



## DEFENSE INFORMATION SYSTEMS AGENCY

P. O. BOX 549  
FORT MEADE, MARYLAND 20755-0549

IN REPLY  
REFER TO: Joint Interoperability Test Command (JTE)

**30 Oct 13**

### MEMORANDUM FOR DISTRIBUTION

**SUBJECT:** Extension of the Special Interoperability Test Certification of the Avaya Aura S8800 and Hewlett Packard (HP) DL-360 G7 with Release (Rel.) Communication Manager (CM) 6.0.1 (00.1.510.1 Service Pack 19211)

**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 (j), see Enclosure

1. References (a) and (b) establish the Joint Interoperability Test Command (JITC), as the responsible organization for interoperability test certification.
2. The Avaya Aura S8800 and HP DL-360 G7 with Release (Rel.) Communication Manager (CM) 6.0.1 (00.1.510.1 Service Pack 19211), hereinafter referred to as the System Under Test (SUT), meets all the critical interoperability requirements for Local Session Controller (LSC) and is certified for joint use within the Defense Information Systems Network (DISN). The Defense Information Systems Agency (DISA) adjudicated that Test Discrepancy Reports (TDRs) open at the completion of testing were determined to have a minor operational impact. The operational impact of noted discrepancies was based on the SUT's conditions of fielding during the initial transition from legacy to Internet Protocol (IP) based communications. The fielding of the SUT is limited to IP version 4 (IPv4) only across the DISN. The SUT is certified for joint use with dual stack IPv6 intra-enclave. The SUT has also been tested as a Small End Office (SMEO) switch, and met the critical interoperability requirements for a SMEO. The SUT was tested with the Avaya S8800 Core server. JITC analysis determined that the Hewlett Packard DL-360 G7 server is exactly the same as the S8800 Core server with the exception of a faster central processing unit and therefore it is also interoperability certified for joint 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 Action & Milestones (POA&M), 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 (d), and LSC test procedures, Reference (f). SMEO product requirements were derived from UCR References (e) and (f) and SMEO test procedures derived from Reference (f) and (g). No other configurations, features, or functions, except those cited within this memorandum are certified by JITC. This certification extension expires upon changes that affect interoperability, but no later than three years from 20 April 2011; which is the date the DISA Certifying Authority (CA) provided a positive Recommendation.

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the Avaya Aura S8800 and Hewlett Packard (HP) DL-360 G7 with Release (Rel.) Communication Manager (CM) 6.0.1 (00.1.510.1 Service Pack 19211)

3. The extension of this certification is based on Desktop Review (DTR) 18 for Tracking Number (TN)1009101 and DTR 17 for TN1020101. The original certification, documented in Reference (h), is based on interoperability testing conducted by JITC, DISA adjudication of open TDRs, review of the vendor's Letters of Compliance (LoC), and DISA CA approval of the Information Assurance (IA) configuration. Interoperability testing was conducted by JITC, Fort Huachuca, Arizona, from 2 August through 17 September 2010. Review of the vendor's LoC was completed on 8 March 2011. DISA adjudication of outstanding TDRs was completed on 21 April 2011. Verification & Validation (V&V) testing was conducted from 4 through 8 July 2011 to fix open test discrepancies. The DISA CA has reviewed the IA Assessment Reports for the SUT, References (i) and (j), and based on the findings in the reports has provided a positive recommendation. This DTR was requested to upgrade from release CM 6.01 (00.1.510.1 Service Pack 20554) to 6.3 (R016x.03.0.124.0 Service Pack 20983). This release includes IA and interoperability fixes. JITC determined that this DTR request required V&V testing. JITC conducted V&V testing from 19 August through 13 September and 1 through 4 October 2013. Four previous interoperability discrepancies were closed. No new interoperability discrepancies were opened as a result of this V&V test.

a. During V&V testing for LSC DTR 16 and SMEO DTR 15, the soft client could not answer an incoming higher precedence call when preempted. This discrepancy was fixed with LSC DTR 18 and SMEO DTR 17, which includes CM 6.3 with Service Pack 20983.

b. During V&V testing for LSC DTR 16 and SMEO DTR 15, the Avaya One-X Communicator soft client includes a drop button feature that does not work. This discrepancy was fixed with LSC DTR 18 and SMEO DTR 17, which includes CM 6.3 with Service Pack 20983.

