



DEFENSE INFORMATION SYSTEMS AGENCY

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IN REPLY
REFER TO:

Joint Interoperability Test Command (JTE)

7 Aug 12

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Special Interoperability Test Certification of the Fujitsu FLASHWAVE 9500 from Software Release 4.1.4 to Software Release 4.1.5

References: (a) Department of Defense Directive 4630.05, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 2004
(b) Department of Defense Instruction 8100.04, "DoD Unified Capabilities (UC)," 9 December 2010
(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 Fujitsu FLASHWAVE 9500, with Software Release 4.1.4, is hereinafter referred to as the System Under Test (SUT). The SUT meets all its critical interoperability requirements and JITC certifies the SUT for joint use in the Defense Information Systems Network (DISN) as a Fixed-Network Element (F-NE). The SUT provides additional optical transport interfaces and functional capabilities. JITC evaluated and certifies the SUT for optical transport for the Optical Carrier interfaces detailed in Table 1. Additional sponsor functional capabilities are addressed in Table 2. The operational status of the SUT will be verified during deployment. Any new discrepancies that are discovered in the operational environment will be evaluated for impact and adjudicated to the satisfaction of the DISA via a vendor Plan of Action and Milestones to address the concern(s) within 120 days of identification. JITC conducted testing using F-NE requirements within the Unified Capabilities Requirements (UCR) 2008, Change 1, Reference (c), and other sponsor requested requirements. JITC does not certify any other configurations, features, or functions, except those cited within this memorandum. This certification expires upon changes that affect interoperability, but no later than three years from the date of this memorandum.

3. The extension of this certification is based upon Desktop Review (DTR) 2 and DTR 3. JITC conducted Interoperability testing at the Indian Head, Maryland, test facility from 6 July through 27 August 2010. A review of the current changes in the SUT in References (d) and (e) and comparison with the new requirements in Reference (c) was conducted on 21 June 2012 to certify the SUT for interoperability within the DISN without additional interoperability testing. Defense Information Assurance (IA)/Security Accreditation Working Group (DSAWG) granted accreditation on 3 December 2010, based on the security testing completed by the IA test team and published in a separate report, Reference (f).

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the Fujitsu FLASHWAVE 9500 from Software Release 4.1.4 to Software Release 4.1.5

DTR 2 updates the Software Release from 4.1.4 to 4.1.5, as listed in Table 3. DTR 3 included 32 components, as listed in Table 4. These components have the same exact functionality as previously tested and approved components in Software Release 4.1.4. JITC determined, through analysis, that there is minimal risk in approving these DTRs. This change is unlikely to affect the interoperability of the certified F-NE. Therefore, JITC approves DTRs 2 and 3. The DSAWG accreditation for DTRs 2 and 3 was not required because these DTRs are relevant only to interoperability certification.

4. Table 1 shows the SUT Interface Interoperability Status and Table 2 shows the Capability and Feature Requirements used to evaluate the interoperability of the SUT.

Table 1. SUT Interface Interoperability Status

Interface	Critical (See note.)	Reference (UCR 2008, Change 1)	Threshold CR/FR	Status	Remarks	
NE	Analog	No	5.9.2.3.1	1,2,4	NA	Not supported by the SUT.
	Serial	No	5.9.2.3.2	1,2,4	NA	Not supported by the SUT.
	BRI ISDN	No	5.9.2.3.3	1,2,4	NA	Not supported by the SUT.
	DS1	No	5.9.2.3.4	1,2,3,4	NA	Not supported by the SUT.
	E1	No	5.9.2.3.5	1,2,3,4	NA	Not supported by the SUT.
	DS3	No	5.9.2.3.6	1,2,3,4	NA	Not supported by the SUT.
	OC-X	No	5.9.2.3.8	1,2,3,4	Certified	SUT met requirements for the following interfaces: OC-48/STM-16; OC-192/STM-64; and, OC-768/STM-256.
IP (Ethernet)	No	5.9.2.3.9	1,2,4,7	Certified	SUT met requirements for 10/100/1000 and 10GbE.	
NM	10Base-X	Yes	5.3.2.4.4	8	Certified	SUT met NM requirements for specified interfaces.
	100Base-X	Yes	5.3.2.4.4	8	Certified	
OTHER	10 GbE LAN	No	5.9.2.3.9	1,2,4,7	Certified	SUT met requirements for specified interfaces.
	10 GbE WAN	No	5.9.2.3.9	1,2,4,7	Certified	SUT met requirements for specified interfaces.
	OSC	No	5.9.2.3.9	1,2,3,4,5	Certified	SUT met requirements for specified interfaces.

