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SECTION 11

SUPPLEMENTS TO THE SERIES F RECOMMENDATIONS

Supplement No. 1

DEFINITIONS RELATING TO TELEGRAPH, TELEMATIC AND DATA TRANSMISSION SERVICES

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The study of terminology work by Study Group I in the 1989-1992 study period is covered by a revised Question 3/I.

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1 General definitions

1.1 *Telematic services*

1.1.1 **telematic services**

F: services t´el´ematiques

S: servicios de telem´atica (servicios telem´aticos)

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

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

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

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

1.1.2 **teletex service**

F: service t´el´etex

S: servicio teletex

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

1.1.3 **public facsimile service**

F: service public de t´el´ecopie

S: servicio p´ublico facs´imil

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

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

1.1.4 **videotex service**

F: service vid´eotex

S: servicio videotex

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

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

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

2) information is stored in a data base;

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

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

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

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

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

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

1.1.5 **message handling service**

F: service de messagerie

S: servicio de tratamiento de mensajes

A service provided by the means of message handling systems.

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

Note 2 — Examples of Message Handling services are:

— Interpersonal Messaging service (IPM service)

— Message Transfer service (MT service).

1.2 *Non-telematic services*

1.2.1 **public data transmission service**

F: service public de transmission de données

S: servicio público de transmisión de datos

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

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

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

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

1.2.2 **public telegram service**

F: service public des télégrammes

S: servicio público de telegramas

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

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

1.3 *Terms and definitions on videography*

1.3.1 **videography**

F: vid´eographie

S: videograf´ia

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

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

1.3.2 **broadcast videography, teletext**

F: vid´eographie diffus´ee, t´el´etexte

S: videograf´ia radiodifundida, teletexto

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

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

Note 2 — The terms ‘‘teletext’’ and ‘‘teletex’’ refer to two different concepts.

1.3.3 **videotex, interactive videography**

F: vid´eographie interactive, vid´eotex

S: videotex, videograf´ia interactiva

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

2 Definitions from different Working Parties

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

2.1.1 **international store-and-forward**

F: enregistrement et retransmission au niveau international

S: almacenamiento y retransmisi´on internacional

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

2.1.2 **interconnected store-and-forward**

F: enregistrement et retransmission avec interconnexion

S: almacenamiento y retransmisi´on con interconexi´on

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

2.1.3 **international transit store-and-forward**

F: enregistrement et retransmission en transit au niveau international

S: almacenamiento y retransmisi´on internacional en tr´ansito

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

2.1.4 **interconnected transit store-and-forward**

F: enregistrement et retransmission en transit avec interconnexion

S: almacenamiento y retransmisi´on en tr´ansito con interconexi´on

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

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

2.1.5 *Draft terms and definitions on telex*

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

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

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

2.3 *Working Party I/3* | (teletex service)

2.3.1 *Common definitions*

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

2.3.2 *Definitions of terms related to interworking*

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

2.3.2.1 **interworking**

F: interfonctionnement

S: interfuncionamiento

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

2.3.2.2 **conversion facility (CF)**

F: unit´e de conversion (UC)

S: unidad de conversi´on (UC)

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

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

F: proc´edures avec la s´election en une ou deux ´etapes pour l'interfonctionnement dans le sens t´elex vers t´el´etex

S: procedimientos con marcaci´on mono o bietapa para el interfuncionaminto de t´elex a teletex

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

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

F: unit´e de conversion avec enregistrement et retransmission (UC utilisant les principes d'enregistrement et retransmission

S: unidad de conversi´on con almacenamiento y retransmisi´on (UC que utiliza los principios de almacenamiento y retransmisi´on

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

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

F: unit´e de conversion en temps r´eel (interfonctionnement en temps r´eel)

S: unidad de conversi´on en tiempo real (interfuncionamiento en tiempo real)

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

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

F: validation du terminal t´el´etex demand´e [r´esultat de la validation (positive ou n´egative)]

S: validaci´on del terminal teletex llamado [resultado de validaci´on (positivo o negativo)]

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

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

F: d´ep | t du message/remise du message (d´ep | t du

texte/remise)

S: dep´osito de mensaje/entrega de mensaje (dep´osito/entrega de texto)

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

2.3.2.8 **on-line delivery acknowledgement: (ODA)**

F: avis de remise de ligne

S: acuse de recibo de entrega en l´ınea (ODA)

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

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

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

S: notificaci´on de no entrega (NDN)/notificaci´on de entrega positiva (PDN)

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

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

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

2.3.2.10 *Specific glossary to one-stage selection procedure*

CF prefix

F: pr´efixe de l’UC

S: prefijo de UC

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

2.3.2.11 *Specific glossary to two-stage selection procedure*

i) **CF national number**

F: num´ero national de l'UC

S: n´umero nacional de UC

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

ii) **input message acknowledgement (IMA)**

F: accus´e de d´ep | t (IMA)

S: acuse de recibo de mensaje introduc´ido (IMA)

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

2.3.3 **mixed mode of operation**

F: mode d'exploitation mixte

S: modo mixto de explotaci´on

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

2.4 *Working Party I/4* | (facsimile and telewriting)

2.4.1 *Facsimile*

Facsimile terminal | (facsimile machine)

group (of facsimile terminals)

F: groupe (de t´el´ecopieurs)

S: grupo (de terminales facs´imil)

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

2.4.1.1 **group 2**

F: groupe 2

S: grupo 2

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

2.4.1.2 **group 3**

F: groupe 3

S: grupo 3

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

2.4.1.3 **group 4**

F: groupe 4

S: grupo 4

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

2.4.2 *Classes of group 4*

There are three classes of group 4 facsimile terminals:

