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AMENDMENT 2
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Information technology — Text Communication — Message-Oriented Text Interchange Systems (MOTIS) —

Part 2:
Overall Architecture

AMENDMENT 2: Minor enhancements: Multinational organizations and terminal-form addresses

Technologies de l'information — Communication de texte — Systèmes d'échange de texte en mode message —

Partie 2: Architecture générale

AMENDEMENT 2: Améliorations mineures: Adresses d'organisations multinationales et de fiches de terminaux

Reference number
ISO/IEC 10021-2:1990/Amd.2:1994(E)

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Amendment 2 to International Standard ISO/IEC 10021-2:1990 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee 18, *Document processing and related communication*.

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Page 18

Subclause 9.3.5

Add to end of second paragraph:

Depending on the requirements for the type of access unit defined in the relevant Message Handling specifications, a positive delivery report indicates either successful acceptance of the message (or probe) by the access unit, or that the access unit has successfully performed further conveyance of the message (or probe).

Page 43

Subclause 17.2

Add a new last paragraph after the NOTE:

For information relating to organizations which operate in more than one country, see annex G . See also 7.3.2 in ISO/IEC 10021-1.

Page 47

Subclause 18.3.9

Replace the entire subclause by:

An **organization-name** is a standard attribute that identifies an organization. The value of an organization-name is a Printable String, Teletex String, or both.

When used in a *mnemonic O/R address* (see 18.5.1), as a national matter organizations may be identified either relative to the country denoted by a country-name (so that organization names are unique within the country), or relative to the MD identified by a private-domain-name or an administration-domain-name or both. Whether Printable or Teletex, the string is chosen from a set of such strings that is administered for this purpose (and perhaps others) by the country or MD alluded to above.

NOTE - In countries choosing country-wide unique organization-names, a national registration authority for organization-names is required.

When used in a *terminal O/R address* (see 18.5.4), the organization-name is a free-form value, with no requirement for registration.

Page 50

Subclause 18.5

Replace the third paragraph by:

The table has four sections. Attribute types in the first are those of a general nature. Attribute types in the second and third are those specific to physical delivery, but unformatted-postal-address may be used as an extension to the terminal address. The fourth section encompasses domain-defined attributes.

Page 51

Table 10

Under the heading TERM *change* "-" *into* "C*" *for the following entries:*

common-name

organization-name

organizational-unit-names

personal-name

unformatted-postal-address

Add to the legend of Table 10:

C* conditional, but intended to be used for rendition purposes and not for MHS addressing or routing

Page 53

Subclause 18.5.4

Replace point e) by:

e) Conditionally, one or more attributes chosen from organization-name, organizational-unit-names, personal-name, unformatted-postal-address and common-name, and conditionally one or more domain-defined attributes, all of which provide additional information to identify the user.

Page 53

Subclause 18.5.5

Insert a new subclause:

18.5.5 Determination of Address Forms

The form of an O/R address shall be determined as follows:

if it contains a numeric-user-identifier, it is a numeric O/R address;

if it contains a network-address, it is a terminal O/R address;

if it contains a physical-delivery-country, it is a postal O/R address;

any other O/R address is a mnemonic O/R address.

If a postal O/R address contains an unformatted-postal-address it is an unformatted postal O/R address, otherwise it is a formatted postal O/R address.

Pages 81-84

Renumber existing annexes G and H (as re-numbered by Amd.1) to H and I, and insert new annex G.

Revise all references to annexes G and H to become H and I respectively.

Annex G

(informative)

Use of O/R Addresses by Multinational Organizations

It is recognised that, where regulations permit, many organizations will wish to operate message handling systems which are located in more than one country. These organizations include both private organizations and public MH service providers. The addressing and routing policies of such systems should be consistent with the general MHS model, in order to ensure interworking with the remainder of the global MHS.