Table 1. SUT Interface Interoperability Status (continued)

NOTE: UCR does not specify any minimum interfaces. The SUT must minimally provide one of the listed ingress and egress interfaces specified.					
LEGEND:					
10Base-X	10 Mbps Ethernet generic designation	LAN	Local Area Network		
100Base-X	100 Mbps Ethernet generic designation	Mbps	Megabits per second		
BRI	Basic Rate Interface	NA	Not Applicable		
CR	Capability Requirement	NE	Network Element		
DS1	Digital Signal Level 1 (1.544 Mbps)	NM	Network Management		
DS3	Digital Signal Level 3 (44.736 Mbps)	OC-X	Optical Carrier - X (OC-3, OC-12, etc.)		
DWDM	Dense Wavelength Division Multiplexing	OSC	Optical Supervisory Channel		
E1	European Interface Standard (2.048 Mbps)	STM	Synchronous Transport Module		
FR	Functional Requirement	SUT	System Under Test		
GbE	Gigabit Ethernet	UCR	Unified Capabilities Requirements		
IP	Internet Protocol	WAN	Wide Area Network		
ISDN	Integrated Services Digital Network				

Table 2. SUT CRs and FRs Status

CR/FR ID	Capability/Function	Applicability (See note 1.)	Reference (UCR 2008, Change 1)	Status	Remarks
F- NE CR/FR					
1	General NE Requirements				
	General Requirements	Required	5.9.2.1	Met	
	Alarms	Required	5.9.2.1.1	Met	
	Congestion Control & Latency	Required	5.9.2.1.2	Met	
2	Compression				
	G.726	Conditional	5.9.2.2	NA	Not supported by the SUT.
	G.728	Conditional	5.9.2.2	NA	Not supported by the SUT.
	G.729	Conditional	5.9.2.2	NA	Not supported by the SUT.
3	Interface Requirements				
	Timing	Required	5.9.2.3.7	Met	
4	Device Management				
	Management Options	Required	5.9.2.4.1	Met	
	Fault Management	Conditional	5.9.2.4.2	Met	
	Loop-Back Capability	Conditional	5.9.2.4.3	Met	
	Operational Configuration Restoral	Required	5.9.2.4.4	Met	
5	DLoS				
	DLoS Transport	Conditional	5.9.2.4.5	NA	Not supported by the SUT.
6	IPv6 Requirements				
	Product Requirements	Required	5.3.5.4	Met	SUT is a Layer-2 device and transports IPv4 and IPv6 traffic transparently.
7	NM Requirements				
	VVoIP NMS Interface Requirements	Required	5.3.2.4.4	Met	
	General Management Requirements	Required	5.3.2.17.2	Met	
Other Tested Requirements					
8	Requirements Applicable to all OTS Elements				
	Overall Requirements	Conditional	5.5.3.2.2.1	Partially Met	Certified based on sponsor requirements. See Note 2.
	Performance Requirements	Conditional	5.5.3.2.2.2	Met	
	Reliability and Quality Assurance	Conditional	5.5.3.2.2.2.1	Partially Met	Certified based on sponsor requirements. See Note 3.

Table 2. SUT CRs and FRs Status (continued)

