



DEFENSE INFORMATION SYSTEMS AGENCY

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

IN REPLY
REFER TO:

Joint Interoperability Test Command (JITC)

20 Sep 11

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Extension of Special Interoperability Test Certification of the Aruba Networks Wireless Products, from version 3.3.2.18-FIPS to version 3.4.4.0-FIPS

- References:
- (a) Department of Defense Directive 4630.05, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 2004
 - (b) Chairman, Joint Chiefs of Staff Instruction 6212.01E, "Interoperability and Supportability of Information Technology and National Security Systems," 15 December 2008
 - (c) through (e), see Enclosure 1

1. References (a) and (b) establish the Joint Interoperability Test Command (JITC), as the responsible organization for interoperability test certification.
2. The Aruba Networks Wireless Products, version 3.3.2.18-FIPS, was originally certified for joint use in the Defense Information System Network as a Wireless Local Area Network Access System (WLAS) and Wireless Access Bridge (WAB). The vendor submitted a Desktop Review (DTR) to close Information Assurance (IA) Plans of Action and Milestones (POA&Ms) with version 3.4.4.0-FIPS. The US Army Information Systems Engineering Command Technology Integration Center (USA ISEC TIC) conducted testing using wireless requirements derived from the Unified Capabilities Requirements (UCR), Reference (c), and wireless test procedures, Reference (d). The JITC will verify the SUT's certification status during operational deployment. 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 Defense Information Systems Agency via vendor POA&Ms that address all new critical TDRs within 120 days of identification. The JITC does not certify any other configurations, features, or functions, except those cited in this memorandum, or authorized by the Program Management Office. This certification expires upon changes that affect interoperability, but no later than three years from the date of the Unified Capabilities Approved Products List approval memorandum dated 29 December 2010.
3. JITC approves the extension of this certification for DTR 1 submitted to close out IA findings and add an Access Point to the listing – AP-105-1. JITC originally certified the 3200, 3600, and 6000 network controller and the AP-65, -70, -85LX, -85TX, and -125. After comparing the AP-105-1 to the other certified AP product families, JITC determined that the AP-105-1 is certifiable without any additional interoperability testing. Approval is based on Verification and Validation (V&V) IA testing conducted from 23 through 30 May 2011 by the USA ISEC TIC, a Department of Defense (DoD) Component Test Lab, and DISA IA Certification Authority (CA) approval. The results of the tests for this product are published in a separate IA report,

JITC Memo, JTE, Extension of Special Interoperability Test Certification of the Aruba Networks Wireless Products, from version 3.3.2.18-FIPS to version 3.4.4.0-FIPS

Reference (e). The DISA IA CA approval was granted on 19 July 2011. JITC and USA ISEC TIC review of the DTR submission determined that there was no impact on interoperability.

4. Table 1 lists the interfaces, Capability Requirements (CR), Functional Requirements (FR), and component status of the SUT. The threshold Capability/Functional requirements for WLASs and WABs were established by Section 5.3.1 of Reference (c) and were used to evaluate the interoperability of the SUT.