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

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

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

2.4.3 **telefax**

F: t´el´efax

S: telefax

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

2.4.4 **FAX 4**

F: FAX 4

S: FAX 4

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

2.4.5 **bureaufax**

F: bureaufax

S: burofax

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

2.4.6 **public telefax station**

F: poste t´el´efax public

S: estaci´on telefax p´ublica

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

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

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

2.5.1 **videotex service**

F: service vid´eotex

S: servicio videotex

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

The videotex service includes the following set of characteristics:

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

2) information is stored in a data base;

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

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

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

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

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

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

2.5.2 **videotex service profile**

F: profil du service vid´eotex

S: perfil del servicio videotex

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

2.5.3 **videotex service facility**

F: services compl´ementaires vid´eotex

S: facilidad del servicio videotex

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

2.5.4 **videotex information retrieval**

F: recherche d'information vid´eotex

S: recuperaci´on de informaci´on videotex

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

2.5.5 **videotex transaction**

F: transactions vid´eotex

S: transacci´on videotex

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

2.5.6 **videotex messaging [videotex message handling]**

F: messagerie vid´eotex [traitement des messages vid´eotex]

S: mensajer´ia videotex [tratamiento de mensajes videotex]

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

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

F: conf´erence vid´eotex [services de messages entre terminaux vid´eotex]

S: conferencia videotex [mensajer´ia entre terminales videotex]

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

2.5.8 **videotex data processing**

F: traitement des donn´ees vid´eotex

S: procesamiento de datos videotex

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

2.5.9 **videotex service provider**

F: prestataire de service vidéotex

S: proveedor del servicio videotex

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

2.5.10 **videotex information provider**

F: fournisseur d'information vidéotex

S: proveedor de información videotex

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

2.5.11 **videotex terminal**

F: terminal vid´eotex

S: terminal videotex

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

2.5.12 **videotex host computer**

F: ordinateur principal vid´eotex

S: ordenador (computador) principal videotex

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

2.5.13 **videotex service centre**

F: centre de service vid´eotex

S: centro de servicio videotex

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

2.5.14 **videotex gateway**

F: acc`es multiple vid´eotex

S: funci´on de multiacceso videotex (cabecera videotex)

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

2.5.15 **external videotex host computer**

F: ordinateur principal externe vid´eotex

S: ordenador principal videotex externo

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

2.5.16 **videotex frame**

F: feuillet vid´eotex

S: trama videotex

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

2.5.17 **videotex page**

F: document vid´eotex

S: p´agina videotex

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

Supplement No. 2

TERMS AND DEFINITIONS FOR TELEX

This Supplement contains terms and definitions for use in the telex service. Most terms bear an International Electrotechnical Vocabulary (IEC) number which follows the definition.

1 telex conversation mode

F: conversation t´elex

S: modo conversacional t´elex

The use of a telex connection for a dialogue or exchange of information between two *terminals* .
721.53.05

2 access to the public telegram service

F: acc`es au service public des t´el´egrammes

S: acceso al servicio p´ublico de telegramas

Provision for a *telex terminal* | o send and receive *telegrams*
| to and from the *public telegram service* .
721.53.07

3 user class-of-service

F: cat´egorie d'usager

S: clase de servicio de usuario

The category that defines the characteristics of a call available to a user of a public telecommunication service.

Note — The characteristics for a user class of service could be, for example, *binary rate* , | erminal operating mode, code structure, *access barred* .
721.53.08

4 public telex booth

F: cabine publique t´elex

S: cabina telex p´ublica

Telex *terminal* available to the public (i.e. non-subscribers).
721.53.09

5 outgoing only terminal

F: terminal sp´ecialis´e en d´epart

S: terminal de salida solamente

A *terminal* that can make outgoing calls to the network but which is prevented from receiving incoming calls.
721.53.10

6 incoming only terminal

F: terminal sp´ecialis´e en arriv´ee

S: terminal de llegada solamente

A *terminal* that can receive incoming calls from the network but which is prevented from making outgoing calls.

721.53.11

7 **access barred**

F: interdiction

S: prohibici´on de acceso

A function of a telecommunication network that bars calls to or from certain subscribers, from or to certain services, routes or *terminals* .
721.53.12

8 **restricted service**

F: service restreint

S: servicio restringido

A service whereby a subscriber may have *access barred* from his terminal installation to certain services, routes or *terminals* which would normally be accessible to all customers.
721.53.13

9 **priority**

F: priorit´e relative

S: prioridad relativa

The possibility of setting up a call from a nominated *terminal* on a *private network* or *closed user group* , by assigning to it, at each stage of selection, priority over all other calls of lower priority that are in the process of being established. The possibility may apply either to every call or only to nominated calls from such a privileged terminal.
721.53.14

10 **absolute priority**

F: priorit´e absolue

S: prioridad absoluta

The possibility of setting up a call from a nominated *terminal* on a *private network* or *closed user group* , by assigning to it at each stage or certain stages of selection, priority over all other calls of lower priority that are established. The possibility may apply either to every call or only to nominated calls from such a privileged terminal.
721.53.15

11 **priority for called subscriber**

F: abonn´e prioritaire en demand´e

S: prioridad del abonado llamado

A subscriber who has the facility of *priority* or *absolute priority* for all calls or for certain calls only to his *terminal* facility is activated by the sending of an appropriate signal by the calling terminal.

