



## DEFENSE INFORMATION SYSTEMS AGENCY

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IN REPLY  
REFER  
TO:

Joint Interoperability Test Command (JITE)

**28 Sept 12**

### MEMORANDUM FOR DISTRIBUTION

**SUBJECT:** Extension of the Special Interoperability Test Certification of the Cisco Unified Communications Manager Local Session Controller, Version 8.0(2) Engineering Special (ES) 9

**References:** (a) DoD Directive 4630.05, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 2004  
(b) CJCSI 6212.01E, "Interoperability and Supportability of Information Technology and National Security Systems," 15 December 2008  
(c) through (f), see Enclosure

1. References (a) and (b) establish the Joint Interoperability Test Command (JITC), as the responsible organization for interoperability test certification.
2. The Cisco Unified Communications Manager (CUCM), Version 8.0(2), hereinafter referred to as the System Under Test (SUT) is certified for joint use in the Defense Information System Network (DISN) as a Local Session Controller (LSC). The Defense Information Systems Agency (DISA) adjudicated all open non-AS Test Discrepancy Reports (TDRs) to have a minor operational impact. The fielding of the SUT is limited to IP version 4 (IPv4) across the DISN. Although the SUT supports Internet Protocol version 6 (IPv6), it was not tested inter-enclave because of test limitations within the network infrastructure. Therefore, inter-enclave IPv6 is not covered under this certification, but intra-enclave use of IPv6 is authorized for use. Any new discrepancy noted in the operational environment will be evaluated for impact on the existing certification. These discrepancies will be adjudicated to the satisfaction of DISA via a vendor Plan of Actions and Milestones, which will address all new critical TDRs within 120 days of identification. Testing was conducted using LSC product requirements derived from the Unified Capabilities Requirements (UCR), Reference (c), and LSC test procedures, Reference (d). No other configurations, features, or functions, except those cited within this memorandum, are certified by JITC. This certification expires upon changes that affect interoperability, but no later than 16 September 2013, which is three years from the date of the original Unified Capabilities (UC) Approved Products List (APL) memorandum.
3. The extension of this certification is based upon Desktop Review (DTR) 8. The original certification is based on interoperability testing conducted by JITC, review of the vendor's Letters of Compliance (LoC), and DISA Information Assurance (IA) Certification Authority (CA) approval of the IA configuration. Interoperability testing was conducted by JITC, Fort Huachuca, Arizona, from 28 June 2010 through 20 August 2010 and documented in Reference (e). Review of the vendor's LoC was completed on 21 September 2010. The DISA CA has

reviewed the IA Assessment Report for the SUT, Reference (f), and based on the findings in the report has provided a positive recommendation. The acquiring agency or site will be responsible for the DoD Information Assurance Certification and Accreditation Process (DIACAP) accreditation. This DTR was requested to update the 3845 Cube from IOS 15.1(1)T-BORON\_141 to IOS 15.1.4M4. This release includes IA and commercial updates. JITC determined Verification and Validation (V&V) testing was required prior to approval. The V&V interoperability testing of the updates associated with this DTR was successfully verified from 25 through 29 June 2012. Therefore, JITC approves this DTR. The results of the IA testing are published in a separate report, Reference (f).

4. The interface, Capability Requirements (CR) and Functional Requirements (FR), and component status of the SUT is listed in Tables 1 and 2. The threshold Capability/Functional requirements for LSCs are established by Sections 5.3.2, 5.3.4, 5.3.5, and 5.4 of Reference (c) and were used to evaluate the interoperability of the SUT.

