



National Défense
Defence nationale

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**SPECIFICATION FOR
PREPARATION OF MATERIEL CHANGE NOTICES (MCN)
FOR CANADIAN FORCES EQUIPMENT**

(BILINGUAL)

(Supersedes D-01-100-215/SF-000 dated 1991-11-05)

**SPÉCIFICATION POUR LA
PRÉPARATION DES AVIS DE CHANGEMENT DU MATÉRIEL (MCN)
ÉQUIPEMENT DES FORCES CANADIENNES**

(BILINGUE)

(Remplace la D-01-100-215/SF-000 de 1991-11-05)

**Issued on Authority of the Chief of the Defence Staff
Publiée avec l'autorisation du Chef d'état-major de la Défense**

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SUPERSEDES
D-01-100-215/SF-000
1991-11-05

SPECIFICATION
FOR
PREPARATION OF MATERIEL CHANGE NOTICES (MCN)
FOR CANADIAN FORCES EQUIPMENT

1. SCOPE

1.1 **Introduction.** The Department of National Defence (DND) is required to ensure that the spare parts ordered by DND to support new weapons systems and equipments (end items) are identical in form, fit and function to the parts fitted and/or installed in the end item to be supplied to DND under contract.

1.1.1 The contractor/vendor is required to notify DND, by means of Materiel Change Notices (MCNs), of all changes made to parts which are fitted and/or installed in the end item to be supplied to DND under contract.

1.2 **Purpose.** This specification states the requirements of DND for the preparation, by the contractor/vendor, of Materiel Change Notices (MCNs).

1.3 **Application.** This specification will apply to all new production contracts for end items for which a Provisioning Parts Breakdown (PPB) has been prepared and will be equally binding on both the contractor and the contractor's vendors/subcontractors. To this extent, the contractor is required to impose upon the vendors/subcontractors the applicable requirements, terms, conditions and data requirements, including Supplementary Provisioning Technical Documentation (SPTD), of this document. Application of this specification to existing contracts or to other than new production contracts will be at the discretion of DND.

1.4 **Method of reference.** This specification will be referenced in the Statement of Work (SOW) and/or will be specified in the contract for the end item.

1.5 **Intended use.** The MCN, when prepared in accordance with this specification, will be used by DND to:

- (a) Update the Provisioning Parts Breakdown (PPB), which will have been provided by the contractor/vendor under the terms of the contract for the end item.

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- (b) Evaluate the need to amend requisitions/contracts which contain spare parts, to agree with the MCN.
- (c) Update the DND computer record of the end item parts breakdown.

1.6 **Definitions.** For the purpose of this specification, the definitions listed at paragraph 6.1 of this specification apply.

2. **APPLICABLE DOCUMENTS**

Not applicable.

3. **REQUIREMENTS**

3.1 **Materiel Change Notices (MCNs).** The contractor/vendor shall prepare MCNs, electronic copies are available from:

**National Defence Headquarters
MGen George R. Pearkes Building
101 Colonel By Drive
Ottawa, Ontario
Canada K1A 0K2**

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In accordance with this specification to notify DND of all changes to parts fitted and/or installed in the end item to be supplied to DND under contract. Such changes usually result from engineering, production or modification changes which have been approved for incorporation into the end item.

3.2 **Submission.** The contractor/vendor shall submit MCNs, in four copies, to DND whenever one or more of the following data elements is changed for a given item:

- (a) Indention code.
- (b) Item name.
- (c) Manufacturer's Reference Number (MRN).
- (d) NATO Commercial and Government Entity (NCAGE) Code.
- (e) Contractor's part number.
- (f) Quantity Per Assembly (QPA).
- (g) Reference designation number.
- (h) Unit of Issue (UOI).

3.2.1 **MCNs shall be submitted to DND:**

- (a) Following the Initial Provisioning Conference (IPC) for the end item, except as otherwise stated in Notes 1 and 2 below; and
- (b) Until the production cycle or the delivery of the end item ordered by DND has been completed.

Note 1: Changes to parts which occur during the period from the date the PPB is forwarded to DND to the date the provisioning conference is held shall be retained by the contractor/vendor until the provisioning conference is conducted, at which time the PPB will be updated.

Note 2: If it is determined that a provisioning conference will not be held at the contractor's/vendor's facility, DND will inform the contractor accordingly and will request that MCNs be submitted for changes to parts that have occurred since the submission of the PPB directly to DND.

