Test Report No.: 05/009-2

System under Test
Stollmann E+V GmbH

E4S-Box
HW-ID: 52263V01

Test Specification: TBR3 / TBR3 A1

1.1 IUT Information

TR Issued By:	Stollmann E+V GmbH Mendelssohnstr. 15 22761 Hamburg
DUT:	52263
REV:	V01
Board No.:	4
FW-Vers.:	E4S V2.000
Remarks:	Conformance Test
Date:	15.08.2005
Author:	J. Jensen

1.2 Observations and HW Alterations:

1) R80 = R84 = R88 = R92 = 42R2
2) N27 = N28 = N29 = N30 = Vogt 503 16 016 00
3) R44 = R43 = R49 = R48 = R59 = R58 = R54 = R53 = 19R6
4) R203 = 10k instead of 15k
5)

1.3 Observations Operation:

1.4 Application Info

Extended CAPIDEMO used

Test System Identification

Test System	Manufacturer	Serial Number
K1403	Tektronix	BF-9012-123
Basic Access Reference Cord	CSELT	N/A
IDACOM PT500	HP	CA37040490

Contents

2 Test Result Summary

After HW and FW alterations the DUT did not show non-conform behavior in respect to the requirements of TBR3/A1.

3 Layer 1 Test Cases

3.1 Layer 1 Electrical Characteristics Test Cases Results

Test cases are referenced to Annex D of ETS 300 012

D.4 Electrical Characteristics NPM 42V

D.4.1	Frame rate when transmitting an INFO1		Polarity OK, 19.9ppm
D.4.2	TE jitter characteristics, Bus I,	Pat. 1	+3.2%
D.4.2	TE jitter characteristics, Bus I,	Pat. AA	+4.0%
D.4.2	TE jitter characteristics, Bus I,	Pat. 0	+3.6%
D.4.2	TE jitter characteristics, Bus I,	Pat. 2^{19}-1	+4.4%
D.4.2	TE jitter characteristics, Bus II,	Pat. 1	+3.2%
D.4.2	TE jitter characteristics, Bus II,	Pat. AA	+3.6%
D.4.2	TE jitter characteristics, Bus II,	Pat. 0	+3.6%
D.4.2	TE jitter characteristics, Bus II,	Pat. 2^{19}-1	+3.6%
D.4.2	TE jitter characteristics, Bus IIIa,	Pat. 1	+3.2%
D.4.2	TE jitter characteristics, Bus IIIa,	Pat. AA	+3.2%
D.4.2	TE jitter characteristics, Bus IIIa,	Pat. 0	+3.2%
D.4.2	TE jitter characteristics, Bus IIIa,	Pat. 2^{19}-1	+3.2%
D.4.2	TE jitter characteristics, Bus IV,	Pat. 1	+3.2%
D.4.2	TE jitter characteristics, Bus IV,	Pat. AA	+3.2%
D.4.2	TE jitter characteristics, Bus IV,	Pat. 0	+3.2%
D.4.2	TE jitter characteristics, Bus IV,	Pat. 2^{19}-1	+3.2%
D.4.2.2	TE output phase deviation, Bus I, 0.5UI/5Hz,	Pat. 1	+ 0.25%, + 4.65%
D.4.2.2	TE output phase deviation, Bus I, 0.125UI/20Hz,	Pat. 1	+ 0.85%, + 4.05%
D.4.2.2	TE output phase deviation, Bus I, 0.05UI/50Hz,	Pat. 1	+ 0.25%, + 4.65%
D.4.2.2	TE output phase deviation, Bus I, 0.05UI/2kHz,	Pat. 1	- 1.15%, + 4.05%
D.4.2.2	TE output phase deviation, Bus I, 0.5UI/5Hz,	Pat. AA	+ 0.65%, + 3.85%
D.4.2.2	TE output phase deviation, Bus I, 0.125UI/20Hz,	Pat. AA	+ 0.45%, + 3.65%
D.4.2.2	TE output phase deviation, Bus I, 0.05UI/50Hz,	Pat. AA	+ 0.65%, + 4.25%
D.4.2.2	TE output phase deviation, Bus I, 0.05UI/2kHz,	Pat. AA	- 1.55%, + 4.05%
D.4.2.2	TE output phase deviation, Bus I, 0.5UI/5Hz,	Pat. 0	+ 0.45%, + 4.45%
D.4.2.2	TE output phase deviation, Bus I, 0.125UI/20Hz,	Pat. 0	+ 1.25%, + 4.45%
D.4.2.2	TE output phase deviation, Bus I, 0.05UI/50Hz,	Pat. 0	+ 1.45%, + 4.65%
D.4.2.2	TE output phase deviation, Bus I, 0.05UI/2kHz,	Pat. 0	- 0.74%, + 4.45%
D.4.2.2	TE output phase deviation, Bus I, 0.5UI/5Hz,	Pat. 2^{19}-1	+ 0.65%, + 5.05%
D.4.2.2	TE output phase deviation, Bus I, 0.125UI/20Hz,	Pat. 2^{19}-1	+ 0.25%, + 4.65%
D.4.2.2	TE output phase deviation, Bus I, 0.05UI/50Hz,	Pat. 2^{19}-1	+ 0.25%, + 5.05%
D.4.2.2	TE output phase deviation, Bus I, 0.05UI/2kHz,	Pat. 2^{19}-1	- 1.15%, + 4.85%

