



भारत सरकार
GOVERNMENT OF INDIA
रक्षा मंत्रालय
MINISTRY OF DEFENCE

संहिताकरण की नियम - पुस्तक
MANUAL OF CODIFICATION
(2023)

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FOREWORD

The Armed Forces are advancing towards the establishment of a Joint Theatre Level Command (JTLC), a development expected to bring significant advantages to the Indian Armed Forces. The establishment of the JTLC will necessitate a high degree of interoperability and coordination between the Army, Navy, and Air Force. This level of coordination and integration can only be achieved through a comprehensive and standardized system of codification for defence equipment.

Codification is the process of assigning a unique identification number to every item of defence equipment in the inventory of the armed forces. This system enables the identification and tracking of equipment throughout its lifecycle, from procurement to disposal. The importance of codification in the establishment of the JTLC cannot be overstated. With a unified system of codification, the three services will be able to efficiently manage and track equipment across the entire theatre of operation, leading to quicker and more effective deployment of resources, improved operational readiness, and faster response times. Furthermore, a standardized system of codification will enable seamless communication and information exchange between the three services, a crucial factor in achieving the desired level of jointness. This will also ensure better coordination and integration between the services, reducing potential duplication of efforts and enhancing overall efficiency. By standardizing the identification and cataloguing of military and defence related items, the codification system simplifies procurement, logistics, and supply chain management. Codification is an essential aspect of modern defence logistics management, and the Directorate of Standardisation, as NCB, India, has worked tirelessly to develop a comprehensive system that meet the needs of the Indian defence forces and industries.

The previous "Manual of Codification" was released in 1999. However, with the introduction and adoption of the NATO Codification System and the usage of a web-based codification platform, it has become essential to rewrite this manual, incorporating all relevant aspects involved in the current codification ecosystem employed by the Directorate of Standardisation. The Codification Manual represents a significant milestone in the standardization and modernization of the Indian defence industry. The Indian National Codification Bureau, a crucial component of India's defence infrastructure, plays a vital role in ensuring the efficient management of defence related items.

This manual provides a comprehensive guide to the codification system used by the Indian National Codification Bureau. It includes detailed explanations of the principles, practices, and procedures used in the codification process, making it an indispensable resource for all those involved in defence procurement, logistics, and supply chain management. Moreover, this manual elaborates on the process for indigenous defense vendors/industries to obtain an NCAGE, enabling them to showcase their products on the Indian Defence Mart (IDM). This is a crucial step towards achieving the vision of 'Atmanirbhar Bharat' and the 'Make in India' mission.

I am confident that the Codification Manual will serve as an essential reference for all those involved in defence related activities as it provides a framework for the efficient management of critical defence assets.

New Delhi
10 May 2023



(Dr G. Satheesh Reddy)
Chairman
Standardisation Committee

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LIST OF ABBREVIATIONS

S. No.	Abbreviation	Full Form
1	AHSP	Authority Holding Sealed Particulars
2	RO	Responsible Organisation
3	BIS	Bureau of Indian Standards
4	C&C	Codification and Cataloguing
5	CQA	Controller of Quality Assurance
6	DCA	Defence Codification Authority
7	NCB-OPS	National Codification Bureau-Operations
8	NCB-India	National Codification Bureau-India
9	IDM Portal	India Defence Mart Portal
10	NCAGE	NATO Commercial and Government Entity Code
11	CACOSA	Centre for Advance Computing & System Application
12	DECC	Defence Equipment Codification Committee
13	DGAQA	Director General Aeronautical Quality Assurance
14	DGQA	Director General Assurance Quality
15	DRDO	Defence Research & Development Organisation
16	IIG	Item Identification Code
17	INC	Item Name Code
18	DPSU	Defence Public Sector Undertaking
19	NSC	NATO Supply Class
20	NSN	NATO Stock Number
21	NSPA	NATO Supply and Procurement Agency
22	NCS	NATO Codification System
23	RUN	Raksha Udhyami Number
24	IOS	Item of Supply
25	IOP	Item of Production
26	STANAG 3150	Codification-Uniform System of Supply Classification
27	STANAG 3151	Codification-Uniform System of Item of Identification
28	STANAG 4177	Codification-Uniform System of Data Acquisition
29	STANAG 4199	Codification-Uniform System of Exchange of Material Management Data
30	STANAG 4438	Codification-Uniform System of Dissemination of Data Associated with NATO Stock Numbers(NSN)

CHAPTER - 1

INTRODUCTION

1. Lean, mean and efficient inventory management forms the basis for op logistics and availability of war fighting machinery to the end users and front-line warriors in order to effectively implement strategy and tactics for a favourable outcome. It is a well-known fact that the defence outlay for the armed forces on a year-on-year basis is approximately 1.5% - 2% of the GDP and after discounting the pay and allowances, it further gets trimmed down for the capital/revenue expenditure.

