INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.1600 *bis*
Amendment 1
(12/2000)

SERIES Q: SWITCHING AND SIGNALLING

Intelligent Network

Signalling system No. 7 – Interaction between ISDN user part ISUP'97 and INAP CS-1: Test suite structure and test purposes (TSS & TP)

Amendment 1

ITU-T Recommendation Q.1600 *bis* – Amendment 1

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ITU-T Recommendation Q.1600 *bis*

**Signalling system No. 7 – Interaction between ISDN user part ISUP'97 and INAP CS-1:
Test suite structure and test purposes (TSS & TP)**

AMENDMENT 1

Summary

This amendment contains the **PIXIT** proforma (Annex B) and **PCTR** proforma (Annex C) to ITU-T Q.1600 *bis*, Signalling system No. 7 interaction between ISDN user part (ISUP'97) and INAP CS-1 Test suite structure and test purposes.

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.

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Signalling system No. 7 – Interaction between ISDN user part ISUP'97 and INAP CS-1:
Test suite structure and test purposes (TSS & TP)

AMENDMENT 1

ANNEX B[1]

PIXIT proforma for ISDN User Part (ISUP)'97 and INAP CS-1

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 e.g. 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 [7].

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.1214 "Distributed functional plane for intelligent Network CS-1", ITU-T Q.1218 "Interface Recommendation for intelligent network CS-1"
ATS Specification:	N-ISDN/INAP CS-1 interaction
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:	

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[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   SUT

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				
TCAP				

B.7   Protocol information for ISUP/INAP

B.7.1   Protocol identification ISUP

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

B.7.2   Protocol identification INAP

Name:	INAP CS-1
Version:	
PICS references:	

B.7.3   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.7.3.1   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.1600 *bis* – General configuration

Item	Parameter	Parameter type	Explanation	Value
1	TSP_NI_C	BIT_2	SS No. 7 Network indicator on the AC interface	
2	TSP_NI_D	BIT_2	SS No. 7 Network indicator on the AD interface	
3	TSP_SLS_C	BIT_4	SS No. 7 Signalling link selection on the AC interface	
4	TSP_SLS_D	BIT_4	SS No. 7 Signalling link selection on the AD interface	
5	TSP_CIC_C_PTC	BIT_12	SS No. 7 Circuit identification code on the AC interface	
6	TSP_CIC_D_PTC	BIT_12	SS No. 7 Circuit identification code on the AD interface	
7	TSP_SPC	BIT_14	SS No. 7 Signalling point code of the tester on the AC interface (C_PTC)	
8	TSP_SPD	BIT_14	SS No. 7 Signalling point code of the tester on the AD interface (D_PTC)	
9	TSP_SPB	BIT_14	SS No. 7 Signalling point code of the tester on the AB interface (B_PTC)	
10	TSP_SPA_B	BIT_14	SS No. 7 Signalling point code of the SUT on the AD interface (MTC-D_PTC)	
11	TSP_SPA_C	BIT_14	SS No. 7 Signalling point code of the SUT on the AC interface (MTC-C_PTC)	
12	TSP_SPA_D	BIT_14	SS No. 7 Signalling point code of the SUT on the AD interface (MTC-D_PTC)	

B.7.3.2   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.1600 *bis* – Parameter values

Item	Parameter	Parameter type	Explanation	Value
1	TSP_Nb_SPD_AddressSignals	HEX_N	Subscriber number for which the call will be routed to signalling point D (SP D)	
2	TSP_Nb_SPC_AddressSignals	HEX_N	Subscriber number for which the call will be routed to signalling point C (SP C)	
3	TSP_Nb_SPB_AddressSignals	HEX_N	First subscriber number for which the call will be routed to the virtual signalling point D, e.g. IN trigger number in SP_A	
4	TSP_IN_Nb_A1_AddressSignals	HEX_N	First subscriber number for which the call will be routed to the virtual signalling point D, e.g. IN trigger number in SP_A	
5	TSP_IN_Nb_ASSISTING_SSP_AddressSignals	HEX_N	Number of assisting SSP	
6	TSP_Dest_ISDN_access	BIT_1	Use of ISDN access at destination ('1' b) or non-ISDN access ('0' b)	
7	TSP_Orig_ISDN_access	BIT_1	Use of ISDN access at origination ('1' b) or non-ISDN access ('0' b)	
8	TSP_LocNb	HEX_N	Location number to which the call will be routed	
9	TSP_RgNb	HEX_N	Redirecting number for which the call was routed before the destination was reached	
10	TSP_orig_CdNb	HEX_N	Original Called number to which the call was routed originally	
11	TSP_NatAdrI	BOOLEAN	Use of international (TRUE) or national (FALSE) numbers	