8 (cont)	Common Physical Design Requirements	Conditional	5.5.3.2.2.3	Met	
	Protection and Restoration	Conditional	5.5.3.2.2.4	Met	
	Optical Amplifier Requirements				
	OLA Physical Design Requirements	Conditional	5.5.3.2.3.1	Not Met	See Note 4.
	Muxponder Requirements				
	Muxponder	Conditional	5.5.3.2.4	Partially Met	Certified based on sponsor requirements. See Note 5.
	Transponder Requirements				
	Transponder	Conditional	5.5.3.2.5	Partially Met	Certified based on sponsor requirements. See Note 6.
	Interface Requirements	Conditional	5.5.3.2.5.1	Partially Met	Certified based on sponsor requirements. See Note 7.
	ROADM Requirements				
	ROADM Requirements	Conditional	5.5.3.2.6	Partially Met	Certified based on sponsor requirements. See Note 8.
	ROADM Specific Physical Design Requirements	Conditional	5.5.3.2.6.1	Met	
	Requirements Common to Transponder and ROADM				
	Framed Formats	Conditional	5.5.3.2.7.1	Partially Met	Certified based on sponsor requirements. See Note 9.
	Unframed Formats	Conditional	5.5.3.2.7.2	Partially Met	Certified based on sponsor requirements. See Note 10.
	Optical Supervisory Channel Requirements				
Optical Supervisory Channel	Conditional	5.5.3.2.8	Partially Met	Certified based on sponsor requirements. See Note 11.	
OTS Standard Compliance	Conditional	5.5.3.2.9	Partially Met	Certified based on sponsor requirements. See Note 12.	
9	TSF Requirements				
	TSF SONET/SDH	Required	5.5.3.3.2	Partially Met	Certified based on sponsor requirements. See Note 13.
	TSF Ethernet	Required	5.5.3.3.3	Partially Met	Certified based on sponsor requirements. See Note 14.
	TSF Framing Requirements	Required	5.5.3.3.4	Met	
	TSF Switch Fabric	Required	5.5.3.3.5	Partially Met	Certified based on sponsor requirements. See Note 15.
	TSF Performance	Required	5.5.3.3.6	Met	
	General Link Protection	Required	5.5.3.3.7	Partially Met	Certified based on sponsor requirements. See Note 16.
	Linear Protection	Required	5.5.3.3.8	Partially Met	Certified based on sponsor requirements. See Note 17.
	Ring Protection	Required	5.5.3.3.19	Partially Met	Certified based on sponsor requirements. See Note 18.
	Fault management	Required	5.5.3.3.10	Met	
	Performance Management	Required	5.5.3.3.11	Partially Met	Certified based on sponsor requirements. See Note 19.
	EMS	Required	5.5.3.3.12	Partially Met	Certified based on sponsor requirements. See Note 20.
	Physical Design	Required	5.5.3.3.13	Met	
Standards Compliance	Required	5.5.3.3.14	Partially Met	Certified based on sponsor requirements. See Note 21.	

Table 2. SUT CRs and FRs Status (continued)

NOTES:

1. Annotation of 'required' refers to high-level requirement category. Applicability of each sub-requirement is provided in Enclosure 3.
2. SUT does not support 100G interface, 100G transponder, pre-dispersion compensation, and multiple DWDM span reach requirements. SUT supports 450 km over SMF, 930 km over NZDSF for 40G, 135 km length and 35 dB spans loss.
3. SUT does not support software upgradeability in a modular fashion as required by the UCR. The OTS' requirement for a minimum of eight user-defined remote control points for external functions but SUT supports only four user-defined remote control points.
4. SUT does not support Raman Amplifiers and internal Optical Spectrum Analyzer. SUT supports 135 km / 35 dB spans loss and pre-dispersion compensation.
5. SUT does not support a four-to-one Muxponder.
6. SUT does not support 100G transponder. SUT supports SR, IR-1, R2, LR-1, LR-2 for OC-48, OC-192 interfaces. SUT also supports 1200 km over SMF, 930 km over NZDSF for 10G, 450 km over SMF, and 930 km over NZDSF for 40G.
7. SUT supports OTU-2 and OTU-3 at the client and network sides except for 40G interface, which supports OTU-3 at the network side.
8. SUT does not supports the direction-less wavelength routing, colorless wavelength routing, cascading of eight or more ROADMs, configuration for it to pass-through all wavelengths those are not explicitly dropped or added. SUT also does not support dynamic wavelength selection without pre-cabling, adding or dropping all wavelengths from each of eight line-side fiber connections to tributary side optics, wavelength hair-pinning capability, wavelength regeneration including wavelength conversion using back-to-back transponders or through-transponders via hair-pinning, and optical multicasting capability.
9. SUT supports OTU-2 and OTU-3 at the client and network sides except for 40G interface, which supports OTU-3 at the network side.
10. SUT supports mixed framed and unframed wavelength services via ALIEN wavelength.
11. SUT GNE will not communicate with other Nodes in the absence of an OSC. SUT supports 135 km length and 35 dB spans loss for OSC.
12. SUT supports OTU-2 and OTU-3 at the client and network sides except for 40G interface, which supports OTU-3 at the network side.
13. SUT does not support selection of SONET or SDH per card or port level. However, SONET or SDH is set at the system level meaning either SUT is set for entirely SDH or set for entirely SONET. SUT also does not support 40G switching as SONET or SDH in TSF mode. However, SUT does support 40G interface as SONET and SDH in OTS mode, SR, LR-1, LR-2, LR-3, and IR-1, IR-2, IR-3 for OC-48 and OC-192 interfaces, and VSR for STM-256 all application codes supported for various values of n and x.
14. SUT does not support LCAS in SDH mode.
15. SUT supports VCAT and VC-4 granularity.
16. 1:N and 4-Fibers BLSR are not supported by the SUT.
17. 1:1 is not supported by the SUT.
18. 4-Fibers BLSR is not supported by the SUT.
19. The SUT does not track PM data with 5-m intervals and also does not track frame errors, P-Bit Parity Errors, C-Bit Parity Errors, FEBE, layer-1 statistics, layer-2 errors, and all QoS parameters defined for the RPR. However, the SUT supports Block Error PMs for SDH but only Bit-error PMs for SONET, and all PMs are collected in 15-m intervals.
20. SUT does not support RPR and does not track PM data with 5- m intervals. SUT also does not track frame errors, P-Bit Parity Errors, C-Bit Parity Errors, and FEBE.
21. SUT does not support RPR.

