# NATO use of Civil Standards

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**International Standardization Workshop
31st October 2018**

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# Agenda

- **NATO Policy on use of non-NATO Standards**

- **Benefit of Adopting non-NATO Standards**

- **AAP-03 (K) Chapter 3 – Civil & Defence Standards**

- **Standard-Related Document (SRD) – 003**

- **UK 'internal' process for validating SP's**

- **Summary**

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Extract from 'NATO Policy for Standardization'
Document PO(2016)0315 - Para 7.5.2

NATO **shall adopt and refer** to suitable non-NATO standards (civil standards and national defence standards) in lieu of developing NATO standardization documents to the maximum extent.

**NATO will fully exploit** mature national defence standards.

**NATO shall only develop** a standard where no suitable non-NATO standard exists.

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- **Non-NATO standards shall be selected for NATO's use based on their ability to meet in full, or in part, the NATO requirement. These Standards should have broad acceptance, accessibility and technical excellence.**
- **In general, using civil standards is preferred to using national defence standards.**
- **Using civil standards brings broader expertise, technology and best practices of industry to the solution.**
- **Compared to developing NATO standards, this avoids duplication of effort, reduces NATO's workload, broadens interoperability and can reduce procurement costs.**

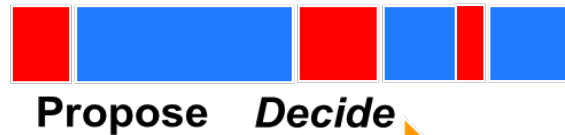*Civil as possible, Military only as Necessary*

## IN NATO ~ 21 – 62 months; National SMEs do most work

Propose    Task    Draft, debate, revise, repeat    Ratify    Promulgate

## ADOPTING: ~ 14 – 20 months; work is more distributed

Propose    *Decide*    Ratify    Promulgate

**Savings!!!**

**Adopt a Standard**

**… into NATO**

# IN NATO ~ 21 – 62 months; National SMEs do most work

Propose　　Task　　Draft, debate, revise, repeat　　Ratify　Promulgate

**without delays, break of silences, extensions, etc**

ADOPTING: ~ 14 – 20 months; work is more distributed

Propose  *Decide*

**Adopt a Standard**

ISO International Organization for Standardization

Ratify  Promulgate

*... into NATO*

*"It is estimated that savings of between 10 and 50% could be made through a more intensive use of civil standards in the military sector."*

< University of Sussex >

# Goal: Enhancing NATO's use of civil standards and civil-military approaches to standardization.

# Objectives:

- Identify the impact of civil standards;
- Provide Education and Training;
- Foster relationships with civil Standards Developing Organisations;
- Update Policy and Procedures;
- Encourage use of Civil Standards;

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civil standard / norme civile

CIV-STD

**"A standard published by a civil standards developing organization and made available to the public."**

norme civile / civil standard

**"Norme publiee par une organisation d'elaboration de normes et mise a la disposition du public."**

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**The US NSDD research project was commissioned by Mr. Greg Saunders US DoD Standardization Agency Director and SMG Chairman, to help understand:**

- **How many civil standards are NATO using?**
- **Where are they used?**
- **How are they referenced, and by whom?**
- **Are there Intellectual Property issues?**
- **In what domains are civil standards used?**

