NATO STANDARD

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Volume 3

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DRAFT

NATO LETTER OF PROMULGATION

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This publication shall be handled in accordance with C-M(2002)60.

Dimitrios SIGOULAKIS
Lieutenant General, GRC (A)
Director, NATO Standardization Office

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RESERVED FOR NATIONAL LETTER OF PROMULGATION

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RECORD OF RESERVATIONS

CHAPTER	RECORD OF RESERVATION BY NATIONS
Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.	

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RECORD OF SPECIFIC RESERVATIONS

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CHAPTER 1. STANDARDS

1.1. INTRODUCTION

001. The purpose of this chapter is to specify the candidate NISP standards. The document organizes these standards, following baseline 3.1 NATO's C3 Taxonomy, as endorsed by the NATO C3 Board per AC/322-D(2019)0034-AS1(INV) on 26 August 2019. A graphical representation of this taxonomy is included in volume 1.

002. For some standards it was not clear yet which service identified in the C3 Taxonomy should be used. Therefore, as an interim solution, the taxonomy was extended with e.g. user-defined "Cloud Services". In a separate section, all standards are listed for which could not yet be defined how they should be linked to the C3 Taxonomy.

003. The standards are presented in tabular form. Each table represent a subtree from the C3 taxonomy and each table line (marked in bold and spanning all columns in the table) represents a taxonomy node from the subtree. Under each taxonomy node title, all standards which are mapped to the node are listed with the following attributes: title of the standard; where possible, a link to the standard; publication number of the standard; a list of all the capability profiles where the standard is used; and finally the "responsible party" which is the domain expert that advises NATO about the standard. In general, a taxonomy node is only listed if at least one standard is assigned to this taxonomy node.

004. When STANAG X Ed Y is in ratification process, this is indicated by STANAG (RD) X Ed Y, and when it is a study draft, this is indicated by STANAG (Study) X Ed Y.

1.1.1. Releasability Statement

005. In principle, NISP only contains or references standards or related documents, which are generally available for NATO/NATO member nations/CCEB.

1.2. USER APPLICATIONS

Title	Pubnum	Profiles	Responsible Party

1.3. TECHNICAL SERVICES

006. The "Technical Services" include those services required to enable "User Applications". They are part of the "Back-End Capabilities" while "User Applications" are part of "User-Facing Capabilities".

007. According to the C3 Taxonomy, they consist of "Community Of Interest (COI) Services", "Core Services" and "Communications Services". The complete collection of Technical

Services is sometimes referred to as the "Technical Services Framework" (TSF) or "NNEC Services Framework" (NSF).

008. In addition to the "Technical Services" identified in the C3 Taxonomy, a taxonomy layer "Cloud Computing" has been added. This enables a more useful categorization of cloud-based standards (currently only included as candidate standards).

1.3.1. Community Of Interest (COI) Services

Title	Pubnum	Profiles	Responsible Party
Symbology Services			
NATO Vector Graphics Specification post version 2.0.2, to be issued 1Q2023	NATO ADatP-4733 (Study) Ed A Ver 1 / STANAG (Study) 4733 Ed 1	BSP	DPC CaP1
TIDE Transformational Baseline Ver 3.0	NATO TTB v3.0:2009	BSP	NCIA/CES
GML in JPEG 2000 for Geographic Imagery (GMLJP2)	OGC 05-047r3:2006	BSP	FMN CPWG
Track Management Services			
Identification Data Combining Process	NATO AIDPP-01 Ed A Ver 1:2023 / STANAG 4162 Ed 3	BSP	DPC CaP2
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 (FD) Ed C Ver 1:2019 / STANAG FT (RD) 5516 Ed 9	BSP	DPC CaP1 TDL CaT
Modelling and Simulation Services			

1.3.2. Core Services

Title	Pubnum	Profiles	Responsible Party
Geospatial Services			
NATO Geospatial Web Services	NATO AGeoP-26 (Study) Ed B Ver 1	BSP	MCJSB/JGS
OpenGIS Web Processing Service (WPS) 1.0.0	OGC 05-007r7:2007	BSP	NCIA/AWG
Geospatial Coordinate Services			

