TVRC Errata Item

1 Errata Item Details

TVRC Errata Item ID	TVRC-EE097
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CC/TWG Kavi Comment Reference	n/a
TWG Change Request (CR)	testingwg.00357.2015.CR_DP_1_1_REQ_15.1.2.4_DID_listen_R03.003.docx

2 Document Details

TC Document Name	Test Cases for Digital Protocol 1.1.01
TC Document Date	2016-01-20
TC Document Status	Not published

3 Issue Summary

Functionality Area/Subject	Digital protocol
Test Case ID	TC_LIS_NFCA_UND_BI_33_x, TC_LIS_NFCA_UND_BI_34_x, TC_LIS_NFCA_UND_BI_35_x, TC_LIS_NFCB_UND_BV_14_x, TC_LIS_NFCB_UND_BI_15_x
Subcase	All
Scenario(s)	All
Step(s)	n/a

4 Issue Description

The CR testingwg.00357.2015.CR_DP_1_1_REQ_15.1.2.4_DID_listen_R03.003.docx is not correctly implemented in the "Test Cases for Digital Protocol 1.1.01" document. Therefore, the test cases TC_LIS_NFCA_UND_BI_33_x, TC_LIS_NFCA_UND_BI_34_x, TC_LIS_NFCA_UND_BI_35_x, TC_LIS_NFCB_UND_BV_14_x, TC_LIS_NFCB_UND_BI_15_x in Test Cases for Digital Protocol version 1.1.01 shall be replaced by the test cases in §5

5 Approved Resolution

4.1.2.27 NFC-A Handling of DID error in blocks (NFCID1 size = 1) (x = 0 to 1) [TC_DP11_LIS_NFCA_UND_BI_33_x]

TC Id	TC_DP11_LIS_NFCA_UND_BI_33_x
RQ reference	DP11_15.1.2.4, DP11_15.2.6.2, DP11_15.2.6.4

Test Purpose	**ensure that**
	{
	when { the IUT is issued the RATS command with the errors on the DID values required in the specification }
	then { the NFC-A Listen Device with a single size NFCID1 ignores the blocks with error}
	}

Comments	
Selection	NFC Forum Type A Listen Device NFCID1 size = 1 DID in T4AT Listen Mode supported = TRUE
Test Configuration Functions	
Conditions	
Test case scenario	Run the following scenario. • Send the RATS command with the values as indicated below:
Acceptance criteria	The IUT behaves as described in the following scenario (the IUT replies to the RATS with its ATS and ignores the block in the following step).

x	DID in RATS	RATS	DID in Select P_AID
0	'1'	'E0 81'	'2'
1	'1'	'E0 81'	Not Present

Scenario TC_DP11_LIS_NFCA_UND_BI_33.A (x = 0 to 1)		NFC-A Handling of RATS (NFCID1 size = 1)
Step	**Exchanges**	**Comments**
1	**IUT** ◀ '52' (short frame) ◀ **LT**	ALL_REQ to poll for the IUT
2	**IUT** ▶ SENS_RES ▶ **LT**	SENS_RES

Scenario TC_DP11_LIS_NFCA_UND_BI_33.A (x = 0 to 1)		NFC-A Handling of RATS (NFCID1 size = 1)		
Step		**Exchanges**		**Comments**
3	IUT ◀	'5000' (standard frame with EOD)	◀ LT	SLP_REQ
4	IUT ‖	The IUT does not send any frame	▶ LT	SLP_RES (Mute)
5	IUT ◀	'52' (short frame)	◀ LT	ALL_REQ
6	IUT ▶	SENS_RES	▶ LT	SENS_RES
7	IUT ◀	'93 20'	◀ LT	SDD_REQ CL1
8	IUT ▶	NFCID1 CL1 + BCC	▶ LT	SDD_RES
9	IUT ◀	'93 70' + NFCID1 CL1 + BCC	◀ LT	SEL_REQ CL1
10	IUT ▶	("xx1x x0xx")b	▶ LT	SEL_RES
11	IUT ◀	'E0 81'	◀ LT	RATS
12	IUT ▶	ATS	▶ LT	TC(1) in ATS shall be '1x'b
13	IUT ◀	$I(0)_0$ ['00 A4 04 00' +'Lc' + P_AID + 'Le'] with: x = 0 then DID = '2' x = 1 then no DID	◀ LT	Select P_AID/b.n. = 0
14	IUT‖	The IUT does not send any frame	‖LT	LT proceeds with next step after Mute Time
15	IUT ◀	$I(0)_0$ ['00 A4 04 00' +'Lc' + P_AID + 'Le'] with: DID = '1'	◀ LT	Select P_AID/b.n. = 0
16	IUT ▶	$I(0)_0$ [n PR_data bytes + SW] with DID = '1'	▶ LT	b.n. = 0
End of test: Reset NFC Forum Listen Device.				