2. Armed forces are trending towards formation of Theatre Commands with three Joint Logistic Nodes (JLNs) already operational. In order to achieve integrated war fighting effort, the need of the hour is to optimise and rationalise the defence inventory while ensuring seamless availability of the equipment and spares in the spectrum of operations at a given location, time and in required quantities for optimal use of manpower and resources. Towards this, sharing of common resources of tri or two services is essential and critical in the overall scheme of things.

3. Defence inventory is sourced by armed forces from myriad of Indian/Foreign OEMs comprising of a large variety of complex equipment and platforms each in turn consisting of number of assemblies, sub-assemblies and components. While the imported inventory comprises of both Russian and western origin equipment, the indigenous equipment/platforms are primarily from DPSUs and private defence manufacturers. Considering the involvement of multiple agencies and different variants of weapons/equipment/platforms ordered in different time intervals with varying part numbers, it is essential that a common supply language be evolved, which is uniformly understood by all concerned to identify uniquely an item, component, sub-assemblies and main equipment based on form, fit and function.

4. In most of the cases, though the items are same, it is highly probable that these are recognised by different names and part/reference numbers in each of three services. Further, each service is following its own internal codification system designed and developed to meet their provisioning, stocking, accounting and maintenance needs. Whilst these systems by themselves are efficient and effective in meeting the service specific requirements, the biggest challenge is that there is no mechanisms to establish de-facto commonalty for inter service common equipment used by two or more services.

5. Therefore, there is a felt need for a mechanism of linking each of the service logistic data base for establishing the commonality as well as achieving rationalisation of inventory. To meet the emergent requirement and evolve a common supply language for the defence equipment, DoS has embarked on 'Codification and Cataloguing' defence inventory in a

uniform pattern. Towards this end, the Standardisation directive outlines a methodology to be adopted across the three services for achieving standardisation and codification of defence inventory leading to variety reduction and entry control highlighting the need for codification as a ‘means to an end’.

6. Over the years, Directorate of Standardisation (DoS) has made numerous efforts towards codification of the Defence Inventory through various tools. With a humble beginning in 1978 using a manual procedure of capturing characteristic data, an indigenous software was evolved in the 1990s known as ‘New AHSP Codification Software (NACS)’ using advanced data processing techniques for cataloguing the equipment. In 2008, DoS has adopted NATO Codification System (NCS) procedures, which is based on Group Class categorisation and ‘Item of Supply’ (IoS) concept viz One Item, One Code using an in house CODI-SAP legacy Software. Finally in 2016, DoS has migrated to a state-of-the-art, Web-Based Codification Software NCORE NG administered by NATO Gp (AC/135) with DoS designated as National Codification Bureau of India(NCB-India) with 64 participating nations.

7. In the post Covid era, MoD in line with ‘Atma Nirbharta Abhiyan’ embarked on a host of initiatives which include Start Up Challenges, IDEX Innovations, Positive Indigenisation List etc towards focused indigenisation efforts in manufacture of defence equipment as also empowering MSMEs by offering export potential for a wider defence base in the world market. The NATO Codification System (NCS) adopted by DoS can be gainfully used to achieve the desired goal of capturing the defence equipment database, identifying commonality and establishing a vendor database of indigenous defence manufacturers.

8. In a path breaking effort, DoS in association with DGQA has also codified 93 common equipment, out of 146 common tri services eqpt (excluding COT/OBSs equipment), in a record time through active participation of all stakeholders. Since the services inventory systems are not connected, NSNs of these equipment would be populated onto each of the services logistic inventory systems and service references linked to each of the NSNs for establishing commonality.

9. In order to further streamline the codification process and meet emergent requirement, codification of all new equipment has been mandated in all capital contracts at RFP and Contract finalisation stage through DAP 2022. This will ensure ab-initio codification of every new eqpt by the respective OEMs. The same has been agreed by standardisation committee during the meeting held on 11 Mar 2023. The approved standardisation directive dated 16 May 2023 is placed at Appendix ‘A’.

10. Furtherance to the effort of capturing vendor database and displaying their products on a common platform, MoD/DDP has implemented a web-Based Portal IDM (India Defence Mart) with URL <https://www.idm.gov.in> for mapping each of the indigenous defence manufacturers and suppliers with their products by issuing **NCAGE Certificate** for vendor registration followed by '**Raksha Udyami Number**' (RUN) **certificate** for vendor assessment and details of their products along with NATO Stock Number (NSN).

11. The codification manual aims to bring out the salient aspects of codification ecosystem, role played by each stakeholder and its benefits to the defence eco system in furthering the 'Joint ness' amongst Defence services in a seamless way to meet the operational and logistic requirements of Theatre Commands and JLN's.

Chapterisation

12. The **First Chapter** brings to fore the background and the need for codification in the defence eco-system.

13. The **Second Chapter** explains the Organisation structure of Dte of Standardisation and its Codification and Cataloguing group

14. The **Third Chapter** brings out the Over View of NCS Eco-system, broad concepts and its advantages/benefits.

15. The **Fourth Chapter** deals with the detailed Codification process and procedures and the responsibilities of DoS functioning as NCB, India.