Title	Pubnum	Profiles	Responsible Party
OpenGIS Coordinate Transformation Services (CTS)	OGC 01-009:2001	BSP	NCIA/AWG
Information Management Services			
Application Vulnerability Description Language (AVDL) Ver 1.0	OASIS AVDL Ver 1.0:2004	BSP	NCIA/CS
Formal Messaging Services			
Tactical Data Exchange - Link 11/11B	NATO ATDLP-5.11 Ed B Ver 1:2019 / STANAG FT 5511 Ed 10	BSP	DPC CaP1 TDL CaT
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 (FD) Ed C Ver 1:2019 / STANAG FT (RD) 5516 Ed 9	BSP	DPC CaP1 TDL CaT
Joint Range Extension Application Protocol (JREAP)	NATO ATDLP-5.18 (FD) Ed C Ver 1 / STANAG (RD) 5518 Ed 5	BSP	DPC CaP1 TDL CaT
SOAP Messages with Attachments (SwA) Profile 1.1	OASIS WSS-SwA Ver 1.1:2006	BSP	NCIA/CES
Variable Message Format (VMF)[1]	US DoD MIL-STD-6017D:2017	BSP	DPC CaP1
Business Support CIS Security Services			
Common Biometric Exchange Formats Framework (CBEFF) - 2018 Edition	ANSI INCITS 398-2008:2008	BSP	NCIA/JISR
Electronic Biometric Transmission Specification (EBTS) Ver 8.1	FBI EBTS Ver 8.1:2008	BSP	NAFAG/ JCGISR
Communication and Collaboration Services			
HTML5 - A vocabulary and associated APIs for HTML and XHTML (2012)	W3C APIs for HTML5 and XHTML:2012	BSP	NCIA/CES
Fax Services			
Procedures for real-time Group 3 facsimile communication over IP networks	ITU-T T.38:2010	BSP	NCIA/NSII

Title	Pubnum	Profiles	Responsible Party
Infrastructure Services			
The Secure Real-time Transport Protocol (SRTP)	IETF RFC 3711:2004	BSP	FMN CPWG
NATO Imagery Interpretability Rating Scale (NIIRS)	NATO AIntP-07 Ed A Ver 1:2018 / STANAG 7194 Ed 2	BSP	MCJSB/ JINT JISRP
Distributed File System (DFS) DCE DFS	Open Group F209a:1997	BSP	NCIA/CES
Infrastructure Networking Services			
Very high speed digital subscriber line transceivers 2 (VDSL2)	ITU-T G. 993-2:2011	BSP	NCIA/NSII
Server Message Block (SMB)	Microsoft MS-SMB - 20130118:2013	BSP	NCIA/CES
X/Open Network File System (C702 Protocols for Inter-working: XNFS, Version 3W)	Open Group C702:1998	BSP	NCIA/CES
DCE 1.1: Remote Procedure Call	Open Group C706:1997	BSP	NCIA/CES
Host Configuration Services			
Dynamic Host Configuration Protocol for IPv6 (DHCPv6)	IETF RFC 3315:2003	BSP	NCIA/NSII
IPv6 Prefix Options for Dynamic Host Configuration Protocol (DHCP) version 6	IETF RFC 3633:2003	BSP	NCIA/NSII
Distributed Time Services			
DCE 1.1: Time Services	Open Group C310:1994	BSP	NCIA/CES
Platform Services			
Web Services Brokered Notification Ver 1.3	OASIS WS-BrokeredNotification:2006	BSP	NCIA/CES
Web Services Business Process Execution Language (WSBPEL) version 2.0	OASIS WS-BPEL Ver 2.0:2007	BSP	NCIA/CES
WS-BaseNotification	OASIS WS BaseNotification Ver 1.3:2006	BSP	NCIA/CES

