NATO STANDARD

ADatP-34

NATO Interoperability Standards and Profiles

Volume 1

Introduction

Edition O Version 2

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NATO LETTER OF PROMULGATION

The enclosed Allied Data Publication ADatP-34, Edition O, Version 2 NATO Interoperability Standards and Profiles, which has been approved by the nations in the C3B, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 5524.

ADatP-34, Edition O, Version 2 is effective on receipt.

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

Dimitrios SIGOULAKIS
Major 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

[nation]	[detail of reservation]
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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CHAPTER 1. INTRODUCTION

001. The NATO Interoperability Standards and Profiles (NISP) is developed by the NATO Consultation, Command and Control (C3) Board Interoperability Profiles Capability Team (IP CaT).

002. The NISP will be made available to the general public as ADatP-34(N) when approved by the C3 Board.

003. The included interoperability standards and profiles (Volume 2) are **mandatory** for use in NATO common funded Communications and Information Systems (CIS). Volume 3 contains **candidate** standards and profiles.

004. In case of conflict between any adopted non-NATO[1] standard and relevant NATO standard, the definition of the latter prevails.

005. In the NISP the keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" are to be interpreted as described in [IETF RFC 2119].

Table 1.1. Abbreviations

Abbreviation	Full Text
ABB	Architecture Building Block
ACaT	Architecture Capability Team
ACP	Allied Communications Publication
AdatP-34	Allied Data Publication - Cover publication for the NISP
BSP	Basic Standards Profile
C3	Consultation, Command and Control
CCEB	Combined Communications Electronic Board (military communications-electronics organization established among five nations: Australia, Canada, New Zealand, United Kingdom, and the United States)
CESF	Core Enterprise Services Framework
COI	Community of Interest
CIAV (WG)	Coalition Interoperability Assurance and Validation (Working Group)

[1] ISO or other recognized non-NATO standards organization

Abbreviation	Full Text
CIS	Communication and Information Systems
CWIX	Coalition Warrior Interoperability eXploration, eXperimentation, eXamination eXercise
DOTMLPFI	Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities and Interoperability
EAPC	Euro-Atlantic Partnership Council
FMN	Federated Mission Networking
IOP	Interoperability Point
IP CaT	Interoperability Profiles Capability Team
MIP	Multilateral Interoperability Programme
NAF	NATO Architecture Framework
NDPP	NATO Defence Planning Process
NISP	NATO Interoperability Standards and Profiles
NIST	National Institute of Standards and Technology
NGO	Non govermental organization
RFC	Request for Change
SDS	Service Data Sheet
SIOP	Service Interoperability Point
SIP	Service Interface Profile
SME	Subject Matter Expert
SOA	Service Oriented Architecture
STANAG	A NATO standardization document that specifies the agreement of member nations to implement a standard, in whole or in part, with or without reservation, in order to meet an interoperability requirement. Notes: A NATO standardization agreement is distinct from the standard(s) it covers.
TACOMS	Tactical Communication Programme

1.1. PURPOSE OF THE NISP

006. NISP gives guidelines to capability planners, programme managers and test managers for NATO common funded systems in the short or mid-term timeframes.

007. The NISP prescribes the necessary technical standards and profiles to achieve interoperability of Communications and Information Systems in support of NATO's missions and operations. In accordance with the Alliance C3 Strategy (ref. C-M(2018)0037) all NATO Enterprise (ref. C-M(2014)0061) entities shall adhere to the NISP mandatory standards and profiles in volume 2.

1.2. INTENDED AUDIENCE

008. The intended audience of the NISP are all stakeholders in the NATO Enterprise, and Allied and Partner nations involved in development, implementation, lifecycle management, and transformation to a federated environment.

009. There are specific viewpoints that are mapped to the NISP structure. NISP gives guidelines to:

- capability planners involved in NDPP and NATO led initiatives
- programme managers for building NATO common funded systems
- test managers for their respective test events (such as CWIX, CIAV, etc.)
- national planning and programme managers for their national initiatives

010. Specific NATO or national views to the NISP based on data export to external planning and management systems will be possible upon delivery of an updated version of the NISP Exchange Specification.

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CHAPTER 2. BASIC CONCEPTS

011. This chapter gives an overview to understand the data in volume 2 and volume 3. NISP does not differentiate between the usage of NATO and non- NATO standards but always strives to select the most appropriate and up to date. The classification (Mandatory or Candidate) of any standard depends on its location in the NISP, Volume 2 or Volume 3, respectively.

2.1. STANDARDS

012. The NISP is composed of non-NATO and NATO Standards. While the first ones are adopted by NATO through the NISP. The second ones are to be considered as normative references.

013. Standards (NATO and non-NATO) are defined and managed in their life cycle by the developing standardization bodies with their own timetable. NATO standards are identified in the NISP by their covering document (STANAG number). They can be in the life cycle status of study/in ratification (no yet NATO approved/expected), promulgated (valid) and superseded/ obsolete. A non-NATO standard may have different life cycle status such as emerging, mature, fading, or obsolete. Different standardization bodies may use their own lifecycle status definitions. NISP takes lifecyle status of standards into account, but does not copy them into the NISP database. To inquire about the current status of NATO standards, please visit the NATO Standardization Document Database (NSDD) hosted on the NATO Standardization Organization (NSO) Website. Superseded/obsolete NATO and non-NATO standards may be included in the NISP for maintenance purpose.

014. NISP allow references to either a NATO Standard or the covering document if it exists. However, it is recommended that NATO organizations and nations reference a NATO Standard and NOT the covering document for inclusion in the NISP. IP CaT will subsequently add the covering document as well, but only for reference purposes.

2.2. INTEROPERABILITY PROFILES

015. Profiles define the specific use of standards at a service interoperability point (SIOP) in a given context. A SIOP is a reference point within an architecture where one or more service interfaces are physically or logically instantiated to allow systems delivering the same service using different protocols to interoperate. A SIOP serves as the focal point for service interoperability between interconnected systems, and may be logically located at any level within the components, and its detailed technical specification is contained within a service interface profile (SIP). Profiles support prerequisites for programmes or projects and enable interoperability implementation and testing.

016. Interoperability Profiles provide combinations of standards and (sub)profiles for different CIS and identify essential profile elements including:

- Capability Requirements and other NAF architectural views

- Characteristic protocols
- Implementation options
- Technical standards
- Service Interoperability Points, and
- The relationship with other profiles such as the system profile to which an application belongs.

017. The NISP now defines the **obligation status** of profiles and standards as "mandatory" or "candidate".

- **Mandatory**: The application of standards or profiles is enforced for NATO common funded systems in planning, implementing and testing. Nations are required to use the NISP for developing capabilities that support NATO's missions (ie. NATO led operations, projects, programs, contracts and other related tasks). Nations are invited to do the same nationally to promote interoperabilty for federated systems and services.
- **Candidate**: The application of a standard or profile shall only be used for the purpose of testing and programme / project planning. The standard or profile must have progressed to a stage in its life-cycle and is sufficiently mature and is expected to be approved by the standardization body in the foreseeable future. This implies, that from a planning perspective, the respective standard or profile is expected to become mandatory during execution of the programme. A candidate standard or profile should not stay in volume 3 for more than 3 years.

018. Profiles shall be updated if referenced standards change. Profiles are dynamic entities by nature. NATO captures this dynamic situation by updating profiles once a year in the NISP. Profile owners are responsible for the versioning of their profiles. Profile reviews are required every 2 years by their owners to ensure their accuracy and continued relevance.

019. Proposed profiles (and standards) can be accepted as candidates in order to follow their developments and to decide if they can be promoted to mandatory standards and profiles. In some cases proposed standards and profiles can be readily accepted directly as mandatory.

020. Interoperability Profiles can reference other Interoperability Profiles to allow for maximal reuse.

021. Further information and guidance on creation of profiles is available in Appendix A.

2.3. BASIC STANDARDS PROFILE

022. Within the NISP, the "*Basic Standards Profile*" specifies the technical, operational, and business standards that are generally applicable in the context of the Alliance and the NATO Enterprise. For a specific context, such as Federated Mission Networking, separate profiles may

be defined that apply specifically to that context or related architectures. The standards that are cited may be NATO standards, or other agreed international and open standards.

023. As there is no overarching alliance architecture, each standard is associated with elements of the C3 Taxonomy. A distinction must be made between applicability of a standard, and conformance to the standard. If a standard is applicable to a given C3 Taxonomy element, any architecture that implements such an element need not be fully conformant with the standard. The degree of conformance may be judged based on the specific context of the project. For example, to facilitate information exchange between C2 and logistics systems it may be sufficient to implement only a subset of concepts as defined in JC3IEDM (STANAG 5525).

024. The “Basic Standards Profile” contains “agreed” as well as “candidate” standards.

2.4. CREATING RELATIONSHIPS TO OTHER CONCEPTS AND PLANNING OBJECTS WITHIN NATO

025. Different initiatives and organizations have developed new concepts to govern developments in the interoperability domain. These concepts have logical relationship to the NISP.

2.4.1. Architecture Building Block

026. An Architecture Building Block (ABB) is a constituent of the architecture model that describes a single aspect of the overall model [1].

2.4.1.1. Characteristics

027. ABBs:

- Capture architecture requirements; e.g., business, data, application, and technology requirements
- Direct and guide the development of Solution Building Blocks

2.4.1.2. Specification Content

028. ABB specifications include the following as a minimum:

- Fundamental functionality and attributes: semantic, unambiguous, including security capability and manageability
- Interfaces: chosen set, supplied
- Interoperability and relationship with other building blocks

[1] TOGAF 9.1 Specification

- Dependent building blocks with required functionality and named user interfaces
- Map to business/organizational entities and policies

2.4.2. FMN Spiral Specifications

029. Federated Mission Networking (FMN) Spiral[2] Specifications encompass "an evolutionary cycle that will raise the level of maturity of federated mission networking capabilities over time".

030. The FMN spiral specification contain the following sections

- architecture
- instructions
- profiles, and
- requirements specifications.

The Mandatory and Candidate FMN Spiral Profiles, in context for FMN Affiliates, are listed in the NISP Volumes 2 and 3.

2.4.3. Capability Packages

031. Profiles will be referenced in the NISP for specified NATO Common Funded Systems or Capability Packages and may include descriptions of interfaces to National Systems where appropriate.

2.5. CRITERIA FOR SELECTING STANDARDS

032. Any standard(s) listed in Volume 2 of the NISP shall:

- Be already approved by a NATO Standardization Tasking Authority or another non- NATO standards development organization (e.g. ISO, ANSI, ETSI, IEEE, IETF, W3C);
- Have an assigned responsible party within NATO that can provide relevant subject matter expertise;
- Be available in one of the NATO official languages;
- Support C3 Interoperability (including. people, processes and technology) and related NATO common funded Communication and Information Systems (CIS), including their development and operations;

[2]Annex B TO Volume I - Implementation Overview, NATO FMN Implementation Plan v4.0 dated: 23 September 2014, Terms and Definitions

- Enable the NATO Enterprise, NATO Nations and Partner Nations to develop interoperable C3 capabilities that support NATO's missions (i.e. NATO led operations, projects, programs, contracts and other related tasks).
- Any standard deviating from the criteria listed in this paragraph, can be recommended by the IP CaT for inclusion in the NISP and can be implemented after the approval of the C3B.

2.6. CRITERIA FOR SELECTING NON-NATO STANDARDS

033. Any Non-NATO standard(s) listed in Volume 2 of NISP should:

- Have implementations from a cross-section of vendors available;
- Be utilized by the broader user community;
- Be developed in a consensus-based way;
- Be free from any legal issues (i.e. intellectual property rights);
- Meet NATO requirements;
- Be easily accessible to vendors;
- Have an open architecture, e.g. extensible for new technological developments,
- Be compatible with other NATO-agreed standards;
- Be stable (mostly recognized by related community/industry) and mature enough in terms of technology;
- Be measurable in terms of its compliance.

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CHAPTER 3. ORGANIZATION OF THE NISP INFORMATION

034. This chapter gives an overview of the new structure of all three volumes.

3.1. NISP STRUCTURE

035. The structure of the NISP is organized to list and categorize the standards and profiles according to their usage in NATO. It contains three volumes:

- **Volume 1** - Introduction: This volume introduces basic concepts, provides the management framework for the configuration control of the NISP and the process for handling Request for Change (RFC). It includes also guidance on development of interoperability profiles.
- **Volume 2** - Agreed Interoperability Standards and Profiles: This volume lists agreed interoperability standards and profiles, mandatory for NATO common funded systems. These should support NATO and National systems today and new systems actually under procurement or specification.
- **Volume 3** - Candidate Interoperability Standards and Profiles: This Volume lists informative references to Standards and Interoperability Profiles, such as drafts of NATO specifications, that may be used as guidance for future programmes.

036. Volume 2 is normative for NATO common funded systems and Volume 3 is informative.

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CHAPTER 4. INTEROPERABILITY IN SUPPORT OF CAPABILITY PLANNING

037. The following documents form the foundation to understand the embedding of NISP into NDPP and architecture work:

Table 4.1. NDPP References

Document	Document Reference
Alliance C3 Strategy Information and Communication Technology to prepare NATO 2020 (20 July 2018)	Alliance C3 Strategy C-M(2018)0037
Alliance C3 Policy (14 December 2018)	C-M(2015)0041-REV2
NATO Defence Planning Process (NDPP)	PO(2016)0655 (INV)

038. The NATO Defence Planning Process (NDPP) is the primary means to identify the required capabilities and promote their timely and coherent development and acquisition by Allies and Partners. It is operationally driven and delivers various products which could support the development and evolution of more detailed C3 architecture and interoperability requirements. The development of NDPP products also benefits from input by the architecture and interoperability communities, especially the NISP, leading to a more coherent development of CIS capabilities for the Alliance.

039. The work on Enterprise, Capability, and programme level architecture will benefit from the NISP by selecting coherent sets of standards for profiles.

040. More information on how the NISP supports the NDPP can be found in Annex B.

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CHAPTER 5. CONFIGURATION MANAGEMENT

041. The NISP is updated once a year to account for the evolution of standards and profiles.

042. Request for Change (RFC) to the NISP will be processed by the IP CaT, following the process in the graphic below:

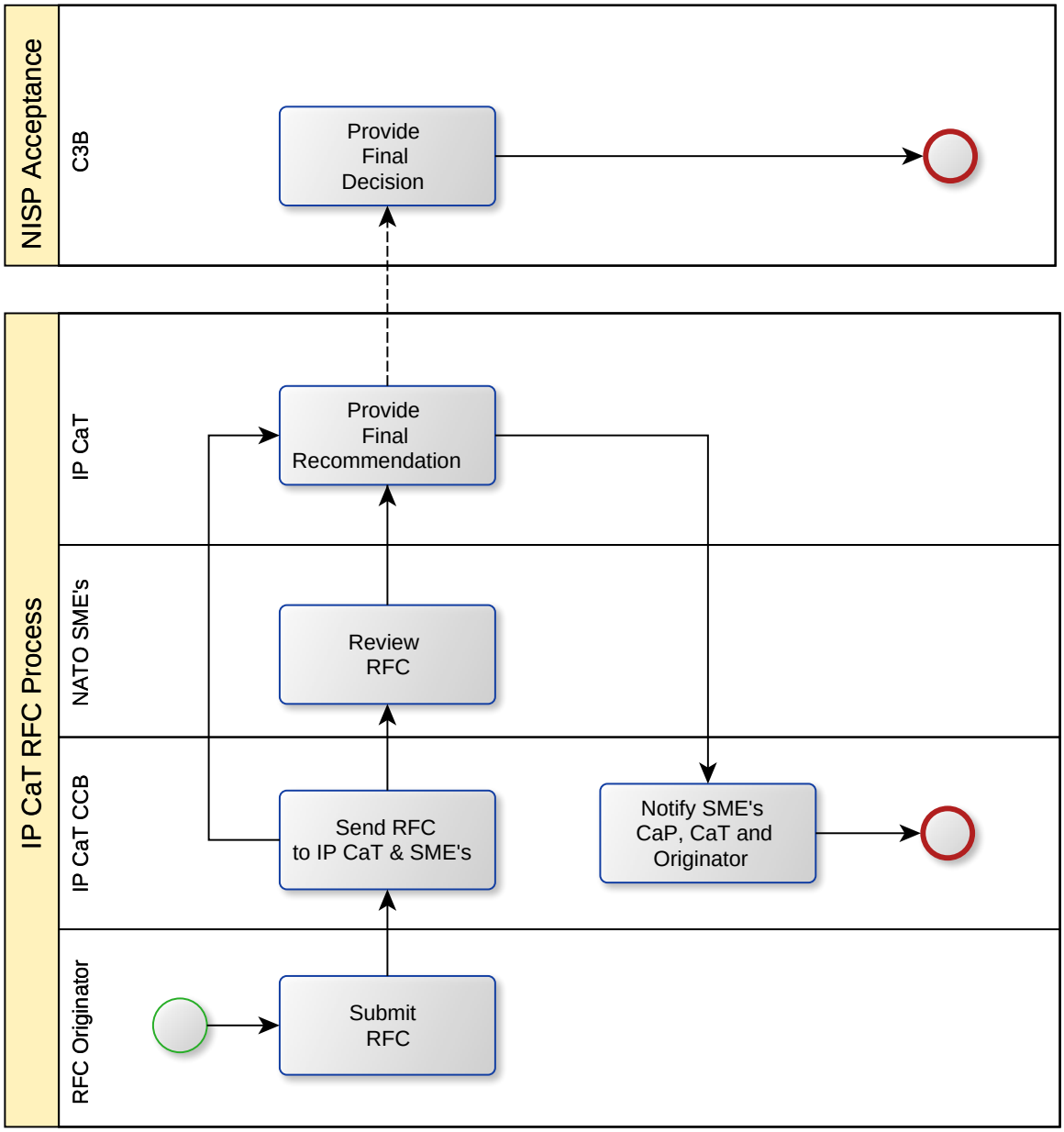

Figure 5.1. RFC Handling Process

043. The RFC contains all information required for the NISP management by IP CaT; The detailed information about standard or profile is handed over as attachments to this form. A notional RFC form with example information is presented below:

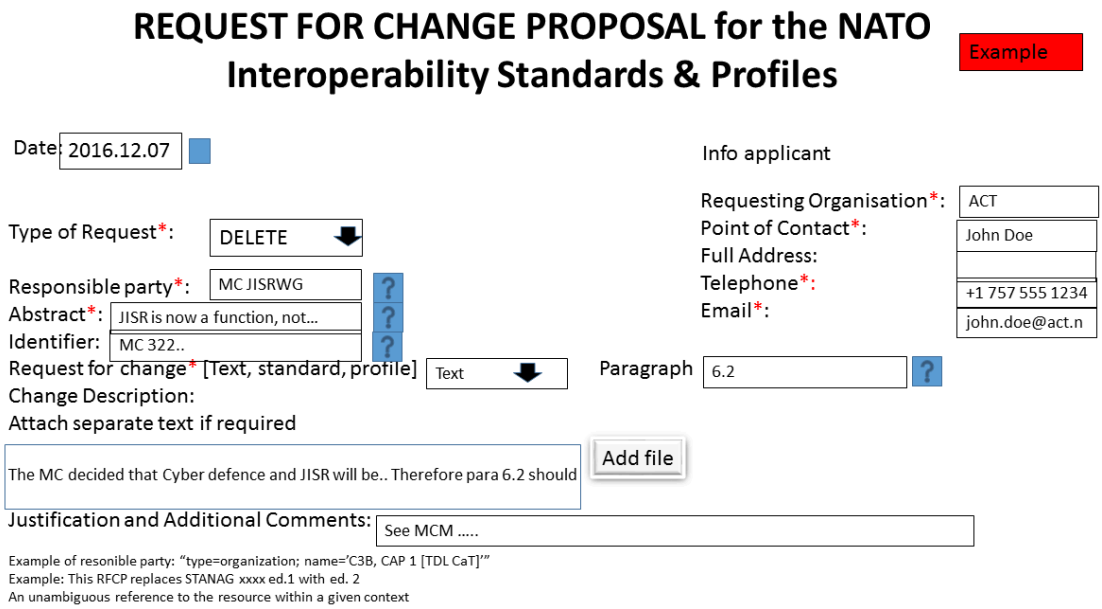

Figure 5.2. RFC Notional Form

044. The primary point of contact for RFC submission is the IP CaT. RFCs may be submitted to the IP CaT via the Change web site or via email to herve.radiguet@act.nato.int with attachments.

045. Review of RFCs will be coordinated with the responsible C3 Board substructure organizations where appropriate.

046. The IP CaT reviews the submissions in dialog with national and international bodies. Based on that review, the RFC will be formally processed into the next version of the NISP; or returned to the originator for further details; or rejected. The IP CaT will attempt to address all RFCs submitted by 1 September into the next NISP release. RFCs submitted after this date may be considered for inclusion at the discretion of the IP CaT, or will be processed for the following NISP release.

5.1. NISP UPDATE PROCESS

047. The new NISP version is submitted to the C3 Board by end of the year after internal review by the IP CaT. The version under review is a snapshot in time of the status of standards and profiles.

048. The database of standards and profiles maintained by the IP CaT is the definitive source of the current status of standards and profiles.

5.1.1. Criteria for listing Standards and Profiles

049. Standards and profiles listed in Volume 2 of the NISP shall:

1. have an assigned responsible party that can provide relevant subject matter expertise, if no responsible party exists the IP CaT will create a temporary assignment,

2. be available in one of the NATO official languages,

3. support C3 Interoperability (incl. people, processes and technology) and related NATO common funded Communication and Information Systems (CIS) including their development and operations, and

4. enable the NATO Enterprise, NATO Nations and partner nations to develop interoperable capabilities that support NATO's missions (ie. NATO led operations, projects, programs, contracts and other related tasks).

050. In addition standards shall be approved already by a NATO Standardization Tasking Authority or another non-NATO standards development organization (e.g. ISO, ANSI, ETSI, IEEE, IETF, W3C).

051. Deviations from the rules listed above can be recommended by the IP CaT and approved by the C3B.

052. Given the rate of innovation in Information and Communication Technology (ICT), it is unsurprising that, NATO standards must be reviewed and updated regularly to keep pace with the state of the art and other international standards. The following criteria should be considered by responsible parties during their annual review of NATO Standards:

- Are all stakeholders' views are reflected in the Standardization Working Group?
    - End Users/ Operational Users
    - Implementers/Vendors
    - Technical Solutions Experts/Testers
    - Standards Experts
- Are all referenced basic standards and documents still valid?
- Are key terms consistent with agreed NATO Terminology?
- Does the standard contain conformance criteria?
- Were any issues with the standard identified during test events (e.g. CWIX, CIAV)?

- Are reference implementations[1] of the Standard available to vendors?

053. Some key criteria for inclusion of non-NATO standards into Volume 2 are

- Availability of implementations from a cross-section of vendors;
- Compatibility with other standards;
- Completeness. Does the standard meet the functional requirements?
- Extensibility. Can the standard easily add new technologies when they become available?;
- Stability/maturity. Is the standard based on well understood technology, and has it matured enough to ensure no major changes will occur through further refinements?
- Non-discriminatory. Was the standard developed in a consensus-based way?
- Testability. Conformance metrics. Can the standard be tested to prove compliance?
- Legitimacy. Freedom from legal issues.

054. Similar criteria are also applied for inclusion of Profiles into Volume 2. Profiles should follow the Profile Guidance in Volume 1, Appendix A, and the IPCaT reserves the right to adjust the data structure of a profile to align with the data model of the NISP.

055. Standards and profiles listed in Volume 3 are not subject to the above criteria as they are not (yet) mandatory.

5.1.2. Updating listed Standards and Profiles

- process RFCs together with related responsible parties,
- check if newer versions of
  - listed standards are published by the NATO Standardization Tasking Authority or another non-NATO standards development organization,
  - listed profiles are published by the respective development organization,
  - contact all responsible parties to assess if there is a continued need to keep standards and profiles within Volume 2.

[1]To facilitate interoperability and adoption in general the production of reference implementations and similar tools that vendors can use to bootstrap and test development efforts is critical. These reference tools help clarify the expected behavior described by the standard. If these tools are released under appropriate licenses, the tools themselves or components thereof can be directly integrated into vendor products, reducing the investment cost, and therefore the risk, of adoption and accelerating adoption efforts. For standards that rely on multiple parties, such as communications protocols between two different roles, having a reference implementation for both communicants can be a big help to implementers by giving them a correspondent against which to test their own implementation. As such, simple implementation efforts can have a significant role in encouraging interoperability and adoption.

5.2. NISP PRODUCTS

056. The NISP is published in several formats:

- Documentation in HTML and PDF Formats
- Website and searchable online Database
- Data export in XML format

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CHAPTER 6. NATIONAL SYSTEMS INTEROPERABILITY COORDINATION

057. Coordination of standards and profiles between Nations and NATO are critical for interoperability. As a result of the C3 Board substructure reorganization, participants in IP CaT are subject matter experts (SME) and are no longer national representatives. SME's should therefore coordinate with national and C3 Board representatives to ensure national perspectives are presented to IP CaT. As such, each of the IP CaT SMEs is responsible for:

- Appropriate and timely coordination of standards and profiles with respect to interoperability with national systems;
- Coordination of the SME input including coordination with national SMEs of other C3 Board substructure groups; and
- Providing appropriate technical information and insight based on national market assessment.

058. National level coordination of interoperability technical standards and profiles is the responsibility of the C3 Board. When the latest version of NISP is approved by the C3 Board, it will become the NATO Standard covered by STANAG 5524. This STANAG contains the agreement of the participating nations regarding usage of the mandatory standards and profiles in the NISP.

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CHAPTER 7. INTEROPERABILITY STANDARDS GUIDANCE

059. The NISP references Standards from different standardization bodies[1]. In the case of a ratified STANAG, NATO standardization procedures apply. The NISP only references these STANAG's without displaying the country-specific reservations. The country-specific reservations can be found in the NATO Standardization Office's NATO Standardization Document Database.

060. The Combined Communications Electronics Board (CCEB) nations will use NISP Volume 2 to publish the interoperability standards for the CCEB under the provisions of the NATO-CCEB List of Understandings (LoU)[2].

061. The NISP organizes the standards using the structure of baseline 4.0 of NATO's C3 Taxonomy, as endorsed by the NATO C3 Board per AC/322-D(2020)0021 on "C3 Taxonomy Baseline 4.0" dated 4 August 2020. A graphical representation of this taxonomy is given in the following figure and a description of it can be obtained at: https://tide.act.nato.int/tidepedia/index.php/C3_Taxonomy. Currently, the standards only address a subset of the services in the taxonomy, mainly services in the group Technical Services. For some standards it is indicated that an appropriate mapping to the C3 Taxonomy could not yet be made.

[1]In case of conflict between any adopted non-NATO standard and relevant NATO standard, the definition of the latter prevails.
[2]References: NATO Letter AC/322(SC/5)L/144 of 18 October 2000, CCEB Letter D/CCEB/WS/1/16 of 9 November 2000, NATO Letter AC/322(SC/5)L/157 of 13 February 2001

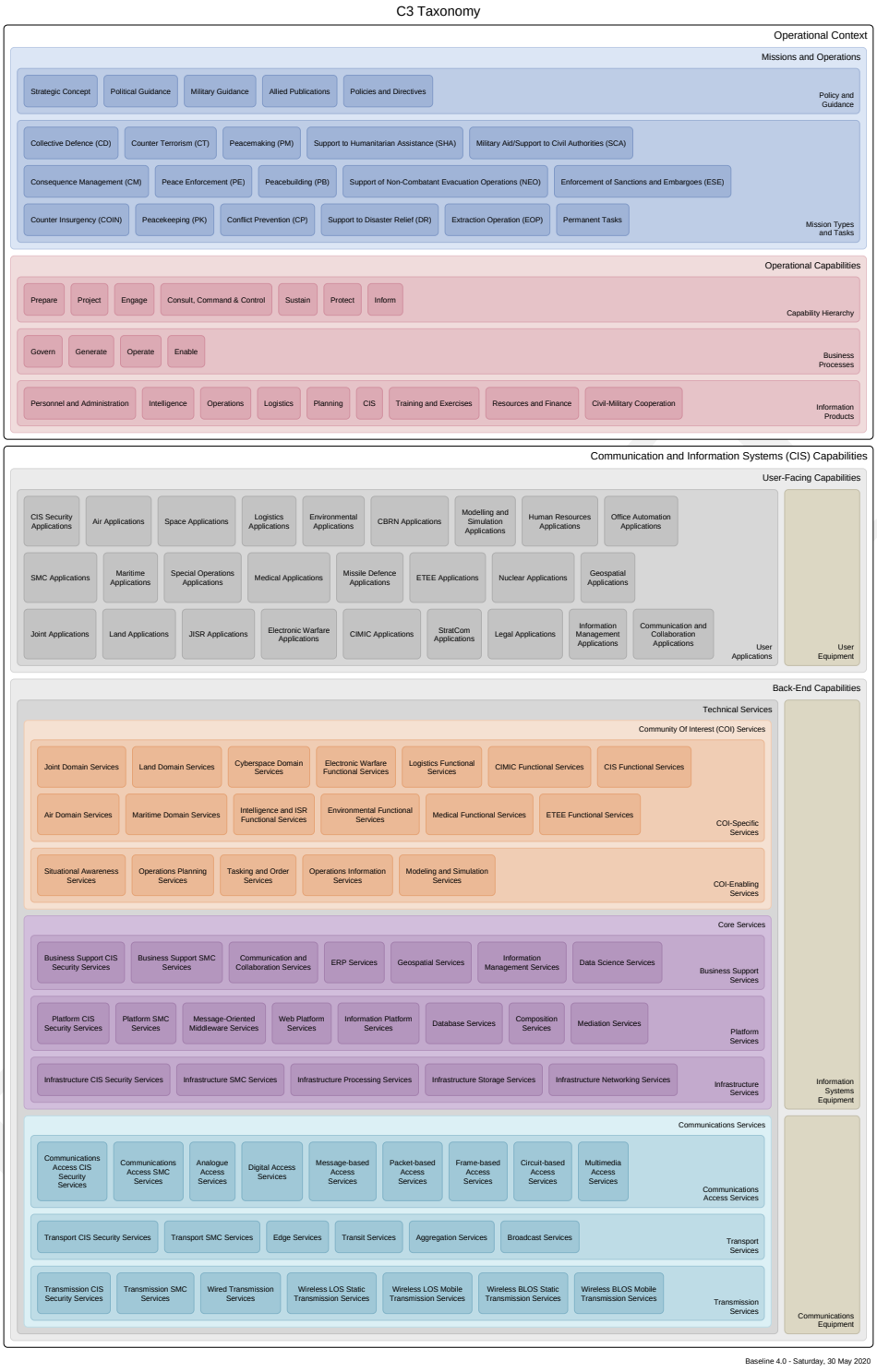

Figure 7.1. C3 Taxonomy

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

063. However, a subset of documents may only be available for those nations or organizations, which are joining a specific mission or are members of a special working group. The membership in these activities is outside the scope of NISP.

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CHAPTER 8. APPLICABILITY

064. The mandatory standards and profiles documented in Volume 2 will be used in the implementation of NATO Common Funded Systems. Participating nations agree to use the mandatory standards and profiles included in the NISP at the Service Interoperability Points and to use Service Interface Profiles among NATO and Nations to support the exchange of information and the use of information services in the NATO realm.