16. The **Fifth Chapter** covers the NCAGE Registration, India Defence Mart Portal (IDM) and Raksha Udyami Number (RUN) which is a precursor for codification as well as the procedure devised by MoD/DDP for capturing the defence manufacturer/vendor on a single and unique platform.

17. The **Sixth Chapter** pertains to the methodology of obtaining NSNs for Indigenised defence inventory and for imported equipment from Foreign OEMs Chapter also deals with International Operations for Codification and the interface of DoS with NCBs of 63 participating countries.

18. Finally, the **Seventh Chapter** deals with role of DoS/CACOSA, the backend Network of Networks through which the NCORE NG Software functions and the linkages with more than 400 Indian Defence Users.

19. For any queries, clarifications and suggestions the following may be contacted:-

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CHAPTER - 2

ORGANISATION

General Introduction

1. Directorate of Standardisation is responsible for conducting standardisation activities in all fields in the Ministry of Defence under the control of Department of Defence Production within the broad policies formulated by Standardisation Committee.

Objectives

2. The Objectives of the Directorate of Standardisation are enumerated below:
- a) Codification of Defence inventory to ensure uniform pattern of numbering the items and denoting each item by a well defined scientific nomenclature.
 - b) Variety Reduction through preparation of Standardisation documents like Joint Services Preferred Range (JSPR) and Joint Services Rationalised List (JSRL).
 - c) Entry control to check proliferation of Defence inventory.
 - d) Preparation and promulgation of Joint Service Specification (JSS), Joint Services Guide (JSG) and Approval Notification (AN) in accordance with Five Year Roll on Plan.
 - e) Assist Inter Services Equipment Policy Committee (ISEPC) in formulation of Joint Services Policy Statement (JSPS) and Joint Service Qualitative Requirement (JSQR)
 - f) To be repository of Indian and Foreign Standards for the use of Defence Services.
 - g) To facilitate IT enabled services for accessing Standardisation/Codification databases, standards and specifications.
 - h) To adopt fast changing technology thereby providing better services.
 - j) To ensure that the standards produced are compatible to IS & International standards.

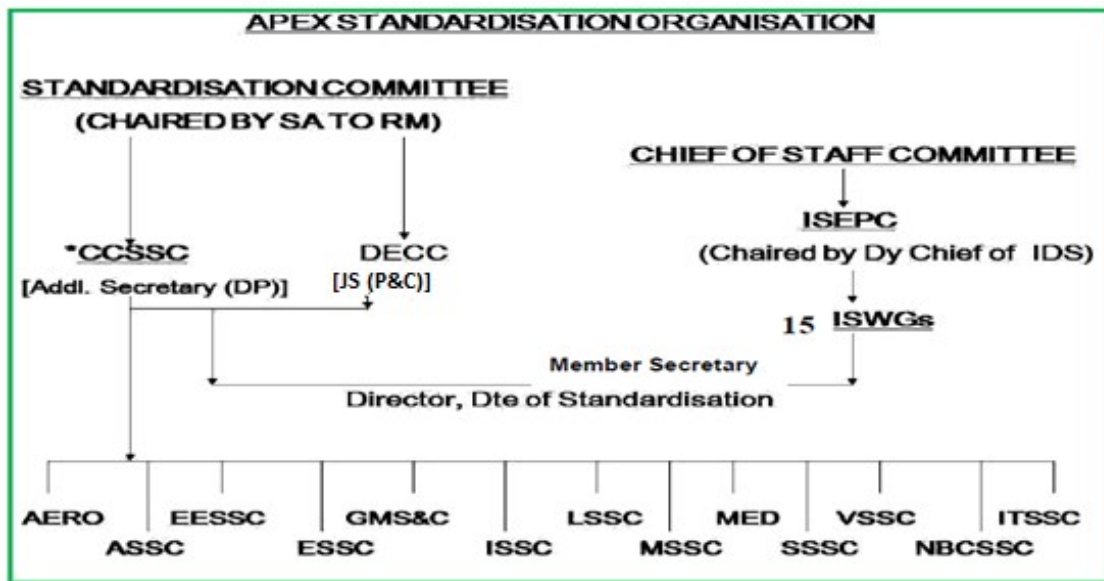
Functions of Directorate of Standardisation