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the Fujitsu FLASHWAVE 9500 from Software Release 4.1.4 to Software Release 4.1.5

Table 2. SUT CRs and FRs Status (continued)

LEGEND:			
ADPCM	Adaptive Differential Pulse Code Modulation	m	minute
BLSR	Bidirectional Line Switched Ring	NA	Not Applicable
C-Bit	Coding Bit	NE	Network Element
CR	Capabilities Requirement	NM	Network Management
CS-ACELP	Conjugate Structure Algebraic Code-Excited Linear Prediction	NMS	Network Management System
		NZDSF	Non-Zero Dispersion Shifted Fiber
dB	Decibel	OC	Optical Carrier
DLoS	Direct Line of Sight	OLA	Optical Line Amplifier
DWDM	Dense Wavelength Division Multiplexing	OSC	Optical Supervisory Channel
EMS	Element Management System	OTS	Optical Transport System
F-NE	Fixed-Network Element	OTU	Optical Transport Unit
FEBE	Front End/Back End	P-Bit	Parity Bit
FR	Functional Requirement	PM	Power Management
G	Gigabit	QoS	Quality of Service
G.726	ITU-T speech codec for ADPCM (32 Kbps)	R	Reach
G.728	ITU-T speech codec for LD-CELP (16 Kbps)	RPR	Resilient Packet Rings
G.729	ITU-T speech codec for CS-ACELP (8 Kbps)	ROADM	Reconfigurable Optical Add-Drop Multiplexor
GNE	Gateway Network Element	SDH	Synchronous Digital Hierarchy
ID	Identification	SMF	System Management Facility
IPv4	Internet Protocol version 4	SONET	Synchronous Optical Transport Network
IPv6	Internet Protocol version 6	SR	Short Reach
IR	Intermediate Reach	STM	Synchronous Transport Module
ITU-T	International Telecommunication Union - Telecommunication	SUT	System Under Test
		SONET	Synchronous Optical Transport Network
Kbps	Kilobits per second	TSF	Transport Switch Function
km	kilometer	UCR	Unified Capabilities Requirements
LCAS	Link Capacity Adjustment Scheme	VC	Virtual Circuit
LD-CELP	Low Delay-Code Excited Linear Prediction	VCAT	Virtual Concatenation
LR	Long Reach	VSR	Very Short Reach
		VVoIP	Voice and Video over Internet Protocol

Table 3 lists the differences between Software Releases 4.1.4 and 4.1.5 in DTR 2.

