



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

X.419

Amendment 1
(12/97)

SERIES X: DATA NETWORKS AND OPEN SYSTEM
COMMUNICATIONS

Message Handling Systems

Information Technology – Message Handling
Systems (MHS): Protocol specifications

**Amendment 1: Use of ISO/IEC 10646 characters
in OR-addresses**

ITU-T Recommendation X.419 – Amendment 1

(Previously CCITT Recommendation)

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INTERNATIONAL STANDARD 10021-6

ITU-T RECOMMENDATION X.419

**INFORMATION TECHNOLOGY – MESSAGE HANDLING SYSTEMS (MHS):
PROTOCOL SPECIFICATIONS**

AMENDMENT 1

Use of ISO/IEC 10646 characters in OR-addresses

Summary

This Amendment contains an enhancement on use of ISO/IEC 10646 characters in OR-addresses.

Source

The ITU-T Recommendation X.419, Amendment 1 was approved on the 12th of December 1997. The identical text is also published as ISO/IEC International Standard 10021-6.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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As of the date of approval of this Recommendation, the ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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ITU-T RECOMMENDATION

**INFORMATION TECHNOLOGY – MESSAGE HANDLING SYSTEMS (MHS):
PROTOCOL SPECIFICATIONS**

AMENDMENT 1

Use of ISO/IEC 10646 characters in OR-addresses

1) Subclause B.2.8

Insert two new paragraphs before the existing first paragraph:

If the **OR-address** contains any attributes encoded both as Universal Strings (either the UniversalString or BMPString ASN.1 type) and as one of the other available string types, the Universal Strings should be deleted.

If the **OR-address** contains any attributes encoded only as Universal Strings and all the characters in those strings are from the printable string repertoire, the Universal Strings may be replaced by the equivalent printable strings; otherwise the **OR-address** cannot be downgraded.

NOTE – Implementations conforming to earlier editions of this Specification will not perform any processing related to Universal Strings. Such implementations will be unable to downgrade addresses containing Universal Strings unless printable or teletex string equivalents are present, and may refuse to downgrade addresses even if the equivalents are present.

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