Table 1. SUT Interface Interoperability Status

Interface	Critical (See note 1.)	UCR Reference	Threshold CR/FR Requirements (See note 2.)	Status	Remarks
WLAS					
802.11a	N	5.3.1.7.2.3	1, 2, 3, 5, and 7	Certified	
802.11b	N	5.3.1.7.2.3	1, 2, 3, 5, and 7	Certified	
802.11g	N	5.3.1.7.2.3	1, 2, 3, 5, and 7	Certified	
802.16	N	5.3.1.7.2.3	1, 2, 3, 5, and 7	Not Tested	
802.3i	N	5.3.1	1, 2, 3, 5, and 7	Certified	
802.3u	N	5.3.1	1, 2, 3, 5, and 7	Certified	
802.3z	N	5.3.1	1, 2, 3, 5, and 7	Certified	See note 3.
802.3ab	N	5.3.1	1, 2, 3, 5, and 7	Certified	See note 3.
WAB					
802.11a	N	5.3.1.7.2.3	1, 2, 3, 6, and 7	Certified	
802.11b	N	5.3.1.7.2.3	1, 2, 3, 6, and 7	Certified	
802.11g	N	5.3.1.7.2.3	1, 2, 3, 6, and 7	Certified	
802.16	N	5.3.1.7.2.3	1, 2, 3, 6, and 7	Not Tested	
802.3i	N	5.3.1	1, 2, 3, 6, and 7	Certified	
802.3u	N	5.3.1	1, 2, 3, 6, and 7	Certified	
802.3z	N	5.3.1	1, 2, 3, 6, and 7	Not Tested	
802.3ab	N	5.3.1	1, 2, 3, 6, and 7	Not Tested	
WEI					
802.11a	N	5.3.1.7.2.3	1, 3, and 4	NA	Products tested did not include WEIs.
802.11b	N	5.3.1.7.2.3	1, 3, and 4	NA	
802.11g	N	5.3.1.7.2.3	1, 3, and 4	NA	
802.16	N	5.3.1.7.2.3	1, 3, and 4	NA	
NOTES:					
1. The UCR does not define any minimum interfaces. The SUT must minimally provide one of the wired interfaces (to the ASLAN) and wireless interfaces (subscriber).					
2. The SUT need not provide wireless capabilities; however, if such capabilities are present, the SUT must meet all threshold CR/FR requirements.					
3. Applies to Aruba 3000 and 6000 controllers. Other devices were not tested with the interface specified.					
LEGEND:					
ASLAN	Assured Services Local Area Network		UCR	Unified capabilities Requirements	
CR	Capability Requirement		WAB	Wireless Access Bridge	
FR	Functional Requirement		WEI	Wireless End Instrument	
NA	Not Applicable		WLAS	Wireless LAN Access System	
SUT	System Under Test				

JITC Memo, JTE, Extension of Special Interoperability Test Certification of the Aruba Networks Wireless Products, from version 3.3.2.18-FIPS to version 3.4.4.0-FIPS

Table 2. SUT Capability Requirements and Functional Requirements Status

CR/FR ID	Capability/ Function	Applicability (See note 1.)	UCR Reference	Status	Remarks
1	General Wireless Requirements				
	IPv6	Required	5.3.1.7.2.1	Met	See note 2.
	WiFi Certified	Required (See note 3.)	5.3.1.7.2.1	Met	See note 4.
	Redundancy	Required	5.3.1.7.2.1	Met	
	FIPS 140-2 Level 1	Required	5.3.1.7.2.1	Met	See note 4.
	Latency	Required	5.3.1.7.2.1	Met	
	Traffic Prioritization	Required	5.3.1.7.2.1	Met	
	Wireless STIGs	Required	5.3.1.7.2.1	Met	See note 5.
2	WIDS				
	Continuous Scanning	Required	5.3.1.7.2.2	Met	See note 6.
	Location-sensing	Required	5.3.1.7.2.2	Met	
3	Wireless Interface Requirements				
	Interface Standards	Required (See note 7.)	5.3.1.7.2.3	Met	
	802.11 Interface Standards	Required (See note 8.)	5.3.1.7.2.3	Met	
	802.16 Interface Standards	Required (See note 9.)	5.3.1.7.2.3	Not Tested	See note 10.
	Fixed / Nomadic WEIs	Required (See note 11.)	5.3.1.7.2.3	NA	See note 12.
4	Wireless End Instruments				
	VoIP Solution	Required (See note 13.)	5.3.1.7.2.4	NA	
	Access Methods	Required (See note 14.)	5.3.1.7.2.4	NA	
	Call Control Authentication	Required (See note 13.)	5.3.1.7.2.4	NA	
	Call Termination	Required (See note 11.)	5.3.1.7.2.4	NA	
5	WLAS Requirements				
	Loss of Call upon WLAS failure	Required (See note 15.)	5.3.1.7.2.5	Met	See note 16.
	Maximum supported EIs	Required (See note 15.)	5.3.1.7.2.5	Met	See notes 16 and 17.
	MOS	Required (See note 15.)	5.3.1.7.2.5	Met	See notes 16 and 17.
	Roaming	Required (See note 15.)	5.3.1.7.2.5	Met	See notes 16.
6	Wireless Access Bridge				
	Individual Interface Standards	Required (See note 8.)	5.3.1.7.2.6	Met	For specified interfaces.
	Maximum Voice Calls Transported	Required (See note 8.)	5.3.1.7.2.6	Met	See notes 16 and 17.
	Voice MOS	Required (See note 8.)	5.3.1.7.2.6	Met	See note 16.
	E2E BER	Required (See note 8.)	5.3.1.7.2.6	Met	
	Secure Voice Transmission	Required (See note 8.)	5.3.1.7.2.6	Met	See note 16.
	Call Signaling Transport	Required (See note 8.)	5.3.1.7.2.6	Met	See note 16.
	Latency	Required (See note 8.)	5.3.1.7.2.6	Met	
	Jitter	Required (See note 8.)	5.3.1.7.2.6	Met	
	WLAS/WAB Combination	Required (See note 8.)	5.3.1.7.2.6	Met	

