INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

V.59

Corrigendum 2
(03/2002)

SERIES V: DATA COMMUNICATION OVER THE TELEPHONE NETWORK

Transmission quality and maintenance

Managed objects for diagnostic information of public switched telephone network connected V-series modem DCEs

Corrigendum 2

ITU-T Recommendation V.59 (2000) – Corrigendum 2

ITU-T V-SERIES RECOMMENDATIONS

DATA COMMUNICATION OVER THE TELEPHONE NETWORK

General	V.1–V.9
Interfaces and voiceband modems	V.10–V.34
Wideband modems	V.35–V.39
Error control	V.40–V.49
Transmission quality and maintenance	**V.50–V.59**
Simultaneous transmission of data and other signals	V.60–V.99
Interworking with other networks	V.100–V.199
Interface layer specifications for data communication	V.200–V.249
Control procedures	V.250–V.299
Modems on digital circuits	V.300–V.399

For further details, please refer to the list of ITU-T Recommendations.

ITU-T Recommendation V.59

Managed objects for diagnostic information of public switched telephone network connected V-series modem DCEs

Corrigendum 2

Source

Corrigendum 2 to ITU-T Recommendation V.59 was prepared by ITU-T Study Group 16 (2001-2004) and approved under the WTSA Resolution 1 procedure on 29 March 2002.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. 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 Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 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.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU had 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.

CONTENTS

ITU-T Recommendation V.59

Managed objects for diagnostic information of public switched telephone network connected V-series modem DCEs

Corrigendum 2

1) Clause 5 – Clarification to resolve conflicts between text of ITU-T Rec. V.59 and ASN.1

Text intended to clarify any conflict between the text of ITU-T Rec. V.59 and the ASN.1 definitions in Annex A was erroneously omitted. The intent has always been to follow the example of other Recommendations that use ASN.1.

The following sentence is to be added to the end of the final paragraph of clause 5 just prior to 5.1: "In the case of a conflict between the ASN.1 and the text, the ASN.1 governs."

ORIGINAL TEXT

The presentation of the managed objects within this Recommendation complies with the specification of ASN.1 (see ITU-T X.680). The ASN.1 as defined in Annex A should be used in conjunction with the object definitions to provide a complete overview of the diagnostics. The ASN.1 encoding in Annex A should employ the BASIC-ALIGNED version of Packed Encoding Rules (PER) according to ITU-T X.691.

END ORIGINAL

REPLACEMENT TEXT

The presentation of the managed objects within this Recommendation complies with the specification of ASN.1 (see ITU-T Rec. X.680). The ASN.1 as defined in Annex A should be used in conjunction with the object definitions to provide a complete overview of the diagnostics. The ASN.1 encoding in Annex A should employ the BASIC-ALIGNED version of Packed Encoding Rules (PER) according to ITU-T Rec. X.691. In the case of a conflict between the ASN.1 and the text, the ASN.1 governs.

END REPLACEMENT

2) Clause 6.13 – Conflict between text definition and ASN.1 of some diagnostic objects

The following list of diagnostic objects are defined as not mandatory in 6.13, but are not indicated as being optional in the ASN.1: txThroughput, rxThroughput, txErrors and rxErrors in the DTE DCE high-level object set.

Since these are all derived objects, they are to be defined as optional. Consequently, the ASN.1 in Annex A should be modified accordingly.

ORIGINAL TEXT

```
DTEDCE::= SEQUENCE OF SEQUENCE
{
     txFlowControl      V59String,
     rxFlowControl      V59String,
     protocol           V59String,
     txSpeed            INTEGER (50..1677215),
     rxSpeed            INTEGER (50..1677215),
     txThroughput       INTEGER (50..1677215),
     rxThroughput       INTEGER (50..1677215),
     txErrors           INTEGER (0..65535),
     rxErrors           INTEGER (0..65535),
     ...
}
```

END ORIGINAL

REPLACEMENT TEXT

```
DTEDCE::= SEQUENCE OF SEQUENCE
{
     txFlowControl      V59String,
     rxFlowControl      V59String,
     protocol           V59String,
     txSpeed            INTEGER (50..1677215),
     rxSpeed            INTEGER (50..1677215),
     txThroughput       INTEGER (50..1677215) OPTIONAL,
     rxThroughput       INTEGER (50..1677215) OPTIONAL,
     txErrors           INTEGER (0..65535) OPTIONAL,
     rxErrors           INTEGER (0..65535) OPTIONAL,
     ...
}
```

END REPLACEMENT

3) Table 17 – Clarification of the definition of txCarrier and rxCarrier low-level objects

Some definitions for the Call Termination object Result Codes between the text and ASN.1 do not correspond with each other. The definitions for both text and ASN.1 are shown in the following table.

Object Identifier	Text	ASN.1
CarrierLost	53	60
TrainingFailed	54	61
NoModulationinCommon	56	62
RetrainFailed	Missing	63

The correction is to align the text values with the ASN.1 values. Replace the second half of Table 17/V.59 with a new version as shown below.