3. The functions of the Directorate of Standardisation are broadly given as follows:-

- a) To provide Secretarial support to Standardisation Committee, the Defence Equipment Codification Committee (DECC), the Committee of Chairman Standardisation Sub Committees (CCSSC), Inter Services Equipment Policy Sub Committee (ISEPSC) & Standardisation Sub Committees (SSCs).
- b) To execute and follow up of all decisions of Standardisation Committee, the Defence Equipment Codification Committee, the Committee of Chairman Standardisation Sub Committee, Inter Services Equipment Policy Sub Committee (ISEPSC) and Standardisation Sub Committees (SSCs).
- c) To create Standardisation Sub Committee/Technical Panels/Working Groups/ Specialist Working Groups for preparation of Standardisation documents pertaining to Standardisation and allied activities and to promulgate their composition.
- d) To scrutinise all new introduction of Defence Stores in the Services with a view to prevent variety of items from entering the supply system and to have an effective check on proliferation of items.
- e) To provide technical advice on Standardisation matters to various important Committees of the Services such as General Staff Equipment Policy Committee and Sub-Committee, Air Staff Equipment Policy Committee and Sub-Committee, various Technical Groups and Technical Committees, various Research and Development Panels, Steering Committees, Technical Coordinating Authorities, Inter Service Equipment Policy Committee and Sub-Committee.
- f) To co-ordinate and conduct Standardisation programme at the following levels:
 - i) **National** - To nominate Officers from Defence Organisations/ Services, Technical Divisional Council and Sectional Committees and to adopt Indian Standards wherever possible.
 - ii) **Inter Service** - To lay down policies, targets and execute orders on Standardisation activities.
 - iii) **Intra Service** - To coordinate with Service Standardisation Cells and other connected Organisations to provide Intra-Service Standardisation.

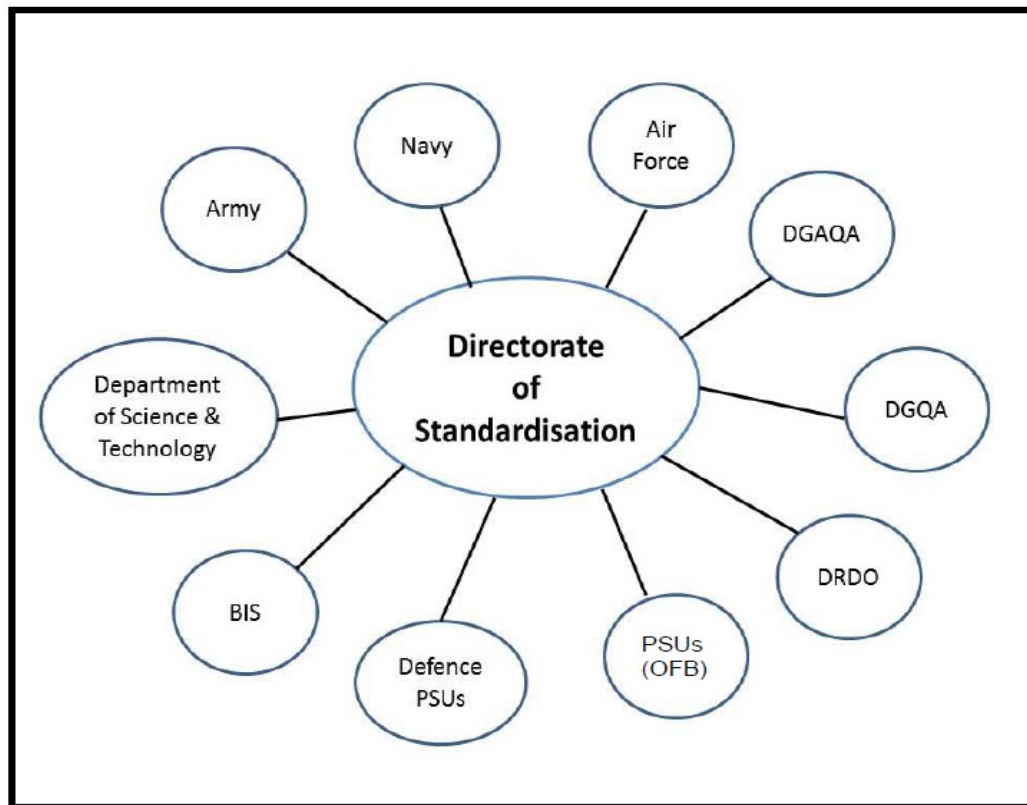
- g) To promote adoption of “SI” units in Ministry of Defence.
- h) To codify all transactions under the Defence Inventory using NATO Codification System (NCS).
- j) To maintain a Data Base of codified Defence Inventory for the purpose of Rationalisation, Standardisation, Simplification and ‘Entry Control’.
- k) To maintain and run Technical Information Centre for all Standardisation activities.
- m) To print, stock and issue Standardisation Documents, Compendiums and Catalogues for the Ministry of Defence Sections.
- n) To have an active interface with BIS, Service Standardisation Cells, DRDO, DGQA, Ordnance Factory Board, Defence Public Sector Undertakings (DPSUs) and Private manufacturers of Defence Stores on all Standardisation and Codification matters.
- p) To coordinate training of Technical officers and staff in Standardisation matters and also to run courses for others on specialised subjects such as Standardisation and Codification.
- q) To conduct Capsule Programmes on Standardisation activities in various training establishments of Services, DRDO, DGQA, Ordnance Factories in order to propagate the philosophy of Standardisation.
- r) To monitor implementation of Standardisation documents.
- s) To create central data base for Standardisation documents for networking.