c. During the original test, the SUT did not support ITU-T V.150.1. This discrepancy was fixed with LSC DTR 18 and SMEO DTR 17, which includes CM 6.3 with Service Pack 20983. The SUT supports ITU-T V.150.1 with the G450 gateway only.

d. The SUT did not support Commercial Cost Avoidance with the DISN Real Time Services Routing Database or Lightweight Directory Access Protocol Version 3 messages for a Database Query. DISA stated the intent to remove this requirement from the UCR; therefore, this discrepancy is no longer applicable.

Additionally, the vendor submitted an updated POA&M for the following discrepancy: The soft client does not properly tag Differentiated Services Code Point (DSCP) values. The soft client is required to tag media and signaling at any value 0-63; but, the soft client tags media and signaling at 0 (best effort). DISA has accepted and approved the vendor's updated POA&M and adjudicated this discrepancy as having a minor operational impact. DISA adjudication of this discrepancy was completed on 29 October 2013. The DISA CA provided a positive recommendation for these DTRs on 20 September 2013, based on the security testing completed DISA-led IA test teams and published in separate reports, References (i) and (j). Therefore, JITC approves these DTRs.

4. The interface, Capability Requirements (CR) and Functional Requirements (FR), and component status of the SUT are listed in Tables 1 and 2. The threshold Capability/Functional requirements for LSCs and SMEOs, with the exception of SMEO NM requirements which are found in UCR 2008, Section 5.2.8, 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 (See note 1.)	Status	Remarks (See note 2.)
<b>Line Interfaces</b>					
10Base-X	Yes	5.3.2.6.3	1, 2, 3, 4, 10, 13, and 16	Certified	SUT met threshold CRs/FRs for IEEE 802.3i and 802.3j. Applies to PEIs (voice) and Softphone (voice).
100Base-X	Yes	5.3.2.6.3	1, 2, 3, 4, 10, 13, and 16	Certified	SUT met threshold CRs/FRs for IEEE 802.3u with the SUT PEIs.
Ethernet IEEE 802.3u (with TSAPI)	No	5.3.2.6.3	1, 17, 18	Certified	See note 3.
1000Base-X	No	5.3.2.6.3	1, 2, 3, 4, 10,13, and 16	Not Tested	This interface is not offered by the SUT PEIs.
2-wire analog	Yes	5.3.2.6.1.6	1, 2, 3, 4, 10, and 13	Certified	SUT met threshold CRs/FRs for 2-wire analog interfaces.
ISDN BRI (See note 4.)	No	5.3.2.6.1.8	1, 2, 3, 4, 10, and 13	Certified	SUT met threshold CRs/FRs for BRI interface with the.
Digital Proprietary	No	5.2	1, 2, 3, 4, 10, and 13	Certified	SUT met threshold CRs/FRs for Digital Proprietary interface.
<b>External Interfaces</b>					
10Base-X	No	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 for the AS-SIP trunk.
100Base-X	No	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 for the AS-SIP trunk.
1000Base-X	No	5.3.2.4.2	1, 2, 3, 6, 7, 8, 10, 11, 13, 15, and 16	Not Tested	This interface is not offered by the SUT.
ISDN T1 PRI ANSI T1.619a	Yes	5.3.2.4.3	2, 3, 7, 8, 10, and 13	Certified	Met threshold CRs/FRs. This interface 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. This interface 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 (DTMF [See note 4.] and MFR1)	No	5.3.2.12.11	2, 3, 7, 8, 10, and 13	Certified	Met threshold CRs/FRs. This interface provides legacy DSN and TELEPORT connectivity with DTMF (Standard, ABCD) and Multifrequency R1 digit formats.
E1 CAS	No (LSC), Yes (SMEO)	5.3.2.12.11	2, 3, 7, 8, 10, and 13	Certified	Met threshold CRs/FRs and met interface criteria for T1 CAS with MLPP.
E1 PRI ITU-T Q.955.3 (See note 5.)	No	5.3.2.12.10	2, 3, 7, 8, 10, and 13	Not Tested	Although this interface is offered by the SUT, it was not tested. This interface is not certified by JITC and is not required for an LSC.
E1 PRI ITU-T Q.931 (See note 5.)	No	5.3.2.12.10	2, 3, 7, 8, 10, and 13	Not Tested	Although this interface is offered by the SUT, it was not tested. This interface is not certified by JITC and is not required for an LSC.

