



www.nato.int/codification

NATO CODIFICATION SYSTEM



*The DNA of
Modern Logistics*

Foreword

It is our pleasure to introduce the NATO Codification System to you. The NATO Codification System is the official programme under which equipment components and parts of the military supply systems are uniformly named, described, classified, and assigned a NATO Stock Number. These stock numbers and item descriptions are published in supply catalogues and repair parts lists, and are used as the key identifiers within logistic information systems. The NCS is a common supply language which operates effectively in a multilingual environment. It facilitates interoperability, curbs duplication (both within nations and between nations), permits interchangeability, and maximises logistics support in the most economical manner possible. However, the primary goal of the NATO Codification System is to ensure that military personnel deployed in an operational scenario can be assured of getting the right items to successfully complete their mission.

The National Codification Bureau (NCB) of the nation that produces the item codifies the Items of Supply produced by that nation, regardless of which nation is the end user. The NCBs, as the central operating points for the NATO Codification System, play an essential role in the logistics operations. The information, services and products provided by the NCBs are used in every facet of logistics operations.

This brochure has been developed to explain the role that the NATO Codification System plays in the overall logistics functions within NATO, and in the wider context of **Partnership for Peace (PfP)**, **Mediterranean Dialogue (MD)** and Sponsored Non-NATO nations around the world (see details at www.nato.int/structur/AC/135/main/links/contacts.htm). The Group hopes that it will increase your awareness and understanding of how codification provides the key to the logistics support necessary to sustain NATO readiness.

A FEW FIGURES

NATO countries manage the data related to

16,000,000 Items of Supply (NSNs).

31,300,000 Part Numbers

>1,400,000 Manufacturers and Vendors

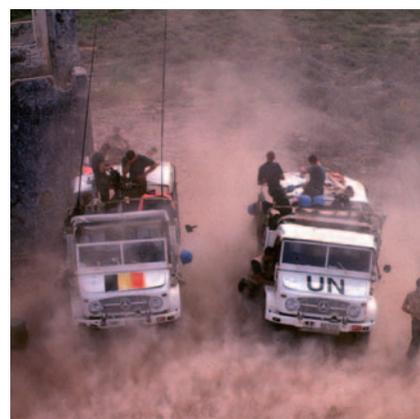
- Its benefits are recognised by its Logistics users. This system has established a single supply language, provides accurate information on the identity and characteristics of an item of supply and avoids duplicates.
- It is a flexible system with growth and upgrade capacity to facilitate improved support to logisticians.

NATO Group of National Directors on Codification (AC/135)



Introduction

NATO governments continuously buy, store and issue millions of items of equipment, especially military equipment. Constant additions are being made to these government inventories resulting from technical and scientific developments.



While all armed forces must maintain their equipment in a perpetual state of operational readiness to ensure the sovereignty of their nation, the equipment must be supported in an operational state throughout its life cycle, additional costs also need to be taken into account such as the acquisition of spare parts. These costs often exceed by far the initial purchase cost of the weapon system. Concurrently realising savings by avoiding duplication and simplifying administration. As a result, NATO nations have developed a common codification system.



The NATO Codification System (NCS)
Minimizing Duplication of Items of Supply is one of the Aims of the NATO Codification System

Necessity of a codification system

Every holder of materiel, whether a manufacturer or user, requires a system to identify an item.

For instance : a **WASHER, FLAT**



MANY MANUFACTURERS  **MANY PART NUMBERS (PN)**

USED ON **MANY** WEAPON SYSTEMS... IN **MANY** NATIONS

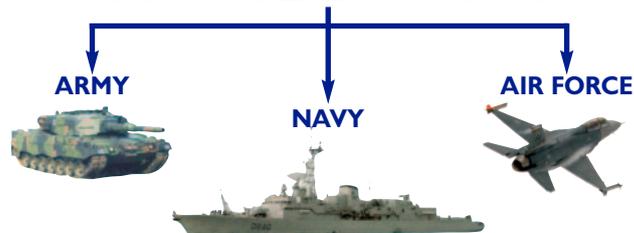
<p>GERMANY BOSCH, ROBERT GmbH PN : 2000102621</p> <p>DEUTZ SERVICE INTERNATIONAL GmbH PN : 01289919EY8776-22</p> <p>MERCEDES - BENZ AG PN : 0001513052</p> <p>MAN NUTZFAHRZEUGE AG PN : 81907010687</p>	<p>FRANCE RENAULT VEHICULES INDUSTRIELS SA PN : 7701007414</p> <p>NETHERLAND VAN DOORNE'S BEDRIJFSWAGENFABRIEK PN : 057343</p> <p>SWEDEN KARLSKRONAVARVET AB PN : 23310163041</p>
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Manufacturers have developed particular systems to meet their specific needs. Consequently, similar types of items satisfying comparable needs, but manufactured by different companies, will be identified by a different numbering schemes. This does not satisfy the requirements of users like armed forces who manage their inventories by item type, rather than origin or use. For them, it does not matter by whom it is used and on the system or equipment it is used; if it has the same characteristics (form, fit and function)¹, it will be assigned one NATO Stock Number (NSN). That NSN will then be used by Logisticians of all NATO nations and Armed Forces to manage that item.