4.1.1.28 NFC-A Handling of DID error in blocks (NFCID1 size = 2) (x = 0 to 1) [TC_DP11_LIS_NFCA_UND_BI_34_x]

TC Id	TC_DP11_LIS_NFCA_UND_BI_34_x
RQ reference	DP11_15.1.2.4, DP11_15.2.6.2, DP11_15.2.6.4

Test Purpose	**ensure that**
	{
	when { the IUT is issued the RATS command with the errors on the DID values required in the specification }
	then { the NFC-A Listen Device with a double size NFCID1 ignores the blocks with error}
	}

Comments	
Selection	NFC Forum Type A Listen Device NFCID1 size = 1 DID in T4AT Listen Mode supported = TRUE
Test Configuration Functions	
Conditions	
Test case scenario	Run the following scenario. • Send the RATS command with the values as indicated below:
Acceptance criteria	The IUT behaves as described in the following scenario (the IUT replies to the RATS with its ATS and ignores the block in the following step).

x	DID in RATS	RATS	DID in Select P_AID
0	'1'	'E0 81'	'2'
1	'1'	'E0 81'	Not Present

Scenario TC_DP11_LIS_NFCA_UND_BI_34.A (x = 0 to 1)		NFC-A Handling of RATS (NFCID1 size = 2)		
Step	**Exchanges**			**Comments**
17	**IUT** ◀	'52' (short frame)	◀ **LT**	ALL_REQ to poll for the IUT
18	**IUT** ▶	SENS_RES	▶ **LT**	SENS_RES

Scenario TC_DP11_LIS_NFCA_UND_BI_34.A (x = 0 to 1)		NFC-A Handling of RATS (NFCID1 size = 2)		
Step		**Exchanges**		**Comments**
19	IUT ◀	'5000' (standard frame with EOD)	◀ LT	SLP_REQ
20	IUT ‖	The IUT does not send any frame	▶ LT	SLP_RES (Mute)
21	IUT ◀	'52' (short frame)	◀ LT	ALL_REQ
22	IUT ▶	SENS_RES	▶ LT	SENS_RES
23	IUT ◀	'93 20'	◀ LT	SDD_REQ CL1
24	IUT ▶	NFCID1 CL1 + BCC	▶ LT	SDD_RES
25	IUT ◀	'93 70' + NFCID1 CL1 + BCC	◀ LT	SEL_REQ CL1
26	IUT ▶	("xxxx x1xx")b	▶ LT	SEL_RES
27	IUT ◀	'95 20'	◀ LT	SDD_REQ CL2
28	IUT ▶	NFCID2 CL2 + BCC	▶ LT	SDD_RES
29	IUT ◀	'95 70' + NFCID2 CL2 + BCC	◀ LT	SEL_REQ CL2
30	IUT ▶	("xx1x x0xx")b	▶ LT	SEL_RES
31	IUT ◀	'E0 81'	◀ LT	RATS (FSD = 256)
32	IUT ▶	ATS	▶ LT	TC(1) in ATS shall be '1x'b
33	IUT ◀	$I(0)_0$ ['00 A4 04 00' +'Lc' + P_AID + 'Le'] with: DID	◀ LT	Select P_AID/b.n. = 0
34	IUT‖	The IUT does not send any frame	‖LT	LT proceeds with next step after Mute Time
35	IUT ◀	$I(0)_0$ ['00 A4 04 00' +'Lc' + P_AID + 'Le'] with: DID = '1'	◀ LT	Select P_AID/b.n. = 0
36	IUT ▶	$I(0)_0$ [n PR_data bytes + SW] with DID = '1'	▶ LT	b.n. = 0
End of test: Reset NFC Forum Listen Device.				

4.1.1.29 NFC-A Handling of DID error in blocks (NFCID1 size = 3) (x = 0 to 1) [TC_DP11_LIS_NFCA_UND_BI_35_x]

TC Id	TC_DP11_LIS_NFCA_UND_BI_35_x
RQ reference	DP11_15.1.2.4, DP11_15.2.6.2, DP11_15.2.6.4

Test Purpose	**ensure that**
	{
	when { the IUT is issued the RATS command with the errors on the DID values required in the specification }
	then { the NFC-A Listen Device with a triple size NFCID1 ignores the blocks with error}
	}

Comments	
Selection	NFC Forum Type A Listen Device NFCID1 size = 1 DID in T4AT Listen Mode supported = TRUE
Test Configuration Functions	
Conditions	
Test case scenario	Run the following scenario. • Send the RATS command with the values as indicated below:
Acceptance criteria	The IUT behaves as described in the following scenario (the IUT replies to the RATS with its ATS and ignores the block in the following step).

