



DEFENSE INFORMATION SYSTEMS AGENCY

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

19 Oct 11

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Special Interoperability Test Certification of the T-Metrics TM-2000 Multi-Purpose Automatic Call Distributor (ACD) Release Version (v) 5.0

- References: (a) DoD Directive 4630.5, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 2004
(b) CJCSI 6212.01D, "Interoperability and Supportability of Information Technology and National Security Systems," 8 March 2006
(c) through (e), see Enclosure 1

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 T-Metrics TM-2000 Multi-Purpose ACD with Release v5.0 is hereinafter referred to as the System Under Test (SUT). The SUT met the interface and functional requirements and is certified for joint use within the Defense Switched Network (DSN). The SUT is certified specifically with switching systems listed in Table 1 that are listed on the Unified Capabilities (UC) Approved Product List (APL) with their associated interfaces. The SUT met the interface and functional requirements for an ACD system as set forth in Reference (c). 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 of this memorandum.

Table 1. SUT Certified Switching Systems

Table with 3 columns: Switch Name (See note.), Interface, and Remarks. It lists various Nortel switch models and their certification details.

**Table 1. SUT Certified Switching Systems (continued)**

| Switch Name (See note.)   | Interface  | Remarks  |                               |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
|---|--|--|-------------------------------|------|----|------------|------|-------------------------------------|------|---------------------|-------|--|-----|-----------------------|-----|--------------------------|-----|-------------------------|----|----------------------|------|----------------------------|-----|--------------------------|-----|-------------------|------|-------------------------------------|------|-------------------------------|
| Nortel Succession DSN 1000M Cabinet, DSN 1000M Chassis, DSN 1000M   | Digital Proprietary  | The SUT interfaces to this switch via proprietary M2616 MBS lines.   |                               |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| Nortel Succession DSN Options 11C, 61C, and 81C   | Digital Proprietary  | The SUT interfaces to this switch via proprietary M2616 MBS lines.   |                               |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| Nortel M1 Options 11C, 61C, and 81C   | Digital Proprietary  | The SUT interfaces to this switch via proprietary M2616 MBS lines.   |                               |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| <b><u>Cisco CallManager</u></b>   | 100BaseT   | The CCM is not certified for standalone use with the SUT. The CCM must connect to one of the Nortel switches in this table through a T1 PRI interface and to the SUT through a 100BaseT interface to the RASM. |                               |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| <b><u>Alcatel-Lucent 5ESS</u></b> , CDX, and VCDX   | ISDN BRI (5E Custom) Analog  |  |                               |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| <p><b>NOTE:</b> Those switching systems bolded and underlined were tested specifically with the SUT by JITC. The other switching systems were not tested with the SUT; however, these systems were previously tested and certified by JITC with the same serial interfaces and JITC analysis determined them to be functionally identical for interoperability certification purposes and they are also certified with the SUT.</p> <p><b>LEGEND:</b></p> <table> <tbody> <tr> <td>5E</td> <td>5ESS</td> <td>M1</td> <td>Meridian 1</td> </tr> <tr> <td>5ESS</td> <td>Class 5 Electronic Switching System</td> <td>Mbps</td> <td>Megabits per second</td> </tr> <tr> <td>802.3</td> <td>Standard for carrier sense multiple access with collision detection at 10 Mbps</td> <td>MBS</td> <td>Meridian Business Set</td> </tr> <tr> <td>CDX</td> <td>Compact Digital Exchange</td> <td>MSL</td> <td>Meridian Switching Load</td> </tr> <tr> <td>CS</td> <td>Communication Server</td> <td>RASM</td> <td>Remote Agent Status Module</td> </tr> <tr> <td>DSN</td> <td>Defense Switched Network</td> <td>SUT</td> <td>System Under Test</td> </tr> <tr> <td>JITC</td> <td>Joint Interoperability Test Command</td> <td>VCDX</td> <td>Very Compact Digital Exchange</td> </tr> </tbody> </table> |  |  | 5E                            | 5ESS | M1 | Meridian 1 | 5ESS | Class 5 Electronic Switching System | Mbps | Megabits per second | 802.3 | Standard for carrier sense multiple access with collision detection at 10 Mbps | MBS | Meridian Business Set | CDX | Compact Digital Exchange | MSL | Meridian Switching Load | CS | Communication Server | RASM | Remote Agent Status Module | DSN | Defense Switched Network | SUT | System Under Test | JITC | Joint Interoperability Test Command | VCDX | Very Compact Digital Exchange |
| 5E  | 5ESS   | M1   | Meridian 1                    |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| 5ESS  | Class 5 Electronic Switching System  | Mbps   | Megabits per second           |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| 802.3   | Standard for carrier sense multiple access with collision detection at 10 Mbps | MBS  | Meridian Business Set         |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| CDX   | Compact Digital Exchange   | MSL  | Meridian Switching Load       |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| CS  | Communication Server   | RASM   | Remote Agent Status Module    |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| DSN   | Defense Switched Network   | SUT  | System Under Test             |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |
| JITC  | Joint Interoperability Test Command  | VCDX   | Very Compact Digital Exchange |      |    |            |      |                                     |      |                     |       |  |     |                       |     |                          |     |                         |    |                      |      |                            |     |                          |     |                   |      |                                     |      |                               |

