in international relations;

b) the need of users to have facsimile services (see § 2.5) available at international level for the exchange of documents, whether between subscriber stations or through the intermediary of public stations;

c) that facsimile services cover a part of the needs not met by other methods of telecommunication;

d) that, in accordance with the Series T Recommendations, facsimile services may be operated using various methods of transmission and switching;

e) that the characteristics specified in the relevant Series T Recommendations in respect of standardization of equipment for operating facsimile services promote these services and simplify operational questions;

f) that the use of universal terms to regulate operating procedures for facsimile services between manual terminals would avoid difficulties of understanding that could arise in relations between users speaking different languages;

g) that universal terminology would be desirable at international level with regard to facsimile services;

it is important that the Administrations be requested to observe common provisions in respect of the operation of facsimile services in all relations.

See Resolution No. 13 at the beginning of this fascicle.

2 Terminology

2.1 facsimile

F: t´el´ecopie

S: facs´imil

Reproduction of all forms of graphical, handwritten or printed material, at a distant location of the original material, within the limits and characteristics specified by the relevant CCITT Recommendations.

2.2 facsimile terminal (facsimile machine)

F: terminal de t´el´ecopie (t´el´ecopieur)

S: terminal facs´imil (aparato facs´imil)

Machine used for the transmission and/or receipt of documents in facsimile services.

2.3 subscriber's facsimile station

F: poste d'abonn´e de t´el´ecopie

S: estaci´on facs´imil de abonado

Equipment made available to a facsimile service subscriber, including a facsimile terminal, access to the appropriate public telecommunication networks as well as connecting and possible additional equipment.

2.4 public facsimile station

F: poste public de t´el´ecopie

S: estaci´on facs´imil p´ublica

Equipment operated by an Administration in a facsimile bureau open to the public, including a facsimile terminal, access to the telecommunication networks (with possible use of dedicated circuits) as well as connecting and possible additional equipment.

2.5 facsimile service

F: service de t´el´ecopie

S: servicio facs´imil

Telecommunication service offered for the purpose of transmitting documents between facsimile machines.

2.6 facsimile on private networks

F: t´el´ecopie sur r´eseaux priv´es

S: facs´imil por redes privadas

With regard to facsimile communications on private networks, circuits leased must be used in accordance with the provisions of Recommendation T.10 and the Series D Recommendations.

2.7 international public facsimile service

F: service public international de télécopie

S: servicio facsímil público internacional

A telecommunication service between facsimile stations in different countries. These services may be classified in three categories:

a) public facsimile service between subscribers’ stations (use of a public telecommunication network);

b) public facsimile service between Administrations’ public bureaux (see § 2.8) (use of a public telecommunication network or dedicated circuits);

c) public facsimile service between Administrations’ public bureaux and subscribers’ stations, and vice versa (use of a public telecommunication network).

2.8 **public facsimile bureau**

F: bureau public de t´el´ecopie

S: oficina facs´imil p´ublica

An Administration's public bureau responsible for accepting, transmitting, receiving and delivering facsimile documents.

3 General characteristics of the facsimile service

3.1 *Terminals*

3.1.1 Specification and classification of compatible terminals shall be in accordance with:

a) the relevant Series T Recommendations;

b) current national legislation.

3.2 *Network*

3.2.1 The facsimile service may utilize:

a) the public switched telephone network (PSTN);

b) the integrated services digital network (ISDN);

c) the circuit switched public data network (CSPDN);

d) the packet switched public data network (PSPDN);

e) dedicated circuits between public facsimile bureaux (Bureaufax service).

4 Restrictions on the use of a facsimile service

4.1 Administrations reserve the right to suspend facsimile services in the circumstances described in Articles 19 and 20 of the *Convention* [1].

4.2 Administrations shall refuse to make facsimile services available to an agency that is known to be organized for the purpose of sending or receiving documents for third parties and for retransmission by any means in order to avoid the payment of the full charges normally levied for such correspondence.

4.3 Administrations shall refuse to make facsimile services available to a client whose activities may be regarded as an infringement of the functions of an Administration in providing a public telecommunication service.

5 Scope

5.1 The provisions set out below shall apply to the operation of public facsimile services via the public telecommunication networks in international relations:

a) between subscribers' (Telefax) facsimile stations (see Recommendations F.180, F.182 and F.184);

b) between public facsimile bureaux (Bureaufax: see Recommendations F.170 and F.171);

c) between public fascimile bureaux and subscribers' facsimile stations, and vice versa (see Recommendation F.190).

5.2 *Classes of service*

Two classes of facsimile service in each category mentioned in § 5.1 are handled by the Administration. They are:

a) ordinary private facsimile correspondence;

b) service facsimile correspondence, including franking privilege telecommunications using facsimile, which, in accordance with Recommendation D.193, may be offered during conferences and meetings of the ITU.

5.3 Service facsimile correspondence is exchanged between the Administrations concerned (see Recommendations F.170, F.180 and the relevant Series D Recommendations).

5.4 Where agreement is reached between Administrations, similar arrangements may be made to those described in Recommendation F.1, §§ D.14 and D.15 (service telegrams), and Recommendation F.60, §§ 2.2.2 and 2.2.3 (service telex calls).

5.5 Service facsimile correspondence may be requested only by persons authorized to do so by their respective Administrations.

5.6 Service facsimile correspondence relating to the official business of the ITU may be exchanged between Administrations and recognized private operating agencies on the one hand and the Chairman of the Administrative Council of the ITU, the Secretary-General of the ITU, the Director of the CCITT, the Director of the CCIR and the Chairman of the IFRB on the other hand.

5.7 Franking privilege facsimile correspondence is considered as service facsimile correspondence and is admitted on a reciprocal and optional basis where consistent with national law.

5.8 Service facsimile correspondence should be made, as far as possible, outside the busiest hours.

6 Quality of service

6.1 The quality of service depends on the normal characteristics of the network used and of the facsimile terminals, in particular their scanning and reproduction parts.

6.2 Terminal-to-terminal quality shall be checked by various measurements. In particular, the quality of the scanning and reproduction functions may be checked:

a) between manually operated terminals;

b) between a terminal operated manually and an automatic terminal;

c) between automatic terminals;

by:

i) automatic transmission of a test chart to check the reproduction system of the destination terminal;

ii) transmission of a chart on paper to check the scanning system on the transmitting terminal or the reproduction system of the destination terminal.

The standardized CCITT test chart shall be used for this purpose.

6.3 Administrations shall perform test and measurement services:

a) to locate faults and to restore service on the public network excluding terminal equipment; or

b) to locate and to clear faults, including those involving the terminals.

Note — For the Telefax 4 service, see also Recommendation F.184, § 6.

7 Terminal identification

7.1 Identification of terminals is effected following the procedures laid down in the relevant Series T Recommendations. (See also Recommendations F.182, § 4, and F.184, § 5.3.)

8 Terminal implementation

If the transmitted document is not generated from a physical scanner, then the signals appearing across the network interface should be identical to those which would be generated if a hard copy of the document had been physically scanned (see relevant T-Series Recommendations).

Terminals which do not include a physical scanner shall have the ability to accept input from such a scanner.

If the received document is not displayed on paper then the signals appearing across the network interface should be identical to those which would be generated if the received document was being displayed on paper.

Terminals which display documents in ‘‘soft’’ form shall have the ability to output the document to a device which will produce a paper copy of it.

If the received document is displayed in ‘‘soft’’ form e.g. on a visual display unit, it is not necessary for the whole document to be displayed at one time; however, the user must be able to display the other parts of the document e.g. by scrolling. (Technical requirements for the display of documents in ‘‘soft’’ copy form are for further study.).

9 Enquiries and complaints

9.1 Enquiries and complaints services shall be provided by Administrations.

Reference

[1] *International Telecommunication Convention* , Nairobi, 1982.

Recommendation F.162

OPERATIONAL REQUIREMENTS OF AN INTERNATIONAL STORE-AND-FORWARD FACSIMILE SWITCHING SERVICE (COMFAX)

1 Introduction

1.1 With the development of equipment that provides store-and-forward facilities for facsimile service, and that permits inter-operation between dissimilar facsimile terminals, there is a requirement to ensure that such systems should have the capability of interworking with each other.

1.2 It is therefore necessary to define the areas in which common procedures or facilities are essential to provide a standardized international service which may be accessed by a wide variety of terminals and which can employ a wide variety of networks for access and interworking purposes.

1.3 The service would be provided for registered users for the origination of traffic. However, to make the service attractive to potential users, the transmission of messages could be allowed to any facsimile terminal (preferably capable of automatic reception), connected to the public telephone network, the public data networks or by direct connection from the facsimile switching node.

2 Scope

2.1 This Recommendation defines the basic operational requirements of an international store-and-forward facsimile switching service, whereby switching and protocol conversion facilities are provided by Administrations using computer-controlled store-and-forward nodes.

2.2 As a national option, input from character terminals, for output to facsimile terminals, may be provided. Optionally, the service should be capable of receiving messages from a domestic or international Telemessage service (telex, Teletex and Videotex) for the transmission and/or delivery of messages in a facsimile mode.