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APPENDIX A. PROFILE GUIDANCE

A.1. PROFILE CONCEPTUAL BACKGROUND

065. ISO/IEC TR 10000 [2] defines the concept of profiles as a set of one or more base standards and/or International Standardized Profiles, and, where applicable, the identification of chosen classes, conforming subsets, options and parameters of those base standards, or International Standardized Profiles necessary to accomplish a particular function.

066. The C3 Board (C3B) Interoperability Profiles Capability Team (IP CaT) has extended the profile concept to encompass references to NAF architectural views [1], characteristic protocols, implementation options, technical standards, Service Interoperability Points (SIOP), and related profiles.

067. Nothing in this guidance precludes the referencing of National profiles or profiles developed by non-NATO organizations in the NATO Interoperability Standards and Profiles (NISP).

A.2. PURPOSE OF INTEROPERABILITY PROFILES

068. Interoperability Profiles aggregate references to the characteristics of other profiles types to provide a consolidated perspective.

069. Interoperability Profiles identify essential profile elements including Capability Requirements and other NAF architectural views [1], characteristic protocols, implementation options, technical standards, Service Interoperability Points, and the relationship with other profiles such as the system profile to which an application belongs.

070. NATO and Nations use profiles to ensure that all organizations will architect, invest, and implement capabilities in a coordinated way that will ensure interoperability for NATO and the Nations. Interoperability Profiles will provide context and assist or guide information technologists with an approach for building interoperable systems and services to meet required capabilities.

A.3. APPLICABILITY

071. NISP stakeholders include engineers, designers, technical project managers, procurement staff, architects and other planners. Architectures, which identify the components of system operation, are most applicable during the development and test and evaluation phase of a project. The NISP is particularly applicable to a federated environment, where interoperability of mature National systems requires an agile approach to architectures.

072. The IP CaT has undertaken the development of interoperability profiles in order to meet the need for specific guidance at interoperability points between NATO and Nations systems

and services required for specific capabilities. As a component of the NISP, profiles have great utility in providing context and interoperability specifications for using mature and evolving systems during exercises, pre-deployment or operations. Application of these profiles also provides benefit to Nations and promotes maximum opportunities for interoperability with NATO common funded systems as well as national to national systems. Profiles for system or service development and operational use within a mission area enable Nations enhanced readiness and availability in support of NATO operations.

A.4. GUIDELINES FOR INTEROPERABILITY PROFILE DEVELOPMENT

073. Due to the dynamic nature of NATO operations, the complex Command and Control structure, and the diversity of Nations and Communities of Interest (COI), interoperability must be anchored at critical points where information and data exchange between entities exists. The key drivers for defining a baseline set of interoperability profiles include:

- Identify the Service Interoperability Points and define the Service Interface Profiles
- Develop modular Architecture Building Blocks
- Use standards consistent with common architectures
- Develop specifications that are service oriented and independent of the technology implemented in National systems where practical
- Develop modular profiles that are reusable in future missions or capability areas
- Use an open system approach to embrace emerging technologies

074. The starting point for development of a profile is to clearly define the Service Interoperability Point where two entities will interface and the standards in use by the relevant systems.

075. The NISP is the governing authoritative reference for NATO interoperability profiles. Doctrine, Organization, Training, Materiel, Leadership and education, Personnel, Facilities and Interoperability (DOTMLPFI) capability analysis may result in a profile developer determining that some of the capability elements may not be relevant for a particular profile. In such cases, the "not applicable" sections may either be marked "not applicable" or omitted at the author's discretion.

A.5. STRUCTURE OF INTEROPERABILITY PROFILE DOCUMENTATION

076. This section identifies typical elements of Interoperability Profile Documentation.

A.5.1. Identification

077. Each NATO or candidate NATO Interoperability Profile **shall** have a unique identifier assigned to it when accepted for inclusion in the NISP. This **shall** be an alpha-numeric string appended to the root mnemonic from the NISP profile taxonomy.

A.5.2. Profile Elements

078. Profile elements provide a coherent set of descriptive inter-related information to NATO, national, Non-Governmental Organization (NGO), commercial and other entities ('actors') desiring to establish interoperability.

079. Profiles are not concepts, policies, requirements, architectures, patterns, design rules, or standards. Profiles provide context for a specific set of conditions related to the aforementioned documents in order to provide guidance on development of systems, services, or even applications that must consider all of these capability related products. Interoperability Profiles provide the contextual relationship for the correlation of these products in order to ensure interoperability is 'built-in' rather than considered as an 'after-thought'.

A.5.2.1. Applicable Standards

080. Each profile **should** document the standards required to support this or other associated profiles and any implementation specific options. The intention of this section is to provide an archive that shows the linkage between evolving sets of standards and specific profile revisions.

Table A.1. Applicable Standards

ID	Purpose/Service	Standards	Guidance
A unique profile identifier	A description of the purpose or service	A set of relevant Standard Identifier from the NISP	Implementation specific guidance associated with this profile (may be a reference to a separate annex or document)

A.5.2.2. Related Profiles

081. Each profile should document other key related system or service profiles in a cross reference table. The intention of this section is to promote smart configuration management by including elements from other profiles rather than duplicating them in part or in whole within this profile. Related profiles would likely be referenced in another section of the profile.

Table A.2. Related Profiles

Profile ID	Profile Description	Community of Interest	Associated SIOPs
A unique profile identifier	A short description of the profile	Air, Land, Maritime, Special Ops, etc.	Unique SIOP identifiers

A.6. VERIFICATION AND CONFORMANCE

082. Each profile **should** identify authoritative measures to determine verification and conformance with agreed quality assurance, Key Performance Indicators (KPIs), and Quality of Service standards such that actors are satisfied they achieve adequate performance. All performance requirements must be quantifiable and measurable; each requirement must include a performance (what), a metric (how measured), and a criterion (minimum acceptable value).

083. Stakeholders are invited to provide feedback to improve a profile's verification and conformance criteria.

084. Verification and Conformance is considered in terms of the following five aspects:

1. Approach to Validating Service Interoperability Points
2. Relevant Maturity Level Criteria
3. Key Performance Indicators (KPIs)
4. Experimentation
5. Demonstration

A.6.1. Approach to Validating Service Interoperability Points

085. Each profile should describe the validation approach used to demonstrate the supporting service interoperability points. The intention of this section is to describe a high-level approach or methodology by which stakeholders may validate interoperability across the SIOP(s).

A.6.2. Relevant Maturity Level Criteria

086. Each profile should describe the Maturity criteria applicable to the profile. The intention of this section is to describe how this profile supports the achievement of improved interoperability.

A.6.3. Key Performance Indicators (KPIs)

087. Each profile should describe the associated Key Performance Indicators (KPIs) to establish a baseline set of critical core capability components required to achieve the enhanced

interoperability supported by this profile. The intention of this section is to assist all stakeholders and authorities to focus on the most critical performance-related items throughout the capability development process.

Table A.3. Key Performance Indicators (KPIs)[1]

Key Performance Indicators (KPI)	Description
KPI #1: Single (named) Architecture	
KPI #2: Shared Situational Awareness	
KPI #3: Enhanced C2	
KPI #4: Information Assurance	
KPI #5: Interoperability	
KPI #6: Quality of Service	
KPI #7: TBD	

[1]'notional' KPIs shown in the table are for illustrative purposes only.

A.6.4. Experimentation

088. Each profile should document experimentation venues and schedules that will be used to determine conformance. The intention of this section is to describe how experimentation will be used to validate conformance.

A.6.5. Demonstration

089. Each profile should document demonstration venues and schedules that demonstrate conformance. The intention of this section is to describe how demonstration will be used to validate conformance.

A.7. CONFIGURATION MANAGEMENT AND GOVERNANCE

A.7.1. Configuration Management

090. Each profile **shall** identify the current approach or approaches toward configuration management (CM) of core documentation used to specify interoperability at the Service Interoperability Point. The intention of this section is to provide a short description of how often documents associated with this profile may be expected to change, and related governance measures that are in place to monitor such changes [e.g., the IP CaT].

A.7.2. Governance

091. Each profile **shall** identify **one or more authorities** to provide feedback and when necessary, Request for Change (RFC) for the Profile in order to ensure inclusion of the most

up-to-date details in the NISP. The intention of this section is to provide a clear standardized methodology by which stakeholders may submit recommended changes to this profile.

References

[1] *NATO Architecture Framework Version 4*. 25 January 2018. AC/322-D(2018)0002.

[2] *Information Technology - Framework and Taxonomy of International Standardized Profiles - Part 3: Principals and Taxonomy for Open System Environment Profiles*. Copyright # 1998. ISO. ISO/IEC TR 10000-3.

APPENDIX B. INTEROPERABILITY IN THE CONTEXT OF NATO DEFENCE PLANNING

B.1. NATO DEFENCE PLANNING

092. The NATO Defence Planning Process (NDPP) is the primary means to identify required capabilities and promote their timely, coherent development and acquisition by Allies and the NATO Enterprise. It is operationally driven and delivers various products which could support the development and evolution of more detailed C3 architecture and interoperability requirements. The development of NDPP products also benefits from input by the architecture and interoperability communities, especially the NISP, leading to a more coherent development of CIS capabilities for the Alliance.

093. Ideally technical interoperability requirements align with the NDPP to ensure coherence in the development of capabilities within the Alliance. NDPP Mission Types and Planning Situations provide the essential foundation for the development of the Minimum Capability Requirements (MCR) and the derivation of high level information exchange and interoperability requirements. MCRs are expressed via a common set of definitions for capabilities (including CIS) called Capability Codes and Statements (CC&S), including explicit reference to STANAGs in some cases[1]. Interoperability aspects are primarily captured in free text form within the Capability Statements and in the subsequent NDPP Targets[2]. The NDPP products could be leveraged by the architecture and interoperability community, to define the operational context for required Architecture Building Blocks and interoperability profiles.

094. The Defence Planning Capability Survey (DPCS) is the tool to collect information on national capabilities, the architecture and interoperability communities should provide input on questions related to C3 related capabilities. The architecture and interoperability communities could also bring valuable insight and expertise to the formulation and tailoring of C3 capabilities-related targets to nations, groups of nations or the NATO enterprise.

095. In practice, there is not always an opportunity (time or money) for such a "clean" approach and compromises must be made - from requirements identification to implementation. In recognition of this fact, NATO has developed a parallel track approach, which allows some degree of freedom in the systems development. Although variations in sequence and speed of the different steps are possible, some elements need to be present. Architecture, including the selection of appropriate standards and technologies, is a mandatory step.

096. In a top-down execution of the systems development approach, architecture will provide guidance and overview to the required functionality and the solution patterns, based on longstanding and visionary operational requirements. In a bottom-up execution of the approach, which may be required when addressing urgent requirements and operational imperatives,

[1]Bi-SC Agreed Capability Codes and Capability Statements, 29 July 2016 and SH/SDP/SDF/CFR/DPF/20-006166 and ACT/SPP/DP/TT-2897/Ser:NU0074 issued on 29 July 2020.
[2]C-M(2017)0021, NATO Capability Targets, 26 June 2017

architecture will be used to assess and validate chosen solution in order to align with the longer term vision.

097. The NISP is a major tool supporting NATO architecture work and must be suitable for use in the different variations of the systems development approach. The NISP will be aligned with the Architectural efforts of the C3 Board led by the ACaT.

098. The relationship of the NISP, the Architecture Building Blocks activities of the ACaT, and Allied Command Transformation Architecture efforts is of a mutual and reciprocal nature. Architecture products provide inputs to the NISP by identifying the technology areas that in the future will require standards. These architecture products also provide guidance on the coherence of standards by indicating in which timeframe certain standards and profiles are required. NATO Architectures benefit from the NISP by selecting coherent sets of standards from profiles.

APPENDIX C. CHANGES FROM NISP VERSION 14 (N) TO NISP VERSION 15 (O)

099. Major content changes to NISP v14 include:

- 5 RFCs processed. Details of the RFC changes are captured in Appendix E.

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APPENDIX D. DETAILED CHANGES FROM NISP VERSION 14 (N) TO NISP VERSION 15 (O)

D.1. ADDED STANDARDS

100. TBD

D.2. DELETED STANDARDS

101. TBD

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APPENDIX E. PROCESSED RFCS

102. The following RFC have been processed::

RFC #	Title	Origin
14-001a	Replace STANAG 5511 Ed 4 with ATDLP 5.11 Ed. B Ver 1 in BSP	TDL
14-001b	Replace STANAG 5516 Ed 4 with ATDLP 5.16 Ed. B Ver 1 in BSP	TDL
14-001c	Replace STANAG 5518 Ed 1 with ATDLP 5.18 Ed. B Ver 2 in BSP	TDL
14-001d	Update ATDLP-5.01 Ed A Ver 1 to ATDLP-5.01 Ed A Ver 2 in the BSP	TDL
14-001e	Remove ATDLP-7.03 Ed B Ver 1 from NISP BSSP for Informal_Messaging_Services	TDL
14-002	For all AEP-76 standards: change RP to LCGDSS and harmonize all publications numbers.	NHQ/CNAD
14-003	Remove STANAG 4312 Ed 2	CNAD
14-004	Remove STANAG 4292 Ed 2	LOS Comms CaT
14-005	Update ADatP-03 Ed A Ver 3 to ADatP-03 Ed A Ver 4	MTF CaT
14-006	Remove CIM, DSP 004, DSP 0226, DSP 0227, DSP 0252 & CIM Schema	SMC CaT
14-007a	Add AGeoP-26 Ed B Ver 1 as candidate standard in Geospatial Services	GRWG/JGSWG
14-12	CaP 2/FFT WG and CaP 2/IFF WG replaced as RP with CaP 2	CaP 2
14-13	Add Joint Domain Service and related standards to the BSP	CaP 2
14-15	Move emerging STANAG 4722 from Track Management Services to Air Domain	CaP 4
14-16	Add ANP-4564 Ed S Ver 1 / STANAG 4564 Ed 3 Maritime Domain Services	CaP 4
14-18	Move AEtP-4579 Ed A Ver 1 / STANAG 4579 Ed 2 from Track Management Systems to Land Domain Services.	CaP 2
14-19	Move STANAG 4162 Ed 2 from Track Management Services to Recognized Picture Services	CaP 2
14-20	Remove reference to non existing paragraph.	TDL

RFC #	Title	Origin
14-27a	Replace in cryptographic services the profile TN-1491 Ed 2 Annex A with ADatP-4778.2 Edition A Version 1 Chapter 2	NCIA
14-27b	Replace in informal messaging services the profile TN-1491 Ed 2 Annex B with ADatP-4778.2 Edition A Version 1 Chapter 2	NCIA
14-27c	Replace in informal messaging services the profile TN-1491 Ed 2 Annex C with ADatP-4778.2 Edition A Version 1 Chapter 4	NCIA
14-27d	Replace in informal messaging services the profile TN-1491 Ed 2 Annex D with ADatP-4778.2 Edition A Version 1 Chapter 5	NCIA
14-27e	Replace in informal messaging services the profile TN-1491 Ed 2 Annex E with ADatP-4778.2 Edition A Version 1 Chapter 6	NCIA
14-27f	Replace in informal messaging services the profile TN-1491 Ed 2 Annex F with ADatP-4778.2 Edition A Version 1 Chapter 7	NCIA
14-27g	Replace in informal messaging services the profile TN-1491 Ed 2 Annex G with ADatP-4778.2 Edition A Version 1 Chapter 8	NCIA
14-27h	Replace in informal messaging services the profile TN-1491 Ed 2 Annex H with ADatP-4778.2 Edition A Version 1 Chapter 9	NCIA
14-27i	Replace in informal messaging services the profile TN-1491 Ed 2 Annex I with ADatP-4778.2 Edition A Version 1 Chapter 10	NCIA
14-27j	Replace in informal messaging services the profile TN-1491 Ed 2 Annex J with ADatP-4778.2 Edition A Version 1 Chapter 11	NCIA
14-27k	Replace in informal messaging services the profile TN-1491 Ed 2 Annex K with ADatP-4778.2 Edition A Version 1 Chapter 12	NCIA
14-28a	Remove ATDLP 5.11 Ed B Ver 1 in volume 3 from Track Management, Formal messaging, Communication Access and Tactical Messages	TDL

RFC #	Title	Origin

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APPENDIX F. ARCHIMATE EXCHANGE FORMAT

103. The C3B have tasked IP CaT to improve the consistency and usability of NISP. IP CaT have therefore in "A standard representation and exchange specification for Interoperability Standards and Profiles" ver 0.8 dated Dec 10, 2020 (AC-322-WP(2020)0036) specified a semantic representation of the data set contained in the NISP as an architecture model in the Open Group ArchiMate Modelling Language so that this model can be exchanged via the ArchiMate Model Exchange File Format Standard between tools and/or systems that can import, and export ArchiMate models. ArchiMate Exchange Files enable exporting content from one ArchiMate modelling tool or repository and importing it into another while retaining information describing the model in the file and how it is structured, such as a list of model elements and relationships. Extensions of ArchiMate are specified in accordance with the Language Customization Mechanisms and where possible re-use metadata elements defined by the NATO Core Metadata Specification (NCMS)to limit the definition of NISP specific metadata requirements.

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NATO STANDARD

ADatP-34

NATO Interoperability Standards and Profiles

Volume 2

Agreed Interoperability Standards and Profiles

Edition O Version 2

6 May 2022

NORTH ATLANTIC TREATY ORGANIZATION
ALLIED DATA PUBLICATION

Published by the
NATO STANDARDIZATION OFFICE (NSO)

NATO LETTER OF PROMULGATION

The enclosed Allied Data Publication ADatP-34, Edition O, Version 2 NATO Interoperability Standards and Profiles, which has been approved by the nations in the C3B, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 5524.

ADatP-34, Edition O, Version 2 is effective on receipt.

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

Dimitrios SIGOULAKIS
Major 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

[nation]	[detail of reservation]
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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Table of Contents

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CHAPTER 1. INTRODUCTION

001. Volume 2 of the NISP focuses on agreed interoperability standards and profiles.

002. The NISP references Standards from different standardization bodies[1]. In the case of a ratified STANAG, NATO Standardization procedures apply. The NISP only references these STANAG's without displaying the country-specific reservations. The country-specific reservations can be found in the NATO Standardization Office's NATO Standardization Document Database (NSDD).

003. The Combined Communications Electronics Board (CCEB) nations will use NISP Volume 2 Chapter 3 and Section 3.3 tables to publish the interoperability standards for the CCEB under the provisions of the NATO-CCEB List of Understandings (LoU)[2].

1.1. SCOPE

004. The scope of this volume includes:

- Identifying the standards and technologies that are relevant to a service oriented environment,
- Describing the standards and technologies to support federation.

[1]In case of conflict between any recommended non-NATO standard and relevant NATO standard, the definition of the latter prevails.
[2]References:NATO Letter AC/322(SC/5)L/144 of 18 October 2000, CCEB Letter D/CCEB/WS/1/16 of 9 November 2000, NATO Letter AC/322(SC/5)L/157 of 13 February 2001

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CHAPTER 2. REFERENCE MODELS: TRANSITION FROM PLATFORM CENTRIC TO SERVICE ORIENTED MODELS

005. Information technology has undergone a fundamental shift from platform-oriented computing to service-oriented computing. Platform-oriented computing emerged with the widespread proliferation of personal computers and the global business environment. These factors and related technologies have created the conditions for the emergence of network-oriented computing. This shift from platform to network is what enables the more flexible and more dynamic network-oriented operation. The shift from viewing NATO and partner Nations as independent to viewing them as part of a continuously adapting network ecosystem fosters a rich information sharing environment.

006. This shift is most obvious in the explosive growth of the Internet, intranets, and extranets. Internet users no doubt will recognize transmission control protocol/internet protocol (TCP/IP), hypertext transfer protocol (HTTP), hypertext markup language (HTML), Web browsers, search engines, and Java[1] Computing. These technologies, combined with high-volume, high-speed data access (enabled by the low-cost laser) and technologies for high-speed data networking (switches and routers) have led to the emergence of network-oriented computing. Information “content” now can be created, distributed, and easily exploited across the extremely heterogeneous global computing environment. The “power” or “payoff” of network-oriented computing comes from information-intensive interactions between very large numbers of heterogeneous computational nodes in the network, where the network becomes the dynamic information grid established by interconnecting participants in a collaborative, coalition environment. At the structural level, network-enabled warfare requires an operational architecture to enable common processes to be shared.

007. One of the major drivers for supporting net-enabled operations is Service-Oriented Architectures (SOA). SOA is an architectural style that leverages heterogeneity, focuses on interfaces between services and as such this approach is inherently platform-neutral. It is focused on the composition of Services into flexible processes and is more concerned with the Service interface and above (including composition metadata, security policy, and dynamic binding information), more so than what sits beneath the abstraction of the Service interface. SOA requires a different kind of platform, because runtime execution has different meanings within SOA. SOA enables users and process architects to compose Services into processes, and then manage and evolve those processes, in a declarative fashion. Runtime execution of such processes is therefore a metadata-centric operation of a different kind of platform -- a Service-oriented composite application platform.

008. Service-enabled operations are characterized by new concepts of speed of command and self-synchronization.

[1]Registered Trademark of ORACLE and/or its affiliates. Other names may be the trademarks of their respective owners.

009. The most important SOA within an enterprise is the one that links all its systems. Existing platforms can be wrapped or extended in order to participate in a wider SOA environment. NATO use of the NISP will provide a template for new systems development, as well as assist in defining the path for existing systems to migrate towards net-enabled operations.

CHAPTER 3. STANDARDS

3.1. INTRODUCTION

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

011. 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.

012. 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[1]; 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.

013. 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.

3.1.1. Releasability Statement

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

3.2. USER APPLICATIONS

Title	Pubnum	Profiles	Responsible Party
Service Management Domain Applications			
TMF000 Event API REST Specification R17.5[1]	TM-FORUM TMF000:2017	SIP-FOR-SMC	FMN CPWG
Trouble Ticket REST API Specification R14.5.1 Interface	TM-FORUM TMF621:2015	SIP-FOR-SMC	FMN CPWG
Product Ordering API REST Specification R14.5.1 Interface	TM-FORUM TMF622:2015	SIP-FOR-SMC	FMN CPWG

[1]If the standard is a NATO standard and has a cover document, the publication number is followed by a slash and the publication number of the cover document.

Title	Pubnum	Profiles	Responsible Party
TMF638 Service Inventory API REST Specification R16.5	TM-FORUM TMF638:2016	SIP-FOR-SMC	FMN CPWG
TMF661 Trouble Ticket API Conformance Profile R16.5.1	TM-FORUM TMF661:2017	SIP-FOR-SMC	FMN CPWG
API REST Conformance Guidelines R15.5.1 Standard	TM-FORUM TR250:2016	SIP-FOR-SMC	FMN CPWG
Architecture Management Application			
NATO Interoperability Standards and Profile eXchange Specification	C3B AC/322-D(2017)0007-U:2017	BSP	C3B IP iCaT
NATO Architecture Framework	C3B AC/322-N(2018)-0002:2018	ARCHITECTURE	C3B Arch iCaT
Enterprise, systems and software - Architecture processes	ISO/IEC/IEEE 42020:2019	ARCHITECTURE	C3B Arch iCaT
Enterprise, systems and software - Architecture Evaluation	ISO/IEC/IEEE 42030:2019	ARCHITECTURE	C3B Arch iCaT
Unified Architecture Framework 1.0 (UAF) Domain Meta Model (DMM)	OMG formal/2017-12-02:2017	ARCHITECTURE	C3B Arch iCaT
Unified Architecture Framework 1.0 (UAF) Domain Meta Model (DMM)	OMG formal/2017-12-02 DMM:2017	ARCHITECTURE	C3B Arch iCaT
ArchiMate 3.1 Specification	Open Group c197:2019	ARCHITECTURE	C3B Arch iCaT
ArchiMate Model Exchange File Format for the ArchiMate Modeling Language 3.1	Open Group c19c:2019	ARCHITECTURE	C3B Arch iCaT
Joint Applications			
IFF Operational Procedures	CCEB ACP 160(E):2004	BSP	C3B NACP CaT
Policy and Procedures for the Management of IFF/SSR, NATO Supplement-1	NATO ACP 160 NS-1(G):2019	BSP	C3B NACP CaT
Implementation Options and Guidance for integrating IFF Mk XIIA Mode 5 on Military Platforms (IOG)	NATO AEtP-11 Ed. B Ver. 1:2017 / STANREG 5635 Ed 1	BSP	C3B CaP2
Technical Characteristics of the IFF Mk XIIA System Part I:	NATO STANAG 4193 Ed 3 P1:2016	BSP	C3B CaP2

Title	Pubnum	Profiles	Responsible Party
System Destription and General Characteristics			
Technical Characteristics of the IFF Mk XIIA System Part II: Classified System Characteristics	NATO STANAG 4193 Ed 3 P2:2016	BSP	C3B CaP2
Technical Characteristics of the IFF Mk XIIA System Part III: Installed System Characteristics	NATO STANAG 4193 Ed 3 P3:2016	BSP	C3B CaP2
Geospatial Applications			
NATO Geospatial Information Framework	NATO AGeoP-11 Ed B Ver 1:2018 / STANAG 2592 Ed 2	BSP	MC, MCJSB, JGS
Office Automation Applications			
XMP Specification Part 3, Storage in Files	ADOBE XMP-part3-2016:2016	BINDING-EXTENSIBLE-V2	NCIA
Graphic Technology - Extensible metadata platform (XMP) specification - Part 1: Data model, serialization and core propertie	ISO 16684-1:2012	BINDING-EXTENSIBLE-V2	NCIA
Open Document Format for Office Applications (OpenDocument) v1.2 -- Part 1: OpenDocument Schema	ISO/IEC 26300-1:2015	BSP	FMN CPWG
Open Document Format for Office Applications (OpenDocument) v1.2 -- Part 2: Recalculated Formula (OpenFormula) Format	ISO/IEC 26300-2:2015	BSP	FMN CPWG
Open Document Format for Office Applications (OpenDocument) v1.2 -- Part 3: Packages	ISO/IEC 26300-3:2015	BSP	FMN CPWG
Office Open XML File Formats -- Part 2: Open Packaging Conventions	ISO/IEC 29500-2:2012	BINDING-GENERIC-V2, BINDING-OOXML-V2	NCIA
Rich Text Format (RTF) Specification, Version 1.9.1	Microsoft RTF 1.9.1:2008	BSP	NCIA/Sstrat/ Sea

Title	Pubnum	Profiles	Responsible Party
Confidentiality Metadata Label Syntax	NATO ADatP-4774 Ed A Ver 1:2017 / STANAG 4774 Ed 1	BINDING-EXTENSIBLE-V2, BINDING-GENERIC-V2, BINDING-OOXML-V2	C3B CaP1 DM CaT
Metadata Binding	NATO ADatP-4778 Ed A Ver 1:2018 / STANAG 4778 Ed 1	BINDING-EXTENSIBLE-V2, BINDING-GENERIC-V2, BINDING-OOXML-V2	C3B CaP1 DM CaT
RDF 1.1 Concepts and Abstract Syntax	W3C REC-rdf11-concepts-20140225:2014	BINDING-EXTENSIBLE-V2	NCIA/CES
RDF Primer	W3C REC-rdf-primer-20040210:2004	BINDING-EXTENSIBLE-V2	NCIA
eXtensible Markup Language (XML) version 1.0 (Fifth Edition)	W3C REC-xml-20081126:2008	BINDING-EXTENSIBLE-V2	FMN CPWG
Browser Application			
Geolocation API Specification 2nd Edition	W3C REC-geolocation-API-20161108/:2016	SIP-FOR-WEB-APPS	FMN CPWG
HTML5 Differences from HTML4	W3C NOTE-html5-diff:2014	SIP-FOR-WEB-APPS	FMN CPWG
Hypertext Markup Language revision 5.2 (HTML5)	W3C REC-html52:2017	SIP-FOR-WEB-APPS	FMN CPWG
Hypertext Markup Language revision 5.3 Editor's Draft (4.7)	W3C REC-html53-Draft:2018	SIP-FOR-WEB-APPS	FMN CPWG
Media Source Extensions	W3C REC-media-source:2016	SIP-FOR-WEB-APPS	FMN CPWG
Mobile Web Application Best Practices	W3C REC-mwabp:2010	SIP-FOR-WEB-APPS	FMN CPWG
Web Speech API	W3C speech-API:2018	SIP-FOR-WEB-APPS	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
DOM Parsing and Serialization	W3C WD-DOM-Parsing:2016	SIP-FOR-WEB-APPS	FMN CPWG

[1]TMF000 is included in FMN Spiral 3. An official publication number is not yet available.

3.3. TECHNICAL SERVICES

015. 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”.

016. 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).

017. 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).