Title	Pubnum	Profiles	Responsible Party
WS-Topics 1.3	OASIS WS-Topics Ver 1.3:2006	BSP	NCIA/CES
Web Services Addressing 1.0 - Core	W3C WS-Addressing 1.0 - Core:2006	BSP	FMN CPWG
Attachments Profile Version 1.0	WS-I AttachmentsProfile-1.0-2006-04-20:2004	BSP	NCIA/CES
WS-I Basic Profile 1.2	WS-I BP12:2010	BSP	NCIA/CES
WS-I Basic Profile 2.0	WS-I wsbp:2010	BSP	NCIA/CES
Simple SOAP Binding Profile Version 1.0	WS-I SimpleSoapBindingProfile-1.0-2004-08-24:2004	BSP	NCIA/CES
Policy Decision Point Services			
Data Format for the Interchange of Fingerprint Facial, and Scar Mark and Tattoo (SMT) Information	ANSI/NIST ITL 1-2000:2000	BSP	NCIA/JISR
NATO Public Key Infrastructure (NPKI) Certificate Policy (CertP) Rev2.	DPC AC/322-D(2004)0024REV2:2008	BSP	DPC NPMA-NPAG
Biometric data interchange formats -- Part 2:	ISO/IEC 19794-2:2011	BSP	NCIA/JISR
Biometric data interchange formats -- Part 5: Face image data	ISO/IEC 19794-5:2011	BSP	NCIA/JISR
Biometric data interchange formats -- Part 6: Iris image data	ISO/IEC 19794-6:2011	BSP	NCIA/JISR
eXtensible Access Control Markup Language core specification	OASIS XACML Ver 3.0:2013	BSP	NCIA/CS
Department of Defense: Electronic Biometric Transmission Specification. Version 1.2	US DoD EBTS Ver 1.2:2006	BSP	NAFAG/ JCGISR
Department of Defense: Electronic Biometric Transmission Specification. Version 2.0	US DoD EBTS Ver 2.0:2009	BSP	NAFAG/ JCGISR
Security Token Services			
Single Sign On	Open Group P702:1997	BSP	DPC CaP4
Directory Services			

Title	Pubnum	Profiles	Responsible Party
Common Directory Services and Procedures	CCEB ACP 133(D):2009	BSP	DPC NACP CaT
Choreography Services			
W3C Web Service Choreography Interface version 1.0	W3C NOTE-wsci:2002	BSP	NCIA/CES
Information Discovery Services			
OpenSearch 1.1 Draft 6	Opensearch OpenSearch 1.1 Draft 6:2005	BSP	FMN CPWG
Metadata Repository Services			
Web Services Metadata Exchange (WS-MetadataExchange)	W3C REC-ws-metadata-exchange:2011	BSP	NCIA/CES
Information Access Services			
An Introduction to GeoRSS: A Standards Based Approach for Geo-enabling RSS feeds, v1.0.0	OGC 06-050r3:2006	BSP	NCIA/AWG
XForms 1.0	W3C REC-xforms:2003	BSP	NCIA/CES
Platform SMC Services			
Remote Network Monitoring Management Information Base, RMON-MIB version 2 using SMIv2	IETF RFC 2021:1997	BSP	NCIA/SMC
IP Version 6 Management Information Base for the Transmission Control Protocol	IETF RFC 2452:1998	BSP	NCIA/NSII
IP Version 6 Management Information Base for the User Datagram Protocol	IETF RFC 2454:1998	BSP	NCIA/NSII
IPv6 MIB	IETF RFC 2465:1998	BSP	NCIA/SMC
ICMPv6 MIB	IETF RFC 2466:1998	BSP	NCIA/SMC
Enhanced Telecom Operations Map	TM Forum GB921:2012	BSP	NCIA/SMC
Service Discovery Services			
TIDE Service Discovery	NATO TIDE-ID-SP:2008	BSP	NCIA/CES

Title	Pubnum	Profiles	Responsible Party
OASIS ebXML Messaging Services Specification Ver 2.0	OASIS ebXML Message Service Ver 2.0:2002	BSP	NCIA/CES
Web Services Dynamic Discovery Version 1.1	OASIS WS-Discovery Ver 1.1:2009	BSP	NCIA/CES
Web Services Description Language (WSDL) Version 2.0 Part 1: Core Language	W3C REC-wsdl20:2007	BSP	NCIA/CTO/ SEA
Mediation Services			
Services to forward Friendly Force Information to Weapon Delivery Assets	NATO ADatP-37 Ed A Ver 1:2018 / STANAG 5528 Ed 1	BSP	DPC CaP2
Data Format Transformation Services			
XML Query Language (XQuery)	W3C WD-xquery:2003	BSP	NCIA/CES
Message-Oriented Middleware Services			
SOAP Version 1.2	W3C SOAP Version 1.2:2001	BSP	NCIA/CES
Web Platform Services			
XML Linking Language (XLink) Version 1.1	W3C REC-xlink11:2010	BSP	NCIA/CES
eXtensible Markup Language (XML) 1.1 (Second Edition)	W3C XML 1.1 (Second Edition):2006	BSP	NCIA/CES
Web Presentation Services			
Web Services for Remote Portlets Specification	OASIS WSRP Ver 2.0:2008	BSP	NCIA/CES