2.3 Technical requirements of the service are not covered in this Recommendation. Facsimile terminals are covered in the Series-T (see also Recommendations F.180, § 1.3 and F.161).

2.4 Tariff and accounting aspects will be covered in D-series Recommendations.

3 General requirements

3.1 The service shall offer a range of store-and-forward facilities using message switching principles.

3.2 The service shall be capable of converting the transmission formats of a range of normally incompatible document facsimile terminals so that these can communicate with each other. The requirement is that facsimile terminals conforming to CCITT Group 3 and Group 4 standards should be acceptable. As a national matter, Group 2 access may be optionally offered.

3.3 The service shall be capable of accepting input from character-orientated terminals, for transmission to a facsimile terminal.

3.4 Customers shall gain access to a switching node either by dialling over the PSTN, or a data network, or by direct connection.

3.5 Customers shall receive transmissions from the node to the customer’s facsimile terminal either by the switching node dialling over the PSTN or a PDN or by a direct connection.

3.6 Messages may be transmitted between store-and-forward nodes. Each node shall be uniquely identified by an identification code. The numbering of nodes is for further study.

3.7 Communications between nodes internationally shall be either by automatic dialling over the PSTN or a PDN or by a direct connection.

3.8 Access to an ISDN store-and-forward switching node is for further study.

4 Quality of service

4.1 The quality of service depends on the normal characteristics of the network used and of the facsimile terminals, in particular their scanning and reproduction parts.

4.2 Switching nodes should provide a means of assessing terminal-to-node quality.

In particular, the quality of the scanning and reproduction functions may be checked between:

a) manually operated terminal and the switching node;

b) automatic terminal and the switching node;

by:

i) automatic transmission of a test chart by the switching node to check the reproduction system of a receiving terminal;

ii) transmission of a test chart on paper to check the scanning system on the transmitting terminal.

The standardized CCITT test charts, Nos. 2 and 3, per CCITT Recommendation T.21 shall be used for this purpose.

4.3 Administrations shall perform test and measurement services:

a) to locate faults and to restore service on the public network, excluding terminal equipment; or

b) to assist users to locate and clear faults, including those involving the terminals.

4.4 *Terminal identification*

Identification of terminals is affected by the procedures laid down in relevant Series-T Recommendations.

4.5 *Error protection*

4.5.1 *Between Group 3 terminals and a switching node*

For further study.

4.5.2 *Between Group 4 terminals and a switching node*

To ensure integrity, error protection will be provided by Group 4 control procedures (see Recommendations T.62 and T.70).

4.5.3 *Between switching nodes*

For further study.

4.6 *International routes*

4.6.1 *Public switched telephone network*

Communications between international nodes shall operate at a data rate of 9.6 kbit/s, with fallback rates of 7.2, 4.8 and 2.4 kbit/s.

4.6.2 *Circuit switched public data network*

Store-and-forward facsimile nodes connected to a circuit switched data network shall operate in accordance with user classes of service 6 or 7 as defined in Recommendation X.1.

4.6.3 *Packet switched data network*

Store-and-forward facsimile nodes connected to a packet switched data network shall operate in accordance with user class of service 10 or 11 as defined in Recommendation X.1.

4.6.4 Store-and-forward facsimile nodes connected to an ISDN shall operate in accordance with user class of service 30 as defined in Recommendation X.1.

4.7 *Duration of service*

4.7.1 The national and international store-and-forward facsimile switching facilities shall be open continously.

4.7.2 Receiving terminals shall, in principle, be available to accept calls continously.

4.8 *Observations on the quality of service*

Administrations shall make observations to evaluate the quality of the store-and-forward facsimile switching service nationally as required and internationally at least once each year.

4.9 *Enquiries and complaints*

Enquiries and complaints services shall be provided by administrations. Unless bilaterally agreed otherwise between the administrations concerned, customers should address any enquiries or complaints to their own administration.

4.10 *Conversion rules*

4.10.1 Every S&F node should have the conversion facilities to realize communication between the mandatory mode of G3 and that of G4, class 1. Other conversion modes can be optional.

4.10.2 Information on conversion modes of the node on the recipient’s side and information on subscriber terminal attributes should be sent to the node on the originator’s side. The possibility of conversion should be examined at the node on the originator’s side. Here also, requests not to convert documents should be handled.

4.10.3 The node on the originator’s side should decide which node is to be used for converting documents by considering information on the conversion modes of both nodes and on subscriber terminal attributes.

5 Service facilities

5.1 *Broadcast transmissions*

Customers can register lists of destinations to which they regularly transmit identical messages, and can then initiate transmission to those destinations by input of a single address code. The system need not necessarily transmit a message to the required destinations simultaneously. Systems should be able to accept at least 40 destinations for a given message.

5.2 *Multi-address transmissions*

Customers can send the same message to many locations by entering the destination addresses sequentially before transmitting the message. The multi-address facility differs from the broadcast facility in that it is not necessary to specify destination addresses in advance. Broadcast facility would therefore be used for transmitting multi-address messages on a regular basis; multi-address facility would be used for occasional multi-destination messages. Systems should be able to accept al least 40 destinations for a given message.

5.3 *Abbreviated addressing*

5.3.1 Abbreviated address codes can be assigned to frequently called destination numbers; these are, in effect, broadcast lists containing a single entry.

5.3.2 A customer shall be able to retrieve the abbreviated address codes assigned to destination numbers by using a terminal for verification purposes. As an optional facility the customer, following validation as a registered user, may be able to add, delete or amend entries in an existing broadcast list.

5.3.3 Based on bilateral agreement, a customer shall be able to activate abbreviated codes in the node to which he is connected and in a node to which his call is routed by the originating node. In such cases, the customer will provide the originating node with routing instructions which specify the destination node and code for the abbreviated address stored in the destination node.

5.4 *Hold for delivery requested by the originator*

The node shall enable originators to send documents into the system that will not be delivered automatically, but will remain stored in the system.

The system shall inform the recipient that the message being sent to him is being held in the facility.

The receiving customer can retrieve the message whenever desired by inputting the appropriate request code and identification information.

5.5 *Hold for delivery requested by the recipient*

The system shall enable recipients to receive documents from the node that will not be delivered automatically, but will remain stored in the system.

Before accepting the message from the originator, the system shall inform the originator that a message will be held for delivery in the node.

The receiving customer can retrieve the message from the originator when desired by inputting the appropriate request code and identification information.

5.6 *Deferred delivery by the recipient*

The destination customer has the option of requesting that the delivery of all documents be deferred until a specified time, by input of a request code, followed by the delivery time. Before accepting the message from the originator, the system shall audibly inform him that the message will be held for delivery in the facility.

5.7 *Deferred delivery by the originator*

The originator has the option of requesting on a per document basis that the delivery of a document be deferred and take place as close to, but not before, the date and time specified as possible, by input of a request code followed by the required delivery time.

5.8 *Multi-page facility*

5.8.1 When transmitting a facsimile document of more than one page during a single session, the initial dialogue between the originating customer and computer establishes the information necessary to link the pages of a multi-page document.

5.8.2 For inputs to a facsimile store and forward node from a text terminal, the text message originator may transmit a code to the node within the message text to indicate that a page break should occur at that point. Additionally, the node shall automatically insert page breaks where otherwise the text would have exceeded a normal page length.

5.9 *Automatic reception*

The destination node shall recognize the tones generated by terminals capable of unattended automatic reception and, upon recognition of these tones, shall transmit the messages.

To ensure the most effective handling and delivery of facsimile documents it is considered preferable that the acceptance of messages is conditional upon the destination terminal having automatic reception. This should be a mandatory requirement for customer registration to the service. The delivery of messages to terminals having manual reception would lead to operational and technical difficulties and Administrations cannot be held responsible for possible non-delivery in these circumstances.

5.10 *Date, time and originator's identity*

The originating node shall include reference information on all documents. This information should be composed of date, time and calling terminal identification. Called terminal identification may be prepared as an option. Ideally, this reference information should appear on the first line of each page of the document.

The time mentioned above should be defined as the time that the reception of a message from an originating terminal has been completed.

To avoid any misunderstanding on the part of the recipient as to the originator of the message, the store and forward node ID could consist of alpha characters only. The originator ID as received by the node could be shown below the store and forward node ID, prefixed by ’’Message from:’’, which could be automatically generated by the node. By bilateral agreement these details, including date, time and a message reference number, could be delivered to the recipient as a separate covering page, as per the following example:

REF: LDN/ROME AHB082 2207 | 987/1230 GMT

BTI COMFAX SERVICE

Message from: +44 1 404 5707

The above covering page generated by the node would be a non-chargeable item.

Parameters for further study.

5.11 *Recall attempts*

If a destination terminal is busy, it shall be recalled at a certain interval during a maximum of four hours. The method and timing of making recall attempts is a national matter except where an international connection is involved. It that case, re-attempts should be made at 20 -minute intervals over a maximum period of 4 hours.

When it is impossible for a destination terminal to receive messages due to the absence of recording paper, lack of power supply or the terminal being out of order, a non-delivery advice should be sent to the originator after confirmation of this situation.

When the originator receives the non-delivery advice, the message shall be deemed ‘‘non-deliverable’’.