3.3.1. Community Of Interest (COI) Services

Title	Pubnum	Profiles	Responsible Party
Community Of Interest (COI) Services			
Web Services for Management (WS-Management) Specification	ISO/IEC 17963:2013	BSP	NCIA/SMC
Air Domain Services			
IFF Operational Procedures	CCEB ACP 160(E):2004	BSP	C3B NACP CaT
Policy and Procedures for the Management of IFF/SSR, NATO Supplement-1	NATO ACP 160 NS-1(G):2019	BSP	C3B NACP CaT
Implementation Options and Guidance for integrating IFF Mk XIIA Mode 5 on Military Platforms (IOG)	NATO AEtP-11 Ed. B Ver. 1:2017 / STANREG 5635 Ed 1	BSP	C3B CaP2
Technical Characteristics of Reverse IFF using Mode 5 Waveform	NATO Study (expected) AEtP-4722 Ed. A Ver. 1 / STANAG 4722 Ed 1	BSP	C3B CaP2

Title	Pubnum	Profiles	Responsible Party
Joint Brevity Words	NATO APP-07 Ed F Ver 2:2015 / STANAG 1401 Ed 15	BSP	MC, MCJSB, IERHWG
Technical Characteristics of the IFF Mk XIIA System Part I: System Destription and General Characteristics	NATO STANAG 4193 Ed 3 P1:2016	BSP	C3B CaP2
Technical Characteristics of the IFF Mk XIIA System Part II: Classified System Characteristics	NATO STANAG 4193 Ed 3 P2:2016	BSP	C3B CaP2
Technical Characteristics of the IFF Mk XIIA System Part III: Installed System Characteristics	NATO STANAG 4193 Ed 3 P3:2016	BSP	C3B CaP2
Recognized Air Picture Services			
Tactical Data Exchange - Link 1 (Point-to-Point)	NATO ATDLP-5.01 Ed A Ver 2:2020 / STANAG 5501 Ed 7	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 11/11B	NATO ATDLP-5.11 Ed B Ver 1:2019 / STANAG FT 5511 Ed 10	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 Ed B Ver 1:2019 / STANAG 5516 FT Ed 8	FMN4	C3B CaP1 TDL CaT
Joint Range Extension Application Protocol (JREAP)[1]	NATO ATDLP-5.18 Ed B Ver 2:2019 / STANAG FT 5518 Ed 4	BSP, FMN3, FMN4	C3B CaP1 TDL CaT
Tactical Data Link - Link 22	NATO ATDLP-5.22 Ed B Ver 1:2021 / STANAG 5522 Ed 6	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 16	NATO STANAG 5516 Ed 4:2008	FMN3	C3B CaP1 TDL CaT
Recognized Maritime Picture Services			
Tactical Data Exchange - Link 11/11B	NATO ATDLP-5.11 Ed B Ver 1:2019 /	BSP	C3B CaP1 TDL CaT

Title	Pubnum	Profiles	Responsible Party
	STANAG FT 5511 Ed 10		
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 Ed B Ver 1:2019 / STANAG 5516 FT Ed 8	BSP, FMN4	C3B CaP1 TDL CaT
Joint Range Extension Application Protocol (JREAP)[1]	NATO ATDLP-5.18 Ed B Ver 2:2019 / STANAG FT 5518 Ed 4	FMN4	C3B CaP1 TDL CaT
Tactical Data Link - Link 22	NATO ATDLP-5.22 Ed B Ver 1:2021 / STANAG 5522 Ed 6	BSP	C3B CaP1 TDL CaT
NATO Vector Graphics (NVG) Protocol version 1.5:2010 (ACT)	NATO TIDE/ NVG:2010	FMN3	NCIA/C2
Operational Specification for OVER-THE-HORIZON TARGETING GOLD (Revision C) (OTH-G)	US DoD OTH-G Rev. C:1997	FMN3, FMN4	FMN CPWG
Over-The-Horizon Targeting Gold baseline 2007	US DoD OTH-T Gold Baseline 2007:2007	FMN4	C3B CaP1 DM CaT
Land Domain Services			
Battlefield Target Identification Device (BTIDs)	NATO STANAG 4579 Ed 1:2001	BSP	C3B CaP2
Recognized Ground Picture Services			
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 Ed B Ver 1:2019 / STANAG 5516 FT Ed 8	FMN4	C3B CaP1 TDL CaT
Joint Range Extension Application Protocol (JREAP)[1]	NATO ATDLP-5.18 Ed B Ver 2:2019 / STANAG FT 5518 Ed 4	FMN4	C3B CaP1 TDL CaT
Meteorology Services			
Manual on the ICAO Meteorological Information Exchange Model	ICAO 10003:2019	BSP	MC, MCJSB, METOC

Title	Pubnum	Profiles	Responsible Party
File Naming Convention for NATO Metoc data and product exchange	NATO AMETOCP-3.2 Ed A Ver 1:2019 / STANAG 6014 Ed 4	BSP	MC, MCJSB, METOC
NATO Meteorological and Oceanographic Codes Manual - Vol 1	NATO AMETOCP-4 I Ed. A Ver. 1:2019 / STANAG 6015 Ed. 5	BSP	MC, MCJSB, METOC
NATO Meteorological and Oceanographic Codes Manual - Vol 2	NATO AMETOCP-4 II (NR) Ed. A Ver. 1:2019 / STANAG 6015 Ed. 5	BSP	MC, MCJSB, METOC
Naval Mine Warfare Information - Data Transfer And Mine Warfare Data Centre Interoperability	NATO AMP-11 SUPP Ed. A Ver. 3:2017 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Southern North Sea (Belgium)	NATO AMP-11 VOL 01 Ver. 2:2004 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Denmark	NATO AMP-11 VOL 03 Ver. 2:1980 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - French Coast (The Channel)	NATO AMP-11 VOL 04 LEVEL 1 PT 1:1996 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - French Coast(Atlantic)	NATO AMP-11 VOL 04 LEVEL 1 PT 2:1994 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - French Coast(Mediterranean)	NATO AMP-11 VOL 04 LEVEL 1 PT 3:1998 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - French Coast	NATO AMP-11 VOL 04 LEVEL 2 Ver. 7:1980 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - German Bight	NATO AMP-11 VOL 05 PART 1:1971 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW

Title	Pubnum	Profiles	Responsible Party
Mine Warfare Pilots - Western Baltic	NATO AMP-11 VOL 05 PART 2:2006 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Greece-Aegean Sea Coasts	NATO AMP-11 VOL 06 PART A Ver. 3:1999 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Maridipart La Spezia	NATO AMP-11 VOL 07 PART A:1994 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Southern Tyrrhenian Area	NATO AMP-11 VOL 07 PART B:2003 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilot (From Messina Strait To Assi Estuary Comprehensive Of Sicily Island) - Marisicilia Area	NATO AMP-11 VOL 07 PART C:2005 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilot - Italy (Taranto Area)	NATO AMP-11 VOL 07 PART D:1999 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Italy (Maridipart Ancona)	NATO AMP-11 VOL 07 PART E:1996 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Italy (Sardinia)	NATO AMP-11 VOL 07 PART F:2007 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilot: North Coast Of Spain - From Bidasoa River To Cape Penas	NATO AMP-11 VOL 08 PART 1 Ver. 1:2000 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilot: Northwest Coast Of Spain - From Cape Penas To Mino	NATO AMP-11 VOL 08 PART 2 Ver. 1:2000 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilot: South Coast Of Spain - From Guadiana River To Cape Of Gata (Including Ceuta And Melilla)	NATO AMP-11 VOL 08 PART 3 Ver. 1:1999 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW

Title	Pubnum	Profiles	Responsible Party
Mine Warfare Pilot: East Coast Of Spain - From Cape Of Gata To Barcelona (Including Baleares Islands)	NATO AMP-11 VOL 08 PART 4 Ver. 1:2004 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Coasts Of Turkey	NATO AMP-11 VOL 11:2002 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - South Coast Of England And Thames	NATO AMP-11 VOL 12 PART A Ver. 12:2011 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots- West Coast Of England And Wales	NATO AMP-11 VOL 12 PART B Ver. 9:2011 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots- Northern Ireland And West Coast Of Scotland	NATO AMP-11 VOL 12 PART C Ver. 10:2011 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - North And East Coasts Of Scotland And England	NATO AMP-11 VOL 12 PART D Ver. 11:2011 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Usa (North Carolina Approaches)	NATO AMP-11 VOL 13 PART 1:2002 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Usa (Norfolk Approaches)	NATO AMP-11 VOL 13 PART 2:2002 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilots - Usa (Delaware Bay & Approaches)	NATO AMP-11 VOL 13 PART 3:2002 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
Mine Warfare Pilot; Kings Bay, Ga/ Mayport, Fl and Approaches	NATO AMP-11 VOL 13 PART 4:2002 / STANAG 1116 Ed 10	BSP	MC, MCMSB, NMW
NATO Military Oceanographic and Rapid Environmental Assessment Support Procedures	NATO ATP-32 Ed E Ver 2:2019 / STANAG 1171 Ed 10	BSP	MC, MCJSB, METOC

Title	Pubnum	Profiles	Responsible Party
Warning and Reporting and Hazard Prediction of Chemical, Biological, Radiological and Nuclear Incidents (Operators Manual)	NATO ATP-45 Ed F Ver 2:2020 / STANAG 2103 Ed 12	BSP	MC, MCJSB, JCBRND CDG
Manual on Codes - International Codes, Volume I.1, Annex II to the WMO Technical Regulations: part A- Alphanumeric Codes	WMO 306 Vol I.1:2019	BSP	MC, MCJSB, METOC
Manual on Codes - International Codes, Volume I.2, Annex II to the WMO Technical Regulations: Part B – Binary Codes, Part C – Common Features to Binary and Alphanumeric Codes	WMO 306 Vol I.2:2019	BSP	MC, MCJSB, METOC
Manual on Codes - Regional Codes and National Coding Practices, Volume II	WMO 306 Vol 2:2018	BSP	MC, MCJSB, METOC
COI-Enabling Services			
ECMAScript Language Specification ed.5.1:2011	ECMA ECMA-262:2011	BSP	FMN CPWG
ECMAScript for XML (E4X) Specification ed.2:2005	ECMA ECMA-357:2005	BSP	NCIA/CES
Representation of Dates and Times	ISO 8601:2004	BSP	NCIA/Sstrat/ Sea
MIP Information Model 5.0	MIP MIM 5.0:2019	BSP	C3B CaP1 DM CaT
NATO Standard Bar Code Handbook	NATO AAITP-09 Ed. A Ver. 1:2018 / STANAG 4329 Ed 5	BSP	MC, MCLSB, AST
Date and Time Formats	W3C NOTE-datetime:1998	BSP	NCIA/Sstrat/ Sea
Situational Awareness Services			
MIP4 Information Exchange Specification 4.3	MIP MIP4-IES-CoreSpec-4.3	FMN4	FMN CPWG
Web Service Messaging Profile (WSMP)	NATO ADatP-5644 (Study) Ed A Ver 1 / STANAG 5644 Ed 1	FMN4	C3B CaP1 DM CaT

Title	Pubnum	Profiles	Responsible Party
Specifications Defining The Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Security	NATO AEP-76 Vol I Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Data Model	NATO AEP-76 Vol II Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - LOANED RADIO	NATO AEP-76 Vol III Ed. A Ver. 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Information Exchange Mechanism	NATO AEP-76 Vol IV Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Network Access	NATO AEP-76 Vol V Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Tactical Data Exchange - Link 1 (Point-to-Point)	NATO ATDLP-5.01 Ed A Ver 2:2020 / STANAG 5501 Ed 7	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 11/11B	NATO ATDLP-5.11 Ed B Ver 1:2019 / STANAG FT 5511 Ed 10	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 Ed B Ver 1:2019 / STANAG 5516 FT Ed 8	FMN4	C3B CaP1 TDL CaT
Joint Range Extension Application Protocol (JREAP)[1]	NATO ATDLP-5.18 Ed B Ver 2:2019 / STANAG FT 5518 Ed 4	BSP, FMN3, FMN4	C3B CaP1 TDL CaT
Tactical Data Link - Link 22	NATO ATDLP-5.22 Ed B Ver 1:2021 / STANAG 5522 Ed 6	BSP	C3B CaP1 TDL CaT

Title	Pubnum	Profiles	Responsible Party
Tactical Data Exchange - Link 16	NATO STANAG 5516 Ed 4:2008	FMN3	C3B CaP1 TDL CaT
Joint C3 Information Exchange Data Model (JC3IEDM)	NATO STANAG 5525 Ed 1:2007	BSP	C3B CaP1 DM CaT
Recognized Picture Services			
Identification Data Combining Process	NATO STANAG 4162 Ed 2:2009	BSP	C3B CaP2
Symbology Services			
NATO Vector Graphics (NVG)	ACT NVG 2.0.2:2015	FMN4	FMN CPWG
Portable Network Graphics (PNG) Specification, v. 1.0	IETF RFC 2083:1997	BSP	NCIA/CES
NATO Joint Military Symbology	NATO APP-06 Ed D Ver 1:2017 / STANAG 2019 Ed 7	FMN3, FMN4	MC, MCJSB, IERHWG
Military Telecommunications-Diagram Symbols	NATO STANAG 5042 Ed 1:1978	BSP	C3B CaP1
NATO Vector Graphics (NVG) Protocol version 1.5:2010 (ACT)	NATO TIDE/ NVG:2010	FMN3	NCIA/C2
Web Feature Service Implementation Specification	OGC 04-094:2005	BSP	NCIA/Sstrat/ Sea
OpenGIS Symbology Encoding Implementation Specification	OGC 05-077r4:2007	BSP	MC, MCJSB, JGS
OGC KML	OGC 07-147r2:2008	FMN4	FMN CPWG
Tasking and Order Services			
Joint C3 Information Exchange Data Model (JC3IEDM)	NATO STANAG 5525 Ed 1:2007	BSP	C3B CaP1 DM CaT
Battlespace Event Services			
NATO Message Catalogue	NATO APP-11 Ed D Ver 1:2015 / STANAG 7149 Ed 6	FMN4	MC, MCJSB, IERHWG
NATO Message Catalogue[2]	NATO Study (expected) APP-11 Ed D Ver 2:2017 / STANAG 7149 Ed 6 (study)	FMN3	MC, MCJSB, IERHWG
Battlespace Object Services			

Title	Pubnum	Profiles	Responsible Party
MIP4 Information Exchange Specification 4.3	MIP MIP4-IES-CoreSpec-4.3	FMN4	FMN CPWG
Web Service Messaging Profile (WSMP)	NATO ADatP-5644 (Study) Ed A Ver 1 / STANAG 5644 Ed 1	FMN4	C3B CaP1 DM CaT
Specifications Defining The Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Security	NATO AEP-76 Vol I Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Data Model	NATO AEP-76 Vol II Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - LOANED RADIO	NATO AEP-76 Vol III Ed. A Ver. 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Information Exchange Mechanism	NATO AEP-76 Vol IV Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Network Access	NATO AEP-76 Vol V Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Joint C3 Information Exchange Data Model (JC3IEDM)	NATO STANAG 5525 Ed 1:2007	FMN3	C3B CaP1 DM CaT
Track Management Services			
Guide to Electromagnetic Spectrum Management in military Operations	CCEB ACP 190(D):2013	BSP	C3B NACP CaT
Carrier Sense Multiple Access/ Collision Detect (CSMA/CD)	ISO/IEC 8802-3:2000	BSP	NCIA/NSII
NATO Friendly Force Information (FFI) Standard for Interoperability of Friendly Force Tracking Systems (FFTS)	NATO ADatP-36 Ed A Ver 1:2017 / STANAG 5527 Ed 1	FMN3, FMN4	

Title	Pubnum	Profiles	Responsible Party
Services to forward Friendly Force Information to Weapon Delivery Assets	NATO ADatP-37 Ed A Ver 1:2018 / STANAG 5528 Ed 1	FMN4	C3B CaP2
NATO Message Catalogue	NATO APP-11 Ed D Ver 1:2015 / STANAG 7149 Ed 6	FMN3, FMN4	MC, MCJSB, IERHWG
Spectrum Management in Military Operations	NATO ASP-01 Ed A Ver 2:2020 / STANAG 5641 Ed 1	BSP	C3B CaP3
Spectrum Management Allied Data Exchange Format - Extensible Markup LAanguage (SMADEF-XML)	NATO ASP-02 Ed A Ver 2:2020 / STANAG 5642 Ed 1	BSP	C3B CaP3
Tactical Data Exchange - Link 1 (Point-to-Point)	NATO ATDLP-5.01 Ed A Ver 2:2020 / STANAG 5501 Ed 7	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 11/11B	NATO ATDLP-5.11 Ed B Ver 1:2019 / STANAG FT 5511 Ed 10	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 Ed B Ver 1:2019 / STANAG 5516 FT Ed 8	FMN4	C3B CaP1 TDL CaT
Joint Range Extension Application Protocol (JREAP)[1]	NATO ATDLP-5.18 Ed B Ver 2:2019 / STANAG FT 5518 Ed 4	FMN3, FMN4	C3B CaP1 TDL CaT
Tactical Data Link - Link 22	NATO ATDLP-5.22 Ed B Ver 1:2021 / STANAG 5522 Ed 6	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 16	NATO STANAG 5516 Ed 4:2008	FMN3, SIP-RECOGNIZED-AIR-PICTURE-DATA	C3B CaP1 TDL CaT
Track Distribution Services			
NATO Friendly Force Information (FFI) Standard for Interoperability	NATO ADatP-36 Ed A Ver 1:2017 / STANAG 5527 Ed 1	FMN4	

Title	Pubnum	Profiles	Responsible Party
of Friendly Force Tracking Systems (FFTS)			
Services to forward Friendly Force Information to Weapon Delivery Assets	NATO ADatP-37 Ed A Ver 1:2018 / STANAG 5528 Ed 1	FMN4	C3B CaP2
Specifications Defining The Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Security	NATO AEP-76 Vol I Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Data Model	NATO AEP-76 Vol II Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - LOANED RADIO	NATO AEP-76 Vol III Ed. A Ver. 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Information Exchange Mechanism	NATO AEP-76 Vol IV Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Network Access	NATO AEP-76 Vol V Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
NATO Message Catalogue	NATO APP-11 Ed D Ver 1:2015 / STANAG 7149 Ed 6	FMN4	MC, MCJSB, IERHWG
Modeling and Simulation Services			
Modeling and Simulation (M&S) High Level Architecture (HLA)	IEEE P1516:2000	BSP	NCIA/E&T
SEDRIS functional specification	ISO/IEC FCD 18023-1:2006	BSP	NCIA/JISR
Common Object Request Broker Architecture (CORBA):2009	OMG formal/2002-12-06:2002	BSP	NCIA/JISR
Standard for Command and Control Systems - Simulation Systems Interoperation	SISO C2SIM:2020	BSP	NMSG/MS3

Title	Pubnum	Profiles	Responsible Party
Distributed Simulation Engineering and Execution Process	SISO DSEEP:2011	BSP	NMSG/MS3
Enumeratiions for Distributed Simulation	SISO Enum:2020	BSP	NMSG/MS3
High Level Architecture	SISO HLA:2010	BSP	NMSG/MS3

[1]The SIP for Recognized Air Picture Data refers to ATDLP-5.18 Ed B Version 1 instead of ATDLP-5.18 Ed B Version 2
[2]STANAG 7149 Ed 6/APP-11 (Study) Edition D Ver 2 should be noted as an emerging standard that will extend the message formats in APP-11(D)(1) with new Urgent Operational Requirements.

3.3.2. Core Services

Title	Pubnum	Profiles	Responsible Party
Core Services			
Identification cards - Contactless integrated circuit(s) cards - Proximity cards	ISO/IEC 14443:2008	BSP	C3B NPMA
Security Techniques - Evaluation criteria for IT security:2009	ISO/IEC 15408:2005	BSP	C3B CaP4
Information technology - Cloud computing - Overview and vocabulary	ISO/IEC 17788:2014	BSP	NCIA/CES
Information technology - Cloud computing - Reference architecture	ISO/IEC 17789:2014	BSP	NCIA/CES
Web Services for Management (WS-Management) Specification	ISO/IEC 17963:2013	BSP	NCIA/SMC
Business Support CIS Security Services			
Machine readable travel documents - Part 1: Machine readable passport	ISO/IEC 7501-1:2008	BSP	NCIA/Sstrat/ Sea
NATO Public Key Infrastructure (NPKI) Certificate Policy (CertP) Rev2.	NATO AC/322-D(2004)0024REV2:2008	BSP	C3B NPMA
SAML Token Profile 1.1	OASIS wss-v1.1-errata-os-SAMLTokenProfile:2006	BSP	C3B CaP4
WSS XML Schema	OASIS wssutil:2001	BSP	NCIA/CS
WS-Trust 1.4	OASIS wstrust-1.4:2012	BSP	NCIA/CS

Title	Pubnum	Profiles	Responsible Party
Basic Security Profile Version 1.1	WS-I BasicSecurityProfile-1.1-2010-01-24.html	BSP	C3B CaP4 :2010
Business Support Guard Services			
Interim Implementation Guide for ACP 123/STANAG 4406 Messaging Services Between Nations	CCEB ACP 145(A):2008	BSP	C3B NACP CaT
Communication and Collaboration Services			
Session Initiation Protocol	IETF RFC 3261:2002	BSP	FMN CPWG
Document management -- Portable document format -- Part 1: PDF 1.7	ISO 32000-1:2008	BSP	FMN CPWG
HyperText Markup Language (HTML)	ISO/IEC 15445:2000	BSP	FMN CPWG
Open Document Format (ODF) for Office Applications (OpenDocument) v1.0	ISO/IEC 26300:2006	BSP	FMN CPWG
Gateway Control Protocol (MGCP) v3	ITU-T H.248.1:2013	BSP	NCIA/NSII
Circuit-based Multimedia Comms. System	ITU-T H.320:2004	BSP	NCIA/NSII
Advanced Distributed Learning (ADL)	NATO STANAG 2591 Ed 1:2013	BSP	MC, MCJSB, NTG
XEP-0004: Data Forms	XMPP XEP-0004:2007	BSP	FMN CPWG
XEP-0030: Service Discovery	XMPP XEP-0030:2008	BSP	FMN CPWG
Informal Messaging Services			
SIP for Binding Metadata to Informal Messages	FMN SIP for Binding Metadata to Informal Messages:2021	FMN4	FMN CPWG
Hypertext Markup Language - 2.0	IETF RFC 1866:1995	FMN3	FMN CPWG
SMTP Service Extension for Message Size Declaration	IETF RFC 1870:1995	FMN3, FMN4	FMN CPWG
The text/enriched MIME Content-type	IETF RFC 1896:1996	FMN3, FMN4	FMN CPWG
Post Office Protocol - Version 3	IETF RFC 1939:1996	BSP	NCIA/CES

Title	Pubnum	Profiles	Responsible Party
SMTP Service Extension for Returning Enhanced Error Codes	IETF RFC 2034:1996	FMN3, FMN4	FMN CPWG
MIME - Part 1: Format of Internet Message Bodies	IETF RFC 2045:1996	FMN3, FMN4	FMN CPWG
MIME - Part 2: Media Types	IETF RFC 2046:1996	FMN3, FMN4	FMN CPWG
MIME - Part 3: Message Header Extensions for Non-ASCII Text	IETF RFC 2047:1996	FMN3, FMN4	FMN CPWG
MIME - Part 5: Conformance Criteria and Examples	IETF RFC 2049:1996	FMN3, FMN4	FMN CPWG
MIME Parameter Value and Encoded Word Extensions: Character Sets, Languages, and Continuations	IETF RFC 2231:1997	BINDING-SMTP-V2	NCIA
The TLS Protocol Version 1.0	IETF RFC 2246:1999	SIP-FOR-TLS	FMN CPWG
Content-ID and Message-ID Uniform Resource Locators	IETF RFC 2392:1998	BINDING-SMTP-V2	NCIA/CES
SMTP Service Extension for Command Pipelining	IETF RFC 2920:2000	FMN3, FMN4	FMN CPWG
SMTP Service Extension for Secure SMTP over TLS	IETF RFC 3207:2002	FMN3, FMN4	FMN CPWG
SMTP Service Extension for Delivery Status Notifications	IETF RFC 3461:2003	FMN3, FMN4	FMN CPWG
Internet Message Access Protocol Version 4, revision 1	IETF RFC 3501:2003	BSP	NCIA/CES
UTF-8, a transformation format of ISO/IEC 10646	IETF RFC 3629:2003	FMN3, FMN4	FMN CPWG
The Text/Plain Format and DelSp Parameters	IETF RFC 3676:2004	FMN4	FMN CPWG
Transport Layer Security Protocol Compression Methods	IETF RFC 3749:2004	SIP-FOR-TLS	FMN CPWG
Media Type Specifications and Registration Procedures	IETF RFC 4288:2005	FMN3	FMN CPWG
The Transport Layer Security (TLS) Protocol Version 1.1	IETF RFC 4346:2006	SIP-FOR-TLS	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Elliptic Curve Cryptography (ECC) Cipher Suites for Transport Layer Security (TLS)	IETF RFC 4492:2006	SIP-FOR-TLS	FMN CPWG
SMTP Service Extension for Authentication	IETF RFC 4954:2007	FMN3, FMN4	FMN CPWG
URI Fragment Identifiers for the text/plain Media Type	IETF RFC 5147:2008	FMN4	FMN CPWG
Transport Layer Security (TLS)	IETF RFC 5246:2008	SIP-FOR-TLS	C3B CaP4
Internet X.509 Public Key Infrastructure Certificate and CRL Profile	IETF RFC 5280:2008	SIP-FOR-TLS	FMN CPWG
Simple Mail Transfer Protocol	IETF RFC 5321:2008	FMN3, FMN4	FMN CPWG
Internet Message Format	IETF RFC 5322:2008	BINDING-SMTP-V2, FMN4	NCIA
Internet Calendaring and Scheduling Core Object Specification (iCalendar)	IETF RFC 5545:2009	FMN4	FMN CPWG
Extensible Provisioning Protocol (EPP) Domain Name Mapping	IETF RFC 5731:2009	BINDING-SMTP-V2	NCIA
Transport Layer Security (TLS) Renegotiation Indication Extension	IETF RFC 5746:2010	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) Extensions: Extension Definitions	IETF RFC 6066:2011	SIP-FOR-TLS	FMN CPWG
The Secure Sockets Layer (SSL) Protocol Version 3.0	IETF RFC 6101:2011	SIP-FOR-TLS	FMN CPWG
Representation and Verification of Domain-Based Application Service Identity within Internet Public Key Infrastructure Using X.509 (PKIX) Certificates in the Context of Transport Layer Security (TLS)	IETF RFC 6125:2011	SIP-FOR-TLS	FMN CPWG
SMTP Service Extension for 8-bit MIME Transport	IETF RFC 6152:2011	FMN3, FMN4	FMN CPWG
Prohibiting Secure Sockets Layer (SSL) Version 2.0	IETF RFC 6176:2011	SIP-FOR-TLS	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS) Heartbeat Extension	IETF RFC 6520:2012	SIP-FOR-TLS	FMN CPWG
Update to Internet Message Format to Allow Group Syntax in the From: and Sender: Header Fields	IETF RFC 6854:2013	BSP	NCIA/CES
X.509 Internet Public Key Infrastructure Online Certificate Status Protocol - OCSP	IETF RFC 6960:2013	SIP-FOR-TLS	FMN CPWG
The Transport Layer Security (TLS) Multiple Certificate Status Request Extension	IETF RFC 6961:2013	SIP-FOR-TLS	FMN CPWG
Encrypt-then-MAC for Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)	IETF RFC 7366:2014	SIP-FOR-TLS	FMN CPWG
Security Labels in Internet Email	IETF RFC 7444:2015	BINDING-SMTP-V2	NCIA
Recommendations for Secure Use of Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)	IETF RFC 7525:2015	SIP-FOR-TLS	FMN CPWG
Deprecating Secure Sockets Layer Version 3.0	IETF RFC 7568:2015	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) Session Hash and Extended Master Secret Extension	IETF RFC 7627:2015	SIP-FOR-TLS	FMN CPWG
Negotiated Finite Field Diffie-Hellman Ephemeral Parameters for Transport Layer Security (TLS)	IETF RFC 7919:2016	SIP-FOR-TLS	FMN CPWG
Transmission Control Protocol	IETF RFC 793:1981	SIP-FOR-TLS	FMN CPWG
The SSL Protocol	IETF RFC SSL2:1995	SIP-FOR-TLS	FMN CPWG
Electronic document file format for long-term preservation -- Part 1: Use of PDF 1.4 (PDF/A-1)	ISO 19005-1:2005	FMN3, FMN4	FMN CPWG
Electronic document file format for long-term preservation -- Part 2: Use of ISO 32000-1 (PDF/A-2)	ISO 19005-2:2011	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Document management -- Portable document format -- Part 1: PDF 1.7	ISO 32000-1:2008	FMN3, FMN4	FMN CPWG
Digital compression and coding of continuous-tone still images: Requirements and guidelines	ISO/IEC 10918-1:1994	FMN3, FMN4	FMN CPWG
Digital compression and coding of continuous-tone still images: Extensions	ISO/IEC 10918-3:1997	FMN3, FMN4	FMN CPWG
Open Document Format for Office Applications (OpenDocument) v1.2 -- Part 1: OpenDocument Schema	ISO/IEC 26300-1:2015	FMN4	FMN CPWG
Open Document Format for Office Applications (OpenDocument) v1.2 -- Part 2: Recalculated Formula (OpenFormula) Format	ISO/IEC 26300-2:2015	FMN4	FMN CPWG
Open Document Format for Office Applications (OpenDocument) v1.2 -- Part 3: Packages	ISO/IEC 26300-3:2015	FMN4	FMN CPWG
Office Open XML File Formats -- Part 1: Fundamentals and Markup Language Reference	ISO/IEC 29500-1:2012	FMN3, FMN4	FMN CPWG
Confidentiality Metadata Label Syntax	NATO ADatP-4774 Ed A Ver 1:2017 / STANAG 4774 Ed 1	BINDING-SMTP-V2, FMN4	C3B CaP1 DM CaT
Metadata Binding	NATO ADatP-4778 Ed A Ver 1:2018 / STANAG 4778 Ed 1	BINDING-SMTP-V2, FMN4	C3B CaP1 DM CaT
NATO Secondary Imagery Format (NSIF) STANAG 4545 Implementation Guide	NATO AEDP-04 Ed 2 Ver 1:2013 / STANAG 4545 Ed 2	FMN3	CNAD, AC/224 NAFAG, JCGISR
NATO Ground Moving Target Indicator(GMTI) Format	NATO AEDP-07 Ed 2 Ver 1:2010 / STANAG 4607 Ed 3	FMN3	FMN CPWG
NATO Intelligence, Surveillance And Reconnaissance Tracking Standard	NATO AEDP-12 Ed A Ver 1:2014 / STANAG 4676 Ed 1	FMN3	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
NATO standardization of measurement and signature intelligence (MASINT) Reporting	NATO AEDP-16 / STANAG (Study) 4716 Ed 1	FMN3	CNAD, AC/224 NAFAG, JCGISR
Allied Joint Medical Doctrine For Medical Evacuation	NATO AJMedP-2 Ed A Ver 1:2018 / STANAG 2546 Ed 2	FMN3, FMN4	COMEDS, MCMedSB, MedStd EM
Captured Persons, Materiel And Documents	NATO AJP-2.5 Ed A:2007 / STANAG 2195 Ed 2	FMN3	MC, MCJSB, JINT
NATO Message Catalogue	NATO APP-11 Ed D Ver 1:2015 / STANAG 7149 Ed 6	FMN4	MC, MCJSB, IERHWG
NATO Message Catalogue[2]	NATO Study (expected) APP-11 Ed D Ver 2:2017 / STANAG 7149 Ed 6 (study)	FMN3	MC, MCJSB, IERHWG
NATO Land Urgent Voice Messages (LUVM) Pocket Book	NATO ATP-97 Ed A Ver 1:2016 / STANAG 2627 Ed 1	FMN3, FMN4	MC, MCLSB, LO
US Motion Imagery Standards Board (MISB) - Motion Imagimary Standards Profile-2015.1	NATO NNSTD MISP-2015.1:2016 / STANAG 4609 Ed 4	FMN3	FMN CPWG
Air Reconnaissance Intelligence Report Forms	NATO STANAG 3377 Ed 6:2002	FMN3	FMN CPWG
XHTML™ 1.0 in XML Schema	W3C NOTE-xhtml1-schema-20020902:2002	FMN4	FMN CPWG
Hypertext Markup Language revision 5 (HTML5)	W3C REC-html5-20141028:2014	FMN4	FMN CPWG
Fax Services			
Procedures for document facsimile transmission in the general switched telephone network	ITU-T T.30:2005	BSP	NCIA/NSII
Interoperability of Tactical Digital Facsimile Equipment	NATO STANAG 5000 Ed 3:2006	BSP	C3B CaP1 N&S CaT
Calendaring and Scheduling Services			