3.3 Special data requirements. In addition to the regular data elements called up in paragraph 3.10, the contractor shall provide the following data for all MCNs, as applicable:

- (a) **Effectivity.** Indication of which end item equipments have old part numbers installed and which have new part numbers.
- (b) **Interchangeability.** Where a new item replaces an old item, indication must be given whether the item is interchangeable Two Way (TW), One Way (OW), or Non-Interchangeable (NI).
- (c) **Prorated recommendation.** A prorated quantity of new to old parts must be given.

3.4 Supplementary Provisioning Technical Documentation (SPTD). For item identification and cataloguing purposes, the contractor/vendor shall provide SPTD for each new item introduced as the result of an MCN. The technical data supplied must be sufficiently comprehensive to allow DND to classify and fully describe the item within the NATO codification system and must accompany the MCN. To satisfy this requirement, the contractor shall furnish for each item an applicable recognized industry specification or standard; or, if a specification or standard does not apply, an engineering drawing, preferably equal to Level 3, but at least equal to Level 2 (see Definitions at paragraph 6.1). Whenever possible, the specification, standard or engineering drawing prepared by the actual manufacturer of the item shall be furnished. Regardless of whether the furnished documentation is a specification, standard or engineering drawing, it shall clearly define all applicable features of the item depicted, including:

- (a) Configuration.
- (b) Physical characteristics, such as dimensions, tolerances, materiel, mandatory processes, surface finish, protective coatings, etc.
- (c) Electrical characteristics.
- (d) Performance data, e.g., those physical and functional characteristics under specified operating conditions (load, speed, etc.) and the environmental conditions under which the item must operate and perform.
- (e) Mounting requirements.
- (f) Special features which contribute to the uniqueness of the item.

The information provided shall include the NCAGE code or the full name and address of the actual manufacturer of the item and the actual manufacturer's part/reference number.

3.4.1 Specifications, standards or engineering drawings not applicable. There may be some items listed for which it is not standard industrial practice to produce specifications, standards or engineering drawings. In that case, prior to submitting the MCN the contractor/vendor shall forward, for the DND NATO cataloguing authority's approval, samples of the SPTD they propose to provide for NATO cataloguing of those items. Under such special circumstances, catalogues, catalogue descriptions or sketches/photographs with textual descriptive data will be considered. However, the contractor/vendor is advised that the data requirements are the same as those specified for specifications, standards and engineering drawings.

3.5 Letters of refusal. Where a manufacturer refuses to supply the contractor with data requirements for proprietary or other reasons, the contractor is not relieved of the obligation to provide the relevant data. The contractor shall further pursue the matter with the manufacturer to effect one of the following alternatives and shall advise DND of the alternative achieved at the time the MCN is submitted:

- (a) the manufacturer will submit the data directly to DND; or
- (b) the manufacturer will allow a conference at their facility to permit DND representatives to review and capture the data; or
- (c) the manufacturer will prescribe an alternative method of furnishing adequate data to enable the provisioning process to be accomplished.

Should the manufacturer still refuse to supply the relevant data requirements, the contractor shall, as a last resort, obtain a Letter of Refusal from the manufacturer stating the specific refusal to both supply the data requirements and satisfy any of the alternatives listed in subparagraphs 3.5(a) through 3.5(c), and shall submit such Letter(s) of Refusal to DND.

3.6 SPTD not required. SPTD need not be provided for an item which is identified as a Canadian, German or US Government specification which completely describes the item including its dimensional, materiel, mechanical and electrical characteristics.

3.7 Release of data. Data extracted from documentation furnished for NATO cataloguing purposes may be used for National and International governmental transactions. The contractor/vendor shall be responsible for advising DND of any restrictions imposed by the documentation source entity on the release of such data. Data categorized by the documentation source entity as "Commercial in Confidence" will not be released outside government circles without the written consent of the source entity.

3.8 Acceptability of SPTD for NATO cataloguing purposes. In case of disputes regarding the acceptability of SPTD furnished for NATO cataloguing purposes, the ruling of the DND NATO cataloguing authority shall prevail.

3.9 Technical interpretation of this specification. NDHQ/DTICS 3 is the final authority for the technical interpretation of this specification. If the contractor has any questions or queries, they should be addressed to:

**Department of National Defence
National Defence Headquarters
MGen George R. Pearkes Building
101 Colonel By Drive
Ottawa, Ontario
Canada K1A 0K2**

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3.10 Detailed instructions for the preparation of MCNs

Note: All definitions and acronyms are listed at Section 6 of this specification.