D.4.3 TE transmitter output impedance

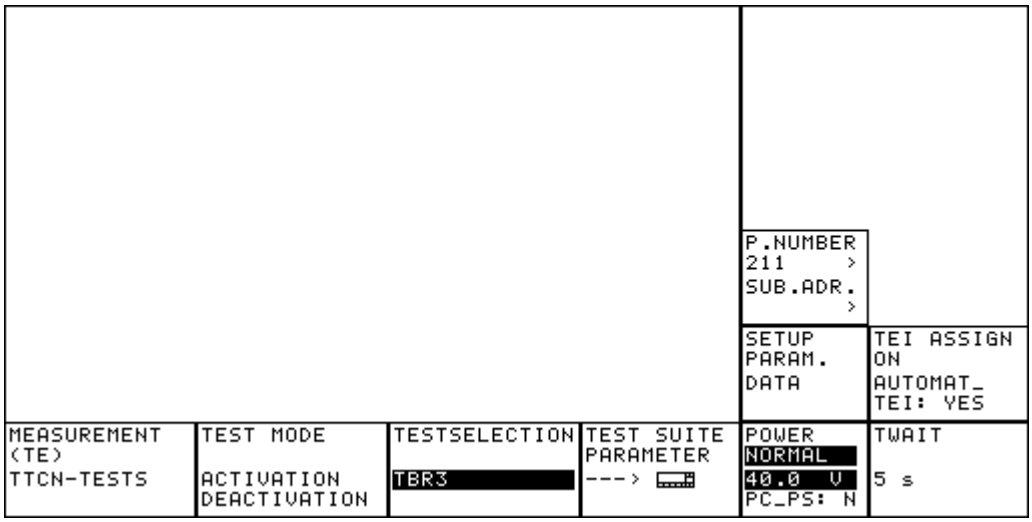
D.4.3.1	TE transmitter output impedance F3	299R1 @ 1MHz
D.4.3.2	TE transmitter output impedance active (bin. ´0´), 50 ?	29R4
D.4.3.2	TE transmitter output impedance active (bin. ´0´), 400 ?	32R9
D.4.3.3	TE transmitter output peak current F3	287µA
D.4.3.4	TE transmitter output impedance F1	296R9
D.4.3.5	TE transmitter output peak current F1	333µA
D.4.4	Pulse shape and amplitude, pos.	728mV at middle of pulse
D.4.4	Pulse shape and amplitude, neg.	719mV at middle of pulse
D.4.5.1	Pulse amplitude	-4.47%, -4.23%
D.4.5.2	Pulse unbalance of an isolated couple of pulses	-0.96%
D.4.6.1	Voltage on other test loads 400 ? , pos.	OK
D.4.6.1	Voltage on other test loads 400 ? , neg.	OK
D.4.6.1	Voltage on other test loads 5.6 ? , pos.	145mV max
D.4.6.1	Voltage on other test loads 5.6 ? , neg.	146mV max
D.4.7	Longitudinal conversion loss of transmitter output F1	f(75dB)=177kHz
D.4.7	Longitudinal conversion loss of transmitter output F3	f(75dB)=177kHz