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the Avaya Aura S8800 and Hewlett Packard (HP) DL-360 G7 with Release (Rel.) Communication Manager (CM) 6.0.1 (00.1.510.1 Service Pack 19211)

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

Interface	Critical	UCR Reference	Threshold CR/FR (See note 1.)	Status	Remarks (See note 2.)
<b>Network Management Interfaces</b>					
10Base-X	No (See note 6.)	5.3.2.4.4 5.3.2.7.2.8	16, 17, and 18 (See note 7.)	Certified	Met threshold CRs/FRs. Verified via LoC.
100Base-X	No (See note 6.)	5.3.2.4.4 5.3.2.7.2.8	16, 17, and 18 (See note 7.)	Certified	Met threshold CRs/FRs. Verified via LoC.
<b>NOTES:</b>					
<p>1. The SUT high-level CR and FR ID numbers depicted in the Threshold CRs/FRs column can be cross-referenced in Table 2. These high-level CR/FR requirements refer to a detailed list of requirements provided in Reference (h).</p> <p>2. Detailed information pertaining to open TDRs and associated operational impacts is in Reference (c).</p> <p>3. The AE Services (Large System) platform provides third party call control through the TSAPI to complete the following actions: adjunct routing of incoming calls, report various events to an adjunct, provide notification/control for a specific station/call, perform adjunct invocation of switch features, and respond to adjunct queries for information. The AE Services (Large System) was tested in conjunction with the Amcom PC/PSAP™ version 11.9.0.301 and no interoperability findings were discovered. The SUT is certified with AE Services (Large System) Release 6.2. It is also certified for use with any product on the UC APL that is certified with AE Services (Large System) Release 6.2 through the TSAPI. This interface and functionality was included with DTR 13 for TN 1009101 and DTR 12 for TN 1020101.</p> <p>4. This interface is required only for a SMEO.</p> <p>5. This interface is required for only for Europe deployment.</p> <p>6. The SUT must provide a minimum of one of the following NM interfaces: 10Base-X or 100Base-X.</p> <p>7. These NM CRs and FRs are required only for SMEO.</p>					
<b>LEGEND:</b>					
10Base-X	10 Mbps Ethernet		JITC	Joint Interoperability Test Command	
100Base-X	100 Mbps Ethernet		LoC	Letter of Compliance	
1000Base-X	1000 Mbps Ethernet		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		MLPP	Multi-Level Precedence and Preemption	
802.3u	100BASE-TX, 100BASE-T4, 100BASE-FX Fast Ethernet at 100 Mbps with auto negotiation		NI-2	National ISDN Standard 2	
AE	Application Enablement		NM	Network Management	
ANSI	American National Standards Institute		PC/PSAP	Personal Computer/Public Safety Answering Point	
APL	Approved Products List		PEI	Proprietary End Instrument	
AS-SIP	Assured Services Session Initiation Protocol		PRI	Primary Rate Interface	
BRI	Basic Rate Interface		PSTN	Public Switched Telephone Network	
CAS	Channel Associated Signaling		Q.931	Signaling Standard for ISDN	
CCS7	Common Channel Signaling 7		Q.955.3	ISDN Signaling Standard for E1 MLPP	
CR	Capability Requirement		SMEO	Small End Office	
DSN	Defense Switched Network		SS7	Signaling System 7	
DTMF	Dual Tone Multi-Frequency		SUT	System Under Test	
DTR	Desktop Review		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		TDR	Test Discrepancy Report	
IAD	Integrated Access Device		TN	Tracking Number	
ID	Identification		TSAPI	Telephony Services Application Programming Interface	
IEEE	Institute of Electrical and Electronics Engineers		UC	Unified Capabilities	
ISDN	Integrated Services Digital Network		UCR	Unified Capabilities Requirements	
ITU-T	International Telecommunication Union – Telecommunication Standardization Sector				