3.10.1 Application. These instructions are applicable to the preparation of the MCN.

3.10.2 Format. The MCN is divided into four parts, A to D inclusive. Each part contains data elements which are described below. The unnumbered data elements on the MCN must remain blank and are for use by DND only. The MCN may be typewritten or prepared by hand using the character conventions shown below:

- (a) Alphabetic: _____
- (b) Numeric: _____
- (c) Special Characters: Period ./ Comma ,/ Dash -/ Asterisk *

3.10.3 **Part A – Data Elements.** The data elements, numbered 1 to 5 inclusive, in Figure 1 are described below.

3.10.3.1 **BLOCK 1, Contractor.** The name and address of the contractor providing the end item and who prepares the MCN shall be shown.

3.10.3.2 **BLOCK 2, Equipment name.** The name of the equipment (end item) to which the part (item) being changed is fitted/installed.

3.10.3.3 **BLOCK 3, PWGSC Contract.** The contract number against which the equipment (end item) described in Block 2 was procured.

3.10.3.4 **BLOCK 4, Action required (Check one only).** This block identifies the reason for raising the MCN. Four basic reasons apply and are described below, with full details of actions to be taken for each:

Action Required	Blocks of MCN To Be Completed
<p>a. Delete Existing Item Without Replacement. This applies to a part (item) which is removed from the end item and which will not be replaced by a different part (item).</p>	<p>Part A – Complete blocks 1 to 5. Ensure that “Delete existing item without replacement” is checked in block 4.</p> <p>Part B – Complete blocks 6 to 18.</p> <p>Part C– Leave blank.</p> <p>Part D – Indicate change authority, e.g., ECP No., EO No., DCI/DCR No., etc., if applicable. Enter remarks as appropriate.</p>
<p>b. Add New Item. This applies to new parts which will be fitted/installed in the end item. The contractor/vendor shall assign an appropriate PPB item number to each addition.</p>	<p>Part A – Complete blocks 1 to 5. Ensure that “Add new item” is checked in block 4.</p> <p>Part B – Leave blank.</p> <p>Part C – Blocks 6 and 7. Enter PPB number and indention level to show relationship of the new item to its next higher assembly. As the PPB numbers were originally allotted in increments of 100 (e.g., 000100, 000200, 000300 etc.), the new PPB shall be allotted in increments of 1. For example, to add a new sub-assembly to an assembly having a PPB number of 000900, the subassembly would be allotted PPB number 000901. If uncertain of the correct PPB number to allot, leave block 6 blank and provide information in the “Remarks” section of Part D.</p> <p>Part D – Indicate change authority, e.g., ECP No., EO No., DCI/DCR No., if applicable. Enter remarks as appropriate.</p>
<p>c. Replace Existing Item with New Item. This applies to a part (item) which is removed from the end item and is replaced with one or more different part(s) (item(s)).</p>	<p>Part A – Complete blocks 1 to 5. Ensure that “Replace existing item with new item” is checked in block 4.</p> <p>Part B – Complete blocks 6 to 18.</p> <p>Part C – Enter in block 6 the same PPB number as shown in Part B. Complete blocks 7 to 18 as appropriate.</p> <p>Part D – Indicate change authority, e.g., ECP No., EO No., DCI/DCR No., if applicable. Enter remarks as appropriate.</p>
<p>d. Amend Existing Item. This applies when a change in a part (item) data is necessary because of errors or omissions in the PPB. The “Remarks” Block should contain the reasons for the change, e.g., to correct the reference designation number; to correct the MRN; to change the Quantity per Assembly (QPA) etc.</p>	<p>Part A – Complete blocks 1 to 5. Ensure that “Amend existing item” is checked in block 4.</p> <p>Part B – Complete blocks 6 to 18 as appropriate.</p> <p>Part C – Complete the appropriate blocks to indicate the required changes. For example, to show a change in the manufacturer’s part number, enter the new part number in block 9. Similarly, block 16 would be completed to show a change in the reference designation number, etc.</p> <p>Part D – Indicate change authority, e.g., ECP No., EO No., DCI/DCR No., if applicable. Enter Remarks as appropriate.</p>

3.10.3.5 **BLOCK 5, MCN serial number.** A maximum of six alphanumeric characters may be assigned by the contractor/vendor to identify the equipment (end item) and the number of the MCNs which have been submitted for that equipment, e.g., GUN1 (first MCN) to GUN999; RX1 to RX9999 (last MCN).

3.10.3.6 **Part B, Block 6 – 18, Existing item data.** This data shall be obtained from the equipment (end item) PPB previously furnished to DND under the terms of the contract for the end item.

3.10.3.7 **Part C, Blocks 6 – 18, New item data.** The data to be supplied shall consist of the same number of data elements as were provided on the equipment (end item) PPB, but applicable to the new part (item).