**Result is a multi-tabbed Excel Spreadsheet**

*Civil as possible, Military only as Necessary*
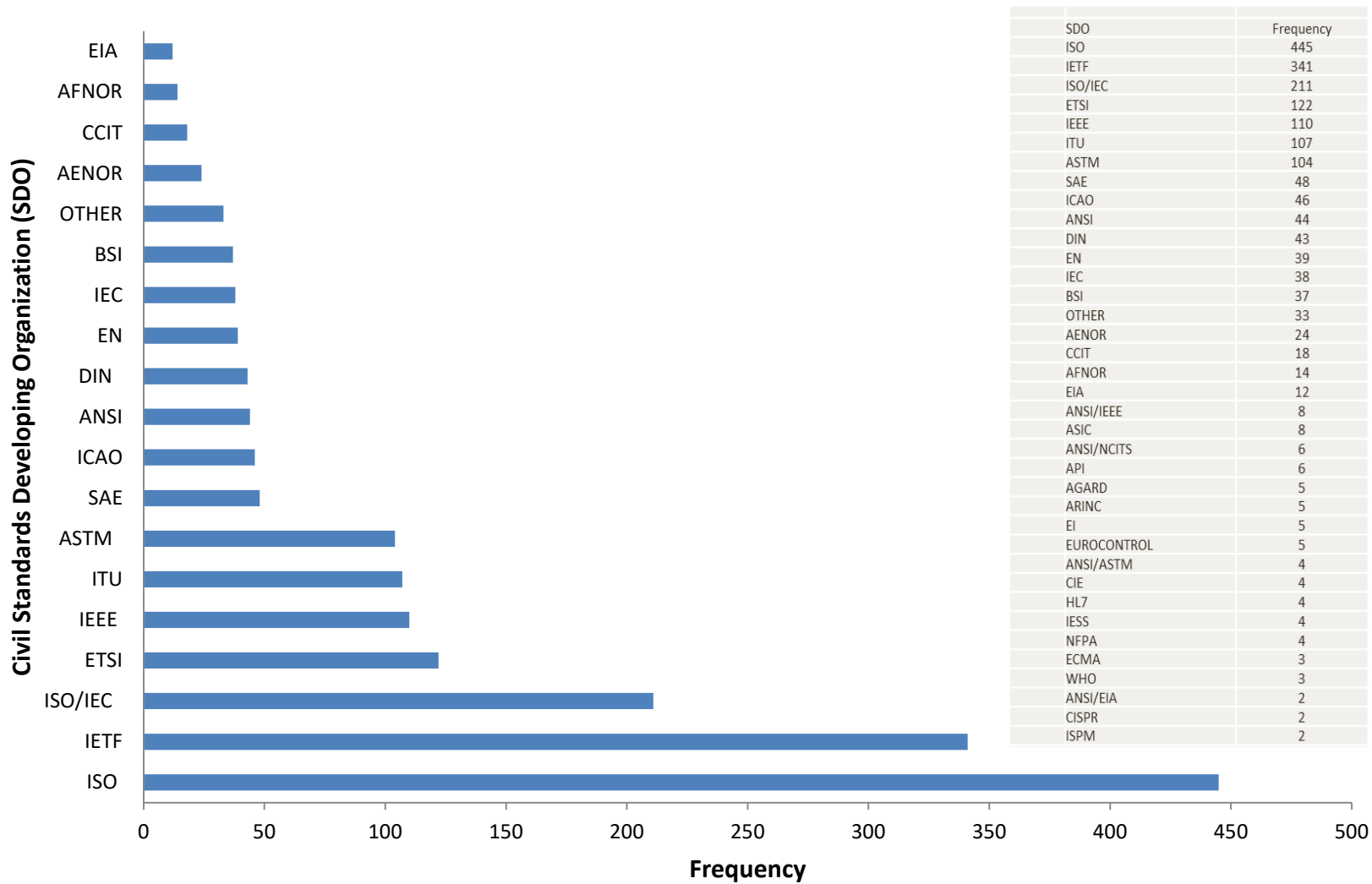
# US Report – NSDD Research

- Dashboard
- SDO Terminology
- Terminology
- Civil Standards Sort Order
- Standards by TA/DTA
- ADC
- ATMC
- AC224
- AC 225
- AC323
- AC326
- AC327

