

Public Comment Feedback Table for ISSI CSSI Conformance testing

Document Title: P25-CAB-ISSI-RFSS_CONF_TEST_CASES-20181119

Comment Date: March 19, 2019

Commenter Name or Company: Motorola Solutions

#	Comment	Action	Explanation
M1	<p>Page 7, Section 1.1, 2nd para</p> <p>Conformance testing as described in this document will not validate the messaging between actual RFSSs. We suggest replacing the first sentence of the second paragraph with this clarifying text:</p> <p>This document validates the messaging between an RFSS under test and the Conformance test tool, which is emulating another RFSS. The tests in this document validate that under prescribed conditions described in this document, the RFSS under test will successfully exchange the messages in the MSCs with the Conformance test tool.</p>	Accepted	<p>The document will be changed with the following text:</p> <p>This document validates the messaging between an RFSS under test and the Conformance test tool, which is emulating another RFSS. The tests in this document validate that under prescribed conditions described in this document, the RFSS under test will successfully exchange the messages in the MSCs with the Conformance test tool.</p> <p>These changes will be made in the other two test case documents as well.</p>
M2	<p>Page 7, section 1.1, 2nd para</p> <p>The second sentence mentions MSCs found in the document. Could a statement about the source of the MSCs be added?</p>	See Explanation	<p>The second sentence will be modified to read: The MSCs within include messaging that originate or terminate within an RFSS (or CSS) itself and are included for reference only. The source of messaging that originates or terminates within an RFSS (or CSS) itself are based on the definitions described in TIA-102.BACA-B "ISSI Messages and Procedures for Voice Services, Mobility Management, and RFSS Capability Polling Services" and TIA-102.BACD-B "ISSI - Messages and Procedures for Supplementary Data".</p> <p>These changes will be made in the other two test case documents as well.</p>
M3	<p>Page 9, section 1.7</p> <p>No P25 standards documents are listed as normative references. Any P25 documents used to create the MSCs should be normative references. Any P25 documents a tester needs to execute or determine pass/fail should be normative references.</p>	Accepted	<p>[102BACA-B], [102BACA-B-1], [102BACA-B-2] and [102BACD-B] will be made normative references.</p> <p>These changes will be made in the other two test case documents as well.</p>
M4	<p>Page 9, Section 1.8, reference [8]</p> <p>Should use CACD-D, not CACD-C.</p>	Accepted	<p>Will change the reference from CACD-C to CACD-D.</p> <p>These changes will be made in the other two test case documents as well.</p>

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M5	<p>Page 10, section 2.1 second para</p> <p>We think the first sentence of the second paragraph should be clearer regarding the validation of the SIP, SDP and RTP messages. We suggest this change to the second paragraph:</p> <p>Conformance testing will validate the FNE equipment under test portion of the SIP, SDP and RTP messages that are exchanged during specific test cases between the FNE equipment under test and the conformance test tool. The SIP, SDP and RTP messages are as defined in this document's MSCs.</p>	Accepted with Modification	<p>The document will be changed with the following text:</p> <p>Conformance testing will validate the FNE equipment under test portion of the SIP, SDP and RTP messages that are exchanged during specific test cases between the FNE equipment under test and the conformance test tool. The SIP, SDP and RTP message flows are as defined in this document's MSCs.</p> <p>These changes will be made in the other two test case documents as well.</p>
M6	<p>Page 10 Section 2.3</p> <p>How was the Valid8 test tool validated? Where have you documented, or will you document how to get a tool validated that does the same thing as the Valid8 tool?</p>	See Explanation	<p>The Institute for Telecommunications Sciences (ITS), part of the National Telecommunications and Information Administration (NTIA), will be validating the Valid8 test tool. ITS will be documenting a procedure on how the test tool was validated.</p>
M7	<p>Page 10 Section 2.3</p> <p>Review of test cases would benefit from understanding the configuration and capabilities of the test tool. When will this information be available? For example, in section 3.1.1, there are tool configuration requirements and optional tool configuration requirements and we do not know how to do that.</p>	See Explanation	<p>The test tool is being developed based on the test cases. A user's guide for the test tool will exist.</p> <p>Note that the statement you are referring to in section 3.1.1 states: "The Group Serving RFSS may also have shown Group Supplementary Data interest with the Group Home for this group based service..." as only a group registration is required for group voice services. Supplementary data service registration is not needed, but is allowed to occur.</p> <p>The sentence for group voice call test cases will be updated to read: "It is acceptable with group voice testing for an RFSS under test to also show (or not show) interest in group supplementary data before this test case is run. If an RFSS under test shows interest in group supplementary data services, the test tool will accept the supplementary data registration messaging."</p>
M8	<p>Page 14 sections 2.6 and 1.5</p> <p>There are two Acronyms sections, suggest combining them.</p>	Accepted	<p>The two acronyms sections will be combined into one section.</p>

