INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.765.1 *bis*

Amendment 1

(12/2000)

SERIES Q: SWITCHING AND SIGNALLING

Specifications of Signalling System No. 7 – ISDN user part

Abstract test suite for the APM support of VPN applications

Amendment 1

ITU-T Recommendation Q.765.1 *bis* – Amendment 1

(Formerly CCITT Recommendation)

ITU-T Q-SERIES RECOMMENDATIONS

SWITCHING AND SIGNALLING

SIGNALLING IN THE INTERNATIONAL MANUAL SERVICE	Q.1–Q.3
INTERNATIONAL AUTOMATIC AND SEMI-AUTOMATIC WORKING	Q.4–Q.59
FUNCTIONS AND INFORMATION FLOWS FOR SERVICES IN THE ISDN	Q.60–Q.99
CLAUSES APPLICABLE TO ITU-T STANDARD SYSTEMS	Q.100–Q.119
SPECIFICATIONS OF SIGNALLING SYSTEMS No. 4 AND No. 5	Q.120–Q.249
SPECIFICATIONS OF SIGNALLING SYSTEM No. 6	Q.250–Q.309
SPECIFICATIONS OF SIGNALLING SYSTEM R1	Q.310–Q.399
SPECIFICATIONS OF SIGNALLING SYSTEM R2	Q.400–Q.499
DIGITAL EXCHANGES	Q.500–Q.599
INTERWORKING OF SIGNALLING SYSTEMS	Q.600–Q.699
SPECIFICATIONS OF SIGNALLING SYSTEM No. 7	Q.700–Q.799
General	Q.700
Message transfer part (MTP)	Q.701–Q.709
Signalling connection control part (SCCP)	Q.711–Q.719
Telephone user part (TUP)	Q.720–Q.729
ISDN supplementary services	Q.730–Q.739
Data user part	Q.740–Q.749
Signalling System No. 7 management	Q.750–Q.759
ISDN user part	**Q.760–Q.769**
Transaction capabilities application part	Q.770–Q.779
Test specification	Q.780–Q.799
Q3 INTERFACE	Q.800–Q.849
DIGITAL SUBSCRIBER SIGNALLING SYSTEM No. 1	Q.850–Q.999
PUBLIC LAND MOBILE NETWORK	Q.1000–Q.1099
INTERWORKING WITH SATELLITE MOBILE SYSTEMS	Q.1100–Q.1199
INTELLIGENT NETWORK	Q.1200–Q.1699
SIGNALLING REQUIREMENTS AND PROTOCOLS FOR IMT-2000	Q.1700–Q.1799
BROADBAND ISDN	Q.2000–Q.2999

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

ITU-T Recommendation Q.765.1 *bis*

Abstract test suite for the APM support of VPN applications

AMENDMENT 1

Summary

This amendment contains the **PIXIT** proforma (Annex B) and **PCTR** proforma (Annex C) to ITU-T Q.765.1 *bis*, Support of Virtual Private Network (VPN) applications with PSS1 information flows.

Source

Amendment 1 to ITU-T Recommendation Q.765.1 *bis* was prepared by ITU-T Study Group 11 (2001-2004) and approved under the WTSA Resolution 1 procedure on 6 December 2000.

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.

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As of the date of approval of this Recommendation, 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.

CONTENTS

ITU-T Recommendation Q.765.1 *bis*

Abstract test suite for the APM support of VPN applications

AMENDMENT 1

ANNEX B[1]

PIXIT proforma for support of virtual private network (VPN) applications

B.0 Scope

The PIXIT proforma enlists all the parameters and data that are needed to configure the ATS (and/or the IUT) before executing the testing campaign. It is to be filled out as part of the preparation for testing by, for example, the test client. The testing laboratory then inputs this data into the implementation of the ATS. More information about the purpose and intent of the PIXIT can be found in ITU-T X.294 | ISO/IEC 9646-5 [8].

B.1 Identification summary

PIXIT Number:	
Test Laboratory Name:	
Date of Issue:	
Issued to:	

B.2 Abstract test suite summary

Protocol Specification:	ITU-T Q.763 (1997): "Signalling System No. 7 – ISDN User Part formats and codes", ITU-T Q.765.1 (1998): "Signalling System No. 7 – Application Transport Mechanism: Support of VPN applications with PSS1 information flows"
ATS Specification:	ISUP97_vpn
Abstract Test Method:	Distributed multiparty test method

B.3 Test laboratory

Test Laboratory Identification:	
Test Laboratory Manager:	
Test Laboratory contact:	
Means of Testing:	
Instructions for completion:	

[1] Users of this Recommendation may freely reproduce the PIXIT proforma in this annex so that it can be used for its intended purpose, and may further publish the completed PIXIT.