Note — There may be several priority levels, each confering relative or absolute priority with respect to lower levels.
721.53.16

12 in-local override

F: priorit´e sur le fonctionnement en local

S: anulaci´on del funcionamiento en local

A facility of the network to override a *terminal* working *in local* , for the purpose of connecting an incoming call to that terminal.

721.53.17

13 direct outgoing selection

F: prise directe

S: selecci´on directa de salida

A facility that permits a *terminal* in a *private network* to set up a call to another network without human intervention in the private network.
721.53.18

14 direct incoming selection

F: s´election directe à l'arriv´ee

S: selecci´on directa de llegada

A facility that permits a *terminal* in a telex network to set up a call to a terminal designated by the caller in a *private network* without human intervention in the private network.
721.53.19

15 direct incoming selection with integrated numbering

F: s´election directe à l'arriv´ee avec num´erotation int´egr´ee

S: selecci´on directa de llegada con numeraci´on integrada

Direct incoming selection using a single *selection sequence* made up from certain figures (digits) identifying the *private network* followed by certain figures identifying the called *terminal* in that network. The complete sequence of figures constitute a complete *address* integrated into the numbering plan of the telex network.
721.53.20

16 direct incoming selection with two-stage selection

F: s´election directe à l'arriv´ee avec num´erotation en deux temps

S: selecci´on directa de llegada con marcaci´on bietapa

Direct incoming selection using two *selection sequences* to select the required *terminal* in the *private network* . The first sequence identifies the private network, the second sequence identifies the terminal in this network. Only the first sequence is integrated into the numbering plan of the telex network.
721.53.21

17 closed user group

F: groupe ferm´e d'usagers

S: grupo cerrado de usuarios

A user group on the public switched network whose *terminals* have the facility to communicate only with each other.

Note — A terminal may belong to more than one closed user group.
721.53.22

18 partially closed user group

F: groupe partiellement ferm´e d'usagers

S: grupo de usuarios parcialmente cerrado

A user group where certain terminals may make calls to or receive calls from any other terminals normally accessible in the public switched network, the other terminals having the facility to communicate only with the user of the group.

Note — In some cases the external access for nominated terminals is limited to outgoing calls.

721.53.23

19 user facility

F: service compl´ementaire

S: facilidad de usuario

A facility which may be provided on request to a user of the telecommunication network in addition to the normal service provided.

Note — A user facility may be provided on a per call basis or for an agreed period of time.
721.53.25

20 automatic calling

F: appel automatique

S: llamada autom´atica

The sequence of operations required by the network procedure to set up a connection without manual intervention at the calling *terminal* .
721.53.26

21 automatic answering

F: r´eponse automatique

S: respuesta autom´atica

Answering in which the called terminal automatically responds to the *calling signal* and the call may be established whether or not the called terminal is attended.
721.53.27

22 manual answering

F: r´eponse manuelle

S: respuesta manual

Answering in which a call is established only if the called user signals his readiness to receive it by means of a manual operation.
721.53.28

23 automatic identification

F: identification automatique

S: identificaci´on autom´atica

The transmission without manual intervention of the identification of the calling *terminal* to the connected terminal or vice versa, or the identification of terminals to one another when a connection is established.

Note — The identification may be provided by the network or by the terminal.
721.53.29

24 line identification by the network

F: identification de ligne par le r´eseau

S: identificaci´on de lin´ea por la red

Transmission by the network, in response to a request from either of two connected parties, of an appropriate line or address identification.
721.53.30

25 automatic date and time indication

F: indication automatique de date et d'heure

S: indicaci´on autom´atica de fecha y hora

Automatic indication by the network of data and time of the commencement of a call either to the calling *terminal* or to both the calling and the called terminals.

721.53.31

26 indication of duration

F: indication de dur´ee

S: indicaci´on de duraci´on

The indication by the network to the paying *terminal* of the chargeable time of a call prior to the release of the paying terminal or by recall at a convenient time.

Note — This information may be provided automatically or on demand.
721.53.32

27 indication of charge

F: indication de taxe

S: indicaci´on del importe de la comunicaci´on

The indication by the network to the paying *terminal* of the charge of a call prior to the release of the paying terminal or by recall at a convenient time.

Note — This information may be provided automatically or on demand.
721.53.33

28 statement of call account

F: d´ecompte de taxes de communications

S: estado de cuentas de comunicaciones

The sending by the network upon request of a subscriber, an Administration, *closed user group* or *private network* , of a detailed account of his call charges either since his last request or over a nominated period.
721.53.34

29 shared terminal

F: terminal partag´e

S: terminal compartido

A facility offered to certain subscribers permitting the use of the same *terminal* , sharing the corresponding costs and charges.
721.53.35

30 accounts for shared terminal

F: d´ecompte pour terminal partag´e

S: cuentas de un terminal compartido

Provision of separate accounts to users of a *shared terminal* .
721.53.36

31 storage of call content

F: archivage des messages

S: almacenamiento del contenido de las comunicaciones

The storage for a specified length of time by the network at the subscriber's request of the contents of some or all of his calls sent or received.
721.53.37

32 retrieval of stored call content

F: consultation d'archivage

S: consulta del contenido almacenado de las comunicaciones

The transmission of the call contents to subscribers who had previously requested *storage of all content* .