- C3B
- CS
- COMEDS
- LC
- MCASB
- MCJSB
- MCLSB
- MCMSB
- MEWAC
- PC

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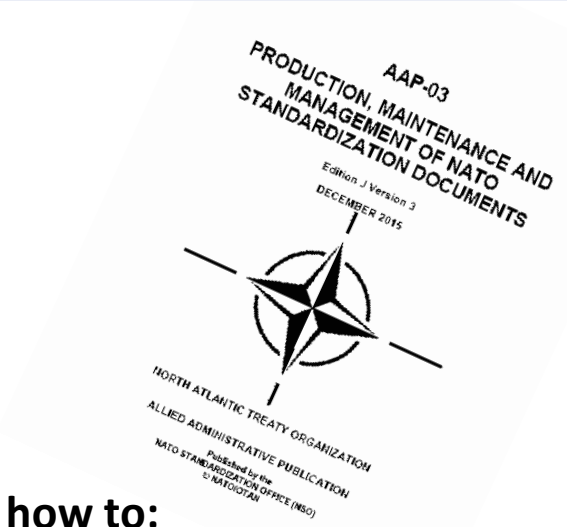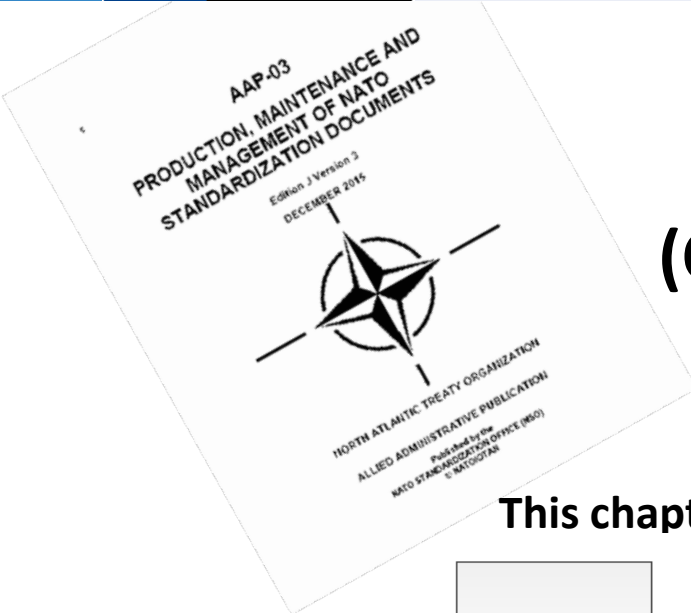
Most Frequently Used Civil Standards by SDO

| SDO | Frequency |
|-----|-----------|
| ISO | 445 |
| IETF | 341 |
| ISO/IEC | 211 |
| ETSI | 122 |
| IEEE | 110 |
| ITU | 107 |
| ASTM | 104 |
| SAE | 48 |
| ICAO | 46 |
| ANSI | 44 |
| DIN | 43 |
| EN | 39 |
| IEC | 38 |
| BSI | 37 |
| OTHER | 33 |
| AENOR | 24 |
| CCIT | 18 |
| AFNOR | 14 |
| EIA | 12 |
| ANSI/IEEE | 8 |
| ASIC | 8 |
| ANSI/NCITS | 6 |
| API | 6 |
| AGARD | 5 |
| ARINC | 5 |
| EI | 5 |
| EUROCONTROL | 5 |
| ANSI/ASTM | 4 |
| CIE | 4 |
| HL7 | 4 |
| IESS | 4 |
| NFPA | 4 |
| ECMA | 3 |
| WHO | 3 |
| ANSI/EIA | 2 |
| CISPR | 2 |
| ISPM | 2 |