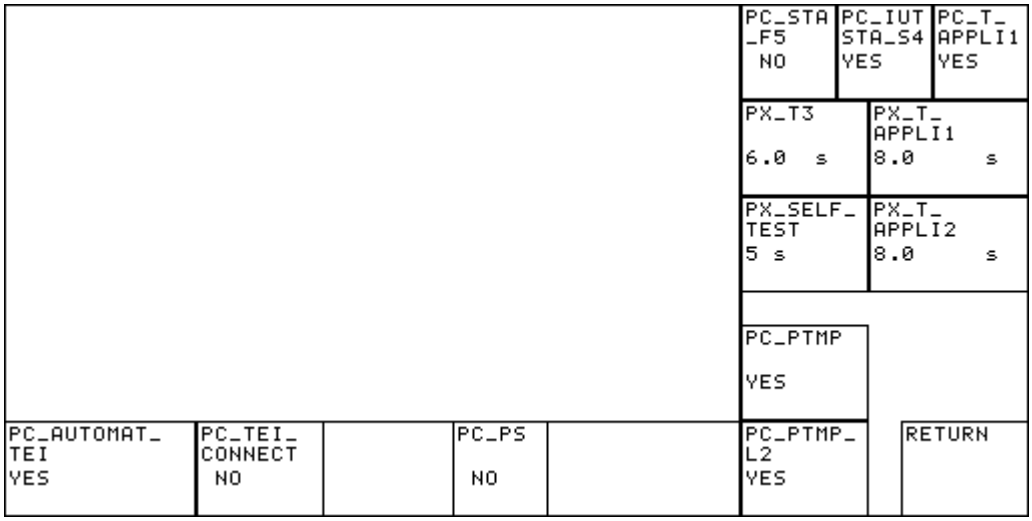
D.4.8 Receiver input characteristics

D.4.8.1.1	TE receiver input impedance F3	346R3 @ 1MHz
D.4.8.1.2	TE receiver input peak current F3	307µA
D.4.8.1.3	TE receiver input impedance F1	354R4
D.4.8.1.4	TE receiver input peak current F1	349µA
D.4.8.2	TE receiver sensitivity, Bus I, 0,5UI/5Hz, no noise	> 6.5dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0.125UI/20Hz, no noise	> 6.5dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0,05UI/50Hz, no noise	> 6.5dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0,05UI/2kHz, no noise	> 6.5dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0,5UI/5Hz, 200kHz/100mV	> 4.0dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0,125UI/20Hz, 200kHz/100mV	> 4.0dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0,05UI/50Hz, 200kHz/100mV	> 4.0dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0,05UI/2kHz, 200kHz/100mV	> 4.0dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0,5UI/5Hz, 2MHz/100mV	> 6.5dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0,125UI/20Hz, 2MHz/100mV	> 6.5dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0,05UI/50Hz, 2MHz/100mV	> 6.5dB margin
D.4.8.2	TE receiver sensitivity, Bus I, 0,05UI/2kHz, 2MHz/100mV	> 6.5dB margin
D.4.8.2	TE receiver sensitivity, Bus IV, +1.5dB, 0,5UI/5Hz	+ 3dbm OK
D.4.8.2	TE receiver sensitivity, Bus IV, +1.5dB, 0,125UI/20Hz	+ 3dbm OK
D.4.8.2	TE receiver sensitivity, Bus IV, +1.5dB, 0,05UI/50Hz	+ 3dbm OK
D.4.8.2	TE receiver sensitivity, Bus IV, +1.5dB, 0,05UI/2kHz	+ 3dbm OK
D.4.8.3	Unbalance about earth of receiver input F3	f(75dB) = 165kHz
D.4.8.3	Unbalance about earth of receiver input F1	f(75dB) = 165kHz

3.2 Layer 1 Functional Test Cases

3.2.1 Layer 1 Functional Test Cases K1403 Settings





3.2.2 Layer 1 Functional Test Case Selection

Abbreviation	Corresponding conditioning parameter
PTMP	The TE supports operation in Point-to-multipoint configuration
AUTO-TEI	The TE is of the Automatic TEI assignment category
PS	The TE is powered from PS1
DES	The TE is designated for operation in restricted mode (for TE powered from PS1)
LP	The TE is locally powered
DET	The TE is equipped with a connection detector (for a locally powered TE)
EARTH	The TE has a connection to earth
INFO2/4-DET	The TE is capable of transmitting INFO 3 within 5 ms of receipt of INFO 2 or INFO 4 in state F4
T3/T200	The value of T3 (including tolerance of 5%) is larger than 4*T200
LowPr-PASS	The outcome of test DCNormtoLowPLCL1 is PASS
F5-I0T3	The outcome of test CPF5PHDI_I0T3 is PASS

The column „TA“ indicates which test ITAAB advises to use for Basic Access Layer 1 for Type Approval Testing.
„Y“ in this column indicates that the test shall be selected according to the conditions described in the column condition
“.„-„ in this column indicates that it is unnecessary to perform the test, because no additional information can be obtained by performing the test.

3.2.3 Layer 1 Functional Test Cases Results

3.2.3.1 Layer 1 Functional Test Cases "BINARY ORGANIZATION OF THE FRAME"

Description	Annex D ETS 300 012	Reference to TBR 3/A1 TTCN test case	Reference to TBR 3/A1	CONDITION	TA	RES
Binary organization of INFO3 frames, B1 & B2 channels filled with 2^9 - 1 PRBS	D.2.1.1	No TTCN test case	9.3.1.1 9.3.1.3 9.3.2		Y	P
Binary organization of INFO1 frames.	D.2.1.2	No TTCN test case	9.2.1		Y	P

3.2.3.2 Layer 1 Functional Test Cases "D-CHANNEL ACCESS CONTROL PROCEDURE"

Description	Annex D ETS 300 012	Reference to TBR 3/A1 TTCN test case	Reference to TBR 3/A1	CONDITION	TA	RES
Interframe (layer 2) time fill of the D channel from the TE	D.3.1.1	DCBinaryOneCL1	9.4.1.1	PTMP	Y	**P**
D-echo channel response: Mismatch at the normal priority level. Immediate stop of transmission by the TE when detecting an error on the D channel (sending 0 and echoed 1)	D.3.1.2.a	DCNormalPL0CL1	9.4.1.3	PTMP	Y	**P**
D-echo channel response: Mismatch at the normal priority level. Immediate stop of transmission by the TE when detecting an error on the D channel (sending 1 and echoed 0)	D.3.1.2.a	DCNormalPL1CL1	9.4.1.3	PTMP	Y	**P**
D-echo channel response: After an error has occurred in the D-echo channel, wait for 8 continuous D-echo channel bits set to binary one before sending a subsequent layer 2 frame	D.3.1.2.b	DCPriorityClass1	9.4.1.2	PTMP	Y	**P**
D-echo channel response: After a successful transmission of a layer 2 frame, wait for 9 continuous D-echo channel bits set to binary one before sending a subsequent layer 2 frame	D.3.1.2.c	DCNormaltoLowPLCL1	9.4.1.2	PTMP	Y	**P**
D-echo channel response: If no layer 2 frame is available wait for 9 continuous D-echo channel bits set to binary one before changing back to the normal priority level	D.3.1.2.c	DCLowtoNormalPLCL1	9.4.1.2	PTMP AND LowPr-PASS	Y	**P**