**Table 2. SUT CR and FR Status**

CR/FR ID	Capability/ Function	Applicability (See note 1.)	UCR Reference	Status	Remarks
1	<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	Met	
	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	
2	<b>Registration, Authentication, and Failover</b>				
	Registration	Required	5.3.2.3.1	Met	
	Failover	Required	5.3.2.3.2	Met	
3	<b>Product Physical, Quality, and Environmental Factors</b>				
	Availability	Required	5.3.2.5.2.1	Met	
	Maximum Downtimes	Required	5.3.2.5.2.2	Met	
	Loss of Packets	Required	5.3.2.5.4	Met	
4	<b>Voice End Instruments</b>				
	Tones and Announcements	Required	5.3.2.6.1.1	Met	
	Audio Codecs	Conditional	5.3.2.6.1.2	Partially Met	See note 2.
	VoIP PEI or AEI Audio Performance Requirements	Required	5.3.2.6.1.3	Met	See note 3.
	VoIP Sampling Standard	Required	5.3.2.6.1.4	Met	
	Authentication to LSC	Required	5.3.2.6.1.5	Met	
	Analog Telephone Support	Required	5.3.2.6.1.6	Met	
	Softphones	Conditional	5.3.2.6.1.7	Partially Met	See notes 4, 5, 6.
	ISDN BRI	Conditional	5.3.2.6.1.8	Met	
5	<b>Video End Instruments</b>				
	Video End Instrument	Required	5.3.2.6.2	Not Tested	See note 7.
	Display Messages, Tones, and Announcements	Required	5.3.2.6.2.1	Not Tested	See note 7.
	Video Codecs (Including Associated Audio Codecs)	Required	5.3.2.6.2.2	Not Tested	See note 7.
6	<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	See note 8.
	Line-Side Custom Features Interference	Conditional	5.3.2.7.2.11	Met	
	Loop Avoidance	Required	5.3.2.7.3	Met	
7	<b>Call Connection Agent Requirements</b>				
	CCA IWF Component	Required	5.3.2.9.2.1	Met	
	CCA MGC Component	Required	5.3.2.9.2.2	Met	
	SG Component	Conditional	5.3.2.9.2.3	Not Tested	See note 9.
	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	See note 9.
	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	Partially Met	See note 10.

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

CR/FR ID	Capability/ Function	Applicability (See note 1.)	UCR Reference	Status	Remarks
7	<b>Call Connection Agent Requirements (continued)</b>				
	CCA-IWF Support for PEI and AEI Signaling Protocols	Required	5.3.2.9.5.5	Met	See note 3.
	CCA-IWF Support for VoIP and TDM Protocol Interworking	Required	5.3.2.9.5.6	Met	
	CCA Preservation of Call Ringing State during Failure Conditions	Required	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	IA is covered under separate report.
	CCA Interaction with EIs	Required	5.3.2.10.10	Partially Met	See note 3.
	CCA Support for AS Voice and Video	Required	5.3.2.10.11	Partially Met	See note 7.
	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	See note 9.	
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	IA is covered under separate report.
	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	See note 9.
	MG Interaction with EIs	Required	5.3.2.12.4.8	Met	
	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	
	MG Interface to TDM Allied and Coalition	Conditional	5.3.2.12.6	Not Tested	See note 9.
	MG Interface to TDM PSTN in U.S.	Required	5.3.2.12.7	Met	
	MG Interfaces to TDM PSTN OCONUS	Required	5.3.2.12.8	Not Met	See note 11.
	MG Support for CCS7	Conditional	5.3.2.12.9	Not Tested	See note 9.
	MG Support for ISDN PRI Trunks	Required	5.3.2.12.10	Met	
	MG Support for CAS Trunks	Required	5.3.2.12.11	Partially Met	See note 10.
	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 ITU-T V.150.1	Required	5.3.2.12.16	Met	See note 12.	
MG Preservation of Call Ringing during Failure	Required	5.3.2.12.17	Met		
9	<b>SG Requirements</b>				
	SG and CCS7 Network Interactions	Conditional	5.3.2.13.5.1	Not Tested	See note 10.
	SG Interactions with CCA	Conditional	5.3.2.13.5.2	Not Tested	See note 10.
	SG Interworking Functions	Conditional	5.3.2.13.5.3	Not Tested	See note 10.