5.12 *Closed user group*

Exchange of communication is limited to a group of terminals designated by a subscriber and no calls into or out of the closed user group are permitted. However, outgoing access from the closed user group may be provided at the discretion of the controlling Administration.

5.13 *Information retrieval*

Information may be stored in a node in advance which can be retrieved by any customers through dialling the appropriate number. Such information could be weather reports, stock market quotes, etc.

6 Operational requirements of nodes

6.1 Sufficient information shall be stored in the node to enable charging to be carried out. This information shall include, but not necessarily be limited to the following:

— date/time of submission

— date/time of delivery

— volume of data transmitted

— transmission holding time.

6.2 After the destination node has successfully completed the delivery of a message to the destination terminal, the destination notifies the originating node of the completion of the transmission.

6.3 If the destination node cannot deliver after recalls are attempted, it shall notify the originating node of this fact along with the call identification information.

6.4 Facsimile messages may be sent internationally by the originating node to distant customers in one of the following ways:

6.4.1 From the originating node to the destination node, and then to the customer.

The need for the originating node to verify connectibility of the distant customer's terminal at the destination node before accepting the message from the originating customer is for agreement between Administrations on a bilateral basis.

6.4.2 From the originating node directly to a distant customer in those cases where a node does not exist in the country concerned. This is subject to bilateral agreement.

7 User assistance

If a customer encounters difficulty in making a facsimile call, the input of a specific code gives access to an assistance operator at the origin node. Also, if an access procedure error occurs more than three times when setting up a call, the caller shall be automatically transferred to an assistance operator. The operator has equipment which can be used to obtain information and to identify procedural errors, and to give information on the progress of message delivery.

Alternatively, the node may provide coded information indicating operating errors or equipment faults. Registered users will use a manual to investigate the fault. The manual should provide appropriate information in an easily understood form, enabling the user to locate information and rectify errors without the need to contact administration staff on the majority of occasions. The user manual will also provide appropriate details to enable the user to contact an enquiry point, at which administration staff will more fully investigate the fault.

8 Non-delivery advice

If a destination terminal is busy or out of order in spite of recalling, a non-delivery message shall be transmitted to the originator's terminal.

The non-delivery message should be composed of a non-delivery notification (NDN), the originating date and time, the destination identification and an indication of whether the whole or part of the document was not delivered.

9 Delivery confirmation

As an extra chargeable service, if a customer requests delivery confirmation this information will be transmitted to the customer when available.

10 Call establishment procedures

10.1 *Originating a call*

After gaining access to the switching node, the following information is provided to the node to establish a facsimile call.

10.1.1 *Destination customer's identity*

10.1.2 *Originating customer's identity*

The method of entry shall be at the discretion of the Administration. Further study is required on whether additional information is required.

10.2 *Receiving a call*

10.2.1 The store-and-forward system shall be able to handle calls that are automatically answered.

10.2.2 The destination customer's identity will be provided to the node.

10.2.3 Administrations may also provide for inaudible automatic reception over the public switched telephone network.

11 Customer information

11.1 *Directories*

A customer should provide all information required to be included in a directory for this service.

11.2 *Directory entries*

For further study.

12 Access to facsimile message handling facilities

Customers of the store-and-forward facsimile switching service should have access to the services offered by message handling facilities.

Recommendation F.170

OPERATIONAL PROVISIONS FOR THE INTERNATIONAL PUBLIC FACSIMILE SERVICE BETWEEN PUBLIC BUREAUX (BUREAUFAX) |

1 General provisions

1.1 In accordance with the general conditions of Recommendation F.160, Administrations may operate an international public facsimile service between public bureaux provided that terminals are compatible or compatibility is ensured by the network from the standpoint of the characteristics specified in the relevant Recommendations and in accordance with bilateral or multilateral agreements.

Note — The operation of the international public facsimile service between public bureaux and subscriber stations and vice versa is covered by Recommendation F.190.

1.2 Facsimile terminals may be manual, have automatic operation of the called station or be fully automatic. The operational procedures applicable in relations between the different types of stations are set out in the relevant Recommendations in the T-Series.

2 Conditions for acceptance

2.1 Documents for facsimile transmission shall normally be accepted up to a maximum size ISO A4 (210×297 mm). Exceptionally, documents of a different size may be accepted by bilateral agreement between those administrations concerned, for example the North American ‘‘legal’’ size (216×356 mm).

2.2 For faithful transmission, contents of documents must leave minimum blank margins of 10 mm on all four sides. With regard to formats other than A4 which have been bilaterally agreed, the margins to be left on all four sides of the documents shall be 15 mm in the case of North American formats.

2.3 Where the area to be transmitted exceeds the area reproducible by facsimile, a document may be divided by the sender.

See Resolution No. 13 at the beginning of this fascicle.

Public bureaux may be offices of Telecommunication or of Postal Administrations.

2.4 Care must be taken to ensure that there is no loss of the reproducible part transmitted.

2.5 To ensure the satisfactory facsimile transmission of a document, senders should be advised not to submit documents with insufficiently sharp contrast or inadequate definition.

2.6 If the customer presents a document containing colours of half-tones, he should be informed that, with existing equipment, faithful reproduction at the distant end will not be possible as printing will be in black and white only.

2.7 If, after having been informed that the quality of the document to be transmitted is unsuitable for satisfactory facsimile transmission (this includes all photographs and documents in colour), the sender of the document still insists on its transmission, it shall be accepted by the public bureau only at the sender's own risk. In this event the service instruction RISQUES EXPEDITEUR (abbreviated RE) must be inserted in box 6 on the transmittal sheet. When the service instruction RE is not applicable to the whole document, the relevant pages must be designated in box 6 of the transmittal sheet, for example: ''RE 3 + 5 + 12''.

2.8 Administrations shall reserve the right to refuse the transmission of documents in the circumstances described in Articles 19 and 20 of the ITU Convention [1] and in Article 36 of the Universal Postal Union Convention [2].

3 Composition of a facsimile transmission

3.1 Every facsimile transmission shall include

— a transmittal sheet as the first page, in accordance with § 3.2, and

— a customer's document in accordance with § 3.4.

3.2 *Transmittal sheet*

3.2.1 The transmittal sheet must permit the identification of the following information:

1) originating office and optional, originating number of the document;

2) international transmitting bureau (sending office);

3) document sending number;

4) number of pages (excluding the transmittal sheet, except in those cases where the lower portion of the sheet carries a message for the addressee);

5) date and, if necessary, time of acceptance;

6) service instruction RE (Risk of Sender) in accordance with § 2.7, if applicable;

7) delivery mode, in coded form, and other service instructions, if any and the call number for delivery modes E, F, G and H;

8) the addressee's address containing all the particulars necessary to ensure the routing and delivery of the facsimile document without enquiries or requests for information. As a general rule, it should indicate:

i) the designation of the addressee;

ii) his full postal address including, if it exists, the postal code;

9) sender's address (including, if it exists, the postal code) and, if available, his telephone, telex or Teletex number.

Note — Items 1) and 9) may be omitted from the transmittal sheet if this information can be traced from other information provided elsewhere on the form.

3.2.2 The various parts of the transmittal sheet shall be contained within ISO format A5 (210 × 148 mm). They may also be located in the upper half of a sheet of ISO format A4 so that the sender can use the lower half to write a document.

Note — If a North American format is used for the transmittal sheet, the width of the sheet will be 216 mm (instead of 210).

3.2.3 The various parts of the transmittal sheet shall be designated at least in French or in English or in Spanish. Other languages may be added by Administrations.

3.2.4 Figure 1/F.170 shows the measurements, locations and designations of the various parts of the transmittal sheet.

3.3 *Customer's document*

3.3.1 The document for facsimile transmission can contain written or printed matter, drawings, or any other graphic, subject to the limitations referred to under conditions for acceptance in § 2 above. A signature is optional.

4 Acceptance

4.1 A document for facsimile transmission may be handed in at the counter of a public bureau. Other means of acceptance and the modes of returning the original to the sender after transmission may be designated by the Administration responsible for the public bureau.

4.2 The sender may use transmittal sheets that consist of the A4 version in accordance with § 3.2.2, if available, for writing out a document in the lower half of the sheet.

4.3 The sender of a facsimile document shall be required to establish his identity if called upon to do so by the accepting public facsimile bureau.

Figure 1/F.170, (MC), p.1

5 Transmission

5.1 In principle, documents shall be transmitted by a public bureau in the order in which they are accepted, except where a priority system is established.

5.2 At the request of the transmitting bureau, on a case by case basis and immediately after the transmission, the receiving public bureau will acknowledge the satisfactory receipt of a facsimile document.

5.3 A transmission prevented by adverse conditions shall be repeated as soon as conditions allow.

In case of unsatisfactory receipt, the receiving public bureau should indicate service instruction ’’RPT PAGE . | | ’’ in box 7 of the transmittal sheet.

5.4 If a facsimile document received at the international receiving public facsimile station is unsatisfactory after a maximum of three attempts, in principle no further attempts shall be made. The sender will be informed of the situation, by the transmitting bureau.

