DEFENSE INFORMATION SYSTEMS AGENCY
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IN REPLY
REFER TO: Joint Interoperability Test Command (JTE)

MEMORANDUM FOR DISTRIBUTION **8 Jul 11**

SUBJECT: Extension of the Special Interoperability Test Certification of the Cisco Media Experience (MXP) family to include the 6000 MXP, 3000 MXP, 1000 MXP, Edge 95 MXP, and the 1700 MXP with software release F7.3.1

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 Defense Information Systems Agency (DISA), Joint Interoperability Test Command (JITC), as the responsible organization for interoperability test certification.

2. The Special Interoperability Test Certification of the Cisco MXP models tested to include the 6000 MXP, 3000 MXP, 1000 MXP, Edge 95 MXP, and the 1700 MXP with software release F7.3.1 are hereinafter referred to as the System Under Test (SUT). The SUT met all the critical interface and functional interoperability requirements of the Unified Capabilities Requirements Section 5.2.12.4, and is certified for joint use within the Defense Information System Network (DISN) as a Video Teleconferencing (VTC) system. The SUT meets the critical interoperability requirements for serial interfaces; however, the serial interfaces must connect to an Integrated Access Switch (IAS) or Terminal Adapter (TA), which provides an inverse multiplex capability and a direct interface to the DISN. The SUT is certified with any IAS or TA on the Unified Capabilities Approved Products List. The SUT also met the conditional requirements for an Internet Protocol (IP) interface with the International Telecommunication Union – Telecommunication Standardization Sector (ITU-T) H.323 protocol; however, Assured Service is not yet defined for an IP interface with ITU-T H.323 protocol. Therefore, Command and Control (C2) VTC users and Special C2 VTC users are not authorized to be served by an IP interface with the ITU-T H.323 protocol. The SUT meets the critical interoperability requirements set forth in Reference (c) using test procedures derived from Reference (d). No other configurations, features, or functions, except those cited within this report, are certified by the JITC. This certification expires upon changes that affect interoperability, but no later than three years from the date the DISA Certifying Authority (CA) provided a positive Recommendation.

3. The extension of this certification is based upon Desktop Review (DTR) 1. The original certification is based on interoperability testing conducted by JITC, review of the vendor's

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Letters of Compliance (LoC), and DISA CA recommendation. Interoperability testing was conducted by JITC at the Global Information Grid Network Test Facility, Fort Huachuca, Arizona, from 9 February through 6 March 2009 and documented in Reference (e). Review of the LoC was completed on 6 March 2009. The DISA CA provided a positive recommendation on 12 May 2009 based on the security testing completed by DISA-led Information Assurance (IA) test teams and published in a separate report, Reference (f). Tandberg was acquired by Cisco; therefore, the SUT is now sold and supported by Cisco. This DTR was requested to include software release F9.0.2. This software release includes fixes for outstanding IA findings and fixes identified by commercial users which offer enhancements to the certified version and have no operational impact. The JITC determined there was minor risk in approving this DTR based on JITC analysis of the documentation for software release F9.0.2. Therefore, JITC approves this DTR. DISA Network Systems Directorate has approved the IA posture of the SUT in this DTR on 28 May 2011.

4. The SUT certified hardware and software components and their supported interfaces are listed in Table 1. The Functional Requirements used to evaluate the interoperability of the SUT and the interoperability statuses are indicated in Table 2.

Table 1. SUT Certified Hardware Components

	Tested Component[1]	Component Certified by Similarity	Supported Interfaces
SUT Release F7.3.1	**Cisco 6000 MXP**	Cisco 6000 MXP Portable	IP (10/100 Mbps with ITU-T H.323 protocol), ISDN BRI, ISDN PRI T1, ISDN PRI E1, and the following Serial interfaces: EIA-366A, EIA-449, ITU-T V.35[2]
		Cisco Maestro MXP	
		Cisco Educator MXP	
		Cisco Collaborator	
		Cisco Dual CPC	
		Cisco 8000 MXP	
	Cisco 3000 MXP	Cisco 3000 MXP Portable	IP (10/100 Mbps with ITU-T H.323 protocol), ISDN BRI, and the following Serial interfaces: EIA-366A, EIA-449, ITU-T V.35[2]
		Cisco Profile 3000 MXP	
		Cisco 880 MXP	
		Cisco 770 MXP	
		Cisco 990 MXP	
		Cisco Tactical MXP	
		Cisco MediaPlace	IP (10/100 Mbps with ITU-T H.323 protocol), ISDN BRI
		Cisco Intern MXP	
		Cisco MediaPlus	IP (10/100 Mbps with ITU-T H.323 protocol)
	Cisco Edge 95 MXP	Cisco Edge 85 MXP	IP (10/100 Mbps with ITU-T H.323 protocol), ISDN BRI
		Cisco Edge 75 MXP	
	Cisco 1000 MXP	Cisco Compass MXP	IP (10/100 Mbps with ITU-T H.323 protocol), ISDN BRI
		Cisco Utility MXP	
	Cisco 1700 MXP[3]	Cisco 150 MXP	IP (10/100 Mbps with ITU-T H.323 protocol)

NOTES:
1 Components bolded and underlined were tested by JITC. The other components in the family series were not tested; however, they utilize the same software and hardware and JITC analysis determined them to be functionally identical for interoperability certification purposes and they are also certified for joint use.
2 The electrical physical interface tested was ITU-T V.35 in accordance with ITU-T V.36/V.37.
3 The 1700 MXP and 150 MXP are IP only MXPs and require the use of an ITU-T H.323 to ITU-T H.320 gateway solution in order to connect to the DISN. In testing, JITC has found minimal risk in certifying this with any ITU-T H.323 to ITU-T H.320 gateways certified and on the UC APL.