¹ "Form, Fit and Function," means Form : The shape, size, dimensions, and other physical measurable parameters that uniquely characterize a product. For software, form denotes the language and media. Fit : The ability of a product to interface or interconnect with an integral part of another product. Function : The actions that a product is designed to perform.

ONE ITEM OF SUPPLY  **ONE NATO STOCK NUMBER**

NSN
5310-12-1866904



Many Part Numbers - different users - different Nations
but - the same Item and the same NSN



Jeg har brug
for en skive



Une entretoise
s.v.p.



I need a washer



Ich brauche
eine Unterlegscheibe



Necesito una
arandela

Codification, the tool for interoperability



In order to facilitate :

- national Armed Forces (land, air, sea) to work with and support each other ;
- Armed Forces from any NATO nations to working with and support each other ;
- NATO Armed Forces working with and supporting Armed Forces of Partner nations ;
- maximum effectiveness of resources in an operational theatre, whether it is national, NATO wide or international.

The codification system must :

- provide accurate data on all items of supply to all participating nations in time of peace or war ;
- allow prompt access to data ;
- provide a common language understandable by all.

**The system of data exchange based on these principles is called :
NATO Data Exchange "NADEX".**

**It is the basis of materiel interoperability
among all partners**



Codification, the basis for modern logistics operations

Logistics operations can be classified into five main areas :

- Development of a Support Solution ;
- Acquisition of Materiel: Initial purchase and reprovioning ;
- Management of Resources; Warehousing; Distribution and Redistribution of materiel ;
- Maintenance (Repair or Overhaul) ;
- Disposal.

In an Alliance such as NATO, the concept of interoperability is of prime importance and should be vigorously applied in each and every one of these areas.



CODIFICATION WITH REGARD TO ACQUISITION OF MATERIEL

Procurement of materiel is realised following a detailed assessment of the requirement. The Codification System answers questions raised by purchasers :

- Who manufactures the required item ?
- Does the item proposed by the manufacturer meet the requirement ?
- Are there restrictions on purchasing activities ?
- Is the item already in use nationally or in another NATO nation ?

The system then provides :

- a list of manufacturers likely to provide the required item ;
- a detailed description of the item, covering all of its related : physical, qualitative and/or performance characteristics. Descriptions must be comparable, irrespective of their source of supply, and must therefore be based on a universal language ;
- access to information on procurement conditions to promote competitiveness between manufacturers.

CODIFICATION WITH REGARD TO MANAGEMENT OF RESOURCES

NATO Logistics organizations :

- manage their materiel by type and application, notwithstanding the origin of the items ;
- warehouse items under appropriate conditions to ensure their operational readiness ;
- deliver the required materiel to the specific customer on time and using the most appropriate mode of transportation ;
- distribute and redistribute the equipment according to specific requirement and the resources available among the various users.

The system therefore :

- identifies items of supply satisfying the same requirement by a unique number, regardless of the referencing system used by the manufacturer ;
- may specify packaging requirements, warehousing conditions and expected shelf-life ;
- indicates the users of a specific item and / or specifies transportation information required for delivery of the materiel ;
- informs the logistics managers on all the resources available among the users.

CODIFICATION WITH REGARD TO MAINTENANCE

Personnel responsible for maintaining equipment will need answers to the following questions :

- what spare parts are required to be purchased and where should they be delivered ?
- what are the maintenance capabilities given the resources available on site ?
- are the spares needed available somewhere in the national and/or NATO wide system ?

The codification system presents :

- relationships which exists between all parts of a system and its components or sub-assemblies ;
- list of national and international registered users ;
- possible Interchangeability between items in order to maximise the use of available resources.



The Codification System must be able to respond to the requirements of Logisticians in these areas of Global Logistics Operations

CODIFICATION WITH REGARD TO DISPOSAL

Disposal of an item of supply can be related to its usefulness (obsolescence, replacement of the main equipment ,...) or its condition (non repairable). If it becomes necessary to dispose of unusable equipment to reduce warehousing costs, it is important to :

- eliminate only those items which cannot be reused by another user ;
- salvage components or substances which can generate savings through recycling ;
- guarantee the protection of the environment during disposal actions.

To this extent, the codification system contains data that :

- identifies potential users for surplus equipment ;
- lists the nature of components and constituent elements of a given item, as well as its recoverability criteria ;
- indicates the disposal procedures for hazardous or polluting materials or substances.

CODIFICATION WITH REGARD TO INTEROPERABILITY

For over 45 years, NATO Codification has been utilised by the military forces of NATO to promote "national" and "international" inter-operability.