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the Avaya Aura S8800 and Hewlett Packard (HP) DL-360 G7 with Release (Rel.) Communication Manager (CM) 6.0.1 (00.1.510.1 Service Pack 19211)

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

CR/FR ID	Capability/ Function	Applicability (See note 1.)	UCR Reference	Status	Remarks
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	5.3.2.23	Not Met	See note 13.
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	Met	See note 14.
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	5.3.2.26.1	Met	
	Call Display	Required	5.3.2.26.2	Met	
	Class of Service Override	Required	5.3.2.26.3	Met	
	Busy Override and Busy Verification	Required	5.3.2.26.4	Met	
	Night service	Required	5.3.2.26.5	Met	
	Automatic Recall of Attendant Calls in Queue to the Attendant	Required	5.3.2.26.6	Met	
15	<b>AS-SIP Requirements</b>				
	SIP Requirements for AS-SIP Signaling Appliances and AS-SIP Eis	Required	5.3.4.7	Met	
	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 Met	See note 7.
	Calling Services	Required	5.3.4.13	Partially Met	See note 15.
	SIP Translation Requirements for Interworking 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	Partially Met	See note 15.	
16	<b>IPv6 Requirements</b>				
	Product Requirements	Required	5.3.5.4	Met	G450 supports IPv4/v6 dual stack. G650 supports IPv4 only.
17	<b>NM Requirements (LSC)</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	Met	
	Requirement for FCAPS Management	Required	5.3.2.17.3	Partially Met	See note 16.
	NM requirements of Appliance Functions	Required	5.3.2.18	Met	
Accounting Management	Required	5.3.2.19	Partially Met	See note 17.	

