

INTERNATIONAL TELECOMMUNICATION UNION



T.90 Amendment 3 (06/98)

SERIES T: TERMINALS FOR TELEMATIC SERVICES

Characteristics and protocols for terminals for telematic services in ISDN

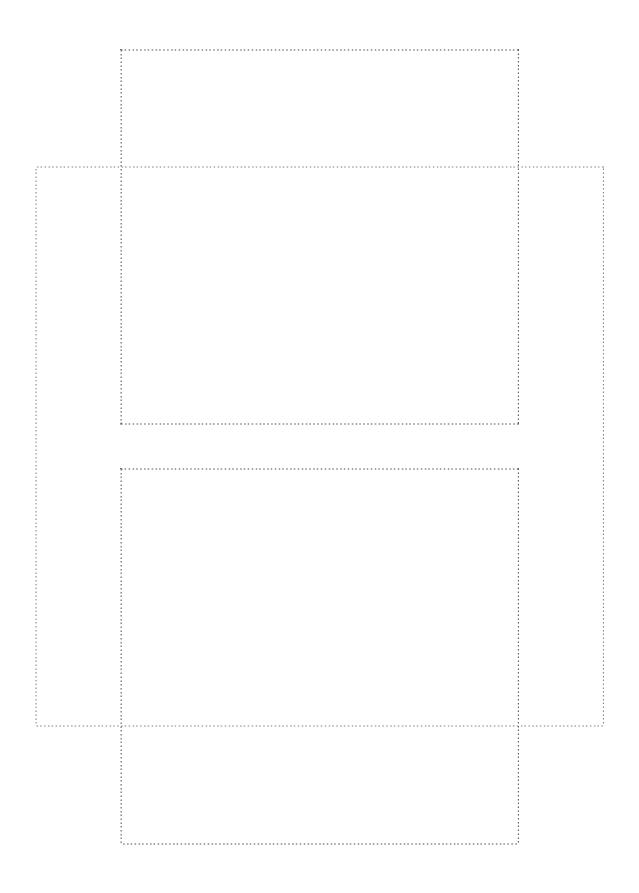
Amendment 3: Cause value for a G4 Fax fall-back

ITU-T Recommendation T.90 – Amendment 3

(Previously CCITT Recommendation)

ITU-T T-SERIES RECOMMENDATIONS TERMINALS FOR TELEMATIC SERVICES

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



ITU-T RECOMMENDATIONS SERIES

- Series A Organization of the work of the 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 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
- Series Z Programming languages



Printed in Switzerland Geneva, 1998

ITU-T RECOMMENDATION T.90

CHARACTERISTICS AND PROTOCOLS FOR TERMINALS FOR TELEMATIC SERVICES IN ISDN

AMENDMENT 3

Cause value for a G4 Fax fall-back

Summary

Amendment 3 describes cause value for a G4 fall-back to G3-mode.

Ten values are added in a table of fall-back codes to be added in I.1 iii)/T.90 and are used for automatic fall-back G4 to G3 mode.

Source

Amendment 3 to ITU-T Recommendation T.90, was prepared by ITU-T Study Group 8 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 18th of June 1998.

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.

INTELLECTUAL PROPERTY RIGHTS

The ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. The 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, 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.

© ITU 1998

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

Introduction and background

Most G4 facsimile provides fall-back function from G4-mode to G3-mode. When the call with G4-mode is disconnected with pre-defined cause values, of ISDN service, G4 facsimile tries to make the second call with G3-mode automatically. But, depending on the reason for failure and the specific interworking used by each Operator, it is possible to get different network reactions.

Consequently, different cause values can be received. So, it is needed to show the range of cause values for which G4 Fax should fall back.

This new range of cause values was proposed and it was decided to add them in Recommendation T.90 at the October 1997 meeting of Study Group 8.

CHARACTERISTICS AND PROTOCOLS FOR TERMINALS FOR TELEMATIC SERVICES IN ISDN

AMENDMENT 3

Cause value for a G4 Fax fall-back

(Geneva, 1998)

Subclause I.1

Replace the existing item iii) by:

iii) A terminal which supports both G2/G3 and G4 facsimile function should release the call:

- If interworking ISDN to PSTN has been indicated, or causes shown in Table I.1 for calls within the ISDN, when the call has been rejected, the terminal which supports both G2/G3 and G4 facsimile function may initiate a re-attempt in the G2/G3 mode. It should use the 3.1 kHz audio bearer capability and should provide the HLC information element with high layer characteristics identification "facsimile Group 2/3".
- If interworking ISDN, to switched 64 kbit/s non-ISDN network, has been indicated when the call has been rejected, actions according to item ii) may be appropriate.

NOTE - For evolution, further study is also required to eliminate the method which may result in unsuccessful calls caused by incompatibility.

Cause Code	Meaning
3	No route to destination
18	No user responding
57	Bearer capability not authorized
58	Bearer capability not presently available
63	Service or option not available, unspecified
65	Bearer capability not implemented
70	Only restricted digital information bearer capability is available
79	Service or option not implemented, unspecified
88	Incompatible destination
127	Interworking, unspecified

Table I.1 – Fall-back codes