The NCS is an integral part of supply operations throughout the world. It furnishes accurate information to all participating nations on the characteristics of millions of items. It simplifies the resolution of supply data management problems by providing quick responses from a single, up-to-date source. The NCS offers many significant advantages to NATO and non-NATO nations, as well as to private sector participants outside the defence community.



CODIFICATION WITH REGARD TO NATO AND COMMERCIAL STANDARDS

Military Logistics doctrines and practices are increasingly based on commercial disciplines and standards. The Group of NATO National Directors on Codification has kept pace with, and has often been at the leading edge of, this evolution continually enhancing the NCS, so that it can truly be referred to as the key to modern Logistics.

The NATO Codification System is based on two principal Standard NATO Agreements (STANAGs). These are STANAG 3150, Uniform System of Supply Classification, and STANAG 3151, Uniform System of Item Identification.

The way the NCS records information about "Commercial and Government Entities" has been accepted by the International Standards Organisation. The NATO Commercial and Government Entity (**NCAGE**)¹ system has been assigned International Code Designator (ICD) 0141 under ISO Standard 6523 - Structure for the Identification of Organisations and Organisation Parts.

¹ also known in the USA as CAGE



The NCS is cognisant of and has been enhanced to align with other ISO standards. AC/135 has also made progress in linking the NCS with the overall concept of STEP technology, ISO Standard 10303. The NCS has also been recognised as a specific function within the NATO Life Cycle Management concept and been added to the Life Cycle Data Model. The NATO Life Cycle Management concept is almost entirely based on ISO 15288, Life Cycle Management - System Life Cycle Processes. Furthermore, the Electronic Commerce Code Management Association (ECCMA) has developed a commercial version of the NCS called the ECCMA Open Technology Dictionary (eOTD). See www.eccma.org for details about eOTD. ISO has recognized eOTD as a draft standard and assigned it ISO Standard 22745. AC/135 and ECCMA have formalized their cooperation in a Memorandum of Agreement. ISO Standard 22745 includes the concept of tagging characteristics data compatible with eOTD in STEP design files.



The NCS can also recognise part numbers provided by manufacturers and vendors in bar code format. A linkage between the NCS and the EAN International scheme has been developed. This is broadening the aspect of Logistics operations by adding further data to the NCS. Military Logistics applications can now perform a cross-reference operation within the NCS domain, and provide a "dual" recognition of certain items of supply in NSN and EAN format. This is an enhancement to facilitate dialogue between military Logisticians and commercial manufacturers and suppliers.



Finally, the NCS has been linked to the United Nations Common Coding System (UNCCS). This simple linkage will allow NATO Logisticians to better communicate with UN authorities for materiel management Proposes.



NATO Codification System (NCS)

The NCS applies two basic rules :

- that each item of supply will have a single unique number (ONE ITEM - ONE NUMBER) ;
- that the National Codification Bureau (NCB) of the producing nation codifies the items of supply produced by that nation, regardless of which nation is the end user. This applies even if the producer nation does not use the item.

THE NATO STOCK NUMBER (NSN)

5905-00-7345199



GROUPS AND CLASSES

GROUP: 59
CONTENTS: Electrical and electronic equipment components

Mounting hardware, included in classes of this group, includes such specially designed items as brackets, holders, retainers etc... Excluded from classes in this group are such hardware items as screws (class 5305), bolts (class 5306), studs (class 5307), washers (class 5310), rivets (class 5320) and other common items indexed to specific classes, other than in group 59.

CLASS: 5905
WORDING: Resistors

INCLUDES: Varistors, resistive ballast tubes, rheostats, resistor networks, resistor mounting hardware, thermistors.

EXCLUDES: Resistance wire

Each Group covers a series of related Classes. Each Class covers a relatively homogeneous area of commodities, with respect to their physical or performance characteristics, or with respect that the items included therein are such that they are usually requisitioned or issued together or constitute a related grouping for supply management purposes.

ITEM NAME

ITEM NAME: RESISTOR, FIXED, FILM
INC: 05311
STATUS: A
COND CODE: 1
IIG: A001A0
APP KEY: D

ITEM NAME DEFINITION: A resistor whose ohmic value cannot be adjusted or varied. The resistance element consists of either a thin layer of conductive material, containing neither binders nor insulating materials, deposited on an insulated form or an alloy of metal and ceramic materials, usually fused to an insulated form. Opposition to the flow of current is an inherent property of the materials used and is manifested in the heat dissipation in the resistor. See also ATTENUATOR, FIXED and RESISTOR, FIXED, COMPOSITION. Excludes carbon composition type resistors.

CLASS: 5905

An approved item name is selected and carefully delimited to designate a family of items of supply with similar characteristics mostly determined by a definition.

MANUFACTURER

NCAGE: 96214
STATUS: A
TYPE: A
NAI/NAE: 334220
SIC: 3679
CPV:

COMPANY NAME AND ADDRESS: RAYTHEON COMPANY, 2501 W. UNIVERSITY DRIVE, 801 M/S 8064, MC KINNEY, UNITED STATES

Website: www.raytheon.com
Tel: 972-952-3928
e-mail: bwcook@raytheon.com
Fax: 972-952-4250

Within the NCS the term MANUFACTURER covers the whole range of possible sources for technical data for items entering the supply systems of participating nations.