5.5 If transmission cannot be effected by the international transmitting public bureau within 4 hours of acceptance by the public facsimile bureau, the sender should be informed as soon as possible.

5.6 On no account will the international receiving public bureau request repeat transmissions in an attempt to improve the quality of facsimile reproduction of pages designated as unsuitable by the service instruction RE.

6 Delivery

6.1 The Administrations determine the method of delivery they use for the facsimile documents they receive, according to Figure 1/F.170, Note 3, of the present Recommendation. The methods of delivery used by each Administration should figure in the Bureaufax Table (see Section 11 below).

6.2 The facsimile documents received by a destination public bureau are, as far as possible, delivered to the addressee according to the method of delivery indicated in box 7 of the facsimile transmittal sheet.

6.3 The receiving public facsimile bureau shall, if required, record the date and time of receipt and the method of delivery of each facsimile document.

6.4 Facsimile documents should be delivered to the addressee within the following times from the moment when the receiving public bureau is able to process the documents received (the hours when the receiving public bureau is closed are not taken into account for delivery times):

Method of delivery A: — ordinary postal service times;

Method of delivery B: — places of delivery having a bureaufax bureau: 4 hours;

— places of destination without a bureaufax bureau: as provided by the Administration responsible for the receiving bureaufax bureau;

Method of delivery C: — processing by the receiving bureau before 1200 noon on working days: delivery the same day;

— processing by the receiving bureau after 1200 noon on working days: delivery the next working day;

Method of delivery D: — collection from the counter one hour after processing by the receiving bureau;

Method of delivery E, F, G, H: — the addressee is called within one hour. If the public bureau cannot reach the addressee within three hours, the destination Administration may apply another method of delivery, to deliver the facsimile document to the addressee as soon as possible.

6.5 The addressee of a facsimile document must establish his identity if required to do so by the destination public facsimile bureau.

6.6 The addressee of a facsimile document with the service instruction RE in accordance with § 2.7 above shall be obliged to accept the quality of facsimile reproduction offered.

6.7 When a facsimile document cannot be delivered to the addressee, the destination Administration must advise the international transmitting office of the origin Administration, giving the reason for non-delivery. Box 7 of the Bureaufax transmittal sheet can be used to this effect. The Administrations can agree to transmit this information through other telecommunication services like Telex, Teletex, etc.

7 Service facsimile correspondence

7.1 By agreement between Administrations, service facsimile correspondence may be exchanged between the Administrations concerned for the purposes mentioned below:

— to exchange communications between the Administrations concerned for the efficient operation of the Bureaufax service as necessary, including communications concerning enquiries or claims from customers in connection with the Bureaufax service;

— to exchange communications between the Administrations concerned in connection with other telecommunication services provided mutually by these Administrations, in particular urgent communications that cannot be effected by other telecommunication means, e.g. by international telex or telegram services, because they contain diagrammatic material or other material where it is important for the original to be exactly reproduced.

Note — The indication SERVICE should be clearly shown on the transmittal sheet.

7.2 The Administrations should reply to the requests for information and claims by correspondence within 15 days of receipt of the request.

8 Archives

8.1 The maintenance of archives shall be at the discretion of the individual Administrations concerned which will decide on the most suitable arrangements to answer any subsequent queries, in particular on the international accounts.

9 Charging, refunds and accounting

9.1 Charging principles, refund of charges and international accounting for the transmission of documents in the international public facsimile service between public bureaux are governed by Recommendations, agreements and/or conventions such as are given in CCITT Recommendation D.70.

10 Cancellation at the request of the sender

10.1 Where permitted by the Administration concerned, the sender of a facsimile document, or his authorized representative, may, upon establishing his identity or authority, cancel his document provided its international transmission has not begun.

10.2 In the case of multipage facsimile documents, one or more pages may be cancelled if their international transmission has not yet begun. The transmitting public bureau must then amend accordingly the number of pages cited on the transmittal sheet and request the receiving public bureau to do likewise.

This amendment goes at the end of the transmission; through a new transmittal sheet, giving the correct number of pages effectively transmitted. This second transmittal sheet shall contain the necessary information to identify the sheet initially transmitted.

10.3 At the sender’s request, pages already received by the receiving public facsimile bureau may be either delivered to the addressee or destroyed according to the instructions of the sender.

11 Bureaufax Table

11.1 Each Administration participating in the Bureaufax service should supply information required for the Bureaufax Table to the ITU Secretariat, either directly or through the International Bureau of the UPU. All subsequent amendments should be communicated by the Administrations concerned in the same manner as they arise.

11.2 This table contains the information required for routing traffic as well as useful information concerning other operational aspects of the service provided by the Administration concerned.

11.3 The ITU General Secretariat publishes the Bureaufax Table with information received from the Administrations, while any subsequent amendments appear in the ITU Operational Bulletin.

12 Bureaufax service via the public switched telephone network, via a public data network, via the ISDN or via facilities dedicated to Bureaufax service

12.1 The special provisions applicable in the case of international public facsimile service via the public switched telephone network are normally those indicated in Recommendation F.182.

12.2 Special provisions applicable in the case of international public facsimile service via a public data network are being studied.

12.3 Special provisions applicable in the case of international public facsimile service via the Integrated Services Digital Network are for further study.

12.4 Special provisions applicable in the case of international public facsimile service via dedicated circuits are for further study.

12.5 Special provisions applicable in the case of international public facsimile service using store-and-forward switching facilities are those indicated in Recommendation F.171.

12.6 Special provisions applicable in the case of international public facsimile service using MH services are for further study.

BLANC

H.T. [T1.170]

{ ANNEX A (to Recommendation F.170) } { **List of expressions for use in the operation of facsimile services** }

Unable to convert Table.

Tableau [T1.170] à l'italienne, p.

References

[1] *International Telecommunication Convention* , Nairobi, 1982.

[2] *Universal Postal Union Convention* , Hamburg, 1984.

Recommendation F.171

OPERATIONAL PROVISIONS RELATING TO THE USE OF STORE-AND-FORWARD SWITCHING NODES WITHIN THE BUREAUFAX SERVICE

1 General provisions

1.1 In accordance with Recommendations F.160 and F.170, Administrations may operate an international public facsimile service between public bureaux. Additionally, in accordance with Recommendation F.190. Administrations may operate a service between public bureaux and private subscribers' stations.

1.2 In the bureaufax service, it is not uncommon for the transmitted document to be scanned and transmitted several times as it progresses from the office of origin to the office of destination. With each rescan and retransmission, the quality of the document, as finally delivered to the addressee is progressively degraded. By the replacement of manual retransmission practices with switching nodes, employing store-and-forward techniques, document quality may be preserved. Quality may even be improved over current transmission practices through the use of error handling techniques between nodes and the use of data networks, rather than the telephone network, as the transmission medium.

1.3 This Recommendation states the operational provisions peculiar to the bureaufax service when store-and-forward facsimile switching nodes are employed within the international transmission of documents.

2 Conditions of acceptance

2.1 Documents for transmission within the bureaufax service and between subscriber stations and public bureaux shall conform to § 2 of Recommendation F.170.

3 Composition of a facsimile transmission

3.1 Every facsimile transmission shall include a transmittal sheet and the customer's document as defined in § 3 of Recommendation F.170.

4 Acceptance

4.1 *Acceptance at a public bureau*

The acceptance of documents at the counter of a public bureau will conform to § 4 of Recommendation F.170.

4.2 *Acceptance from subscribers' stations*

4.2.1 A document for delivery through the bureaufax service may be accepted directly from the subscriber's station into store and forward node in the country of origination.

4.2.2 The customer will access the store and forward node in conformance with the provisions of Recommendation F.162. At the discretion of the administration in the country of origin, the customer must be a registered user of the service.

4.2.3 The Administration in the country of origin will provide users of the service with the information necessary to route the document through the store and forward node, and any interconnected store and forward node, to the appropriate public bureau in the country of destination. The addressing of such facsimile messages should use abbreviated dialling codes rather than explicit telephone numbers for the facsimile terminals in the destination bureau.

4.2.4 The correct addressing of the facsimile message will be the responsibility of the originating subscriber.

4.2.5 As for transmissions originating from a public bureau, messages entered into the bureaufax service by a subscriber must contain a transmittal sheet, in accordance with F.170, § 3.2, as the first page. The Administration in the country of origin will ensure that transmittal forms are available to its subscribers.

4.2.6 Acceptance of the facsimile document by the node will constitute acceptance into the bureaufax service.

4.2.7 Facsimile documents to be entered into the bureaufax service may, optionally, be accepted from text terminals in cases where the node can provide the necessary conversion to the appropriate facsimile format. In such cases, the transmittal sheet may be generated either by the originating terminal or by the node.

5. Transmission

5.1 International bureaufax transmissions may involve store and forward switching nodes, typically at gateway locations, in three different ways:

— nodes in both the country of origin and country of destination,

— node located in the country of origin,

— node located in the country of destination.

In any case, each node will be programmed with abbreviated codes for delivering documents to inland public bureaux. These abbreviated codes will be made available to other administrations for the efficient routing of traffic.