721.53.38

33 statistics on request

F: statistiques sur demande

S: estad´isticas a petici´on

Provision for the network to send to the subscriber at this request, details of his calls under defined headings, e.g. international calls, national calls, calls to certain subscribers or total of all calls.
721.53.39

34 recorded message

F: r´eponse par message enregistr´e

S: mensaje registrado

A facility provided by the called subscriber or terminating network, whereby incoming calls to that subscriber may be connected to a transmitter for recorded *messages* .
721.53.40

35 camp-on: connect when free

F: attente sur occupation

S: conexi´on tras liberaci´on

The holding by the network of a call attempt that was unsuccessful due to the called *terminal(s)* being busy or due to network congestion, with subsequent automatic connection as soon as possible.
721.53.41

36 camp-on with recall

F: attente sur occupation avec rappel

S: conexi´on tras liberaci´on con rellamada

A *camp-on* with the release of the calling *terminal* and recall as soon as possible.
721.53.42

37 absent subscriber service (in telegraphy and data communication)

F: service des abonn´es absents (en t´el´egraphie et transmission de donn´ees)

S: servicio de abonado ausente (en telegraf´ia y comunicaci´on de datos)

A facility that permits the calling *terminal* to be advised automatically by a *service signal* that, due to an action of the called subscriber, the latter's terminal is not available for calls.
721.53.43

38 call re-direction

F: renvoi d'appel

S: redireccionamiento de la llamada

A facility that permits a call to be redirected to a previously nominated alternative destination upon the request of the called subscriber with advice by a *service signal* to the calling terminal.
721.53.44

39 changed address interception

F: intervention pour transfert d'abonn´e, intervention pour changement de num´ero d'appel

S: interceptaci´on de cambios de direcci´on

Automatic advice provided by the network to a calling *terminal* of a called terminal's new address followed either by *call redirection* or by release of the calling terminal.

Note — It is also possible to simply send a *service signal* followed by release.

721.53.45

40 store-and-forward

F: enregistrement et retransmission

S: almacenamiento y retransmisión

The process of storing *messages* or parts of messages and their subsequent transmission to the designated address or addresses.

721.53.46

41 storage installation

F: installation d'enregistrement

S: instalación de almacenamiento

An installation that provides a *store-and-forward* function.

Note — This installation may be provided at a *terminal* or at a centralized installation.

721.53.47

42 redirection address

F: adresse de réacheminement

S: dirección de redireccionamiento

Information sent in the backward direction consisting of a number of *address* signals indicating the complete address to which the call is to be or has been redirected.

721.53.48

43 delayed delivery

F: remise différée

S: entrega diferida

A *store-and-forward* process in which the re-transmission of stored *messages* is delayed until a predetermined period.

721.53.49

44 message priority

F: priorité des messages

S: prioridad de los mensajes

A facility within a *store-and-forward* , or *message switching* system that enables a subscriber to attach to his *message* one of a number of levels of priority which has been provided.

721.53.50

45 message spacing

F: espacement des messages

S: separaci´on de los mensajes

A facility whereby a subscriber may request the network to transmit several *line feed* characters to his *terminal* at the end of each successful call, before clear down, for the purpose of providing a blank space between adjacent printed *messages* .

721.53.51

46 header

F: en-t **|** *te*

S: encabezamiento

The initial part of a *message* or *packet* which contains the service information.

721.53.52

47 booked call

F: appel à heure fixe

S: llamada a hora convenida

A process whereby a subscriber may have his *terminal* called by the network at a given time, with or without an audible signal.
721.53.53

48 network recall

F: rappel du r´eseau

S: rellamada a la red

The recall of the network by a subscriber during the *message* phase of the call to request facilities.
721.53.54

49 multi-address call

F: communication à destinations multiples

S: comunicaci´on multidireccional

A call set up by the network in which more than one called *terminal* is involved.
721.53.55

50 conference call

F: communication de conf´erence

S: comunicaci´on conferencia

A *multi-address call* in which the signals which may be transmitted by any one of the terminals are received simultaneously by all other *terminals* .

Note — The order in which the terminals may transmit shall be mutually agreed.
721.53.56

51 broadcast call

F: communication de diffusion

S: comunicaci´on de difusi´on

A *multi-address call* in which signals are transmitted simultaneously by the calling *terminal* to all the called terminals.
721.53.57

52 restricted conference call

F: conf´erence restreinte

S: comunicaci´on conferencia restringida

A *conference call* in which certain nominated *terminals* may only transmit to one, or some, of the terminals involved, or may not transmit at all.

721.53.58

53 broadcast conference call

F: conf´erence-diffusion

S: comunicaci´on conferencia de difusi´on

A *restricted conference call* in which only one nominated *terminal* can transmit to and receive from the other terminals.

721.53.59

54 prefix

F: préfixe

S: prefijo

An indicator, consisting of one or more digits, that allows the selection of different types of address formats (e.g. local, national or international address formats), transit network and/or service selection. Prefixes are not part of the national subscriber number and are not signalled over inter-network or international boundaries.

55 escape code

F: code d'échappement

S: código de escape

An indicator consisting of one or more digits. The indicator is defined in a given numbering plan and is used to indicate that the following digits are a number from a different numbering plan. Escape codes are currently used within Recommendation X.121 numbering plans.

Note — An escape code may be carried forward through the originating network and can be carried across inter-network and international boundaries. Therefore, the values of escape codes should be standardized.

Supplement No. 3

OUTLINE DESCRIPTION OF THE INMARSAT STANDARD-C SYSTEM AND THE SERVICES IT MAY SUPPORT

(quoted in Recommendation F.127)

1 Purpose

The purpose of this Supplement is to place the operational procedures specified in the main part of Recommendation F.127 into a broader perspective by giving an outline description of the INMARSAT Standard-C system and the services it may support.