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

CR/FR ID	Capability/ Function	Applicability (See note 1.)	UCR Reference	Status	Remarks																																																								
7	ASLAN Requirements Applicable to Wireless Products																																																												
	General Performance Parameters	Required	5.3.1.3	Met																																																									
<p>NOTES:</p> <ol style="list-style-type: none"> The SUT need not provide wireless capability. However, if wireless capability is present, the SUT must meet the wireless requirements (as applicable for product type WLAS, WAB, or WEI) in order to be certified. Vendor demonstrated IPv6 QoS and IPv6 packet transfer via Ethernet. Only applies to 802.11 interfaces. Verified via vendor LOC. Vendor met STIG requirements with submitted mitigations. SUT's ability to be monitored by WIDS was conformed via a separate ARMT IA test event. Individual sub-requirements apply to specific interface types. Applicable to 802.11 interfaces only. Applicable to 802.16 interfaces only. SUT does not provide 802.16 (conditional) interface. Applies to WEIs; not applicable to WLASs or WABs. SUT does not include WEIs. The WEI is certified in conjunction with a call-control agent (VoIP solution). The WEI may be dedicated service (single traffic type) or shared service (voice, video, and data). Specified requirements are only applicable to WLAS products. Verified via emulated phone (Ixia). The SUT supports the ability to limit the number of subscribers, thereby controlling number of voice subscribers. <p>LEGEND:</p> <table> <tr> <td>802.11</td> <td>IEEE set of wireless standards in the 2.4,3.6, and 5 GHz</td> <td>LOC</td> <td>Letter of Compliance</td> </tr> <tr> <td>802.16</td> <td>IEEE series of wireless broadband standards</td> <td>MOS</td> <td>Mean Opinion Score</td> </tr> <tr> <td>ASLAN</td> <td>Assured Services Local Area Network</td> <td>QoS</td> <td>Quality of Service</td> </tr> <tr> <td>BER</td> <td>Bit Error Rate</td> <td>STIG</td> <td>Security Technical Implementation Guide</td> </tr> <tr> <td>CR</td> <td>Capability Requirement</td> <td>SUT</td> <td>System Under Test</td> </tr> <tr> <td>E2E</td> <td>End-to-End</td> <td>UCR</td> <td>Unified Capabilities Requirements</td> </tr> <tr> <td>EI</td> <td>End Instruments</td> <td>VoIP</td> <td>Voice over Internet Protocol</td> </tr> <tr> <td>FIPS</td> <td>Federal Information Processing Standard</td> <td>WAB</td> <td>Wireless Access Bridge</td> </tr> <tr> <td>FR</td> <td>Functional Requirement</td> <td>WEI</td> <td>Wireless End Instrument</td> </tr> <tr> <td>GHz</td> <td>Gigahertz</td> <td>WIDS</td> <td>Wireless Intrusion Detection System</td> </tr> <tr> <td>IA</td> <td>Information Assurance</td> <td>WiFi</td> <td>Trademark of the Wi-Fi Alliance that refers to a range of connectivity technologies including WLAN</td> </tr> <tr> <td>IEEE</td> <td>Institute of Electrical and Electronics Engineers</td> <td>WLAN</td> <td>Wireless Local Area Network</td> </tr> <tr> <td>ID</td> <td>Identification</td> <td>WLAS</td> <td>Wireless Local Area Network Access System</td> </tr> <tr> <td>IPv6</td> <td>Internet Protocol version 6</td> <td></td> <td></td> </tr> </table>						802.11	IEEE set of wireless standards in the 2.4,3.6, and 5 GHz	LOC	Letter of Compliance	802.16	IEEE series of wireless broadband standards	MOS	Mean Opinion Score	ASLAN	Assured Services Local Area Network	QoS	Quality of Service	BER	Bit Error Rate	STIG	Security Technical Implementation Guide	CR	Capability Requirement	SUT	System Under Test	E2E	End-to-End	UCR	Unified Capabilities Requirements	EI	End Instruments	VoIP	Voice over Internet Protocol	FIPS	Federal Information Processing Standard	WAB	Wireless Access Bridge	FR	Functional Requirement	WEI	Wireless End Instrument	GHz	Gigahertz	WIDS	Wireless Intrusion Detection System	IA	Information Assurance	WiFi	Trademark of the Wi-Fi Alliance that refers to a range of connectivity technologies including WLAN	IEEE	Institute of Electrical and Electronics Engineers	WLAN	Wireless Local Area Network	ID	Identification	WLAS	Wireless Local Area Network Access System	IPv6	Internet Protocol version 6		
802.11	IEEE set of wireless standards in the 2.4,3.6, and 5 GHz	LOC	Letter of Compliance																																																										
802.16	IEEE series of wireless broadband standards	MOS	Mean Opinion Score																																																										
ASLAN	Assured Services Local Area Network	QoS	Quality of Service																																																										
BER	Bit Error Rate	STIG	Security Technical Implementation Guide																																																										
CR	Capability Requirement	SUT	System Under Test																																																										
E2E	End-to-End	UCR	Unified Capabilities Requirements																																																										
EI	End Instruments	VoIP	Voice over Internet Protocol																																																										
FIPS	Federal Information Processing Standard	WAB	Wireless Access Bridge																																																										
FR	Functional Requirement	WEI	Wireless End Instrument																																																										
GHz	Gigahertz	WIDS	Wireless Intrusion Detection System																																																										
IA	Information Assurance	WiFi	Trademark of the Wi-Fi Alliance that refers to a range of connectivity technologies including WLAN																																																										
IEEE	Institute of Electrical and Electronics Engineers	WLAN	Wireless Local Area Network																																																										
ID	Identification	WLAS	Wireless Local Area Network Access System																																																										
IPv6	Internet Protocol version 6																																																												