ITEM IDENTIFICATION

Item Identification Data: NSN: 5905-00-7345199, NIIN SC: 0, NFM SN: 028, Date: 12/11/95

INC: 05311, Item Name: RESISTOR, FIXED, FILM, ISC: 3

Type: 4, RPD MRC: 9, IIG N°: A001A0

Reference Data Table:

NCAGE	PART NUMBER	RNVC	RNCC	DAC	RNAAC	RNSC
73168	06-250144-036	9	5	5	KE	B
30184	122200-001040	9	5	2	9Z	B
05869	4171402-620	2	5	6	ZX	D
96214	418295-40	1	5	5	KE	D
F2427	99004052	2	5	4	ZB	D
F2663	C07H3-330UJ	2	5	4	ZB	D
81349	M22684-01-0040	2	2	3	KE	D
81349	MILR22684-1	1	4	3	KE	D
F1621	ROM25-330UJ	2	5	4	ZB	D

Users: MOE Code: YB Spain, YJ Singapore, ZA Australia, ZF France, ZG Germany, ZH Rep. of Korea, ZK United Kingdom, ZN Netherlands, ZR Italy

List of items of production complying with the item of supply concept (NATO Commercial and Governmental Entity Code (NCAGE) and respective reference number. Various codes are associated with these references :

- Reference Number Variation code (RNVC) indicating whether the cited Reference Number is or is not item identifying or is for information only ;
- Reference Number Category Code (RNCC) specifying the type of reference = part number, standard reference, technical drawing reference number, etc ;
- Document Availability Code (DAC) designating the current status of technical documentation availability ;
- Reference Number Action Activity Code (RNAAC) identifying the codifier responsible for the codification;
- Reference Number Status Code (RNSC) indicating the admissibility of the reference for procurement ;

and a

- Major Organisational Entity Code (MOE - Code) identifying the users of the item of supply : YB = SPAIN ; YJ = SINGAPORE ; etc...

CHARACTERISTICS DATA

NSN: 5905-00-7345199
ITEM NAME: RESISTOR, FIXED, FILM

DESIGN:

MRC	Requirement Statement	Clear Text Reply
AAPP	ELECTRICAL RESISTANCE	330.000 OHMS
AAPQ	RESISTANCE TOLERANCE IN PERCENT	-5.000 / 5.000
AAQF	AMBIENT TEMP IN DEG CELSIUS AT FULL RATED POWER	70.0
AAQH	TEMP RANGE OF TEMP	-55.0 / 150.0
AAQZ	COEFFICIENT IN DEG CELSIUS	
AARB	INCLOSURE METHOD	ENCAPSULATED
ABPM	TERMINAL TYPE	WIRE LEAD
ADAQ	BODY DIAMETER	0.098 INCHES NOMINAL
AEFB	BODY LENGTH	0.281 INCHES NOMINAL
STYL	POWER DISSIPATION RATING IN WATTS	0.250 FREE AIR
	STYLE DESIGNATOR	14 AXIAL TERMINAL EACH END

Items of supply are described in guides used by all nations. Descriptions are coded such that they may be stored and transmitted by computerised means. These coded descriptions can be translated into any language using a suitable decoding tool. **A pictorial representation may be present.**

PACKAGING DATA

FREIGHT DATA

MANAGEMENT DATA

NSN: 5905-00-7345199
ITEM NAME: RESISTORS, FIXED, FILM

Code	Data Element	Response
MOE Code	MAJOR ORGANIZATIONAL ENTITY CODE	ZZ: United States
PMIC	PRECIOUS METALS INDICATOR CODE	A: No known precious metal
ADP EIC	ADP EQUIPMENT IDENTIFICATION CODE	O: No ADP components
AAC	ACQUISITION ADVICE CODE	V: Terminal Item
SOSC	SOURCE OF SUPPLY CODE	S9E: Defense Electronics Supply Center
UIC	UNIT OF ISSUE CODE	EA: Each
UP	UNIT PRICE AND CURRENCY CODE	0.18 US\$
QUPC	QUANTITY PER UNIT PACKAGE CODE	A: 10
CIIC	CONTROLLED INVENTORY ITEM CODE	U: Unclassified
SLC	SHELF LIFE CODE	O: Non-deteriorative
NATO REC	NATO RECOVERABILITY CODE	O: Non Repairable Item
USI SERV CODE	USING SERVICE CODE	I: Integrated Material Manager
PC	PHRASE CODE AND STATEMENT	F: When exhausted use 5905-01-161-3203

Management data covers all fields of logistics: supply, issue, maintenance, applicability, interchangeability, storage and packaging, handling criteria, hazards, usage, and disposal, etc...



