



GUIDE TO THE NATO CODIFICATION SYSTEM



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of National Directors of Codification

PREFACE

This booklet contains an explanation of the NATO Codification System (NCS) as used by NATO nations, Agencies and Sponsored nations worldwide. It is intended as a guide for users of the system, including procurement and management organisations that are requested or required to include codification as part of their functions or obligations, and it also provides a useful reference for others with an interest in the system.

It has particular significance for manufacturers and contractors producing and supplying Item of Supply -IoS- in accordance with national or multi national NATO contracts where use of the NATO Codification System is specified.

The NATO Codification System has evolved, and continues to do so, in response to the needs of Logistic management and developing information technology.

As a result, the information contained in this guide may have been superseded by changes or revisions to policies and methods.

Verification of current procedures or assistance in dealing with any query or difficulty may be obtained by contacting the NCBs which are listed on the AC/135 Website at

<http://www.nato.int/structur/AC/135/welcome.htm>

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1. THE NATO CODIFICATION SYSTEM

1.1. INTRODUCTION

The NATO Codification System (NCS) is a uniform and common system for identification, classification and stock numbering of Items of Supply of user nations. It is designed to achieve maximum effectiveness in logistics support and to facilitate materiel data management. The System has been agreed by all signatories of the Alliance and sponsored non-NATO nations for use in identifying equipment and supplies.

The principal document of the System is the Allied Codification Publication No 1 (ACodP-1), also known as the NATO Manual on Codification, which describes the system operating procedures. In its military application the System has been accepted under two NATO Standardisation Agreements (STANAGs) - STANAG 3150 (Uniform System of Supply Classification) and STANAG 3151 (Uniform System of Item of Supply Identification). The System, which is based upon the United States Federal Catalogue System, is also used by the Civil Departments of some NATO nations. It is governed by the NATO Group of National Directors on Codification (AC/135) and implemented by the National Codification Bureau (NCB) of each user nation.

1.2. OBJECTIVES

The principal objectives of the System are :

- To facilitate interoperability between user nations
- To increase the effectiveness of user nations logistics systems.
- To facilitate data handling.
- To minimise logistics costs of user nations.
- To increase efficiency in user nations logistics operations.

To achieve these objectives the System provides for each "Item of Supply" (see Paragraph 1.5) to be assigned with :

- A unique Item Name.
- A unique classification.
- A unique identification.
- A unique NATO Stock Number.

These concepts are further described in Paragraph 1.6.

The data so collected is stored in national databases for immediate retrieval. Additional Technical Characteristics Data of Items of Supply is also held for use as a reference library against which all new Items of Supply may be screened to reveal those which have already had a NATO Stock Number assigned, thus avoiding IoS duplication in NATO inventories.

1.3. USE OF THE NATO CODIFICATION SYSTEM

The establishment, operation and maintenance of the NATO Codification System provide a uniform identification language for use within national activities (e.g. supply management, standardisation etc.) and among member nations, including non-NATO nations that are sponsored members of the NCS.

Its use is based on the principle that responsibility for codification of an IoS rests with the nation that controls the design of the IoS, even if the IoS is not used within that nation. In these circumstances the purchasing nation has to request codification action from the design control nation.

For codification of IoS produced by manufacturers not located in a NATO nation or Tier 2 Sponsored nation, special rules apply (as detailed in ACodP-1).

1.4. BENEFITS OF THE NATO CODIFICATION SYSTEM

The NATO Codification System provides accurate information as to the identity of an IoS, it permits recording of the sources of supply and provides other management data. It enables the solution of supply management problems by providing data users with ready access to a single up-to-date source.

1.4.1. OPERATIONAL ADVANTAGES :

- Enhanced opportunities for standardisation, by recording and revealing the unique characteristics of Items of Supply in user nations supply systems, allowing parts from a number of weapons systems to be used efficiently and effectively.
- The NCS provides access to the full range of information on all Items of Supply in the inventories of user nations. This allows users to pool resources and share the burden in regard to the acquisition of spare parts and the maintenance of common equipment. During operational deployment the NCS also facilitates minimisation of the supply requirement in terms of spares and consumables.
- An accurate description of the IoS permits users to readily identify spares and or substitute Items of Supply which meet the requirement for a given weapon system thus reducing downtime and supporting force multiplication.
- The use of a common supply language understood by all users simplifies the technical dialogue between participating nations and other users.
- The use of computer technology allows the recording, processing and transmittal of IoS identification data and related management support data in an efficient and user friendly manner.

1.4.2. ECONOMIC ADVANTAGES :

- The data base allows the designer and project manager to screen for parts which are already stocked in the supply system and which could be utilised rather than producing a new IoS concept. This practice reduces the variety of Items of Supply to be managed and eliminates unnecessary costs for identification, storage and other related supply functions. Nearly 50% of the components used in the design of new equipment are already codified in the NATO inventory.