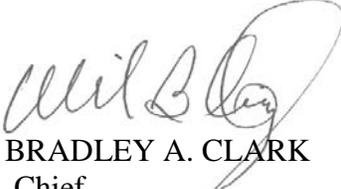
5. In accordance with the Program Manager's request, the JITC did not prepare a detailed test report. The JITC distributes interoperability information via the JITC Electronic Report Distribution system, which uses Non-secure Internet Protocol Router Network (NIPRNet) e-mail. More comprehensive interoperability 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 <http://jit.fhu.disa.mil> (NIPRNet). Information related to Defense Switched Network (DSN) testing is on the Telecom Switched Services Interoperability website at <http://jitc.fhu.disa.mil/tssi>. All associated data is available on the Defense Information Systems Agency Unified Capability Coordination Office (UCCO) website located at <http://www.disa.mil/ucco/>.

JITC Memo, JTE, Extension of Special Interoperability Test Certification of the Aruba Networks Wireless Products, from version 3.3.2.18-FIPS to version 3.4.4.0-FIPS

6. The JITC point of contact is Ms. Lisa Fardsalehi, commercial 520.538.5531 or DSN 879.5531; e-mail address is lisa.fardsalehi@disa.mil. The JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The UCCO tracking number is 0901301.

FOR THE COMMANDER:

1 Enclosure a/s


for BRADLEY A. CLARK
Chief
Battlespace Communications Portfolio

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

National Security Agency, DT

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

(This page intentionally left blank.)

ADDITIONAL REFERENCES

- (c) Office of the Assistant Secretary of Defense Document, "Department of Defense Unified Capabilities Requirements 2008, Change 1," 22 January 2010
- (d) Joint Interoperability Test Command Document, "Unified Capabilities Test Plan (UCTP)"
- (e) United States Army Document, "Information Assurance (IA) Finding Summary for Aruba Networks v 3.4.4.0-FIPS (Tracking Number 0901301)," May 2011

(This page left intentionally blank.)