3.10.3.8 **Part D, Change authority.** If applicable, the contractor/vendor shall indicate the applicable reference document number, e.g., Engineering Change Proposal (ECP), Engineering Order, Design Change Instruction (DCI), Design Change Request (DCR) number, etc.

3.10.3.9 **Part D, Remarks.** This section should contain appropriate remarks, e.g., PPB Item Number A00100 is deleted and replaced by 5 parts (items) which are listed in MCN Serial Numbers TOR1-TOR5 inclusive.

4. **QUALITY ASSURANCE PROVISIONS**

Not applicable.

5. **PACKAGING**

Not applicable.

6. **NOTES**

6.1 **Definitions.** For the purpose of this specification, the following definitions apply.

6.1.1 **Assembly.** An item forming a portion of an equipment, that can be provisioned and replaced as an entity and which normally incorporates replaceable parts or groups of parts.

Note: The distinction between an assembly and a subassembly is determined by the individual application. An assembly in one instance may be a subassembly in another where it forms a portion of an assembly.

6.1.2 **Character.** Characters may be letters, digits, punctuation marks or other symbols that are used for the control or representation of data.

6.1.3 **Contract.** A contract is a deliberate engagement, recognized by law, between competent parties upon a legal consideration to do or abstain from doing some act.

6.1.4 **End item.** A final combination of end products, component parts and/or materiel which is ready for its intended use, e.g., rifle, recorder, ship, tank, mobile machine shop, or aircraft.

6.1.5 **Equipment.** A combination of parts, subassemblies or assemblies forming a particular article within itself and capable of performing an operational function.

6.1.6 **Indentation (IND).** An alphanumeric character which illustrates a lateral and descending “family tree” relationship of each line item to and within the end item and its components, assemblies, subassemblies and sub-subassemblies.

6.1.7 **Item name basic.** The name of an item as listed in manufacturer’s drawings, specifications or catalogue.

6.1.8 **Level 2 engineering drawings.** Drawings prepared to this level shall disclose directly or by reference a design approach suitable to support the manufacture of a production prototype and limited production models.

6.1.8.1 These engineering drawings shall include, as applicable, parts lists, detail and assembly drawings, interface control data, diagrams, performance characteristics, critical manufacturing limits and details of new materiel and processes. Special inspection and test requirements necessary to determine compliance with requirements for the item shall be defined on the engineering drawings or referenced to a document acceptable to DND.

6.1.9 **Level 3 engineering drawings.** Drawings prepared to this level shall provide engineering definition sufficiently complete to enable a competent manufacturer to produce and maintain quality control of item(s) to the degree that physical and performance characteristics interchangeable with those of the original design are obtained without resorting to additional product design effort, additional design data or recourse to the original design authority. These engineering drawings shall:

- (a) Reflect the end product.
- (b) Provide the engineering data for the support of quantity production.
- (c) Provide, in conjunction with other related procurement data, the necessary data to permit competitive procurement of items substantially identical to the original item(s).

6.1.9.1 These engineering drawings shall include details of unique processes when essential to design and manufacture; details of performance ratings; dimensional and tolerance data; critical manufacturing assembly sequences, toleranced input and output parameters; diagrams; mechanical and electrical connections; physical characteristics, including form and finish; details of materiel identification, inspection, test and evaluation criteria; necessary calibration information; and quality control data.

6.1.10 **Manufacturer's Reference Number (MRN).** A primary identifier comprised of an undetermined number of alphanumeric characters, assigned to an item of production by a manufacturer which controls the design, characteristics and production of the item by means of its engineering drawings, specifications and inspection requirements.

6.1.11 **NATO Stock Number (NSN).** A 13 digit number, e.g., 5305-21-111-3333 broken-down as follows:

- (a) Digits 1 – 4 e.g., 5305 is the NATO supply classification consisting of Group 53 (which covers all items of hardware) followed by the class within the Group 05 (screws), 06 (bolts, etc., the whole being known as the Supply Class.
- (b) Digits 5 – 6 e.g., 00 USA, 21 Canada, 14 France, 99 UK, etc.
- (c) Digits 7 – 13 e.g., 111-3333 the National Item Identification Number, nonsignificant, but sequentially assigned by each National Codification Bureau to a unique item of supply.
- (d) Digits 5 – 13 e.g., 21-111-3333 the NATO Item Identification Number including both the NATO Code of the National Codification Bureau and its item identification number. This 9 digit number remains with the item throughout its life even though the NATO supply classification may change as a result of reclassification and consequent conversion of stock numbers e.g., 5305-21-111-2222 converted to 2805-21-111-2222.

6.1.12 **Part.** An item forming part of an assembly or subassembly, which is not normally further broken-down.