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

CR/FR ID	Capability/ Function	Applicability (See note 1.)	UCR Reference	Status	Remarks
18	<b>NM Requirements (SMEO)</b>				
	Physical Interface to ADIMSS	Required	5.2.8.1	Met	Requirement was met with an IEEE 8.02.3u Ethernet Interface.
	Measurements and Data Generation	Required	5.2.8.2	Met	
	Fault Management	Required	5.2.8.3	Met	
	Configuration Management	Required	5.2.8.4	Met	
	Automated Message Accounting	Required	5.2.8.5	Met	
	Performance Management	Required	5.2.8.6	Met	
<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>The annotation of 'required' refers to a high-level requirement category. The applicability of each sub-requirement is provided in Reference (h), Enclosure 3.</li> <li>The SUT Media Gateway and CCA do not support the ITU-T G.723.1 codec. This requirement was changed in UCR 2008 change 2 from required to conditional with an immediate applicability.</li> <li>The SUT met the requirement for ITU-T H.323 PEIs, but did not meet requirements for an AEI because none were provided. The SUT was tested to UCR 2008 change 1 requirements and since the AEI requirements are new, vendor has 18 months to comply (July 2011).</li> <li>During V&amp;V testing for LSC DTR 16 and SMEO DTR 15, the soft client could not answer an incoming higher precedence call when preempted. This discrepancy was fixed with LSC DTR 18 and SMEO DTR 17, which includes CM 6.3 with Service Pack 20983.</li> <li>During V&amp;V testing for LSC DTR 16 and SMEO DTR 15, the soft client did not properly tag DSCP values. The soft client is required to tag media and signaling at any value 0-63; however, the soft client tags media and signaling at 0 (best effort). DISA has accepted and approved the vendor's POA&amp;M and adjudicated this discrepancy as having a minor operational impact.</li> <li>During V&amp;V testing for LSC DTR 16 and SMEO DTR 15, the Avaya One-X Communicator soft client includes a drop button feature that does not work. This discrepancy was fixed with LSC DTR 18 and SMEO DTR 17, which includes CM 6.3 with Service Pack 20983.</li> <li>The SUT supports Legacy H.320 video with ISDN PRI and BRI interfaces; however, it does not support IP video PEI or AEI EIs. This was adjudicated by DISA to have a minor operational impact because of the limited deployment of IP video.</li> <li>The SUT LSC to PEI, AEI and Operator Console Status Verification do not support a default set of 5mintues. The SUT default is 20 every 20 seconds but is configurable up to 2 hours. This was adjudicated by DISA as having a minor operational impact with the recommendation to change this requirement to remove the default value as long as it is configurable.</li> <li>The SUT met the IWF requirements with the T1 PRI interfaces and T1/E1 CAS. The SUT does not support SS7 or IP based PSTN interfaces which are not required for an LSC.</li> <li>The SUT met all critical T1 CAS interface requirements with the following exceptions adjudicated by DISA as having a minor operational impact with no POA&amp;M to fix it: <ul style="list-style-type: none"> <li>The SUT acknowledges a wink start signal greater than 350 ms. The SUT recognizes wink start signals up to 395 ms.</li> <li>The SUT preempt signal is out of tolerance. The SUT generates a preempt signal from 336 to 339 ms. The requirement is 340 to 350 ms. Since all switches acknowledge the preempt signal from 328 to 363 ms there is no impact.</li> </ul> </li> <li>The SUT offers an E1 ETSI ISDN PRI interface however it was not tested and is not covered under this certification. The E1 ETSI ISDN PRI interface is required only for deployment in Europe. The SUT does support the conditional E1 CAS interface for Europe, and therefore the SUT is not certified for deployment in Europe.</li> <li>During the original test, the SUT did not support ITU-T V.150.1. This discrepancy was fixed with LSC DTR 18 and SMEO DTR 17, which includes CM 6.3 with Service Pack 20983. The SUT supports ITU-T V.150.1 with the G450 gateway only.</li> <li>The SUT does not support Commercial Cost Avoidance with the DISN RTS Routing Database or LDAP Version 3 messages for a Database Query. DISA stated the intent to remove this requirement from the UCR; therefore, this discrepancy is no longer applicable.</li> <li>The SUT met this requirement with the Communication Manager Messaging Voice Mail System which is listed separately on the UC APL.</li> <li>The SUT met the UCR Supplementary Services and Calling Services Requirements with the exceptions in the subparagraphs below. DISA accepted the vendor's POA&amp;M and adjudicated these discrepancies as having a minor operational impact. <ul style="list-style-type: none"> <li>Call Forwarded calls above ROUTINE ring the destination at ROUTINE cadence although the precedence level is maintained.</li> <li>Unattended Call Transfers to the Avaya AS5300 @ precedence above ROUTINE are class marked at ROUTINE.</li> <li>Instruments assigned the Hotline Feature cannot restrict other features (i.e. Hold, Transfer, Add hock Conferencing, etc.)</li> <li>SUT plays Precedence Notification Tone to an active user for only 3 seconds. The requirement is indefinite or until user hangs up.</li> </ul> </li> <li>The SUT met the NM requirements in accordance with UCR 2008 Change 1 Section 5.3.2.17.3 with the following exception: The SUT does not have the ability to limit calls to a destination based on percentage of calls based on vendors LoC. DISA accepted the vendor's POA&amp;M and adjudicated this discrepancy as having a minor operational impact.</li> </ol>					

