DEFENSE INFORMATION SYSTEMS AGENCY
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IN REPLY REFER TO: Joint Interoperability Test Command (JTE) **8 Jan 14**

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Special Interoperability Test Certification of the General DataComm, Inc., Xedge 6000, Fixed Network Element (F-NE), from Software Release 7.3.14 to Software Release 7.3.16

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 (h), 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 General DataComm, Inc., Xedge 6000, F-NE, with Software Release 7.3.14, is hereinafter referred to as the System Under Test (SUT). The SUT is a family of products with models submitted for testing that includes Xedge 6280 and 6445 platforms. 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 F-NE. 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 Defense Information Systems Agency (DISA) in a vendor Plan of Action and Milestones to address the concern(s) within 120 days of identification. The JITC conducted testing using F-NE requirements within the Unified Capabilities Requirements (UCR) 2008, Change 2, Reference (c), and other sponsor requested requirements. JITC tested the SUT using F-NE test procedures, Reference (d) and test procedures developed to address the sponsor unique requirements. JITC does not certify any other configurations, features, or functions, except those cited within this memorandum. This certification expires 3 May 2015 based upon the UC Approved Products List (APL) memorandum expiration, or upon changes that affect interoperability.

3. The JITC approves the extension of this certification for Desktop Review (DTR) 2, submitted to add the Analog Voice Module (AVM) and software update as listed in Table 3. Approval is based on Interoperability (IO) Verification and Validation (V&V) testing of these components conducted at the Indian Head, Maryland Test Facility, from 11 through 14 November 2013. The Information Assurance (IA) accreditation of DTR 2 was not required because the DTR approval is relevant only to IO certification. The results of the tests for the original certification are published in separate reports by Unified Capabilities Certification Office (UCCO) Tracking

Number (see paragraph 6) and can be found on the Approved Products List Integrated Tracking System (APLITS) at https://aplits.disa.mil.

4. Section 5.9 of the UCR establishes the interfaces and threshold CRs/FRs used to evaluate the interoperability of the SUT as a F-NE. Table 1 and Table 2 lists the F-NE, sponsor-requested interfaces, CRs, FRs, and component status of the SUT. Table 3 documents the components listed in DTR-2 to be included in the original certification.

Table 1. SUT Interface Interoperability Status

Interface		Critical (See note 1.)	UCR Ref (UCR 2008, Change 2)	Threshold CR/FR (See note 2.)	Status	Remarks
NE	Analog	No	5.9.2.3.1	1, 2, and 4	Certified	SUT met requirements for specified interfaces.
	Serial	No	5.9.2.3.2	1, 2, and 4	Certified	SUT met requirements for specified interfaces.
	BRI ISDN	No	5.9.2.3.3	1, 2, and 4	NA	Not supported by the SUT.
	DS1	No	5.9.2.3.4	1, 2, 3, and 4	Certified	SUT met requirements for specified interfaces.
	E1	No	5.9.2.3.5	1, 2, 3, and 4	Certified	SUT met requirements for specified interfaces.
	DS3	No	5.9.2.3.6	1, 2, 3, and 4	Certified	SUT met requirements for specified interfaces.
	OC-X	No	5.9.2.3.8	1, 2, 3, and 4	Certified	SUT met requirements for the following interfaces: OC-3 ATM and OC-12 ATM
	IP (Ethernet) 10/100/1000 and GbE	No	5.9.2.3.9	1, 2, 4, and 7	Certified	SUT met requirements for specified interfaces.
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	

NOTES:
1. UCR does not specify any minimum interfaces. The SUT must minimally provide one of the listed ingress and egress interfaces specified.
2. CR/FR requirements are contained in Table 2. CR/FR numbers represent a roll-up of UCR requirements.

LEGEND:

100Base-X	100 Mbps Ethernet generic designation	IP	Internet Protocol
10Base-X	10 Mbps Ethernet generic designation	ISDN	Integrated Services Digital Network
ATM	Asynchronous Transfer Mode	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.,)
E1	European Interface Standard (2.048 Mbps)	Ref	Reference
FR	Functional Requirement	SUT	System Under Test
GbE	Gigabit Ethernet	UCR	Unified Capabilities Requirements

Table 2. SUT CRs and FRs Status

CR/FR ID	Capability/Function	Applicability (See note)	UCR Ref (UCR 2008, Change 2)	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	

NOTE: Applicability refers to the high-level roll-up of section requirements. A detailed listing of individual requirements applicability can be located in Enclosure 3 of the original certification.