B.4 Client identification

Client Identification:	
Client Test manager:	
Test Facilities required:	

B.5 System under test

Name:	
Version:	
SCS Number:	
Machine configuration:	
Operating system identification:	
IUT Identification:	
PICS Reference for IUT:	
Limitations of the SUT:	
Environmental conditions:	

B.6 Ancillary protocols

Protocol name	Version No.	PICS Ref.	PIXIT Ref.	PCTR Ref.
MTP				
Access protocol				

B.7 Protocol information for ISUP

B.7.1 Protocol identification ISUP

Name:	ISDN User Part (ISUP)'97
Version:	
PICS references:	

B.7.2 IUT information – PIXIT proforma tables

The PIXIT information requested in the following tables is needed to provide the necessary information for the execution of the testing campaign.

B.7.2.1 General configuration

Signalling point codes

Two signalling point codes – one incoming and one outgoing – have to be defined for the IUT in case the exchange is a gateway between two networks.

Circuit identification codes

From a formal point of view, in most test cases it is sufficient to use only one CIC per signalling link in order to execute the testing. From a practical point of view the tester could select any CIC within a range of CICs belonging to a route, when initiating a call setup. The tester can, however, use the first

CIC in the circuit group, without reducing the generality. The ATS requires the first CIC in the group as an answer to the PIXIT questions B.1/5 and B.1/6 in Table B.1.

Table B.1/Q.765.1 *bis* – General configuration

Item	Parameter	Parameter type	Explanation	Value
1	TSP_SPA_R	BIT_14	SS No. 7 Signalling point code of the SUT on the AB interface (right side)	
2	TSP_SPB	BIT_14	SS No. 7 Signalling point code of the tester on the AB interface	
3	TSP_NI_R	BIT_2	SS No. 7 Network indicator on the AB interface	
4	TSP_SLS_R	BIT_4	SS No. 7 Signalling link selection on the AB interface	
5	TSP_CIC_R	BIT_12	SS No. 7 Circuit identification code on the AB interface	
6	TSP_NB_CICS	BIT_12	Number of SS No. 7 Circuit identification codes on the AB and AC interfaces	
7	TSP_SPA_L	BIT_14	SS No. 7 Signalling point code of the SUT on the AC interface (left side)	
8	TSP_SPC	BIT_14	SS No. 7 Signalling point code of the tester on the AC interface	
9	TSP_NI_L	BIT_2	SS No. 7 Network indicator on the AC interface	
10	TSP_SLS_L	BIT_4	SS No. 7 Signalling link selection on the AC interface	
11	TSP_CIC_L	BIT_12	SS No. 7 Circuit identification code on the AC interface	
12	TSP_Link_R	BIT_12	CIC for the signalling link on the AB interface	
13	TSP_Link_L	BIT_12	CIC for the signalling link on the AC interface	

B.7.2.2 Parameter values

Called party numbers

The called party numbers have to be specified for each role which is to be tested.

Table B.2/Q.765.1 *bis* – Parameter values

Item	Parameter	Parameter type	Explanation	Value
1	TSP_Nb_SPA	HEX_N	Subscriber number for which the call will be routed to signalling point A (SP A)	
2	TSP_Nb_SPB	HEX_N	Subscriber number for which the call will be routed to signalling point B (SP B)	
3	TSP_Nb_SPC_ non_ISUP	HEX_N	Subscriber number for which the call will be routed to signalling point C (SP C) via non-ISUP (e.g. R2 or TUP)	
4	TSP_Nb_Operator	HEX_N	Subscriber number which has to be called to reach the operator located at the IUT (SP A)	

B.7.2.3 Timer values

Table B.3/Q.765.1 *bis* – Timer values

Item	Parameter	Parameter type	Type	Value
1	TSP_T7	INTEGER	Wait for some event timer (20-30 s)	
2	TSP_TearlyACM	INTEGER	Early ACM (5-20 s)	
3	T_A_STEP	INTEGER	Test step execution control timer	
4	T_B_STEP	INTEGER	Test step execution control timer	
5	T_WAIT	INTEGER	Local timer	

ANNEX C[2]

Protocol conformance test report (PCTR) proforma for support of virtual private network (VPN) applications

C.0 Scope

The testing laboratory uses the Protocol Conformance Test Report to follow up the execution of the testing campaign. The PCTR Proforma is based on ITU-T X.294 | ISO/IEC 9646-5 [8]. Any additional information needed can be found in that Recommendation | International Standard.

C.1 Identification summary

C.1.1 Protocol conformance test report

PCTR Number:	
PCTR Date:	
Test Laboratory Identification:	
Test Laboratory Manager:	
Signature:	

C.1.2 IUT identification

Name:	
Version:	
Protocol specification:	
PICS:	
Previous PCTR if any:	

[2] Users of this Recommendation may freely reproduce the PCTR proforma in this annex so that it can be used for its intended purpose, and may further publish the completed PCTR.