4. Various Committees forming part of the Apex Standardisation organisation are depicted below:



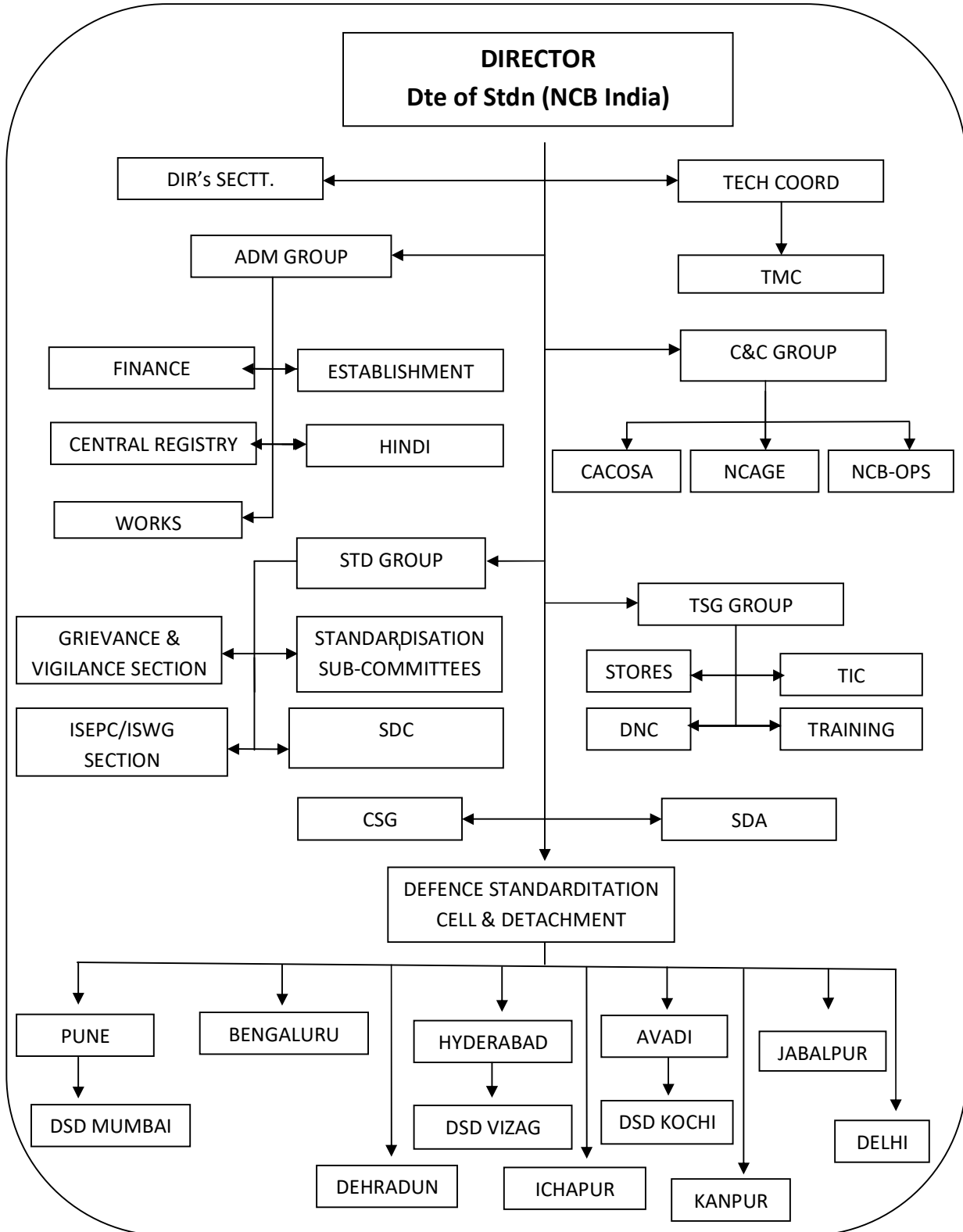
5. Directorate of Standardisation: It's Interface

For efficient functioning, DOS is required to interact with various Organisations/agencies within/outside the Ministry of Defence. A chart indicating the interacting agencies is depicted below:



6. Organisation Structure

Organisation Structure of Directorate of Standardisation is depicted below:



7. Codification and Cataloguing Group

Codification and Cataloguing aspects of Directorate of Standardisation are under Director, NCB India and JD (C&C). Codification implies evolution and employment of a code or a system that uses a uniform pattern of numbering the items and denoting each item by a well defined scientific nomenclature which will uniquely identify a store when so referred to. The codification process involves item identification, classification into appropriate Groups & Classes and allotment of an identification number i.e. NSN iaw NATO Codification System.

8. Defence Equipment Codification Committee (DECC)

The importance of codification and cataloguing of Defence Stores on Joint Services basis under a uniform system was realized as early as 1959 when DECC was set up by the Government of India to give a practical shape to the principles of Standardisation and Codification of Defence Stores, DECC formed originally under the Government of India letter No. 86551/Std Sectt/5860/CG (Admin) dated 29 Jun 1959. The committee was reconstituted from time to time due to changes in organizational structures of establishments of stake holders and involved in codification activities.