**Table 1. SUT Interface Interoperability Status**

Interface	Critical	UCR Reference	Threshold CR/FR <sup>1</sup>	Status	Remarks <sup>2</sup>
<b>Line Interfaces</b>					
10Base-X	Yes	5.3.2.6.3	2, 4, 10, 13, and 16	Certified	Met threshold CRs/FRs for IEEE 802.3i and 802.3j. Applies to PEIs and softphones.
100Base-X	Yes	5.3.2.6.3	2, 4, 10, 13, and 16	Certified	Met threshold CRs/FRs for IEEE 802.3u. Applies to PEIs and softphones.
1000Base-X	No	5.3.2.6.3	2, 4, 10,13, and 16	Certified	Met threshold CRs/FRs for IEEE 802.3ab. Applies to PEIs and softphones.
2-wire analog	Yes	5.3.2.6.1.6	2, 4, 10, and 13	Certified	Met threshold CRs/FRs for 2-wire instruments. Applies to 2-wire secure and non-secure analog instruments. Requirement met through use of an IAD integrated in the MG that supports IEEE 802.3i, 802.3u, and 802.3ab <sup>3</sup>
BRI	No	5.3.2.6.1.8	2, 4, 10, and 13	Not Tested	This interface is offered by the SUT but was not tested because it does not support Assured Services.
<b>External Interfaces</b>					
10Base-X	No <sup>4</sup>	5.3.2.4.2	1, 2, 3, 6, 7, 8, 10, 11, 13, 15, and 16	Certified	Met threshold CRs/FRs for IEEE 802.3i and 802.3j. Applies to AS-SIP trunk.
100Base-X	No <sup>4</sup>	5.3.2.4.2	1, 2, 3, 6, 7, 8, 10, 11, 13, 15, and 16	Certified	Met threshold CRs/FRs for IEEE 802.3u. Applies to AS-SIP trunk.
1000Base-X	No <sup>4</sup>	5.3.2.4.2	1, 2, 3, 6, 7, 8, 10, 11, 13, 15, and 16	Certified	Met threshold CRs/FRs for IEEE 802.3z and 802.3ab. Applies to AS-SIP trunk.
ISDN T1 PRI ANSI T1.619a	Yes	5.3.2.4.3	2, 3, 7, 8, 10, and 13	Certified	Met threshold CRs/FRs. Provides legacy DSN and TELEPORT connectivity.
ISDN T1 PRI NI-2	Yes	5.3.2.4.3	2, 3, 7, 8, 10, and 13	Certified	Met threshold CRs/FRs. Provides PSTN Connectivity
T1 CCS7 ANSI T1.619a	No	5.3.2.12.9	2, 3, 7, 8, 10, and 13	Not Tested	This interface is not offered by the SUT.
T1 CAS	No	5.3.2.12.11	2, 3, 7, 8, 10, and 13	Not Certified	This interface is offered by the SUT but was not certified because of known discrepancies <sup>5</sup>
E1 PRI ITU-T Q.955.3	No <sup>6</sup>	5.3.2.12.10	2, 3, 7, 8, 10, and 13	Certified	Tested under PBX1 configuration. Results applicable to LSC.
E1 PRI ITU-T Q.931	No <sup>6</sup>	5.3.2.12.10	2, 3, 7, 8, 10, and 13	Certified	Conditionally required for European PSTN connectivity.