C.1.3 Testing environment

PIXIT Number:	
ATS Specification:	
Abstract Test Method:	Distributed multiparty test method
Means of Testing identification:	
Date of testing:	
Conformance Log reference(s):	
Retention Date for Log reference(s):	

C.1.4 Limits and reservation

Additional information relevant to the technical contents or further use of the test report, or the rights and obligations of the test laboratory and the client, may be given here. Such information may include restriction on the publication of the report.

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C.1.5 Comments

Additional comments may be given by either the client or the test laboratory on any of the contents of the PCTR, for example, to note disagreement between the two parties.

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C.2 IUT conformance status

This IUT has/has not been shown by conformance assessment to be non-conforming to the referenced protocol specification.

Strike the appropriate words in this sentence. If the PICS for this IUT is consistent with the static conformance requirements (as specified in clause C.3 of this report) and there are no "FAIL" verdicts to be recorded (in clause C.6) strike the word "has/". Otherwise strike the words "/has not".

C.3 Static conformance summary

The PICS for this IUT is or is not consistent with the static conformance requirements in the specified protocol. Strike the appropriate words in this sentence.

C.4 Dynamic conformance summary

The test campaign did/did not reveal errors in the IUT.

Strike the appropriate words in this sentence. If there are no "FAIL" verdicts to be recorded (in clause C.6 of this report) strike the word "did/". Otherwise strike the words "/did not".

Summary of the results of groups of test:

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C.5 Static conformance review report

If clause C.3 indicates non-conformance, this clause itemizes the mismatches between the PICS and the static conformance requirements of the specified protocol specification.

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C.6 Test campaign report

Table C.1/Q.765.1 *bis* – TC group: PINP
Test campaign report

ATS reference	Selected [Y/N]	Run [Y/N]	Verdict [P/F/I]	Observations (Reference to any observations made in clause C.7)
VPN_V_1_1_1				
VPN_V_1_1_2				
VPN_V_1_1_3				

Table C.2/Q.765.1 *bis* – TC group: PANP
Test campaign report

ATS reference	Selected [Y/N]	Run [Y/N]	Verdict [P/F/I]	Observations (Reference to any observations made in clause C.7)
VPN_V_1_2_1				
VPN_V_1_2_2				
VPN_V_1_2_3				

Table C.3/Q.765.1 *bis* – TC group: CNID
Test campaign report

ATS reference	Selected [Y/N]	Run [Y/N]	Verdict [P/F/I]	Observations (Reference to any observations made in clause C.7)
VPN_V_2_1				
VPN_V_2_2				

Table C.4/Q.765.1 *bis* – TC group: ATII
Test campaign report

ATS reference	Selected [Y/N]	Run [Y/N]	Verdict [P/F/I]	Observations (Reference to any observations made in clause C.7)
VPN_V_3_1				
VPN_V_3_2				

Table C.5/Q.765.1 *bis* – TC group: OVER
Test campaign report

ATS reference	Selected [Y/N]	Run [Y/N]	Verdict [P/F/I]	Observations (Reference to any observations made in clause C.7)
VPN_V_4_1				
VPN_V_4_2				

Table C.6/Q.765.1 *bis* – TC group: VPN_SUP
Test campaign report

ATS reference	Selected [Y/N]	Run [Y/N]	Verdict [P/F/I]	Observations (Reference to any observations made in clause C.7)
VPN_V_5_1				
VPN_V_5_2				
VPN_V_5_3				
VPN_V_5_4				
VPN_V_5_5				
VPN_V_5_6				
VPN_V_5_7				
VPN_V_5_8				

Table C.7/Q.765.1 *bis* – TC group: NOT_SUP
Test campaign report

ATS reference	Selected [Y/N]	Run [Y/N]	Verdict [P/F/I]	Observations (Reference to any observations made in clause C.7)
VPN_V_6_1				
VPN_V_6_2				
VPN_V_6_3				
VPN_V_6_4				
VPN_V_6_5				
VPN_V_6_6				

Table C.8/Q.765.1 *bis* – TC group: GPINX
Test campaign report

ATS reference	Selected [Y/N]	Run [Y/N]	Verdict [P/F/I]	Observations (Reference to any observations made in clause C.7)
VPN_V_7_1				
VPN_V_7_2				
VPN_V_7_3				
VPN_V_7_4				
VPN_V_7_5				

Table C.9/Q.765.1 *bis* – TC group: ERROR
Test campaign report

ATS reference	Selected [Y/N]	Run [Y/N]	Verdict [P/F/I]	Observations (Reference to any observations made in clause C.7)
VPN_V_8_1				
VPN_V_8_2				
VPN_V_8_3				
VPN_V_8_4				

C.7 Observations

Additional information relevant to the technical content of the PCTR is given here.

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