B.7.3.3   Timer values

Table B.3/Q.1600 *bis* – Timer values

Item	Parameter	Parameter type	Type	Value
1	TSP_TWAIT	INTEGER	Wait for an event	
2	TSP_TGUARD	INTEGER	Guard timer for the test case	
3	TSP_T8	INTEGER	10..15 s	
4	TSP_T34	INTEGER	2..4 s	
5	TSP_TnoReply	INTEGER	SCF controlled (by the MTC)	
6	TSP_Tsus	INTEGER	T6 (Q.764) or 4..10 s or 0 s (default) respectively	
7	TSP_tol	INTEGER	Tolerance for ISUP timers in per cent	
8	TSP_TwaitFor Termination	INTEGER	Time tolerance for termination	
9	TSP_Tcall_Duration	INTEGER	Duration of a call	
10	TSP_TCont_Check	INTEGER	Time between an IAM with Continuity Check required on this circuit and sending of a COT	

Table B.3/Q.1600 *bis* – Timer values

Item	Parameter	Parameter type	Type	Value
11	TSP_TSGM	INTEGER	Time between an IAM and sending of a SGM	
12	TSP_TRing_Time	INTEGER	Time until ANM is sent after ACM	

B.7.3.4 INAP related information

Table B.4/Q.1600 *bis* – Timer values INAP related information

Item	Parameter	Parameter type	Explanation	Value
1	TSP_ServiceKey	INTEGER	Service Key of an Initial DP	
2	TSP_CutPaste_val	INTEGER	TSP contains the value of the CutandPaste I.E. which is used in the CONNECT operation	
3	TSP_DestRoutAddr	HEX_N	Destination Routing Address	

B.7.3.5 PICS related Test Suite Parameter

Table B.5/Q.1600 *bis* – Timer values PICS related information

Item	Parameter	Parameter type	Explanation	Value
1	SII	BOOLEAN	This variable indicates if the IUT has implemented the service interaction indicators. If they are implemented, the TSO_comp_SII shall be implemented in the appropriated way	
2	SII_no_eACM	BOOLEAN	SII implemented and the IUT sends no early ACM	
3	ColInf_eRBCSM	BOOLEAN	Send an EventReportBCSM op. to the MTC (SCP) after the specified number of digits were collected by the exchange, if a ReqRepBCSMEvent op. accompanied by a CollectInf. op. to arm DP2 was sent by the MTC	
4	ColInf_CodInf	BOOLEAN	Send a CollectedInformation op. to the MTC (SCP) after the specified number of digits were collected by the exchange, if a ReqRepBCSMEvent op. accompanied by a CollectInf. op. to arm DP2 was sent by the MTC	

**Protocol Conformance Test Report (PCTR) proforma for
ISDN User Part (ISUP)'97/INAP CS-1 interaction**

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 [7]. 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:	

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):	

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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.1.4   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.1600 *bis* – TC group: IDP
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)
ISN_V_1_1_1				
ISN_V_1_1_2				
ISN_V_1_1_3				
ISN_V_1_1_4				
ISN_V_1_1_5				
ISN_V_1_1_6				
ISN_V_1_1_7				
ISN_V_1_1_8				
ISN_V_1_1_9				
ISN_V_1_1_10				
ISN_V_1_1_11				
ISN_V_1_1_12				
ISN_V_1_1_13				
ISN_V_1_1_14				

Table C.2/Q.1600 *bis* – TC group: CON
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)
ISN_V_1_2_1				
ISN_V_1_2_2				
ISN_V_1_2_3				
ISN_V_1_2_4				
ISN_V_1_2_5				
ISN_V_1_2_6				
ISN_V_1_2_7				
ISN_V_1_2_8				
ISN_V_1_2_9				
ISN_V_1_2_10				
ISN_V_1_2_11				
ISN_V_1_2_12_a				
ISN_V_1_2_12_b				
ISN_V_1_2_13_a				