**Table 1. SUT Interface Interoperability Status (continued)**

Interface	Critical	UCR Reference	Threshold CR/FR <sup>1</sup>	Status	Remarks <sup>2</sup>																																																																																								
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10Base-X	No <sup>4</sup>	5.3.2.4.4 5.3.2.7.2.8	16 and 17	Certified	Met threshold CRs/FRs. Verified via LoC.																																																																																								
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<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>The CR/FR requirements are contained in Table 2. The CR/FR numbers represent a roll-up of UCR requirements. Reference (e), Enclosure 3 provides a list of more detailed requirements LSC products.</li> <li>Reference (e), Enclosure 2, paragraph 11, provides detailed information pertaining to open TDRs and associated operational impacts.</li> <li>Voice calls from the SUT gateway analog interfaces via the UC DISN WAN require a loopback configuration of ANSI T1.619a ISDN PRI interfaces within each gateway (refer to Cisco CUCM deployment guide). This configuration requires translations in the gateways to route all out going analog calls placed towards the UC DISN WAN via the looped T1s. Additionally, incoming calls from the UC DISN WAN to analog end instruments on each gateway must be routed via the looped T1s. Without this configuration, analog end instruments cannot place calls via the UC DISN WAN. This configuration requires two looped ISDN PRI ANSI T1.619a T1s within each 3845 and 3945 gateways and will support a maximum of 69 analog interfaces per gateway. This allows for up to two ISDN PRI T1 interfaces or one ISDN PRI E1 interface for timing/network access. In addition, each 2851 and 2951 gateway requires one looped ANSI T1.619a ISDN PRI within each 2851 and 2951 gateway and will support a maximum of 23 analog interfaces per gateway. Both gateways also require a T1 or E1 interface for synchronization via recovered timing.</li> <li>Must provide a minimum of one of the listed interfaces.</li> <li>The SUT CAS interface had interoperability test discrepancies adjudicated to be critical for certification.</li> <li>The interface is conditionally required for deployment in Europe.</li> </ol> <p><b>LEGEND:</b></p> <table border="0"> <tr> <td>10Base-X</td> <td>10 Mbps Ethernet</td> <td>ITU-T</td> <td>International Telecommunication Union –</td> </tr> <tr> <td>100Base-X</td> <td>100 Mbps Ethernet</td> <td></td> <td>Telecommunication Standardization Sector</td> </tr> <tr> <td>1000Base-X</td> <td>1000 Mbps Ethernet</td> <td>LoC</td> <td>Letter of Compliance</td> </tr> <tr> <td>802.3ab</td> <td>1000 Mbps Ethernet over Twisted Pair</td> <td>LSC</td> <td>Local Session Controller</td> </tr> <tr> <td>802.3i</td> <td>10 Mbps twisted pair media for 10Base-X networks</td> <td>Mbps</td> <td>Megabits per second</td> </tr> <tr> <td>802.3j</td> <td>10 Mbps fiber media for 10Base-X networks</td> <td>MG</td> <td>Media Gateway</td> </tr> <tr> <td>802.3u</td> <td>100BASE-TX, 100BASE-T4, 100BASE-FX Fast Ethernet at 100 Mbps with auto negotiation</td> <td>MLPP</td> <td>Multi-Level Precedence and Preemption</td> </tr> <tr> <td>802.3z</td> <td>Standard for Gigabit Ethernet</td> <td>NA</td> <td>Not Applicable</td> </tr> <tr> <td>ANSI</td> <td>American National Standards Institute</td> <td>NI-2</td> <td>National ISDN Standard 2</td> </tr> <tr> <td>AS-SIP</td> <td>Assured Services Session Initiation Protocol</td> <td>NM</td> <td>Network Management</td> </tr> <tr> <td>BRI</td> <td>Basic Rate Interface</td> <td>PBX</td> <td>Private Branch Exchange</td> </tr> <tr> <td>CAS</td> <td>Channel Associated Signaling</td> <td>PEI</td> <td>Proprietary End Instrument</td> </tr> <tr> <td>CCS7</td> <td>Common Channel Signaling</td> <td>PRI</td> <td>Primary Rate Interface</td> </tr> <tr> <td>CR</td> <td>Capability Requirement</td> <td>PSTN</td> <td>Public Switched Telephone Network</td> </tr> <tr> <td>CUCM</td> <td>Cisco Unified Communications Manager</td> <td>SS7</td> <td>Signaling System 7</td> </tr> <tr> <td>DISN</td> <td>Defense Information System Network</td> <td>SUT</td> <td>System Under Test</td> </tr> <tr> <td>DSN</td> <td>Defense Switched Network</td> <td>T1</td> <td>Digital Transmission Link Level 1 (1.544 Mbps)</td> </tr> <tr> <td>E1</td> <td>European Basic Multiplex Rate (2.048 Mbps)</td> <td>T1.619a</td> <td>SS7 and ISDN MLPP Signaling Standard for T1</td> </tr> <tr> <td>FR</td> <td>Functional Requirement</td> <td>TDRs</td> <td>Test Discrepancy Reports</td> </tr> <tr> <td>IAD</td> <td>Integrated Access device</td> <td>UC</td> <td>Unified Capabilities</td> </tr> <tr> <td>IEEE</td> <td>Institute of Electrical and Electronics Engineers, Inc.</td> <td>UCR</td> <td>Unified Capabilities Requirements</td> </tr> <tr> <td>ISDN</td> <td>Integrated Services Digital Network</td> <td>WAN</td> <td>Wide Area Network</td> </tr> </table>						10Base-X	10 Mbps Ethernet	ITU-T	International Telecommunication Union –	100Base-X	100 Mbps Ethernet		Telecommunication Standardization Sector	1000Base-X	1000 Mbps Ethernet	LoC	Letter of Compliance	802.3ab	1000 Mbps Ethernet over Twisted Pair	LSC	Local Session Controller	802.3i	10 Mbps twisted pair media for 10Base-X networks	Mbps	Megabits per second	802.3j	10 Mbps fiber media for 10Base-X networks	MG	Media Gateway	802.3u	100BASE-TX, 100BASE-T4, 100BASE-FX Fast Ethernet at 100 Mbps with auto negotiation	MLPP	Multi-Level Precedence and Preemption	802.3z	Standard for Gigabit Ethernet	NA	Not Applicable	ANSI	American National Standards Institute	NI-2	National ISDN Standard 2	AS-SIP	Assured Services Session Initiation Protocol	NM	Network Management	BRI	Basic Rate Interface	PBX	Private Branch Exchange	CAS	Channel Associated Signaling	PEI	Proprietary End Instrument	CCS7	Common Channel Signaling	PRI	Primary Rate Interface	CR	Capability Requirement	PSTN	Public Switched Telephone Network	CUCM	Cisco Unified Communications Manager	SS7	Signaling System 7	DISN	Defense Information System Network	SUT	System Under Test	DSN	Defense Switched Network	T1	Digital Transmission Link Level 1 (1.544 Mbps)	E1	European Basic Multiplex Rate (2.048 Mbps)	T1.619a	SS7 and ISDN MLPP Signaling Standard for T1	FR	Functional Requirement	TDRs	Test Discrepancy Reports	IAD	Integrated Access device	UC	Unified Capabilities	IEEE	Institute of Electrical and Electronics Engineers, Inc.	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**Table 2. SUT CR and FR Status**

