



National Défense
Defence nationale

Sous-ministre adjoint (Matériels) / Assistant Deputy Minister (Material)

Direction générale système de matériel et chaîne d'approvisionnement / Director General Materiel Systems and Supply Chain




S1000D Implementation Progress in the Department of National Defence Canada

October 2025


Canada




Overview


 Implementation Journey

 Policy Development

 Software Implementation

 Legacy Data Migration

 Change Management & Training

 What's Next



**CENTRAL PUBLICATIONS
MANAGEMENT SYSTEM**

DEPARTMENT OF
NATIONAL DEFENCE

Canada



From Fragmentation to Integration

2018

Technical Publications Challenges Identified

- Outdated legacy database for publications
 - Contains over 32 000 publications
 - PDF and Word documents only
- Disparate legacy repositories, supplier-specific IETPs
- Challenges in data consistency
- Lack of centralized access or unified structure
- Lack of integration

2019-2023

Overarching Policy Development

- Establishment of foundational policies
- Development of S1000D compliant organizational business rules
- Stakeholder alignment and governance setup

2023-2025

Software Acquisition & Integration

- Acquisition of software and tools
- Integration with SAP
- Migration of existing repositories
- Development of training content and materials
- User onboarding and capability building

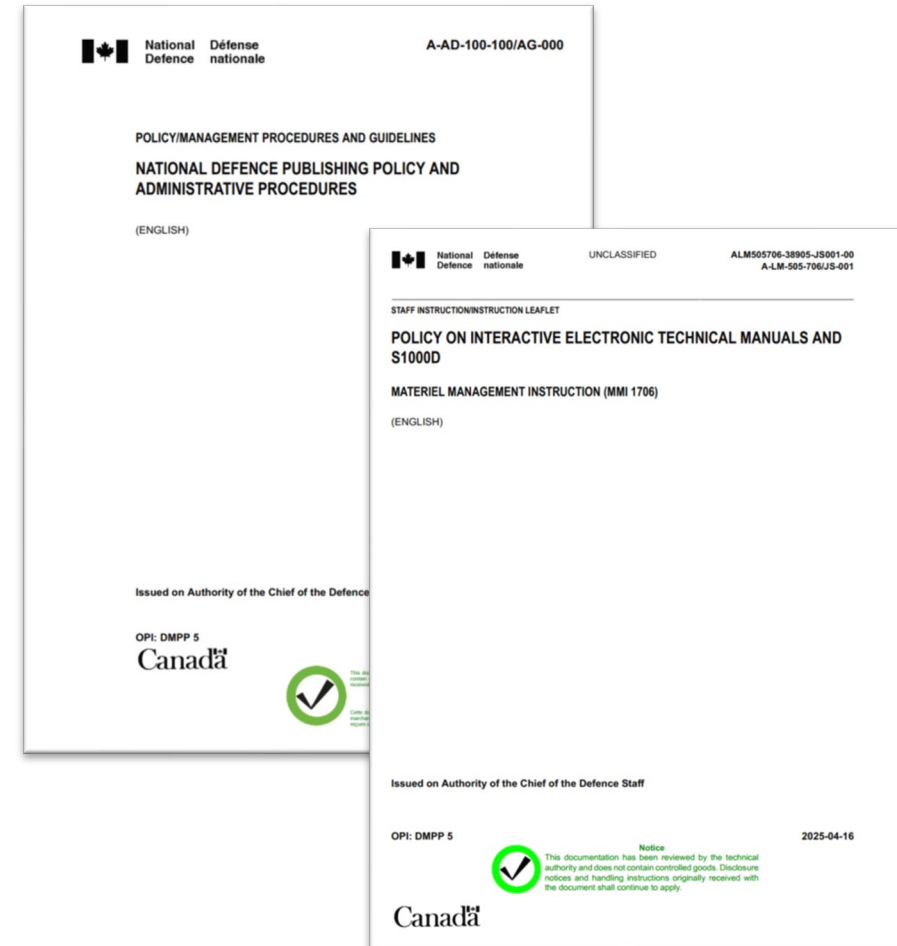


Policy as the Foundation for Successful Transformation

Goal: Unified, policy-driven, secure publications environment that supports data integrity, change management, interoperability

- 15 new policy documents under development
- BREX rules aligned with organizational needs
- Consultation with Industry

BRDP Layer	Business Rules
DND BRDPs	134
TPA BRDPs	197
Contractor BRDPs	147
Total	478



Policy – cont'd

❑ Administrative publications - set the overarching policy for S1000D implementation

- Instructions for different types of DND publications
- Publications management procedures,
- Organizational business rules for publications data structuring
- Criteria for acceptance of commercial and foreign government publications as DND adopted publications

❑ DND Specifications for Types of Technical Publications - updated to include S1000D guidance