Table 1. SUT Certified Hardware Components (continued)

ACRONYMS:

APL	Approved Products List	JITC	Joint Interoperability Test Command
BRI	Basic Rate Interface	kbps	kilobits per second
CPC	Cisco Plasma Cart	kHz	kiloHertz
DCE	Data Circuit-Terminating Equipment	Mbps	Megabits per second
DISN	Defense Information System Network	MXP	Media Experience
DTE	Data Terminal Equipment	PRI	Primary Rate Interface
E1	European Basic Multiplex Rate (2.048 Mbps)	SUT	System Under Test
EIA	Electronic Industries Alliance	T1	Digital Transmission Link Level 1 (1.544 Mbps)
EIA-366A	Standard for interface between DTE and automatic calling equipment for data communication	UC	Unified Capabilities
EIA-449	Standard for 37-position and 9-position interface for DTE and DCE employing serial binary data interchange	V.35	Standard for data transmission at 48 kbps using 60-108 kHz group band circuits
H.320	Standard for narrowband VTC	V.36	Modems for synchronous data transmission using 60-108 kHz group band circuits
H.323	Standard for multi-media communications on packet-based networks	V.37	Synchronous data transmission at a data signaling rate higher than 72 kbps using 60-108 kHz group band circuits
IP	Internet Protocol	VTC	Video Teleconferencing
ISDN	Integrated Services Digital Network		
ITU-T	International Telecommunication Union - Telecommunication Standardization Sector		

Table 2. SUT Functional Requirements and Interoperability Status

Interface	Critical	Certified	Requirements Required or Conditional	Status	UCR Reference
IP (10/100 Mbps) ITU-T H.323	No [1]	Yes [2]	The VTC system/endpoints shall meet the requirements of FTR1080B-2002 (R)	Met	5.2.12.4.5
			ITU-T H.323 in accordance with FTR 1080B-2002 (C)	Met	5.2.12.4.5
			Layer 3 Differential Service Code Point tagging as specified in UCR, 5.2.12.8.2.9 (C)	Met	5.2.12.4.5
			A loss of any conferee on a multipoint videoconference shall not terminate or degrade the DISN service supporting VTC connections of any of the other conferees on the videoconference (R)	Met	5.2.12.4.5
			Audio add-on interface, implemented independently of an IAS, shall be in accordance with UCR, 5.2.12.3 (CPE) (C)	Met	5.2.12.4.5
			Physical, electrical, and software characteristics shall not degrade or impair switch and associated network operations (R)	Met	5.2.12.4.5
ISDN BRI	No [1]	Yes	The VTC system/endpoints shall meet the requirements of FTR 1080B-2002 (R)	Met	5.2.12.4.5
			A loss of any conferee on a multipoint videoconference shall not terminate or degrade the DISN service supporting VTC connections of any of the other conferees on the videoconference (R)	Met	5.2.12.4.5
			Audio add-on interface, implemented independently of an IAS, shall be in accordance with UCR, 5.2.12.3 (CPE) (C)	Met	5.2.12.4.5
			Integrated BRI interface shall be in conformance with Terminal Adaptor requirements in UCR, 5.2.12.3 (CPE) (C)	Met	5.2.12.4.5
			Physical, electrical, and software characteristics of VTU system(s)/ endpoint(s) that are used in the DISN network shall not degrade or impair the serving DISN switch and its associated network operations. (R)	Met	5.2.12.4.5

Table 2. SUT Functional Requirements and Interoperability Status (continued)