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M9	<p>Page 17 section 3.1.1.2 and every section like it</p> <p>The test plan does NOT indicate how equipment under test passes a test. Please add pass criteria. For instance, does all documented message content as defined by the MSCs have to match, or is there a sub-set of content that is required to pass?</p>	See Explanation	A detailed pass/fail criteria document will be created. This document will specify by message the needed fields and allowed values. Test cases will identify specific scenarios with MSCs needed to pass a test.
M10	<p>Page 18, Payload Block 1, every Transmission Sequence Number. Incorrect format found in all three documents.</p> <p>The Transmission sequence number is a 7 bit parameter, not 4 hex nibbles as shown. The value 17 should be depicted as (%b0010001)</p>	Accepted	<p>Payload Block 0 has the Transmission Sequence Number (TSN). The TSN will be updated to be a 7-bit parameter as described in BACA-B.</p> <p>These changes will be made in the other two test case documents as well.</p>
M11	<p>Page 19, Payload Block 2 and every ALGID after</p> <p>If these are unencrypted calls, then the test plan should state that and all ALGIDs need to be changed to %x80. The test plan's current value of ALGID = 00 is defined as "Accordion 1.3" in the TR8.15 ALGID guide, document 15-010-R1_TR-8.15 ALGID Guide v2.1. See also TIA-102.BAAC-D Reserved Values, Table 6 Standard ALGID Values.</p>	Accepted	<p>Agree – ALGID for encrypted calls should be AlgID: %x80. \$80. All three test case documents will be updated.</p> <p>These changes will be made in the other two test case documents as well.</p>
M12	<p>Page 75, section 3.5 and every subsequent confirmed call test in all of the documents:</p> <p>This section and the MSC mischaracterize group service profile parameter g-ccsetupT. It is not normatively mapped to the group home confirmed call wait timer Tgchstartconfirmed. The use of g-ccsetupT other than denoting whether a group is using confirmed or unconfirmed call is local policy; the standard does not define what "confirmed call setup time" means or how to use it. Since having a configurable confirmed call wait timer is not required, and a 0 wait time is allowed, suggest removing the use of "g-ccsetupT" and instead call it "confirmed call wait time".</p>	Accepted with Modification	<p>Agree that g-ccsetupT is actually the group service profile parameter. The standard actually describes the timer shown in the MSCs as being the "Tgchstartconfirmed" timer. The Tgchstartconfirmed timer will be specified in the test cases.</p> <p>These changes will be made in the other two test case documents as well.</p>