3.2.3.3 Layer 1 Functional Test Cases "ACTIVATION/DEACTIVATION PROCEDURE"

Description	Annex D ETS 300 012	Reference to TBR 3/A1 TTCN test case	Reference to TBR 3/A1	CONDITION	T A	R E S
Act.-Deactivation procedure when power is applied in state F1.	D.3.2.1 (1a)	F1/AD1aF1_PS&LP-on	9.4.2.3.1	PS OR (LP AND NOT DET)	Y	P
Act.-Deactivation procedure when local power is applied in state F1.0.	D.3.2.1 (1b)	F10/AD1bF10_LP-on	9.4.2.3.1	LP AND DET	Y	X
Act.-Deactivation procedure for loss of local power in state F1.1.	D.3.2.1 (1c)	F11/AD1cF11_LP-off	9.4.2.3.1	LP AND DET	Y	X
Act.-Deactivation procedure when power S is applied in state F1.1	D.3.2.1 (1d)	F11/AD1dF11_PS-on	9.4.2.3.1	LP AND DET	Y	X
Act.-Deactivation when T3 expires in state F1.1.	D.3.2.1 (2)	F1/AD2F11_CHK_T3	9.4.2.3.1	LP AND DET	Y	X
Act.-Deactivation for loss of power S in state F2.	D.3.2.1 (3a)	F2/AD3aF2_PS-off	9.4.2.3.1	PS OR (LP AND DET)	Y	X
Act.-Deactivation for loss of local power in state F2.	D.3.2.1 (3b)	F2/AD3bF2_LP-off	9.4.2.3.1	LP	Y	P
Act.-Deactivation when receiving INFO0 in state F2.	D.3.2.1 (4)	F2/AD4F2_RX-I0	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO2 in state F2.	D.3.2.1 (5)	F2/AD5F2_RX-I2	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO4 in state F2.	D.3.2.1 (6)	F2/AD6F2_RX-I4	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFOX in state F2.	D.3.2.1 (7)	F2/AD7F2_RX-IX	9.4.2.3.1		Y	P
To check that IUT is brought to state F7 when receiving INFO4 in state F2 and that it sends a PH-AI primitive.	D.3.2.1 (6)	F2/CPF2PHAI	9.4.2.3.1		Y	P
Act.-Deactivation procedure when T3 expires in state F2.	D.3.2.1 (8)	F2/AD8F2_CHK_T3	9.4.2.3.1	LP AND DET	Y	X
Act.-Deactivation procedure for loss of power S in state F3.	D.3.2.1 (9a)	F3/AD9aF3_PS-off	9.4.2.3.1	PS OR (LP AND DET)	Y	X
Act.-Deactivation procedure for loss of local power in state F3.	D.3.2.1 (9b)	F3/AD9bF3_LP-off	9.4.2.3.1	LP	Y	P
Act.-Deactivation procedure when receiving PH-AR in state F3.	D.3.2.1 (10)	F3/AD10F3_PH-AR	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO0 in state F3.	D.3.2.1 (11)	F3/AD11F3_RX-I0	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO2 in state F3.	D.3.2.1 (12)	F3/AD12F3_RX-I2	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO4 in state F3.	D.3.2.1 (13)	F3/AD13F3_RX-I4	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFOX in state F3.	D.3.2.1 (14)	F3/AD14F3_RX-IX	9.4.2.3.1		Y	P
Act.-Deactivation procedure when T3 expires in state F3.	D.3.2.1 (15)	F3/AD15F3_CHK_T3	9.4.2.3.1		Y	P
To check that IUT is brought to state F1.1 in case of disappearance of power S and that it sends a MPH-II(d) primitive.	D.3.2.1 (9a)	F3/CPF3MPHIID	9.4.2.3.1	LP AND DET AND AUTO-TEI	Y	X
To check that IUT is brought to state F7 when receiving INFO4 in state F3 and that a PH-AI primitive is sent.	D.3.2.1 (13)	F3/CPF3PHAI	9.4.2.3.1		Y	P
To check that IUT does not set on layer 2 timer in the same time as T3.	D.3.2.1 (10)	F4/CPF4Tlayer2	9.4.2.3.1	T3/T200	Y	P
Act.-Deactivation procedure for loss of power S in state F4.	D.3.2.1 (16a)	F4/AD16aF4_PS-off	9.4.2.3.1	PS OR (LP AND DET)	Y	X
Act.-Deactivation procedure for loss of local power in state F4.	D.3.2.1 (16b)	F4/AD16bF4_LP-off	9.4.2.3.1	LP	Y	P
To check that IUT is brought to state F1.1 in case of disappearance of power S and that it sends a MPH-II(d) primitive.	D.3.2.1 (16a)	F4/CPF4MPHIID	9.4.2.3.1	LP AND DET AND AUTO-TEI	Y	X
To check that IUT is brought to state F7 when receiving INFO 4 in state F4 and that a PH-AI primitive is sent.	D.3.2.1 (19)	F4/CPF4PHAI	9.4.2.3.1		Y	P
To check that IUT sends a PH-DI on T3 expiration.	D.3.2.1 (21)	F4/CPF4PHDI_T3exp	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO0 in state F4.	D.3.2.1 (17)	F4/AD17F4_RX-I0	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO2 in state F4.	D.3.2.1 (18)	F4/AD18F4_RX-I2	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO4 in state F4.	D.3.2.1 (19)	F4/AD19F4_RX-I4	9.4.2.3.1		Y	P
Act.-Deactivation procedure when T3 expires in state F4.	D.3.2.1 (21)	F4/AD21F4_CHK_T3	9.4.2.3.1		Y	P