- Improved determination of materiel requirements and budgeting through greater knowledge of Items of Supply in stock.
- Effective co-ordination in procurement by enabling the elimination of concurrent acquisition and disposal of the same IoS, consolidating orders from several users to benefit from price reductions on bulk purchases and having visibility of several potential sources of supply.
- Effective use of assets by enabling supply support interchange between linked organisations and between nations.
- Reduction of national and NATO inventories, warehouse space, data maintenance and personnel through the elimination of duplication of an IoS.
- Improved surplus and excess materiel disposal operations through the uniform identification of each Item of Supply, including the prevention of erroneous disposal.

1.4.3. BENEFITS TO INDUSTRY

- Improved government-industry understanding and relations, through the use of a single identification system and common language.
- Descriptions of Items of Supply by characteristics enable design engineers to accurately search for and select components or equipment meeting technical or functional characteristics more efficiently than with any commercial catalogue.
- The accurate descriptions recorded in the NATO Codification System including form, fit and functional dimensions, material and surface treatment for Items of Supply facilitates the work of military and civilian standardisation agencies responsible for developing guidelines.
- The in-depth knowledge of the composition of Items of Supply, through detailed recording of hazardous and precious materials, promotes recycling activities which will assist in the recovery of precious materials and assist in the protection of the environment whilst contributing to the avoidance of prohibitive reclamation costs of returning polluted sites to civilian use.

1.5. ITEM OF SUPPLY -IoS-

The NATO Codification System is based on the "IoS concept" and requires a unique IoS Identification of each IoS. An IoS is an Item of Production which a responsible supply management authority has determined as being required to meet a specific logistics requirement.

Within the limits set by the concept, an IoS may be :

- A single Item of Production with a single NATO Stock Number.
- Two or more interchangeable Items of Production from one or several manufacturers all with a single NATO Stock Number.
- A quality controlled, precise tolerance IoS, selected from a normal production run allocated a discrete NATO Stock Number to differentiate it from the normal item in the production run.
- A production line IoS with a special modification and with a discrete NATO Stock Number to differentiate it from the normal item in the production run.

The various operational requirements which frequently cause an Item of Production to be used for differing purposes may validly, but not necessarily, cause an Item of Production to be referenced to more than one NATO Stock Number, due to a broader or narrower IoS concept.

1.6. ELEMENTS OF THE SYSTEM

1.6.1. CLASSIFICATION

Military inventories are complex and comprehensive in their content. To enable efficient management of these complex inventories in the NCS the components of the inventory are split into a hierarchical structure of discrete Groups and Classes. Each Group is formed by Items of Supply of the same physical or performance characteristics or utilisation in the same application, and is indicated by a 2 digit code (NATO Supply Group) NSG.

Within each Group, Items of Supply are further divided into Classes. These Classes are indicated by an additional 2 digit code forming, together with the Group code, a 4 digit NATO Supply Classification (NSC). The NATO Supply Classification System is uniform throughout all nations and each IoS concept identified using this System will be assigned a unique 4 digit Classification code.

The NATO Classification structure of all groups and classes and their definitions, is published on behalf of the Group of National Directors on Codification (AC/135) by the U.S. as ACodP-2 (Allied Codification Publication No 2). It is also included on the NATO Master Catalogue of References for logistics (NMCRL).

1.6.2. ITEM NAMES

To ensure uniformity the System employs rules for naming each IoS using Approved Item Names (AIN). These AINs are defined in National Codification Handbooks (H-6) and ACodP-3. Approved Item Names are published together with their definitions and Item Name Codes (INC) and are used for classification of Items of Supply (see Paragraph 1.6.1) and descriptive identification of IoS and, where applicable, for reference identification of IoS (see Paragraph 1.6.3). The H-6 also defines colloquial names which are cross-referenced to Approved Item Names. When a manufacturer's Item Name cannot be related to an Approved Item Name, it may, exceptionally, be used as a Non-Approved Item Name (NAIN). The naming and nomenclature of an IoS is crucial to future linkage between the NCS and emerging international standards such as ECCMA, UNSPSC, PLib, STEP and PLCS.

AC/135 has published a NATO IoS Name Directory, known as Allied Codification Publication No 3 (ACodP-3), a comprehensive and internationally agreed dictionary of Approved Item Names required in the preparation of all IoS identifications. A National Codification Bureau having a requirement for an IoS Name not included in ACodP-3 must request its assignment in accordance with prescribed rules. However, H-6 handbooks are still maintained by several nations to serve as guides for IoS identification in their own language. Approved Item Names and related codes in the national H-6 handbooks conform to ACodP-3.

Each Approved Item Name is referenced in the ACodP-3 to one or more NSC codes.

1.6.3. ITEM OF SUPPLY IDENTIFICATION

IoS identification is the most important element of the NATO Codification System, as it prescribes the characteristics required to uniquely identify an IoS Concept.