Table 3. DTR 2 Software Revision to be included in the Original Certification

DTR 2 Objective/Issue	Issue	Description of Change	Original Revision Number	New Revision Number
A Release 4.1.x FLASHWAVE 9500 Packet ONP equipped with the WMP5-W8A1 unit continuously reports and clears TCA alarms that rise against in-service channels on the WMP5-W8A1 unit. The number of TCA alarms reported increases over time, and the WMP5-W8A1 unit eventually shuts down the channel and triggers a traffic outage.	1	Release 4.1.5 corrects FLASHWAVE 9500 Packet ONP issues detected in prior software releases, which caused the platform to behave differently than in the manner documented. One issue affects only FLASHWAVE 9500 Packet ONP systems that are equipped with the WMP5-W8A1 unit. The other issue affects only FLASHWAVE 9500 Packet ONP systems that are equipped with the IFP5-CMD1 unit.	FC9565CR04-I04	FC9565CR04-I05
In a Release 4.1.4 or earlier NE, CRC mismatch errors detected by a FPGA cause the IFP5-CMD1 unit optical laser to shut down. The CRC mismatch errors may be detected by the FPGA during SFP module insertion into the IFP5-CMD1 unit, during SFP module provisioning, or during the software upgrade process.	2			
LEGEND:				
CRC	Cyclic Redundancy Check	ONP	Optical Networking Platform	
DTR	Desktop Review	SFP	Small Form Pluggable	
FPGA	Field-Programmable Gate Array	TCA	Threshold Crossing Alert	
NE	Network Element			

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the Fujitsu FLASHWAVE 9500 from Software Release 4.1.4 to Software Release 4.1.5

Table 4 lists the equipment used for DTR 3 testing.

Table 4. List of DTR 3 Equipment to be included in the Original Certification

DTR 3 - New Components Part Number	Description	Comparable Approved Components Part Number																																				
FC95700180	OC-48 LR1 Multi-rate SFP	FC95700140																																				
FC95700190	OC-48 LR2 Multi-rate SFP	FC95700150																																				
FC95705083	100Base-FX SFP, MMF or SMF, 2Km	FC95705081																																				
FC95705093	100Base-LX SFP	FC95705090																																				
FC95700020	OC-3 IR-1 SFP	FC95700021																																				
FC95700050	OC-12 IR-1 SFP	FC95700051																																				
FC95700160	OC-48 Multi-rate SR-1 SFP	FC95700080																																				
P9500MPC1R0415A	MPC1 with preloaded R4.1.5 software	PL9500MPC1R0415A																																				
P9500MPE1R0415A	MPE1 with preloaded R4.1.5 software	PL9500MPE1R0415A																																				
FC9570B40B	CWDM SFP - 161nm OC3/12/48	FC9570B40A FC9570B40H																																				
FC9570B40C	CWDM SFP - 157nm OC3/12/48																																					
FC9570B40D	CWDM SFP - 155nm OC3/12/48																																					
FC9570B40E	CWDM SFP - 153nm OC3/12/48																																					
FC9570B40F	CWDM SFP - 151nm OC3/12/48																																					
FC9570B40G	CWDM SFP - 149nm OC3/12/48																																					
FC95704AAD	OC-48 DWDM SFP - 1531.12nm	FC95704AAC																																				
FC95704AAG	OC-48 DWDM SFP - 1531.12nm																																					
FC95704AAE	OC-48 DWDM SFP - 1531.90nm																																					
FC95704AAF	OC-48 DWDM SFP - 1532.68nm																																					
FC95704AAH	OC-48 DWDM SFP - 1534.25nm																																					
FC95704AAJ	OC-48 DWDM SFP - 1535.04nm																																					
FC95704AAK	OC-48 DWDM SFP - 1535.82nm																																					
FC95704AAN	OC-48 DWDM SFP - 1538.19nm																																					
FC95704AAP	OC-48 DWDM SFP - 1538.98nm																																					
FC95704AAQ	OC-48 DWDM SFP - 1539.77nm																																					
FC95704AAR	OC-48 DWDM SFP - 1540.56nm																																					
FC95704AAS	OC-48 DWDM SFP - 1541.35nm																																					
FC95704AAT	OC-48 DWDM SFP - 1542.14nm																																					
FC95704AAU	OC-48 DWDM SFP - 1542.94nm																																					
FC95704AAV	OC-48 DWDM SFP - 1543.73nm																																					
FC95704AAY	OC-48 DWDM SFP - 1546.12nm																																					
FC95704AAZ	OC-48 DWDM SFP - 1546.92nm																																					
<p>LEGEND:</p> <table> <tr> <td>100Base-FX</td> <td>100 Mbps Ethernet generic designation</td> <td>MMF</td> <td>Multi-mode Fiber</td> </tr> <tr> <td>100Base-LX</td> <td>100 Mbps Ethernet generic designation</td> <td>MPC1</td> <td>Microprocessor C1</td> </tr> <tr> <td>CWDM</td> <td>Coarse Wavelength Division Multiplexor</td> <td>MPE1</td> <td>Microprocessor E1</td> </tr> <tr> <td>DTR</td> <td>Desktop Review</td> <td>nm</td> <td>nanometer</td> </tr> <tr> <td>DWDM</td> <td>Dense Wavelength Division Multiplexing</td> <td>OC</td> <td>Optical Carrier</td> </tr> <tr> <td>IR</td> <td>Intermediate Reach</td> <td>SFP</td> <td>Small Form Pluggable</td> </tr> <tr> <td>Km</td> <td>Kilometer</td> <td>SMF</td> <td>Single Mode Fiber</td> </tr> <tr> <td>LR</td> <td>Long Reach</td> <td>SR</td> <td>Short Reach</td> </tr> <tr> <td>Mbps</td> <td>Megabits per second</td> <td></td> <td></td> </tr> </table>			100Base-FX	100 Mbps Ethernet generic designation	MMF	Multi-mode Fiber	100Base-LX	100 Mbps Ethernet generic designation	MPC1	Microprocessor C1	CWDM	Coarse Wavelength Division Multiplexor	MPE1	Microprocessor E1	DTR	Desktop Review	nm	nanometer	DWDM	Dense Wavelength Division Multiplexing	OC	Optical Carrier	IR	Intermediate Reach	SFP	Small Form Pluggable	Km	Kilometer	SMF	Single Mode Fiber	LR	Long Reach	SR	Short Reach	Mbps	Megabits per second		
100Base-FX	100 Mbps Ethernet generic designation	MMF	Multi-mode Fiber																																			
100Base-LX	100 Mbps Ethernet generic designation	MPC1	Microprocessor C1																																			
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DWDM	Dense Wavelength Division Multiplexing	OC	Optical Carrier																																			
IR	Intermediate Reach	SFP	Small Form Pluggable																																			
Km	Kilometer	SMF	Single Mode Fiber																																			
LR	Long Reach	SR	Short Reach																																			
Mbps	Megabits per second																																					