x	DID in RATS	RATS	DID in Select P_AID
0	'1'	'E0 81'	'2'
1	'1'	'E0 81'	Not Present

Scenario	TC_DP11_LIS_NFCA_UND_BI_35.A NFC-A Handling of RATS (NFCID1 size = 3) (x = 0 ~~and y = 0 to 5~~)			
Step		**Exchanges**		**Comments**
37	**IUT** ◀	'52' (short frame)	◀ **LT**	ALL_REQ to poll for the IUT
38	**IUT** ▶	SENS_RES	▶ **LT**	SENS_RES

Scenario	TC_DP11_LIS_NFCA_UND_BI_35.A NFC-A Handling of RATS (NFCID1 size = 3) (x = 0 ~~and y = 0 to 5~~)			
Step		**Exchanges**		**Comments**
39	IUT ◀	'5000' (standard frame with EOD)	◀ LT	SLP_REQ
40	IUT ‖	The IUT does not send any frame	▶ LT	SLP_RES (Mute)
41	IUT ◀	'52' (short frame)	◀ LT	ALL_REQ
42	IUT ▶	SENS_RES	▶ LT	SENS_RES
43	IUT ◀	'93 20'	◀ LT	SDD_REQ CL1
44	IUT ▶	NFCID1 CL1 + BCC	▶ LT	SDD_RES
45	IUT ◀	'93 70' + NFCID1 CL1 + BCC	◀ LT	SEL_REQ CL1
46	IUT ▶	("xxxx x1xx")b	▶ LT	SEL_RES
47	IUT ◀	'95 20'	◀ LT	SDD_REQ CL2
48	IUT ▶	NFCID2 CL2 + BCC	▶ LT	SDD_RES
49	IUT ◀	'95 70' + NFCID2 CL2 + BCC	◀ LT	SEL_REQ CL2
50	IUT ▶	("xxxx x1xx")b	▶ LT	SEL_RES
51	IUT ◀	'97 20'	◀ LT	SDD_REQ CL3
52	IUT ▶	NFCID3 CL3 + BCC	▶ LT	SDD_RES
53	IUT ◀	'97 70' + NFCID3 CL3 + BCC	◀ LT	SEL_REQ CL3
54	IUT ▶	("xx1x x0xx")b	▶ LT	SEL_RES
55	IUT ◀	'E0 81''	◀ LT	RATS (FSD = 256)
56	IUT ▶	ATS	▶ LT	TC(1) in ATS shall be '1x'b
57	IUT ◀	$I(0)_0$ ['00 A4 04 00' +'Lc' + P_AID + 'Le'] with: x = 0 then DID = '2' x = 1 then no DID	◀ LT	Select P_AID/b.n. = 0
58	IUT‖	The IUT does not send any frame	‖LT	LT proceeds with next step after Mute Time
59	IUT ◀	$I(0)_0$ ['00 A4 04 00' +'Lc' + P_AID + 'Le'] with: DID = '1'	◀ LT	Select P_AID/b.n. = 0

Scenario	TC_DP11_LIS_NFCA_UND_BI_35.A NFC-A Handling of RATS (NFCID1 size = 3) (x = 0 ~~and y = 0 to 5~~)	
Step	**Exchanges**	**Comments**
60	**IUT** ▸ $I(0)_0$ [n PR_data bytes + SW] with DID = '1' ▸ **LT**	b.n. = 0
End of test: Reset NFC Forum Listen Device.		

4.1.2.14 NFC-B Correct handling of DID (x = 0 to 1) [TC_DP11_LIS_NFCB_UND_BV_14_x]

TC Id	TC_DP11_LIS_NFCB_UND_BV_14_x
RQ reference	DP11_15.1.2.4

Test Purpose	**ensure that**
	{
	when { the IUT receives blocks containing the correct DID }
	then { the NFC-B Listen Device will use the correct DID on the reply }
	}

Comments	
Selection	NFC Forum Type B Listen Device DIDs supported = TRUE
Test Configuration Functions	
Conditions	
Test case scenario	Run the following scenario. • The LT negotiates DID and send blocks • For x = 0 with DID = '0' • For x = 1 with DID = '2'.
Acceptance criteria	The IUT negotiates the DID and uses the correct DID on the reply blocks For x = '0' the IUT cannot send the DID on the blocks For x = '1' the IUT has to use the DID = '2'

Scenario TC_DP11_LIS_NFCB_UND_BV_14_x.A NFC-B Correct handling of DID = '0' (x=0)				
Step		**Exchanges**		**Comments**
61	**IUT** ◀	'05 00 08'	◀ **LT**	ALLB_REQ to poll for the IUT
62	**IUT** ▶	SENSB_RES	▶ **LT**	SENSB_RES
63	**IUT** ◀	'1D' + NFCID0 + '00 08 01 00'	◀ **LT**	ATTRIB with DID = '0'
64	**IUT** ▶	'00'	▶ **LT**	ATTRIB Response with DID = '0'
65	**IUT** ◀	$I(0)_0$ ['00 A4 04 00' +'Lc' + P_AID + 'Le'] with no DID	◀ **LT**	Select P_AID/b.n. = 0
66	**IUT** ▶	$I(0)_0$ [n PR_data bytes + SW] with no DID	▶ **LT**	b.n. = 0
End of test: Reset NFC Forum Listen Device.				