The IoS identification consists of the minimum data required to establish clearly the essential characteristics of the IoS, i.e. those characteristics which give the IoS its unique character and differentiate it from every other IoS. The basic rule of thumb is “One IoS, One NATO Stock Number (NSN)”.

There are two methods of IoS identification, the descriptive method and the reference method. In both approaches, identification of the True Manufacturer or Design Authority for an IoS is essential for the proper application of the Uniform System of Item Identification (STANAG 3151). It is similarly important that all known manufacturers/suppliers of an IoS and their individual part or drawing numbers be recorded. This process ensures that codification data users in the logistics chain are aware of where the Intellectual Property Rights (IPR) of any given IoS lie and that all known sources of that IoS are known to Acquisition Officers in national procurement organisations.

DESCRIPTIVE METHOD. The descriptive identification of IoS requires the use of uniform Item Names and technical descriptions using Item Identification Guides (see following sub-paragraph). Also, each Approved Item Name is referenced in the National Handbooks H-6 to a specific Item Identification Guide.

An Item Identification Guide (IIG) is a document used to identify an IoS by describing its attributes or characteristics in order to differentiate it from other Items of Supply and to record the necessary supplementary data required for logistics management. Each IIG is a self-contained document containing a compilation of requirements plus decision making rules to establish the IoS's individual identification. Each guide covers a complete "family" of like Items of Supply and lists the requirement for the recording of the IoS's characteristics, ready-formatted for machine processing.

As an additional tool for use with the descriptive method, the use of reference drawings has been developed. The purpose of these drawings, is to express, pictorially, characteristics of Items of Supply which cannot be adequately described by words alone. Relevant reference drawings are integrated in Item Identification Guides.

REFERENCE METHOD. The reference identification of an IoS is an indirect process of identification. In this approach, the Item Name is supported by reference data only, consisting of the manufacturer's name (encoded In Accordance With (IAW) the NATO Commercial and Governmental Entity Code (NCAGE) allocation and formatting rules see Paragraph 1.6.4), and the reference/drawing number by which the IoS is known and recognised by the manufacturer.

1.6.4. NATO COMMERCIAL AND GOVERNMENTAL ENTITY CODES - NCAGE.

As indicated in previous Paragraphs, it is necessary to record manufacturers' names against codified Items. To meet this requirement, a 5 character NATO Commercial And Governmental Entity Code (NCAGE), is assigned to each manufacturer. The structure for NCAGE coding is set out in ACodP-1. Details of individual NCAGEs are published in the NATO Master Catalogue of References for logistics (NMCRL) and various national codification publications on CD-ROM.

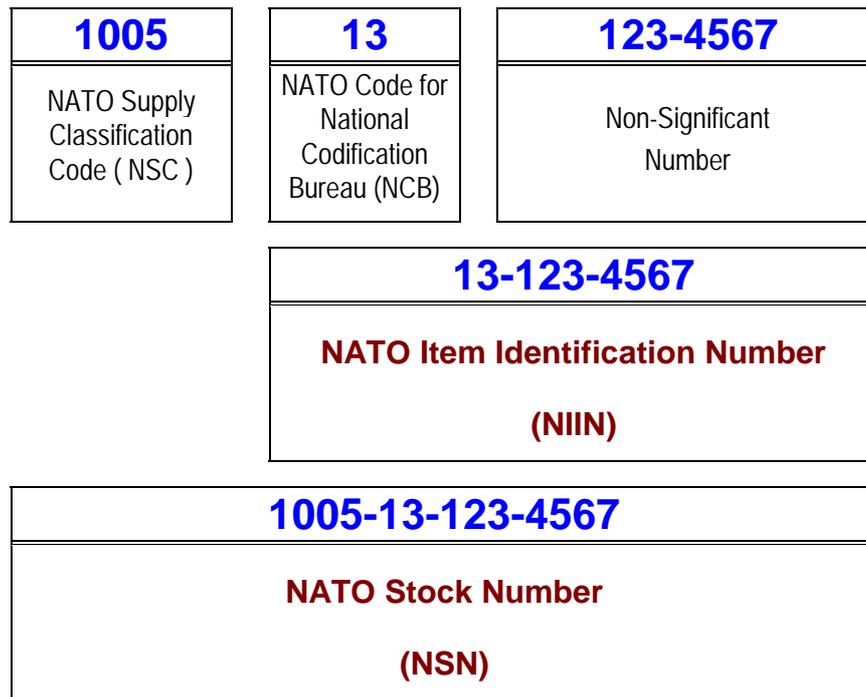
1.6.5. NATO STOCK NUMBER - NSN

When it is established that an Item of Supply is unique, its identity is fixed through the assignment of its own NATO Stock Number (NSN). NSNs are issued by NCBs.

