TVRC Errata Item

1 Errata Item Details

Title	GCF Analog v2.0 testing issue
Certification Release(s) affected	CR10
TVRC Errata Item ID	TVRC-EE104
Date Received	2017-03-15
TVRC ID	EE104
Date Resolved	2017-03-15
CC/TWG Kavi Comment Reference	n/a
TWG Change Request (CR)	testingwg.00505.2017.GCF_Analog_v20_testing_issue Rev 1.000.docx

2 Document Details

TC Document Name	Test Cases for Analog 2.0
TC Document Date	2016-10-03
TC Document Status	Published

3 Issue Summary

Functionality Area/Subject	Analog 2.0 Test Cases
Test Case ID	See below
Subcase	n/a
Scenario(s)	n/a
Step(s)	n/a

4 Issue Description

Currently most NFCC/devices are certified for CR8 testing for Analog, Digital and Activity v1.0. NFC Forum CR8 will continue to be active until 2018-02. GCF started the certification which includes ANALOG v2.0 already and it is expected that it will be mandatory starting with June 2017. ANALOG v2.0 test cases require the device to implement Activity v1.1 or higher for execution of the scenarios defined in Appendix E of test cases for Analog. This means most devices, although they support the new ANALOG parameter requirements, will FAIL the test a-priori due to the required command sequence defined in Appendix E of TC_ANA.

The described problem in command sequence execution during testing has no impact what so ever on any measured analog parameter. Furthermore, this problem is limited to a testing issue and has no impact on interoperability in the field.

This CR proposes to provide some flexibility to OEMs targeting GCF certification by allowing devices implementing either of v1.0 and v1.1 of Digital and Activity to be able to execute ANALOG v2.0 test cases as defined in TC ANA v2.0.02.

Devices implementing v1.1 of Digital and Activity can easily execute Appendix E scenarios of TC ANA v2.0.02. However, devices implementing v1.0 of Digital and Activity must fail due to the scenarios defined in Appendix E. The described problem is limited to Poller test cases only.

Therefore, this CR proposes to give some flexibility in the scenarios for execution of Poll mode test cases by allowing both, Appendix E scenarios of TC AN v1.0 and Appendix E scenarios as defined in TC AN v2.0.02 for Poll Mode test cases execution defined for ANA v2.0.

This Erratum shall be withdrawn when NFC Forum Certification Release 8 is sunset (February 2018)

5 Approved Resolution

Appendix E, after Table 34 add:

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The following alternative test scenarios may be executed for Poller Device Tests.

Table 35: Alternative Test Scenario for Poller Device Tests

	Test Tool (Listener Simulation)		IUT (Poller Under Test)
NFC A		<	ALL_REQ/SENS_REQ
	SENS_RES	>	
		<	SDD_REQ
NFC B		<	ALLB_REQ/SENSB_REQ
	SENSB_RES	>	
		<	ATTRIB
NFC F		<	SENSF_REQ (‘00 FF FF 00 03’)
	SENSF_RES	>	
		<	SENSF_REQ (''00 FF FF 01 0F’)

Table 36: Alternative Test Scenario for Power On and Off Tests

	Test Tool (Poller Simulation)		IUT (Listener Under Test)
NFC A	ALL_REQ/SENS_REQ	>	
		<	SENS_RES
	Reset sequence during $\mathbf{t}_{FIELD\_OFF}$	>	
	ALL_REQ/SENS_REQ sent after $\mathbf{GT}_A$	>	
		<	SENS_RES
NFC B	ALLB_REQ/SENSB_REQ	>	
		<	SENSB_RES
	ATTRIB	>	
		<	Any ATTRIB answer
	Reset sequence during $\mathbf{t}_{FIELD\_OFF}$	>	
	ALLB_REQ/SENSB_REQ sent after $\mathbf{GT}_B$	>	
		<	SENSB_RES
NFC F	SENSF_REQ (‘00 FF FF 00 03’)	>	
		<	SENSF_RES
	ATR_REQ	>	
		<	ATR_RES
	Reset sequence during $\mathbf{t}_{FIELD\_OFF}$	>	
	SENSF_REQ (‘00 FF FF 00 03’) sent after $\mathbf{GT}_F$	>	
		<	SENSF_RES

NOTE The scenario in Table 1 36 is for NFC-A mode only.

Table 1: Alternative Test Scenario for Reset Characteristics Measurement

	IUT (Poller Under Test)		Test Ttool (Listener Simulation)
NFC A	ALL_REQ/SENS_REQ	>	
		<	’01 00’ (no EoD) SENS_RES
	’93 20’ (SDD frame)	>	
		<	’77 3A A6 9F’ + ‘75’ (SDD frame with BCC error)
	The IUT stops sending the carrier within $\mathbf{t}_{RESETDELAY}$	>	

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6 Document Updates to be Applied

Test Cases for Analog 2.0

7 Information to the Authorized Labs

Ensure that the test tools support this update before execution of the test cases

8 Information to the CA

Ensure that the test tools used has been updated according to this Erratum.