Title	Pubnum	Profiles	Responsible Party
Internet Calendaring and Scheduling Core Object Specification (iCalendar)	IETF RFC 5545:2009	FMN3, FMN4	FMN CPWG
iCalendar Transport-Independent Interoperability Protocol (iTIP)	IETF RFC 5546:2009	FMN3, FMN4	FMN CPWG
iCalendar Message-Based Interoperability Protocol (iMIP)	IETF RFC 6047:2010	FMN3, FMN4	FMN CPWG
Video-based Communication Services			
Session Initiation Protocol	IETF RFC 3261:2002	FMN3, FMN4	FMN CPWG
Reliability of Provisional Responses in the Session Initiation Protocol (SIP)	IETF RFC 3262:2002	FMN3, FMN4	FMN CPWG
An Offer/Answer Model with the Session Description Protocol (SDP)	IETF RFC 3264:2002	FMN3, FMN4	FMN CPWG
The Session Initiation Protocol (SIP) UPDATE Method	IETF RFC 3311:2002	FMN3, FMN4	FMN CPWG
Session Timers in the Session Initiation Protocol (SIP)	IETF RFC 4028:2005	FMN3, FMN4	FMN CPWG
A Framework for Conferencing with the Session Initiation Protocol (SIP)	IETF RFC 4353:2006	FMN3, FMN4	FMN CPWG
Extending the Session Initiation Protocol (SIP) Reason Header for Preemption Events	IETF RFC 4411:2006	FMN3, FMN4	FMN CPWG
Communications Resource Priority for the Session Initiation Protocol (SIP)	IETF RFC 4412:2006	FMN3, FMN4	FMN CPWG
SDP: Session Description Protocol	IETF RFC 4566:2006	FMN3, FMN4	FMN CPWG
Session Initiation Protocol (SIP) Call Control - Conferencing for User Agents	IETF RFC 4579:2006	FMN3, FMN4	FMN CPWG
The Binary Floor Control Protocol (BFCP)	IETF RFC 4582:2006	FMN4	FMN CPWG
Conference Establishment Using Request-Contained Lists in the Session Initiation Protocol (SIP)	IETF RFC 5366:2008	FMN3, FMN4	FMN CPWG
RTP Payload Format for H.264 Video	IETF RFC 6184:2011	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
SIP-Specific Event Notification	IETF RFC 6665:2012	FMN3, FMN4	FMN CPWG
RTP Topologies	IETF RFC 7667:2015	FMN3, FMN4	FMN CPWG
Notation for national and international telephone numbers, e-mail addresses and web addresses	ITU-T E.123:2001	FMN3, FMN4	FMN CPWG
The international public telecommunication numbering plan	ITU-T E.164:2010	FMN3, FMN4	FMN CPWG
Pulse code modulation (PCM) of voice frequencies	ITU-T G.711:1988	FMN3, FMN4	FMN CPWG
Low-complexity coding at 24 and 32 kbit/s for hands-free operation in systems with low frame loss	ITU-T G.722.1:2005	FMN4	FMN CPWG
Low-complexity coding at 24 and 32 kbit/s for hands-free operation in systems with low frame loss	ITU-T G.722.1 (2005) Corrigendum 1 (06/08):2008	FMN3, FMN4	FMN CPWG
Advanced video coding for generic audiovisual services	ITU-T H.264:2017	FMN3, FMN4	FMN CPWG
International Network Numbering for Communications Systems in use in NATO	NATO STANAG 4705 Ed 1:2015	BSP, FMN3, FMN4	C3B CaP1 N&S CaT
The NATO Military Communications Directory System	NATO STANAG 5046 Ed 4:2015	BSP	C3B CaP1 N&S CaT
Audio-based Communication Services			
RTP: A Transport Protocol for Real-Time Applications	IETF RFC 3550:2003	FMN3, FMN4	FMN CPWG
Extending the Session Initiation Protocol (SIP) Reason Header for Preemption Events	IETF RFC 4411:2006	FMN3, FMN4	FMN CPWG
Communications Resource Priority for the Session Initiation Protocol (SIP)	IETF RFC 4412:2006	FMN3, FMN4	FMN CPWG
RTP Payload for DTMF Digits, Telephony Tones, and Telephony Signals	IETF RFC 4733:2006	FMN3, FMN4	FMN CPWG
SCIP Signalling Plan rev.3.3	CIS3 C&IP SCIP-210:2010	FMN3, FMN4	C3B CaP1 N&S CaT

Title	Pubnum	Profiles	Responsible Party
SCIP over the PSTN rev.1.0	CIS3 C&IP SCIP-214.1:2008	FMN4	C3B CaP1 N&S CaT
SCIP over RTP rev.1.0	CIS3 C&IP SCIP-214.2:2010	FMN3, FMN4	C3B CaP1 N&S CaT
Securing SIP Signaling - Use of TLS with SCIP	CIS3 C&IP SCIP-214.3:2014	FMN3, FMN4	C3B CaP1 N&S CaT
U.S. SCIP/IP Implementation Standard and MER Publication rev.2.2	CIS3 C&IP SCIP-215:2011	FMN4	C3B CaP1 N&S CaT
Minimum Essential Requirements (MER) for V.150.1 Gateways Publication rev.2.2	CIS3 C&IP SCIP-216:2011	FMN4	FMN CPWG
Interoperable Terminal Priority (TP) Community of Interest (COI) Specification rev.1.0	CIS3 C&IP SCIP-233.350:2012	FMN3, FMN4	C3B CaP1 N&S CaT
Secure MELP(e) Voice rev.1.1	CIS3 C&IP SCIP-233.501:2012	FMN3, FMN4	C3B CaP1 N&S CaT
Secure G.729D Voice Specification Rev. 1.1.	CIS3 C&IP SCIP-233.502:2011	FMN3, FMN4	C3B CaP1 N&S CaT
Notation for national and international telephone numbers, e-mail addresses and web addresses	ITU-T E.123:2001	FMN3, FMN4	FMN CPWG
The international public telecommunication numbering plan	ITU-T E.164:2010	FMN3, FMN4	FMN CPWG
Pulse code modulation (PCM) of voice frequencies	ITU-T G.711:1988	FMN3, FMN4	FMN CPWG
Low-complexity coding at 24 and 32 kbit/s for hands-free operation in systems with low frame loss	ITU-T G.722.1:2005	FMN4	FMN CPWG
Low-complexity coding at 24 and 32 kbit/s for hands-free operation in systems with low frame loss	ITU-T G.722.1 (2005) Corrigendum 1 (06/08):2008	FMN3, FMN4	FMN CPWG
14 kHz audio codec	ITU-T G.722.1c:2012	BSP	NCIA/NSII
Coding of speech at 8 kbit/s using conjugate-structure algebraic-code-excited linear prediction (CS-ACELP)	ITU-T G.729:2012	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Advanced video coding for generic audiovisual services	ITU-T H.264:2017	FMN3	FMN CPWG
Packet-based Multimedia Communication System	ITU-T H.323:2001	BSP	FMN CPWG
Secure Communications Interoperability Protocol (SCIP)	NATO AComP-5068 Ed A Ver 2:2017 / STANAG 5068 Ed 1	BSP	C3B CaP1 N&S CaT
NATO Secondary Imagery Format (NSIF) STANAG 4545 Implementation Guide	NATO AEDP-04 Ed 2 Ver 1:2013 / STANAG 4545 Ed 2	FMN3	CNAD, AC/224 NAFAG, JCGISR
NATO Ground Moving Target Indicator(GMTI) Format	NATO AEDP-07 Ed 2 Ver 1:2010 / STANAG 4607 Ed 3	FMN3	FMN CPWG
NATO Intelligence, Surveillance And Reconnaissance Tracking Standard	NATO AEDP-12 Ed A Ver 1:2014 / STANAG 4676 Ed 1	FMN3	FMN CPWG
NATO standardization of measurement and signature intelligence (MASINT) Reporting	NATO AEDP-16 / STANAG (Study) 4716 Ed 1	FMN3	CNAD, AC/224 NAFAG, JCGISR
Allied Joint Medical Doctrine For Medical Evacuation	NATO AJMedP-2 Ed A Ver 1:2018 / STANAG 2546 Ed 2	FMN3, FMN4	COMEDS, MCMedSB, MedStd EM
Captured Persons, Materiel And Documents	NATO AJP-2.5 Ed A:2007 / STANAG 2195 Ed 2	FMN3	MC, MCJSB, JINT
NATO Message Catalogue	NATO APP-11 Ed D Ver 1:2015 / STANAG 7149 Ed 6	FMN4	MC, MCJSB, IERHWG
NATO Message Catalogue[2]	NATO Study (expected) APP-11 Ed D Ver 2:2017 / STANAG 7149 Ed 6 (study)	FMN3	MC, MCJSB, IERHWG
NATO Land Urgent Voice Messages (LUVM) Pocket Book	NATO ATP-97 Ed A Ver 1:2016 / STANAG 2627 Ed 1	FMN3, FMN4	MC, MCLSB, LO

Title	Pubnum	Profiles	Responsible Party
US Motion Imagery Standards Board (MISB) - Motion Imagimary Standards Profile-2015.1	NATO NNSTD MISP-2015.1:2016 / STANAG 4609 Ed 4	FMN3	FMN CPWG
Air Reconnaissance Intelligence Report Forms	NATO STANAG 3377 Ed 6:2002	FMN3	FMN CPWG
The 600 Bit/S, 1200 Bit/S AND 2400 Bit/S NATO Interoperable Narrow Band Voice Coder	NATO STANAG 4591 Ed 1:2008	BSP	C3B CaP1 N&S CaT
International Network Numbering for Communications Systems in use in NATO	NATO STANAG 4705 Ed 1:2015	FMN3, FMN4	C3B CaP1 N&S CaT
Text-based Communication Services			
SIP for Binding Metadata to XMPP Stanzas	FMN SIP for Binding Metadata to XMPP Stanzas:2021	FMN4	FMN CPWG
The TLS Protocol Version 1.0	IETF RFC 2246:1999	SIP-FOR-TLS	FMN CPWG
Enhanced Security Services for S/MIME	IETF RFC 2634:1999	BINDING-XMPP-V2	NCIA
UTF-8, a transformation format of ISO/IEC 10646	IETF RFC 3629:2003	FMN3, FMN4	FMN CPWG
Transport Layer Security Protocol Compression Methods	IETF RFC 3749:2004	SIP-FOR-TLS	FMN CPWG
The Transport Layer Security (TLS) Protocol Version 1.1	IETF RFC 4346:2006	SIP-FOR-TLS	FMN CPWG
Elliptic Curve Cryptography (ECC) Cipher Suites for Transport Layer Security (TLS)	IETF RFC 4492:2006	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS)	IETF RFC 5246:2008	SIP-FOR-TLS	C3B CaP4
Internet X.509 Public Key Infrastructure Certificate and CRL Profile	IETF RFC 5280:2008	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) Renegotiation Indication Extension	IETF RFC 5746:2010	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) Extensions: Extension Definitions	IETF RFC 6066:2011	SIP-FOR-TLS	FMN CPWG
The Secure Sockets Layer (SSL) Protocol Version 3.0	IETF RFC 6101:2011	SIP-FOR-TLS	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Extensible Messaging and Presence Protocol (XMPP): Core	IETF RFC 6120:2011	BINDING-XMPP-V2, FMN3, FMN4	NCIA
Extensible Messaging and Presence Protocol (XMPP): Instant Messaging and Presence	IETF RFC 6121:2011	BINDING-XMPP-V2, FMN3, FMN4	NCIA
Extensible Messaging and Presence Protocol (XMPP): Address Format	IETF RFC 6122:2011	BINDING-XMPP-V2, FMN3, FMN4	NCIA
Representation and Verification of Domain-Based Application Service Identity within Internet Public Key Infrastructure Using X.509 (PKIX) Certificates in the Context of Transport Layer Security (TLS)	IETF RFC 6125:2011	SIP-FOR-TLS	FMN CPWG
Prohibiting Secure Sockets Layer (SSL) Version 2.0	IETF RFC 6176:2011	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS) Heartbeat Extension	IETF RFC 6520:2012	SIP-FOR-TLS	FMN CPWG
X.509 Internet Public Key Infrastructure Online Certificate Status Protocol - OCSP	IETF RFC 6960:2013	SIP-FOR-TLS	FMN CPWG
The Transport Layer Security (TLS) Multiple Certificate Status Request Extension	IETF RFC 6961:2013	SIP-FOR-TLS	FMN CPWG
Encrypt-then-MAC for Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)	IETF RFC 7366:2014	SIP-FOR-TLS	FMN CPWG
Recommendations for Secure Use of Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)	IETF RFC 7525:2015	SIP-FOR-TLS	FMN CPWG
Deprecating Secure Sockets Layer Version 3.0	IETF RFC 7568:2015	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) Session Hash and Extended Master Secret Extension	IETF RFC 7627:2015	SIP-FOR-TLS	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Negotiated Finite Field Diffie-Hellman Ephemeral Parameters for Transport Layer Security (TLS)	IETF RFC 7919:2016	SIP-FOR-TLS	FMN CPWG
Transmission Control Protocol	IETF RFC 793:1981	SIP-FOR-TLS	FMN CPWG
The SSL Protocol	IETF RFC SSL2:1995	SIP-FOR-TLS	FMN CPWG
NATO Friendly Force Information (FFI) Standard for Interoperability of Friendly Force Tracking Systems (FFTS)	NATO ADatP-36 Ed A Ver 1:2017 / STANAG 5527 Ed 1	FMN4	
Confidentiality Metadata Label Syntax	NATO ADatP-4774 Ed A Ver 1:2017 / STANAG 4774 Ed 1	BINDING-XMPP-V2, FMN4	C3B CaP1 DM CaT
Metadata Binding	NATO ADatP-4778 Ed A Ver 1:2018 / STANAG 4778 Ed 1	BINDING-XMPP-V2, FMN4	C3B CaP1 DM CaT
NATO Secondary Imagery Format (NSIF) STANAG 4545 Implementation Guide	NATO AEDP-04 Ed 2 Ver 1:2013 / STANAG 4545 Ed 2	FMN3	CNAD, AC/224 NAFAG, JCGISR
NATO Ground Moving Target Indicator(GMTI) Format	NATO AEDP-07 Ed 2 Ver 1:2010 / STANAG 4607 Ed 3	FMN3	FMN CPWG
NATO Intelligence, Surveillance And Reconnaissance Tracking Standard	NATO AEDP-12 Ed A Ver 1:2014 / STANAG 4676 Ed 1	FMN3	FMN CPWG
NATO standardization of measurement and signature intelligence (MASINT) Reporting	NATO AEDP-16 / STANAG (Study) 4716 Ed 1	FMN3	CNAD, AC/224 NAFAG, JCGISR
Allied Joint Medical Doctrine For Medical Evacuation	NATO AJMedP-2 Ed A Ver 1:2018 / STANAG 2546 Ed 2	FMN3, FMN4	COMEDS, MCMedSB, MedStd EM
Captured Persons, Materiel And Documents	NATO AJP-2.5 Ed A:2007 / STANAG 2195 Ed 2	FMN3	MC, MCJSB, JINT
NATO Message Catalogue	NATO APP-11 Ed D Ver 1:2015 / STANAG 7149 Ed 6	FMN4	MC, MCJSB, IERHWG

Title	Pubnum	Profiles	Responsible Party
NATO Message Catalogue[2]	NATO Study (expected) APP-11 Ed D Ver 2:2017 / STANAG 7149 Ed 6 (study)	FMN3	MC, MCJSB, IERHWG
NATO Land Urgent Voice Messages (LUVM) Pocket Book	NATO ATP-97 Ed A Ver 1:2016 / STANAG 2627 Ed 1	FMN3, FMN4	MC, MCLSB, LO
US Motion Imagery Standards Board (MISB) - Motion Imagimary Standards Profile-2015.1	NATO NNSTD MISP-2015.1:2016 / STANAG 4609 Ed 4	FMN3	FMN CPWG
Air Reconnaissance Intelligence Report Forms	NATO STANAG 3377 Ed 6:2002	FMN3	FMN CPWG
Character Model for the World Wide Web 1.0: Fundamentals	W3C REC-charmod-20050215:2005	FMN4	FMN CPWG
Internationalization Tag Set (ITS) Version 1.0	W3C REC-its-20070403:2007	FMN4	FMN CPWG
Internationalization Tag Set (ITS) Version 2.0	W3C REC-its20-20131029:2013	FMN4	FMN CPWG
Ruby Annotation	W3C REC-ruby-20010531:2001	FMN4	FMN CPWG
XEP-0004: Data Forms	XMPP XEP-0004:2007	FMN3	FMN CPWG
Data Forms	XMPP XEP-0004:2020	FMN4	FMN CPWG
XEP-0012: Last Activity	XMPP XEP-0012:2008	FMN3, FMN4	FMN CPWG
XEP-0030: Service Discovery	XMPP XEP-0030:2008	FMN3	FMN CPWG
Service Discovery	XMPP XEP-0030:2017	FMN4	FMN CPWG
XEP-0045: Multi-User Chat	XMPP XEP-0045:2012	FMN3	FMN CPWG
Multi-User Chat	XMPP XEP-0045:2019	FMN4	FMN CPWG
XEP-0047: In-Band Bytestreams	XMPP XEP-0047:2012	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
XEP-0049: Private XML Storage	XMPP XEP-0049:2004	FMN3	FMN CPWG
XEP-0054: vcard-temp	XMPP XEP-0054:2008	FMN3, FMN4	FMN CPWG
XEP-0055: Jabber Search	XMPP XEP-0055:2009	FMN3, FMN4	FMN CPWG
XEP-0059: Result Set Management	XMPP XEP-0059:2006	FMN4	NCIA
XEP-0060: Publish-Subscribe	XMPP XEP-0060:2010	BINDING-XMPP-V2, FMN3	NCIA
Publish-Subscribe	XMPP XEP-0060:2020	FMN4	FMN CPWG
XEP-0065: SOCKS5 Bytestreams	XMPP XEP-0065:2011	FMN3	FMN CPWG
XEP-0068: Field Standardization for Data Forms	XMPP XEP-0068:2012	FMN4	NCIA
XEP-0082: XMPP Date and Time Profiles	XMPP XEP-0082:2013	FMN4	FMN CPWG
XEP-0092: Software Version	XMPP XEP-0092:2007	FMN3, FMN4	FMN CPWG
JID Escaping	XMPP :2007	FMN4	FMN CPWG
XEP-0114: Jabber Component Protocol	XMPP XEP-0114:2012	FMN3, FMN4	FMN CPWG
XEP-0115: Entity Capabilities	XMPP XEP-0115:2008	FMN3	FMN CPWG
Entity Capabilities	XMPP XEP-0115:2020	FMN4	FMN CPWG
XEP-0160: Best Practices for Handling Offline Messages	XMPP XEP-0160:2016	FMN3, FMN4	FMN CPWG
XEP-0198: Stream Management	XMPP XEP-0198:2011	FMN3	NCIA
XEP-0199: XMPP Ping	XMPP XEP-0199:2009	FMN3, FMN4	NCIA
XEP-0202: Entity Time	XMPP XEP-0202:2009	FMN3, FMN4	NCIA

Title	Pubnum	Profiles	Responsible Party
XEP-0203: Delayed Delivery	XMPP XEP-0203:2009	FMN3, FMN4	FMN CPWG
XEP-0220: Server Dialback	XMPP XEP-0220:2014	FMN3	FMN CPWG
Server Dialback	XMPP XEP-0220:2015	FMN4	FMN CPWG
XEP-0258: Security Labels in XMPP	XMPP XEP-0258:2013	BINDING-XMPP-V2, FMN3	NCIA
XEP-0313: Message Archive Management	XMPP XEP-0313:2017	FMN4	FMN CPWG
XEP-0346: Form Discovery and Publishing	XMPP XEP-0346:2017	FMN4	FMN CPWG
Presence Services			
Extensible Messaging and Presence Protocol (XMPP): Core	IETF RFC 6120:2011	FMN3, FMN4	NCIA
Extensible Messaging and Presence Protocol (XMPP): Instant Messaging and Presence	IETF RFC 6121:2011	FMN3, FMN4	NCIA
Extensible Messaging and Presence Protocol (XMPP): Address Format	IETF RFC 6122:2011	FMN3, FMN4	NCIA
XEP-0004: Data Forms	XMPP XEP-0004:2007	FMN3	FMN CPWG
XEP-0012: Last Activity	XMPP XEP-0012:2008	FMN3, FMN4	FMN CPWG
XEP-0030: Service Discovery	XMPP XEP-0030:2008	FMN3	FMN CPWG
Service Discovery	XMPP XEP-0030:2017	FMN4	FMN CPWG
XEP-0045: Multi-User Chat	XMPP XEP-0045:2012	FMN3	FMN CPWG
Multi-User Chat	XMPP XEP-0045:2019	FMN4	FMN CPWG
XEP-0047: In-Band Bytestreams	XMPP XEP-0047:2012	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
XEP-0049: Private XML Storage	XMPP XEP-0049:2004	FMN3	FMN CPWG
XEP-0054: vcard-temp	XMPP XEP-0054:2008	FMN3, FMN4	FMN CPWG
XEP-0055: Jabber Search	XMPP XEP-0055:2009	FMN3, FMN4	FMN CPWG
XEP-0059: Result Set Management	XMPP XEP-0059:2006	FMN4	NCIA
XEP-0060: Publish-Subscribe	XMPP XEP-0060:2010	FMN3	NCIA
Publish-Subscribe	XMPP XEP-0060:2020	FMN4	FMN CPWG
XEP-0065: SOCKS5 Bytestreams	XMPP XEP-0065:2011	FMN3	FMN CPWG
XEP-0082: XMPP Date and Time Profiles	XMPP XEP-0082:2013	FMN4	FMN CPWG
XEP-0092: Software Version	XMPP XEP-0092:2007	FMN3, FMN4	FMN CPWG
JID Escaping	XMPP :2007	FMN4	FMN CPWG
XEP-0114: Jabber Component Protocol	XMPP XEP-0114:2012	FMN3, FMN4	FMN CPWG
XEP-0115: Entity Capabilities	XMPP XEP-0115:2008	FMN3	FMN CPWG
Entity Capabilities	XMPP XEP-0115:2020	FMN4	FMN CPWG
XEP-0160: Best Practices for Handling Offline Messages	XMPP XEP-0160:2016	FMN3, FMN4	FMN CPWG
XEP-0198: Stream Management	XMPP XEP-0198:2011	FMN3	NCIA
XEP-0199: XMPP Ping	XMPP XEP-0199:2009	FMN3, FMN4	NCIA
XEP-0202: Entity Time	XMPP XEP-0202:2009	FMN3, FMN4	NCIA
XEP-0203: Delayed Delivery	XMPP XEP-0203:2009	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
XEP-0220: Server Dialback	XMPP XEP-0220:2014	FMN3	FMN CPWG
Server Dialback	XMPP XEP-0220:2015	FMN4	FMN CPWG
XEP-0258: Security Labels in XMPP	XMPP XEP-0258:2013	FMN3	NCIA
XEP-0313: Message Archive Management	XMPP XEP-0313:2017	FMN4	FMN CPWG
Application Sharing Services			
Data Protocols for Multimedia Conferencing	ITU-T T.120:2007	BSP	NCIA/NSII
Geospatial Services			
		FMN4	
XML Schema of the Geodatabase	ESRI :2008	FMN4	FMN CPWG
JPEG 2000 image coding system: Core coding system	ISO/IEC 15444-1:2004	FMN4	NCIA/JISR
		FMN4	
NATO Geospatial Metadata Profile	NATO AGeoP-08 Ed B Ver 1:2019 / STANAG 2586 Ed 2	BSP	MC, MCJSB, JGS
NATO Geospatial Information Framework	NATO AGeoP-11 Ed B Ver 1:2018 / STANAG 2592 Ed 2	FMN4	MC, MCJSB, JGS
Additional Military Layers (AML) - Digital Geospatial Data Products	NATO AGeoP-19 Ed A Ver 1:2015 / STANAG 7170 Ed 3	BSP, FMN4	MC, MCJSB, JGS
Geodetic Datums, Projections, Grids and Grid References	NATO AGeoP-21 Ed A Ver 1:2016 / STANAG 2211 Ed 7	BSP	MC, MCJSB, JGS
Defence Geospatial Web Services	NATO AGeoP-26 Ed A Ver 1:2020 / STANAG 6523 Ed 1	BSP	MC, MCJSB, JGS
Standard on warship Electronic Chart Display and Information Systems (WECDIS)	NATO ANP-4564 Ed A Ver 1:2017 / STANAG 4564 Ed 3	BSP	C3B CaP2

Title	Pubnum	Profiles	Responsible Party
Digital Terrain Elevation Data (DTED) Exchange Format	NATO STANAG 3809 Ed 4:2004	BSP	MC, MCJSB, JGS
Compressed ARC Digitized Raster Graphics (CADRG)	NATO STANAG 7098 Ed 2:2004	BSP	MC, MCJSB, JGS
Controlled Imagery Base (CIB)	NATO STANAG 7099 Ed 2:2004	BSP	MC, MCJSB, JGS
Vector Smart Map (VMAP) Level 1	US DoD MIL-PRF-89033:1995	FMN4	FMN CPWG
Compressed ARC Digitized Raster Graphics (ADRG)	NGA MIL-PRF-89038:1994	FMN4	FMN CPWG
Vector Smart Map (VMAP) Level 0	US DoD MIL-PRF-89039:1995	FMN4	FMN CPWG
Raster Product Format	NGA MIL-STD-2411:2010	FMN4	FMN CPWG
World Geodetic System 84 (WGS-84)	NGA TR 8350.2:2004	BSP	NCIA/JISR
GML in JPEG 2000 for Geographic Imagery (GMLJP2)	OGC 05-047r3:2006	FMN3, FMN4	FMN CPWG
Open GIS Web Map Service Implementation Specification	OGC 06-042:2006	BSP	FMN CPWG
Web Services Common Implementation Specification v2.0.0	OGC 06-121r9:2010	BSP	NCIA
OpenGIS Web Map Tile Service Implementation Standard	OGC 07-057r7:2010	BSP	NCIA/AWG
OGC KML	OGC 07-147r2:2008	FMN3	FMN CPWG
GML Simple Features Profile v2.0	OGC 10-100r2:2010	BSP	NCIA/AWG
Geographical Tagged Image Format (GeoTIFF)	OSGEO 1.8.2:2000	FMN3	FMN CPWG
Geospatial Web Map Services			
Defence Geospatial Web Services	NATO AGeoP-26 Ed A Ver 1:2020 / STANAG 6523 Ed 1	FMN4	MC, MCJSB, JGS
Open GIS Web Map Service Implementation Specification	OGC 06-042:2006	FMN3, FMN4	FMN CPWG
Geospatial Web Feature Services			

Title	Pubnum	Profiles	Responsible Party
OpenGIS Web Feature Service 2.0 Interface Standard	OGC 09-025r2:2006	FMN3, FMN4	FMN CPWG
Geospatial Web Coverage Services			
Web Coverage Service Core (WCS):2012	OGC 09-110r4:2012	BSP	NCIA/JISR
Geospatial Web Map Tile Services			
Defence Geospatial Web Services	NATO AGeoP-26 Ed A Ver 1:2020 / STANAG 6523 Ed 1	FMN4	MC, MCJSB, JGS
OpenGIS Web Map Tile Service Implementation Standard	OGC 07-057r7:2010	FMN4	NCIA/AWG
Geography Markup Language (GML) simple features profile Technical Note v 2.0	OGC 11-044:2011	FMN3	FMN CPWG
Content Management Services			
XMP Specification Part 3, Storage in Files	ADOBE XMP-part3-2016:2016	BINDING-EXTENSIBLE-V2	NCIA
HMAC: Keyed-Hashing for Message Authentication	IETF RFC 2104:1997	BINDING-CRYPTO-V2	NCIA
Key words for use in RFCs to Indicate Requirement Levels	IETF RFC 2119:1997	BINDING-COMMON-XML	NCIA
MIME Parameter Value and Encoded Word Extensions: Character Sets, Languages, and Continuations	IETF RFC 2231:1997	BINDING-REST-V2, BINDING-SMTP-V2	NCIA
Content-ID and Message-ID Uniform Resource Locators	IETF RFC 2392:1998	BINDING-SMTP-V2	NCIA/CES
Enhanced Security Services for S/MIME	IETF RFC 2634:1999	BINDING-XMPP-V2	NCIA
UTF-8, a transformation format of ISO/IEC 10646	IETF RFC 3629:2003	FMN3, FMN4	FMN CPWG
Internet X.509 Public Key Infrastructure Certificate and CRL Profile	IETF RFC 5280:2008	BINDING-CRYPTO-V2	FMN CPWG
Internet Message Format	IETF RFC 5322:2008	BINDING-SMTP-V2	NCIA

Title	Pubnum	Profiles	Responsible Party
Extensible Provisioning Protocol (EPP) Domain Name Mapping	IETF RFC 5731:2009	BINDING-SMTP-V2	NCIA
Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 3.2 Message Specification	IETF RFC 5751:2010	BINDING-CRYPTO-V2	NCIA
Extensible Messaging and Presence Protocol (XMPP): Core	IETF RFC 6120:2011	BINDING-XMPP-V2	NCIA
Extensible Messaging and Presence Protocol (XMPP): Instant Messaging and Presence	IETF RFC 6121:2011	BINDING-XMPP-V2	NCIA
Extensible Messaging and Presence Protocol (XMPP): Address Format	IETF RFC 6122:2011	BINDING-XMPP-V2	NCIA
Additional XML Security Uniform Resource Identifiers (URIs)	IETF RFC 6931:2013	BINDING-CRYPTO-V2	NCIA
Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing	IETF RFC 7230:2014	BINDING-REST-V2	NCIA/CES
Security Labels in Internet Email	IETF RFC 7444:2015	BINDING-REST-V2, BINDING-SMTP-V2	NCIA
JSON Web Signature (JWS)	IETF RFC 7515:2015	BINDING-CRYPTO-V2	NCIA
Graphic Technology - Extensible metadata platform (XMP) specification - Part 1: Data model, serialization and core propertie	ISO 16684-1:2012	BINDING-EXTENSIBLE-V2	NCIA
Information Technology - Document Schema Definition Languages (DSDL) - Part 3: Rules-based validation - Schematron Second Edition	ISO 19757-3:2016	BINDING-COMMON-XML	NCIA
Office Open XML File Formats -- Part 2: Open Packaging Conventions	ISO/IEC 29500-2:2012	BINDING-GENERIC-V2, BINDING-OOXML-V2	NCIA

Title	Pubnum	Profiles	Responsible Party
Information Technology - Security Techniques - Security information objects for access control	ITU-T X.841:2000	BINDING-REST-V2	NCIA
Confidentiality Metadata Label Syntax	NATO ADatP-4774 Ed A Ver 1:2017 / STANAG 4774 Ed 1	BINDING-COMMON-XML, BINDING-CRYPTO-V2, BINDING-EXTENSIBLE-V2, BINDING-GENERIC-V2, BINDING-OOXML-V2, BINDING-REST-V2, BINDING-SIDECAR-V2, BINDING-SMTP-V2, BINDING-SOAP, BINDING-WSMP-V2, BINDING-XMPP-V2	C3B CaP1 DM CaT
Metadata Binding	NATO ADatP-4778 Ed A Ver 1:2018 / STANAG 4778 Ed 1	BINDING-COMMON-XML, BINDING-CRYPTO-V2, BINDING-EXTENSIBLE-V2, BINDING-GENERIC-V2, BINDING-OOXML-V2, BINDING-REST-V2, BINDING-SIDECAR-V2,	C3B CaP1 DM CaT