The NSN is a 13 digit number and is divided into 3 parts :

- The first 4 digits are the NATO Supply Classification Code and relate the IoS to the group and class of similar Items of Supply (see Paragraph 1.6.1).
- The next 2 digits indicate the NCB assigning the NSN.
- The final 7 digits of a NSN are computer allocated and have no inherent significance other than to uniquely identify the IoS to which they are allocated. In practice, this means that no inference should be drawn by the logistician or other data user based on any apparent serial progression. These 7 digits are assigned to one IoS within the originating nation's codification database, they may be duplicated in the Total Item Record (TIR) of another NCS user nation. To enable user friendly reading of NSN data, it is common for a dash to be inserted at strategic points in the NSN e.g. (1005-13-123-4567), however, whenever a NSN is read in an Automatic Data Processing (ADP environment, the NSN will be represented in its true form, (i.e. 1005131234567) as a thirteen (13) digit string.

An example of a NSN and related terms is shown below :



The NATO Item Identification Number (NIIN) (Last Nine (9) Digits of an NSN) is the fixed part of the NSN, and it remains associated with the IoS concept throughout its life cycle. However, the NSC (First Four (4) Digits) may change if there is a revision of the IoS Classification structure.

The principal benefits of the NSN are :

- Uniformity. It is uniform in composition, length, structure and use.
- Adaptability. It supports the varied requirements of logistics management in a supply system, both nationally and internationally, from initial procurement to final disposal of the IoS.
- Simplicity. It is applicable without modification to all Items of Supply, it is unique, easy to assign, it is flexible to maintain and it is readily recognised throughout the user nations of the world.
- Stability. The NIIN is associated with only one IoS in perpetuity, it is never re-allocated to another IoS even if the original IoS is no longer in use.
- Compatibility. The NSN and its related data can be recorded and communicated manually or by all types of ADP systems (no two user nations have the same hardware / software configuration). Providing, through the fixed format rules of the NATO Data Exchange (NADEX) system, elegant solutions to the communications problems raised by the use of diverse operating, communication and supply systems in the current user nations.

Further the system provides for :

- Expandability. Ten million different Items of Supply may be recorded for each NCB code.

1.7. CODIFICATION SERVICES AND EXCHANGE OF CODIFICATION DATA

In order to obtain the maximum benefit from the NATO Codification System, internationally agreed methods, formats and procedures have been set up to facilitate the regular exchange of codification data and services among member nations.

Standard procedures for exchange of data by telecommunication means have been established and special input and output codes and formats have been agreed upon.

The NATO and Sponsored nations also exchange general data, including national NCAGE Data, which details the full names, addresses, telephone, fax, e-mail and industrial classification codes of all recorded national manufacturers and suppliers. The nations also supply the NSN Cross Reference Lists (CRLs), which contain nationally assigned NSNs cross-referenced to manufacturer's Refsets (Reference Sets), which are the identifying data string created by joining the manufacturer's NCAGE and reference/drawing numbers together, to NAMSA in order to produce the NMCRL.

Some NATO nations are currently able to exchange Materiel Management Data (MMD) and other nations are planning to introduce this facility. MMD includes information necessary to acquire, account for and generally manage Items of Supply, such as price, source of supply, shelf life. The exchange of these data elements is accomplished on the basis of STANAG 4199 (Uniform System of Exchange of Materiel Management Data).

1.8. PUBLICATIONS ON NATO CODIFICATION

All international rules, operating procedures and forms are contained in the NATO Manual on Codification, published as Allied Codification Publication No 1 (ACodP-1), which is updated bi-annually.

2. CODIFICATION PROCEDURES

2.1. GENERAL REQUIREMENTS

2.1.1. INTRODUCTION

Logisticians in NATO and Sponsored user nations require that NATO Codification be undertaken for all Items of Supply prior to delivery to the user. A comprehensive series of actions is undertaken to achieve this end. These actions are detailed in this Chapter.

It is essential that arrangements be made for codification at the earliest possible stage in a project to ensure that codification data is provided in step with the production of Items of Supply. Whenever possible, the requirement shall be noted at the design stage and contractors encouraged to use Standard Components and Items of Supply which have already been codified and fully described.

2.1.2. CODIFICATION CONTRACT CLAUSE

In every case, invitations to tender, orders for prototype work, or other pre-production action shall contain the appropriate reference to the need for data in support of NATO codification. Contracts for major equipment and spare parts shall contain a clause specifying the supply of supporting data for codification.

However, the actual supply of data in support of codification (the list of existing NSNs and/or technical documentation relating to new items to be codified) will only be required after the final signature of the order or contract. In the early stages of the procurement process, companies will only be required to obtain an NCAGE code. The contracting authority may only require codification data from companies that win a bid or from whom goods are ordered.

The subject of the Codification Contract Clause and details of its meaning and use, as agreed by member nations, can be found in Chapter 4.