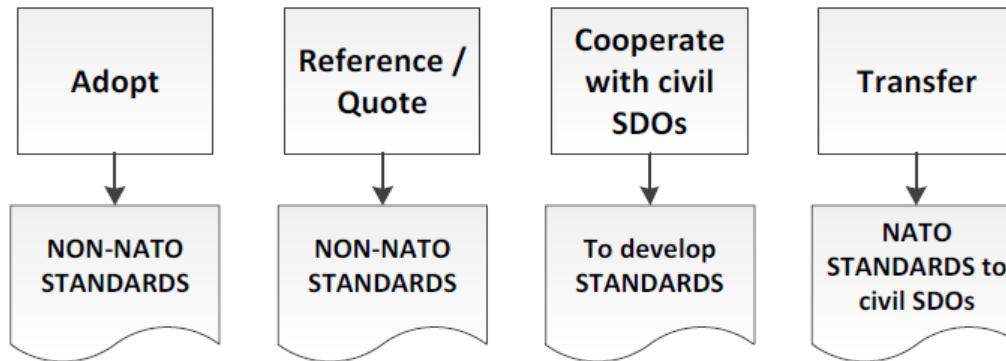| Civil Standards Usage by Tasking Authority (TA) | | | | |
|---|---|---|---|---|
| **Tasking Authority** | **Abbreviation** | **Promulgated Documents** | **Promulgated Documents With Referenced Civil Standards (n)** | **# Referenced Civil Standards** |
| Conference of National Armaments Directors (CNAD) | CNAD | 413 | 418 | 418 |
| Military Committee (MC) | MC | 517 | 101 | 551 |
| Consultation Command and Control Board (C3B) | C3B | 141 | 51 | 841 |
| Air Traffic Management Committee (ATMC) | ATMC | 42 | 13 | 28 |
| Committee of the Chiefs of Military Medical Services (COMEDS) | COMEDS | 73 | 9 | 43 |
| Pipeline Committee (PC) | PC | 43 | 5 | 49 |
| Committee for Standardization (CS) | CS | 4 | 2 | 8 |
| Air Defence Committee (ADC) | ADC | 0 | 0 | 0 |
| Logistics Committee (LC) | LC | 6 | 0 | 0 |

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# Chapter 3
# Non-NATO
# (Civil and Defence)
# Standards

**This chapter provides information on how to:**

| Adopt | Reference / Quote | Cooperate with civil SDOs | Transfer |
|---|---|---|---|
| NON-NATO STANDARDS | NON-NATO STANDARDS | To develop STANDARDS | NATO STANDARDS to civil SDOs |

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## Identification of Standardization Solution

**Standardization Proposal (SP) Form – Annex A, part 13**
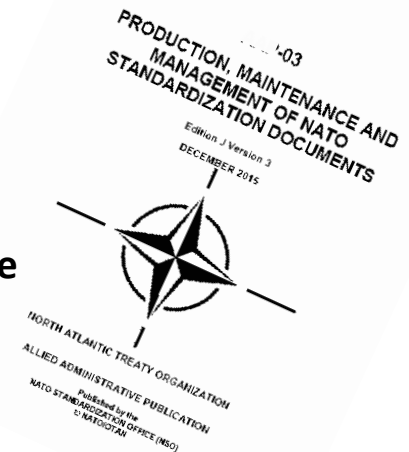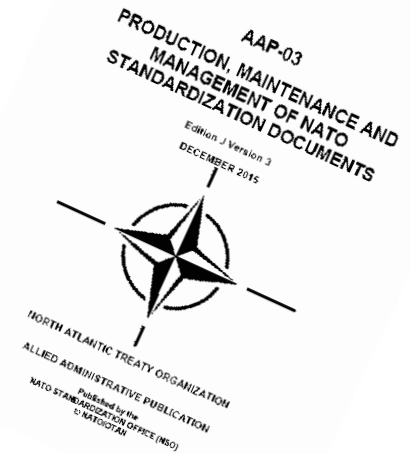**Standardization Inquiry (SI) Form – Annex B, part 14**

**Standardization Task (ST) Form – Annex C, part 12**

**Modification Proposal Form – Annex G, part 6**
**Revision Task Form (RT) – Annex H, part 11**
**(**for Major Modification)