[1]Except Appendix B, List of Geographical Data Field Identifiers (DFIs)

1.3.3. Communications Services

Title	Pubnum	Profiles	Responsible Party
Communications Services			
High Rate Ultra-Wide Band PHY and MAC Standard	ECMA ECMA-368:2008	BSP	NCIA/NSII
Broadband Radio Access Networks (BRAN) HiperMAN	ETSI TS 102 624-1:2009	BSP	NCIA/NSII

Title	Pubnum	Profiles	Responsible Party
ZigBee - Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Low Rate Wireless Personal Area Networks (WPANs)	IEEE 802.15.4:2006	BSP	NCIA/NSII
Mobile WiMax	IEEE 802.16e:2006	BSP	NCIA/NSII
Wireless Broadband	IEEE 802.16e:2004	BSP	NCIA/NSII
Multiple Spanning Trees	IEEE 802.1S:2002	BSP	NCIA/NSII
Mobile Broadband Wireless Access (Draft)	IEEE 802.20:2006	BSP	NCIA/NSII
The Dynamic Source Routing Protocol (DSR) for Mobile Ad Hoc Networks for IPv4	IETF RFC 4728:2007	BSP	NCIA/NSII
Technical Standards for an Automatic Radio Control System (ARCS) for HF Communication Links[1]	NATO STANAG (Study) 4538 Ed 2	BSP	DPC CaP1 BLOS CaT
Interoperability Standard for Satellite SHF Deployable Terminals Control and Command Services	NATO STANAG 4706 Ed 1:2018	BSP	DPC CaP1 SATCOM CaT
Common Alerting Protocol Ver 1.3	OASIS CAP Ver 1.2:2010	BSP	NCIA/CTO/ SEA
The Open Grid Services Architecture (OGSA) version 1.5	OGF OGSA Ver 1.5:2006	BSP	NCIA/CES
Communications Access Services			
Standard Interfaces Of Unmanned Aircraft (UA) CONTROL System (UCS) for NATO UA Interoperability - Interface Control Document	NATO AEP-84 I Ed A Ver 1:2017 / STANAG 4586 Ed 4	BSP	NNAG/ JCGUAS
Standard Interfaces Of Unmanned Aircraft (Ua) Control System (UCS) for NATO UA Interoperability - Interface Control Document	NATO AEP-84 II Ed A Ver 1:2017 / STANAG 4586 Ed 4	BSP	NNAG/ JCGUAS
Joint Range Extension Application Protocol (JREAP)	NATO ATDLP-5.18 (FD) Ed C Ver 1 / STANAG (RD) 5518 Ed 5	BSP	DPC CaP1 TDL CaT