It is of primary importance that the Codification Contract Clause be included in all acquisition/procurement contracts. Prime contractors shall be made aware of the requirement to include the Codification Contract Clause in any contracts placed with sub-contractors so that technical data can be obtained for Sub-Contracted Components.

2.1.3. NATIONAL CODIFICATION BUREAUX - NCB

Codification work is undertaken under the supervision and control of the National Codification Bureau (NCB) of the codifying nation. Some nations utilise specialist codification contractors to perform the actual codification of Items of Supply.

Note: The acquisition/procurement contract shall not demand the delivery of NATO Stock Numbers for the procured IoS from the contractor. NSN assignment is the sole responsibility of the NCB of the codifying nation.

The acquisition/procurement contract shall detail the full address and contact details of the NCB in the country acquiring/procuring any given equipment/spares. All prime and sub-contractors shall obtain codification information, guidance, publications and national regulations from the NCB as the mandated authority for the provision of the above requirements.

For multi-national/NATO projects, close liaison shall be established between the NCBs of participating nations. The NCB of one of the nations participating in the project may act as co-ordinator, assisted by the project contractor or an international consortia of contractors.

2.1.4. THE NATO MAINTENANCE AND SUPPLY AGENCY - NAMSA

The NATO Maintenance and Supply Agency (NAMSA) participates in the NATO Codification System on behalf of all other NATO Agencies. NAMSA may be made responsible for the co-ordination and management of the codification of a common or NATO Project.

The Memorandum of Understanding (MoU) between AC/135 and NAMSA was established to enable contact and interaction between AC/135 and NAMSA. The MoU structures the provision of clearly defined services by NAMSA to the AC/135 community.

2.1.5. TRAINING ON NATO CODIFICATION

Training courses for personnel engaged in NATO Codification work are conducted by some NCBs, and these are normally open to personnel of supply departments and industry. Enquiries on the type and duration of such courses should be addressed to the NCB.

2.2. FINANCIAL ASPECTS

2.2.1. INTRODUCTION

As in all other phases of logistics supply, codification is a cost element. It is vital that acquisition/procurement and budget management personnel are aware of the expenditure codification will entail. All acquisition/procurement contracts and financial budgetary plans shall ensure that adequate financial provision is included for full codification in acquisition/procurement projects and financial planning for such.

2.2.2. MANUFACTURER'S COSTS

Where an acquisition/procurement project has included the Codification Contract Clause, there will be no cost to the Main Equipment Supplier/Manufacturer for the provision of codification related technical documentation/drawings and/or draft item identification. The costs of the provision of Technical Documentation/drawings and/or Draft Item Identification shall be included in the contract under the sub-clauses set out in the Codification Contract Clause. It is the responsibility of the Main Equipment Supplier/manufacturer to ensure that all sub-contractors are aware of the requirement for supporting Technical Documentation /drawings and/or Draft Item Identification and to include the Codification Contract Clause in any contract let to a sub-contractor. The cost of the actual codification is the responsibility of the Government Defence Entity Acquiring/Procuring the equipment in question.

2.3. SEQUENCE OF CODIFICATION ACTIONS

2.3.1. INTRODUCTION

While the detailed process of codification is not the responsibility of procurement or user authorities, it is desirable that users in particular are conversant with the codification requirement to facilitate proper introduction of the equipment being procured into service. The following paragraphs set out, in brief, the normal series of actions that make up the codification process. Flowcharts may be prepared by NATO Codification Sub-Groups established for the co-ordination of codification of major projects; however, they may also be used by any authority which sponsors or controls codification projects.

To ensure that the correct Items of Supply are codified for any given piece of equipment, the equipment designers and user community must decide on which IoS will be identified as potential spares to be eventually stocked in the inventory of the user nation. This is accomplished by the user group studying data such as the Logistics Support Analysis (LSA) and the Initial Provisioning List (IPL) created by the Main Equipment Supplier. The IPL shall be screened against the existing codification database to identify those Items of Supply which are already part of the user nations' inventory. Items of Supply which are not found in the existing database require codification. The result of this process will be a final list of Items of Supply, with NSNs and related data recorded, which are to be procured in order to support the equipment in service.

2.3.2. REQUESTS FOR CODIFICATION

These requests must contain the following information :

- The True Manufacturer's/Design Authority's fully identifying part number.
- The Approved Item Name (AIN) and the Item Name Code (INC) where it is known.
- The NATO Commercial and Governmental Entity Code -NCAGE- or name and address of the manufacturer.

- The proposed NATO Supply Class.

The name of the True Manufacturer/Design Authority is essential to the codification process. It is common practice for suppliers to allocate their own part numbers and where "Sub-Contracted Components" are included in equipment the supplier must quote the True Manufacturer/Design Authority's Part Number and provide all relevant data of the IoS for screening and recording in the national database.