Description	Annex D ETS 300 012	Reference to TBR 3/A1 TTCN test case	Reference to TBR 3/A1	CONDITION	T A	R E S
Act.-Deactivation procedure for loss of power S in state F5.	D.3.2.1 (22a)	F5/AD22aF5_PS-off	9.4.2.3.1	(PS OR (LP AND DET)) AND NOT INFO2/4-DET	Y	X
Act.-Deactivation procedure for loss of local power in state F5.	D.3.2.1 (22b)	F5/AD22bF5-LP-off	9.4.2.3.1	LP AND NOT INFO2/4-DET	Y	P
Act.-Deactivation procedure when receiving INFO0 in state F5.	D.3.2.1 (23)	F5/AD23F5_RX-I0	9.4.2.3.1	NOT INFO2/4-DET	Y	P
Act.-Deactivation procedure when receiving INFO2 in state F5.	D.3.2.1 (24)	F5/AD24F5_RX-I2	9.4.2.3.1	NOT INFO2/4-DET	Y	P
Act.-Deactivation procedure when receiving INFO4 in state F5.	D.3.2.1 (25)	F5/AD25F5_RX-I4	9.4.2.3.1	NOT INFO2/4-DET	Y	P
Act.-Deactivation procedure when receiving INFOX in state F5.	D.3.2.1 (26)	F5/AD26F5_RX-IX	9.4.2.3.1	NOT INFO2/4-DET	Y	P
Act.-Deactivation procedure when T3 expires in state F5.	D.3.2.1 (27)	F5/AD27F5-CHK_T3	9.4.2.3.1	NOT INFO2/4-DET	Y	P
To check that IUT is brought to state F1.1 in case of disappearance of power S and that it sends a MPH-II(d) primitive.	D.3.2.1 (22a)	F5/CPF5MPHIID	9.4.2.3.1	LP AND DET AND AUTO-TEI AND NOT INFO2/4-DET	Y	X
To check that IUT is brought to state F7 when receiving INFO4 in state F5 and that a PH-AI primitive is sent.	D.3.2.1 (25)	F5/CPF5PHAI	9.4.2.3.1	NOT INFO2/4-DET	Y	P
To check that IUT has no action on receipt of INFO0 in state F5.	D.3.2.1 (23)	F5/CPF5PHDI_I0T3	9.4.2.3.1	NOT INFO2/4-DET	Y	F()
To check that IUT sends a PH-DI on T3 expiration.	D.3.2.1 (27)	F5/CPF5PHDI_T3expa	9.4.2.3.1	NOT INFO2/4-DET AND F5-I0T3	Y	X
To check that IUT sends a PH-DI on T3 expiration.	D.3.2.1 (27)	F5/CPF5PHDI_T3expb	9.4.2.3.1	NOT INFO2/4-DET AND NOT F5-I0T3	Y	P
Act.-Deactivation procedure for loss of power S in state F6.	D.3.2.1 (28a)	F6/AD28aF6_PS-off	9.4.2.3.1	PS	Y	X
Act.-Deactivation procedure for loss of local power in state F6.	D.3.2.1 (28b)	F6/AD28bF6_LP-off	9.4.2.3.1	LP	Y	P
Act.-Deactivation procedure for loss of power S in state F6.	D.3.2.1 (28c)	F6/AD28cF6_PS-off	9.4.2.3.1	LP AND DET	Y	X
Act.-Deactivation procedure for loss of framing in state F6.	D.3.2.1 (29)	F6/AD29F6_lostfr	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving PH-AR in state F6.	D.3.2.1 (30)	F6/AD30F6_PH-AR	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO2 in state F6.	D.3.2.1 (32)	F6/AD32F6_RX-I2	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO4 in state F6.	D.3.2.1 (33)	F6/AD33F6_RX-I4	9.4.2.3.1		Y	P
Act.-Deactivation procedure when T3 expires in state F6.	D.3.2.1 (34)	F6/AD34F6_CHK_T3	9.4.2.3.1		Y	P
To check that IUT is brought to state F7 when receiving INFO4 in state F6 and that a PH-AI primitive is sent.	D.3.2.1 (33)	F6/CPF6PHAIa	9.4.2.3.1		Y	P
To check that IUT is brought to state F7 when receiving INFO4 in state F6 during T3 and that a PH-AI primitive is sent.	D.3.2.1 (33)	F6/CPF6PHAIb	9.4.2.3.1		Y	P
To check that IUT sends a PH-DI on T3 expiration.	D.3.2.1 (34)	F6/CPF6PHDI_T3exp	9.4.2.3.1		Y	P
To check that IUT goes from F6 to F3 on receipt of INFO 0 while T3 is set on.	D.3.2.1 (31)	F6/CPF6PHDI_I0T3	9.4.2.3.1		Y	P
To check that IUT does send a PH-DI primitive upon receipt of INFO0 in F6.	D.3.2.1 (31)	F6/CPF6PHDI_I0	9.4.2.3.1		Y	P
To check that a PH-AR generates no action from IUT in state F6 but has really been sent.	D.3.2.1 (30)	F6/CPF6PHARa	9.4.2.3.1		Y	P
To check that a PH-AR generates no action from IUT in state F6 but has really been sent.	D.3.2.1 (30)	F6/CPF6PHARb	9.4.2.3.1		Y	P