LEGEND:

ADPCM	Adaptive Differential Pulse Code Modulation	IPv4	Internet Protocol version 4
CR	Capability Requirement	IPv6	Internet Protocol version 6
CS-ACELP	Conjugate Structure Algebraic Code-Excited Linear Prediction	Kbps	Kilobits per second
DLoS	Direct Line of Sight	LD-CELP	Low Delay-Code Excited Linear Prediction
F-NE	Fixed Network Element	NA	Not Applicable
FR	Functional Requirement	NM	Network Management
G.726	ITU-T speech codec for ADPCM (32 Kbps)	NMS	Network Management System
G.728	ITU-T speech codec for LD-CELP (16 Kbps)	Ref	Reference
G.729	ITU-T speech codec for CS-ACELP (8 Kbps)	SUT	System Under Test
ID	Identification	UCR	Unified Capabilities Requirements
ITU-T	International Telecommunication Union –Telecommunication	VVoIP	Voice and Video over Internet Protocol

Table 3. List of DTR 2 Equipment to be included in the Original Certification

New Serial Number	Description	New Part Number
GDLC10173880 GDLC10173881 GDLC10173882	Xedge Analog Voice Module (AVM) / Line Interface Module (LIM) E&M 8 ports (1 plug-in)`	032M209-019
GLDC10173885 GLDC10423166	Xedge Packet Cell Switch	200M008-001

LEGEND:

AVM	Analog Voice Module	IP	Internet Protocol
LIM	Line Interface Module	N/A	Not Available
E&M	Ear and Mouth		

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 Unified Capabilities (UC) products testing is available on the DISA UC Products Testing and Certification website located at http://www.disa.mil/Services/Network-Services/UCCO. All associated test information is available on the DISA UC Certification Office APL Integrated Tracking System (APLITS) website located at https://aplits.disa.mil.

6. The JITC testing point of contact is Ms. Fanny Lee-Linnick, commercial (301) 743-4259. e-mail address is Fanny.Lee-Linnick.civ@mail.mil, mailing address: 3341 Strauss Avenue, Suite 236, Indian Head, Maryland 20640-5149. The UCCO Tracking Number (TN) for the SUT is 1027301.

FOR THE COMMANDER:

1 Enclosure a/s

for RICHARD J. HARRISON
Chief
Networks/Communications & UC Portfolio

Distribution (electronic mail):
DoD CIO

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the General DataComm, Inc., Xedge 6000, Fixed Network Element (F-NE), from Software Release 7.3.14 to Software Release 7.3.16

Joint Staff J-6
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, MARCORSYSCOM, SIAT, A&CE Division
US Coast Guard, CG-64
Defense Information Systems Agency, TEMC
DIA, Office of the Acquisition Executive
NSG Interoperability Assessment Team
DOT&E, Netcentric Systems and Naval Warfare
Medical Health Systems, JMISIV&V

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ADDITIONAL REFERENCES

(c) Office of Assistant Secretary of Defense for Networks and Information Integration Document, "Department of Defense Unified Capabilities Requirements 2008, Change 2," December 2010
(d) Joint Interoperability Test Command, "Unified Capabilities Test Plan (UCTP)," 4 February 2010
(e) Special Interoperability Test Certification of the General DataComm, Inc., Xedge 6000, Fixed Network Element (F-NE), with Software Release 7.3.14, 3 May 2012
(f) Joint Interoperability Test Command Document, "Information Assurance Findings Summary for General DataComm, Xedge 6000, Version 7.3.14 (Tracking Number: 1027301), 17 February 2012
(g) Desktop Review Application, Analog Voice Module (AVM) LIM, 4 June 2013
(h) Xedge/ProSphere Systems Deployment Guide for Xedge 6000 Version 7.3.16 and ProSphere Network Management System Version 6.0.0, 032R297-MIL, Issue 7, May 2013

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