Requests for codification are passed either to the appropriate NCB or the nominated coordinator of the project. This depends on the decision of the appropriate Sub-Group or the participating nations.

2.3.3. INITIAL SCREENING AND CODIFICATION

Initial requests for codification are input in electronic media, by telecommunication means, e.g. AECMA Specification 2000M, for screening against the databases to reveal, by comparison of the reference numbers (part numbers), any IoS with an existing NSN. After initial screening, the IoS with no matching NSN by reference, in the codification database shall be codified. The resultant "Embryo NIIN" with its technical characteristics will be screened against the full codification database, where no match by characteristics is found, the IoS will be allocated a new NSN.

2.3.4. PRIORITIES

The aim is to achieve "delivery of Main Equipment and supporting spares (IoS) with NATO Codification Data available".

NCBs have established timeframes for provision of codification data and services to each other or to the user. However, a necessary condition for meeting the agreed processing times is early provision of the technical documentation by contractors and suppliers (see Chapter 4).

2.3.5. FOLLOW-ON ACTIONS

An IoS may be subject to modification, change or correction, by the manufacturer during production, or at the request of the end user during production processing, or after field experience. Such modifications must be evaluated by the Configuration Manager to ascertain whether the modification or change is such as to warrant the creation of a new IoS with a different NSN.

It should be noted that the Codification Contract Clause (see Chapter 4) specifically caters to this requirement throughout the life of the contract. However, it should be acknowledged that use of an IoS may extend beyond the contract's time limit. As a result, the obligations of the original contract should be borne in mind and financial provisions made. Any Sub-Contracted Components or additional components added to a piece of equipment should be treated in the exact same manner.

2.3.6. SUMMARY

The following actions are required to ensure timely codification;

- To ensure that the Codification Contract Clause is included in the main contract, and in any sub-contracts as required.
- To inform, at the earliest possible stage in the procurement and design of equipment and selection of spares, the responsible NCB of the codification requirement.
- To assess, and budget for, any codification task not covered by the main contract.
- To make provision, if possible, for additional follow-on codification (e.g. modification) tasks after the main contract has expired.
- To advise the NCBs of the originating nations, as early as possible, of the future workload to enable them to plan for the provision of codification data before the planned delivery date of the Main Equipment and the supporting spares.
- To invite representation from the appropriate NCB(s) to attend provisioning conferences or any other meetings at which lists of IoS or spare parts and codification problems will be discussed.

3. COMMON AND NATO PROJECTS

3.1. COMMON PROJECT

A Common Project consists of one or more pieces of equipment or End Item procured by more than one nation for which codification of Items of Supply is to be performed. The IoS can be an original or reproduced IoS for which special rules apply (Consult with your NCB).

3.2. NATO PROJECT

A NATO Project is a project which is officially recognised (e.g. NATO AWACS). A special AC/135 Sub-Group may be created by the Group of National Directors on Codification representing the NCBs of the participating nations with the co-option as necessary of project contractors.

One or more NATO Codification Project Codes (NCPC) may be assigned by NATO AC/135 Secretariat upon request by the appropriate Sub-Group.

3.3. PROJECT CONTRACTOR

A Project Contract is given to a contractor acting on behalf of other agencies and is authorised to produce parts lists (indicating IoS). A project contractor will only contact his home NCB and will be informed through his home NCB of the arrangements made for a particular project by the other participating NCBs. A contractor within a project may be registered as an authorised data receiver for a limited number of data elements.

3.4. HOME NCB

The Home NCB is the NCB of the nation in which the project contractor normally operates and is registered in the national list of companies.

3.5. PARTICIPATING OR CONSORTIUM NATIONS

Participating or Consortium nations are defined as the nations involved in developing, manufacturing, procuring and using the end equipment.

3.6. GENERAL PROCEDURAL REQUIREMENTS

A complete and detailed codification clause (see STANAG 4177) will be inserted in the respective contracts with main and sub-contractors. Main and sub-contractors must insert the codification clause in all contracts with their sub-contractors. In turn, sub-contractors must pass this clause downwards to their own suppliers.

Data for codification will be transmitted between NCBs using telecommunications in accordance with established rules and formats. The primary means of data exchange between NCBs is a telecommunications system called the NATO Mailbox System (NMBS). The formats and mode of communication between NCBs and project contractors is agreed with the contractor at national discretion. Codification transactions must include within the Document Control Number the NCPC or Project Code where established.

Co-ordination of codification can reduce overall project costs and the number of codification requests. The participating nations should decide on how the codification of the IoS for the project concerned is to be co-ordinated.