2 Definitions

The following are definitions of the terms used in relation to message transmission in the Maritime Satellite Service using the INMARSAT Standard-C system.

Note — A similar set of definitions for data transmission is contained in Recommendation X.350 and for telephone interworking in Recommendation M.1100.

2.1 **maritime satellite message transmission system** is a means for the establishment of temporary connections between an on-board DTE and a maritime satellite store-and-forward unit. The maritime satellite message transmission system comprises a maritime local circuit, a maritime satellite circuit, a maritime terrestrial circuit, and a maritime store-and-forward unit. The general configuration is shown in Figure 1.

2.2 **maritime local circuit** is a circuit between an on-board DTE and the ship earth station.

2.3 **maritime satellite circuit** is a circuit between the ship earth station and the coast earth station. It comprises all elements required for establishing, maintaining and clearing the maritime satellite circuit including the network coordination station.

2.4 **maritime terrestrial circuit** is a circuit between the coast earth station and the maritime satellite store-and-forward unit. The coast earth station and the maritime satellite store-and-forward unit may be co-located or remote from one another.

Figure 1, p. 1

2.5 **ship earth station (SES)** is defined in Article 1, Section 4.16 of the *Radio Regulations* , ITU, Geneva, 1982, but may be viewed as the combination of a data circuit-terminating equipment (DCE) and a radio transceiver.

2.6 **coast earth station (CES)** is defined in Article 1, Section 4.14 of the *Radio Regulations* , ITU, Geneva, 1982.

2.7 **maritime satellite store-and-forward unit (MSSFU)** is the functional interface between the maritime satellite message transmission system and a public network.

The MSSFU provides the following functions:

— interworking between the signalling systems used in the maritime satellite transmission message transmission system and the relevant public network;

— routing and call control for calls to and from ships;

— effects message transfer to and from ships by store-and-forward;

— charging.

2.8 **network coordination station** is a station in the maritime satellite system with the capability to coordinate, supervise and monitor the assignment and utilization of the maritime satellite circuits within a satellite coverage area. The network coordination station is designated by and operated for the satellite system operator (INMARSAT).

3 System overview

3.1 Calls may be made from ship to shore, shore to ship, or ship to ship.

3.2 The characteristics of the maritime satellite circuit provided by the INMARSAT Standard-C system are such that message transfer in real time cannot be supported. Only store-to-store message transfer, which allows for error correction using ARQ techniques, can be supported over the maritime satellite circuit. The possibility of real time working over the maritime satellite circuit, thus allowing by-pass of the store-to-store processes, is for further study.

3.3 The system has been designed so that the message transfer between terminals is performed by three cascaded independent store-and-forward message transfer processes:

a) DTE to (or from) DCE at the SES over the maritime local circuit;

b) SES to (or from) the MSSFU over the combined maritime satellite and maritime terrestrial circuits; and

c) MSSFU to (or from) the terrestrial public network.

3.4 The message transfer processes may be arranged to provide two modes of operation:

a) relay (baton passing), and

b) end-to-end (fire-bucket brigade).

3.4.1 *Relay mode of operation*

This is the basic mode of operation of the Standard-C system and is a mandatory provision. As the name implies each message is handed on and then the messenger drops out, i.e. at each transfer the complete message is stored and the circuit released before the next circuit is established over which the message is forwarded. During any one call, message flow is in one direction only, i.e. simplex working.

3.4.2 *End-to-end mode of operation*

This is not a mandatory provision of the Standard-C system. This mode of operation is only available on ship-to-shore calls. In this mode the circuits are left connected to allow part-messages to be passed in both directions from one end to the other. Half duplex working is available to the end users. However, the provision of full duplex working is for further study.

4 Services

Only message and data services are provided (speech communication is not provided). All message and data transfers shall take place at the earliest opportunity, unless delayed at the request of the originator.

All transactions handled by a MSSFU are given a reference number and stamped with the date and time at which their processing occurred. As detailed below, for an Administration operating a Standard-C system, the offering of specified services to the subscribers to certain public networks is mandatory, whilst the offering of these same services to the subscribers to all public networks is optional. (The offering of the remaining services to anyone is also optional.)

The services that may be supported by an SES also varies (dependent on SES complexity), and this variation has led to the SES classification shown in Table 1.

H.T. [T1.3]

TABLE 1

INMARSAT's SES classification in terms of the services supported

SES class (Note)	1	2		
		3		
Shore-to-ship	Message EGC Polling command	S NS OS	S I OS	S S OS
Ship-to-shore Message Data reporting Distress alert }	{ S OS S	S OS S	S OS S	
Ship-to-ship	Message	S	S	S

Note — The entries in the columns under SES class have the following meanings:

S Service is supported

NS Service is not supported

I (EGC) services are supported when SES is otherwise idle

OS Service is optionally supported, dependent on SES complexity

Table 1 [T1.3], p.

4.1 *Shore-to-ship services*

Broadly there are three groups of services:

a) message,

b) enhanced group call , and

c) polling command, which are described in more detail below.

An Administration operating a Standard-C system must offer to the subscribers to the public telex network the message (one or two-stage) service and the enhanced group call (EGC) services. The provision of the other services to the subscribers to the public telex network is optional. The provision of any of these services to the subscribers to other public networks is also optional.

These services may be extended across international borders on a bilateral basis. Where no such bilateral agreement exists, the Administration operating the system may clear the call and return the appropriate service signal.

All shore-to-ship services use only the relay mode of operation.