Description	Annex D ETS 300 012	Reference to TBR 3/A1 TTCN test case	Reference to TBR 3/A1	CONDITION	T A	R E S
Act.-Deactivation procedure when receiving INFO0 in state F6.	D.3.2.1 (31)	F6/AD31F6_RX-I0	9.4.2.3.1		Y	P
Act.-Deactivation procedure for loss of power S in state F7.	D.3.2.1 (35a)	F7/AD35aF7_PS-off	9.4.2.3.1	PS	Y	X
Act.-Deactivation procedure for loss of local power in state F7.	D.3.2.1 (35b)	F7/AD35bF7_LP-off	9.4.2.3.1	LP	Y	P
Act.-Deactivation procedure for loss of power S in state F7.	D.3.2.1 (35c)	F7/AD35cF7_PS-off	9.4.2.3.1	LP AND DET	Y	X
Act.-Deactivation procedure for loss of framing in state F7.	D.3.2.1 (36)	F7/AD36F7_lostfr	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO0 in state F7.	D.3.2.1 (37)	F7/AD37F7_RX-I0	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO2 in state F7.	D.3.2.1 (38)	F7/AD38F7_RX-I2	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO4 in state F7.	D.3.2.1 (39)	F7/AD39F7_RX-I4	9.4.2.3.1		Y	P
To check that IUT does send a PH-DI primitive upon receipt of INFO0 in F7.	D.3.2.1 (37)	F7/CPF7PHDI_I0	9.4.2.3.1		Y	P
Act.-Deactivation procedure for loss of power S in state F8.	D.3.2.1 (40a)	F8/AD40aF8_PS-off	9.4.2.3.1	PS OR (LP AND DET)	Y	X
Act.-Deactivation procedure for loss of local power in state F8.	D.3.2.1 (40b)	F8/AD40bF8_LP-off	9.4.2.3.1	LP	Y	P
Act.-Deactivation procedure when receiving PH-AR in state F8.	D.3.2.1 (41)	F8/AD41F8_PH-AR	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO0 in state F8.	D.3.2.1 (42)	F8/AD42F8_RX-I0	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO2 in state F8.	D.3.2.1 (43)	F8/AD43F8_RX-I2	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFO4 in state F8.	D.3.2.1 (44)	F8/AD44F8_RX-I4	9.4.2.3.1		Y	P
Act.-Deactivation procedure when receiving INFOX in state F8.	D.3.2.1 (45)	F8/AD45F8_RX-IX	9.4.2.3.1		Y	P
Act.-Deactivation procedure when T3 expires in state F8.	D.3.2.1 (46)	F8/AD46F8_CHK_T3	9.4.2.3.1		Y	P
To check that IUT is brought to state F1.1 in case of disappearance of power S and that it sends a MPH-II(d) primitive.	D.3.2.1 (40a)	F8/CPF8MPHIIDa	9.4.2.3.1	LP AND DET AND AUTO-TEI	Y	P
To check that IUT is brought to state F1.1 in case of disappearance of power S and that it sends a MPH-II(d) primitive.	D.3.2.1 (40a)	F8/CPF8MPHIIDb	9.4.2.3.1	LP AND DET AND AUTO-TEI	Y	P
To check that a PH-AR generates no action from IUT in state F8 but has really been sent.	D.3.2.1 (41)	F8/CPF8PHARa	9.4.2.3.1		Y	P
To check that a PH-AR generates no action from IUT in state F8 but has really been sent.	D.3.2.1 (41)	F8/CPF8PHARb	9.4.2.3.1		Y	P
To check that IUT goes from F8 to F3 on receipt of INFO0 while T3 is set On.	D.3.2.1 (42)	F8/CPF8PHDI_I0T3	9.4.2.3.1		Y	P
To check that IUT sends a PH-DI primitive upon receipt of INFO0 in F8.	D.3.2.1 (42)	F8/CPF8PHDI_I0b	9.4.2.3.1		Y	P
To check that IUT is brought to state F7 when receiving INFO4 in state F8 and that PH-AI primitive is sent.	D.3.2.1 (44)	F8/CPF8PHAIb	9.4.2.3.1		Y	P
To check that IUT is brought to state F7 when receiving INFO4 in state F8 during T3 and that PH-AI primitive is sent.	D.3.2.1 (44)	F8/CPF8PHAIc	9.4.2.3.1		Y	P
To check that IUT stays in F8 on T3 expiration.	D.3.2.1 (46)	F8/CPF8PHDI_T3exp	9.4.2.3.1		Y	P