5.1.1 *Nodes in both countries*

5.1.1.1 Facsimile documents will be entered into the node both by public bureaux and by private subscribers.

5.1.1.2 Documents will be transmitted between nodes in accordance with Recommendation F.162, § 4.6. Wherever possible, the routing between nodes will employ networks designed specifically for the transmission of data to preserve a maximum quality of delivered document. This is important since the end-to-end transmission may still involve multiple scans and retransmissions.

5.1.1.3 If the quality of the document received at the public bureau in the country of destination is not satisfactory, the receiving bureau will contact the assistance operator at the node in the country of destination, who, following confirmation that the document held in store in the node is acceptable, will initiate a retransmission.

5.1.1.4 If the quality of the document held in store by the node in the country of destination is not satisfactory, the operator will contact the assistance operator at the node in the country of origin who, following confirmation that the document held in store there is acceptable, will initiate a retransmission.

5.1.1.5 If the quality of the document held in store by the node in the country of origin is not satisfactory, the operator will request retransmission from the originating public bureau or subscriber.

5.1.2 *Node in the country of origin*

5.1.2.1 The international transmission from the node in the country of origin to the public bureau in the country of destination will comply with Recommendation F.170, § 5, with the following exceptions:

5.1.2.2 If a document received at the international receiving public station is not satisfactory, the international receiving public station will contact the assistance operator at the node in the originating country to request retransmission. The assistance operator will act in accordance with § 5.1.1.5 above.

5.1.3 *Node in the destination country*

5.1.3.1 Except by bilateral agreement, the node in the destination country will accept facsimile transmissions from the country of origin in a manner emulating a facsimile terminal, i.e. the originating country's operator need not be knowledgeable of any special procedures to deposit the document into the node. In this case, transmission is in conformance with § 5 of Recommendation F.170 except that the node acts as the international receiving public facsimile station.

5.1.3.2 Documents received by the node in the above manner will be routed to the destination public bureau through manual intervention.

6 Delivery

6.1 Delivery of facsimile messages by the destination public facsimile bureau will generally comply with § 6 of Recommendation F.170.

6.2 Delivery of bureaufax messages to subscribers' stations will generally comply with § 2 of Recommendation F.190.

6.2.1 In cases where a store and forward node exists in the country of destination, the message will be transmitted to the subscribers' stations directly from the node, without recourse to an additional stage of printing and rescanning the document.

6.2.2 By bilateral agreement, the facsimile transmitting station in the country of origin may provide the node with sufficient information to effect automatic switching and retransmission of the message directly to subscribers' stations. Otherwise, transmission to subscribers' stations will be effected by manual intervention of the node operator.

6.2.3 By bilateral agreement in cases where a node exists only in the country of origin, facsimile messages may be transmitted directly from the node to subscribers' stations in the country of destination.

7 Other provisions

Provisions relating to:

— Service facsimile correspondence

— Archives

— Charging, refunds and accounting

— Cancellation at the request of the sender

— List of public bureaux

will conform to the appropriate section of Recommendation F.170.

Recommendation F.180

GENERAL OPERATIONAL PROVISIONS FOR THE INTERNATIONAL PUBLIC FACSIMILE SERVICE BETWEEN SUBSCRIBERS' STATIONS (TELEFAX) |

1 General

1.1 In accordance with the general conditions in Recommendation F.160, facsimile subscribers' stations may participate in the subscriber facsimile service operated over the public telecommunication network, provided that their installations are compatible or that compatibility is ensured by the network, in terms of the characteristics specified in the relevant Recommendations.

1.2 Administrations shall establish the conditions and procedures for connecting facsimile subscriber station terminals to the public telecommunication networks in accordance with their regulations. However, terminals with automatic reception should insofar as possible be directly accessible to the calling station without manual intervention by an operator at the called subscriber's end (direct connection to the network without a manually served domestic exchange between).

1.3 Facsimile terminals may be manual, automatic for incoming calls or fully automatic. Automatic reception is desirable. The operating procedures applicable in relations between the different types of stations are set out in the relevant T-series Recommendations.

Note — The operation of the public international facsimile service between subscriber stations and public bureaux (and vice versa) is the subject of the Recommendation F.190.

See Resolution No. 13 at the beginning of this fascicle.

2 Conditions of acceptance

2.1 Calls between subscribers' stations participating in the subscriber facsimile service shall in principle be accepted without any limits on duration. Nevertheless, the procedures prescribed for the public networks used shall also apply to the facsimile service between subscribers' stations.

2.2 Conditions relating to maximum format, quality of paper to be used and other practical and operational aspects shall be limited and prescribed by the characteristics of facsimile terminals, as laid down in the relevant Recommendations.

3 Service facsimile correspondence

3.1 Service facsimile documents may be exchanged between the Administrations concerned for the purposes mentioned below:

— to exchange communications between the Administrations concerned for the efficient operation of the service as necessary, including communications in connection with subscribers' requests or enquiries (for example directory information) with respect to the service;

— by agreement between Administrations, to exchange communications between the Administrations concerned in connection with other telecommunication services, in particular urgent communications which cannot be effected by other telecommunication means e.g. by international telex or telegram services because they contain diagrammatic material or other material where it is important for the original to be exactly reproduced;

— for franking privilege documents where considerations similar to the above apply (see the relevant Series D Recommendations)

4 Tariffs, refunds and accounting

4.1 Tariffs, refund of charges and international accounting for the transmission of facsimile documents in the international public facsimile service between subscribers' stations shall be governed by Recommendation D.71.

5 Service name

5.1 **Telefax**

5.1.1 The public facsimile service between subscriber stations on a public telecommunication network shall be known as the Telefax service.

5.1.2 It is assumed that all terminals forming a part of the international Telefax service shall be ''hardwired'' (the question of the use of acoustic couplers is for further study).

Provisional name.

5.1.3 The service shall consist of the Telefax 2, Telefax 3 (including minitelefax 35 and minitelefax 36) and Telefax 4.

See Recommendation F.160, § 5.

5.2 **Telefax 2**

5.2.1 Telefax service using Group 2 terminals shall be known as Telefax 2.

5.2.2 Administrations wishing to establish an international Telefax 2 service shall ensure that all terminals conform to the appropriate Recommendations and that international operational procedures and service quality (Recommendation F.160, § 6) are observed.

5.3 **Telefax 3**

5.3.1 Telefax service using Group 3 terminals shall be known as Telefax 3.

5.3.2 Telefax service using Group 3 terminals for A5 documents shall be known as mini telefax 35.

5.3.3 Telefax service using Group 3 terminals for A6 documents shall be known as mini telefax 36.

5.3.4 Administrations wishing to establish an international Telefax 3 (including minitelefax 35 and minitelefax 36) service shall ensure that all terminals conform to the appropriate Recommendations and that international operational procedures and service quality (Recommendation F.160, § 6) are observed.

5.4 **Telefax 4**

5.4.1 Telefax service using Group 4 terminals shall be known as Telefax 4.

5.4.2 Administrations wishing to establish an international Telefax 4 service shall ensure that all terminals conform to the appropriate Recommendations and that international operational procedures and service quality (Recommendations F.160, § 6 and F.184, § 6) are observed.

6 Directories

6.1 *Compilation of directories*

6.1.1 As far as possible each Administration shall publish a directory of its subscribers participating in the Telefax service at least once a year.

Note — Some Administrations may wish to provide the directory as an annex to another publication. Additionally, some may wish to place an identifying mark against entries in telephone directories to indicate Telefax subscribers.

6.1.2 Directories should not be larger than 210 × 297 mm (A4).

6.1.3 The directories sent to Administrations shall be set up in roman letters. When the directory is written in a language other than that used in the country to which it is sent, it shall contain an explanatory note to facilitate its use. This note shall be drawn up in whatever official language of the Union has been agreed upon by the Administrations concerned.

6.1.4 The call number published shall be that which the calling subscriber has to select in order to obtain the called subscriber in accordance with the procedure prescribed in his own country.

6.2 *Contents of directories*

6.2.1 As far as possible, directories shall contain at least, in alphabetical order of subscribers' names (subscribers of the same name being classified in the alphabetical order of the places where they are located):

Column 1: subscriber's name and address, including the locality.

Column 2: group of facsimile machine according to characteristics specified by the CCITT, i.e.:

— 2 or 3 or 4, or

— 3/2 in the case of interworking between Groups 3 and 2 terminals, or

— 4/3 in the case of interworking between Groups 4 and 3 terminals.

Column 3: national call number of the facsimile subscriber's station, i.e.:

— trunk code in parentheses ( );

— subscriber's number (followed by an extension number if the terminal is connected to a PABX).

For a model see Table 1/F.180.

H.T. [T1.180]

TABLE 1/F.180

Tableau 1/F.180 [T1.180], p.

6.2.2 It would be desirable for the directory also to contain supplementary information of assistance to the subscriber, as follows:

— telephone numbers for customer services such as faults, enquiries, test centre, sales departments;

— user procedures, both for national and international calls;

— general information about facsimile terminals, i.e. compatibility matters, facilities (unattended operation, serial numbering, etc.);

— information on any Bureaufax service provided by the Administration (general information, list of offices including call numbers, opening hours, tariffs, Bureaufax — Telefax interworking);

— information on public Telefax stations (general information, places, addresses, call numbers, opening hours, tariffs).