**Non-NATO standardization solutions: "if known, indicate existing suitable non-NATO standardization solutions that should be adopted by NATO or interested Civil Standard Developing organizations for co-development."**
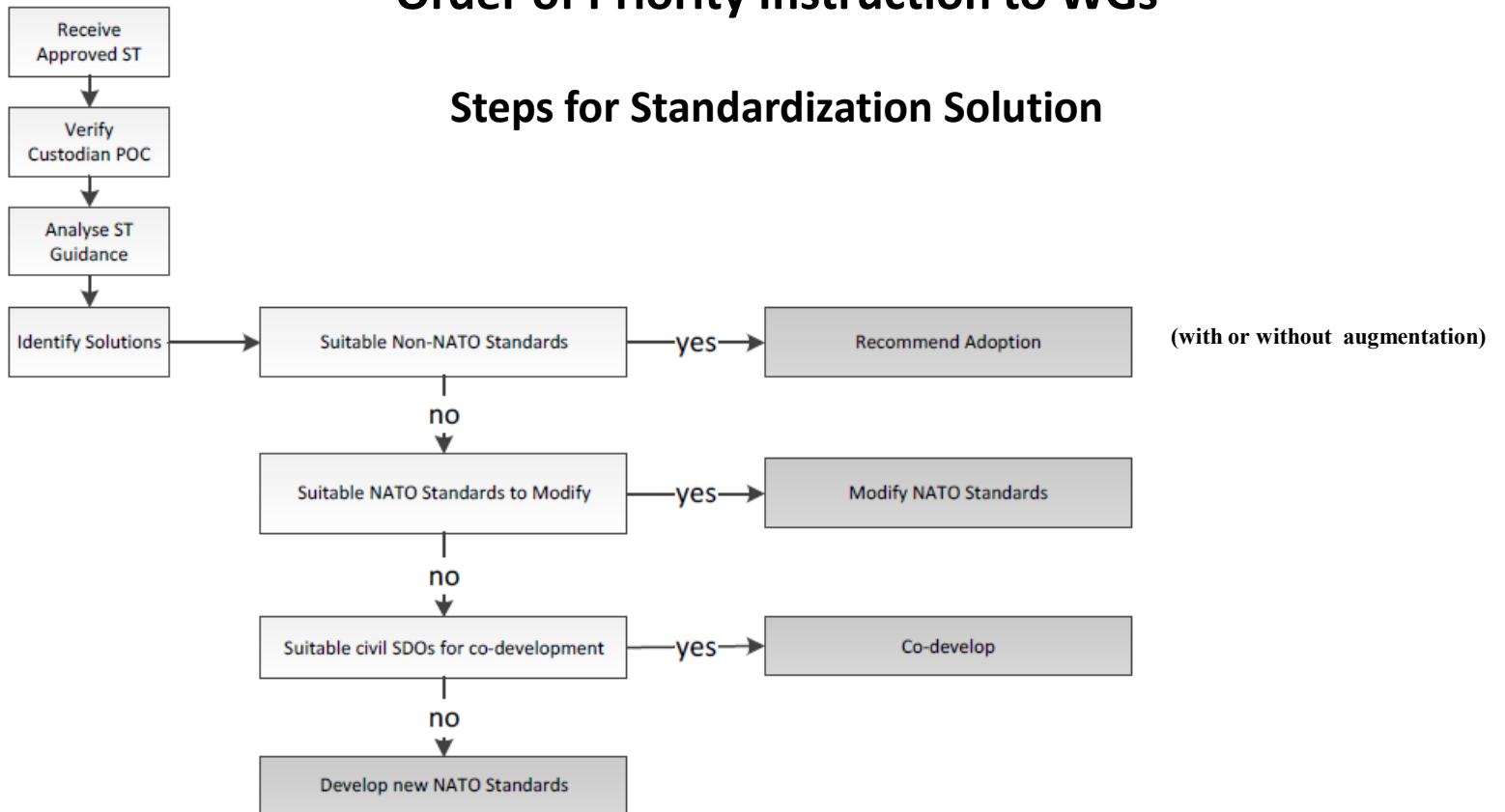
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**Order of Priority Instruction to WGs**

**Steps for Standardization Solution**

```
Receive
Approved ST
    │
    ▼
Verify
Custodian POC
    │
    ▼
Analyse ST
Guidance
    │
    ▼
Identify Solutions ──► Suitable Non-NATO Standards ──yes──► Recommend Adoption    (with or without augmentation)
                                 │
                                 no
                                 ▼
                       Suitable NATO Standards to Modify ──yes──► Modify NATO Standards
                                 │
                                 no
                                 ▼
                       Suitable civil SDOs for co-development ──yes──► Co-develop
                                 │
                                 no
                                 ▼
                       Develop new NATO Standards
```

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## Civil Standards Developing Organizations who have signed Technical Cooperation Agreement's with NATO