3.2.3.4 Layer 1 Functional Test Cases "TIMERS FOR ACTIVATION/DEACTIVATION"

Description	Annex D ETS 300 012	Reference to TBR 3/A1 TTCN test case	Reference to TBR 3/A1	CONDITION	TA	RES
Timer for activation when receiving INFO2 in state F3, Test A.	D.3.2.2.1.1	F3/TIF3info2	9.4.2.4		Y	P
Timer for activation when receiving INFO2 in state F4, Test B (elapsed time between reception of INFO2 and cessation of INFO1 and subsequent transmission of INFO3).	D.3.2.2.1.2	F4/TIF4info2	9.4.2.4		Y	P
Timer for activation when receiving INFO4 in state F3, Test A.	D.3.2.2.2.1	F3/TIF3info4	9.4.2.4		Y	P
Timer for activation when receiving INFO4 in state F4, Test B (elapsed time between reception of INFO4 and cessation of INFO1 and subsequent transmission of INFO3).	D.3.2.2.2.2	F4/TIF4info4	9.4.2.4		Y	P
Value of timer 3.	D.3.2.2.4	F3/TItimer T3	9.4.2.3.2		Y	P
Timer for physical deactivation in state F6, Test A.	D.3.2.2.5.1	F6/TIF6physdeact	9.4.2.5		Y	P
Timer for physical deactivation in state F7, Test A.	D.3.2.2.5.2	F7/TIF7physdeact	9.4.2.5		Y	P
Timer for complete deactivation in state F7, Test A.	D.3.2.2.6.1	F7/TIF7compdeact1	9.4.2.3.1 9.4.2.5	No T309	Y	P
Timer for complete deactivation in state F8, Test B.	D.3.2.2.6.2	F8/TIF8compdeact1	9.4.2.3.1 9.4.2.5	No T309	Y	P

3.2.3.5 Layer 1 Functional Test Cases "FRAME ALIGNMENT PROCEDURE"

Description	Annex D ETS 300 012	Reference to TBR 3/A1 TTCN test case	Reference to TBR 3/A1	CONDITION	TA	RES
Frame alignment procedure for one bad frame.	D.3.3a	FA/F7/FAinfA_1fr	9.4.3		Y	P
		FA/F7/FAinfB_1fr	9.4.3		Y	P
		FA/F7/FAinfD_1fr	9.4.3		Y	P
Frame alignment procedure for n (n > = 2) bad frames.	D.3.3b	FA/F7/FAinfA_kfr	9.4.3		Y	P
		FA/F7/FAinfB_kfr	9.4.3		Y	P
		FA/F7/FAinfD_kfr	9.4.3		Y	P
Frame re-alignment procedure for m+1 (m >=3) good frames.	D.3.3c	FA/F7/FAregain	9.4.3		Y	P
Idle channel code on the B-channels.	D.3.5	BC/F7/BCBinaryOne	9.4.5	PTMP	Y	P

4 Layer 2 Test

4.1 Selection Layer 2 Test Cases

```
Conformance Test System          Summary Report           15.08.2005

Test Suite: TBR3_L2                    Verdicts Assigned
IUT:        E4S V2.000                  PASS:      34
Client:     Stollmann E+V GmbH          FAIL:       0
Operator:   J.Jensen                    INCONC:     0
Location:   Stollmann E+V GmbH
                                       Report Format  Ordered by Verdict
  Selected Cases:   34                   PASS:   SHORT
  Unselected Cases: 0                    FAIL:   DETAILED
  Iterations:       1                    INCONC: DETAILED
```

4.2 PICS Parameter Settings

```
PICS Identifier  WD4:TBR3_L2_PICS.F       Selection  RESTRICTED

  Does the IUT implement automatic TEI?                  YES
  Does the IUT support timer T203?                       NO
  Can the IUT invoke TEI identity verify:
     error C?                                            YES
     error D?                                            YES
     error G?                                            YES
     error H?                                            YES
     detection of multiple TEI assignment?               YES
```

4.3 PIXIT Parameter Settings

```
PIXIT Identifier  WD4:TBR3_L2_PIXIT.F     Selection:       RESTRICTED

  Maximum number of oustanding frames (K): 1
  Is IUT stable in state 1? NO
  Is IUT stable in state 4? YES
  Does the IUT implement state 6? NO
  Coding of a compatible L.3 SETUP message: 0801010504028890H

  Fixed TEI value: 0

  Timer values (10th of seconds):
  Identity request (TIDREQ): 20
  Layer 3 response (TWL3): 300
```


4.4 Test Identifier for Verdict: PASS

Test Identifier for Verdict: PASS Branch #

Test Group: /LM/S10/	
TC11013	0
Test Group: /LM/S30/	
TC13008	0
TC13010	0
TC13014	0
Test Group: /LM/S40/	
TC14001	0
TC14002	0
Test Group: /DC/S40/	
TC24004	0
TC24020	0
Test Group: /DC/S50/	
TC25002	0
TC25005	0
Test Group: /DC/S70/	
TC27003	0
TC27004	0
TC27011	0
TC27012	0
TC27015	0
TC27019	0
TC27022	0
TC27027	0
TC27028	0
TC27031	0
TC27040	0
TC27043	0
TC27046	0
TC27058	0
Test Group: /DC/S74/	
TC27404	0
TC27411	0
TC27412	0
TC27413	0
TC27414	0
TC27417	0
Test Group: /DC/S80/	
TC28005	0
TC28012	0
Test Group: /DC/S84/	
TC28406	0
TC28424	0