9. This Committee is the paramount body dealing with Codification and Cataloguing activities of Defence stores. Committee functions under Standardisation Committee which is the Apex Body that lays down broad policies. All policy decisions on matters pertaining to codification and cataloguing and priorities for codification are taken by DECC. Joint Secretary (P&C), MoD/ DDP is the Chairman of the Committee and its members include representatives from all three services, DGQA, DRDO, DPSUs and DGAQA. Director, Directorate of Standardisation is the member secretary of DECC.

10. Composition of Defence Equipment Codification Committee

The present composition of Defence Equipment Codification Committee is as under:

- a) **Chairman.** JS (P&C) Department of Defence Production, Ministry of Defence.
- b) **Member Secretary.** Director, Directorate of Standardisation.
- c) **Members**
 - i) Ministry of Defence - To be nominated by DG (Acq).
 - ii) **DRDO**
 - aa) Director Inter-Services Business (DISB).
 - ab) As nominated by Chief Controller (Aeronautics & Service Interaction) (CC AE&SI)/ DQRS.

- d) **HQ IDS**
 - i) Rep of Op Logistic Directorate.
 - ii) Rep of Director General Armed Forces Medical Services.
- e) **IHQ of MOD (Army)**
 - i) Director General of Ordnance Services (DGOS).
 - ii) Engineer – in – Chief.
 - iii) Director General Weapons & System (DGWE).
 - iv) Officer-in-charge Army Standardisation Cell.
 - v) Master General of Ordnance (MGO).
 - vi) Representative of Master Inventory Scaling Organisation (MISO).
 - vii) IA Standardisation Cell (MGS)
- f) **IHQ of MOD (Navy)**
 - i) Chief of Material (COM).
 - ii) Director General of Naval Armt (DGONA).
 - iii) Director General Naval Armt Inspection (DGNAI).
 - iv) Director of Logistics Services (DLS).
 - v) Director Naval Air Material (DNAM).
 - vi) Director of Indigenization (DOI).
 - vii) Officer-in-charge Naval Standardisation Cell.
- g) **Air HQ**
 - i) Gp Capt Procurement.
 - ii) Air Cmde MP/Air Cmde Indigenisation.
 - iii) Gp Capt IMMOLS.
 - iv) C Eng O (C), HQ MC.
 - v) Officer-in-charge Air Force Standardisation Cell.

- h) **DGQA**
 - i) Director General of Quality Assurance (Admin-19).
 - ii) Director of Quality Assurance (Vehicles) - DQA(V).
 - iii) Director of Quality Assurance (Electronics) - DQA(L).
 - iv) Director of Quality Assurance General Stores - DQA(GS).
 - v) Director of Quality Assurance Engineering Equipment-DQA(E).
 - vi) Director of Quality Assurance (Armament) - DQA(A).
 - vii) Director of Quality Assurance (Naval) - DQAN*.
 - viii) Director of Quality Assurance (Warship Project) DQA(WP).
 - ix) Director of Quality Assurance (Radar & Systems) - DQA (R&S).
 - x) Director of Quality Assurance (Metal & explosives)-DQA (M&E).
 - xi) Addl Dir Gen Quality Assurance (Combat Vehicle)-ADGQA CV
 - xii) Director of Quality Assurance (Combat Vehicle) - DQA (CV).
- j) **DGAQA/ DDG AQA.**
- k) **DPSUs**
 - i) Bharat Electronics Ltd (BEL)
 - ii) Bharat Earth & Movers Ltd (BEML)
 - iii) Hindustan Aeronautics Ltd (HAL)
 - v) Bharat Dynamics Ltd (BDL)
 - vi) Mishra Dhatu Nigam Limited (MIDHANI)
 - vii) Garden Reach Ship Builders & Engineers Ltd (GRSE)
 - viii) Goa Shipyard Ltd (GSL)
 - ix) Mazgaon Dock Ltd (MDL)
 - x) Hindustan Shipyard Limited (HSL)
 - xi) Munitions India Limited (MIL)
 - xii) Armoured Vehicles Nigam Limited (AVANI)

- xiii) Advanced Weapons and Equipment India Limited (AWE India)
- xiv) Troop Comforts Limited (TCL) (Troop Comfort Items)
- xv) Yantra India Limited (YIL)
- xvi) India Optel Limited (IOL)
- xvii) Gliders India Limited (GIL)

11. Allied Committee-AC/135

The NATO Codification System (NCS) is managed and run by a NATO Cadre Group consisting of the National Directors on Codification (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 operations for participating nations and to provide the bridge necessary to facilitate global logistics operations. The mission of the AC/135 is to make the NCS as efficient as possible to better meet the logistics requirement of the forces involved in joint operations worldwide. Dte of Standardisation on behalf of Govt of India has signed an MOU on 10 Jun 2008 vide letter No. DOS/C&C/GP-IV/FC-3166 dated 02 Dec 2008 for Tier 1 membership of AC/ 135, an apex body of NCS and become a member of AC/135 and also recognized as National Codification Bureau of India (NCB India).