- Co-ordination by Home NCB. The codification of the IoS will be co-ordinated by the Home NCBs of the nations in which the lists of the IoS are initiated. These lists are normally submitted by the Project Contractors in the name of the consortium nations. This co-ordination will be undertaken for all the IoS listed, irrespective of the nation of origin or national user requirement for any IoS. The Home NCB will be responsible for requesting codification in the nation of origin for each IoS concerned. The Home NCB can send a representative at the logistics conference in accordance with national procedures.
- Co-ordination by one nation/NAMSA. The co-ordinating nation/NAMSA whichever is nominated by the participating nations will co-ordinate codification and submit codification requests on behalf of all participating nations direct to the NCB concerned.
- No Co-ordination. The codification of each and every IoS is requested by each and every user in accordance with established procedures.

3.7. SUMMARY OF RESPONSIBILITIES

The Group of National Directors on Codification may, when it considers it necessary, create an AC/135 Sub-Group to plan and supervise the codification process for Common Projects.

Sub-Groups can be tasked with duties which may include the following :

- Negotiation of agreements between participating nations on the methodology of the codification task.
- Production, if necessary, of a project flowchart.
- Request the NATO AC/135 Secretariat to assign the NATO Codification Project Code.
- Appointment of a Codification Co-ordinator where necessary (the duties to be agreed by participating nations).
- Planning and control of the codification task until completion.

The procuring nations or agencies are responsible for :

- Inclusion of a Codification Contract Clause (see Chapter 4) in the main contract.
- Financial arrangements including any documentation work by project offices or sub-contractors.
- Dispatch of requests for codification action in accordance with NATO rules and procedures to the NCB of the nations where the specific IoS Design Authority rests.

The NCB of each participating nation is responsible for :

- Advice and guidance to national manufacturers or contractors responsible for codification work on the project.
- Supervision of the production of data by their manufacturers and the proper processing of this data.
- Maintenance of the codification data, including user registration and processing of subsequent additions/revisions to the IoS record.

The NCB of each procuring nation is responsible for :

- Identification of IoS of foreign origin and transmission of data concerning these Items of Supply in the form of codification requests to the appropriate NCB, through a codification co-ordinator when required.
- Dissemination of data to contractors which are registered as authorised data receivers (including data for which maintenance has been performed).

The contractors or manufacturers (as applicable) are responsible for :

- Establishment of contact with the NCB to obtain the full range of codification handbooks and instructions needed for the discharge of their codification responsibilities.
- Production of accurate technical codification documentation, particularly drawings, Parts List, etc. for codification and, where required by the NCBs draft IoS identifications.
- Arrangements with sub-contractors for all necessary technical codification documentation as called for in the Codification Contract Clause.

4. THE NATO CODIFICATION CONTRACT CLAUSE

4.1. OBJECTIVE

The aim of this chapter is to provide an understanding of, and ensure a standard approach to the NATO Codification Contract Clause by both contracting authorities and contractors. Minor additions or changes to the clause may be made by Contracting Authorities, but the principles must be maintained.

The Codification Contract Clause is designed to ensure that technical data, i.e. drawings, specifications, draft IoS identifications or other technical documentation required for codification, are supplied. STANAG 4177 (Codification of Item of Supply - Uniform System of Data Acquisition) has been developed to ensure that contracts for the supply of equipment and spare parts include a clause for providing, at the time required, to the appropriate Codification Authority such technical data as may be required for IoS identification (see Appendix A).

The Codification Contract Clause is not designed to require NATO Stock Numbers from contractors for the contracted equipment and spare parts. Assignment and exchange of NATO Stock Numbers must follow the NATO codification procedures, that are uniquely performed by the NCBs of the codifying nations.

4.2. USE OF THE NATO CODIFICATION CONTRACT CLAUSE

4.2.1. CONTRACTING AUTHORITIES

Contracting Authorities shall employ the NATO Codification Contract Clause in national/international contracts for equipment and spare parts as a contractual provision which requires the prime contractor and sub-contractors to provide the data stated in Paragraph 4.1 above to enable the assignment of NSNs for the IoS .

NATO Infrastructure Units, NATO agencies, SHAPE, and Military Commands, as well as NATO nations sponsoring projects should be aware of the need to use the Codification Contract Clause before letting any contracts at the inception of projects.

The requirement for a supplier to provide data for codification purposes can relate to any type of contract from a simple purchase order to a complete weapon system.

Consideration should be given to the need for provision of data in respect of possible modifications to the IoS where such modifications affect the characteristics, reference or drawing of the IoS and which change the "IoS" concept.

4.2.2. CONTRACTORS AND SUPPLIERS

The contractors/suppliers responsibility for codification varies with the type of contractual provision included in the Tender for Contract. In exceptional cases, data supplied may be restricted to the manufacturers names and addresses and the Part Numbers for the selected IoS.

Companies, industrial consortia, prime contractors or other bodies concerned with the supply of equipment and component parts which may be purchased from sub-contractors are to ensure that the provisions of the Codification Contract Clause are included in all sub-contracts or other supply agreements placed with such sub-contractors.