4.5 Test Identifier for Verdict: FAIL

```
No cases were assigned the verdict FAIL.
```

4.6 Test Identifier for Verdict: INCONC

```
No cases were assigned the verdict INCONC.
```


5 Layer 3 Test

5.1 Selection Layer 3 Test Cases

```
Conformance Test System                          Summary Report   15.08.2005
Test Suite: TBR3_L3                       Verdicts Assigned
IUT:        E4S V2.000                           PASS:      49
Client:     Stollmann E+V GmbH                   FAIL:       0
Operator:   J.Jensen                             INCONC:     0
Location:   Stollmann E+V GmbH, Hamburg
                                                 Report Format  Ordered by Verdict
  Selected Cases:   49                           PASS:   SHORT
  Unselected Cases: 22                           FAIL:   DETAILED
  Iterations:       1                            INCONC: DETAILED
```

5.2 PICS Parameter Settings

```
PICS Identifier WD4:TBR3_L3_PICS.F

Optional Timer:

Is Timer T302 implemented ?  : NO
Is Timer T303 implemented ?  : YES
Is Timer T304 implemented ?  : YES
Is Timer T310 implemented ?  : YES
Is Timer T318 implemented ?  : NO
Is Timer T319 implemented ?  : NO
Is Timer T322 implemented ?  : NO

Call Characteristics:

Is Call rearrangement implemented ?  : NO
Is En-Bloc sending used ?            : YES
Is Overlap sending used ?            : NO
Is Overlap receiving implemented ?   : NO

Information Elements:

Is Low layer compatibility supported ?   : YES
Is High layer compatibility supported ?  : NO
Is Incoming BC Check supported ?         : YES
Is incoming HLC Ckeck supported ?        : NO

Messages:

Is ALERT PDU implemented ?             : YES
Is Call Proceeding PDU implemented ?   : YES
Is CONN_ACK PDU implemented ?          : YES
Is NOTIFY PDU implemented ?            : NO
Is PROGRESS PDU implemented ?          : NO
```


5.3 PIXIT Parameter Settings

```
PIXIT Identifier WD4:TBR3L3PIXIT.F

Data Link:

Data Link            : Broadcast
IUT Stable in U7 ?   : NO
IUT Stable in U9 ?   : NO

Timer Values in milliseconds:

T303     : 4000
T303 Max : 4200
T303 Min : 3800
T304     : 30000
T304 Max : 31500
T304 Min : 28500
T305     : 30000
T305 Max : 31500
T305 Min : 28500
T308     : 4000
T308 Max : 4200
T308 Min : 3800
T310     : 40000
T310 Max : 42000
T310 Min : 38000
T313     : 4000
T313 Max : 4200
T313 Min : 3800

IUT can Generate :

Connect ?         : YES
Disconnect ?      : YES
Information ?     : NO
Notify ?          : NO
Progress ?        : NO
Release ?         : NO
Resume ?          : NO
Setup ?           : YES
Status Enquiry ?  : NO
Suspend ?         : NO

Bearer Cap. Low and High Layer:

Bearer Capability Value                     : 04028890H
Incompatible Bearer Capability Value        : 040380B0A2H
Low Layer compatibility Value               : H
High layer compatibility Value              : H
Incompatible high layer compatibility Value : H
Party Number Value                          : 9941
Length of Party Number                      : 05H
```


5.4 Test Identifier for Verdict: PASS

```
Test Group: /U00/PS/
  TC10002                                          0
  TC10004                                          0
  TC10005                                          0
  TC10006                                          0
  TC10008                                          0
  TC10010                                          0
  TC10011                                          0
  TC10015                                          0
  TC10024                                          0
  TC10027                                          0
  TC10028                                          0
  TC10029                                          0
Test Group: /U00/AC/
  TC20002                                          0
Test Group: /U01/PS/
  TC10101                                          0
  TC10102                                          0
  TC10103                                          0
  TC10105                                          0
  TC10107                                          0
  TC10120                                          0
  TC10125                                          0
Test Group: /U03/PS/
  TC10301                                          0
  TC10302                                          0
  TC10303                                          0
Test Group: /U03/AC/
  TC20301                                          0
Test Group: /U04/PS/
  TC10401                                          0
  TC10402                                          0
Test Group: /U04/AC/
  TC20401                                          0
Test Group: /U08/PS/
  TC10801                                          0
  TC10802                                          0
  TC10805                                          0
Test Group: /U10/PS/
  TC11003                                          0
  TC11004                                          0
  TC11005                                          0
  TC11007                                          0
  TC11008                                          0
  TC11021                                          0
Test Group: /U10/AC/
  TC21001                                          0
  TC21003                                          0
  TC21006                                          0
Test Group: /U11/PS/
  TC11101                                          0
  TC11103                                          0
  TC11105                                          0
  TC11107                                          0
  TC11118                                          0
Test Group: /U19/PS/
  TC11903                                          0
  TC11904                                          0
  TC11906                                          0
  TC11908                                          0
  TC11909                                          0
```


5.5 Test Identifier for Verdict: FAIL

No cases were assigned the verdict FAIL.

5.6 Test Identifier for Verdict: INCONC

No cases were assigned the verdict INCONC.