Advantages of the NATO Codification System

OPERATIONAL ADVANTAGES

- This system contributes to equipment standardization efforts, which support interoperability, as several weapon systems spare parts can be used interchangeably with others.
- A national and NATO wide knowledge of all available military assets and resources allows for :
 - ◆ rationalisation of inventory management by sharing resources spare parts and maintenance activities ;
 - ◆ the minimum distribution of essential spare parts during the deployment of forces in a theatre of operation ;
 - ◆ cross service supply between the military branches ;
 - ◆ sharing of supply support between nations.
- An accurate description of the items permits users to readily find equipment, which meets requirements and accomplish replenishment without delay.
- The use of a common language simplifies the technical dialogue between users. Maximum use of coded data allows language independent communications.
- The use of computer technology allows the recording, processing, and transmitting of identification and management data through easily accessible databases.

ECONOMIC ADVANTAGES

- The database allows designers and project managers to screen for parts which are already stocked in the supply system and which could be used, rather than introducing a new item. This practice reduces the variety of items to be managed and eliminates unnecessary costs for experimentation, identification, storage and other related supply functions. Approximately 50% of the components used in the design of all new equipment are already codified.
- A widespread knowledge of spare parts used within the Armed Forces allows purchasing agencies to :
 - ◆ avoid unnecessary procurement for a specific user when another user has surplus stocks ;
 - ◆ combine orders from several users to benefit from price reductions on large purchases ;
 - ◆ access several potential sources of supply, thus generating significant savings by promoting competitiveness between suppliers ;
 - ◆ account for supply costs: senior managers are aided in managing budgets and tracking expenditures when the NCS is used within a supply budget system.
- The system contributes to the standardization of the range of equipment performing the same functions, thus reducing the number of spare parts required to manage each weapon system.
- The cancellation of duplicates reduces the stock levels and generates savings in storage space, handling assets and personnel.

ADDITIONAL BENEFITS

The NATO Codification System and its item description patterns offer advantages even for participants outside the defence community.



NON-NATO, NON GOVERNMENTAL ORGANISATIONS AND COMMERCE

- Many non-NATO nations have adopted the NATO codification system because of their requirement to codify equipment supplied by the manufacturers. The manufacturers having access to the NATO database can meet their customers' requirements at a lower price.
- Descriptions of items enable design engineers to accurately search for and select components or equipment meeting technical or functional characteristics more efficiently than with any commercial catalogue.
- Relations and understanding between governments (purchaser) and manufacturers (provider) are greatly enhanced by the use of a common language.
- Better tracking of vendors: The NCS includes a system for identifying and tracking commercial vendors. Combined with procurement systems, managers can systematically track critical information such as past performance by the contractor, addresses and telephone numbers, and political/social data (such as geographical distribution of vendors and manufacturers within a nation).
- History of commercial sources: Logisticians can use the NCS to determine past sources for purchases of the item of supply. This can be useful when items are difficult to obtain.
- Aid domestic industrial base: When a company's reference number is recorded on an item of supply in the **NATO Master Catalogue of References for Logistics (NMCL)**, it is visible to other nations as a potential source for that item. Thus, the company's opportunity for sales is improved.

STANDARDIZATION ORGANIZATIONS

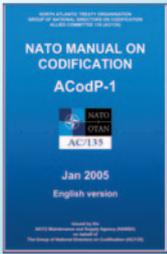
The accurate descriptions (characteristics, specifications and drawings) found in the supply system disclosing varieties, types and dimensions for items of supply facilitate the work of standardization agencies responsible for developing guidelines.

ENVIRONMENTAL AGENCIES

The in-depth knowledge of the composition of materials, through detailed descriptions, promotes proper hazardous material handling recycling activities that will ensure the protection of the environment and avoid prohibitive restoration costs of polluted sites. This information also ensures required demilitarization activities of military equipment.

Track important information: the system makes it easier for logisticians to recognise whether precious metals may be embedded in a supply item, whether it is hazardous to the environment, or of such high value that it requires special storage procedures. Data in the system can also alert users when supply items may be susceptible to harm during storage or transportation, thus requiring special handling.

The products and services of codification



AC/135 publishes documents to support the NATO Codification System. These include several Allied Publications and publications that are identical in format and meaning but unique by nation.

ALLIED CODIFICATION PUBLICATIONS

- **ACodP-1** = NATO Manual on Codification :

This publication, sets out the principles, responsibilities, procedures, forms and general guidance on the operation of the NATO Codification System. (downloadable from the AC/135 WEB site at www.nato.int/structur/AC/135/main/links/acodp1.htm)