12. In 2008, DOS has adopted NATO Codification System (NCS). The NCS was implemented using an indigenously developed New AHSP Codification System (NACS 3.0) wherein Defence Cataloguing Number (DCAN) / DS Cat Part No were allotted for all codified items. To meet the increasing requirement of codification, in 2016, DOS has migrated to web based software NCORE NG (M/s ESG, Germany) which facilitates seamless codification of indigenous equipment, adoption of imported codification data, access to global database and visibility of Indian products to other countries for export. India was awarded Tier 2 status in 2019 post satisfying all the entries of NCS thus facilitating two way exchange of information with all 31 NATO countries as well as 32 Non-NATO member nations and access to 36 million codified items.

13. Dte of Standardisation functions approval of NATO Stock Number post codification of items as National Codification Bureau (NCB) India. All transactions w.r.t. NCS, the responsibility of the C&C Group. In order to ensure the smooth functioning of the group and achieve the assigned tasks, the group is organised into seven sections namely Admin Section, Tech Support Section, Defence Codification Authority (DCA), National Codification Bureau-India (NCB-Operations), NATO Commercial and Govt. Entity Code (NCAGE), India Defence Mart (IDM) portal and Centre for Advanced Computing & System Application (CACOSA). Details on duties of technical sections of C&C Group is as follows:

a) **Defence Codification Authority (DCA)**

- i) This section deals with all the activities pertaining to National Codification activities.
- ii) Approval of all Codification Requests (DCNs) and allotment of NSNs as per procedures. DCA acts as 'Approver' for codification undertaken by Codifier/verifier on the behalf of Director, NCB India. Role of Codifier is being assigned to AHSPs/OEMs and role of Verifier is presently given to DSC Cells.
- iii) Liaison with all defence establishments for smooth codification activities through problem resolution/guidance.
- iv) Coordinating Training Requirements of NCORE NG web based codification software at Training Institutions at DS Cell Badarpur and Pune.
- v) Coordination for updation of ICD with CACOSA.
- vi) Creating/monitoring Project Management Module.
- vii) Screening of data NSN, excel sheet received from user.

b) **National Codification Bureau (NCB) – Ops**

- i) NCB (International Ops), is responsible for dealing with all matters related to foreign NSNs on behalf of NCB (India).
- ii) Creation of Foreign Codification Requests (LSA).
- iii) Adoption of Foreign NSNs through Adoption Requests (LAU) followed by filling of Private/ICD Data.
- iv) Action International Requests for codification.
- v) Timely processing of returns to NSPA as laid down in ACodP1 Manual.
- vi) Upkeep and Maintenance of Records in respect of all International Transactions (LSA/LAU/LTI etc).
- vii) Keeping track of LSA with US (on payment basis)

viii) Liaise with defence establishments for completion of codification activities.

ix) Monitoring the access rights of Info Hub ID and daily export/ import shipment Key ID.

c) **India Defence Mart (IDM) Portal** - India Defence Mart (IDM) facilitates in capturing data of all Defence sector manufacturers and supplier's through on boarding on IDM Portal and subsequently issue of NCAGE Certificate to all onboarded defence sector manufacturers suppliers followed by issue of Raksha Udyami Number (RUN) which is based on the capacity verification carried out by DPSUs/QA establishments. The portal provides the features to upload the equipment/products details of the manufactured by Indian Defence Manufacturers/suppliers/MSMEs/DPSUs along with NSN and their NCAGE code leading to enhancing global visibility and export potential. Directorate of Standardisation/NCB India is responsible for:

- i) Action related to NCAGE requests through IDM Portal.
- ii) Issue of NCAGE Code as per SOP for IDM Portal.
- iii) Liaise with DPIT for any technical issue.
- iv) Creation/ Initiation and Approval of NCAGE certificates.
- v) Liaise with manufacturers and suppliers related to NCAGE issues.
- vi) Updation of NCAGE adding GST, PAN and Udhdyog Aadhar.
- vii) Verification of NSN of products uploaded by Defence manufacturers and suppliers.
- viii) Approval for final uploading of products on IDM Portal post verification of NCAGE Code and NSN.

d) **Tech Coord (C&C)**

- i) Monitoring the codification status as per DECC and interface with DSCs/DSDs and allied organizations.
- ii) Overall coordination with NCB-Ops/DCA/IDM Portal /CACOSA on all technical matters.