6.2.3 It would be desirable for the directory to contain other lists of subscribers:

— classified according to type of business;

— in order of station identification.

6.3 *Supply of directories*

6.3.1 Each Administration publishing a directory shall supply, free of charge, to the Administrations with which it has Telefax relations a sufficient number of copies of its directories to meet the requirements of operating the service. This number shall be fixed in advance by mutual agreement and shall be regarded as applicable until a request to change it is received. Such request must be made not later than 1 February each year.

6.3.2 Each Administration publishing a Telefax directory shall supply, against payment, to the Administrations with which it has Telefax relations a number of its directories to be put on sale. This number shall be fixed in advance by mutual agreement and shall be regarded as applicable until a request to change it is received. Such a request must be made not later than 1 February each year.

6.3.3 A subscriber wishing to obtain a copy of the Telefax directory of another country must apply to his own Administration. If an Administration receives a direct application for a directory from a subscriber in a foreign country, it must forward the request to the Administration of the subscriber’s country.

6.3.4 An Administration that has supplied directories of its country intended for sale to another Administration shall indicate the equivalent in gold francs or special drawing rights (SDR) of the sale price of the directories applied in the country of origin plus any postal charges.

6.4 *Accounting arrangements concerning the paid supply of directories for sale*

6.4.1 At least once a year and preferably at the end of the current period of the directories concerned, each Administration that has supplied another Administration with directories for which payment is due shall draw up a special account for the amounts due to it for such directory supplies, including the cost of dispatch, and shall send it to the last-named Administration for settlement. These amounts may be included in the monthly telephone or telex accounts depending on the bilateral arrangements made by Administrations.

6.4.2 Except where the Administrations have agreed otherwise, no accounts shall be established for the paid supply of directories unless the total number of copies delivered to an Administration for sale exceeds 50. When the number is 50 or less, directories shall be delivered free of charge.

7 Interworking between services

7.1 Interworking between Telefax 3 and Telefax 2 services and between Telefax 4 and Telefax 3 services must be provided (see also Recommendation F.184, § 5.1.4.2).

7.2 Interworking between the Telefax and Bureaufax service is dealt with in Recommendation F.190.

7.3 Interworking with other services: the entire problem of interworking is under study.

8 Public Telefax stations (public Telefax booths)

8.1 A public Telefax station is an equipment comprising the facsimile terminal and the access to the network which an Administration places at the disposal of the public for the operation of the Telefax service.

8.2 Public Telefax stations are operated in the same way as Telefax subscriber stations and form an integral part of the Telefax service.

8.3 Where necessary, public Telefax stations are listed in the Telefax directory (see § 6).

8.4 The Administrations establish the conditions under which public Telefax stations are placed at the disposal of users.

Note — A regulation of the international operational procedure to be applied to the exchange of facsimile messages between public bureaux and public Telefax stations still requires further study.

Recommendation F.182

OPERATIONAL PROVISIONS FOR THE INTERNATIONAL PUBLIC FACSIMILE SERVICE BETWEEN SUBSCRIBER STATIONS WITH GROUPS 2 AND 3

FACSIMILE MACHINES (TELEFAX 2 AND TELEFAX 3)

1 Terminals

1.1 The facsimile terminals using the public switched telephone network shall be in accordance with the relevant Series T Recommendations.

2 Network

2.1 The Telefax 2 and the Telefax 3 services shall be provided over the public switched telephone network (PSTN).

3 Procedures for the transmission of documents

3.1 The technical procedures for transmitting documents in the Telefax 2 and 3 services are to be found in Recommendation T.30.

4 Terminal identification

4.1 *Manual operation*

4.1.1 In manual operation it is assumed that terminal identification is established by normal telephone conversation.

4.2 *Automatic operation*

4.2.1 In the case of automatic operation at the called station, an answering tone of 2100 Hz shall identify connection to a non-voice terminal. Additionally, an automatic identification must be regarded as compulsary for Group 3 machines or machines of later standards participating in the Telefax service.

4.2.2 It would be desirable for the identification of the transmitting station to appear at the receiving station, in the form of an identification line printed at the top of each page received, in an area 10 mm deep extending across the whole width of the page. This area may be either inside or outside the nominal A4 page, in accordance with the option selected by the user.

4.2.3 The digital station identification shall consist of up to 20 characters (including only digits and spaces). This identification shall be the international telephone number and the format should be as follows: plus sign, country code, space, area code, space, subscriber's number. For the coding arrangements, see Recommendation T.30.

4.2.4 The identification of the receiving station, at the transmitting station, may be either displayed or printed.

Note — The study of the technical arrangements concerning automatic operation identification should be carried out as a matter of urgency by Study Group VIII.

5 Directory

See Recommendation F.180, § 6.

Recommendation F.184

OPERATIONAL PROVISIONS FOR THE INTERNATIONAL PUBLIC FACSIMILE SERVICE BETWEEN SUBSCRIBER STATIONS WITH

GROUP 4 FACSIMILE MACHINES (TELEFAX 4)

1 Introduction

1.1 *Scope*

1.1.1 This Recommendation defines the rules to be followed in the international Group 4 Facsimile (Telefax 4) service.

1.1.2 Telefax 4 is an international service, offered by Administrations enabling subscribers to exchange correspondence either manually or automatically via telecommunication networks.

1.1.3 The basic element of the correspondence between people using the service is the page, as the smallest unit of text treated as an entity. No restrictions shall exist as far as the operator procedures for generation of the text or the positioning of text within the reproducible area on a page are concerned.

1.1.4 Questions of an essentially technical nature concerning the international Telefax 4 service are dealt with by other Recommendations.

1.1.5 In this Recommendation, the word terminal is used instead of apparatus which appears in Recommendations T.563 and T.6. These two words should be considered as being equivalent.

1.2 *Service definitions*

1.2.1 *General*

1.2.1.1 An essential characteristic of the Telefax 4 service is that it provides a basic level of compatibility between all terminals participating in the service.

1.2.1.2 There are three classes of Group 4 facsimile terminals:

— **Class I** — minimum requirement is a terminal able to send and receive documents containing facsimile encoded information (in accordance with Recommendations T.6, T.503 and T.400 series).

— **Class II** — minimum requirement is a terminal able to transmit documents that are facsimile encoded (in accordance with Recommendations T.6, T.503 and T.400 series). In addition, the terminal must be capable of receiving documents which are facsimile coded (in accordance with Recommendations T.6, T.503 and T.400 series), Teletex coded (in accordance with the basic coded character repertoire as defined in Recommendation T.61) and also mixed-mode documents (in accordance with Recommendations T.501 and T.400 series).

— **Class III** — minimum requirement is a terminal that is capable of generating, transmitting and receiving facsimile coded documents (in accordance with Recommendations T.6, T.503 and T.400 series), Teletex coded documents (in accordance with the basic coded character as defined in Recommendation T.61) and mixed-mode documents (in accordance with Recommendations T.501 and T.400 series — when defined).

1.2.1.3 Where a Telefax 4 Class 3 terminal and mixed mode Teletex terminal are both provided on the ISDN, they should be able to communicate without any restriction according to the basic service requirements of this Recommendation F.200.

1.2.2 *Basic requirements*

1.2.2.1 The basic requirements of Telefax 4 service are as follows:

a) a basic level of compatibility is provided between any two terminals both nationally and internationally so that they may communicate image-coded information to each other. This is to be achieved by requiring that terminals comply with Recommendations T.563, T.6, T.62, T.70, T.503 and T.400 series;

b) it is for each Administration to decide on the network(s) on which the Telefax 4 service will be carried. There shall be no restriction on the type of network to be used;

c) it should be possible to extend the Telefax 4 service to any number of countries;

d) to permit private use applications, for example, encryption, there should be no technical limitation on the bit sequence of the subscriber’s information that may be transmitted;

e) a received Telefax 4 message can be printed or displayed as decided by the recipient and the terminal characteristics. If the message is printed, the receiving subscriber will be furnished with a document that is identical with that produced by the sending subscriber as far as its contents, layout and format are concerned;

f) it is intended that the Telefax 4 service should require no changes to the Recommendations for existing services or networks.

1.2.3 *Standardized options*

1.2.3.1 It is recognized that some subscribers may need to use their Group 4 facsimile terminals to communicate nationally and internationally using service features that are not included in the basic requirements. A number of CCITT-standardized options should, therefore, be defined. However, the provision of any option in a service leads to some degree of incompatibility and the number of standardized options should be restricted, as shown below, to those features for which a clear international need can be foreseen.

The sending terminal shall ensure the transmission of documents using only those options that have been indicated as being available at the receiving terminal.

1.2.3.2 The standardized options should provide means for:

a) different pel transmission densities (T.563);

b) optional coding schemes (T.6);

c) grey scale images (T.6);

d) colour images (T.6);

e) use of the mixed-mode of operation (T.61, T.6, T.501, T.503 and T.400 series);

f) printable areas (T.561 — Classes II and III only, T.563);

g) escape into national and private options (T.62);

h) resolution conversion algorithms (T.563).