Title	Pubnum	Profiles	Responsible Party
		BINDING-SMTP-V2, BINDING-SOAP, BINDING-WSMP-V2, BINDING-XMPP-V2	
Context/value Association using genericode 1.0	OASIS context-value-association-1.0:2010	BINDING-COMMON-XML	NCIA
Code List Representation (Genericode)	OASIS cs-genericode-1.0:2007	BINDING-COMMON-XML	NCIA
Web Services Security: SOAP Message Security 1.1	OASIS wss-v1.1-spec-os-SOAPMessageSecurity:2006	BINDING-CRYPTO-V2	NCIA/CES
Simple Object Access Protocol (SOAP)	W3C NOTE-SOAP-20000508:2000	BINDING-SOAP	NCIA
XML Security Algorithm Cross-Reference	W3C NOTE-xmlsec-algorithms-20130411:2013	BINDING-CRYPTO-V2	NCIA
RDF 1.1 Concepts and Abstract Syntax	W3C REC-rdf11-concepts-20140225:2014	BINDING-EXTENSIBLE-V2	NCIA/CES
RDF Primer	W3C REC-rdf-primer-20040210:2004	BINDING-EXTENSIBLE-V2	NCIA
SOAP Version 1.2 Part 1: Messaging Framework	W3C REC-soap12-part1-20030624:2003	BINDING-SOAP	NCIA
Associating Style Sheets with XML documents, Version 1.0	W3C REC-xml-stylesheet-19990629:1999	BINDING-COMMON-XML	NCIA/CES
eXtensible Markup Language (XML) version 1.0 (Fifth Edition)	W3C REC-xml-20081126:2008	BINDING-EXTENSIBLE-V2	FMN CPWG
XML-Signature Syntax and Processing (Second Edition)	W3C REC-xmldsig-core-20080610:2008	BINDING-CRYPTO-V2, BINDING-SOAP	NCIA
Errata for XML Signature 2nd Edition	W3C REC-xmldsig-core-20080610:2014	BINDING-CRYPTO-V2	NCIA

Title	Pubnum	Profiles	Responsible Party
XML Signature Syntax and Processing Version 1.1	W3C REC-xmldsig-core1-20130411:2013	BINDING-CRYPTO-V2	NCIA
XML Encryption Syntax and Processing	W3C REC-xmlenc-core-20021210:2002	BINDING-CRYPTO-V2	NCIA
XML Encryption Syntax and Processing Version 1.1	W3C REC-xmlenc-core1-20130411:2013	BINDING-CRYPTO-V2	NCIA
XML Schema Definition Language (XSD) 1.1 Part 1: Structures	W3C REC-xmlschema11-1-20120405:2012	BINDING-COMMON-XML	NATO Archive Committee
XML Path Language 1.0	W3C REC-xpath-19991119:1999	BINDING-CRYPTO-V2	NCIA
XML Pointer Language (Xpointer)	W3C wd-xptr-20020816:2002	BINDING-CRYPTO-V2	NCIA
Open XML SPIF	XML SPIF xmlspif:2010	BINDING-COMMON-XML	NCIA
XEP-0060: Publish-Subscribe	XMPP XEP-0060:2010	BINDING-XMPP-V2	NCIA
XEP-0258: Security Labels in XMPP	XMPP XEP-0258:2013	BINDING-XMPP-V2	NCIA
Formal Messaging Services			
Concept of NATO Message Text Formatting System (CONFORMETS)	NATO ADatP-03 Ed A Ver 4:2021 / STANAG 5500 Ed 8	BSP	C3B CaP1 MTF CaT
NATO Secondary Imagery Format (NSIF) STANAG 4545 Implementation Guide	NATO AEDP-04 Ed 2 Ver 1:2013 / STANAG 4545 Ed 2	BSP	CNAD, AC/224 NAFAG, JCGISR
NATO Message Catalogue	NATO APP-11 Ed D Ver 1:2015 / STANAG 7149 Ed 6	BSP	MC, MCJSB, IERHWG
Tactical Data Exchange - Link 1 (Point-to-Point)	NATO ATDLP-5.01 Ed A Ver 2:2020 / STANAG 5501 Ed 7	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 Ed B Ver 1:2019 / STANAG 5516 FT Ed 8	BSP	C3B CaP1 TDL CaT

Title	Pubnum	Profiles	Responsible Party
Tactical Data Link - Link 22	NATO ATDLP-5.22 Ed B Ver 1:2021 / STANAG 5522 Ed 6	BSP	C3B CaP1 TDL CaT
Military Message Handling System (MMHS)	NATO STANAG 4406 Ed 2:2006	BSP	C3B CaP1
Search Services			
The Dublin Core Metadata Element Set	ISO 15836:2010	BSP	NCIA/Sstrat/ Sea
TIDE Information Discovery (Request-Response) Protocol v2.3	NATO TIDE/TIDE-ID-RR:2009	BSP	NCIA/CES
Archiving Services			
TIFF Revision 6.0	ADOBE TIFF:1992	ARCHIVE-ARCHIVE	NATO Archive Committee
Specification of the Broadcast Wave Format (BWF) - Version 2	EBU Tech 3285:2011	ARCHIVE-ARCHIVE	NATO Archive Committee
MIME Encapsulation of Aggregate Documents, such as HTML (MHTML)	IETF RFC 2557:2006	ARCHIVE-ARCHIVE	NCIA/CES
The application/mbox Media Type	IETF RFC 4155:2005	ARCHIVE-ARCHIVE	NCIA/CES
Common Format and MIME Type for Comma-Separated Values (CSV) Files	IETF RFC 4180:2005	ARCHIVE-ARCHIVE	NCIA/CES
Information and documentation - WARCfile format.	ISO 28500:2009	ARCHIVE-ARCHIVE	NATO Archive Committee
Document management -- Portable document format -- Part 1: PDF 1.7	ISO 32000-1:2008	ARCHIVE-ARCHIVE	FMN CPWG
Digital compression and coding of continuous-tone still images: Requirements and guidelines	ISO/IEC 10918-1:1994	ARCHIVE-ARCHIVE	FMN CPWG
Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s; PCM Part 3: audio	ISO/IEC 11172-3:1993	ARCHIVE-ARCHIVE	NCIA/NSII

Title	Pubnum	Profiles	Responsible Party
Generic coding of moving pictures and associated audio information: Video	ISO/IEC 13818-2:2000	ARCHIVE-ARCHIVE	NCIA/CES
Generic coding of moving pictures and associated audio information -- Part 3: Audio	ISO/IEC 13818-3:1998	ARCHIVE-ARCHIVE	NCIA/CES
Coding of audio-visual objects -- Part 10: Advanced Video Coding	ISO/IEC 14496-10:2012	ARCHIVE-ARCHIVE	NCIA/CES
Coding of audio-visual objects -- Part 2: Visual	ISO/IEC 14496-2:2004	ARCHIVE-ARCHIVE	NCIA/CES
JPEG 2000 image coding system: Core coding system	ISO/IEC 15444-1:2004	ARCHIVE-ARCHIVE	NCIA/JISR
Database languages - SQL - Part 1: Framework	ISO/IEC 9075-1:2011	ARCHIVE-ARCHIVE	NCIA/Sstrat/ Sea
OGC KML	OGC 07-147r2:2008	ARCHIVE-ARCHIVE	FMN CPWG
OGC GeoPackage Encoding Standard V1.0.	OGC 12-128r10:2004	ARCHIVE-ARCHIVE	NCIA/AWG
Scalable Vector Graphics (SVG) 1.1 Specification (Second Edition)	W3C REC-SVG11-20110816:2011	ARCHIVE-ARCHIVE	NATO Archive Committee
Extensible Markup Language (XML) version 1.1 (Second Edition)	W3C REC-xml11-20060816:2006	ARCHIVE-ARCHIVE	NCIA/CES
XML Schema Definition Language (XSD) 1.1 Part 1: Structures	W3C REC-xmlschema11-1-20120405:2012	ARCHIVE-ARCHIVE	NATO Archive Committee
XML Schema Definition Language (XSD) 1.1 Part 2: Datatypes	W3C REC-xmlschema11-2-20120405:2012	ARCHIVE-ARCHIVE	NATO Archive Committee
Data Science Services			
Predictive Model Markup Language (PMML)	DMG PMML-4.2.1:2015	BSP	NCIA
Cross.Industry Standard Process for Data Mining	TMA crisp-dm-1.0:2000	BSP	NCIA
SPARQL 1.1 Query Language	W3C PR-sparql11-query-20121108:2012	BSP	NCIA
Platform Services			

Title	Pubnum	Profiles	Responsible Party
Representational State Transfer (REST)	ACM 2002-REST-TOIT:2000	BSP	FMN CPWG
Atom Publishing Protocol	IETF RFC 5023:2007	BSP	FMN CPWG
Information technology - Distributed Application Platforms and Services (DAPS) - General technical principles of Service Oriented Architecture	ISO/IEC 30102:2012	BSP	NCIA/CES
ebXML Registry Information Model Version 3.0	OASIS regrep-rim-3.0-os:2005	BSP	NCIA/CES
Simple Object Access Protocol (SOAP)	W3C NOTE-SOAP-20000508:2000	BSP	NCIA
Web Services Addressing 1.0 - Metadata	W3C REC-ws-addr-metadata-20070904:2007	BSP	NCIA/CES
Web Services Addressing 1.0 - SOAP Binding	W3C REC-ws-addr-soap-20060509:2006	BSP	NCIA/CES
Platform CIS Security Services			
Digital Signature Algorithm RSA 2048	RSA PKCS#1 v2.1:2002	BSP	NCIA/CS
XML Signature Syntax and Processing (2nd ed.):2008	W3C xmldsig-core:2008	BSP	NCIA/CES
Platform Guard Services			
Secure Shell (SSH)	IETF RFC 4250:2006	BSP	C3B CaP4
Transport Layer Security (TLS)	IETF RFC 5246:2008	BSP	C3B CaP4
Security Token Services			
The Kerberos v5 Simple Authentication and Security Layer (SASL) Mechanism	IETF RFC 4752:2006	BSP	FMN CPWG
Internet X.509 Public Key Infrastructure Certificate and CRL Profile	IETF RFC 5280:2008	BSP	FMN CPWG
Web Services Federation Language (WS-Federation) Version 1.2	OASIS wsfed:2009	BSP	NCIA/CES
Web Services Policy 1.5 - Guidelines for Policy Assertion Authors	W3C NOTE-ws-policy-guidelines-20071112:2007	BSP	NCIA/CS

Title	Pubnum	Profiles	Responsible Party
Web Services Policy 1.5 - Primer	W3C NOTE-ws-policy-primer-20071112:2007	BSP	NCIA/CS
Web Services Policy 1.5 - Framework	W3C REC-ws-policy-20070904:2007	BSP	NCIA/CS
Policy Decision Point Services			
Biometrics Data, Interchange, Watchlisting and Reporting	NATO AEDP-15 Ed A Ver 1:2013 / STANAG 4715 Ed 1	BSP	CNAD, AC/224 NAFAG, JCGISR
Information Labeling Services			
XMP Specification Part 3, Storage in Files	ADOBE XMP-part3-2016:2016	BINDING-EXTENSIBLE-V2	NCIA
HMAC: Keyed-Hashing for Message Authentication	IETF RFC 2104:1997	BINDING-CRYPTO-V2	NCIA
Key words for use in RFCs to Indicate Requirement Levels	IETF RFC 2119:1997	BINDING-COMMON-XML	NCIA
MIME Parameter Value and Encoded Word Extensions: Character Sets, Languages, and Continuations	IETF RFC 2231:1997	BINDING-REST-V2, BINDING-SMTP-V2	NCIA
Content-ID and Message-ID Uniform Resource Locators	IETF RFC 2392:1998	BINDING-SMTP-V2	NCIA/CES
Enhanced Security Services for S/MIME	IETF RFC 2634:1999	BINDING-XMPP-V2	NCIA
Internet X.509 Public Key Infrastructure Certificate and CRL Profile	IETF RFC 5280:2008	BINDING-CRYPTO-V2	FMN CPWG
Internet Message Format	IETF RFC 5322:2008	BINDING-SMTP-V2	NCIA
Extensible Provisioning Protocol (EPP) Domain Name Mapping	IETF RFC 5731:2009	BINDING-SMTP-V2	NCIA
Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 3.2 Message Specification	IETF RFC 5751:2010	BINDING-CRYPTO-V2	NCIA

Title	Pubnum	Profiles	Responsible Party
Extensible Messaging and Presence Protocol (XMPP): Core	IETF RFC 6120:2011	BINDING-XMPP-V2	NCIA
Extensible Messaging and Presence Protocol (XMPP): Instant Messaging and Presence	IETF RFC 6121:2011	BINDING-XMPP-V2	NCIA
Extensible Messaging and Presence Protocol (XMPP): Address Format	IETF RFC 6122:2011	BINDING-XMPP-V2	NCIA
Additional XML Security Uniform Resource Identifiers (URIs)	IETF RFC 6931:2013	BINDING-CRYPTO-V2	NCIA
Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing	IETF RFC 7230:2014	BINDING-REST-V2	NCIA/CES
Security Labels in Internet Email	IETF RFC 7444:2015	BINDING-REST-V2, BINDING-SMTP-V2	NCIA
JSON Web Signature (JWS)	IETF RFC 7515:2015	BINDING-CRYPTO-V2	NCIA
Graphic Technology - Extensible metadata platform (XMP) specification - Part 1: Data model, serialization and core propertie	ISO 16684-1:2012	BINDING-EXTENSIBLE-V2	NCIA
Information Technology - Document Schema Definition Languages (DSDL) - Part 3: Rules-based validation - Schematron Second Edition	ISO 19757-3:2016	BINDING-COMMON-XML	NCIA
Office Open XML File Formats -- Part 2: Open Packaging Conventions	ISO/IEC 29500-2:2012	BINDING-GENERIC-V2, BINDING-OOXML-V2	NCIA
Information Technology - Security Techniques - Security information objects for access control	ITU-T X.841:2000	BINDING-REST-V2	NCIA
Confidentiality Metadata Label Syntax	NATO ADatP-4774 Ed A Ver 1:2017 / STANAG 4774 Ed 1	BINDING-COMMON-XML, BINDING-CRYPTO-V2,	C3B CaP1 DM CaT

Title	Pubnum	Profiles	Responsible Party
		BINDING-EXTENSIBLE-V2, BINDING-GENERIC-V2, BINDING-OOXML-V2, BINDING-REST-V2, BINDING-SIDECAR-V2, BINDING-SMTP-V2, BINDING-SOAP, BINDING-WSMP-V2, BINDING-XMPP-V2	
Metadata Binding	NATO ADatP-4778 Ed A Ver 1:2018 / STANAG 4778 Ed 1	BINDING-COMMON-XML, BINDING-CRYPTO-V2, BINDING-EXTENSIBLE-V2, BINDING-GENERIC-V2, BINDING-OOXML-V2, BINDING-REST-V2, BINDING-SIDECAR-V2, BINDING-SMTP-V2, BINDING-SOAP, BINDING-WSMP-V2, BINDING-XMPP-V2	C3B CaP1 DM CaT

Title	Pubnum	Profiles	Responsible Party
Context/value Association using genericode 1.0	OASIS context-value-association-1.0:2010	BINDING-COMMON-XML	NCIA
Code List Representation (Genericode)	OASIS cs-genericode-1.0:2007	BINDING-COMMON-XML	NCIA
Web Services Security: SOAP Message Security 1.1	OASIS wss-v1.1-spec-os-SOAPMessageSecurity:2006	BINDING-CRYPTO-V2	NCIA/CES
Simple Object Access Protocol (SOAP)	W3C NOTE-SOAP-20000508:2000	BINDING-SOAP	NCIA
XML Security Algorithm Cross-Reference	W3C NOTE-xmlsec-algorithms-20130411:2013	BINDING-CRYPTO-V2	NCIA
RDF 1.1 Concepts and Abstract Syntax	W3C REC-rdf11-concepts-20140225:2014	BINDING-EXTENSIBLE-V2	NCIA/CES
RDF Primer	W3C REC-rdf-primer-20040210:2004	BINDING-EXTENSIBLE-V2	NCIA
SOAP Version 1.2 Part 1: Messaging Framework	W3C REC-soap12-part1-20030624:2003	BINDING-SOAP	NCIA
Associating Style Sheets with XML documents, Version 1.0	W3C REC-xml-stylesheet-19990629:1999	BINDING-COMMON-XML	NCIA/CES
eXtensible Markup Language (XML) version 1.0 (Fifth Edition)	W3C REC-xml-20081126:2008	BINDING-EXTENSIBLE-V2	FMN CPWG
XML-Signature Syntax and Processing (Second Edition)	W3C REC-xmldsig-core-20080610:2008	BINDING-CRYPTO-V2, BINDING-SOAP	NCIA
Errata for XML Signature 2nd Edition	W3C REC-xmldsig-core-20080610:2014	BINDING-CRYPTO-V2	NCIA
XML Signature Syntax and Processing Version 1.1	W3C REC-xmldsig-core1-20130411:2013	BINDING-CRYPTO-V2	NCIA
XML Encryption Syntax and Processing	W3C REC-xmlenc-core-20021210:2002	BINDING-CRYPTO-V2	NCIA
XML Encryption Syntax and Processing Version 1.1	W3C REC-xmlenc-core1-20130411:2013	BINDING-CRYPTO-V2	NCIA

Title	Pubnum	Profiles	Responsible Party
XML Schema Definition Language (XSD) 1.1 Part 1: Structures	W3C REC-xmlschema11-1-20120405:2012	BINDING-COMMON-XML	NATO Archive Committee
XML Path Language 1.0	W3C REC-xpath-19991119:1999	BINDING-CRYPTO-V2	NCIA
XML Pointer Language (Xpointer)	W3C wd-xptr-20020816:2002	BINDING-CRYPTO-V2	NCIA
Open XML SPIF	XML SPIF xmlspif:2010	BINDING-COMMON-XML	NCIA
XEP-0060: Publish-Subscribe	XMPP XEP-0060:2010	BINDING-XMPP-V2	NCIA
XEP-0258: Security Labels in XMPP	XMPP XEP-0258:2013	BINDING-XMPP-V2	NCIA
Platform SMC Services			
IEEE QoS	IEEE 802.1p:2004	BSP	NCIA/NSII
Structure of Management Information	IETF RFC 1212:1991	BSP	NCIA/CES
Management Information Base v2 (MIB II)	IETF RFC 1213:1991	BSP	NCIA/SMC
Definitions of Managed Objects for the Ethernet-like Interface Types	IETF RFC 1643:1994	BSP	NCIA/NSII
RIP Version 2 MIB Extensions	IETF RFC 1724:1994	BSP	NCIA/SMC
Host Resources Management Information Base (MIB)	IETF RFC 2790:2000	BSP	NCIA/SMC
Remote Network Monitoring Management Information Base, RMON-MIB version 1	IETF RFC 2819:2000	BSP	NCIA/SMC
OSPF version 2 Management Information Base:2006	IETF RFC 4750:2006	BSP	NCIA/SMC
COBIT 5: A Business Framework for the Governance and Management of Enterprise IT	ISACA Cobit 5:2012	BSP	NCIA/Sstrat/ Sea
Performance objectives and procedures for provisioning and maintenance of IP-based networks	ITU-T M.2301:2002	BSP	FMN CPWG

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TMF630 API Design Guidelines 3.0 R17.5.0	TM-FORUM TMF630:2017	FMN4	FMN CPWG
API REST Conformance Guidelines R15.5.1 Standard	TM-FORUM TR250:2016	FMN4	FMN CPWG
Service Discovery Services			
electronic business eXtensible Markup Language (ebXML) Technical Architecture Specification v1.0.4	EBXML ebTA:2001	BSP	NCIA/CES
TIDE Service Discovery	NATO TIDE/TIDE-ID-SP:2008	BSP	NCIA/CES
ebXML Registry Services and Protocols Version 3.0	OASIS regrep-rs-3.0-os:2005	BSP	NCIA/CES
Universal Description Discovery & Integration (UDDI)	OASIS uddi-v3.00-published-20020719:2002	BSP	NCIA/C2
Web Service Description Language (WSDL) 1.1	W3C NOTE-wsdl-20010315:2001	BSP	FMN CPWG
Message-Oriented Middleware Services			
Web Service Messaging Profile (WSMP)	NATO ADatP-5644 (Study) Ed A Ver 1 / STANAG 5644 Ed 1	FMN4	C3B CaP1 DM CaT
Web Services Reliable Messaging (WS-ReliableMessaging)	OASIS relmes:2009	BSP	FMN CPWG
Web Services Security: SOAP Message Security 1.1	OASIS wss-v1.1-spec-os-SOAPMessageSecurity:2006	BSP	NCIA/CES
Direct Messaging Services			
Specifications Defining The Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Security	NATO AEP-76 Vol I Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Data Model	NATO AEP-76 Vol II Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS

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Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - LOANED RADIO	NATO AEP-76 Vol III Ed. A Ver. 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Information Exchange Mechanism	NATO AEP-76 Vol IV Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Network Access	NATO AEP-76 Vol V Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Web Platform Services			
FTP Security Extensions	IETF RFC 2228:1997	BSP	NCIA/CES
HyperText Transfer Protocol (HTTP), version 1.1	IETF RFC 2616:1999	BSP	FMN CPWG
Internationalization of the File Transfer Protocol	IETF RFC 2640:1999	BSP	NCIA/CES
Extensions to FTP	IETF RFC 3659:2007	BSP	NCIA/CES
Extended MKCOL for Web Distributed Authoring and Versioning (WebDAV)	IETF RFC 5689:2009	BSP	NCIA/CES
FTP Command and Extension Registry	IETF RFC 5797:2010	BSP	NCIA/CES
File Transfer Protocol HOST Command for Virtual Hosts	IETF RFC 7151:2014	BSP	NCIA/CES
Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing	IETF RFC 7230:2014	BSP	NCIA/CES
Geolocation API Specification 2nd Edition	W3C REC-geolocation-API-20161108/:2016	SIP-FOR-WEB-APPS	FMN CPWG
HTML5 Differences from HTML4	W3C NOTE-html5-diff:2014	SIP-FOR-WEB-APPS	FMN CPWG
Cascading Style Sheets, level 2 revision 1	W3C REC-CSS2-2011067:2011	BSP	FMN CPWG

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Hypertext Markup Language revision 5.2 (HTML5)	W3C REC-html52:2017	SIP-FOR-WEB-APPS	FMN CPWG
Hypertext Markup Language revision 5.3 Editor's Draft (4.7)	W3C REC-html53-Draft:2018	SIP-FOR-WEB-APPS	FMN CPWG
Media Source Extensions	W3C REC-media-source:2016	SIP-FOR-WEB-APPS	FMN CPWG
Mobile Web Application Best Practices	W3C REC-mwabp:2010	SIP-FOR-WEB-APPS	FMN CPWG
XML Information Set	W3C REC-xml-infoset-20011024:2001	BSP	NCIA/CES
Associating Style Sheets with XML documents, Version 1.0	W3C REC-xml-stylesheet-19990629:1999	BSP	NCIA/CES
eXtensible Markup Language (XML) version 1.0 (Fifth Edition)	W3C REC-xml-20081126:2008	BSP	FMN CPWG
XML Base	W3C REC-xmlbase-20010627:2001	BSP	NCIA/CES
Web Speech API	W3C speech-API:2018	SIP-FOR-WEB-APPS	FMN CPWG
DOM Parsing and Serialization	W3C WD-DOM-Parsing:2016	SIP-FOR-WEB-APPS	FMN CPWG
Wireless Markup Language (WML) version 2	WAPFORUM WAP-238-WML-20010911-a:2001	BSP	NCIA/CES
Web Hosting Services			
SIP for Binding Metadata to HTTP Messages	FMN SIP for Binding Metadata to HTTP Messages:2021	FMN4	FMN CPWG
SIP for Binding Metadata to SOAP Messages	FMN SIP for Binding Metadata to SOAP Messages:2021	FMN4	FMN CPWG
Uniform Resource Locators (URL)	IETF RFC 1738:1994	FMN3, FMN4	FMN CPWG
The TLS Protocol Version 1.0	IETF RFC 2246:1999	SIP-FOR-TLS	FMN CPWG
Upgrading to TLS Within HTTP/1.1	IETF RFC 2817:2000	FMN3, FMN4	FMN CPWG
The 'text/html' Media Type	IETF RFC 2854:2000	FMN3, FMN4	FMN CPWG

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UTF-8, a transformation format of ISO/IEC 10646	IETF RFC 3629:2003	FMN3, FMN4	FMN CPWG
Transport Layer Security Protocol Compression Methods	IETF RFC 3749:2004	SIP-FOR-TLS	FMN CPWG
Uniform Resource Identifiers (URI): Generic Syntax	IETF RFC 3986:2005	FMN3, FMN4	FMN CPWG
Atom Syndication Format, v1.0	IETF RFC 4287:2005	FMN3, FMN4	FMN CPWG
Scripting Media Types	IETF RFC 4329:2006	FMN3, FMN4	FMN CPWG
The Transport Layer Security (TLS) Protocol Version 1.1	IETF RFC 4346:2006	SIP-FOR-TLS	FMN CPWG
Elliptic Curve Cryptography (ECC) Cipher Suites for Transport Layer Security (TLS)	IETF RFC 4492:2006	SIP-FOR-TLS	FMN CPWG
The application/json Media Type for JavaScript Object Notation (JSON)	IETF RFC 4627:2006	FMN3, FMN4	FMN CPWG
Atom Publishing Protocol	IETF RFC 5023:2007	FMN3, FMN4	FMN CPWG
Transport Layer Security (TLS)	IETF RFC 5246:2008	SIP-FOR-TLS	C3B CaP4
Internet X.509 Public Key Infrastructure Certificate and CRL Profile	IETF RFC 5280:2008	SIP-FOR-TLS	FMN CPWG
Internet Calendaring and Scheduling Core Object Specification (iCalendar)	IETF RFC 5545:2009	FMN4	FMN CPWG
Transport Layer Security (TLS) Renegotiation Indication Extension	IETF RFC 5746:2010	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) Extensions: Extension Definitions	IETF RFC 6066:2011	SIP-FOR-TLS	FMN CPWG
The Secure Sockets Layer (SSL) Protocol Version 3.0	IETF RFC 6101:2011	SIP-FOR-TLS	FMN CPWG
Representation and Verification of Domain-Based Application Service Identity within Internet Public Key Infrastructure Using X.509 (PKIX) Certificates in the Context of Transport Layer Security (TLS)	IETF RFC 6125:2011	SIP-FOR-TLS	FMN CPWG
Prohibiting Secure Sockets Layer (SSL) Version 2.0	IETF RFC 6176:2011	SIP-FOR-TLS	FMN CPWG

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Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS) Heartbeat Extension	IETF RFC 6520:2012	SIP-FOR-TLS	FMN CPWG
X.509 Internet Public Key Infrastructure Online Certificate Status Protocol - OCSP	IETF RFC 6960:2013	SIP-FOR-TLS	FMN CPWG
The Transport Layer Security (TLS) Multiple Certificate Status Request Extension	IETF RFC 6961:2013	SIP-FOR-TLS	FMN CPWG
Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing	IETF RFC 7230:2014	FMN3, FMN4	NCIA/CES
Hypertext Transfer Protocol (HTTP/1.1): Semantics and Content	IETF RFC 7231:2014	FMN3, FMN4	FMN CPWG
Hypertext Transfer Protocol (HTTP/1.1): Conditional Requests	IETF RFC 7232:2014	FMN3, FMN4	FMN CPWG
Hypertext Transfer Protocol (HTTP/1.1): Range Requests	IETF RFC 7233:2014	FMN3, FMN4	FMN CPWG
Hypertext Transfer Protocol (HTTP/1.1): Caching	IETF RFC 7234:2014	FMN3, FMN4	FMN CPWG
Hypertext Transfer Protocol (HTTP/1.1): Authentication	IETF RFC 7235:2014	FMN3, FMN4	FMN CPWG
Encrypt-then-MAC for Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)	IETF RFC 7366:2014	SIP-FOR-TLS	FMN CPWG
Recommendations for Secure Use of Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)	IETF RFC 7525:2015	SIP-FOR-TLS	FMN CPWG
Deprecating Secure Sockets Layer Version 3.0	IETF RFC 7568:2015	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) Session Hash and Extended Master Secret Extension	IETF RFC 7627:2015	SIP-FOR-TLS	FMN CPWG
Negotiated Finite Field Diffie-Hellman Ephemeral Parameters for Transport Layer Security (TLS)	IETF RFC 7919:2016	SIP-FOR-TLS	FMN CPWG

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Transmission Control Protocol	IETF RFC 793:1981	SIP-FOR-TLS	FMN CPWG
The SSL Protocol	IETF RFC SSL2:1995	SIP-FOR-TLS	FMN CPWG
Electronic document file format for long-term preservation -- Part 1: Use of PDF 1.4 (PDF/A-1)	ISO 19005-1:2005	FMN3, FMN4	FMN CPWG
Electronic document file format for long-term preservation -- Part 2: Use of ISO 32000-1 (PDF/A-2)	ISO 19005-2:2011	FMN3, FMN4	FMN CPWG
Document management -- Portable document format -- Part 1: PDF 1.7	ISO 32000-1:2008	FMN3, FMN4	FMN CPWG
Digital compression and coding of continuous-tone still images: Requirements and guidelines	ISO/IEC 10918-1:1994	FMN3, FMN4	FMN CPWG
Digital compression and coding of continuous-tone still images: Extensions	ISO/IEC 10918-3:1997	FMN3, FMN4	FMN CPWG
Open Document Format for Office Applications (OpenDocument) v1.2 -- Part 1: OpenDocument Schema	ISO/IEC 26300-1:2015	FMN4	FMN CPWG
Open Document Format for Office Applications (OpenDocument) v1.2 -- Part 2: Recalculated Formula (OpenFormula) Format	ISO/IEC 26300-2:2015	FMN4	FMN CPWG
Open Document Format for Office Applications (OpenDocument) v1.2 -- Part 3: Packages	ISO/IEC 26300-3:2015	FMN4	FMN CPWG
Office Open XML File Formats -- Part 1: Fundamentals and Markup Language Reference	ISO/IEC 29500-1:2012	FMN3, FMN4	FMN CPWG
The Directory: Public-key and attribute certificate frameworks	ISO/IEC 9594-8:2008	BSP	NCIA/CS
Confidentiality Metadata Label Syntax	NATO ADatP-4774 Ed A Ver 1:2017 / STANAG 4774 Ed 1	FMN4	C3B CaP1 DM CaT
Metadata Binding	NATO ADatP-4778 Ed A Ver 1:2018 / STANAG 4778 Ed 1	FMN4	C3B CaP1 DM CaT

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NATO Secondary Imagery Format (NSIF) STANAG 4545 Implementation Guide	NATO AEDP-04 Ed 2 Ver 1:2013 / STANAG 4545 Ed 2	FMN3	CNAD, AC/224 NAFAG, JCGISR
NATO Ground Moving Target Indicator(GMTI) Format	NATO AEDP-07 Ed 2 Ver 1:2010 / STANAG 4607 Ed 3	FMN3	FMN CPWG
NATO Intelligence, Surveillance And Reconnaissance Tracking Standard	NATO AEDP-12 Ed A Ver 1:2014 / STANAG 4676 Ed 1	FMN3	FMN CPWG
NATO standardization of measurement and signature intelligence (MASINT) Reporting	NATO AEDP-16 / STANAG (Study) 4716 Ed 1	FMN3	CNAD, AC/224 NAFAG, JCGISR
Captured Persons, Materiel And Documents	NATO AJP-2.5 Ed A:2007 / STANAG 2195 Ed 2	FMN3	MC, MCJSB, JINT
NATO Message Catalogue[2]	NATO Study (expected) APP-11 Ed D Ver 2:2017 / STANAG 7149 Ed 6 (study)	FMN3	MC, MCJSB, IERHWG
US Motion Imagery Standards Board (MISB) - Motion Imagimary Standards Profile-2015.1	NATO NNSTD MISP-2015.1:2016 / STANAG 4609 Ed 4	FMN3	FMN CPWG
Air Reconnaissance Intelligence Report Forms	NATO STANAG 3377 Ed 6:2002	FMN3	FMN CPWG
WS-SecurityPolicy 1.3	OASIS wsspol-1.3:2009	BSP	NCIA/CS
		FMN4	
Geography Markup Language (GML) simple features profile Technical Note v 2.0	OGC 11-044:2011	FMN3	FMN CPWG
GML application schema for the Simple and GML serializations of GeoRSS	OGC 1.1:2006	FMN4	FMN CPWG
RSS 2.0 Specification	RSS 2.0:2009	FMN3, FMN4	FMN CPWG