Table C.2/Q.1600 *bis* – TC group: CON
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)
ISN_V_1_2_13_b				
ISN_V_1_2_14_a				
ISN_V_1_2_14_b				
ISN_V_1_2_15_a				
ISN_V_1_2_15_b				
ISN_V_1_2_16				
ISN_V_1_2_17				
ISN_V_1_2_18				
ISN_V_1_2_19				
ISN_V_1_2_20				

Table C.3/Q.1600 *bis* – TC group: OIN
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)
ISN_V_1_3_1				
ISN_V_1_3_2				
ISN_V_1_3_3				
ISN_V_1_3_4				
ISN_V_1_3_5				
ISN_V_1_3_6				

Table C.4/Q.1600 *bis* – TC group: INCD
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)
ISN_V_2_1				
ISN_V_2_2				

Table C.5/Q.1600 *bis* – TC group: DPP
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)
ISN_V_3_1				
ISN_V_3_2				
ISN_V_3_3				
ISN_V_3_4				
ISN_V_3_5				
ISN_V_3_6				
ISN_V_3_7				
ISN_V_3_8				
ISN_V_3_9				
ISN_V_3_10				

Table C.6/Q.1600 *bis* – TC group: SCS
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)
ISN_V_4_1_1				
ISN_V_4_1_2_a				
ISN_V_4_1_2_b				
ISN_V_4_1_3_a				
ISN_V_4_1_3_b				
ISN_V_4_1_4_a				
ISN_V_4_1_4_b				
ISN_V_4_1_5_a				
ISN_V_4_1_5_b				

Table C.7/Q.1600 *bis* – TC group: ACON
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)
ISN_V_4_2_1				
ISN_V_4_2_2				
ISN_V_4_2_3_a				
ISN_V_4_2_3_b				
ISN_V_4_2_3_c				

Table C.8/Q.1600 *bis* – TC group: IPC
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)
ISN_V_5_1_1				
ISN_V_5_1_2				
ISN_V_5_1_3				
ISN_V_5_1_4				
ISN_V_5_1_5				
ISN_V_5_1_6				
ISN_V_5_1_7				
ISN_V_5_1_8				
ISN_V_5_1_9				
ISN_V_5_1_10				
ISN_V_5_1_11				
ISN_V_5_1_12				
ISN_V_5_1_13				
ISN_V_5_1_14				
ISN_V_5_1_15				
ISN_V_5_1_16				
ISN_V_5_1_17				
ISN_V_5_1_18				
ISN_V_5_1_19				
ISN_V_5_1_20				
ISN_V_5_1_21				
ISN_V_5_1_22				

Table C.9/Q.1600 *bis* – TC group: AM_ISSP
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)
ISN_V_5_2_1				
ISN_V_5_2_2				
ISN_V_5_2_3				
ISN_V_5_2_4				
ISN_V_5_2_5_a				
ISN_V_5_2_5_b				
ISN_V_5_2_5_c				
ISN_V_5_2_6				

Table C.9/Q.1600 *bis* – TC group: AM_ISSP
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)
ISN_V_5_2_7				
ISN_V_5_2_8				
ISN_V_5_2_9				
ISN_V_5_2_10				
ISN_V_5_2_11				
ISN_V_5_2_12				
ISN_V_5_2_13_a				
ISN_V_5_2_13_b				
ISN_V_5_2_13_c				
ISN_V_5_2_13_d				
ISN_V_5_2_14				
ISN_V_5_2_15				

Table C.10/Q.1600 *bis* – TC group: HOM_ISSP
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)
ISN_V_5_3_1				
ISN_V_5_3_2				

Table C.11/Q.1600 *bis* – TC group: HOM_ASSP
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)
ISN_V_5_4_1				
ISN_V_5_4_2				
ISN_V_5_4_3				

Table C.12/Q.1600 *bis* – TC group: CG
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)
ISN_V_6_1				
ISN_V_6_2				
ISN_V_6_3				
ISN_V_6_4				
ISN_V_6_5				
ISN_V_6_6				
ISN_V_6_7				

Table C.13/Q.1600 *bis* – TC group: SF
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)
ISN_V_7_1				
ISN_V_7_2				
ISN_V_7_3				
ISN_V_7_4				
ISN_V_7_5				
ISN_V_7_6				

Table C.14/Q.1600 *bis* – TC group: SCS
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)
ISN_V_8_1_1				
ISN_V_8_1_2				

C.7 Observations

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

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