4.1.1 *Message services*

4.1.1.1 *On-stage message service*

Subscribers to a public network may send single messages to ships.

See Recommendation F.125.
The subscribers to a public network gain access to the MSSFU by using selection procedures normal to that of the terrestrial network. The called address is the mobile earth station's international number is automatically passed forward (by the appropriate signalling system) to the MSSFU, the subscriber achieves access to the unit and addresses the ship by a single stage of selection. On receipt of this address, the MSSFU will check that the required ship is logged into the ocean region and will accept or reject the call accordingly.

The MSSFU also needs to know the network address of the calling subscriber so that, if required, advice of non-delivery can be made. This address is forwarded to the MSSFU for a subscriber to the public telex network by the caller's answerback, or for a subscriber to PDN through the network protocols. But a subscriber to the PSTN will have to provide the address by being registered in advance with the Administration offering the service, and by going through a log-on/validation procedure prior to putting in the message. Non-registered PSTN subscribers are barred.

Having entered the whole message the calling subscriber may clear the terrestrial call. Only when the complete message is stored in the MSSFU will it be handed on to the addressed SES.

The return of a positive delivery notification is a national matter. But if the message cannot be delivered, it is mandatory that the message originator be advised of non-delivery. Where possible, the MSSFU will set up a call (across the appropriate terrestrial network) to the originator's network address in order to advise non-delivery. In those cases where this is not possible (e.g. to a PSTN terminal having an originate-only modem), the means of providing non-delivery notification is for further study.

4.1.1.2 *Two-state message service*

In order to be able to use these services the subscribers to public networks must be registered in advance with the Administration operating the system. Non-registered callers are barred.

The subscribers use selection procedures (normal to the terrestrial networks to which they are connected) to access the MSSFU. Any convenient national network address (having no necessary relationship with ships' numbers) may be allocated for access to the MSSFU. On gaining access the terrestrial subscriber enters into dialogue with the unit. Having first logged-on and undergone validation, the caller enters the mobile earth station's international number to be called (i.e. performs the second stage of selection), requests any special service features required (multi-address call, follow-on messages, class of delivery), and enters the message(s).

Again, positive delivery notification is a national matter, but advice of non-delivery is mandatory. (For this service the message originator's network address will always be known.) The non-delivery advice procedures are described above in § 4.1.1.1.

4.1.2 *Enhanced group call (EGC) services*

In order to be able to use these services the subscribers to public networks must be registered in advance with the Administration operating the system. Non-registered callers are barred.

This group of services is identified by a unique address format which is described in Annex A.

In general these are message broadcast services, i.e the message is sent simultaneously to a number of ships, which have to be specially equipped with an EGC receiver capability to be able to receive them.

The messages sent have attributes that must be specified by the message originator, namely: message priority, the service into which the message falls, address of message, the rate at which the message is repeated, and the alphabet into which the message is translated. These attributes are specified in a message header which uses a standardized structure and coding system. A detailed description of message header structure and coding is given in Annex A.

Notification of message delivery or non-delivery is not mandatory.

This group of services is divided between the:

— FLEETNET^{TM} service, and

— SAFETYNET^{TM} service.

4.1.2.1 *FLEETNET*

This service is for commercial users requiring closed user group operation, so-called *group call* , to a pre-defined group of one or more ships. This group is identified by having a common address, i.e. a group number.

Supporting this service is a system housekeeping service, which requires unique receiver addressing. This service is called ‘‘Download Group Identity’’, and is used when group numbers are being added to, or deleted from, the list of group numbers held in a particular EGC receiver to which it will respond. The unique address of an EGC receiver and the group numbers to which it will respond cannot be changed by the ship’s operator.

4.1.2.2 *SAFETYNET*

Strictly speaking this is not a public service, but its description is included for the sake of completeness.

This service is for information providers (mostly government agencies) disseminating maritime safety information to all suitably equipped ships in a specified geographical area. These geographical areas may be either:

a) a fixed, pre-defined area (such as the Navarea, WMO area or NAVTEX coverage area), or

b) an absolute area (whose boundary is specified by a set of coordinates).

In order to be able to respond to geographical area addressing, the EGC receiver must be programmed with the ship’s current position. If the ship’s position has not been updated for more than 12 hours, all geographical addressed messages having a priority higher than routine are printed out by the receiver.

The services currently available within SAFETYNET^{TM} (along with their service code in brackets) are (see § A.3.2):

— Navarea warnings (31);

— WMO meteorological forecasts (22) and warnings (42), to ships in any one of 1000 WMO areas;

— WMO meteorological forecasts (34), to ships in an absolute rectangular area;

— NAVTEX re-broadcasts (12);

— distress alert (14), to ships in an absolute circular area;

— meteorological warnings, to ships in an absolute rectangular area (04) or circular area (24);

— maritime safety message to all ships in an ocean region (00).

4.1.3 *Polling command services*

In order to be able to use these services the subscribers to public networks must be registered in advance with the Administration operating the service. Non-registered callers are barred. This group of services is addressed by a means yet to be determined.

These services allow polling command originators to poll a selected group of ships to extract prepared data held on board ship awaiting transmission or to transmit a message to the group. When polled, the stored data in the ship terminal is automatically transmitted to the MSSFU where it is stored in the polling output file allocated when the poll was initiated. The means by which the polling command originator obtains the field data (by retrieval and/or forced delivery) is a national matter.

The three services contained in this group of services may be distinguished as follows:

i) one or more ships are listed by the polling command originator, but are polled individually,

ii) the ships in a pre-defined user group are polled simultaneously, and

iii) the ships in a geographical area specified by the polling command originator are polled simultaneously.