- AFNOR — French Association for Standardization: http://www.afnor.org/
- ANSI — American National Standards Institute: http://ansi.org/
- ASD-STAN — European industrial Standardization Organization for AeroSpace & Defence: http://www.asd-stan.org/
- ASTM International — American Society for Testing and Materials: http://www.astm.org
- BSI — British Standards Institutions: http://www.bsigroup.com
- CEN — European Committee for Standardization: https://www.cen.eu
- CENELEC — European Committee for Eletrotechnical Standardization: http://www.cenelec.eu
- DIN — German Institute for Standardization: http://www.din.de
- ETSI — European Telecommunications Standards Institute: http://www.etsi.org
- GS1 — GS1 UK: https://www.gs1uk.org
- IEC — International Electrotechnical Commission: http://www.iec.ch
- IEEE — Institute of Electrical and Electronics Engineers, Incorporated: http://www.ieee.org
- ISO — International Organization for Standardization: http://www.iso.org
- SAE International — Society of Automotive Engineers: http://www.sae.org
- TSE — Turkish Standards Institution: http://www.tse.org.tr/en
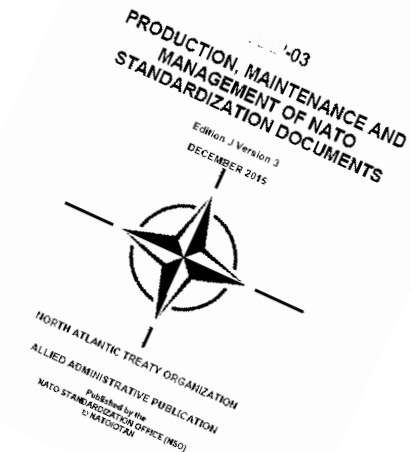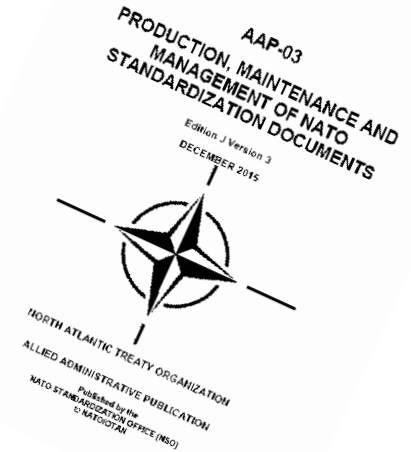
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## Referencing of Civil and Defence Standards convention

**Normative references** - are those directly referenced in the document as part of the requirement

**Informative references** - are those listed for information purposes only and are not part of any requirement (background information).

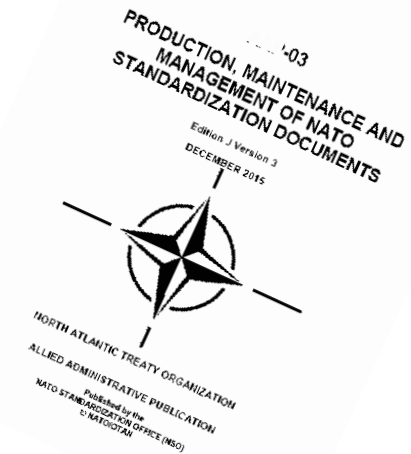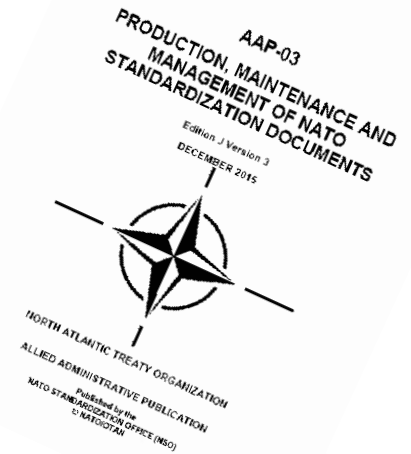*Civil as possible, Military only as Necessary*

# SRD-003
## Facilitating the Development and use of Civil Standards

**Definition**

A standard-related document (SRD) is a NATO standardization document that facilitates the understanding implementation of one or more Allied standards