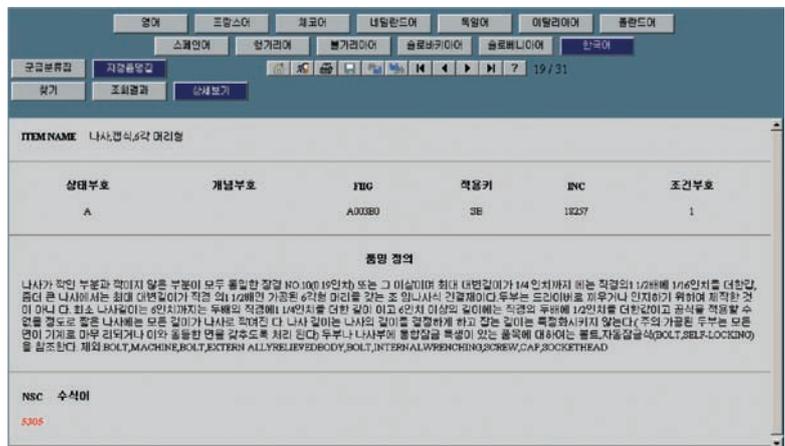
- **ACodP-2/3** = NATO Multilingual Supply Classification Handbook and Item Name Directory :

This publication contains the single uniform classification system (ACodP-2) and the uniform Approved Item Names (ACodP-3) assigned to materiel within the NATO Codification System.

Note : The **NATO** Multilingual **ACodP-2/3** publication is accessible online at www.acodp2-3.com/enacodp.htm



Seleccionar	COA	TITULO COA	TITULO GRUPO
<input checked="" type="checkbox"/>	5905	Resistencias.	Componentes de Equipos Eléctricos y Electrónicos
<input checked="" type="checkbox"/>	5910	Condensadores.	Componentes de Equipos Eléctricos y Electrónicos
<input checked="" type="checkbox"/>	5915	Filtros y Redes.	Componentes de Equipos Eléctricos y Electrónicos
<input checked="" type="checkbox"/>	5920	Fusibles, Reductores, Absorbedores y Protectores.	Componentes de Equipos Eléctricos y Electrónicos

상대부호	개념부호	FIG	적용키	INC	조건부호
A		A0080	SB	19257	1

품명 정의

나사가 각의 부분과 각이치 않은 부분이 모두 동일한 길일 NO 000 19인치) 또는 그 이상이며 최대 대변길이 1/4 인치까지 되는 직경의 1/2인치에 1/16인치를 더한 값, 줄더 큰 나사에서는 최대 대변길이 직경의 1/2인치인 가운뎃 6인치)를 갖는 조임나사. 견출제이다. 두부는 드로잉에로 가공되거나 인치이기 위하여 절삭한 것이 아니다. 최소 나사깊이는 4인치까지는 두배의 직경에, 1/4인치를 더한 길이이고 4인치 이상의 깊이에는 직경의 두배에 1/2인치를 더한 길이이고 공식을 적용할 수 없을 정도로 얇은 나사에는 모든 길이가 나사로 적어진다. 나사 길이는 나사의 길이를 결정하게 하고 같은 길이는 특정화시키지 않는다. (주의 가운뎃 두부는 모든 면이 거칠고 마무 리되거나 이와 동일한 면을 갖추도록 처리 된다.) 두부나 나사부에 통합압출 특성이 있는 용역에 대하여는 볼트,자물감물식(BOLT,SELF-LOCKING)을 참조한다. 제와 BOLT,MACHINE,BOLT,EXTERN ALLYRELEVEEDBODY,BOLT,INTERNALWRENCHING,BREW,CAP,SOCKETHEAD

NSC 수석어

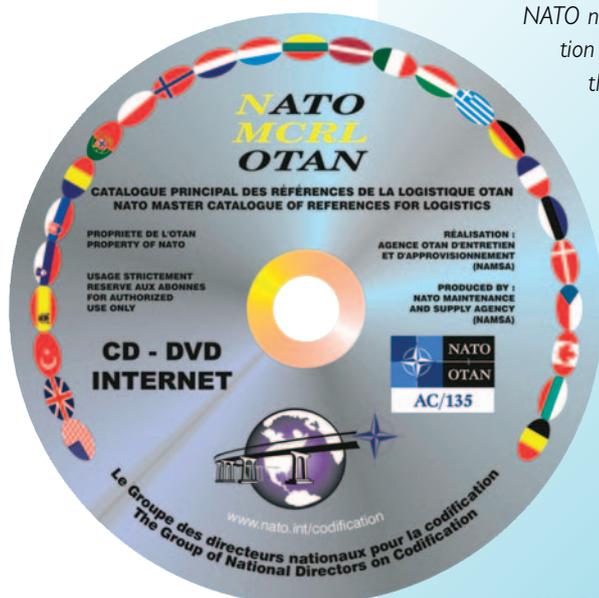
5905

ALLIED CODIFICATION TOOLS AND PRODUCTS

- **NMCR** = NATO Master Catalogue of References for Logistics :

It is a bi-monthly on CD-ROM publication comprising of the NATO Stock Numbers of all NATO nations and those of the sponsored non-NATO nations . It contains identification data of the items of production and the list of the user nations in addition to the information identifying the manufacturers and the sources of supply are associated to these NSNs.

(see www.nmcr.com)



- The NMCR is a basic tool for :
 - ◆ Codifiers to determine if an item has already been identified in another nation ;
 - ◆ Logisticians to determine the sources of supply for a given item, and other user nations to allow cross servicing.