Interface	Critical	Certified	Requirements Required or Conditional	Status	UCR Reference
ISDN PRI T1[3] ISDN PRI E1[3]	No [1]	Yes	The VTC system/endpoints shall meet the requirements of FTR 1080B-2002 (R)	Met	5.2.12.4.5
			A loss of any conferee on a multipoint videoconference shall not terminate or degrade the DISN service supporting VTC connections of any of the other conferees on the videoconference (R)	Met	5.2.12.4.5
			Audio add-on interface, implemented independently of an IAS, shall be in accordance with UCR, 5.2.12.3 (CPE) (C)	Met	5.2.12.4.5
			Integrated PRI interface shall be in conformance with IAS requirements in UCR, 5.2.12.7 (IAS) (C)	Met	5.2.12.4.5
			Physical, electrical, and software characteristics of VTU system(s)/ endpoint(s) that are used in the DISN network shall not degrade or impair the serving DISN switch and its associated network operations.(R)	Met	5.2.12.4.5
Serial Interfaces:[3, 4] EIA-366A EIA-449 ITU-T V.35[5]	No [1]	Yes	The VTC system/endpoints shall meet the requirements of FTR 1080B-2002 (R)	Met	5.2.12.4.5
			A loss of any conferee on a multipoint videoconference shall not terminate or degrade the DISN service supporting VTC connections of any of the other conferees on the videoconference (R)	Met	5.2.12.4.5
			Audio add-on interface, implemented independently of an IAS, shall be in accordance with UCR, 5.2.12.3 (CPE) (C)	Met	5.2.12.4.5
			Connections shall be in conformance with the requirements for serial interface(s) as described in FTR 1080B-2002 (C)	Met	5.2.12.4.5
			Physical, electrical, and software characteristics of VTU system(s)/ endpoint(s) that are used in the DISN network shall not degrade or impair the serving DISN switch and its associated network operations.(R)	Met	5.2.12.4.5
	Yes	Certified	Security (IA/DIACAP) (R)	See note 6.	5.2.12.4.5

NOTES:

1 The VTC system interface requirements can be met with an ISDN BRI, ISDN PRI, Serial, or ITU-T H.323 interface.

2 The SUT also met the requirements for the ITU-T H.323 interface standard; however, Assured Service is not yet defined for the ITU-T H.323 interface. Since ITU-T H.323 interfaces do not provide Assured Services during a crisis or contingency, users' access to the DISN will be on a best effort basis. Therefore, C2 VTC users and Special C2 VTC users are not authorized to be served by an ITU-T H.323 interface.

3 These interfaces are only supported on the 6000 MXP. No other MXP product supports these interfaces.

4 The SUT meets the critical interoperability requirements for serial interfaces; however, the serial interfaces must connect to an IAS or TA which provides an inverse multiplex capability and a direct interface to the DISN. The SUT is certified with any IAS or TA on the UC APL.

5 The electrical physical interface tested was ITU-T V.35 in accordance with ITU-T V.36/V.37.

6 Security is tested by DISA-led IA test teams and published in a separate report, Reference (f).

Table 2. SUT Functional Requirements and Interoperability Status (continued)

LEGEND:

APL	Approved Products List	ISDN	Integrated Services Digital Network
BRI	Basic Rate Interface	ITU-T	International Telecommunication Union - Telecommunication Standardization Sector
C	Conditional		
C2	Command and Control	JITC	Joint Interoperability Test Command
CPE	Customer Premise Equipment	kbps	kilobits per second
DIACAP	Department of Defense Information Assurance Certification and Accreditation Process	kHz	kiloHertz
		Mbps	Megabits per seconds
DISA	Defense Information Systems Agency	PRI	Primary Rate Interface
DISN	Defense Switched Network	R	Required
E1	European Basic Multiplex Rate (2.048 Mbps)	SUT	System Under Test
EIA	Electronic Industries Alliance	T1	Digital Transmission Link Level 1 (1.544 Mbps)
EIA-366A	Standard for interface between data terminal equipment and automatic calling equipment for data communication	TA	Terminal Adapter
		UC	Unified Capabilities
		UCR	Unified Capabilities Requirements
EIA-449	Standard for 37-position and 9-position interface for data terminal equipment and data circuit-terminating equipment employing serial binary data interchange	V.35	Standard for data transmission at 48 kbps using 60-108 kHz group band circuits
		V.36	Modems for synchronous data transmission using 60-108 kHz group band circuits
FTR	Federal Telecommunications Recommendation		
H.320	Standard for narrowband VTC	V.37	Synchronous data transmission at a data signaling rate higher than 72 kbps using 60-108 kHz group band circuits
H.323	Standard for multi-media communications on packet-based networks	VTC	Video Teleconferencing
		VTU	Video Teleconferencing Unit
IA	Information Assurance		
IAS	Integrated Access Switch		

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 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). The 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), or http://199.208.204.226 (SIPRNet). Information related to DISN 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 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, e-mail: ucco@disa.mil.

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6. The JITC point of contact is Mr. Steven Lesneski, DSN 879-5400, commercial (520) 538-5400, FAX DSN 879-4347, or e-mail to steven.lesneski@disa.mil. The JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The tracking number for the SUT is 0831501.

FOR THE COMMANDER:

Enclosure a/s

for BRADLEY A. CLARK
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Defense Information Systems Agency, GS23

ADDITIONAL REFERENCES

(c) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008," 22 January 2009

(d) Joint Interoperability Test Command, "Defense Switched Network Generic Switch Test Plan (GSTP), Change 2," 2 October 2006

(e) Joint Interoperability Test Command, Memo, JTE, "Special Interoperability Test Certification of the Cisco Media Experience (MXP) models to include the 6000 MXP, 3000 MXP, 1000 MXP, Edge 95 MXP, and the 1700 MXP with software release F7.3.1," 3 June 2009

(f) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of The Cisco MXP models to include the 6000 MXP, 3000 MXP, 1000 MXP, Edge 95 MXP, and the 1700 MXP with software release F7.3.1," 12 May 2009