CR/FR ID	Capability/Function	Applicability <sup>1</sup>	UCR Reference	Status
<b>1</b>	<b>Assured Services Product Features and Capabilities</b>			
	DSCP Packet Marking	Required	5.3.2.2.1.4	Met
	Voice Features and Capabilities	Required	5.3.2.2.2.1	Partially Met <sup>2</sup>
	Public Safety Features	Required	5.3.2.2.2.2	Met
	ASAC – Open Loop	Required	5.3.2.2.2.3	Met
	Signaling Protocols	Required	5.3.2.2.2.3	Met
	Signaling Performance	Required	5.3.2.2.2.4	Met
<b>2</b>	<b>Registration, Authentication, and Failover</b>			
	Registration	Required	5.3.2.3.1	Met
	Failover	Required	5.3.2.3.2	Met
<b>3</b>	<b>Product Physical, Quality, and Environmental Factors</b>			
	Availability	Required	5.3.2.5.2.1	Partially Met <sup>3</sup>
	Maximum Downtimes	Required	5.3.2.5.2.2	Met
	Loss of Packets	Required <sup>4</sup>	5.3.2.5.4	Met
<b>4</b>	<b>Voice End Instruments</b>			
	Tones and Announcements	Required	5.3.2.6.1.1	Partially Met <sup>2,5</sup>
	Audio Codecs	Required	5.3.2.6.1.2	Partially Met <sup>5</sup>
	VoIP PEI or AEI Audio Performance Requirements	Required	5.3.2.6.1.3	Partially Met <sup>5</sup>
	VoIP Sampling Standard	Required	5.3.2.6.1.4	Partially Met <sup>5</sup>
	Authentication to LSC	Required	5.3.2.6.1.5	Partially Met <sup>5</sup>
	Analog Telephone Support	Required <sup>6</sup>	5.3.2.6.1.6	Partially Met <sup>7</sup>
	Softphones	Conditional	5.3.2.6.1.7	Met <sup>8</sup>
ISDN BRI	Conditional	5.3.2.6.1.8	Not Tested	
<b>5</b>	<b>Video End Instruments</b>			
	Video End Instrument	Required	5.3.2.6.2	Not Tested <sup>8</sup>
	Display Messages, Tones, and Announcements	Required	5.3.2.6.2.1	Not Tested <sup>8</sup>
	Video Codecs (Including Associated Audio Codecs)	Required	5.3.2.6.2.2	Not Tested <sup>8</sup>
<b>6</b>	<b>LSC Requirements</b>			
	PBAS/ASAC Requirements	Required	5.3.2.7.2.1	Met
	Calling Number Delivery Requirements	Required	5.3.2.7.2.2	Met
	LSC Signaling Requirements	Required	5.3.2.7.2.3	Met
	Service Requirements under Total Loss of WAN Transport	Required	5.3.2.7.2.4	Met
	Local Location Server and Directory	Required	5.3.2.7.2.5	Met
	LSC Transport Interface Functions	Required	5.3.2.7.2.7	Met
	LSC to PEI, AEI, and Operator Console Status Verification	Required	5.3.2.7.2.10	Partially Met <sup>9</sup>
	Line-Side Custom Features Interference	Conditional	5.3.2.7.2.11	Met
Loop Avoidance	Required <sup>4</sup>	5.3.2.7.3	Met	