- **NADB** = NATO Ammunition database :

It is a specialised CD-ROM product, based on codification data. It provides a unique reference source for matters related to the management of NATO ammunition. See www.namsa.nato.int/ammo/nadb_e.htm

- **NMBS** = NATO Mailbox System :

It is a reliable and fast means of exchanging high volumes of data in electronic format with a minimum of manual intervention. The system spans most of the world and since its introduction in 1993 it has grown. The system is constantly brought up to date to reflect the newest trends in information technology but using only proven and reliable technology.

- **NABS** = NATO Automated Business System :

It is comprehensive electronic environment which improves the efficiency of agenda management and document exchange within the group. Any committee, whether its members are working in one geographical area or spread all over the world, can take advantage of the new automated document management system. NABS eliminates the need for hard copies and can therefore substantially reduce hours of manual labour involved in handling these hard copies. NABS allows the users to process, circulate, locate and manage documents in an easier and, last but not least, more cost effective way.





NATIONAL PUBLICATIONS

Each nation distributes supplementary files in addition to the above mentioned allied publications.

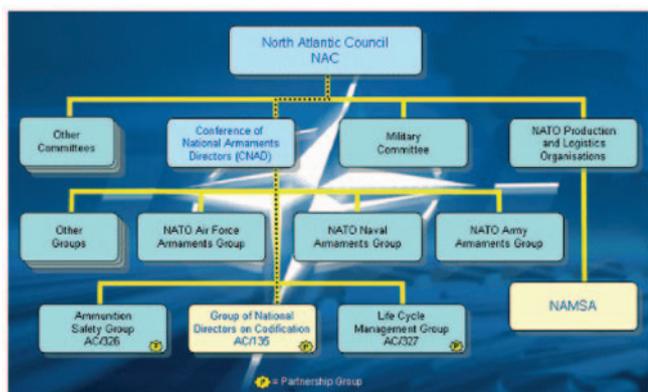
- **Manual of National Procedures** based very closely on the NATO ACodP-1 procedures.
- **H2-H6** : a translation of the ACodP-2 and ACodP-3 in the language of the nation.
- **H4-H8** : a national basic file for manufacturers and suppliers.
- **IIG** : an Item Identification Guide allowing the description of items based on their physical characteristics and performance using a common language. The US IIGs are used as references by the other nations.
- **CRL and ML** : these publications include characteristics, standardization and/or management data to supplement the NATO Master Catalogue of References for Logistics (NMCRL). The various national products (National database of items used by the Armed Services).
- **For further details on National Publications see www.nato.int/structur/AC/135/main/links/products_national.htm**



Organisation of NATO Codification System

The NATO Codification System is managed and run by a NATO Cadre Group consisting of the National Directors on Codification Allied Committee 135 (AC/135). This group, which is under the authority of the Conference of National Armament Directors (CNAD), is committed to increased effectiveness and efficiency of global logistics systems and operations for participating nations and to provide the bridge necessary to facilitate global logistics operations.

NATO STRUCTURE



NATIONAL ORGANIZATIONS

Within each nation, a **National Codification Bureau (NCB)** is responsible for the maintenance of the **Total Item Records (TIR)** and support files (manufacturers, item names, Item Identification Guides, classification). Each NCB is the sole responsible authority for the other nations as far as data exchange and codification services are concerned.

Depending on the nation, codification tasks are :

- carried out within the NCBs (centralised organisation) ;
- shared between the various agencies of the Ministry of Defence ;
- sub-contracted to specialised private sector agencies or manufacturers.

Some nations have extended the use of the NCS to ministries or governmental agencies external to Defence.

SYSTEM OBJECTIVES

The four key determinants of system effectiveness are :

- **Logistic Requirement** : To support national, NATO wide and international logistics management systems and requirements;
- **Financial** : To ensure that national, NATO wide and international operation of the NCS provides value for money ;
- **Quality** : To ensure that codification systems and procedures are effective and efficient in relation to both their design and their output ;
- **Information Technology (IT)** : To ensure that the NCS is developed to accommodate relevant IT opportunities.

The AC/135 has signed a Memorandum of Understanding (MoU) with the NATO Maintenance and Supply Agency (NAMSAs) (**see www.namsa.nato.int**) for the provision of specific technical and administrative support.

Use of the NCS by non-NATO nations

More and more nations outside NATO, including Partnership for Peace (PfP) ; Mediterranean Dialogue (MD) and Pacific Area Nations, are using the NCS.

(see www.nato.int/structur/AC/135/main/links/contacts.htm).

These nations recognise the benefits of adopting the NCS for internal purposes, for dealing with NATO nations and for dealing with each other.

The Group of National Directors on Codification recognises that there are advantages to both NATO and non-NATO nations in the adoption of the NCS. One of the policies of the Group is that allied and friendly nations around the world can be provided with the possibility to take part in the NCS. To facilitate and formalise this participation, the AC/135 has initiated the Sponsorship Program. Participation in the Sponsorship Program is subject to a formal agreement between the non-NATO nation and the AC/135.