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Web Services Addressing 1.0 - Core	W3C REC-ws-addr-core-20060509:2006	FMN3, FMN4	FMN CPWG
Cross-Origin Resource Sharing	W3C CR-cors-20130129:2013	FMN3, FMN4	FMN CPWG
Simple Object Access Protocol (SOAP)	W3C NOTE-SOAP-20000508:2000	FMN3, FMN4	NCIA
Web Service Description Language (WSDL) 1.1	W3C NOTE-wsdl-20010315:2001	FMN3, FMN4	FMN CPWG
Web Services Description Language (WSDL) Version 2.0 SOAP 1.1 Binding	W3C NOTE-wsdl20-soap11-binding-20070626:2007	FMN3, FMN4	FMN CPWG
XHTML™ 1.0 in XML Schema	W3C NOTE-xhtml1-schema-20020902:2002	FMN3, FMN4	FMN CPWG
Character Model for the World Wide Web 1.0: Fundamentals	W3C REC-charmod-20050215:2005	FMN4	FMN CPWG
CSS Namespaces Module Level 3	W3C REC-css-namespaces-3-20140320:2014	FMN3, FMN4	FMN CPWG
CSS Style Attributes	W3C REC-css-style-attr-20131107:2013	FMN3, FMN4	FMN CPWG
Cascading Style Sheets, level 2 revision 1	W3C REC-CSS2-2011067:2011	FMN3, FMN4	FMN CPWG
CSS Color Module Level 3	W3C REC-css3-color-20110607:2011	FMN3, FMN4	FMN CPWG
Media Queries	W3C REC-css3-mediaqueries-20120619:2012	FMN3, FMN4	FMN CPWG
Selectors Level 3	W3C REC-css3-selectors-20110929:2011	FMN3, FMN4	FMN CPWG
Hypertext Markup Language revision 5 (HTML5)	W3C REC-html5-20141028:2014	FMN3, FMN4	FMN CPWG
Internationalization Tag Set (ITS) Version 1.0	W3C REC-its-20070403:2007	FMN4	FMN CPWG
Internationalization Tag Set (ITS) Version 2.0	W3C REC-its20-20131029:2013	FMN4	FMN CPWG
Ruby Annotation	W3C REC-ruby-20010531:2001	FMN4	FMN CPWG

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eXtensible Markup Language (XML) version 1.0 (Fifth Edition)	W3C REC-xml-20081126:2008	FMN3, FMN4	FMN CPWG
XML Schema Part 1: Structures Second Edition	W3C REC-xmlschema-1-20041028:2004	FMN3, FMN4	FMN CPWG
XML Schema Part 2: Datatypes Second Edition	W3C REC-xmlschema-2-20041028:2004	FMN3, FMN4	FMN CPWG
XML Key Management Specification:2005	W3C xkms2:2005	BSP	NCIA/CES
Web Presentation Services			
Web Services for Remote Portlets Specification	OASIS wsrp-specification-1.0:2003	BSP	NCIA/CES
Information Access Services			
MIME Parameter Value and Encoded Word Extensions: Character Sets, Languages, and Continuations	IETF RFC 2231:1997	BINDING-REST-V2	NCIA
Atom Syndication Format, v1.0	IETF RFC 4287:2005	BSP	FMN CPWG
Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing	IETF RFC 7230:2014	BINDING-REST-V2	NCIA/CES
Security Labels in Internet Email	IETF RFC 7444:2015	BINDING-REST-V2	NCIA
Information Technology - Security Techniques - Security information objects for access control	ITU-T X.841:2000	BINDING-REST-V2	NCIA
Confidentiality Metadata Label Syntax	NATO ADatP-4774 Ed A Ver 1:2017 / STANAG 4774 Ed 1	BINDING-REST-V2, BINDING-SOAP	C3B CaP1 DM CaT
Metadata Binding	NATO ADatP-4778 Ed A Ver 1:2018 / STANAG 4778 Ed 1	BINDING-REST-V2, BINDING-SOAP	C3B CaP1 DM CaT
RSS 2.0 Specification	RSS 2.0:2009	BSP	FMN CPWG
Simple Object Access Protocol (SOAP)	W3C NOTE-SOAP-20000508:2000	BINDING-SOAP	NCIA
SOAP Version 1.2 Part 1: Messaging Framework	W3C REC-soap12-part1-20030624:2003	BINDING-SOAP	NCIA

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Extensible HyperText Markup Language, version 1	W3C REC-xhtml1-20020801:2002	BSP	NCIA/CES
XML-Signature Syntax and Processing (Second Edition)	W3C REC-xmldsig-core-20080610:2008	BINDING-SOAP	NCIA
Metadata Repository Services			
XML Signature Syntax and Processing (2nd ed.):2008	W3C xmldsig-core:2008	BSP	NCIA/CES
Information Annotation Services			
XMP Specification Part 3, Storage in Files	ADOBE XMP-part3-2016:2016	BINDING-EXTENSIBLE-V2	NCIA
HMAC: Keyed-Hashing for Message Authentication	IETF RFC 2104:1997	BINDING-CRYPTO-V2	NCIA
Key words for use in RFCs to Indicate Requirement Levels	IETF RFC 2119:1997	BINDING-COMMON-XML	NCIA
MIME Parameter Value and Encoded Word Extensions: Character Sets, Languages, and Continuations	IETF RFC 2231:1997	BINDING-REST-V2, BINDING-SMTP-V2	NCIA
Content-ID and Message-ID Uniform Resource Locators	IETF RFC 2392:1998	BINDING-SMTP-V2	NCIA/CES
Enhanced Security Services for S/MIME	IETF RFC 2634:1999	BINDING-XMPP-V2	NCIA
Internet X.509 Public Key Infrastructure Certificate and CRL Profile	IETF RFC 5280:2008	BINDING-CRYPTO-V2	FMN CPWG
Internet Message Format	IETF RFC 5322:2008	BINDING-SMTP-V2	NCIA
Extensible Provisioning Protocol (EPP) Domain Name Mapping	IETF RFC 5731:2009	BINDING-SMTP-V2	NCIA
Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 3.2 Message Specification	IETF RFC 5751:2010	BINDING-CRYPTO-V2	NCIA
Extensible Messaging and Presence Protocol (XMPP): Core	IETF RFC 6120:2011	BINDING-XMPP-V2	NCIA

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Extensible Messaging and Presence Protocol (XMPP): Instant Messaging and Presence	IETF RFC 6121:2011	BINDING-XMPP-V2	NCIA
Extensible Messaging and Presence Protocol (XMPP): Address Format	IETF RFC 6122:2011	BINDING-XMPP-V2	NCIA
Additional XML Security Uniform Resource Identifiers (URIs)	IETF RFC 6931:2013	BINDING-CRYPTO-V2	NCIA
Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing	IETF RFC 7230:2014	BINDING-REST-V2	NCIA/CES
Security Labels in Internet Email	IETF RFC 7444:2015	BINDING-REST-V2, BINDING-SMTP-V2	NCIA
JSON Web Signature (JWS)	IETF RFC 7515:2015	BINDING-CRYPTO-V2	NCIA
Graphic Technology - Extensible metadata platform (XMP) specification - Part 1: Data model, serialization and core propertie	ISO 16684-1:2012	BINDING-EXTENSIBLE-V2	NCIA
Information Technology - Document Schema Definition Languages (DSDL) - Part 3: Rules-based validation - Schematron Second Edition	ISO 19757-3:2016	BINDING-COMMON-XML	NCIA
Office Open XML File Formats -- Part 2: Open Packaging Conventions	ISO/IEC 29500-2:2012	BINDING-GENERIC-V2, BINDING-OOXML-V2	NCIA
Information Technology - Security Techniques - Security information objects for access control	ITU-T X.841:2000	BINDING-REST-V2	NCIA
Confidentiality Metadata Label Syntax	NATO ADatP-4774 Ed A Ver 1:2017 / STANAG 4774 Ed 1	BINDING-COMMON-XML, BINDING-CRYPTO-V2, BINDING-EXTENSIBLE-	C3B CaP1 DM CaT

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		V2, BINDING-GENERIC-V2, BINDING-OOXML-V2, BINDING-REST-V2, BINDING-SIDECAR-V2, BINDING-SMTP-V2, BINDING-SOAP, BINDING-WSMP-V2, BINDING-XMPP-V2	
Metadata Binding	NATO ADatP-4778 Ed A Ver 1:2018 / STANAG 4778 Ed 1	BINDING-COMMON-XML, BINDING-CRYPTO-V2, BINDING-EXTENSIBLE-V2, BINDING-GENERIC-V2, BINDING-OOXML-V2, BINDING-REST-V2, BINDING-SIDECAR-V2, BINDING-SMTP-V2, BINDING-SOAP, BINDING-WSMP-V2, BINDING-XMPP-V2	C3B CaP1 DM CaT
Context/value Association using genericode 1.0	OASIS context-value-association-1.0:2010	BINDING-COMMON-XML	NCIA

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Code List Representation (Genericode)	OASIS cs-genericode-1.0:2007	BINDING-COMMON-XML	NCIA
Web Services Security: SOAP Message Security 1.1	OASIS wss-v1.1-spec-os-SOAPMessageSecurity:2006	BINDING-CRYPTO-V2	NCIA/CES
Simple Object Access Protocol (SOAP)	W3C NOTE-SOAP-20000508:2000	BINDING-SOAP	NCIA
XML Security Algorithm Cross-Reference	W3C NOTE-xmlsec-algorithms-20130411:2013	BINDING-CRYPTO-V2	NCIA
RDF 1.1 Concepts and Abstract Syntax	W3C REC-rdf11-concepts-20140225:2014	BINDING-EXTENSIBLE-V2	NCIA/CES
RDF Primer	W3C REC-rdf-primer-20040210:2004	BINDING-EXTENSIBLE-V2	NCIA
SOAP Version 1.2 Part 1: Messaging Framework	W3C REC-soap12-part1-20030624:2003	BINDING-SOAP	NCIA
Associating Style Sheets with XML documents, Version 1.0	W3C REC-xml-stylesheet-19990629:1999	BINDING-COMMON-XML	NCIA/CES
eXtensible Markup Language (XML) version 1.0 (Fifth Edition)	W3C REC-xml-20081126:2008	BINDING-EXTENSIBLE-V2	FMN CPWG
XML-Signature Syntax and Processing (Second Edition)	W3C REC-xmldsig-core-20080610:2008	BINDING-CRYPTO-V2, BINDING-SOAP	NCIA
Errata for XML Signature 2nd Edition	W3C REC-xmldsig-core-20080610:2014	BINDING-CRYPTO-V2	NCIA
XML Signature Syntax and Processing Version 1.1	W3C REC-xmldsig-core1-20130411:2013	BINDING-CRYPTO-V2	NCIA
XML Encryption Syntax and Processing	W3C REC-xmlenc-core-20021210:2002	BINDING-CRYPTO-V2	NCIA
XML Encryption Syntax and Processing Version 1.1	W3C REC-xmlenc-core1-20130411:2013	BINDING-CRYPTO-V2	NCIA
XML Schema Definition Language (XSD) 1.1 Part 1: Structures	W3C REC-xmlschema11-1-20120405:2012	BINDING-COMMON-XML	NATO Archive Committee

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XML Path Language 1.0	W3C REC-xpath-19991119:1999	BINDING-CRYPTO-V2	NCIA
XML Pointer Language (Xpointer)	W3C wd-xptr-20020816:2002	BINDING-CRYPTO-V2	NCIA
Open XML SPIF	XML SPIF xmlspif:2010	BINDING-COMMON-XML	NCIA
XEP-0060: Publish-Subscribe	XMPP XEP-0060:2010	BINDING-XMPP-V2	NCIA
XEP-0258: Security Labels in XMPP	XMPP XEP-0258:2013	BINDING-XMPP-V2	NCIA
Directory Services			
Common Directory Services and Procedures	CCEB ACP 133(C):2007	BSP	C3B NACP CaT
The TLS Protocol Version 1.0	IETF RFC 2246:1999	SIP-FOR-TLS	FMN CPWG
Definition of the inetOrgPerson LDAP Object Class	IETF RFC 2798:2000	FMN3, FMN4	FMN CPWG
LDAP Data Interchange Format (LDIF)	IETF RFC 2849:2000	FMN4	FMN CPWG
Transport Layer Security Protocol Compression Methods	IETF RFC 3749:2004	SIP-FOR-TLS	FMN CPWG
The Transport Layer Security (TLS) Protocol Version 1.1	IETF RFC 4346:2006	SIP-FOR-TLS	FMN CPWG
Elliptic Curve Cryptography (ECC) Cipher Suites for Transport Layer Security (TLS)	IETF RFC 4492:2006	SIP-FOR-TLS	FMN CPWG
LDAP: Technical Specification Road Map	IETF RFC 4510:2006	FMN4	FMN CPWG
LDAP: The Protocol	IETF RFC 4511:2006	FMN4	FMN CPWG
LDAP: Directory Information Models	IETF RFC 4512:2006	FMN4	FMN CPWG
LDAP: Authentication Methods and Security Mechanisms	IETF RFC 4513:2006	FMN4	FMN CPWG
LDAP: String Representation of Distinguished Names	IETF RFC 4514:2006	FMN4	FMN CPWG
LDAP: String Representation of Search Filters	IETF RFC 4515:2006	FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
LDAP: Uniform Resource Locator	IETF RFC 4516:2006	FMN4	FMN CPWG
LDAP: Syntaxes and Matching Rules	IETF RFC 4517:2006	FMN4	FMN CPWG
LDAP: Internationalized String Preparation	IETF RFC 4518:2006	FMN4	FMN CPWG
LDAP: Schema for User Applications	IETF RFC 4519:2006	FMN3, FMN4	FMN CPWG
Transport Layer Security (TLS)	IETF RFC 5246:2008	SIP-FOR-TLS	C3B CaP4
Internet X.509 Public Key Infrastructure Certificate and CRL Profile	IETF RFC 5280:2008	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) Renegotiation Indication Extension	IETF RFC 5746:2010	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) Extensions: Extension Definitions	IETF RFC 6066:2011	SIP-FOR-TLS	FMN CPWG
The Secure Sockets Layer (SSL) Protocol Version 3.0	IETF RFC 6101:2011	SIP-FOR-TLS	FMN CPWG
Representation and Verification of Domain-Based Application Service Identity within Internet Public Key Infrastructure Using X.509 (PKIX) Certificates in the Context of Transport Layer Security (TLS)	IETF RFC 6125:2011	SIP-FOR-TLS	FMN CPWG
Prohibiting Secure Sockets Layer (SSL) Version 2.0	IETF RFC 6176:2011	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS) Heartbeat Extension	IETF RFC 6520:2012	SIP-FOR-TLS	FMN CPWG
X.509 Internet Public Key Infrastructure Online Certificate Status Protocol - OCSP	IETF RFC 6960:2013	SIP-FOR-TLS	FMN CPWG
The Transport Layer Security (TLS) Multiple Certificate Status Request Extension	IETF RFC 6961:2013	SIP-FOR-TLS	FMN CPWG
Encrypt-then-MAC for Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)	IETF RFC 7366:2014	SIP-FOR-TLS	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Recommendations for Secure Use of Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)	IETF RFC 7525:2015	SIP-FOR-TLS	FMN CPWG
Deprecating Secure Sockets Layer Version 3.0	IETF RFC 7568:2015	SIP-FOR-TLS	FMN CPWG
Transport Layer Security (TLS) Session Hash and Extended Master Secret Extension	IETF RFC 7627:2015	SIP-FOR-TLS	FMN CPWG
Negotiated Finite Field Diffie-Hellman Ephemeral Parameters for Transport Layer Security (TLS)	IETF RFC 7919:2016	SIP-FOR-TLS	FMN CPWG
Transmission Control Protocol	IETF RFC 793:1981	SIP-FOR-TLS	FMN CPWG
The SSL Protocol	IETF RFC SSL2:1995	SIP-FOR-TLS	FMN CPWG
Relational Database Services			
Open Database Connectivity (ODBC) 3.8	Microsoft MSDN-ODBCPR:1996	BSP	NCIA/CES
Joint C3 Information Exchange Data Model (JC3IEDM)	NATO STANAG 5525 Ed 1:2007	BSP	C3B CaP1 DM CaT
Mediation Services			
Profile for the Use of S/MIME protocols Cryptographic Message Syntax (CMS) and Enhanced Security Services (ESS) for S/MIME	NATO STANAG 4631 Ed 1:2008	BSP	C3B CaP1
Data Format Transformation Services			
Key words for use in RFCs to Indicate Requirement Levels	IETF RFC 2119:1997	BINDING-COMMON-XML	NCIA
Information Technology - Document Schema Definition Languages (DSDL) - Part 3: Rules-based validation - Schematron Second Edition	ISO 19757-3:2016	BINDING-COMMON-XML	NCIA
Confidentiality Metadata Label Syntax	NATO ADatP-4774 Ed A Ver 1:2017 / STANAG 4774 Ed 1	BINDING-COMMON-XML	C3B CaP1 DM CaT

Title	Pubnum	Profiles	Responsible Party
Metadata Binding	NATO ADatP-4778 Ed A Ver 1:2018 / STANAG 4778 Ed 1	BINDING-COMMON-XML	C3B CaP1 DM CaT
Context/value Association using genericode 1.0	OASIS context-value-association-1.0:2010	BINDING-COMMON-XML	NCIA
Code List Representation (Genericode)	OASIS cs-genericode-1.0:2007	BINDING-COMMON-XML	NCIA
Associating Style Sheets with XML documents, Version 1.0	W3C REC-xml-stylesheet-19990629:1999	BINDING-COMMON-XML	NCIA/CES
XML Schema Definition Language (XSD) 1.1 Part 1: Structures	W3C REC-xmlschema11-1-20120405:2012	BINDING-COMMON-XML	NATO Archive Committee
Open XML SPIF	XML SPIF xmlspif:2010	BINDING-COMMON-XML	NCIA
Infrastructure Services			
RTP: A Transport Protocol for Real-Time Applications	IETF RFC 3550:2003	BSP	FMN CPWG
Network News Transfer Protocol (NNTP)	IETF RFC 3977:2006	BSP	NCIA/CES
Digital compression and coding of continuous-tone still images: Registration of JPEG profiles, SPIFF profiles, SPIFF tags, SPIFF colour spaces, APPn markers, SPIFF compression types and Registration Authorities (REGAUT)	ISO/IEC 10918-4:1999	BSP	NCIA/CES
Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s; PCM Part 3: audio	ISO/IEC 11172-3:1993	BSP	NCIA/NSII
Generic Coding of Moving Pictures and Associated Audio (MPEG-2)	ISO/IEC 13818:2000	BSP	NCIA/CES
Coding of Moving Pictures and Audio (MPEG-4)	ISO/IEC 14496:1999	BSP	NCIA/CES
Open Virtualization Format (OVF) specification	ISO/IEC 17203:2017	BSP	NCIA/CES

Title	Pubnum	Profiles	Responsible Party
Information Technology - Cloud Computing - Interoperability and Portability	ISO/IEC 19941:2017	BSP	NCIA/CES
Information technology - Distributed Application Platforms and Services (DAPS) - General technical principles of Service Oriented Architecture	ISO/IEC 30102:2012	BSP	NCIA/CES
7 kHz Audio-Coding within 64 kbit/s	ITU-T G.722:2012	BSP	FMN CPWG
Coding of speech at 8 kbit/s using conjugate-structure algebraic-code-excited linear prediction (CS-ACELP)	ITU-T G.729:2012	BSP	FMN CPWG
Video coding for low bit rate communication	ITU-T H.263:2005	BSP	FMN CPWG
Advanced video coding for generic audiovisual services	ITU-T H.264:2017	BSP	FMN CPWG
NATO Advanced Data Storage Interface (NADSI) Requirements And Implementation Guide	NATO AEDP-06 Ed B Ver 4:2020 / STANAG 4575 Ed 4	BSP	CNAD, AC/224 NAFAG, JCGISR
NATO Ground Moving Target Indicator(GMTI) Format	NATO AEDP-07 Ed 2 Ver 1:2010 / STANAG 4607 Ed 3	BSP	FMN CPWG
Air Reconnaissance Primary Imagery Data Standard	NATO AEDP-09 Ed 1:2009 / STANAG 7023 Ed 4	BSP	CNAD, AC/224 NAFAG, JCGISR
Imagery Air Reconnaissance Tape Recorder Interface	NATO AEDP-11 Ed 1:2001 / STANAG 7024 Ed 2	BSP	CNAD, AC/224 NAFAG, JCGISR
Motion Imagery Standards Profile	NATO NNSTD MISP-2019.1:2018 / STANAG 4609 Ed 5	BSP	CNAD, AC/224 NAFAG, JCGISR

Title	Pubnum	Profiles	Responsible Party
Exchange of Imagery	NATO STANAG 3764 Ed 6:2015	BSP	MC, MCJSB, JINT JISRP
Parameters and Coding Standards for 800 bps Digital Speach Encoder/ Decoder	NATO STANAG 4479 Ed 1:2002	BSP	C3B CaP1 Blos Comms
NATO Standard ISR Library Interface (NSILI)	NATO STANAG 4559 Ed 3:2010	BSP	FMN CPWG
NATO Imagery Interpretability Rating Scale (NIIRS)	NATO STANAG 7194 Ed 1:2009	BSP	MC, MCJSB, JINT JISRP
X Window System, Version 11, release 7.5:2009	X-CONSORTIUM X11R7.5:2009	BSP	NCIA/CES
Infrastructure CIS Security Services			
IP Encapsulating Security Payload (ESP)	IETF RFC 4303:2005	FMN4	FMN CPWG
IKE and IKEv2 Authentication Using the Elliptic Curve Digital Signature Algorithm (ECDSA)	IETF RFC 4754:2007	FMN4	C3B CaP4
Elliptic Curve Groups modulo a Prime (ECP Groups) for IKE and IKEv2	IETF RFC 5903:2010	FMN4	FMN CPWG
Internet Key Exchange Protocol Version 2 (IKEv2)	IETF RFC 7296:2014	FMN4	FMN CPWG
Signature Authentication in the Internet Key Exchange Version 2 (IKEv2)	IETF RFC 7427:2015	FMN4	FMN CPWG
Generic Raw Public-Key Support for IKEv2	IETF RFC 7670:2016	FMN4	FMN CPWG
Authentication Services			
A summary of the X.500(96) User Schema for Use with LDAPv3	IETF RFC 2256:1997	FMN3, FMN4	FMN CPWG
Definition of the inetOrgPerson LDAP Object Class	IETF RFC 2798:2000	FMN3, FMN4	FMN CPWG
Uniform Resource Identifiers (URI): Generic Syntax	IETF RFC 3986:2005	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
LDAP: Schema for User Applications	IETF RFC 4519:2006	FMN3, FMN4	FMN CPWG
Internet Message Format	IETF RFC 5322:2008	FMN3, FMN4	NCIA
OASIS Security Services (SAML)	OASIS saml:2009	FMN3	NCIA
OASIS SAML Metadata Interoperability Profile	OASIS SAML V2.0:2005	FMN4	FMN CPWG
Digital Certificate Services			
More Modular Exponential (MODP) Diffie-Hellman groups for Internet Key Exchange (IKE)	IETF RFC 3526:2003	FMN3, FMN4	FMN CPWG
LDAP: X.509 Certificate Schema	IETF RFC 4523:2006	FMN3	FMN CPWG
Internet X.509 Public Key Infrastructure Certificate and CRL Profile	IETF RFC 5280:2008	FMN3, FMN4	FMN CPWG
X.509 Internet Public Key Infrastructure Online Certificate Status Protocol - OCSP	IETF RFC 6960:2013	FMN4	FMN CPWG
Textual Encodings of PKIX, PKCS, and CMS Structures	IETF RFC 7468:2015	FMN4	FMN CPWG
Information technology - Open Systems Interconnection - The Directory: Public-key and attribute certificate frameworks	ITU-T X.509:2016	FMN3, FMN4	FMN CPWG
Secure Hash Standard (SHS)	NIST FIPS PUB 180-4:2015	FMN3, FMN4	C3B CaP4
Digital Signature Standard (DSS)	NIST FIPS PUB 186-4:2013	FMN3, FMN4	FMN CPWG
Advanced Encryption Standard (AES)	NIST FIPS PUB 197:2001	FMN3, FMN4	FMN CPWG
Recommendation for Pair-Wise Key-Establishment Schemes Using Discrete Logarithm Cryptography	NIST SP 800-56A Rev 3:2018	FMN3, FMN4	FMN CPWG
Recommendation for Pair-Wise KeyEstablishment Schemes Using Integer Factorization Cryptography	NIST SP 800-56B Rev 1:2014	FMN3	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Recommendation for Pair-Wise Key Establishment Using Integer Factorization Cryptography	US DoC NIST SP 800-56B:2019	FMN4	FMN CPWG
Infrastructure Cryptography Services			
HMAC: Keyed-Hashing for Message Authentication	IETF RFC 2104:1997	BINDING-CRYPTO-V2	NCIA
Internet X.509 Public Key Infrastructure Certificate and CRL Profile	IETF RFC 5280:2008	BINDING-CRYPTO-V2	FMN CPWG
Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 3.2 Message Specification	IETF RFC 5751:2010	BINDING-CRYPTO-V2	NCIA
Additional XML Security Uniform Resource Identifiers (URIs)	IETF RFC 6931:2013	BINDING-CRYPTO-V2	NCIA
JSON Web Signature (JWS)	IETF RFC 7515:2015	BINDING-CRYPTO-V2	NCIA
Confidentiality Metadata Label Syntax	NATO ADatP-4774 Ed A Ver 1:2017 / STANAG 4774 Ed 1	BINDING-CRYPTO-V2	C3B CaP1 DM CaT
Metadata Binding	NATO ADatP-4778 Ed A Ver 1:2018 / STANAG 4778 Ed 1	BINDING-CRYPTO-V2	C3B CaP1 DM CaT
Web Services Security: SOAP Message Security 1.1	OASIS wss-v1.1-spec-os-SOAPMessageSecurity:2006	BINDING-CRYPTO-V2	NCIA/CES
XML Security Algorithm Cross-Reference	W3C NOTE-xmlsec-algorithms-20130411:2013	BINDING-CRYPTO-V2	NCIA
XML-Signature Syntax and Processing (Second Edition)	W3C REC-xmldsig-core-20080610:2008	BINDING-CRYPTO-V2	NCIA
Errata for XML Signature 2nd Edition	W3C REC-xmldsig-core-20080610:2014	BINDING-CRYPTO-V2	NCIA
XML Signature Syntax and Processing Version 1.1	W3C REC-xmldsig-core1-20130411:2013	BINDING-CRYPTO-V2	NCIA
XML Encryption Syntax and Processing	W3C REC-xmlenc-core-20021210:2002	BINDING-CRYPTO-V2	NCIA
XML Encryption Syntax and Processing Version 1.1	W3C REC-xmlenc-core1-20130411:2013	BINDING-CRYPTO-V2	NCIA

Title	Pubnum	Profiles	Responsible Party
XML Path Language 1.0	W3C REC-xpath-19991119:1999	BINDING-CRYPTO-V2	NCIA
XML Pointer Language (Xpointer)	W3C wd-xptr-20020816:2002	BINDING-CRYPTO-V2	NCIA
Virtualization Management Services			
Information technology — Virtualization Management Specification	ISO/IEC 19099:2014	BSP	NCIA/CES
Infrastructure Processing Services			
Open Virtualization Format Specification, v.2.0.1	DMTF DSP0243:2013	BSP	C3B CaP1
X Window System, Version 11, release 7.5:2009	X-CONSORTIUM X11R7.5:2009	BSP	NCIA/CES
Virtualized Processing Services			
Open Virtualization Format Specification, v.2.0.1	DMTF DSP0243:2013	FMN4	C3B CaP1
Open Virtualization Format (OVF) specification	ISO/IEC 17203:2017	BSP	NCIA/CES
Virtual Hard Disk Image Format Specification	Microsoft :2006	FMN4	FMN CPWG
Virtual Disk Format 5.0	VMware :2011	FMN4	FMN CPWG
Virtualized Storage Services			
Information technology - Cloud Data Management Interface (CDMI)	ISO/IEC 17826:2016	BSP	NCIA/CES
File System Storage Services			
Data Protocols for Multimedia Conferencing	ITU-T T.120:2007	BSP	NCIA/NSII
Domain Name Services			
Domain names - concepts and facilities	IETF RFC 1034:1987	FMN3, FMN4	FMN CPWG
Domain names - implementation and specification	IETF RFC 1035:1987	FMN3, FMN4	FMN CPWG
Clarifications to the DNS Specification	IETF RFC 2181:1997	FMN3, FMN4	FMN CPWG
A DNS RR for specifying the location of services (DNS SRV)	IETF RFC 2782:2000	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Distributing Authoritative Name Servers via Shared Unicast Addresses	IETF RFC 3258:2002	FMN3, FMN4	FMN CPWG
DNS Security Introduction and Requirements	IETF RFC 4033:2005	FMN4	NCIA/CS
Resource Records for the DNS Security Extensions	IETF RFC 4034:2005	FMN4	FMN CPWG
Protocol Modifications for the DNS Security Extensions	IETF RFC 4035:2005	FMN4	FMN CPWG
Use of SHA-256 in DNSSEC Delegation Signer (DS) Resource Records (RRs)	IETF RFC 4509:2006	FMN4	FMN CPWG
Operation of Anycast Services	IETF RFC 4786:2006	FMN3, FMN4	FMN CPWG
DNS Security (DNSSEC) Hashed Authenticated Denial of Existence	IETF RFC 5155:2008	FMN4	FMN CPWG
Use of SHA-2 Algorithms with RSA in DNSKEY and RRSIG Resource Records for DNSSEC	IETF RFC 5702:2009	FMN4	FMN CPWG
DNS Zone Transfer Protocol (AXFR)	IETF RFC 5936:2010	FMN3, FMN4	FMN CPWG
DNS Transport over TCP - Implementation Requirements	IETF RFC 5966:2010	FMN3, FMN4	FMN CPWG
Unique Origin Autonomous System Numbers (ASNs) per Node for Globally Anycasted Services	IETF RFC 6382:2011	FMN3, FMN4	FMN CPWG
Extension Mechanisms for DNS (EDNS(0))	IETF RFC 6891:2013	FMN3, FMN4	FMN CPWG
Architectural Considerations of IP Anycast	IETF RFC 7094:2014	FMN3, FMN4	FMN CPWG
Distributed Time Services			
Precision Time Protocol (PTP)	IEEE 1588:2008	BSP	NCIA/NSII
Network Time Protocol (NTP)	IETF RFC 5905:2010	FMN3, FMN4	FMN CPWG
Standard-frequency and time-signal emissions. Annex 1: Coordinated universal time (UTC)	ITU-R TF 460-6:2002	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Working with Time Zones	W3C timezone:2005	BSP	NCIA/Sstrat/ Sea