The availability of directory services may significantly affect the addressing policies which organizations choose to adopt. If a universal directory service is available, originators and recipients of messages can be referred to by means of a user-friendly directory name; the O/R addresses can be obtained from the directory by the message handling system. In this situation, the human users need never encounter the O/R address values used, and the addressing policy can be chosen on purely technical criteria. If such a directory service is not available, it will be necessary for users to handle O/R addresses manually. In this case, aesthetic and other human factors considerations will also influence the selection of addressing policy.

G.1 Addressing principles

Global unambiguousness of MHS names is achieved by means of a hierarchical registration structure and consistent use of the naming conventions. This means that wherever an O/R address is used, it is necessary to register the address attribute values according to the procedures applicable for the country denoted by the value of the country-name attribute. In the case of the private-domain-name and administration-domain-name, this implies registration with the applicable registration authorities in that country or domain. These principles form the basis for global messaging.

The interconnection of domains (PRMD to ADMD, ADMD to ADMD, PRMD to PRMD) is subject to bilateral agreement. Such agreements are subject to commercial and technical criteria; among other matters, these agreements may specify the range of O/R address values which are accepted.

Where an organization requires domain names with more than one country code, it is necessary to register the names according to the procedures in each country. Frequently, it will be possible to register the same value of private-domain-name (or administration-domain-name, as applicable) in each country; however, factors outside the scope of MHS (such as legal ownership of names) mean that it will sometimes be necessary for a multinational organization to use different values for their domain name according to the country-code used.

Users of MHS ideally would like to have one address to be used for global messaging which will be provided on letter heads and business cards (indicating the country in which the user is located) to be used by potential partners for communication through MHS systems. The reachability of distant partners through a service provider depends upon the connectivity offered.

G.2 Example configurations

Multinational organizations may choose to organise their messaging systems in any way which is compatible with these basic principles. Examples of possible configurations for a multinational PRMD include:

G.2.1 Multiple Independent PRMDs

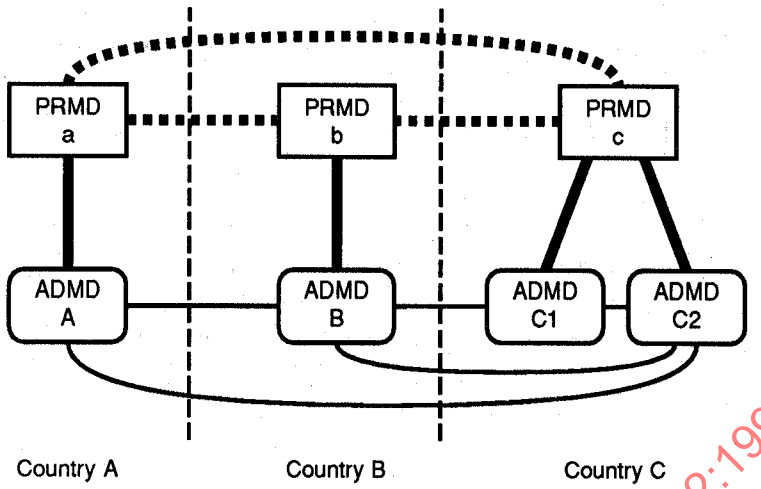

Figure G.1
Multiple Independent PRMDs

The multinational organization may divide its messaging system logically into portions which are wholly contained within one country. Each portion functions as a separate PRMD, and uses addresses registered in the local country.

Each PRMD may connect to one or more ADMDs in the local country. Where the PRMD is connected to more than one ADMD, and the single space ADMD name is not used, each user (or DL) will have multiple O/R addresses (aliases) with different values for the administration-domain-name attribute. Any of these alias values may be used as the value of the originator O/R address. Where the local country permits the use of the single space ADMD name, and the PRMD elects to use it, each user (or DL) may have a single value of O/R address, regardless of the number of ADMDs that the PRMD is connected to, assuming that mechanisms are in place to handle this convention.