- Maintenance instructions
- Operating instructions
- Data summaries
- Preventive instructions
- Illustrated Parts Lists
- Preservation and storage instructions



RTX English

Unclassified

How To Use This Specification

33. This specification is divided into the following parts for the development of DND/CAF publications (see Figure 1):

- Part 1 - Introduction - Introductory information applicable to all publications, including S1000D publications and non-S1000D publications;
- Part 2 - Technical Publications Content - Common information and rules that are applicable to all publications, including S1000D publications and non-S1000D publications;
- Part 3 - S1000D Publications - Information specific to S1000D publications, including IETM output and PDF output;
- Part 4 - Non-S1000D Publications - Information specific to non-S1000D publications, including PDF output;
- Part 5 - Quality Assurance - Quality assurance information applicable to all publications, including S1000D publications and non-S1000D publications; and
- Part 6 - Delivery of Publications - Delivery information applicable to all publications, including S1000D publications and non-S1000D publications.

34. Once a decision has been made on the publication format (S1000D or non-S1000D), publications must comply with all rules identified in Part 1 - Introduction, Part 2 - Technical Publications Content, the appropriate Part for the type of format (either Part 3 - S1000D Publications or Part 4 - Non-S1000D Publications), Part 5 - Quality Assurance, and the appropriate section in Part 6 - Delivery of Publications. See Figure 1.