Scenario TC_DP11_LIS_NFCB_UND_BV_14_x.B NFC-B Correct handling of DID = '0' (x=1)				
Step		**Exchanges**		**Comments**
67	**IUT** ◀	'05 00 08'	◀ **LT**	ALLB_REQ to poll for the IUT
68	**IUT** ▶	SENSB_RES	▶ **LT**	SENSB_RES
69	**IUT** ◀	'1D' + NFCID0 + '00 08 01 02'	◀ **LT**	ATTRIB with DID = '2'
70	**IUT** ▶	'02'	▶ **LT**	ATTRIB Response with DID = '2'
71	**IUT** ◀	$I(0)_0$ ['00 A4 04 00' +'Lc' + P_AID + 'Le'] with DID = '2'	◀ **LT**	Select P_AID/b.n. = 0
72	**IUT** ▶	$I(0)_0$ [n PR_data bytes + SW] with DID = '2'	▶ **LT**	b.n. = 0
End of test: Reset NFC Forum Listen Device.				

4.1.2.15 NFC-B Correct handling of DID (x = 0 to 1) [TC_DP11_LIS_NFCB_UND_BI_15_x]

TC Id	TC_DP11_LIS_NFCB_UND_BI_15_x
RQ reference	DP11_15.1.2.4 DP11_15.2.6.2, DP11_15.2.6.4

Test Purpose	**ensure that**
	{
	when { the IUT receives blocks containing incorrect DID }
	then { the NFC-B Listen Device will ignore blocks with incorrect DID }
	}

Comments	
Selection	NFC Forum Type B Listen Device DIDs supported = TRUE
Test Configuration Functions	
Conditions	
Test case scenario	Run the following scenario. • The LT negotiates DID and send blocks • For x = 0 with different DID than negotiated • For x = 1 with no DID for DID negotiated different than '0'
Acceptance criteria	The IUT negotiates the DID and in both cases ignores the block following

Scenario TC_DP11_LIS_NFCB_UND_BI_15_x.A NFC-B Correct handling of DID = '0' (x=0)				
Step	**Exchanges**			**Comments**
73	**IUT** ◀	'05 00 08'	◀ **LT**	ALLB_REQ to poll for the IUT
74	**IUT** ▶	SENSB_RES	▶ **LT**	SENSB_RES
75	**IUT** ◀	'1D' + NFCID0 + '00 08 01 01'	◀ **LT**	ATTRIB with DID = '1'
76	**IUT** ▶	'01'	▶ **LT**	ATTRIB Response with DID = '0'
77	**IUT** ◀	$I(0)_0$ ['00 A4 04 00' +'Lc' + P_AID + 'Le'] with DID = '2'	◀ **LT**	Select P_AID/b.n. = 0

Scenario TC_DP11_LIS_NFCB_UND_BI_15_x.A NFC-B Correct handling of DID = '0' (x=0)				
Step		**Exchanges**		**Comments**
78	**IUT** ▶	IUT stays mute in receive mode and raise the Unrecoverable Error Exception after	▶ **LT**	
End of test: Reset NFC Forum Listen Device.				

Scenario TC_DP11_LIS_NFCB_UND_BI_15_x.B NFC-B Correct handling of DID = '0' (x=1)				
Step		**Exchanges**		**Comments**
1	**IUT** ◀	'05 00 08'	◀ **LT**	ALLB_REQ to poll for the IUT
2	**IUT** ▶	SENSB_RES	▶ **LT**	SENSB_RES
3	**IUT** ◀	'1D' + NFCID0 + '00 08 01 01'	◀ **LT**	ATTRIB with DID = '1'
4	**IUT** ▶	'01'	▶ **LT**	ATTRIB Response with DID = '1'
5	**IUT** ◀	$I(0)_0$ ['00 A4 04 00' +'Lc' + P_AID + 'Le'] with no DID	◀ **LT**	Select P_AID/b.n. = 0
6	**IUT** ▶	IUT stays mute in receive mode and raise the Unrecoverable Error Exception	▶ **LT**	
End of test: Reset NFC Forum Listen Device.				

6 Document Updates to be Applied

Test Cases for Digital Protocol version 1.1.01

7 Information to the Authorized Labs

n/a.

8 Information to the CA

n/a.