3.3.3. Communications Services

Title	Pubnum	Profiles	Responsible Party
Communications Services			
Interface standard for LC connectors with protective housings related to IEC 61076-3-106	IEC 61754-20-100:2012	BSP	FMN CPWG
Station and Media Access Control Connectivity Discovery	IEEE 802.1AB:2009	BSP	NCIA/NSII
Media Access Control (MAC) Bridges	IEEE 802.1D:2004	BSP	NCIA/NSII
Virtual Bridged Local Area Networks	IEEE 802.1Q:2005	BSP	NCIA/NSII
Rapid Reconfiguration of Spanning Tree	IEEE 802.1W:2002	BSP	NCIA/NSII
Single-mode fiber using 1,310 nm wavelength	IEEE 802.3-2012:2012	BSP	FMN CPWG
An Aplication of the BGP Community Attribute in Multi-Home Routing	IETF RFC 1998:1996	BSP	NCIA
A Flexible Method for Managing the Assignment of Bits of an IPv6 Address Block	IETF RFC 3531:2003	BSP	NCIA
Considerations for Internet group Management protocols (IGMP) and Multicast listener Discovery Snooping Switches	IETF RFC 4541:2006	BSP	NCIA
IPv6 Stateless Address Autoconfiguration	IETF RFC 4862:2007	BSP	NCIA
NATO Pre Placed Key (PPK) Key Material Format and Fill Checks Specification Rev.1.0	CIS3 C&IP SCIP-233.104	FMN4	C3B CaP1 N&S CaT
X.509 Elliptic Curve (EC) Key Material Format Specification	CIS3 C&IP SCIP-233.109:2014	FMN4	C3B CaP1 N&S CaT

Title	Pubnum	Profiles	Responsible Party
NATO Point-to-Point and Multipoint PPK-Processing Specification Rev.1.0	CIS3 C&IP SCIP-233.304	FMN4	C3B CaP1 N&S CaT
ECDH Key Agreement and TEK Derivation rev.1.1	CIS3 C&IP SCIP-233.307:2011	FMN4	C3B CaP1 N&S CaT
Interoperable Terminal Priority (TP) Community of Interest (COI) Specification rev.1.0	CIS3 C&IP SCIP-233.350:2012	FMN4	C3B CaP1 N&S CaT
Application State Vector Processing Specification rev.1.2	CIS3 C&IP SCIP-233.401:2012	FMN4	C3B CaP1 N&S CaT
NATO Fixed Filler Generation Specification Rev. 1.0.	CIS3 C&IP SCIP-233.422	FMN4	C3B CaP1 N&S CaT
Universal Fixed Filler Generation Specification Rev. 1.0.	CIS3 C&IP SCIP-233.423:2011	FMN4	C3B CaP1 N&S CaT
Point-to-Point Cryptographic Verification Specification Rev. 1.1.	CIS3 C&IP SCIP-233.441	FMN4	C3B CaP1 N&S CaT
Point-to-Point Cryptographic Verification w/Signature rev.1.0	CIS3 C&IP SCIP-233.444:2011	FMN4	C3B CaP1 N&S CaT
AES-256 Encryption Algorithm Specification Rev. 1.0.	CIS3 C&IP SCIP-233.601:2011	FMN4	C3B CaP1 N&S CaT
Generic cabling for customer premises	ISO/IEC 11801:2002	BSP	FMN CPWG
Characteristics of a single-mode optical fibre and cable	ITU-T G.652:2016	BSP	FMN CPWG
Characteristics of a Robust, Non-Hopping Serial Tone Modulator/ Demodulator For Severely Degraded HF Radio Links	NATO AComP-4415 Ed A Ver 1:2015 / STANAG 4415 Ed 2	BSP	C3B CaP1 Blos Comms
Multi-hop IP Networking with legacy UHF Radios: Mobile ad hoc relay Line of Sight Networking (MARLIN)	NATO AComP-4691 Ed A Ver 1:2016 / STANAG 4691 Ed 2	BSP	C3B CaP1 LOS Comms CaT
Have Quick	NATO STANAG 4246 Ed 3:2009	BSP	C3B CaP1 LOS Comms CaT

Title	Pubnum	Profiles	Responsible Party
Characteristics of 1200/2400/ 3600 bps single tone modulators for HF Radio links	NATO STANAG 4285 Ed 1:1989	BSP	C3B CaP1 Blos Comms
Saturn	NATO STANAG 4372 Ed 3:2008	BSP	C3B CaP1 LOS Comms CaT
Minimum Technical Equipment Standards For Naval HF Shore-to-Ship Broadcast Systems	NATO STANAG 4481 Ed 1:2002	BSP	C3B CaP1 Blos Comms
Characteristics of single tone modulators/demodulators for maritime HF radio links with 1240 Hz bandwidth	NATO STANAG 4529 Ed 1:1998	BSP	C3B CaP1 Blos Comms
Technical Standards for an Automatic Radio Control System (ARCS) for HF Communication Links	NATO STANAG 4538 Ed 1:2009	BSP	C3B CaP1 Blos Comms
Digital Interoperability between UHF communications terminals - Integrated Waveform (IWF)	NATO STANAG 4681 Ed 1:2015	BSP	C3B CaP1 SATCOM CaT
Minimum Standards for Naval low Frequency (LF) Shore-to-Ship Surface Broadcast Systems	NATO STANAG 5065 Ed 1:1999	BSP	C3B CaP1 Blos Comms
Profile for HF radio data communications	NATO STANAG 5066 Ed 3:2015	BSP	C3B CaP1 Blos Comms
Communications Access Services			
System Segment Specification for the Multifunctional Information Distribution System (MIDS) Low-Volume Terminal and Ancillary Equipment, Rev. EG	CJCSM SSS-M-10001:2011	BSP	NCIA/NSII
Physical/electrical characteristics of hierarchical digital interfaces	ITU-T G.703:2001	BSP	NCIA/NSII
Interoperable Data Links for Imaging Systems	NATO AEDP-7085 Ed A Ver 1:2011 / STANAG 7085 Ed 3	BSP	CNAD, AC/224 NAFAG, JCGISR

Title	Pubnum	Profiles	Responsible Party
Interoperable Command And Control Data Link For Unmanned Systems (IC2DL) - Top Level Description	NATO AEP-77 Vol1 Ed A Ver 1:2016 / STANAG 4660 Ed 1	BSP	CNAD, AC/141 NNAG, JCGUAS
Interoperable Command And Control Data Link For Unmanned Systems (IC2DL) - Physical Layer / Signal In Space Description	NATO AEP-77 Vol2 Ed A Ver 1:2016 / STANAG 4660 Ed 1	BSP	CNAD, AC/141 NNAG, JCGUAS
Interoperable Command And Control Data Link For Unmanned Systems (IC2DL) - Operational Physical Layer / Signal In Space Description	NATO AEP-77 Vol3 Ed A Ver 1:2016 / STANAG 4660 Ed 1	BSP	CNAD, AC/141 NNAG, JCGUAS
Tactical Data Exchange - Link 1 (Point-to-Point)	NATO ATDLP-5.01 Ed A Ver 2:2020 / STANAG 5501 Ed 7	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 11/11B	NATO ATDLP-5.11 Ed B Ver 1:2019 / STANAG FT 5511 Ed 10	BSP	C3B CaP1 TDL CaT
Tactical Data Link - Link 22	NATO ATDLP-5.22 Ed B Ver 1:2021 / STANAG 5522 Ed 6	BSP	C3B CaP1 TDL CaT
Technical Characteristics of the Multifunctional Information Distribution System (MIDS) - VOL I & II	NATO STANAG 4175 Ed 5:2014	BSP	C3B CaP1 TDL CaT
Standard Interfaces of UAV Control System (UCS) for NATO UAV Interoperability	NATO STANAG 4586 Ed 3:2012	BSP	CNAD, AC/141 NNAG, JCGUAS
Network Access Control Services			
IP Encapsulating Security Payload (ESP)	IETF RFC 4303:2005	FMN4	FMN CPWG
IKE and IKEv2 Authentication Using the Elliptic Curve Digital Signature Algorithm (ECDSA)	IETF RFC 4754:2007	FMN4	C3B CaP4

Title	Pubnum	Profiles	Responsible Party
Elliptic Curve Groups modulo a Prime (ECP Groups) for IKE and IKEv2	IETF RFC 5903:2010	FMN4	FMN CPWG
Internet Key Exchange Protocol Version 2 (IKEv2)	IETF RFC 7296:2014	FMN4	FMN CPWG
Signature Authentication in the Internet Key Exchange Version 2 (IKEv2)	IETF RFC 7427:2015	FMN4	FMN CPWG
Generic Raw Public-Key Support for IKEv2	IETF RFC 7670:2016	FMN4	FMN CPWG
Tactical Messaging Access Services			
Call Sign Book for Ships	CCEB ACP 113(AD):2012	BSP	C3B NACP CaT
Information Assurance for Allied Communications and Information Systems	CCEB ACP 122(D):1982	BSP	C3B NACP CaT
Instructions For The Life Cycle Management Of Allied Communications Publications (ACPS)	CCEB ACP 198(O):2018	BSP	C3B NACP CaT
Maritime And Mobile Tacticalwide Area Networking (MTWAN) In The Maritime Environment - Operating Guidance	CCEB ACP 200 V1(D):2013	BSP	C3B NACP CaT
Maritime Tactical Wide Area Networking (MTWAN) Technical Instructions	CCEB ACP 200 V2(C):2010	BSP	C3B NACP CaT
Maritime And Mobile Tactical Wide Area Networking (MTWAN) In The Maritime Environment - Technical Guidance	CCEB ACP 200 V2(D):2015	BSP	C3B NACP CaT
Communications Instructions Internet Protocol (IP) Services	CCEB ACP 201(A):2017	BSP	C3B NACP CaT
Address Indicating Groups - Instructions and Assignments	NATO ACP 100 NS-1(P):2009	BSP	C3B NACP CaT
NATO Routing Indicator Book, NATO Supplement-1	NATO ACP 117 NS-1(R):2013	BSP	C3B NACP CaT

Title	Pubnum	Profiles	Responsible Party
Handling of ATOMAL Information Within Classified Communications Centres, NATO Supplement-2	NATO ACP 122 NS-2(A):1979	BSP	C3B NACP CaT
NATO Naval and Maritime Air Communications Instructions and Organisation	NATO ACP 176 NS-1(F):2018	BSP	C3B NACP CaT
Instructions for the Life Cyle Management of Allied Communications Publications (ACPs) - General & NATO Supps	NATO ACP 198 NS-1(G):2012	BSP	C3B NACP CaT
Tactical Data Exchange - Link 1 (Point-to-Point)	NATO ATDLP-5.01 Ed A Ver 2:2020 / STANAG 5501 Ed 7	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 11/11B	NATO ATDLP-5.11 Ed B Ver 1:2019 / STANAG FT 5511 Ed 10	BSP	C3B CaP1 TDL CaT
Joint Range Extension Application Protocol (JREAP)[1]	NATO ATDLP-5.18 Ed B Ver 2:2019 / STANAG FT 5518 Ed 4	BSP	C3B CaP1 TDL CaT
Tactical Data Link - Link 22	NATO ATDLP-5.22 Ed B Ver 1:2021 / STANAG 5522 Ed 6	BSP	C3B CaP1 TDL CaT
Standards for Interface of Data Links 1, 11, and 11B Through a Buffer	NATO ATDLP-6.01 Ed A Ver 1:2016 / STANAG 5601 Ed 7	BSP	C3B CaP1 TDL CaT
Technical Characteristics of the Multifunctional Information Distribution System (MIDS) - VOL I & II	NATO STANAG 4175 Ed 5:2014	BSP	C3B CaP1 TDL CaT
NATO Multi-channel Tactical Digital Gateway - System Standards	NATO STANAG 4206 Ed 3:1999	BSP	C3B CaP1 N&S CaT
NATO Multi-channel Digital Gateway-Multiplex Group Framing Standards	NATO STANAG 4207 Ed 3:2000	BSP	C3B CaP1 N&S CaT

Title	Pubnum	Profiles	Responsible Party
International Routing and Directory for Tactical Communications Systems	NATO STANAG 4214 Ed 2:2005	BSP	C3B CaP1 N&S CaT
The NATO Military Communications Directory System	NATO STANAG 5046 Ed 4:2015	BSP	C3B CaP1 N&S CaT
Standards for Data Forwarding between Tactical Data Systems employing Link 11/11B, Link 16 and Link 22	NATO STANAG 5616 Ed 5:2011	BSP	C3B CaP1 TDL CaT
Packet-based Access Services			
Quality of service ranking and measurement methods for digital video services delivered over broadband IP networks	ITU-T J.241:2005	BSP	FMN CPWG
IP packet transfer and availability performance parameters	ITU-T Y.1540:2016	BSP	FMN CPWG
Network performance objectives for IP-based services	ITU-T Y.1541:2011	BSP	FMN CPWG
Framework for achieving end-to-end IP performance objectives	ITU-T Y.1542:2010	BSP	FMN CPWG
IPv4 Routed Access Services			
Host Extensions for IP Multicasting	IETF RFC 1112:1989	FMN3, FMN4	FMN CPWG
Path MTU Discovery	IETF RFC 1191:1990	FMN4	FMN CPWG
Address Allocation for Private Internets	IETF RFC 1918:1996	FMN4	FMN CPWG
BGP Communities Attribute	IETF RFC 1997:1996	FMN3, FMN4	FMN CPWG
Internet Group Management Protocol, Version 2	IETF RFC 2236:1997	FMN4	NCIA/NSII
Administratively Scoped IP Multicast	IETF RFC 2365:1998	FMN3, FMN4	FMN CPWG
Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers	IETF RFC 2474:1998	FMN3, FMN4	FMN CPWG
Internet Group Management Protocol, Version 3	IETF RFC 3376:2002	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Multicast Source Discovery Protocol (MSDP)	IETF RFC 3618:2003	FMN3, FMN4	FMN CPWG
Border Gateway Protocol 4 (BGP-4)	IETF RFC 4271:2006	FMN3, FMN4	FMN CPWG
BGP Extended Communities Attribute	IETF RFC 4360:2006	FMN3, FMN4	FMN CPWG
Configuration Guidelines for DiffServ Service Classes	IETF RFC 4594:2006	FMN3, FMN4	FMN CPWG
Classless Inter-domain Routing (CIDR): The Internet Address Assignment and Aggregation Plan	IETF RFC 4632:2006	FMN3, FMN4	FMN CPWG
Multiprotocol Extensions for BGP-4	IETF RFC 4760:2007	FMN3, FMN4	FMN CPWG
The Generalized TTL Security Mechanism (GTSM)	IETF RFC 5082:2007	FMN3, FMN4	FMN CPWG
Capabilities Advertisement with BGP-4	IETF RFC 5492:2009	FMN3, FMN4	FMN CPWG
4-Octet AS Specific BGP Extended Community	IETF RFC 5668:2009	FMN4	FMN CPWG
IANA Guidelines for IPv4 Multicast Address Assignments	IETF RFC 5771:2010	FMN3, FMN4	FMN CPWG
Bidirectional Forwarding Detection (BFD)	IETF RFC 5880:2010	FMN4	FMN CPWG
Bidirectional Forwarding Detection (BFD) for IPv4 and IPv6 (Single Hop)	IETF RFC 5881:2010	FMN4	FMN CPWG
Bidirectional Forwarding Detection (BFD) for Multihop Paths	IETF RFC 5883:2010	FMN4	FMN CPWG
Autonomous-System-Wide Unique BGP Identifier for BGP-4	IETF RFC 6286:2011	FMN3, FMN4	FMN CPWG
Overview of the Internet Multicast Addressing Architecture	IETF RFC 6308:2011	FMN3, FMN4	FMN CPWG
BGP Support for Four-Octet Autonomous System (AS) Number Space	IETF RFC 6793:2012	FMN3, FMN4	FMN CPWG
IANA Registries for BGP Extended Communities	IETF RFC 7153:2014	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Revised Error Handling for BGP UPDATE Messages	IETF RFC 7606:2015	FMN3, FMN4	FMN CPWG
Protocol Independent Multicast - Sparse Mode (PIM-SM): Protocol Specification (Revised)	IETF RFC 7761:2016	FMN3, FMN4	FMN CPWG
Transmission of IP Packets over Ethernet Networks	IETF RFC 894:1984	FMN4	NCIA/NSII
Internet Standard Subnetting Procedure	IETF RFC 950:1985	FMN4	NCIA/NSII
Quality of service ranking and measurement methods for digital video services delivered over broadband IP networks	ITU-T J.241:2005	FMN3, FMN4	FMN CPWG
Performance objectives and procedures for provisioning and maintenance of IP-based networks	ITU-T M.2301:2002	FMN3, FMN4	FMN CPWG
IP packet transfer and availability performance parameters	ITU-T Y.1540:2016	FMN3, FMN4	FMN CPWG
Network performance objectives for IP-based services	ITU-T Y.1541:2011	FMN3, FMN4	FMN CPWG
Framework for achieving end-to-end IP performance objectives	ITU-T Y.1542:2010	FMN3, FMN4	FMN CPWG
Interoperability Point Quality of Service (IP QoS)	NATO AComP-4711 Ed A Ver 1:2018 / STANAG 4711 Ed 1	FMN3, FMN4	C3B CaP1 N&S CaT
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Network Access	NATO AEP-76 Vol V Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Native Circuit-based Access Services			
The NATO Military Communications Directory System	NATO STANAG 5046 Ed 4:2015	BSP	C3B CaP1 N&S CaT
Voice Access Services			
The 600 Bit/S, 1200 Bit/S AND 2400 Bit/S NATO Interoperable Narrow Band Voice Coder	NATO STANAG 4591 Ed 1:2008	BSP	C3B CaP1 N&S CaT
Transport Services			

Title	Pubnum	Profiles	Responsible Party
PPP LCP Extensions	IETF RFC 1570:1994	BSP	NCIA/NSII
The Point-to-Point Protocol (PPP)	IETF RFC 1661:1994	BSP	NCIA/NSII
RIP Version 2 MIB Extensions	IETF RFC 1724:1994	BSP	NCIA/SMC
Application of the Border Gateway Protocol in the Internet	IETF RFC 1772:1995	BSP	FMN CPWG
Requirements for IP Version 4 Routers	IETF RFC 1812:1995	BSP	FMN CPWG
The PPP Multilink Protocol (MP)	IETF RFC 1990:1996	BSP	NCIA/NSII
BGP Communities Attribute	IETF RFC 1997:1996	BSP	FMN CPWG
ISO Transport Service on top of TCP (ITOT)	IETF RFC 2126:1997	BSP	NCIA/NSII
Resource ReSerVation Protocol (RSVP) -- Version 1 Functional Specification	IETF RFC 2205:1997	BSP	NCIA/NSII
OSPF Version 2 (STD-54)	IETF RFC 2328:1998	BSP	NCIA/NSII
RIP Version 2	IETF RFC 2453:1998	BSP	FMN CPWG
Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers	IETF RFC 2474:1998	BSP	FMN CPWG
Traditional IP Network Address Translation (NAT)	IETF RFC 3022:2001	BSP	NCIA/NSII
Layer Two Tunnelling Protocol (L2TP) Differentiated Services Extension	IETF RFC 3308:2002	BSP	NCIA/NSII
IP Mobility Support for IPv4	IETF RFC 3344:2002	BSP	NCIA/NSII
Multicast Source Discovery Protocol (MSDP)	IETF RFC 3618:2003	BSP	FMN CPWG
Virtual Router Redundancy Protocol	IETF RFC 3768:2004	BSP	NCIA/NSII
Encapsulating MPLS in IP or Generic Routing Encapsulation (GRE)	IETF RFC 4023:2005	BSP	NCIA/NSII
Border Gateway Protocol 4 (BGP-4)	IETF RFC 4271:2006	BSP	FMN CPWG
BGP Extended Communities Attribute	IETF RFC 4360:2006	BSP	FMN CPWG
Configuration Guidelines for DiffServ Service Classes	IETF RFC 4594:2006	BSP	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Protocol Independent Multicast - Sparse Mode (PIM-SM): Protocol Specification (Revised)	IETF RFC 4601:2006	BSP	FMN CPWG
Multiprotocol Extensions for BGP-4	IETF RFC 4760:2007	BSP	FMN CPWG
Capabilities Advertisement with BGP-4	IETF RFC 5492:2009	BSP	FMN CPWG
4-Octet AS Specific BGP Extended Community	IETF RFC 5668:2009	BSP	FMN CPWG
User Datagram Protocol (UDP)	IETF RFC 768:1980	BSP	NCIA/NSII
Intermediate System to Intermediate System intra-domain routeing information exchange protocol for use in conjunction with the protocol for providing the connectionless-mode network service (ISO 8473)	ISO/IEC 10589:2002	BSP	NCIA/NSII
Microsoft Windows Sockets (Winsock) Version 2.2.2	Microsoft Winsock2Spec:1997	BSP	NCIA/CES
Networking Framework for All-IP Transport Services (NETIP)	NATO AComP-4731 Ed A Ver 1:2017 / STANAG 4731 Ed 1	BSP	C3B CaP1 N&S CaT
Transport CIS Security Services			
CIS Security Technical and Implementation Directive on Cryptographic Security and Mechanisms for the Protection of NATO Information within NNN & IO CIS	C3B AC/322-D(2015)0031:2015	FMN4	FMN CPWG
The Secure Real-time Transport Protocol (SRTP)	IETF RFC 3711:2004	FMN4	FMN CPWG
Session Description Protocol (SDP) Security Descriptions for Media Streams	IETF RFC 4568:2006	FMN4	FMN CPWG
Transport Layer Security (TLS)	IETF RFC 5246:2008	FMN4	C3B CaP4
Negotiated Finite Field Diffie-Hellman Ephemeral Parameters for Transport Layer Security (TLS)	IETF RFC 7919:2016	FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
CSfC Multi-Site Connectivity Capability Package	NSA MSCCP v1.0:2017	FMN4	FMN CPWG
Packet-based Transport Services			
Interface standard for LC connectors with protective housings related to IEC 61076-3-106	IEC 61754-20-100:2012	FMN3, FMN4	FMN CPWG
IEEE Standard for Ethernet	IEEE 802.3:2018	FMN3, FMN4	FMN CPWG
Host Extensions for IP Multicasting	IETF RFC 1112:1989	FMN4	FMN CPWG
Path MTU Discovery	IETF RFC 1191:1990	FMN4	FMN CPWG
Address Allocation for Private Internets	IETF RFC 1918:1996	FMN4	FMN CPWG
IP Encapsulation within IP	IETF RFC 2003:1996	BSP	NCIA/NSII
Routing Information Protocol next generation for IPv6 (RIPng)	IETF RFC 2080:1997	FMN3, FMN4	NCIA/NSII
Internet Group Management Protocol, Version 2	IETF RFC 2236:1997	BSP, FMN4	NCIA/NSII
RIP Version 2	IETF RFC 2453:1998	FMN3, FMN4	FMN CPWG
Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers	IETF RFC 2474:1998	FMN3, FMN4	FMN CPWG
Generic Routing Encapsulation (GRE)	IETF RFC 2784:2000	FMN3, FMN4	FMN CPWG
IANA Assigned Numbers	IETF RFC 3232:2002	BSP	NCIA/NSII
The Use of Galois/Counter Mode (GCM) in IPsec Encapsulating Security Payload (ESP)	IETF RFC 4106:2005	FMN4	FMN CPWG
IP Encapsulating Security Payload (ESP)	IETF RFC 4303:2005	FMN3, FMN4	FMN CPWG
Configuration Guidelines for DiffServ Service Classes	IETF RFC 4594:2006	FMN3, FMN4	FMN CPWG
Classless Inter-domain Routing (CIDR): The Internet Address Assignment and Aggregation Plan	IETF RFC 4632:2006	FMN4	FMN CPWG
IKE and IKEv2 Authentication Using the Elliptic Curve Digital Signature Algorithm (ECDSA)	IETF RFC 4754:2007	FMN3, FMN4	C3B CaP4

Title	Pubnum	Profiles	Responsible Party
Using HMAC-SHA-256, HMAC-SHA-384, and HMAC-SHA-512 with IPsec	IETF RFC 4868:2007	FMN4	FMN CPWG
IANA Guidelines for IPv4 Multicast Address Assignments	IETF RFC 5771:2010	FMN4	FMN CPWG
Elliptic Curve Groups modulo a Prime (ECP Groups) for IKE and IKEv2	IETF RFC 5903:2010	FMN3, FMN4	FMN CPWG
Suite B Cryptographic Suites for IPsec	IETF RFC 6379:2011	FMN4	FMN CPWG
Internet Key Exchange Protocol Version 2 (IKEv2)	IETF RFC 7296:2014	FMN3, FMN4	FMN CPWG
Signature Authentication in the Internet Key Exchange Version 2 (IKEv2)	IETF RFC 7427:2015	FMN3, FMN4	FMN CPWG
Generic Raw Public-Key Support for IKEv2	IETF RFC 7670:2016	FMN3, FMN4	FMN CPWG
Internet Protocol, version 4	IETF RFC 791:1981	BSP	NCIA/NSII
Algorithm Implementation Requirements and Usage Guidance for the Internet Key Exchange Protocol Version 2 (IKEv2)	IETF RFC 8247:2017	FMN4	FMN CPWG
Ethernet Address Resolution Protocol	IETF RFC 826:1982	FMN3, FMN4	NCIA/NSII
Transmission of IP Packets over Ethernet Networks	IETF RFC 894:1984	FMN4	NCIA/NSII
Internet Standard Subnetting Procedure	IETF RFC 950:1985	FMN4	NCIA/NSII
Requirements for Internet Hosts - Communication Layers	IETF STD 89:1989	BSP	NCIA/NSII
Information technology -- Generic cabling for customer premises -- Part 1: General requirements	ISO/IEC 11801-1:2017	FMN3, FMN4	FMN CPWG
Characteristics of a single-mode optical fibre and cable	ITU-T G.652:2016	FMN3, FMN4	FMN CPWG
Quality of service ranking and measurement methods for digital	ITU-T J.241:2005	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
video services delivered over broadband IP networks			
Performance objectives and procedures for provisioning and maintenance of IP-based networks	ITU-T M.2301:2002	FMN3, FMN4	FMN CPWG
IP packet transfer and availability performance parameters	ITU-T Y.1540:2016	FMN3, FMN4	FMN CPWG
Network performance objectives for IP-based services	ITU-T Y.1541:2011	FMN3, FMN4	FMN CPWG
Framework for achieving end-to-end IP performance objectives	ITU-T Y.1542:2010	FMN3, FMN4	FMN CPWG
Connectors, Fiber Optic, Circular, Environmental Resistant, Hermaphroditic, General Specification for. D	MIL-STD DTL 83526:2006	FMN4	FMN CPWG
Standard for optical connector medium-rate and high-rate military tactical link	NATO AComP-4290 Ed A Ver 2:2018 / STANAG 4290 Ed 2	FMN4	C3B CaP1 N&S CaT
Interoperability Point Quality of Service (IP QoS)	NATO AComP-4711 Ed A Ver 1:2018 / STANAG 4711 Ed 1	FMN3, FMN4	C3B CaP1 N&S CaT
Specifications Defining the Joint Dismounted Soldier System Interoperability Network (JDSSIN) - Network Access	NATO AEP-76 Vol V Ed A Ver 2:2017 / STANAG 4677 Ed 1	FMN4	CNAD, AC/225 NAAG, LCGDSS
Circuit-based Transport Services			
The NATO Military Communications Directory System	NATO STANAG 5046 Ed 4:2015	BSP	C3B CaP1 N&S CaT
Packet Routing Services			
Host Extensions for IP Multicasting	IETF RFC 1112:1989	FMN3, FMN4	FMN CPWG
BGP Communities Attribute	IETF RFC 1997:1996	FMN3, FMN4	FMN CPWG
Administratively Scoped IP Multicast	IETF RFC 2365:1998	FMN3, FMN4	FMN CPWG
Internet Group Management Protocol, Version 3	IETF RFC 3376:2002	FMN3, FMN4	FMN CPWG
Multicast Source Discovery Protocol (MSDP)	IETF RFC 3618:2003	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Border Gateway Protocol 4 (BGP-4)	IETF RFC 4271:2006	FMN3, FMN4	FMN CPWG
BGP Extended Communities Attribute	IETF RFC 4360:2006	FMN3, FMN4	FMN CPWG
Classless Inter-domain Routing (CIDR): The Internet Address Assignment and Aggregation Plan	IETF RFC 4632:2006	FMN3, FMN4	FMN CPWG
Multiprotocol Extensions for BGP-4	IETF RFC 4760:2007	FMN3, FMN4	FMN CPWG
The Generalized TTL Security Mechanism (GTSM)	IETF RFC 5082:2007	FMN3, FMN4	FMN CPWG
Capabilities Advertisement with BGP-4	IETF RFC 5492:2009	FMN3, FMN4	FMN CPWG
4-Octet AS Specific BGP Extended Community	IETF RFC 5668:2009	FMN4	FMN CPWG
IANA Guidelines for IPv4 Multicast Address Assignments	IETF RFC 5771:2010	FMN3, FMN4	FMN CPWG
Bidirectional Forwarding Detection (BFD)	IETF RFC 5880:2010	FMN4	FMN CPWG
Bidirectional Forwarding Detection (BFD) for IPv4 and IPv6 (Single Hop)	IETF RFC 5881:2010	FMN4	FMN CPWG
Bidirectional Forwarding Detection (BFD) for Multihop Paths	IETF RFC 5883:2010	FMN4	FMN CPWG
Autonomous-System-Wide Unique BGP Identifier for BGP-4	IETF RFC 6286:2011	FMN3, FMN4	FMN CPWG
Overview of the Internet Multicast Addressing Architecture	IETF RFC 6308:2011	FMN3, FMN4	FMN CPWG
BGP Support for Four-Octet Autonomous System (AS) Number Space	IETF RFC 6793:2012	FMN3, FMN4	FMN CPWG
IANA Registries for BGP Extended Communities	IETF RFC 7153:2014	FMN3, FMN4	FMN CPWG
Revised Error Handling for BGP UPDATE Messages	IETF RFC 7606:2015	FMN3, FMN4	FMN CPWG
Protocol Independent Multicast - Sparse Mode (PIM-SM): Protocol Specification (Revised)	IETF RFC 7761:2016	FMN3, FMN4	FMN CPWG

Title	Pubnum	Profiles	Responsible Party
Standard for Interconnection of IPv4 Networks at Mission Secret and Unclassified Security Levels	NATO STANAG 5067 Ed 1:2015	BSP	C3B CaP1 N&S CaT
Transmission Services			
Generic Specification for Optical Waveguide Fibers	EIA TIA/ EIA-492000-A:1997	BSP	NCIA/NSII
VLF / LF MSK Multi Channel Broadcast	NATO AComP-4724 Ed A Ver 1:2015 / STANAG 4724 Ed 1	BSP	C3B CaP1 Blos Comms
Single and Multichannel VLF and LF On-Line Broadcast and Off-Line OOK Systems	NATO STANAG 5030 Ed 4:1995	BSP	C3B CaP1 Blos Comms
Wired Transmission Services			
Standard for optical connector medium-rate and high-rate military tactical link	NATO AComP-4290 Ed A Ver 2:2018 / STANAG 4290 Ed 2	BSP	C3B CaP1 N&S CaT
Wired Local Area Transmission Services			
Standard for optical connector medium-rate and high-rate military tactical link	NATO AComP-4290 Ed A Ver 2:2018 / STANAG 4290 Ed 2	BSP	C3B CaP1 N&S CaT
Wired Metropolitan Area Transmission Services			
Standard for optical connector medium-rate and high-rate military tactical link	NATO AComP-4290 Ed A Ver 2:2018 / STANAG 4290 Ed 2	BSP	C3B CaP1 N&S CaT
Wired Wide Area Transmission Services			
Standard for optical connector medium-rate and high-rate military tactical link	NATO AComP-4290 Ed A Ver 2:2018 / STANAG 4290 Ed 2	BSP	C3B CaP1 N&S CaT
Wireless LOS Mobile Transmission Services			
Bluetooth 4.2	Bluetooth SIG bluetooth42:2014	BSP	NCIA/NSII
Wireless LOS Mobile Narrowband Transmission Services			
Technical standards for single channel UHF radio equipment	NATO AComP-4205 Ed A Ver 1:2018 / STANAG 4205 Ed 4	BSP	C3B CaP1 LOS Comms CaT