Note 1 — Administrations are encouraged to ensure that standardized and nationally defined options are used in such a way as to minimize the need for the introduction of private use options.

Note 2 — There is a need for further study as the service develops. Changes may be required to this list.

1.4 *Restrictions on the use of the Telefax 4 service*

Note — Please refer to CCITT Recommendation F.160 for details.

2 Network requirements

2.1 It is the responsibility of each Administration to decide in which network(s) the Telefax 4 service is to be provided. The term Telefax 4 network, as used in this Recommendation, shall be taken to mean a network on which Telefax 4 service is provided.

2.2 Considering that the Telefax 4 service may be operated on the following networks:

a) Telefax 4 service on a circuit switched public data network (CSPDN);

b) Telefax 4 service on a packet switched public data network (PSPDN);

c) Telefax 4 service on a public switched telephone network (PSTN);

d) Telefax 4 service on an integrated services digital network (ISDN),

interworking between Group 4 facsimile terminals supported on any network must be possible.

2.3 The international connection shall use international data transmission facilities. Exceptionally, bilateral agreements to use other means may be made where necessary.

2.4 Connection between PSTNs may use international telephone circuits.

In all cases for interworking between networks of different types, the same network should be used for both traffic directions.

2.5 In the case of international interworking between Group 4 facsimile terminals connected to dissimilar networks, Recommendation X.300 shall apply.

2.6 International routes between ISDNs for the Telefax 4 service shall be capable of supporting user data rates up to 64 kbit/s.

3 Numbering plan

3.1 Considering that it is the responsibility of each Administration to decide on the network(s) to be used for the Telefax 4 service in accordance with the options noted in § 2, the Telefax 4 numbering plan must accommodate these options.

3.2 The Telefax 4 numbering plan is based on the individual numbering plans of each of these networks, i.e. Recommendation E.163 for PSTNs and Recommendation X.121 for public data networks (PDNs) and Recommendation E.164 for ISDN.

3.3 Each of these numbering plans provides for international calls between similar networks.

3.4 The numbering plan for PDNs provides for calls to national and international PSTNs.

3.5 As the numbering plan for PSTNs does not provide for calls to PDNs and non-voice terminals on the ISDN, those Administrations that use the PSTN nationally for the Telefax 4 service must provide for call set-up procedures to give access to the National Telefax 4 service in the other countries on a PDN or the ISDN. These procedures should also apply to access from Group 3 to Telefax 4 interworking capabilities in these countries.

3.6 Administrations are requested to consider the numbering plan of their particular implementation relative to the existing networks. Further study is required.

4 Coding scheme

4.1 The basic coding scheme and control functions for the international Telefax 4 service are detailed in Recommendation T.6.

4.2 The basic character repertoire of graphic characters and control functions for the Telefax 4 service — Class II and Class III — and the coding of these characters for transmission between terminals are found in Recommendation T.61.

4.3 The use of other recognized national and/or application-oriented coding schemes is for further study (see Recommendation T.61).

5 Operation of the Telefax 4 service

5.1 *General*

5.1.1 The Telefax 4 service in each country and the interconnection between countries or networks shall use automatic switching so that it is possible for any Telefax 4 subscriber to reach any other Telefax 4 subscriber using fully automatic selection. This shall not, however, preclude, on a purely interim basis, the use of manual call set-up by international operators, where the calling terminal is served from a PSTN in which international call access to another PSTN serving the called terminal cannot be automatically provided.

Note 1 — Special requirements may in these instances be applicable to the terminals in order not to affect unduly the grade of service.

Note 2 — The feasibility of this approach requires further study.

5.1.2 It is a requirement to allow the through-connection of a call between Group 4 facsimile terminals connected to a private automatic branch exchange (or similar systems) and those connected to public exchanges used for the Group 4 facsimile service.

5.1.3 Two-way alternate (TWA) communication is a capability of the Telefax 4 service, which also includes one-way communication (OWC); the calling subscriber will have full control of the Group 4 facsimile call.

5.1.4 *Interworking with other services*

For further study.

5.1.4.1 Interworking between basic mode and mixed mode Teletex terminals and Classes I, II and III Group 4 facsimile terminals connected to the Telefax 4 service is shown in Table 1/F.184. Where direct interworking between Teletex and Group 4 facsimile terminals is not possible, it is essential that Administrations provide the interworking capability as a function of the network or through specific features.

5.1.4.2 Interworking between facsimile terminals of the Telefax 4 service connected to the PSTN and Telefax terminals of the Telefax 3 service (see Recommendation F.180) should be provided as a function of the Group 4 terminal.

Depending on the networks used, different cases of interworking have to be considered:

1) Telefax 3 (PSTN) — Telefax 4 (PSTN);

2) Telefax 3 (PSTN) — Telefax 4 (PDN);

3) Telefax 3 (PSTN) — Telefax 4 (ISDN).

Note — Telefax 3 terminals and Telefax 4 terminals which are to be connected in the PSTN can also be connected to the ISDN via terminal adaptors.

This case is identical to Case 1 since the interworking of such terminals with PSTN terminals in the same country has to be provided via telephone connections.

Re 1 — Interworking by means of terminal compatibility is possible.

Re 2 — In this case, Telefax 4 terminals use data transmission facilities. Interworking shall be provided by network interworking units. As far as the numbering plans are concerned, refer to §§ 3.4 and 3.5.

Re 3 — In this case, Telefax 4 terminals use specific service features in the ISDN. Interworking shall be provided by network interworking units. §§ 2.5, 3.4 and 3.5 apply accordingly.

H.T. [T1.184]

TABLE 1/F.184

Possible cases of direct interworking for Teletex and Group 4 facsimile terminals on the same network

Tableau 1/F.184 [T1.184], p.4

5.1.4.3 Interworking between Telefax 4 terminals provided on different public data networks (PDNs) shall be provided in accordance with the appropriate CCITT Recommendation.

5.1.4.4 Interworking is desirable between terminals of the Telefax 4 service and terminals of services other than facsimile provided over public switched networks.

5.1.4.5 In both the Teletex and Telefax 4 services, the machines providing mixed mode should enable a direct exchange of documents in accordance with Recommendations T.6, T.61, T.503 and T.400 series.

Note — Interworking with other services is for further study.

5.2 *Call phases*

5.2.1 The operations for each call may be divided into the following three phases:

a) Preparation: preparation of the information to be transmitted.

b) Transmission:

— call establishment (manual or automatic);

— pre-information phase (see Note);

— information transfer (see Note);

— post information phase (see Note);

— call clearing.

Note — During these parts of the transmission phase the network must be transparent with respect to control procedures.

c) Output: displaying the message either by immediate printing or from a storage medium upon control by the operator.

Note — The information may consist of one or more Telefax 4 documents each consisting of one or more Telefax 4 pages.

5.2.2 The control procedures as specified in Recommendation T.62, T.503 and T.400 series shall be used as end-to-end communication procedures between terminals in the service.

5.2.3 The network independent basic transport service for Telefax 4 is specified in Recommendation T.70.

5.2.4 The network-dependent control procedures for the Telefax 4 service should be those that are defined for that network on which the Telefax 4 service is provided (see relevant Recommendations).

5.3 *Call identification*

5.3.1 *General*

5.3.1.1 The Telefax 4 procedures include the exchange of reference information prior to sending any document. This reference information includes identification of the parties to the call as well as the date and time. Also, supplementary reference information is exchanged during a call to allow reference to an individual document or page for error recovery or other purposes.

5.3.1.2 This reference information, taken together, is defined to be printable on a single line called the call identification line. Use of this information is a local decision except in recovering from an interrupted transmission. In the case of automatic linking, the use of this information is for further study.

5.3.2 *Format of the call identification line*

Details of the format of the call identification line are given in Recommendation F.200.

5.4 *ISDN supplementary services*

5.4.1 International supplementary services for the Telefax 4 service in the circuit mode on the B channel:

a) closed user group;

b) multiple numbers for a subscriber;

c) user-to-user signalling;

d) calling line identification presentation;

e) called line identification presentation.

Other supplementary services are for further study.

5.4.2 Use of national supplementary services is beyond the scope of this Recommendation.

5.4.3 *Supplementary services for the Telefax 4 service in the packet mode*

The provision of packet mode services according to Recommendation X.31 within the ISDN is for further study.

6 Quality of service

6.1 *Class I terminals*

6.1.1 For quality of service using class I terminals, see Recommendation F.160, § 6.

6.2 *Class II and III terminals*

6.2.1 The quality of service for Class II and III terminals and interworking with other services is for further study.

6.3 *Error protection*

To ensure call integrity, error protection will be provided by Telefax 4 control procedures (see Recommendations T.62 and T.70). The error rate on the pre-information, information and post-information phases should not exceed 1×10^{-6}.

6.4 *International routes*

The capacity of the routes between countries also has an important influence on the quality of the service. For that reason, the number of circuits provided between any two networks should be such that in the route busy hour not more than one call in 50 is lost due to a lack of international circuits (see Recommendation T.62). (For further study.)

6.5 *Duration of service*

6.5.1 The national and international facilities of the Telefax 4 service shall be open continuously.

6.5.2 Telefax 4 terminals for which call numbers are published in the directories shall, in principle, be available to accept calls continuously.