The Sponsorship Program is designed to assist candidate nations on the road to become full members of the NCS community and it will safeguard the systems and procedures already in place to ensure a continuing high quality of services and information.

Each level of sponsorship, Tier 1 and Tier 2, holds specific benefits.

TIER 1 (entry level) :

- Formalised relationship with AC/135 ; all NATO nations and all other non-NATO sponsored nations.
- Immediate assignment of the necessary nation codes to start using or to develop a national codification system.
- Use of a proven codification system.
- Access to some 16 Million NATO Stock Numbers and related information.
- Possibility to propose NCS process and procedural amendments.
- Possibility to use the NATO Mailbox System to exchange codification data with NATO and sponsored nations.
- Possibility to get technical assistance from NATO nations. through the AC/135 BASELOG program.
- Receive regular updates to Allied Codification publications, official documents and brochures.
- Possibility to add your own data into the consolidated NATO set of data products (NMCRL, Manufacturers file, etc.).

TIER 2 :

In addition to the benefits of a Tier 1 nation, Tier 2 nations will have the following benefits :

- Become a full member of the NCS community ;
- Two way data exchange with NATO and sponsored nations ;
- Participation in meetings of AC/135's Panel A on technical Codification matters.

SPONSORSHIP AGREEMENT PROCEDURE

A non-NATO nation wishing to apply for sponsorship in the NCS needs to send a request for sponsorship to AC/135 through the Secretary.

The request may be a simple letter, signed by a competent authority, stating the intent to use the NCS. If all the NATO nations agree to the request, the Chairman of AC/135 sends a Sponsorship Agreement to the applying nation for signature. The sponsorship agreement will be valid from the moment it is signed by both the commissioned authority of the applying nation and the Chairman of AC/135.

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Future of the NCS

AC/135 is committed to increased effectiveness and efficiency of global logistics systems and operations for participating nations. It aims to improve the high level of supportability of national and multinational military missions. It will provide the bridge necessary to facilitate global logistics operations.

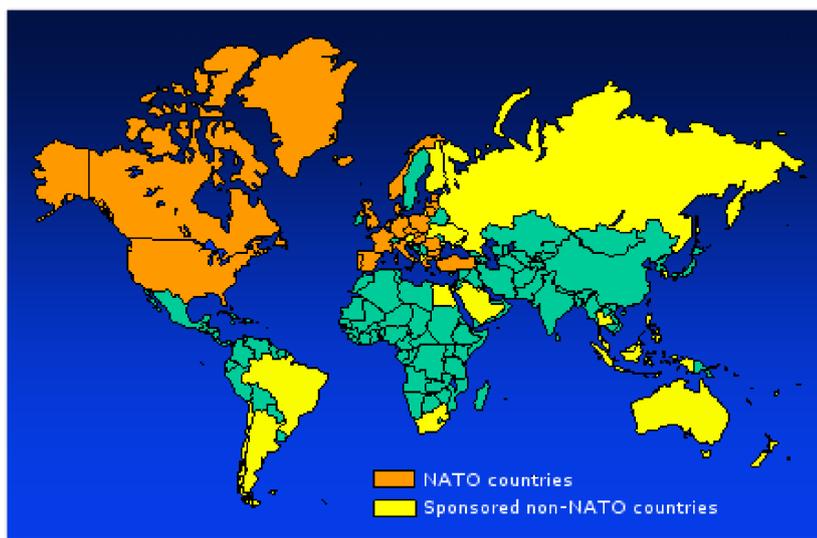
The mission of the AC/135 NATO Group of National Directors on Codification is to make the NCS as efficient as possible to better meet the logistics requirements of the forces involved in joint operations. Within the framework of constant political, economic and technical changes, AC/135 carries out its mission by implementing of a strategic plan with the aim to :

- Support national and international Logistics management systems and requirements within NATO ;
- Provide uniform codification in support of standardisation and interoperability within NATO ;
- Enhance global military co-operation and industrial partnership ;
- Harmonise the NCS with international product data standards.

Conclusion

• The NCS is often referred to as an international language of logistics. It is not an inventory control system; it is the logistics language used by such systems. Likewise, it is not a supply accounting system, but the logistics language used by supply systems. This also applies to procurement systems, maintenance systems, and transportation systems.

- The NCS is the foundation of inter-service and inter-nation logistics co-operation. Thus, adopting this language is often the first step towards such co-operation.
- The NATO Codification System (NCS) is an integral part of the supply operations of NATO nations and many non-NATO nations.
- Its benefits are recognised by its Logistics users. This system has established a single supply language, provides accurate information on the identity and characteristics of an item of supply and avoids duplicates.
- It is a flexible system with growth and upgrade capacity to facilitate improved support to logisticians.



The NATO Codification System

A Reliable International Cataloguing System to support Modern Logistics



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