Title	Pubnum	Profiles	Responsible Party
Technical standards for single channel HF radio equipment	NATO STANAG 4203 Ed 3:2007	BSP	C3B CaP1 Blos Comms
Technical standards for single channel VHF radio equipment	NATO STANAG 4204 Ed 3:2008	BSP	C3B CaP1 LOS Comms CaT
Overall Super High Frequency (SHF) Military Satellite Communications (MILSATCOM) Interoperability Standards	NATO STANAG 4484 Ed 3:2015	BSP	C3B CaP1 SATCOM CaT
Wireless LOS Mobile Wideband Transmission Services			
Technical Characteristics of the Multifunctional Information Distribution System (MIDS) - VOL I & II	NATO STANAG 4175 Ed 5:2014	BSP	C3B CaP1 TDL CaT
Wireless BLOS Static Wideband Transmission Services			
Interoperability standard for Satellite Broadcast Services (SBS))	NATO STANAG 4622 Ed 1:2018	BSP	C3B CaP1 SATCOM CaT
Wireless BLOS Mobile Transmission Services			
Super High Frequency (SHF) Military Satellite Communications (MILSATCOM) Frequency Division Multiple Access (FDMA) Non-EPM Modem for Services Conforming to Class-B Of STANAG 4484	NATO AComP-4486 Ed A Ver 1:2016 / STANAG 4486 Ed 4	BSP	C3B CaP1 SATCOM CaT
Digital interoperability between EHF Tactical Satellite Communications Terminals	NATO STANAG 4233 Ed 1:1998	BSP	C3B CaP1 SATCOM CaT
SHF Milsatcom Non-EPM Modem for Services Conforming to Class-A Of STANAG 4484	NATO STANAG 4485 Ed 2:2015	BSP	C3B CaP1 SATCOM CaT
Extremely High Frequency(EHF) Military Satellite Communications(MILSATCOM) Interoperability Standards for Medium Data Rate Services	NATO STANAG 4522 Ed 1:2006	BSP	C3B CaP1 SATCOM CaT
Wireless BLOS Mobile Narrowband Transmission Services			

Title	Pubnum	Profiles	Responsible Party
Technical standards for single channel HF radio equipment	NATO STANAG 4203 Ed 3:2007	BSP	C3B CaP1 Blos Comms

CHAPTER 4. AGREED PROFILES

4.1. INTRODUCTION

018. The NATO Interoperability Standards and Profiles include the set of Agreed Profiles listed below.

Table 4.1. Agreed Profiles

Service Area	**Title**
Abstract	
URI	**ID**
Federated Mission Networking	FMN Spiral 3 Profile
This document defines the Standards Profile for Federated Mission Networking (FMN) Spiral 3. The FMN Standards Profiles provides a suite of interoperability standards and other standardized profiles for interoperability of selected community of interest services, core services and communications services in a federation of mission networks. It places the required interoperability requirements, standards and specifications in context for FMN Affiliates.	
FMN Spiral 3 Profile	FMN3
Federated Mission Networking	FMN Spiral 4 Profile
Federated Mission Networking is founded on a service-oriented approach. The interoperability standards applicable to these services are identified and specified in line with the C3 Taxonomy. Similarly, the breakdown of the standards profiles more or less follows the taxonomy.	
FMN Spiral 4 Overview of Standards and Profiles	FMN4
Architecture	Profile for the Architecture development
This profile lists recommended standards for miscellaneous architecture releated subjects.	
architecture-profile.pdf	ARCHITECTURE
Archive	Profile for the Long Term Preservation of NATO Digital Information of Permanent value
Outlines the file formats and package structures approved by the Archives Committee for the long-term preservation of NATO digital information of permanent value.	
NISP-V2-archive-profile.pdf	ARCHIVE-ARCHIVE
Security Services	Service Interface Profile Security Services

Service Area	Title
Abstract	
URI	**ID**
This Service Interface Profile (SIP) describes the key elements that make up the NNEC Core Enterprise Services (CES) Security Services.	
AI_TECH_2016.06.02.01_SIP.pdf	SIP-SEC
REST Security Services	Service Interface Profile For REST Security Services
This specification provides the profile for securing representational state transfer (REST) web services (known as RESTful web services) that are deployed within the NNEC web service infrastructure. It specifies security requirements that need to be accounted for depending on the environment in which the services are being deployed, and the level of assurance required for protecting those services. This profile covers the required security protection profile for a Client to access protected resources on a Resource Server using REST.	
AI_TECH_2016.06.02.02_SIP.pdf	SIP-REST
Security Token Services	Service Interface Profile For Security Token Services
The purpose of this Service Interface Profile (SIP) is to specify how the security token service component of the Core Enterprise Services (CES) Security Services may be called.	
AI_TECH_2016.06.02.03_SIP.pdf	SIP-TOKEN
Policy Enforcement Points	Service Interface Profile For Policy Enforcement Points
The purpose of this Service Interface Profile (SIP), which should be read along with the Agency Directive 06.05.04.02.H 2, "Service Interface Profile for Security Services" [NCIA AD 06.05.04.02.H], is to specify how services may be called that are protected by the Core Enterprise Services (CES) Security Services.	
AI_TECH_2016.06.02.04_SIP.pdf	SIP-POLICY-ENFORCE
Enterprise Directory Services	Service Interface Profile For Enterprise Directory Services
The purpose of this Service Interface Profile (SIP) is to specify the interface of the directory service itself.	
AI_TECH_2016.06.02.05_SIP.pdf	SIP-ENTR-DIR
Messaging	Service Interface Profile For Messaging
This specification provides the interface control for simple object access protocol (SOAP) web services that are deployed within the NNEC web service infrastructure.	
AI_TECH_2016.06.02.06_SIP.pdf	SIP-MESG

Service Area	Title
Abstract	
URI	**ID**
REST Messaging	Service Interface Profile For REST Messaging
This specification provides the profile for securing representational state transfer (REST) web services (known as RESTful web services) that are deployed within the NNEC web service infrastructure. This covers only the call from a Web Service Consumer to a Web Service Provider using REST, and the response from the service provider. It includes how the message must be structured and the elements that must be contained within the call.	
AI_TECH_2016.06.02.07_SIP.pdf	SIP-REST-MSG
Publish-Subscribe Services	Service Interface Profile For Publish-Subscribe Services
This document gives directives along with clarifications and amendments to the [OASIS WS-BaseNotification, 2006] and [OASIS WS-BrokeredNotification, 2006] specification on how to implement a notification broker/subscription manager to promote interoperability between the publish/subscribe engines and generic message subscribers. Some extensions to the protocol have been introduced in order to meet NATO requirements.	
AI_TECH_2016.06.02.08_SIP.pdf	SIP-PUBSUB
Publish-Subscribe Notification Broker With Subscription Manager	Service Interface Profile For Publish-Subscribe Notification Broker With Subscription Manager
This document is part of a Service Interface Profile (SIP) for Publish/Subscribe Core Enterprise Services (CES) and should be read together with the main document [NCIA AD 06.05.04.02.E]. It gives guidance on implementation of a WS-Notification compliant notification broker. It is REQUIRED that each notification broker implementation also includes the subscription manager functionality.	
AI_TECH_2016.06.02.09_SIP.pdf	SIP-PUBSUB-NOTIF-BROOKER
Publish-Subscribe Notification Consumer	Service Interface Profile For Publish-Subscribe Notification Consumer
This document is part of a Service Interface Profile (SIP) for publish/subscribe Core Enterprise Services (CES) and should be read together with the main document "Service Interface Profile for Publish/Subscribe Services" [NCIA AD 06.05.04.02.E]. It gives guidance on implementation of a WS-Notification-compliant notification consumer.	
AI_TECH_2016.06.02.10_SIP.pdf	SIP-PUBSUB-NOTIF-CONSUMER
A Notification Cache Service	Service Interface Profile For A Notification Cache Service

Service Area	**Title**
Abstract	
URI	**ID**
This Service Interface Profile (SIP) describes the key eleme nts that make up the NNEC Core Enterprise Services (CES) Notification Cache service. It describes and profiles the operations which a Notification Cache service offers together with the associated message formats, and serves as a template and guideline for implementations.	
AI_TECH_2016.06.02.11_SIP.pdf	SIP-NOTIF-CACHE
Basic Collaboration Services	Service Interface Profile For Basic Collaboration Services
This Collaboration Service Interface Profile (SIP) is focused on instant messaging and is based on the extensible messaging and presence protocol (XMPP).	
AI_TECH_2016.06.02.12_SIP.pdf	SIP-BCS
Core And Advanced Instant Messaging Collaboration Services	Service Interface Profile For Core And Advanced Instant Messaging Collaboration Services
This document specifies the Service Interface Profile (SIP) for a number of instant messaging services that can be implemented and used by any XMPP entity (XMPP Client or XMPP Server) on the XMPP network.	
AI_TECH_2016.06.02.13_SIP.pdf	SIP-MESG-COL-SERV
Geospatial Services – Map Rendering Service	Service Interface Profile For Geospatial Services – Map Rendering Service
This document gives guidance on the implementation of a Map Rendering Service, being a special kind of a Geospatial Service.	
AI_TECH_2016.06.02.14_SIP.pdf	SIP-GEO-MRS
Recognized Air Picture Data Services	Service Interface Profile for Recognized Air Picture Data
This Service Interface Profile provides detailed information, guidance, instructions, standards and criteria to define the minimum set of data elements that are required to be available for operational or technical reasons so that correctly formatted technical message can be generated to establish a Recognized Air Picture in a federated environment.	
FMN Spiral 3 Profile including SIP for RAPD	SIP-RECOGNIZED-AIR-PICTURE-DATA
Service Management Services	Service Interface Profile for Service Management and Control
This Service Interface Profile provides guidance and technical details to the procedures, supporting services, infrastructure and data attributes required to implement Service	

Service Area	Title
Abstract	
URI	**ID**
Management and Control (SMC) services in Mission Networks. As such, this document contributes to the establishment of capabilities in support of Federated Mission Networking (FMN) as an affordable, effective and efficient means to enable sharing of information in a coalition environment.	
FMN Spiral 3 Profile including SIP for SMC	SIP-FOR-SMC
Transport Layer Security	Service Interface Profile for Transport Layer Security
This Service Interface Profile (SIP) provides detailed information, guidance, instructions, standards and criteria to be used as a for the usage of Transport Layer Security (TLS) protocol to provide authentication, confidentiality and integrity services for protecting the communication between a consumer and a provider. This publication is a living document and will be periodically reviewed and updated to reflect technology developments, emerging best practices, evolving standards and new or deprecated cryptographic schemes and algorithms.	
FMN Spiral 3 Profile including SIP for TLS	SIP-FOR-TLS
Web Applications	Service Interface Profile for Web Applications
This Service Interface Profile (SIP) provides detailed information, guidance, instructions, standards and criteria to be used for development, delivery and consumption of Web applications and dynamic Web sites. This publication is a living document and will be periodically reviewed and updated to reflect technology developments and emerging best practices.	
FMN Spiral 3 Profile including SIP for Web Apps	SIP-FOR-WEB-APPS
Cryptographic Services	Cryptographic Artefact Binding Profiles
Profile the use of cryptographic protocols, which can be used to implement support for different cryptographic techniques and mechanisms, for generating cryptographic artefacts to be stored in a cryptographic binding.	
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 2	BINDING-CRYPTO-V2
Informal Messaging Services	Simple Mail Transfer Protocol (SMTP) Binding Profile
This profile specifies the mechanism for binding metadata to Internet Email (both formal and informal) including MIME entities.	

Service Area	Title
Abstract	
URI	**ID**
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 2	BINDING-SMTP-V2
XMPP Services	Extensible Message and Presence Protocol (XMPP) Binding Profile
Confidentiality metadata labels can be supported in XMPP stanzas as indicated by XEP-0258 whereby a mechanism for carrying Enhanced Security Services (ESS) Security labels is standardized. This profile extends the XEP-0258 specification to support carrying an Embedded or Detached BDO for Message stanzas. This profile supports the XMPP use cases for one-to-one instant messaging and multi-user chat.	
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 4	BINDING-XMPP-V2
Metadata Services	Office Open XML (OOXML) Formats Binding Profile
This profile for the OOXML describes how metadata can be maintained.	
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 5	BINDING-OOXML-V2
SOAP Services	Simple Object Access Protocol (SOAP) Profile
This profilesupports for both SOAP 1.1 and SOAP 1.2. To support information sharing between partners it may be necessary to locate a Binding Data Object (BDO) in the SOAP protocol layer. Metadata may be bound to the whole data object (SOAP message) or may be bound to subsets of the SOAP message (data object(s) in the SOAP body). In an environment where data objects must have bound metadata, the resource identified in the URI will already contain a BDO (detached, encapsulating or embedded).	
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 6	BINDING-SOAP
REST Services	Representational State Transfer (REST) Profile
In an environment where data objects must have bound metadata, the resource identified in the URI will already contain a BDO (detached, encapsulating or embedded). As such, there is no requirement for metadata binding that is specific for REST. However, to support	

Service Area	Title
Abstract	
URI	**ID**
information sharing between partners it may be necessary to locate a Binding Data Object (BDO) in the HTTP protocol layer.	
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 7	BINDING-REST-V2
Generic Packaging Services	Generic Open Packaging Convention (OPC) Binding Profile
This profile defines a generic packaging mechanism, based upon the Open Packaging Container (OPC) defined in ISO/IEC 29500-2:2008, to associate any arbitrary file that do not use the Office Open XML (OOXML) format or have no specific profile for supporting the Binding Information with their own file format.	
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 8	BINDING-GENERIC-V2
Sidecar Services	Sidecar Files Binding Profile
Sidecar files allow the association of metadata with a data object for which there is no profile.	
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 9	BINDING-SIDECAR-V2
XMP Services	Extensible Metadata Platform (XMP) Binding Profile
This Binding Profile for XMP describes how metadata should be incorporated within an XMP packet as a structured value.	
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 10	BINDING-EXTENSIBLE-V2
WSMP Services	Web Service Messaging Profile (WSMP) Profile
The Web Service Messaging Profile (WSMP) defines a set of service profiles to exchange arbitrary XML-based messages. WSMP is extensible and may be used by any Community of Interest (COI). This profile supports the requirement to explicitly bind metadata to data (or subsets thereof) whereby the data is XML-based and exchanged between service consumers and service providers using the WSMP message wrapper mechanism.	

Service Area	**Title**
Abstract	
URI	**ID**
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 11	BINDING-WSMP
XML Artifacts Profile	Common XML artefacts 2.0
This profile supports the requirement to bind metadata to data (or subsets thereof) whereby the data is XML-encoded in one of the following schemas: XML Schema, ISO Schematron, XML Stylesheet, Generic Codelist, Context/Value Assosiation or Security Policy Information File.	
ADat-P 4778.2 Ed A Ver 1:2020 - Profiles for Binding Metadata to a Data Object - Chapter 12	BINDING-COMMON-XML

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NATO STANDARD

ADatP-34

NATO Interoperability Standards and Profiles

Volume 3

Candidate Interoperability Standards and Profiles

Edition O Version 2

6 May 2022

NORTH ATLANTIC TREATY ORGANIZATION
ALLIED DATA PUBLICATION

Published by the
NATO STANDARDIZATION OFFICE (NSO)

NATO LETTER OF PROMULGATION

The enclosed Allied Data Publication ADatP-34, Edition O, Version 2 NATO Interoperability Standards and Profiles, which has been approved by the nations in the C3B, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 5524.

ADatP-34, Edition O, Version 2 is effective on receipt.

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

Dimitrios SIGOULAKIS
Major 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

[nation]	[detail of reservation]
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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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 2.0.2	NATO ADatP-4733 Ed A Ver 1:2017 / STANAG (Study) 4733 Ed 1	BSP	C3B CaP1
NATO Transformational Baseline 3.0:2009 (ACT)	NATO TIDE/ TTB: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 Study (expected) AIDPP-01 Ed. A version 1 / STANAG 4162 Ed 3	BSP	C3B CaP2
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 Ed B Ver 1:2019 / STANAG 5516 FT Ed 8	BSP	C3B CaP1 TDL CaT
Modeling and Simulation Services			

1.3.2. Core Services

Title	Pubnum	Profiles	Responsible Party
Business Support CIS Security Services			
Common Biometric Exchange Formats Framework (CBEFF)	ANSI incits-398:2008	BSP	NCIA/JISR
Electronic Biometric Transmission Specification (EBTS)	FBI IAFIS-DOC-01078-8.1:2008	BSP	CNAD, AC/224 NAFAG, JCGISR

Title	Pubnum	Profiles	Responsible Party
Communication and Collaboration Services			
HyperText Markup Language (HTML), Version 5.0, Reference Specification	W3C WD-html5-20121025:2012	BSP	NCIA/CES
Fax Services			
Procedures for real-time Group 3 facsimile communication over IP networks	ITU-T T.38:2010	BSP	NCIA/NSII
Geospatial Services			
NATO Geospatial Web Services	NATO AGeoP-26 Ed B Ver 1	BSP	MC, MCJSB, JGS
OpenGIS Web Processing Service	OGC 05-007r7:2007	BSP	NCIA/AWG
Geospatial Web Coverage Services			
Web Coverage Service Implementation Standard v1.1.2	OGC 07-067r5:2007	BSP	NCIA/AWG
Geospatial Coordinate Services			
OpenGIS Coordinate Transformation Services	OGC 01-009:2001	BSP	NCIA/AWG
Information Management Services			
Application Vulnerability Description Language (AVDL) version 1.0	OASIS AVDL Specification - 01:2004	BSP	NCIA/CS
Formal Messaging Services			
Registration of Military Message Handling System (MMHS) Header Fields for Use in Internet Mail	IETF RFC 6477:2012	BSP	NCIA/CES
Tactical Data Exchange - Link 11/11B	NATO ATDLP-5.11 Ed B Ver 1:2019 / STANAG FT 5511 Ed 10	BSP	C3B CaP1 TDL CaT
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 Ed B Ver 1:2019 / STANAG 5516 FT Ed 8	BSP	C3B CaP1 TDL CaT
Joint Range Extension Application Protocol (JREAP)[1]	NATO ATDLP-5.18 Ed B Ver 2:2019 /	BSP	C3B CaP1 TDL CaT

Title	Pubnum	Profiles	Responsible Party
	STANAG FT 5518 Ed 4		
SOAP Messages with Attachments (SwA) Profile 1.1	OASIS wss-v1.1-spec-os-SwAProfile:2006	BSP	NCIA/CES
Variable Message Format (VMF)[2]	US DoD MIL-STD-6017D:2017	BSP	C3B CaP1
Platform Services			
WS-BrokeredNotification 1.3	OASIS wsn-ws_brokered_notification-1.3-spec-os:2006	BSP	NCIA/CES
Web Services Business Process Execution Language (WSBPEL) version 2.0	OASIS ws-bpel:2007	BSP	NCIA/CES
WS-BaseNotification	OASIS ws-notif:2006	BSP	NCIA/CES
WS-Topics 1.3	OASIS wsn-ws_topics-1.3-spec-os:2006	BSP	NCIA/CES
Web Services Addressing 1.0 - Core	W3C REC-ws-addr-core-20060509:2006	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
Security Token Services			
RADIUS and IPv6	IETF RFC 3162:2001	BSP	NCIA/NSII
Single Sign On	Open Group P702:1997	BSP	C3B CaP4
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
Biometric data interchange formats -- Part 2:	ISO/IEC 19794-2:2007	BSP	NCIA/JISR

Title	Pubnum	Profiles	Responsible Party
Biometric data interchange formats -- Part 5: Face image data	ISO/IEC 19794-5:2007	BSP	NCIA/JISR
Biometric data interchange formats -- Part 6: Iris image data	ISO/IEC 19794-6:2007	BSP	NCIA/JISR
NATO Public Key Infrastructure (NPKI) Certificate Policy (CertP) Rev2.	NATO AC/322-D(2004)0024REV2:2008	BSP	C3B NPMA
eXtensible Access Control Markup Language core specification	OASIS xacml-3.0-core-spec-os:2013	BSP	NCIA/CS
DOD EBTS	US DoD DIN: DOD_BTF_TS_EBTS_Nov06_01.02.00:2006	BSP	CNAD, AC/224 NAFAG, JCGISR
DOD EBTS	US DoD DIN: DOD_BTF_TS_EBTS_Mar09_02.00.00:2009	BSP	CNAD, AC/224 NAFAG, JCGISR
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
Multicast Group Membership Discovery MIB	IETF RFC 5519:2009	BSP	NCIA/NSII
Enhanced Telecom Operations Map	TM-FORUM eTOM Rel.13:2012	BSP	NCIA/SMC
Service Discovery Services			
DNS-Based Service Discovery	IETF RFC 6763:2013	BSP	NCIA/CES
TIDE Service Discovery	NATO TIDE/TIDE-ID-SP:2008	BSP	NCIA/CES

Title	Pubnum	Profiles	Responsible Party
OASIS ebXML Messaging Services Specification	OASIS ebms2:2002	BSP	NCIA/CES
Web Services Dynamic Discovery Version 1.1	OASIS wsdd-discovery-1.1-spec:2009	BSP	NCIA/CES
Web Services Description Language (WSDL) Version 2.0 Part 1: Core Language	W3C REC-wsdl20-20070626:2007	BSP	NCIA/Sstrat/Sea
Message-Oriented Middleware Services			
SOAP Version 1.2	W3C SOAP Version 1.2:2001	BSP	NCIA/CES
Web Platform Services			
Content-ID and Message-ID Uniform Resource Locators	IETF RFC 2392:1998	BSP	NCIA/CES
XML Linking Language (XLink) Version 1.1	W3C REC-xlink11-20100506:2010	BSP	NCIA/CES
Extensible Markup Language (XML) version 1.1 (Second Edition)	W3C REC-xml11-20060816:2006	BSP	NCIA/CES
Web Presentation Services			
Web Services for Remote Portlets Specification	OASIS wsrp-specification-2.0:2008	BSP	NCIA/CES
Information Discovery Services			
OpenSearch 1.1 Draft 6	Opensearch opensearch11d6:2005	BSP	FMN CPWG
Information Access Services			
MIME Encapsulation of Aggregate Documents, such as HTML (MHTML)	IETF RFC 2557:2006	BSP	NCIA/CES
A Standards Based Approach for Geo-enabling RSS feeds, v1.0	OGC 06-050r3:2006	BSP	NCIA/AWG
XForms 1.0	W3C REC-xforms-20031014:2003	BSP	NCIA/CES
Metadata Repository Services			
Web Services Metadata Exchange (WS-MetadataExchange)	W3C REC-ws-metadata-exchange-20111213:2011	BSP	NCIA/CES

Title	Pubnum	Profiles	Responsible Party
Directory Services			
Common Directory Services and Procedures	CCEB ACP 133(D):2009	BSP	C3B NACP CaT
Choreography Services			
W3C Web Service Choreography Interface version 1.0	W3C NOTE-wsci-20020808:2002	BSP	NCIA/CES
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	C3B CaP2
Data Format Transformation Services			
XML Query Language (XQuery)	W3C WD-xquery-20030502:2003	BSP	NCIA/CES
Infrastructure Services			
Real Time Control Protocol (RTCP) attribute in Session Description Protocol (SDP)	IETF RFC 3605:2003	BSP	NCIA/NSII
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	MC, MCJSB, JINT JISRP
Distributed File System (DFS) DCE DFS	Open Group F209a:1997	BSP	NCIA/CES
Infrastructure Networking Services			
Default Address Selection for Internet Protocol version 6 (IPv6)	IETF RFC 6724:2012	BSP	NCIA
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

Title	Pubnum	Profiles	Responsible Party
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
Data Transfer Services			
FTP Extensions for IPv6 and NATs	IETF RFC 2428:1998	BSP	NCIA/NSII
Domain Name Services			
DNS Configuration options for Dynamic Host Configuration Protocol for IPv6 (DHCPv6)	IETF RFC 3646:2003	BSP	NCIA/NSII
Network Information Service (NIS) Configuration Options for DHCPv6	IETF RFC 3898:2004	BSP	NCIA/NSII
A Method for Storing IPsec Keying Material in DNS	IETF RFC 4025:2005	BSP	NCIA/CS
Multicast DNS	IETF RFC 6762:2013	BSP	NCIA/NSII
Distributed Time Services			
DCE 1.1: Time Services	Open Group C310:1994	BSP	NCIA/CES

[1]The SIP for Recognized Air Picture Data refers to ATDLP-5.18 Ed B Version 1 instead of ATDLP-5.18 Ed B Version 2
[2]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
ZigBee	IEEE 802.15.4:2005	BSP	NCIA/NSII
Mobile WiMax	IEEE 802.16e:2005	BSP	NCIA/NSII
Wireless Broadband	IEEE 802.16e:2004	BSP	NCIA/NSII
Multiple Spanning Trees	IEEE 802.1S:2002	BSP	NCIA/NSII

Title	Pubnum	Profiles	Responsible Party
Mobile Broadband Wireless Access (Draft)	IEEE 802.20:2006	BSP	NCIA/NSII
Dynamic Source Routing (DSR) Draft- version 1.0	IETF draft-ietf-manet-dsr-09:2003	BSP	NCIA/NSII
Ad-hoc On-Demand Distance Vector Routing (AODV)	IETF RFC 3561:2003	BSP	NCIA/NSII
IPv6 over Low Power Wireless Personal Area Networks	IETF RFC 4919:2007	BSP	NCIA/NSII
Technical Standards for an Automatic Radio Control System (ARCS) for HF Communication Links[1]	NATO Study (expected) STANAG 4538 Ed 2	BSP	C3B CaP1 Blos Comms
Interoperability Standard for Satellite SHF Deployable Terminals Control and Command Services	NATO STANAG 4706 Ed 1:2018	BSP	C3B CaP1 SATCOM CaT
Common Alerting Protocol Version 1.2	OASIS CAP 1.2:2010	BSP	NCIA/Sstrat/ Sea
The Open Grid Services Architecture (OGSA) version 1.5	OGF draft-ogf-ogsa-spec-1.5-011:2006	BSP	NCIA/CES
Wireless USB Specification	USB.ORG wusb:2005	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 Vol 1 Ed.A Ver 1:2017 / STANAG 4586 Ed 4	BSP	CNAD, AC/141 NNAG, JCGUAS
Standard Interfaces Of Unmanned Aircraft (Ua) Control System (UCS) for NATO UA Interoperability - Interface Control Document	NATO AEP-84 Vol 2 Ed.A Ver 1:2017 / STANAG 4586 Ed 4	BSP	CNAD, AC/141 NNAG, JCGUAS
Joint Range Extension Application Protocol (JREAP)[1]	NATO ATDLP-5.18 Ed B Ver 2:2019 / STANAG FT 5518 Ed 4	BSP	C3B CaP1 TDL CaT
Technical Characteristics of the Multifunctional Information Distribution System (MIDS) - VOL I & VOL II - ATDLP-1.75 Edition A[2]	NATO Study (expected) STANAG 4175 Ed 6	BSP	C3B CaP1 TDL CaT

Title	Pubnum	Profiles	Responsible Party
Tactical Messaging Access Services			
Call Sign Book for Ships	CCEB ACP 113(AJ):2019	BSP	C3B NACP CaT
Information Assurance for Allied Communications and Information Systems	CCEB ACP 122(G):2015	BSP	C3B NACP CaT
Address Indicating Groups - Instructions and Assignments	NATO ACP 100 NS-1(Q)	BSP	C3B NACP CaT
Instructions for the Life Cyle Management of Allied Communications Publications (ACPs), NATO Supplement-1	NATO ACP 198 NS-1(H):2014	BSP	C3B NACP CaT
Tactical Data Exchange - Link 16	NATO ATDLP-5.16 Ed B Ver 1:2019 / STANAG 5516 FT Ed 8	BSP	C3B CaP1 TDL CaT
Joint Range Extension Application Protocol (JREAP)[1]	NATO ATDLP-5.18 Ed B Ver 2:2019 / STANAG FT 5518 Ed 4	BSP	C3B CaP1 TDL CaT
Technical Characteristics of the Multifunctional Information Distribution System (MIDS) - VOL I & VOL II - ATDLP-1.75 Edition A[2]	NATO Study (expected) STANAG 4175 Ed 6	BSP	C3B CaP1 TDL CaT
Standards for Data Forwarding between Tactical Data Systems	NATO Study (expected) STANAG 5616 Ed 7	BSP	C3B CaP1 TDL CaT
IPv4 Routed Access Services			
IP QoS for the NII	NCIA TN-1417	BSP	C3B CaP1 N&S 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	C3B CaP1 N&S CaT
Transport Services			
Routing Information Protocol next generation for IPv6 (RIPng)	IETF RFC 2080:1997	BSP	NCIA/NSII

Title	Pubnum	Profiles	Responsible Party
IP Version 6 over PPP	IETF RFC 2472:1998	BSP	NCIA/NSII
Generic Packet Tunneling in IPv6	IETF RFC 2473:1998	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
Using IPsec to Protect Mobile IPv6 Signaling Between Mobile Nodes and Home Agents	IETF RFC 3776:2004	BSP	NCIA/CS
Border Gateway Multicast Protocol (BGMP)	IETF RFC 3913:2004	BSP	NCIA/NSII
Protocol Independent Multicasting Dense Mode (PIM-DM)	IETF RFC 3973:2005	BSP	NCIA/NSII
Mobile IPv6 Fast Handovers	IETF RFC 5568:2009	BSP	NCIA/NSII
Simplified Multicast Forwarding (SMF)	IETF RFC 6621:2012	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	C3B CaP1 N&S CaT
Packet-based Transport Services			
Mobile IPv6 Support for Dual Stack Hosts and Routers	IETF RFC 5555:2009	BSP	NCIA/NSII
IP QoS for the NII	NCIA TN-1417	BSP	C3B CaP1 N&S CaT
Packet Routing Services			
Interoperability Point Quality of Service (IP QoS)	NATO AComP-4711 Ed A Ver 1:2018 / STANAG 4711 Ed 1	BSP	C3B 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	C3B CaP1 N&S CaT
Packet-based Aggregation 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	C3B 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	C3B CaP1 N&S CaT
Wireless LOS Mobile Transmission Services			
Bluetooth Core Specification v5.0	Bluetooth SIG Core Version 5.0:2016	BSP	NCIA/NSII
Wireless LOS Mobile Narrowband Transmission Services			
Voice Coding Algorithm	NATO STANAG 4444 Ed 2:2015	BSP	C3B CaP1 Blos Comms
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 Study (expected) STANAG 4175 Ed 6	BSP	C3B CaP1 TDL 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.

CHAPTER 2. CANDIDATE PROFILES

2.1. INTRODUCTION

011. There is currently no candidate profiles in NISP.

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