NOTES

1. The choice of alias name has a number of consequences, see G.3.

2. MTS procedures may need to be revised to support multinational PRMDs in a global messaging environment.

This case is not specific to multinational organizations: it is indistinguishable from multiple PRMDs operated by separate organizations.

This configuration allows for differing regulations in various countries and still provides for the allocation of unique O/R addresses.

G.2.2 A single PRMD, named from a "home" country

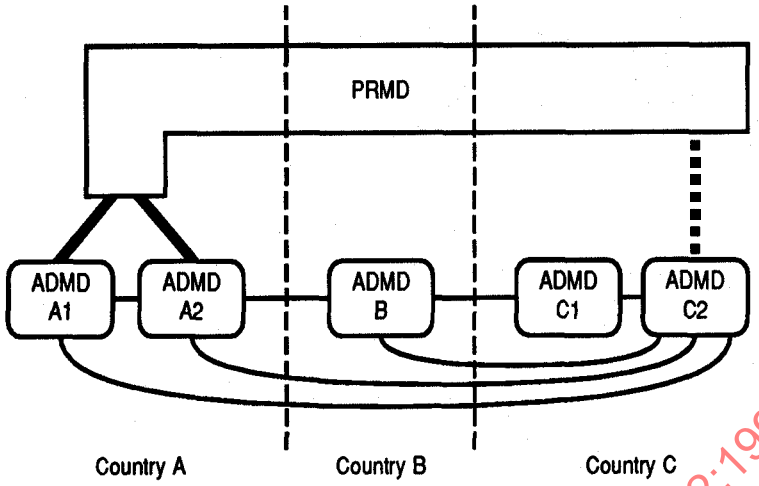

Figure G.2
A single PRMD with a single name

The multinational organization may operate a single management domain which is physically located in more than one country. A single country is selected as the home country for addressing purposes. In this case, all UAs within the MD are addressed with the same values for country-name, administration-domain-name and private-domain-name. This set of attribute values is registered according to the requirements of the chosen country.

The PRMD may connect to one or more ADMDs in the home country, and also (subject to national regulation and commercial criteria) to ADMDs in other countries. Connection to ADMDs outside the home country requires that those ADMDs are able and willing to route messages directly to a PRMD when the country-name used in the O/R address is different from that used by the ADMD.

Users of such a PRMD may not be satisfied with the resulting use of a country name in the O/R address that they may not belong to.

NOTE - MTS procedures may need to be revised to support multinational PRMDs in a global messaging environment.

G.2.3 A single PRMD with multiple country and domain names

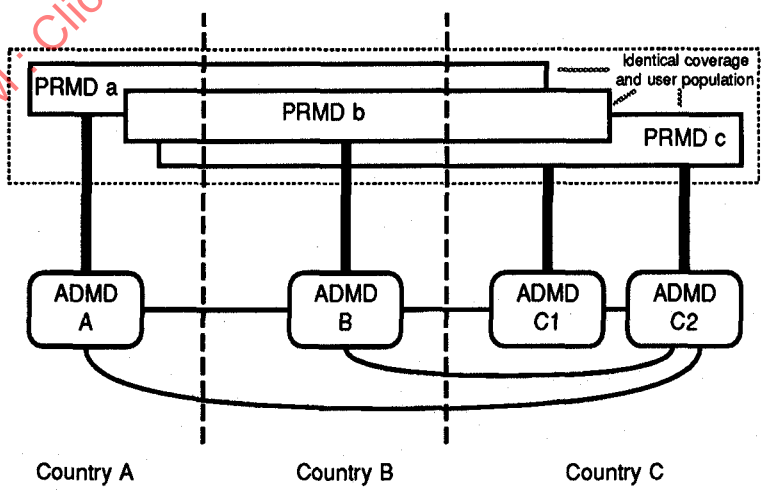

Figure G.3
A single PRMD with multiple country and domain names

The multinational organization may operate a single messaging system, but use PRMD names registered in more than one country. When forming O/R addresses, the administration-domain-name should be one of the values permitted by the country