**Table 2. SUT CR and FR Status (continued)**

CR/FR ID	Capability/ Function	Applicability <sup>1</sup>	UCR Reference	Status
7	<b>Call Connection Agent Requirements</b>			
	CCA IWF Component	Required <sup>10</sup>	5.3.2.9.2.1	Met <sup>11</sup>
	CCA MGC Component	Required <sup>10</sup>	5.3.2.9.2.2	Met
	SG Component	Conditional	5.3.2.9.2.3	Not Tested <sup>11</sup>
	CCA-IWF Support for AS-SIP	Required	5.3.2.9.5.1	Met
	CCA-IWF Support for SS7	Conditional	5.3.2.9.5.2	Not Tested <sup>11</sup>
	CCA-IWF Support for PRI via MG	Required	5.3.2.9.5.3	Met
	CCA-IWF Support for CAS Trunks via MG	Conditional	5.3.2.9.5.4	Not Tested <sup>11</sup>
	CCA-IWF Support for PEI and AEI Signaling Protocols	Required	5.3.2.9.5.5	Partially Met <sup>12</sup>
	CCA-IWF Support for VoIP and TDM Protocol Interworking	Required <sup>10</sup>	5.3.2.9.5.6	Met <sup>11</sup>
	CCA Preservation of Call Ringing State during Failure Conditions	Required <sup>4</sup>	5.3.2.9.6	Met
	CCA Interactions with Transport Interface Functions	Required	5.3.2.10.3	Met
	CCA Interactions with the EBC	Required	5.3.2.10.4	Met
	CCA Support for Admission Control	Required	5.3.2.10.5	Met
	CCA Support for UFS	Required	5.3.2.10.6	Met
	CCA Support for IA	Required	5.3.2.10.7	Met
	CCA Interaction with EIs	Required	5.3.2.10.10	Partially Met <sup>5</sup>
	CCA Support for AS Voice and Video	Required	5.3.2.10.11	Partially Met <sup>8</sup>
CCA Interactions with Service control Functions	Required	5.3.2.10.12	Met	
CCA Interworking between AS-SIP and SS7	Conditional	5.3.2.11	Not Tested <sup>11</sup>	
8	<b>MG Requirements</b>			
	Role of MG In LSC	Required	5.3.2.12.3.1	Met
	MG Support for ASAC	Required	5.3.2.12.4.1	Met
	MG and IA Functions	Required	5.3.2.12.4.2	Met
	MG Interaction with Service Control Function	Required	5.3.2.12.4.3	Met
	MG Interactions with IP Transport Interface Functions	Required	5.3.2.12.4.4	Met
	MG-EBC interactions	Required	5.3.2.12.4.5	Met
	MG IP-Based PSTN Interface Requirements	Conditional	5.3.2.12.4.7	Not Tested
	MG Interaction with EIs	Required	5.3.2.12.4.8	Met <sup>5</sup>
	MG support for User Features and Services	Required	5.3.2.12.4.9	Met
	MG Interface to TDM	Required	5.3.2.12.5	Met <sup>10,11</sup>
	MG Interface to TDM Allied and Coalition	Conditional	5.3.2.12.6	Not Tested
	MG Interface to TDM PSTN in US	Required	5.3.2.12.7	Met <sup>10</sup>
	MG Interfaces to TDM PSTN OCONUS	Required	5.3.2.12.8	Partially Met <sup>10</sup>
	MG Support for CCS7	Conditional	5.3.2.12.9	Not Tested <sup>11</sup>
	MG Support for ISDN PRI Trunks	Required	5.3.2.12.10	Met
	MG Support for CAS Trunks	Required	5.3.2.12.11	Not Tested <sup>11</sup>
	MG requirements for VoIP Internal Interfaces	Required	5.3.2.12.12	Met
MG Echo Cancellation	Required	5.3.2.12.13	Met	
MG Clock Timing	Required	5.3.2.12.14	Met	
MGC-MG CCA Functions	Required	5.3.2.12.15	Met	
MG V.150.1	Required	5.3.2.12.16	Not tested <sup>7</sup>	
MG Preservation of Call Ringing during Failure	Required <sup>4</sup>	5.3.2.12.17	Met	