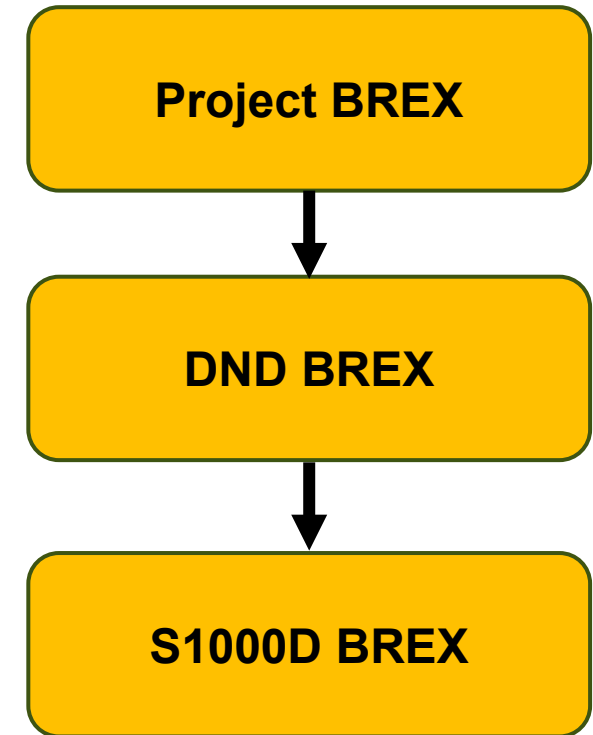
Figure 1 How to Use This Specification

Fig 1. How to Use This Specification



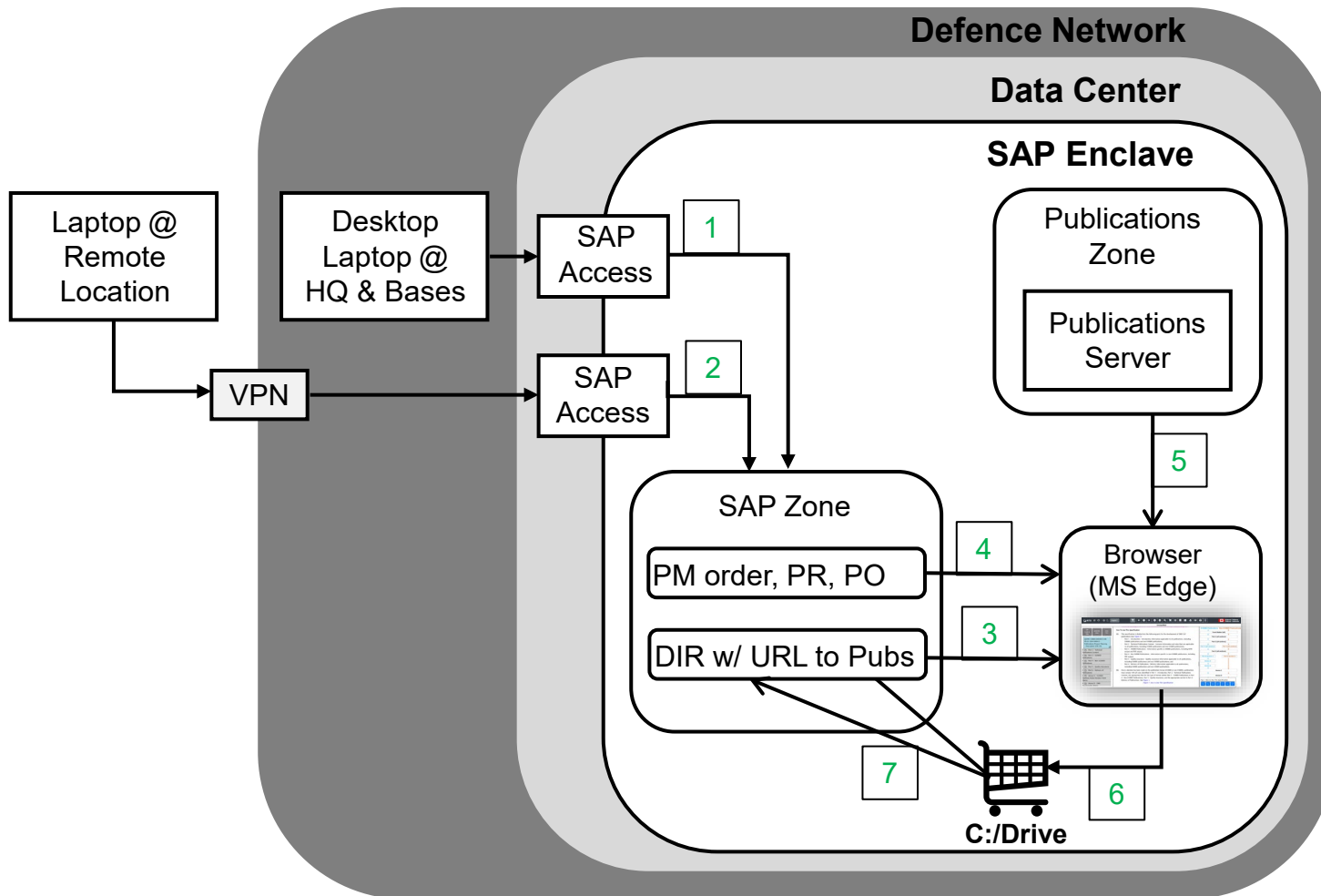
S1000D Software Acquisition and Configuration

- Implementing a S1000D CSDB across the entire Department
 - Centralized data management
 - Efficient collaboration
 - Standardization and compliance
 - Scalability
- Built-in data validation
 - BREX enforcement, XML editing
 - Layered BREX approach - S1000D BREX, DND BREX and Project BREX (includes Contractor layer business rules)
 - DND provides the DND BREX
 - Suppliers develop the Project BREX which calls up the DND BREX
- Multi-language support (English and French)
- Configuration management and accessibility
- Supports data exchange and interoperability





Integration with SAP



1. User in the office accesses SAP.
2. User accesses SAP from a remote location
3. Punching out to a specific publication for viewing is supported using SAP Document Management System (DMS) Document Info Records (DIR) and URLs.
4. Punching out to a list of publications from Plant Maintenance (PM) Work Order (WO), Purchase Requisition (PR), and Purchase Order (PO) is supported using custom button 1 that launches the publications viewer browser using a custom URL that includes within, selection parameters that are used to expose relevant publications.
5. When the browser is launched, the publications stored in the server are listed and then opened in the browser. User picks parts and checks out.
6. Shopping cart file is saved on the users C:/ drive
7. When user clicks a button in SAP to confirm that they are finished with the pub, the file is fetched, parsed and the PM Order, PO or PR are updated with components and quantities.
 - For PM Order, this can also be triggered using button 2 – fetch a file that was previously downloaded during offline Publication Viewing user experience



SAP User Experience

Change Corrective Maint 1101006571: Component Overview

Complete (business) Launch Publication Viewer Copy from Shopping Cart

Order L001 1101006571 IPC Testing URL ERN, MPN and Model ID

Sys.Status REL MANC MSPT PRC SETC CRID

HeaderData Operations Components Costs Partner Objects Additional Data Location Planning Control

Item	Component	Description	Reqmnt Qty	UM	IC	S...	SLoc
0010	MS16995-26:96906	SCREW,CAP, SOCKET HE	1	EA	L		0001
0020							

2 buttons in a PM WO:

- **Button 1: Launch Publication Viewer** when connected
- **Button 2: Copy parts from Shopping Cart** file generated from the CPMs while disconnected

Then use the CPMS **shopping cart functionality** to copy parts into the PM Order, PR or PO

Change Purchase Req. 10000565

Document Overview On Personal Setting

NB Purchase requisitio... 10000565 Source Determination

Header

Item	St...	A	I	Material	Short Text	Quant
10	U			100000256	ZNTC Spare 19	

Item 1 [10] 100000256, ZNTC Spare 19

Material Data Quantities/Dates Valuation Source of Supply

Group/Class NIIN CFSS Document Number

Launch Publication Viewer

Purchase Order 4500005753 Created by KKNIGHT-ADAM

Document Overview On Print Preview Messages Personal Setting

LPO Purchase Order 4500005753 Supplier 1213581 CANADA FMS Doc. date 2004.02.13

Header

Item	St...	A	I	Material	Short Text	PO Qua...	O...	C Deliv. Date	Net Price	Curr...	Per	O...
1	X			124766-21610	FILTER ELEMENT,AIR	30	EA	D 2005.06.30	2.00	USD	1	EA
2	X			100000223	ZSTC Spare 6	40	EA	D 2005.06.30	1.00	USD	1	EA

Item 1 [1] 124766-216:00736, FILTER ELEMENT...