5. In accordance with the Program Manager’s request, JITC did not develop a detailed test report. 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, which .mil/.gov users can access 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 at <http://jit.fhu.disa.mil> (NIPRNet). Information related to Approved Products List (APL) testing is available on the DISA APL Testing and Certification website located at <http://www.disa.mil/Services/Network-Services/UCCO>. All associated test

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the Fujitsu FLASHWAVE 9500 from Software Release 4.1.4 to Software Release 4.1.5

information is available on the DISA Unified Capability Certification Office APL Integrated Tracking System (APLITS) website located at <https://aplits.disa.mil>.

6. JITC testing point of contact is Mr. Son Pham, commercial (301) 743-4258. His e-mail address is Son.m.Pham2.civ@mail.mil; mailing address: 3341 Strauss Avenue, Suite 236, Indian Head, MD 20640-5149. The tracking number for the SUT is 1009501.

FOR THE COMMANDER:


for RICHARD A. MEADOR
Chief
Battlespace Communications Portfolio

Enclosures a/s

Distribution (electronic mail):

Joint Staff J-6

Joint Interoperability Test Command, Liaison, TE3/JT1

Office of Chief of Naval Operations, CNO N6F2

Headquarters U.S. Air Force, Office of Warfighting Integration & CIO, AF/XCIN (A6N)

Department of the Army, Office of the Secretary of the Army, DA-OSA CIO/G-6 ASA (ALT), SAIS-IOQ

U.S. Marine Corps MARCORSSYSCOM, SIAT, MJI Division I

DOT&E, Net-Centric Systems and Naval Warfare

U.S. Coast Guard, CG-64

Defense Intelligence Agency

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Defense Information Systems Agency, TEMC

Office of Assistant Secretary of Defense (NII)/DOD CIO

U.S. Joint Forces Command, Net-Centric Integration, Communication, and Capabilities Division, J68

Defense Information Systems Agency, GS23

Defense Information Systems Agency, Communication Sustainment Division (NS11)

ADDITIONAL REFERENCES

- (c) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008 Change 1," January 2010
- (d) Fujitsu Desk Top Review (DTR) 4 Reference, "FLASHWAVE 9500, R4.1.4 DTR 2,"
1 April 2011
- (e) Fujitsu Desk Top Review (DTR) 5 Reference, "FLASHWAVE 9500, R4.1.4 DTR 3,"
7 September 2011
- (f) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of Fujitsu FLASHWAVE 9500 with Software Release 4.1.4 (Tracking Number 1009501),"
6 April 2011

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