6.6 *Observations on the quality of the service*

For further study.

7 Subscriber terminals

7.1 *General*

7.1.1 In order to support a high quality of service, a range of data signalling rates has been defined as follows:

7.1.1.1 *Public data networks*

Terminals on a circuit switched data network shall operate in accordance with user classes of service 5 and 7 as defined in Recommendation X.1.

Terminals on a packet switched data network shall operate in accordance with user classes of service 9 to 11 as defined in Recommendation X.1.

7.1.1.2 *Public switched telephone networks*

Terminals on the public switched telephone network shall operate at 9600 bit/s with fallback to 7200 bit/s and 4800 bit/s.

7.1.1.3 *Integrated Services Digital Networks (ISDN)*

Terminals on the ISDN shall operate in accordance with user classes of service 30 as defined in Recommendation X.1.

7.1.2 The facilities required in terminals connected to the international Telefax 4 service are listed in the following paragraphs.

7.2 *Coding scheme*

7.2.1 Class I Group 4 facsimile terminals shall have the ability to send, receive and display documents encoded using the Group 4 coding scheme defined in Recommendation T.6.

7.2.2 In addition to the requirements detailed in § 7.2.1, Class II terminals shall have provision for receiving and displaying basic Teletex and mixed-mode documents.

7.2.3 In addition to the requirements detailed in §§ 7.2.1 and 7.2.2, Class III terminals shall have provisions for generating basic Teletex and mixed-mode documents (see Recommendation T.61).

7.3 No constraints should be made on the type of presentation technology employed.

7.4 *Receiving capability*

7.4.1 The ability of a terminal to receive incoming traffic is a prerequisite for it to answer the call.

Note — The control procedures may allow for negotiation of storage capability between terminals. This matter is for further study.

7.4.2 If during a call, the ability of the receiving terminal to continue to accept traffic is jeopardized (e.g. memory threshold reached) an indication of this condition will be passed to the sending terminal using the control procedures to permit the orderly termination and resumption of the transmission.

7.5 *Alarm indicators*

7.5.1 Alarm indicators (visual and/or audible) are required in the terminals to inform users about conditions that could have an adverse effect on the quality of service.

7.5.2 Where appropriate, the following indicators are required:

a) terminals unable to transmit (e.g. paper jam at transmitting end);

b) terminals unable or soon unable to receive (e.g. paper jam or receiving memory nearly full);

c) operator assistance required;

d) message received in store.

7.6 *Terminal identification*

7.6.1 Each terminal in the Telefax 4 service shall have a unique identification. Details of the identification are given in Recommendation F.200.

7.6.2 It is the responsibility of the calling terminal to verify the identification of the called terminal prior to the information transfer phase of the call.

7.7 *Page format, Telefax 4 service*

7.7.1 *General*

7.7.1.1 The principal objective of the Telefax 4 service is to establish a basic defined mode of operation common to all machines used in the service. Therefore, a minimum basic requirement is defined, and all terminals used in the Telefax 4 service shall comply with this minimum basic requirement. This, however, does not preclude the possibility that terminals may by prior agreement operate in modes different from these basic minimum requirements.

7.7.1.2 The maximum reproducible areas for various standard paper sizes are defined in Recommendation T.563.

The minimum requirement is that the image area defined by the United Nations' layout key and ISO 3535 shall be reproduced.

7.7.1.3 The range of the terminals' capabilities is exchanged during session establishment, prior to document transmission. These procedures are defined in Recommendation T.62 and Recommendation T.503 and T.400 series along with the default values for these capabilities if this exchange is not explicitly stated.

7.7.1.4 A particular selection from this established range of capabilities is made preceding transmission of each document. Some of these selections may be changed at page boundaries and some may also be changed within a page.

8 Customer information

8.1 *Directories*

A terminal must comply with all the requirements of a service in order to be included in the directory for that service.

Mixed-mode terminals may have entries in the Telefax and Teletex directories. The entries for such terminals may include indication of their dual capability. See also Recommendation F.180, § 6.

In the case of network interworking facilities to provide interworking Telefax 4 terminals on dissimilar networks or between Telefax 3 and Telefax 4 terminals, separate access numbers to subscribers via interworking units may be necessary. These numbers must be shown in directories.

Note — In these cases, the terminals of the Telefax 4 service may have two identifications (contrary to what is indicated in § 7.6.1). In a given call, however, only one identification is valid.

8.2 *Operating instructions*

For further study.

9 Access to facsimile Message Handling Facilities

Users of the Telefax 4 service may wish to have access to the services offered by Message Handling Facilities. This is for further study.

10 Tariff principles

(This matter requires further studies in conjunction with Study Group III.)

Recommendation F.190

OPERATIONAL PROVISIONS FOR THE INTERNATIONAL
FACSIMILE SERVICE BETWEEN PUBLIC BUREAUX |

AND

SUBSCRIBER STATIONS AND VICE VERSA

(BUREAUFAX — TELEFAX AND VICE-VERSA)

1 General

1.1 Recommendation F.160 lays down general provisions for all forms of international public facsimile services. The specific provisions concerning international public facsimile service between public bureaux (Bureaufax) and between subscriber stations are contained in Recommendations F.170, F.171, F.180, F.182 and F.184.

1.2 With a view to increasing the flexibility and range of these facsimile services, this Recommendation deals with the international transmission of facsimile documents:

a) from a public bureau to a subscriber station (public-to-private); and

b) from a subscriber station to a public bureau (private-to-public).

1.3 Since these methods of operation do not involve the participation of a public bureau at both ends of the connection, the quality of reproduction and speed of delivery normally available in the conventional Bureaufax service may not be attainable.

Public bureaux may be offices of Telecommunication or of Postal Administrations.

1.4 The relevant tariff provisions may be found in Recommendation D.73.

2 ‘‘Public-to-private’’ transmission

2.1 Except where contrary provisions are published by the terminal Administrations concerned, ‘‘public-to-private’’ facsimile transmission is permitted.

2.2 The accepting public facsimile bureau should ask the sender of the document for the following information before accepting the document for transmission:

a) the CCITT Group of the destination subscriber’s facsimile machine;

b) the destination facsimile station’s call number.

On accepting the facsimile document, the public bureau can use, if appropriate, the Bureaufax transmittal sheet in accordance with Recommendation F.170 and provide the necessary information in the corresponding boxes.

2.3 In those cases where:

a) the accepting bureau considers that the quality of the document to be transmitted is unsuitable for satisfactory facsimile transmission; or

b) the sender is unsure of the CCITT Group of the destination facsimile machine,

the document will be sent only if the sender accepts the possible risk of non-delivery or of unsatisfactory quality on reception. In effect, the same provisions apply as for ‘‘RISQUES EXPEDITEUR’’ in the Bureaufax service (Recommendation F.170). If b) above applies, or if, after several attempts within a maximum duration of 3 hours from the time of acceptance of the facsimile document, the destination subscriber cannot be reached, the sender should be given the option of transmission by means of the normal Bureaufax service (where available) in accordance with Recommendation F.170, at the tariffs applicable to that service.

Note — During an interim period for gaining the greatest possible operational experience, the Administrations should apply the same procedure if they know that the receiving facsimile machine operates automatically.

3 ‘‘Private-to-public’’ transmission

3.1 Except where contrary provisions are published by the terminal Administrations concerned, ‘‘private-to-public’’ facsimile transmission is permitted.

3.2 Facsimile documents received by a public bureau from a subscriber station in another country are handled and delivered to the addressee in accordance with appropriate methods laid down by the destination Administration. The provisions of Recommendation F.170, §§ 6.1, 6.3, 6.4 and 6.5 may be applied.

3.3 The sending subscriber shall provide the receiving public bureau with sufficient information for processing his facsimile documents; to that end the subscriber should use a transmittal sheet in accordance with Figure 1/F.190. Administrations should encourage the use of such forms by informing subscribers of their availability.

3.4 If the sending subscriber does not use a transmittal sheet as in § 3.3 above, he shall provide the receiving public bureau with at least the following information:

a) the call number of his facsimile terminal;

b) the number of pages of the document, in accordance with Recommendation F.170, § 3.2.1, item 4;

c) the addressee’s address, in accordance with Recommendation F.170, § 3.2.1, item 8, as well as the addressee’s telephone, telex or teletex numbers if necessary.

It is advisable for the sending subscriber also to give his address, in accordance with Recommendation F.170, § 3.2.1, item 9.

3.5 On receipt of the facsimile document, the receiving bureau should contact the addressee in order to reach agreement on the mode of delivery and the charging.

3.6 The receiving bureau may contact the sending subscriber if the copy received is of unsatisfactory quality.

3.7 In the event of non-delivery owing to incomplete address information or for other reasons (e.g., when the receiving bureau cannot establish contact with the addressee even though the address is complete, or when the document is not collected by the addressee), the receiving bureau may contact the sending subscriber. The facsimile document received and/or other relevant information, should be kept on file in accordance with the national regulations in force.

BLANC

Figure 1/F.190, (N), p.5

MONTAGE:
Page paire = Blanche