**Table 2. SUT CR and FR Status (continued)**

CR/FR ID	Capability/ Function	Applicability <sup>1</sup>	UCR Reference	Status
9	<b>SG Requirements</b>			
	SG and CCS7 Network Interactions	Conditional	5.3.2.13.5.1	Not Tested <sup>11</sup>
	SG Interactions with CCA	Conditional	5.3.2.13.5.2	Not Tested <sup>11</sup>
	SG Interworking Functions	Conditional	5.3.2.13.5.3	Not Tested <sup>11</sup>
10	<b>WWNDP Requirements</b>			
	WWNDP	Required	5.3.2.16	Met
	DSN WWNDP	Required	5.3.2.16.1	Met
11	<b>Commercial Cost Avoidance</b>			
	Commercial Cost Avoidance	Required <sup>3</sup>	5.3.2.23	Not Tested
12	<b>AS-SIP Based for External Devices (Voicemail, Unified Messaging, and Automated Receiving Devices)</b>			
	AS-SIP Requirements for External Interfaces	Conditional	5.3.2.24	Not Tested
13	<b>Precedence Call Diversion</b>			
	Precedence call Diversion	Required	5.3.2.25	Met
14	<b>Attendant Station Features</b>			
	Precedence and Preemption	Required <sup>3</sup>	5.3.2.26.1	Not Tested <sup>13</sup>
	Call Display	Required <sup>3</sup>	5.3.2.26.2	Not Tested <sup>13</sup>
	Class of Service Override	Required <sup>3</sup>	5.3.2.26.3	Not Tested <sup>13</sup>
	Busy Override and Busy Verification	Required <sup>3</sup>	5.3.2.26.4	Not Tested <sup>13</sup>
	Night service	Required <sup>3</sup>	5.3.2.26.5	Not Tested <sup>13</sup>
	Automatic Recall of Attendant	Required <sup>3</sup>	5.3.2.26.6	Not Tested <sup>13</sup>
15	<b>AS-SIP Requirements</b>			
	SIP Requirements for AS-SIP Signaling Appliances and AS-SIP EIs	Required <sup>3</sup>	5.3.4.7	Not Tested
	SIP Session Keep-Alive Timer	Required	5.3.4.8	Met
	Session Description Protocol	Required	5.3.4.9	Met
	Precedence and Preemption	Required	5.3.4.10	Met
	Video Telephony – General Rules	Required	5.3.4.12	Not Tested <sup>8</sup>
	Calling Services	Required	5.3.4.13	Met
	SIP Translation Requirements for Inter-working AS-SIP Signaling Appliances	Required	5.3.4.14	Met
	Relevant Timers for the Terminating Gateway and the Originating Gateway	Required	5.3.4.15	Met
	SIP Requirements for Interworking AS-SIP Signaling Appliances	Required	5.3.4.16	Met
	Keep-Alive Timer Requirements for Interworking AS-SIP Signaling Appliances	Required	5.3.4.17	Met
	Precedence and Preemption Extensions for Interworking AS-SIP Signaling Appliances	Required	5.3.4.18	Met
	Supplementary Services	Required	5.3.4.19	Met

**Table 2. SUT CR and FRs Status (continued)**

CR/FR ID	Capability/Function	Applicability <sup>1</sup>	UCR Reference	Status
16	<b>IPv6 Requirements</b>			
	Product Requirements	Required	5.3.5.4	Partially met <sup>14</sup>
17	<b>NM</b>			
	LSC Management Function	Required	5.3.2.7.2.6	Met
	VVoIP NMS Interface Requirements	Required	5.3.2.4.4	Met
	General Management requirements	Required	5.3.2.17.2	Partially Met <sup>15</sup>
	Requirement for FCAPS Management	Required	5.3.2.17.3	Partially Met <sup>15</sup>
	NM requirements of Appliance Functions	Required	5.3.2.18	Partially Met <sup>15</sup>
	Accounting Management	Required	5.3.2.19	Partially Met <sup>16</sup>