Delivery Address Confirmations Condition Control Retail Customer Data Spec2000 / SC Additional DFP

Activity Code PBN/Mistrip Number Create Dues-in View TIL in CGCS

CFSS PO Number 0 Launch Publication Viewer

Launch Publication Viewer button from the PO or PR

English

AL320 Suspension Module - Illustrated parts data

Illustrated Parts Catalog
Figure 1 D1

Parts

Fig.	Item	Units Per Assembly Unit of Issue	CAGE	Part No. NATO Stock No.	Description	*Usable On Code Assy	*MV/Effect	ICY	SMB Code
D1	000	0001	2898	PN: H025089-1C NSN: 7777-00-011-7142	*Bouton-poussoir (Ress)				
	001	0001	073H3	PN: H051957-17 NSN: 00-5207640	*Vis à tête cylindrique (pas 4 X 1/3)				
	002	0001		7777-00-011-7142	*Ecrin hexagonal (pas 4)				
	003	0001		7777-00-011-7142	*FUSE, CARTRIDGE (3 diff maters for NSN)				
	004	0001	073H3	PN: H033649-244 NSN: 00-5207640	*BREECHBLOCK (3 diff maters for NSN)				
	005	0001	00724	PN: H0-C-300 NSN: 007265820	*PISTOL, PYROTECHNIC (2 diff maters for NSN)				
	006	0001		00-7942742:NSN	*RING, RETAINING (5 diff maters for NSN)				
	007	0001		00724-03	*DIE Material ASSY,BELOW DOOR,comma				
	008	0001	XXXXX	H516995-22	*BAD MMR, comma				

End of Data Module DMC-H05VTRAILERCAN-000A-83-00-0000-0000A-941A-A



SAP User Experience – cont'd

Display Equipment : General Data

Class overview | Measuring points/counters | All Measurement Documents

Equipment: 10030835 Category: Vehicle
Description: [50092]2021 TRUCK CARGO 1T 4X4 EXT
Status: ESTO INST
Valid From: 2024.09.11

General | Location | Organization | Structure

General Data

Equipment master Links with Documents

Doc. with original	Description
ZTP/10000013436/000/01	PMC-S1000DBIKE-EPS01-#
URL PMC-S1000DBIKE-EPS01-AAA01-01	

- SAP DIR points to a URL.
- The URL points to specific publications that can be launched from any SAP business object that is linked to the DIR.
- Example provided is an Equipment Master.

Enabled by Viewer functionality to launch publications via a URL



Legacy Data Migration

- DND Central Publications Management System (CPMS) - one repository for all publications
 - S1000D publications
 - Non-S1000D publications
- Migration achieved by encapsulation
 - Automated process developed to encapsulate legacy PDFs
 - Conversion of PDFs into structured S1000D data modules
- Challenges
 - Quality Assurance of approx. 32,000 publications - poor data from legacy database
 - Numerous stakeholders
 - Contracted publications development
 - Requires investment in personnel and business transformation (new processes, training, compliance)





- Communications plan
 - Transformational initiative
 - Targeted messaging for different types of users
- Common requirements statements and data deliverables in DND contracts
- Training content aligned with new policies
 - On-line job aids
 - Instructor-led training for S1000D publications requirements and S1000D data deliverables
 - Training for S1000D database management, authoring and publishing
- Compliance monitoring
 - S1000D publication vs. non-S1000D publications
 - Common DND Viewer vs. adopted commercial viewers
 - S1000D data deliverables - validation





What's Next

- 2025
 - Policy
 - Software
 - Data migration
 - Communications
 - Training

- Spring 2026
 - CPMS launch
 - Retire old publications repository

- Beyond 2026
 - Continuous Improvement
 - Analytics
 - Compliance Monitoring
 - S/4 Hana Integration



National Défense
Defence nationale

Sous-ministre adjoint (Matériels) / Assistant Deputy Minister (Material)

Direction générale système de matériel et chaîne d'approvisionnement / Director General Materiel Systems and Supply Chain



Merci / Thank You

Contacts:

Daniela Raycheva daniela.raycheva@forces.gc.ca

Bruno Tardif bruno.tardif@forces.gc.ca

Canada