3. The extension of this certification is based upon Desktop Review (DTR) 5. The original certification is based on interoperability testing conducted by JITC, review of the vendor's Letters of Compliance (LoC), and Defense Information Assurance (IA)/Security Accreditation Working Group (DSAWG) accreditation. Interoperability testing was conducted by the JITC at the Global Information Grid Network Test Facility, Fort Huachuca, Arizona, from 7 through 11 April 2008. Review of the vendor's LoC was completed on 5 May 2008. The SUT supports the same software, interfaces, and functionality as when it was previously tested. The only difference is that the SUT now supports either Microsoft XP or Microsoft Windows Vista operating system platform. A review of the SUT and comparison with the new requirements in References (c) and (e) was conducted on 15 December 2009 to determine the SUT was certified for interoperability within the DSN without additional interoperability testing. DSAWG granted accreditation on 31 March 2010 based on the security testing completed by DISA-led IA test teams and published in a separate report, Reference (f). This DTR was requested to add the Host Based Intrusion Detection System (HIDS)/Anti-virus software to the SUT. JITC reviewed the USAF's AFSPC 690 NSS/SCXV IA test data and determined there was no impact to interoperability of the SUT and that the IA posture was not affected negatively. Therefore, this DTR is approved by JITC. The IA posture of the SUT was not changed other than the addition of the HIDS/Anti-virus software being installed, so the original DSAWG accreditation still applies to this DTR request.

4. The functional requirements used to evaluate the interoperability of the SUT and the interoperability statuses are indicated in Table 2.

**Table 2. SUT Functional Requirements and Interoperability Status**

| Interface  | Critical        | Certified | Functional Requirements  | Met         | UCR Paragraph                |
|--|-----------------|-----------|--|-------------|------------------------------|
| CS2100<br>2-Wire<br>Proprietary<br>Interface:<br>M5216 MBS<br>line | No <sup>1</sup> | Yes       | Precedence Call Diversion (R)  | Met         | 5.2.2.3                      |
|  |                 |           | FCC Part 15/Part 68 and ACTA (R)   | Met         | 5.2.12.3.5                   |
|  |                 |           | Auto Answer mode settable to more than the<br>equivalency of 4 ROUTINE rings (C) | Met         | 5.2.12.3.5                   |
|  |                 |           | MLPP precedence call alerting (C)  | Met         | 5.2.12.3.5                   |
|  |                 |           | DTMF Outpulsing in accordance with GR-506-<br>CORE (C)                           | Met         | 5.2.12.3.5,<br>5.2.4.4.2     |
| CS1000M<br>2-Wire<br>Proprietary<br>Interface: M2616<br>MBS line   | No <sup>1</sup> | Yes       | Precedence Call Diversion (R)  | Met         | 5.2.2.3                      |
|  |                 |           | FCC Part 15/Part 68 and ACTA (R)   | Met         | 5.2.12.3.5                   |
|  |                 |           | Auto Answer mode settable to more than the<br>equivalency of 4 ROUTINE rings (C) | Met         | 5.2.12.3.5                   |
|  |                 |           | MLPP precedence call alerting (C)  | Met         | 5.2.12.3.5                   |
|  |                 |           | DTMF Outpulsing in accordance with GR-506-<br>CORE (C)                           | Met         | 5.2.12.3.5,<br>5.2.4.4.2     |
| Cisco<br>100BaseT<br>(See note 2.)                                 | No <sup>1</sup> | Yes       | Conformance to TIA/EIA-470-B (C)   | Met         | 5.2.12.3.5                   |
|  |                 |           | Precedence Call Diversion (R)  | Met         | 5.2.2.3                      |
|  |                 |           | Auto Answer mode settable to more than the<br>equivalency of 4 ROUTINE rings (C) | Met         | 5.2.12.3.5                   |
| ISDN BRI (5E<br>Custom) Analog                                     | No <sup>1</sup> | Yes       | MLPP precedence call alerting (C)  | Met         | 5.2.12.3.5                   |
|  |                 |           | Precedence Call Diversion (R)  | Met         | 5.2.2.3                      |
|  |                 |           | FCC Part 15/Part 68 and ACTA (R)   | Met         | 5.2.12.3.5                   |
|  |                 |           | Auto Answer mode settable to more than the<br>equivalency of 4 ROUTINE rings (C) | Met         | 5.2.12.3.5                   |
|  |                 |           | MLPP precedence call alerting (C)  | Met         | 5.2.12.3.5                   |
|  |                 |           | DTMF Outpulsing in accordance with GR-506-<br>CORE (C)                           | Met         | 5.2.12.3.5,<br>5.2.4.4.2     |
|  | Yes             | Yes       | Security (R)   | See note 3. | 3.2.3, 3.2.5, and<br>5.4.6.1 |

