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Information technology — Message Handling Systems (MHS) —

Part 9:
Electronic Data Interchange Messaging System

AMENDMENT 1: Compression extension

Technologies de l'information — Systèmes de messagerie (MHS) —

Partie 9: Système de messagerie avec échange de données informatisé

AMENDEMENT 1: Extension de compression

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Foreword

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Amendment 1 to ISO/IEC 10021-9:1995 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

This Amendment is also published by ITU-T, but not as identical text.

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Information technology — Message Handling Systems (MHS) —

Part 9: Electronic Data Interchange Messaging System

AMENDMENT 1: Compression extension

1. Insert at the end of clause 2

" CCITT Recommendation V.42 bis (1990), Data Compression Procedures for data circuit terminating equipment (DCE) using error correction procedures"

2. Insert new subclauses at the end of 8.2.19 as follows :

8.2.19.1 Compression Extension introduction

The following extension describes the parameters that need to be exchanged when the primary body part is transferred in a compressed mode. The absence of this parameter implies that the content of the primary body part is not compressed.

```
primary-body-part-compression-indication EDIM-EXTENSION
      CompressionParameter--as defined for P2 File Transfer Body Part
      CRITICAL FOR DELIVERY
      ::= id-edi-compression
```

The syntax of this parameter is that of the corresponding parameter in the file transfer body-part defined in ITU-T Rec. X.420/ISO/IEC 10021-7.

The following macro gives a notation to express an instance of the compression extension.

```
COMPRESSION-ALGORITHM MACRO ::=
BEGIN
        TYPE NOTATION ::= type | empty
        VALUE NOTATION ::= value ( VALUE OBJECT IDENTIFIER )
END
```

NOTE: Although this specification identifies V.42 bis compression, other compression algorithms may be used.

8.2.19.2 V.42bis compression

The following instance of the COMPRESSION-ALGORITHM macro defines the parameters needed to perform V.42 bis compression as stated in the CCITT Recommendation V.42 bis(1990).

```
V42BisCompression COMPRESSION-ALGORITHM V42BisCompressionParameter
       ::= id-edi-compression-v42bis


V42BisCompressionParameter ::= SEQUENCE {
   p1-Number-of-codewords       INTEGER DEFAULT 512,
   p2-Maximum-string-size       INTEGER DEFAULT 6,
```

NOTE: The values 4096 for `p1-Number-of-codewords` and 512 for `p2-Maximum-string-size` may give better performance for EDI purposes rather than the default values (which are those specified by V.42bis).

The V42BisCompressionParameter has the following components :

a) **p1-Number-of-codewords:** gives the number of codewordsThe default value 512 allows 509 entries in the dictionary

b) **p2-Maximum-string-size:** defines the Maximum string size (largest repetitive chain of bytes that can be compressed).

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