REPLACEMENT TEXT

Table 17/V.59 – Call Termination Result Codes *(concluded)*

Mnemonic	Code	Description
noDialTone	47	Outgoing call failed due there being no dial tone detected
voiceDetected	48	Connection failed to voice being detected
reorderTone	49	Call failed due to the detection of the reorder tone
sitTone	50	Call failed due to the detection of the special information tone
engagedTone	51	Call progress failed due to the detection of the Engaged tone
longSpaceDisconnect	52	Modem disconnected using the long space criteria
carrierLost	60	Modem disconnected due to loss of carrier
trainingFailed	61	Modem disconnected due to failure in modem training
noModulationinCommon	62	Modems failed to connect due to there being no common modulation mode
retrainFailed	63	Connection failed due to number of retrain failures
retrainAttemptCountExceeded	64	Connection terminated due to retrain count exceeded
gstnCleardownReceived	65	Connection terminated with correct CLEARDOWN exchange
faxDetected	66	Connection terminated due to detecting facsimile terminal
protocolError	80	Connection terminated due to excess protocol errors
userDisconnect	90	Connection terminated due to user request
onHoldTimerExpired	100	Connection terminated because on-hold timer expired
onHoldRemoteDisc	101	Connection terminated because remote modem disconnected while on hold

END REPLACEMENT

4) Clause 6.8.2, 6.8.4 and 6.12: Typographical errors

The following typographical errors need to be corrected:

4.1) In 6.8.2, for the V.8 *bis* Diagnostics, in Table 11 the definitions for nAK3 and nAK4 are incorrectly indicated as all being nAK2. Table 11 is replaced as shown below.

REPLACEMENT TEXT

Table 11/V.59 – Definition for NAK types

Mnemonic	Code	Description
none	0	No NAK sequence transmitted or received
nAK1	1	NAK1 message transmitted or received
nAK2	2	NAK2 message transmitted or received
nAK3	3	NAK3 message transmitted or received
nAK4	4	NAK4 message transmitted or received

END REPLACEMENT

4.2) In 6.8.4, for the V.91 Diagnostic Objects summary, the Tag-IDs for the following objects are incorrect: txDataHistory, rxDataHistory, noiseEstimate and rxSignalQuality. The summary text is replaced as shown below.

ORIGINAL TEXT

V.91 Modulation Objects

Object Identifier	Tag-ID
modeV91	0A00
iNFO0_TX†	0A41
iNFO0_RX†	0A42
cP†	0A54
v91TxPowerLevel†	0A45, 0A46, 0A47: This object uses the TxPowerLevel definition.
controlChannel	0A01
transparentMode	0A02
txDataHistory†	0A4D
rxDataHistory†	0A4E
noiseEstimate†	0A50
rxSignalQuality†	0A51
rBSpattern†	0A55
digitalPadLoss†	0A56
localCodecLaw	0A04
remoteCodecLaw	0A05
frameSlipsDetected	0A03

END ORIGINAL

REPLACEMENT TEXT

V.91 Modulation Objects

Object Identifier	Tag-ID
modeV91	0A00
iNFO0_TX†	0A41
iNFO0_RX†	0A42
cP†	0A54
v91TxPowerLevel†	0A45, 0A46, 0A47: This object uses the TxPowerLevel definition.
controlChannel	0A01
transparentMode	0A02
txDataHistory†	0A4C
rxDataHistory†	0A4D
noiseEstimate†	0A4F
rxSignalQuality†	0A50
rBSpattern†	0A55
digitalPadLoss†	0A56
localCodecLaw	0A04
remoteCodecLaw	0A05
frameSlipsDetected	0A03

END REPLACEMENT

4.3) In 6.12, in the summary of the Error Control Objects, the object 'featureNegotiation' is incorrect. The correct object name is 'v42featureNegotiation'.

ORIGINAL TEXT

Error Control Objects

Object Identifier	Tag-ID
ModeV42	2F00
protocolNegotiation	2F01
featureNegotiation	2F02
txFrameSize	2F03
rxFrameSize	2F04
txWindow	2F05
rxWindow	2F06
linkTimeout	2F07
framesSentAck	2F08
framesRetransmitted	2F09
framesSentAck	2F0A
framesReceivedDiscard	2F0B
txErrors	2F0C
rxErrors	2F0D
txThroughput	2F0E
rxThroughput	2F0F

END ORIGINAL

REPLACEMENT TEXT

Error Control Objects

Object Identifier	Tag-ID
ModeV42	2F00
protocolNegotiation	2F01
v42featureNegotiation	2F02
txFrameSize	2F03
rxFrameSize	2F04
txWindow	2F05
rxWindow	2F06
linkTimeout	2F07
framesSentAck	2F08
framesRetransmitted	2F09
framesSentAck	2F0A
framesReceivedDiscard	2F0B
txErrors	2F0C
rxErrors	2F0D
txThroughput	2F0E
rxThroughput	2F0F

END REPLACEMENT

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
Series B	Means of expression: definitions, symbols, classification
Series C	General telecommunication statistics
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
Series H	Audiovisual and multimedia systems
Series I	Integrated services digital network
Series J	Cable networks and transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Construction, installation and protection of cables and other elements of outside plant
Series M	TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Telephone transmission quality, telephone installations, local line networks
Series Q	Switching and signalling
Series R	Telegraph transmission
Series S	Telegraph services terminal equipment
Series T	Terminals for telematic services
Series U	Telegraph switching
Series V	**Data communication over the telephone network**
Series X	Data networks and open system communications
Series Y	Global information infrastructure and Internet protocol aspects
Series Z	Languages and general software aspects for telecommunication systems

Geneva, 2002