These are described below.

4.1.3.1 *Polling command individually-directed service*

The subscriber issuing the polling command, having obtained access to the MSSFU, lists the one or more ships to be polled and releases the terrestrial connection. Each SES is then polled individually, thereby allowing the provision of the following service features:

i) notification in the polling output file, if the ship is not present in the ocean region, or the SES is non-operational, and

ii) retry, if the SES is busy when the polling command is first issued.

4.1.3.2 *Polling command group-directed service*

In this service the polling command is transmitted simultaneously to all ships within the pre-defined closed user group. In this mode of operation, recognition of absent, non-operational, or busy SESs cannot be supported, so the notification and retry features available in the individually-directed service are precluded.

4.1.3.3 *Polling command area-directed service*

Apart from the different choice in the ships addressed, this service is the same as that described in § 4.1.3.2 above.

4.2 *Ship-to-shore services*

In this direction there are four services:

i) message,

ii) data reporting,

iii) database access, and

iv) distress alert.

They are described in more detail below.

An Administration operating a Standard-C system must provide the message service to shipboard subscribers; however, it is only mandatory for the Administration to forward messages to the subscribers to the public telex network, the forwarding of messages to the subscribers to other public networks being optional. The offering of the data reporting and database access services to shipboard subscribers is optional.

It is mandatory for an Administration operating a Standard-C system to provide the distress alert service and to forward distress alert messages to a MRCC convenient to that Administration.

4.2.1 *Message service*

Shipboard subscribers to the Maritime-Satellite Service provided by the Standard-C system may send single messages to the subscribers to public networks and to appropriate Applications (from the list shown in Table A-1/F.126).

The messages are forwarded by the MSSFU over a terrestrial connection established by this unit to the addressed subscriber or Application.

Upon delivery of the message to the terrestrial destination, a delivery notification is sent to the ship if requested. In the event of non-delivery a non-delivery notification is sent to the ship.

4.2.2 *Data reporting service*

In order to be able to use this service a terrestrial subscriber and a pre-defined group of ships forming a closed user group must be registered in advance with the Administration operating the service. Non-registered callers are barred.

The service provides for the automatic transmission of prepared data from a ship (within the pre-defined group) to the designated MSSFU where it is stored in the addressed reporting output file. These transmissions are initiated on-board ship, (in contrast to the polling services where the transmission of the data is in response to a polling command issued by the terrestrial polling command originator).

How the terrestrial subscriber obtains the data stored in the reporting output file (by retrieval and/or forced delivery) is a national matter.

4.2.3 *Distress alert service*

This service is available to all ships regardless of whether the ship is logged into an ocean region or not.

A distress alert message is forwarded by the MSSFU without delay to a Maritime Rescue Coordination Centre (MRCC), and a distress alert acknowledgement is sent to the ship. If the ship fails to receive the distress alert acknowledgement, a distress alert message retry cycle is automatically initiated by the ship's SES.

4.3 *Ship-to-ship service*

The only service available between ships is a single message service, i.e. shipbord subscribers may send single messages to other shipboard subscribers. The ships involved do not have to be located in the same ocean region.

For those calls that are routed through a public network, this service shall have the same service features (and shall use the same procedures) as for the ship-to-shore message service.

ANNEX A
(to Supplement No. 3)

Description of the structure and coding to be used

in the message headers of enhanced group calls

A.1 *Introduction*

The INMARSAT Standard-C system requires that messages sent in the enhanced group call services are preceded by information about the message in order that they may be received by the appropriate group of ships, in the appropriate area. This information contains five attributes, namely: message priority, the service into which the message falls, address of message, the rate at which the message is repeated, and the alphabet into which the message is translated.

In order that the same procedures are used by all message originators, these message descriptions are coded and contained in a message header of defined structure. This Annex details this standardized structure and coding.

A.2 *General structure of message header*

The message header contains five codes, one for each attribute. These codes, known as C codes , are presented by the message originators in the following sequence:

$$C_1C_2C_3C_4C_5$$

where

C_1 is the priority code — 1 digit

C_2 is the service code — 2 digits

C_3 is the adress code — up to 11 digits

C_4 is the repetition code — 2 digits

C_5 is the presentation code — 2 digits.

A digit in this context means an alphanumeric character.

The definition of the C codes is given in the next section, but for illustration purposes an example message header is given below:

1 22 12 22 05

This example header is for a safety priority (C_1 = 1) message containing a WMO type meteorological forecast (C_2 = 22) to Region 12 (C_3 = 12) which will be repeated 2 hours (C_4 = 22) after the initial transmission. The text is transmitted in this case in International Alphabet 5 (C_5 = 05).

A.3 *Definition of codes*

A.3.1 *Priority codes, C*

The C_1 code is used to indicate the level of priority needed for the message transmission. In ascending order the priority codes are defined as follows:

0 Routine

1 Safety

2 Urgent

3 Distress.

A.3.2 *Service codes, C*

These codes have been allocated to service as listed below:

00 All ships call

03 Group call

04 Meteorological warnings to rectangular areas

11 INMARSAT system message

12 NAVTEX re-broadcast

14 Shore-to-ship distress alert

22 WMO meteorological forecasts

23 EGC system message

24 Meteorological warnings to circular areas

31 Navarea warnings

33 Download group identity

34 WMO meteorological forecast (rectangular)

42 WMO meteorological warnings.

 2 (2 digits)

A.3.3 *Structure of address codes, C*

Each service listed in § A.3.2 above has a number of possible addresses associated with it. These addresses are coded as specified below:

A.3.3.1 *All ships call (C*

For this case an address as such is not needed, but in order to preserve the structure an arbitrary code C_3 = 00 has been assigned.