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M13	<p>Page 75, section 3.5.1</p> <p>A missing test case is confirmed call with resources available at the start. Is it not included because it is expected to be the same as unconfirmed call?</p>	See Explanation	<p>The standard defines a group with a g-ccsetupT that has a value of 0 as being an unconfirmed group call and a non-zero value of g-ccsetupT as being a confirmed group call – via the group service profile parameter. As this is the case, it was decided that an Unconfirmed Group Call is very similar to a Confirmed Group Call that “initially has available resources”. Therefore a test case for Confirmed Group Call that “initially has available resources” will NOT be included.</p>
M14	<p>Page 85, section 3.5.2.1 F15 and F18</p> <p>The test case description is missing the part about how the RFSS under test first has no resources available and then suddenly it has RF resources. How is this expected to be accomplished during the test? Same comment for all similar confirmed call test cases in all three documents.</p>	See Explanation	<p>Add the following text in the preconditions of each Confirmed Group Call test case to clarify:</p> <p>This test case calls for an RF Site within an RFSS to NOT initially have resources before the test is run. A local talkgroup call is assigned at an RF site that causes a condition such that no RF resources are available for the talkgroup under test.</p> <p>For “Delayed Resources” Confirmed Group Call Tests, the following will also be added:</p> <p>Within “Tgchstartconfirmed” for the talkgroup under test, the local talkgroup call ends and the needed RF resource becomes available at a time shown in the MSC.</p> <p>For “No Resources” Confirmed Group Call Tests, the following will also be added:</p> <p>When the “Tgchstartconfirmed” timer expires for the talkgroup under test, the Group Home RFSS shall assign the call for the talkgroup under test – as indicated in the MSC.</p> <p>These changes will be made in the other two test case documents as well.</p>
M15	<p>Page 145 Section 4.1.1.4 – and all half rate test cases in all three documents</p> <p>Why do the MSCs specify non-consecutive half rate audio packets? The RFSS under test should not be expected to send non-consecutive audio packets. Nor should it be expected to render correct sounding audio when receiving the non-consecutive audio packets.</p>	Accepted	<p>True – the RFSS under test should not be expected to send non-consecutive packets. There was a note at the top of the messaging indicating this, as we only wanted to test a 4V packet and the 2V packet. As this was confusing, group call test cases will be updated to include four 4V packets and one 2V packet in the proper, consecutive order.</p> <p>These changes will be made in the other two test case documents as well.</p>

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M16	<p>Page 270, Section 5.1.1.2 3rd paragraph</p> <p>The description in this paragraph is wrong and every similar paragraph after in all three documents. If the Called Serving does not send an SD Response, the Called Home does not send a self-generated SD Response timeout back to the Called Serving. It would send it to the <u>Calling Home</u>, which is what is shown in this MSC. Please see TIA-102.BACD-B Section 5.4.3, Step 6.a and Table 31.</p>	Accepted with Modification	<p>MSCs will be updated to send an SD Response from the Called Home to the Calling Home.</p> <p>Note that test cases for ISSI RFSS under test will be updated to have 2 (not 8) test cases per emergency service based on comment M21.</p>
M17	<p>Page 273, section 5.1.1.4</p> <p>The message numbering for the alternate procedure does not match the MSC. This error is repeated many times.</p>	Accepted	Agree – the numbering will be updated in this test case and other test cases where a mismatch occurs.
M18	<p>Page 273, section 5.1.1.4, F11</p> <p>F11's route should be TIA-SD-Calling-Home. It sends the message to the Calling Home, which is how it is shown on the MSC. And the s-msg should be a Res, not a Sres according to TIA-102.BACD-B section 5.4.3, Step 6.a and Table 31. This error is made repeatedly for the emergency cases in this document and the other two documents. From the called home to the calling home, the self-generated response is a response, not a secondary response.</p>	Accepted with Modification	<p>MSCs will be updated as suggested.</p> <p>Note that test cases for ISSI RFSS under test will be updated to have 2 (not 8) test cases per emergency service based on comment M21.</p>

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M19	<p>Page 275, section 5.1.2.3 and 5.1.3.3</p> <p>The alternate procedure message F6 Secondary SD Response may not be sent based on local policy. See TIA-102.BACD-B section 5.4.3, Step 6.c.</p>	Accepted	<p>The “Alternate Procedure” for the emergency services MSCs will be updated based on the following, from BACD-B section 5.4.3:</p> <p>6. Upon expiration of the SD_CalledHome_Timeout timer, the Destination Home shall:</p> <p>a. Construct and Send an SDE_RESPONSE_TIMEOUT Error Response (Table 31) to the Calling Home RFSS; and</p> <p>c. Forward the SD Distribution Secondary Response (based on the SD Distribution Response sent in step a. above) as indicated in Table 29 to each of the elements of the preserved forwarding list, excluding any elements that had a SIP Timeout or another failure according to local policy, or Unsuccessful SIP Final Response in response to the SD Request SIP MESSAGE.</p> <p>Therefore, BACD-B is stating that an SD Response shall be sent to the Calling Home RFSS, but an SD Secondary Response may NOT be sent depending on local policy.</p> <p>Note that test cases for ISSI RFSS under test will be updated to have 2 (not 8) test cases per emergency service based on comment M21.</p>
M20	<p>Page 285 section 5.1.4.1, F11 (Alternate F6 in MSC)</p> <p>The route should be TIA-SD-Calling-Home. The called home is not sending it to the called serving. It is sending it to the calling home. And the s-msg should be a Res, not a Sres according to TIA-102.BACD-B section 5.4.3, Step 6.a and Table 31.</p>	Accepted with Modification	<p>Agree – See comment M19 and M21.</p> <p>Note that test cases for ISSI RFSS under test will be updated to have 2 (not 8) test cases per emergency service based on comment M21.</p>