It is in the interest of industry that prime contractors are aware of, and fully discharge, their obligation to provide IoS identification data irrespective of how IoS are produced or provided. This is particularly significant in respect of Sub-Contracted Components.

One objective of the NATO Codification Contract Clause is to ensure that NCBs are in a position to assign NSNs to IoS prior to delivery by the contractor. No other form of numbering/identification is acceptable.

NOTE; NSNs cannot be used to identify IoS on new projects without first obtaining NCB validation.

For a detailed explanation of words and terms used in the standard NATO Codification Contract Clause, refer to the Glossary of Terms at Appendix B to this Chapter.

4.3. GENERAL NOTES

4.3.1. MILITARY SECURITY

It is the responsibility of any Organisation handling codification data to ensure that the security status of any IoS and its related documentation is fully protected.

4.3.2. INDUSTRIAL SECURITY

It is the responsibility of any Organisation demanding or receiving documentation under the Codification Contract Clause to comply strictly with Industrial Security Rules, particularly with regard to Patents and Registration. Documentation of patented IoS should be suitably marked at the time of supply to fully protect IPR.

4.3.3. FINANCIAL REQUIREMENTS

The financial provision for the cost of providing technical data or documentation for use in carrying out codification, if such is needed, must be included in bids or tenders and considered at contract placement.

**CONTRACT CLAUSE RELATING TO THE SUPPLY OF
TECHNICAL DATA FOR IDENTIFYING ITEMS OF SUPPLY
WITHIN THE NATO CODIFICATION SYSTEM**

1. In this Clause:
 - a. "Codification Authority" means the National Codification Bureau (NCB) or Authorized Agency for Codification located in the country of design of the item(s) covered by this contract.
 - b. "Contracting Authority" means the procurement activity of a NATO country or a NATO Management Authority/ Activity.
 - c. "Technical Data" means the engineering drawings, standards, specification and/or technical documentation required to fully identify the items designated by the Contracting Authority to support the equipment covered by the contract.
 - d. "Equivalent contractual instrument" means an agreed formal contractual statement by which a contractor undertakes to furnish technical data in support of codification.
2. Technical Data is required for identification/codification for all items specified in this contract and not already codified in the NATO Codification System. The contractor shall dispatch the data or arrange for dispatch of the data from sub-contractors or suppliers on request from the Codification Authority within the timescale specified in the contract. The contractor shall provide or arrange to have provided updating information regarding agreed modifications, design or drawing changes to all items specified in this contract.
3. The contractor shall include the terms of this clause or an equivalent contractual instrument in any sub-contract(s) to ensure the availability of technical data to the Codification Authority. If dispatch of the data takes place from the sub-contractor or supplier, the contractor shall provide details of sub-contract numbers or similar to enable the Codification Authority to approach the sub-contractor or supplier direct for the data.
4. In the event of a sub-contract order being placed with a manufacturer in a non-NATO country, the contractor shall be responsible for obtaining the necessary technical data from the sub-contractor/supplier and furnishing it to the Contracting Authority.

GLOSSARY OF TERMS USED IN THE CODIFICATION CONTRACT CLAUSE

CONTRACTOR - Any controlling consortia of industrial concerns or prime manufacturers of Items of Supply as designated in the main contract for a piece of equipment or for a range of spare parts.

RELATED DOCUMENTATION - Any form of documentation which can assist in clearly differentiating one IoS from other IoS. In the case of special or peculiar IoS, designed for one function only and protected by a sole source manufacturer, perhaps by patent or other industrial safeguards, this type of identification may replace engineering drawings and specifications and aid in ensuring the secrecy and safeguards required by the makers of such an IoS. Consideration should be given where IoS, when utilised in the host equipment, have safety vested in them and are essential to meeting national approval regulations, e.g. airworthiness, ordnance safety etc. Such data will be identified by reference to manufacturers' own identification systems.

DRAFT IOS IDENTIFICATIONS - The presentation of IoS identifying data in the form required by a particular NCB. Because of the variety of national systems, no common form of draft IoS identification exists, and the presentation requirement can vary from none at all to completion of a detailed format used for direct presentation of the data for inclusion into a national databank. The submission of "draft IoS identifications" may be requested on listings, magnetic tape, telecommunications message, or other automated input media. In all cases, the contractor should contact his NCB to determine the media for submitting "draft IoS identifications."

AGENCY - Any Government or industrial Organisation authorised and staffed to perform some or all phases of codification. In some nations an AGENCY may be a specialist firm of codification contractors working in close co-ordination between the manufacturer, codification contractor and the NCB.

GUIDE FOR INDUSTRY - A document which may be published by the NCB of any NATO nation in order to outline the principles of the NATO Codification System and the relevant procedures by which manufacturers (contractors) will furnish, before delivery, IoS identification data for those Items of Supply for which data is required for codification and internal management of IoS.