**NOTES:**

1. The annotation of 'required' refers to a high-level requirement category. The applicability of each sub-requirement is provided in Reference (e), Enclosure 3.
2. The SUT had outstanding open TDRs at the completion of testing adjudicated by DISA to have a minor operational impact. The vendor has submitted a POA&M to address the open TDRs. Reference (e), Enclosure 2, paragraph 11, provides additional details.
3. When the SUT fails from the primary processor to backup processor, all active drop after approx 6-8 minutes. DISA adjudicated this TDR as minor and accepted the vendor's POA&M.
4. This requirement represented a new UCR 2008, Change 1, requirement and the vendor has 18-months (July 2011) to comply. The vendor is not required to comply with this requirement for the SUT; however, the vendor must comply if they return with a new tracking number.
5. The SUT met the requirement for PEIs; the SUT was not tested with generic AEI because no AEI was provided. AEIs were a new UCR 2008, Change 1, requirement; the vendor has 18-months (July 2011) to comply. The vendor is not required to comply with this requirement unless they return with a new tracking number.
6. The UCR 2008, Change 1, added ITU-T G.711 and ITU-T V.150.1 IAD support. This requirement represented a new UCR 2008, Change 1, requirement and the vendor has 18-months (July 2011) to comply. The vendor is not required to comply with this requirement unless they return with a new tracking number.
7. The vendor submitted a LoC stating compliance to ITU-T V.150; however, this feature could not be tested because it is not supported by other vendors. This requirement represented a new UCR 2008, Change 1, requirement and the vendor has 18-months (July 2011) to comply. The vendor is not required to comply with this requirement unless they return with a new tracking number.
8. The SUT did not demonstrate video requirements (conditional for softphone). The vendor did not provide a PEI video capability. This was adjudicated by DISA to have a low operational impact because of the limited deployment of PEIs with video.
9. The SUT partially met PEI requirements (no video). The AEI and Operator Console requirements were not tested. These requirements represented new UCR 2008, Change 1, requirements and the vendor has 18-months (July 2011) to comply. The vendor is not required to comply with these requirements unless they return with a new tracking number.
10. The SUT must meet T1 PRI (T1.619a and NI-2) IWF. The T1 CAS and T1 CCS7 are conditional.
11. The SUT met T1/E1 PRI IWF requirements. The T1 CAS is supported but not certified and T1 CCS7 is not supported by the SUT.
12. The SUT met PEI CCA-IWF requirements. The AEI CCA-IWF requirements were not tested. The AEI requirement represented a new UCR 2008, Change 1, requirement and the vendor has 18-months (July 2011) to comply. The vendor is not required to comply with this requirement unless they return with a new tracking number.
13. The SUT did not offer an Attendant Console. This requirement represented a new UCR 2008, Change 1, requirement and the vendor has 18-months (July 2011) to comply. The vendor is not required to comply with this requirement unless they return with a new tracking number.
14. The vendor submitted an IPv6 LoC with noted discrepancies. Open TDRs were adjudicated by DISA to have a minor operational impact with the vendor submitted POA&M.
15. The vendor submitted an NM LoC with noted discrepancies. Open TDRs were adjudicated by DISA to have a minor operational impact with the vendor submitted POA&M.
16. The SUT does not comply with the objective requirement for Record Format. Open TDRs were adjudicated by DISA to have a minor operational impact with vendor submitted POA&M.