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M21	<p>Page 287, section 5.1.5.3 (and 5.1.8.3)</p> <p>This MSC is not correct. The messages have to go back and forth three times, not twice as shown. The roles of the RFSSs are similar to U2U14 for unit-to-unit call as depicted in Figure 25 of TIA-102.CACD-D. Or, for this specific case, see SD14 on page 11 of ISSITG comment matrix “18-002-ISSITG – MSI Comments on 17-011...”</p> <p>As we explained in our ISSITG comments, this set of role combinations and those in 5.1.8.3 are the only test cases needed to test every possible interface because the RFSS under test takes on all possible roles when you combine the two. And for some reason, the Call Alert test that does the same roles shows it correctly. Emergency could do the same thing and greatly reduce the number of test cases.</p>	Accepted with Modification	<p>The suggested change will be made. The Emergency Services will each be reduced from 8 to 2 test cases – as all the roles between 2 RFSSs can therefore be captured by 2 test cases based on 5.1.5.3 and 5.1.8.3 for the ISSI test cases document. Test cases 5.1.5.3 and 5.1.8.3 will be updated such that “the messages go back and forth three times” as suggested by the comment.</p> <p>The reference from [BACD-B] section 2.1.3.4 reads: “Responsibilities of the Group Home RFSS” which states: Upon receiving a supplementary data message destined to a group homed to the RFSS:</p> <p>- Forwarding the message to the serving RFSSs with interest in supplementary data for the group.</p>
M22	<p>Page 294, section 5.1.6.4, F11 and F12</p> <p>The Route should be TIA-SD-Calling-Serving, not Called-Serving. The calling home is forwarding the message to the calling serving. The s-msg should be a Res, not Sres according to TIA-102.BACD-B section 5.4.3, Step 6.a and Table 31. And F12 should say what the Calling Serving does, not Called Serving. Section 5.1.7.4 has the same problem.</p>	Accepted with Modification	<p>Agree – See comment M19 and M21.</p> <p>Note that test cases for ISSI RFSS under test will be updated to have 2 (not 8) test cases per emergency service based on comment M21.</p>
M23	<p>Page 304 and beyond</p> <p>We have the same comments against the two Emergency Cancel sections as we have against the Emergency Alarm section. This is the mapping to which other sections they apply:</p> <p>M17: 5.2.1.4, 5.3.1.4 M18: 5.2.2.3, 5.2.3.3, 5.3.2.3, 5.3.3.3 M19: 5.2.4.1, 5.3.4.1 M20: 5.2.5.3, 5.2.8.3, 5.3.5.3, 5.3.8.3 M21: 5.2.6.4, 5.2.7.4, 5.3.6.4, 5.3.7.4</p>	Accepted with Modification	<p>Agree – See comment M19 and M21.</p> <p>Note that test cases for ISSI RFSS under test will be updated to have 2 (not 8) test cases per emergency service based on comment M21.</p>

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M24	<p>Page 374, section 5.4.1.4, F2 and every subsequent non-200 OK message. F2 is missing the radio's affiliated talkgroup "s-group". Per TIA-102.BACD-B Table 26 it is required in the SD Distribution Request, and per Table 30 it is required in the SD Distribution Response. This comment also applies to 5.4.2.2.</p> <p>What does the text in brackets with the word "exposed" in the MSC mean?</p>	Accepted	<p>The affiliated talkgroup of the SU that originated the message will be added to this message. The Call Alert test cases will now also need to specify an affiliated talkgroup.</p> <p>The role that the message being sent to was "exposed". As this term is confusing, it will be removed.</p>
M25	<p>Many of these comments apply to the other two test case documents. We have not supplied duplicate comments nor have we tried to figure out the mapping between documents.</p>	Accepted	<p>The other test case documents with similar issues will be updated consistent with the resolutions discussed within this document.</p>