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

<b>NOTES (continued):</b>			
17. The SUT met the NM requirements in accordance with UCR 2008 Change 1 Section 5.3.2.19 with the following exceptions stipulated in the vendor's LoC. DISA accepted the vendor's POA&M and adjudicated these discrepancies as having a minor operational impact.			
- Does Not Comply with E-Model MOS in the Call Detail Record (CDR) Requirements			
- Does Not Support the Equipment Impairment Factor (Ie) and the TCLw.			
- Does Not Generate Alarms to the VVoIP EMS when E-Model R-factor record in CDR is not met.			
- Does not provide a CDR with the R-Factor and associated raw statistics.			
<b>LEGEND:</b>			
ADIMSS	Advanced DSN Integrated Management Support System	kbps	kilobits per second
AEI	AS-SIP End Instrument	LoC	Letter of Compliance
APL	Approved Products List	LSC	Local Session Controller
AS	Assured Services	Mbps	Megabits per second
ASAC	Assured Services Admission Control	MG	Media Gateway
AS-SIP	Assured Services Session Initiation Protocol	MGC	Media Gateway Controller
BRI	Basic Rate Interface	NM	Network Management
CAS	Channel Associated Signaling	NMS	Network Management System
CCA	Call Connection Agent	OCONUS	Outside the Continental United States
CR	Capability Requirement	PBAS	Precedence Based Assured Services
CCS7	Common Channel Signaling	PCM	Pulse Code Modulation
DISA	Defense Information Systems Agency	PEI	Proprietary End Instrument
DSCP	Differentiated Services Code Point	POA&M	Plan of Action and Milestones
DSN	Defense Switched Network	PRI	Primary Rate Interface
EBC	Edge Boundary Controller	PSTN	Public Switched Telephone Network
EI	End Instrument	SG	Signaling Gateway
FCAPS	Fault, Configuration, Accounting, Performance and Security	SIP	Session Initiation Protocol
FR	Functional Requirement	SNMPv3	Simple Network Management Protocol version 3
G.711	PCM of voice frequencies	SS7	Signaling System 7
IA	Information Assurance	SUT	System Under Test
IP	Internet Protocol	T1	Digital Transmission Link Level 1 (1.544 Mbps)
ID	Identification	TDM	Time Division Multiplexing
ISDN	Integrated Services Digital Network	UC	Unified Capabilities
IP	Internet Protocol	UCR	Unified Capabilities Requirements
IPv4	Internet Protocol version 4	UFS	User Features and Services
IPv6	Internet Protocol version 6	U.S.	United States
ITU-T	International Telecommunication Union - Telecommunication Standardization Sector	V.150	Modem over Internet Protocol Networks
IWF	Interworking Function	VoIP	Voice over Internet Protocol
		VVoIP	Voice and Video over Internet Protocol
		WAN	Wide Area Network
		WWNDP	Worldwide Numbering and Dialing Plan

5. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Sensitive but Unclassified IP Data (formerly known as NIPRNet) e-mail. Interoperability status information is available via the JITC System Tracking Program (STP). STP is accessible by .mil/.gov users 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/>. 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 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 information is available on the DISA UCCO website located at <http://www.disa.mil/Services/Network-Services/UCCO>.

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the Avaya Aura S8800 and Hewlett Packard (HP) DL-360 G7 with Release (Rel.) Communication Manager (CM) 6.0.1 (00.1.510.1 Service Pack 19211)

6. The JITC point of contact is Captain Soamva Duong, DSN 879-5269, commercial (520) 538-5269, FAX DSN 879-4347, or e-mail to soamva.duong.fm@mail.mil. JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The UCCO tracking number for the SUT as an LSC is 1009101 and as a SMEO is 1020101.

FOR THE COMMANDER:



for RICHARD A. MEADOR  
Chief  
Battlespace Communications Portfolio

Enclosure a/s

Distribution (electronic mail):

DoD CIO  
Joint Staff J-6, JCS  
USD(AT&L)  
ISG Secretariat, DISA, JTA  
U.S. Strategic Command, J665  
US Navy, OPNAV N2/N6FP12  
US Army, DA-OSA, CIO/G-6 ASA(ALT), SAIS-IOQ  
US Air Force, A3CNN/A6CNN  
US Marine Corps, MARCORSSYSCOM, SIAT, A&CE Division  
US Coast Guard, CG-64  
DISA/TEMC  
DIA, Office of the Acquisition Executive  
NSG Interoperability Assessment Team  
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) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008, Change 2," 31 December 2010
- (e) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008," 31 December 2008
- (f) Joint Interoperability Test Command, "Unified Capabilities Test Plan (UCTP)," Draft
- (g) Joint Interoperability Test Command, "Defense Switched Network Generic Switch Test Plan (GSTP), Change 2," 2 October 2006
- (h) Joint Interoperability Test Command, Memo, JTE, "Special Interoperability Test Certification of Avaya S8300D with Gateway 450 (G450) Release Communications Manager (CM) 6.0 (R16x.00.1.510.1) with Service Pack 19211," 17 April 2012
- (i) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of Avaya S8800 and Hewlett Packard (HP) DL-360 G7 Local Session Controller (LSC) with Aura Communication Manager (CM) Release (Rel.) 6.0.1 (Tracking Number 1009101),"
- (j) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of Avaya S8800 and Hewlett Packard (HP) DL-360 G7 Small End Office (SMEO) with Aura Communication Manager (CM) Release (Rel.) 6.0.1, (Tracking Number 1020101)," 28 June 2011.