Title	Pubnum	Profiles	Responsible Party
Technical Characteristics of the Multifunctional Information Distribution System (MIDS) - VOL I & VOL II - ATDLP-1.75 Edition A[2]	NATO STANAG (Study) 4175 Ed 6	BSP	DPC CaP1 TDL CaT
Tactical Messaging Access Services			
Call Sign Book for Ships Change 5	CCEB ACP 113(AJ) Change 5:2019	BSP	DPC NACP CaT
Information Assurance for Allied Communications and Information Systems	CCEB ACP 122(G):2015	BSP	DPC NACP CaT
Address Indicating Groups - Instructions and Assignments	NATO ACP 100 NS-1(Q)	BSP	DPC NACP CaT
Instructions for the Life Cyle Management of Allied Communications Publications (ACPs), NATO Supplement-1	NATO ACP 198 NS-1(H):2014	BSP	DPC NACP CaT
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 (FD) Ed C Ver 1:2019 / STANAG FT (RD) 5516 Ed 9	BSP	DPC CaP1 TDL CaT
Joint Range Extension Application Protocol (JREAP)	NATO ATDLP-5.18 (FD) Ed C Ver 1 / STANAG (RD) 5518 Ed 5	BSP	DPC CaP1 TDL CaT
Technical Characteristics of the Multifunctional Information Distribution System (MIDS) - VOL I & VOL II - ATDLP-1.75 Edition A[2]	NATO STANAG (Study) 4175 Ed 6	BSP	DPC CaP1 TDL CaT
IPv6 Routed Access Services			
Interoperability Point Quality of Service (IP QoS)	NATO AComP-4711 Ed A Ver 1:2018 / STANAG 4711 Ed 1	BSP	DPC CaP1 N&S CaT
IPv4 Routed Access Services			
IP QoS for the NII	NCIA TN-1417	BSP	DPC CaP1 N&S CaT
Wireless LOS Mobile Transmission Services			

Title	Pubnum	Profiles	Responsible Party
Bluetooth Core Specification 5.1	Bluetooth SIG Bluetooth 5.0:2016	BSP	NCIA/NSII
Wireless LOS Mobile Wideband Transmission Services			
Technical Characteristics of the Multifunctional Information Distribution System (MIDS) - VOL I & VOL II - ATDLP-1.75 Edition A[2]	NATO STANAG (Study) 4175 Ed 6	BSP	DPC CaP1 TDL CaT
Wireless LOS Mobile Narrowband Transmission Services			
Voice Coding Algorithm	NATO STANAG 4444 Ed 2:2015	BSP	DPC CaP1 BLOS CaT
Transport Services			
IP Version 6 over PPP	IETF RFC 2472:1998	BSP	NCIA/NSII
Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing	IETF RFC 2545:1999	BSP	FMN CPWG
Stateless IP/ICMP Translation Algorithm (SIIT)	IETF RFC 2765:2000	BSP	NCIA/NSII
Mobility Support in IPv6	IETF RFC 3775:2004	BSP	NCIA/NSII
BGP Support for Four-Octet Autonomous System (AS) Number Space	IETF RFC 6793:2012	BSP	FMN CPWG
IP QoS for the NII	NCIA TN-1417	BSP	DPC CaP1 N&S CaT
Packet-based Broadcast Services			
Interoperability Point Quality of Service (IP QoS)	NATO AComP-4711 Ed A Ver 1:2018 / STANAG 4711 Ed 1	BSP	DPC CaP1 N&S CaT
Packet-based Aggregation Services			
Interoperability Point Quality of Service (IP QoS)	NATO AComP-4711 Ed A Ver 1:2018 / STANAG 4711 Ed 1	BSP	DPC CaP1 N&S CaT
Packet-based Transport Services			
IP QoS for the NII	NCIA TN-1417	BSP	DPC CaP1 N&S CaT
Packet Routing Services			

Title	Pubnum	Profiles	Responsible Party
Interoperability Point Quality of Service (IP QoS)	NATO AComP-4711 Ed A Ver 1:2018 / STANAG 4711 Ed 1	BSP	DPC CaP1 N&S CaT
Standard for Interconnection of IPv4 and IPv6 Networks at Mission Secret and Unclassified Security Levels	NATO AComP-5067 Ed A Ver 1 / STANAG (RD) 5067 Ed 2	BSP	DPC CaP1 N&S CaT

[1]The extant edition is Ed 1

[2]The extant edition is Ed 5

1.3.4. Extended C3 Taxonomy

009. The following table list taxonomy nodes, which will be part of a future version of the C3 taxonomy. They are part of this document, because stakesholders have decided to using an unofficial classification scheme for a specific purpose.

1.4. UNASSIGNED STANDARDS

010. The following standards have been declared candidate standards for NATO common funded systems. However, no information of how to map the standards to the C3 Taxonomy have been provided.

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CHAPTER 2. CANDIDATE PROFILES

2.1. INTRODUCTION

011. The NATO Interoperability Standards and Profiles include the set of Candidate Profiles listed below.

Table 2.1. Candidate Profiles

Service Area	Title
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URI	

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