6.1.13 **Part number.** Any number used to identify an item of production, or used by itself or in conjunction with other reference numbers to identify an item of supply. Reference numbers include manufacturer's part, drawing, model, type or source controlling numbers; manufacturer's trade name; specification or standard numbers and specification or standard part, drawing or type numbers.

6.1.14 **Provisioning.** The process of determining requirements and initiating procurement.

6.1.15 Statement of Work (SOW). A document forming a part of the contract demand/requisition and/or contract which describes and identifies in unequivocal terms every aspect of all the work that must be performed to satisfy the particular requirement.

6.1.16 Subassembly. A portion of an assembly, consisting of two or more parts, that can be provisioned and replaced as an entity.

6.1.17 Subcontractor. A party who contracts with a prime contractor to perform all or any part of the prime contractor's obligation in a particular prime contract.

6.1.18 Vendor. Manufacturer or supplier of a component, assembly or part which will be incorporated by the contractor into the end item exactly as procured.

6.1.19 Vendor item. An item which is used in or attached to the end item produced by the contractor and which is procured by the contractor on the open market or from established sources and for which the contractor is not the design activity.

6.2 Abbreviations/Acronyms. The following abbreviations/acronyms apply:

ASSY	Assembly
DCI	Design Change Instruction
DCR	Design Change Request
DND	Department of National Defence (Canada)
DOD	Department of Defence (US)
DTICS	Directorate of Technical Information and Codification Services
ECP	Engineering Change Proposal
EO	Engineering Order
EQPT	Equipment
GSM	Government Supplied Materiel
IND	Indention
IPC	Initial Provisioning Conference
MCN	Materiel Change Notice
MRN	Manufacturer's Reference Number
NATO	North Atlantic Treaty Organization
NCAGE	NATO Commercial and Government Entity
NDHQ	National Defence Headquarters
NI	Non-Interchangeable
NSN	NATO Stock Number
OEM	Original Equipment Manufacturer
OPI	Office of Primary Interest
OW	One Way
PLT	Procurement Lead Time
PPB	Provisioning Parts Breakdown
PWGSC	Public Works and Government Services Canada
QPA	Quantity Per Assembly
QTY	Quantity
RAEC	Related Aero Equipment Code
REP	Repairability Indicator
SL	Shelf Life
SPTD	Supplementary Provisioning Technical Documentation
SOW	Statement of Work
STD	Standard
TW	Two Way
UOI	Unit of Issue
US	United States

CANADIAN FORCES MATERIEL CHANGE NOTICE														
PART A - Data Elements														
CONTRACTOR:		<div style="text-align: center;">④</div> ACTION REQUIRED (CHECK ONE ONLY) <input type="checkbox"/> DELETE EXISTING ITEM WITHOUT REPLACEMENT <input type="checkbox"/> ADD NEW ITEM <input type="checkbox"/> REPLACE EXISTING ITEM WITH NEW ITEM <input type="checkbox"/> AMEND EXISTING ITEM					SERIAL NUMBER:		⑤					
EQUIPMENT NAME:							SUBMITTED BY:							
PWGSC CONTRACT:							APPROVED / REJECTED: (NDHQ USE ONLY)							
REQUISITION: (NDHQ USE ONLY)														
PART B - Existing Data														
PPB ITEM NO.	IND	ITEM NAME BASIC				MANUFACTURER'S PART NUMBER					NCAGE	CONTRACTOR'S PART NUMBER		
⑥	⑦	⑧				⑨					⑩	⑪		
	RAEC	NATO STOCK NUMBER	QTY/ASSY	QTY/EQPT	QTY/SYST	STD UNIT PRICE	UOI	REP	GSM	PLT	CIRCUIT SYMBOL	SL	USE RATE	
		⑫	⑬			⑭	⑮				⑯	⑰	⑱	
PART C - New Data														
PPB ITEM NO.	IND	ITEM NAME BASIC				MANUFACTURER'S PART NUMBER					NCAGE	CONTRACTOR'S PART NUMBER		
⑥	⑦	⑧				⑨					⑩	⑪		
	RAEC	NATO STOCK NUMBER	QTY/ASSY	QTY/EQPT	QTY/SYST	STD UNIT PRICE	UOI	REP	GSM	PLT	CIRCUIT SYMBOL	SL	USE RATE	
		⑫	⑬			⑭	⑮				⑯	⑰	⑱	
PART D - Remarks														
CHANGE AUTHORITY:														
REMARKS:														
<small>(2002-05)</small> <small>Y0110000</small>														

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 (FRANCAIS - AU VERSO)

Figure 1 Canadian Forces Materiel Change Notice