SRD-003 will be released simultaneously with AAP-03(K) on the 1st July 2018

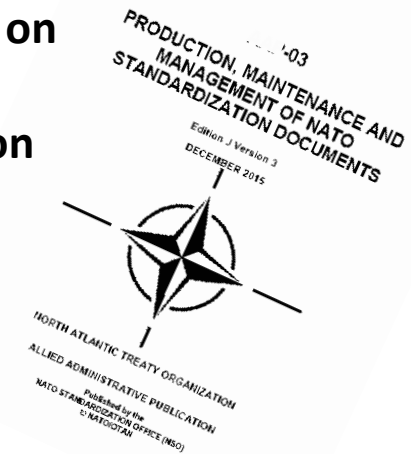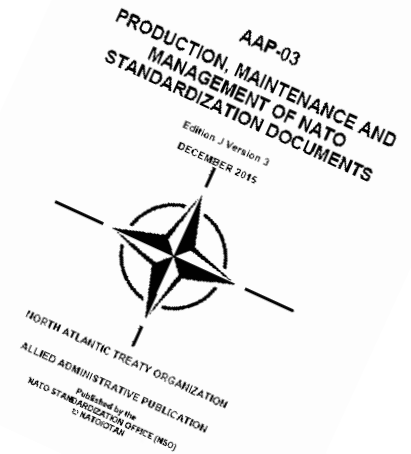The SRD was drafted by the Civil Standards Team under direction of the SMG.

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# Standard-Related Document – 003

**The SRD will:**

- Describe the different types of civil standards and the SDOs that develop them.
- Provide information to the TA, DTA or NATO Body involved in the development, adoption and use of civil standards.
- Clarify the roles and responsibilities of the TA, DTA, and Custodians or NATO Points of Contact when they participate in SDO activities on behalf of NATO.
- Identify criteria for the transfer of an existing NATO standardization document to an SDO.
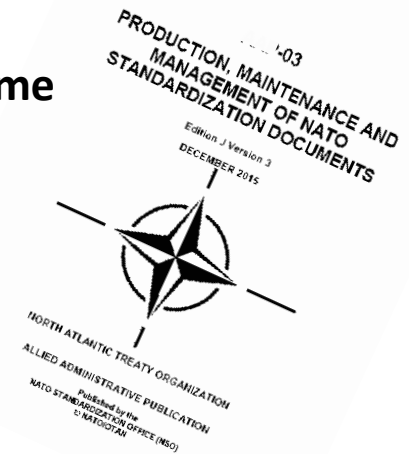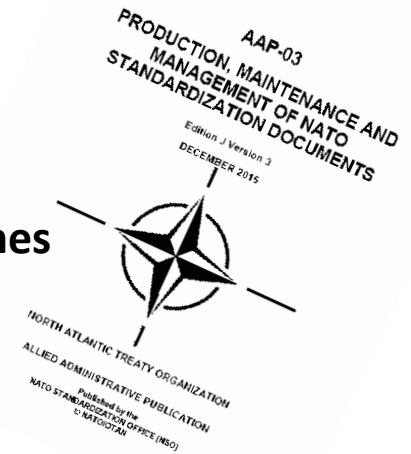
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# UK 'internal' process for Validating Standardization Proposals

**All SP's received through the UK Delegation will:**

- **Be interrogated by the UK DStan team to find any potential matches on subject.**
- **The UK POC will be provided with this information to inform the standardization task of possible non-NATO solutions.**

**In addition, UK POCs on WG's or Custodians will be encouraged to supply to UK DStan all Revision Tasks (RTs) in order to conduct the same activity.**

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# Summary

**Today we have covered..........**

- **NATO Policy on use of non-NATO Standards**
- **Benefit of Adopting non-NATO Standards**
- **AAP-03(K) Chapter 3 – Civil & Defence Standards**
  - **Adoption**
  - **Cooperation with civil SDOs**
  - **Transfer**
  - **Reference**
- **Standard-Related Document (SRD) – 003**
- **UK process for validating SPs**

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# Questions