**NOTES:**

- The ACD requirements can be met via one of the following interfaces: 2-Wire Analog, 2-Wire Digital, 4-Wire Digital, PCM-24, PCM-30, or IP.
- This interface is not required to support IPv6 in accordance with Reference (e).
- Security is tested by DISA-led Information Assurance test teams and published in a separate report, Reference (g).

**LEGEND:**

|             |  |               |   |
|-------------|--|---------------|---|
| 5E          | 5ESSS  | IP            | Internet Protocol   |
| 5ESS        | Class 5 Electronic Switching System                  | IPv6          | Internet Protocol version 6   |
| 100BaseT    | 100 Mbps (Baseband Operation, Twisted Pair) Ethernet | LSSGR         | Local Access and Transport Area (LATA) Switching Systems Generic Requirements     |
| ACTA        | Administrative Council for Terminal Attachments      | Mbps          | Megabits per second   |
| ACD         | Automated Call Distributor                           | MBS           | Meridian Business Set   |
| C           | Conditional  | MLPP          | Multi-Level Precedence and Preemption   |
| CDX         | Compact Digital Exchange                             | PCM-24        | Pulse Code Modulation - 24 Channels   |
| CS          | Communication Server                                 | PCM-30        | Pulse Code Modulation - 30 Channels   |
| DISA        | Defense Information Systems Agency                   | R             | Required  |
| DTMF        | Dual Tone Multi-Frequency                            | SUT           | System Under Test   |
| EIA         | Electronic Industries Alliance                       | TIA           | Telecommunications Industry Association   |
| FCC         | Federal Communications Commission                    | TIA/EIA-470-B | Performance and Compatibility Requirements for Telephone Sets with Loop Signaling |
| GR          | Generic Requirement                                  | UCR           | Unified Capabilities Requirements   |
| GR-506-CORE | LSSGR: Signaling for Analog Interfaces               | VCDX          | Very Compact Digital Exchange   |

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the T-Metrics TM-2000 Multi-Purpose Automated Call Distributor (ACD) with Release v5.0

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 (ERD) 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 <http://jit.fhu.disa.mil> (NIPRNet), or <http://199.208.204.125> (SIPRNet). Information related to DSN 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 (IAAP) 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 (UCCO), e-mail: [ucco@disa.mil](mailto:ucco@disa.mil).

6. The JITC point of contact is Mr. Khoa Hoang, DSN 879-4376, commercial (520) 538-4376, FAX DSN 538-4347, or e-mail to [khoa.hoang@disa.mil](mailto:khoa.hoang@disa.mil). The JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The tracking number for the SUT is 0923904.

FOR THE COMMANDER:

Enclosure a/s

  
for BRADLEY A. CLARK  
Chief  
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DOT&E, Net-Centric Systems and Naval Warfare

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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

**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) Office of the Secretary of Defense, “Interim Unified Capabilities (UC) IPv6 Rules of Engagement (ROE),” 31 July 2009
- (f) Joint Interoperability Test Command, “Information Assurance (IA) Assessment of T-Metrics TM-2000 Multi-Purpose Automated Call Distributor (ACD) Release Version (v) 5.0 (Tracking Number 0923904),” 31 March 2010