**Table 2. SUT CR and FR Status (continued)**

<b>LEGEND:</b>			
AEI	AS-SIP End Instrument	LSC	Local Session Controller
AS	Assured Services	Mbps	Megabits per second
AS-SIP	Assured Services Session Initiation Protocol	MG	Media Gateway
BRI	Basic Rate Interface	MGC	Media Gateway Controller
C2	Command and Control	MFSS	Multi-Function Soft Switch
CAS	Channel Associated Signaling	MLPP	Multilevel Precedence and Preemption
CCA	Call Connection Agent	NI-2	National ISDN Standard 2
CR	Capabilities Requirement	NM	Network Management
CCS7	Common Channel Signaling	NMS	Network Management System
DHCP	Dynamic Host Configuration Protocol	OCONUS	Outside the Continental United States
DISA	Defense Information Systems Agency	PBAS	Precedence Based Assured Services
DSCP	Differentiated Services Code Point	PEI	Proprietary End Instrument
DSN	Defense Switched Network	POA&M	Plan of Action and Milestones
EBC	Edge Boarder Controller	PRI	Primary Rate Interface
EI	End Instrument	PSTN	Public Switched Telephone Network
FCAPS	Fault, Configuration, Accounting, Performance and Security	SG	Signaling Gateway
FR	Functional Requirement	SIP	Session Initiation Protocol
G.711	Standard for PCM of Voice Frequencies	SS7	Signaling System 7
IA	Information Assurance	SUT	System Under Test
IAD	Integrated Access Device	T1	Digital Transmission Link Level 1 (1.544 Mbps)
IP	Internet Protocol	T1.619a	SS7 and ISDN MLPP Signaling Standard for T1
ID	Identification	TDM	Time Division Multiplexing
ISDN	Integrated Services Digital Network	TDR	Test Discrepancy Report(s)
IEEE	Institute of Electrical and Electronics Engineers, Inc.	UCR	Unified Capabilities Requirements
IP	Internet Protocol	UFS	User Features and Services
IPv6	Internet Protocol version 6	U.S.	United States
ITU-T	International Telecommunication Union – Telecommunication Standardization Sector	VoIP	Voice over Internet Protocol
IWF	Interworking Function	WAN	Wide Area Network
JITC	Joint Interoperability Test Command	WWNDP	Worldwide Numbering and Dialing Plan
LoC	Letter of Compliance		

5. No detailed test report was developed in accordance with the Program Manager’s request. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Unclassified-But-Sensitive Internet Protocol Router Network (NIPRNet) e-mail. More comprehensive interoperability status information is available via the JITC System Tracking Program (STP). STP is accessible by .mil/gov users on the NIPRNet at <https://stp.fhu.disa.mil>. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at <https://jit.fhu.disa.mil> (NIPRNet). Information related to DSN testing is on the Telecom Switched Services Interoperability (TSSI) website at <http://jitc.fhu.disa.mil/tssi>. Due to the sensitivity of the information, the Information Assurance Accreditation Package (IAAP) that contains the approved configuration and deployment guide must be requested directly through government civilian or uniformed military personnel from the Unified Capabilities Certification Office (UCCO), e-mail: [disa.meade.ns.list.unified-capabilities-certification-office@mail.mil](mailto:disa.meade.ns.list.unified-capabilities-certification-office@mail.mil). All associated data is available on the DISA UCCO website located at <http://www.disa.mil/ucco/>.

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the Cisco Unified Communications Manager Local Session Controller, Version 8.0(2) Engineering Special (ES) 9

6. The JITC point of contact is Mr. Edward Mellon, DSN 879-5159, commercial (520) 538-5159, FAX DSN 879-4347, or e-mail to edward.a.mellon.civ@mail.mil. JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The UCCO tracking number is 1011801.

FOR THE COMMANDER:

  
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Chief  
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US Navy, OPNAV N2/N6FP12

US Army, DA-OSA, CIO/G-6 ASA(ALT), SAIS-IOQ

US Air Force, A3CNN/A6CNN

US Marine Corps, MARCORSYSCOM, SIAT, A&CE Division

US Coast Guard, CG-64

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DOT&E, Netcentric Systems and Naval Warfare

Medical Health Systems, JMIS IV&V

HQUSAISEC, AMSEL-IE-IS

UCCO

## **ADDITIONAL REFERENCES**

- (c) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008, Change 1," 22 January 2010
- (d) Joint Interoperability Test Command, "Unified Capabilities Test Plan (UCTP)," Draft
- (e) Joint Interoperability Test Command, Memo, JTE, "Special Interoperability Test Certification of the Cisco Unified Communications Manager Local Session Controller, Version 8.0(2)," 23 September 2010
- (f) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of Cisco Unified Communications Manager (CUCM), Version 8.02 (Tracking Number 1011801)," DRAFT