A.3.3.2 *Group call (C*

The EGC receivers forming a closed user group are identified by a common address code. The C_3 address codes are 7-digit numbers allocated by INMARSAT.

A.3.3.3 *Meteorological warnings to rectangular areas (C*

The address code defines the location and size of a rectangular area within an ocean region. The 11 digits of the C_3 code are coded to perform this definition as follows:

— $D_1D_2D_3$ (3 characters) where D_3 = N or S — specifies the latitude of the southwest corner of the rectangule in degrees and whether north (N) or south (S) of the equator;

— $D_4D_5D_6D_7$ (4 characters) where D_7 = E or W — specifies the longitude of the southwest corner of the rectangule in degrees and whether east (E) or west (W) of the prime meridian (if the longitude is less than 100° then the notation 085 for example should be used);

— D_8D_9 (2 characters) — extent in degrees of the rectangle in latitude (northings);

— $D_{1\backslash d0}D_{1\backslash d1}$ (2 characters) — extent in degrees of the rectangle in longitude (eastings).

For example:

12S124E1010

defines a rectangle whose southwest corner is 12 S and 124 E. The extent of the rectangle is 10° north and 10° east.

A.3.3.4 *INMARSAT system message (C*

The message repertoire and its coding is for further study.

A.3.3.5 *NAVTEX re-broadcasts (C*

The 2 digits of the C_3 code have the general structure B_1B_2, where B_1 identifies the NAVTEX transmitter coverage area and is followed by B_2, the message type. The codes allocated to B_2 are listed below:

A Navigational warnings

B Meteorological warnings

C Ice reports

D Search and rescue information

E Meteorological forecast

F Pilot service messages

G DECCA messages

H LORAN messages

I OMEGA messages

J SATNAV messages

K Other electronic navaid messages

L Additional navigational warnings

Z QRU (no messages in hand).

A.3.3.6 *Shore-to-ship distress alert (C*

The address code defines the location and size of a circular area within an ocean region. The 10 digits of the C_3 are coded to perform this definition as follows:

— $N_1N_2N_3$ (3 characters) where N_3 = N or S — specifies the latitude of the centre of the circle in degrees and whether north (N) or south (S) of the equator;

— $N_4N_5N_6N_7$ (4 characters) where N_7 = E or W — specifies the longitude of the centre of the circle in degrees and whether east (E) or west (W) of the prime meridian (the notation 085 should be used for longitude less than 100°);

— $N_8N_9N_{1\d0}$(3 characters) — specifies the radius of the circle in nautical miles, up to 999 nautical miles.

For example:

56N034W010

defines a circle with centre at 56 N 034 W, and a radius of 10 nautical miles.

A.3.3.7 *WMO meteorological forecasts (C*

Globally up to 1000 areas may be pre-coded, C_3 having 3 digits.

A.3.3.8 *EGC system messages (C*

The message repertoire and its coding in 7-digit numbers is for further study.

A.3.3.9 *Meteorological warnings to circular areas (C*

The coding of the location and size of the circular area is as described in § A.3.3.6 above.

A.3.3.10 *NAVAREA warnings (C*

Up to 100 areas within an ocean region can be pre-coded, C_3 having 2 digits.

A.3.3.11 *Download group identity (C*

Each EGC receiver is allocated a unique number in a numbering range managed by INMARSAT. The numbers have 7 digits and form the C_3 address code which is used when group numbers are being added to, or deleted from, the list of group numbers held in a particular EGC receiver.

A.3.3.12 *WMO meteorological forecasts (rectangular) (C*

The condition of the location and size of the rectangular area is as described in § A.3.3.3 above.

A.3.3.13 *WMO meteorological warnings (C*

Globally up to 1000 areas may be pre-coded, C_3 having 3 digits. These area codes are the same as those allocated for WMO meteorological forecasts.

A.3.4 *Repetition codes C*

The repetition rate is the number of times the message originator requires the message to be transmitted and the interval between retransmissions. The presently allocated repetition rates are coded as follows:

10 transmit once on receipt

21 transmit 1 hour after initial broadcast (twice)

22 transmit 2 hours after initial broadcast (twice)

23 transmit 3 hours after initial broadcast (twice)

24 transmit 4 hours after initial broadcast (twice)

26 transmit 12 hours after initial broadcast (twice)

27 transmit 24 hours after initial broadcast (twice)

30 transmit 12 hours after initial broadcast, then 12 hours after the second broadcast (three times)

31 transmit 24 hours after initial broadcast, then 24 hours after the second broadcast (three times)

40 transmit 12 hours after initial broadcast, then 12 hours after the second broadcast and 12 hours after the third broadcast (four times)

41 transmit 24 hours after initial broadcast, then 24 hours after the second broadcast and 24 hours after the third broadcast (four times).

56 *4 (2 digits)*

A.3.5 *Presentation codes C*

This fifth attributes has been introduced in order to facilitate the possible introduction of alphabets other than IA5 into which the message part of an EGC may be translated for sending over the maritime satellite message transmission system. IA5 and some example alphabets are coded as follows:

05 IA5 (international reference version) odd parity

06 Katakana odd parity

07 Devanagari odd parity

08 Arabic odd parity

09 Cyrillic odd parity

A.3.6 The structure and coding of message headers for other services, e.g. polling command services, will be included at a later date.

Blanc