- iii) Monitoring Scaling/Introduction/OBS/SQRs/SOCs cases.
 - iv) Allotment of Group, Class/NATO Stock Number
 - v) Monitoring the codification of newly procured defence inventory
- e) **NCAGE Code (NATO Commercial and Govt. Entity) Regn**
- i) NCAGE section processes the NCAGE requests submitted by different organisations/industries/DPSUs/NGOs/Labs etc. through different modes (online/offline). The documents submitted by these organisations are scrutinised and upon satisfactory scrutiny NCAGE code is allocated and updation of NCAGEs.
 - ii) Monitoring E-mail responses and vendor interaction for NCAGE creations.
 - iii) KHN Transactions in liaison with NCB (Intl Ops).
 - iv) Handling all queries related to NSPA.
- f) **Center for Advance Computing and System Application (CACOSA)** - at HQ DoS, is responsible for smooth functioning of codification software and maintenance of the database. The web-based codification software, NCORE-NG is operated through production system (one application server and one data base server) hosted on cloud at NIC. Being much secured network .Also keeping backup on daily basis of both servers i.e. application and data base server .DoS/CACOSA also hosts two other system i.e. Test and training system for testing purpose of new patch updates and Training system for the training of new codifiers. DoS/CACOSA is responsible for maintenance of all three systems and their database management through AMC partner and OEM. Duties and responsibilities of CACOSA section are as follows:-
- i) Creation/Maintenance of AHSP Code, Issue of new user ID and password and grid cards.
 - ii) Processing NSN updation requests (LNM Transactions) .
 - iii) Maintenance of NCORE-NG software (Production system, training system and Test system), Operating System, patch Updation, Java/Web Browser, Anti-Virus updates etc.
 - iv) Liaison with NIC (Cloud/Data/Space management) and AMC partner for SSL updation etc.

- v) Allotment of Training User ID and password for training courses at RIST Badarpur/IST Pune.
- vi) Daily data back up and Uploading of KHN, SSF and NMCRL data on weekly basis.
- vii) Liaise with M/s ESG for problem resolution and monitoring JIRA activities (ESG Online Group) and ESG(Workshop) as required.
- viii) Assignment lists updation post receipt of hard copy and also create LNM, for i.e. Group, Class, INC/Private data and MRC.
- ix) Approval of all LNM received through NCORE-NG software
- x) Assignment lists updation and NSN maintenance (active/inactive) in consultation with AsHSP.
- xi) Monitoring the access rights of NMCRL (05 User IDs) along with NMCRL Master ID (CACOSA RIGHTS).
- xii) Coordinating Workshop/Training related to regular updation of NCORE NG software

CHAPTER - 3

NATO CODIFICATION SYSTEM (NCS) AND BENEFITS

Need for Codification in Defence

1. Presently the Defence Inventory is provisioned, procured, stored, maintained and issued independently by the three services using different classification and identification methodology. Number of these items are common usage items having identical or similar specifications but known by different names in the three services and held under different cat/part numbers, pattern number or reference number as in vogue in that service. This results in duplication and multiplication of stores. The system of classification of stores in the Army, Navy and Air force is different from each other. Therefore, present system does not encourage identification of common items, inter-operability and standardisation.
2. NCS is a process under which equipment, components and parts of the defence supply system are uniformly named, described, classified and assigned a code known as NATO Stock Number (NSN) based on physical, operational, chemical etc. characteristic of an item. Thus, to enable identification of an item uniquely with respect to Form, Fit and Function, codification is essential.
3. Any item codified by using such system provides a common supply language which operates effectively in a multilingual environment, facilitate inter-operability curbs duplication (both intra and inter service), permits inter changeability, facilitates rationalisation leading to standardisation and maximises logistics support in the most economical manner possible. It ensures that defence personnel deployed in an operational scenario can be assured of getting the right items at the right time to successfully complete their mission.
4. The system is required to achieve maximum effectiveness in logistic support, to facilitate data management in the area of material identification and to identify items with identical characteristics. It thereby becomes possible to reduce inventory (equipment, assemblies, components & spare parts) and to keep the required quantity of stocks under control.

Essentials of Codification: NCS

5. Concept

Codification implies evolution and employment of a code or a system that uses a uniform pattern of numbering the items and denoting each item by a well-defined scientific nomenclature, which will uniquely identify a store when so referred to.

6. Process

Codification process involves following:

- a) **Item Identification** - Identifying items uniquely on the basis of their nomenclature, part number references, material/performance characteristics, usage and manufacturer references. The items so identified are assigned approved item name and description.
- b) **Classification** - The first step in codification is to classify each item/equipments into appropriate Groups and Classes based on the intended use and application which will lead to categorizing and broad identification.
- c) **Allotment of NSN Code** - Each item of supply equipment is codified by respective authorized organization and allotted NSN code by DoS.
- d) **Capturing Internal Codification Number - Commonality**. Unique item identification number allotted by each of the Defence Cataloguing System of tri services is captured on the NSN to establish commonality. Presently, Army uses Defence Store No (DS CAT No)/ Material Number (MAT NR), Air Force uses Global Index Gallery (GIG) Number and Indian Navy has four different platforms viz ILMS, WLMS, ILMS(Air) and INAMS with respective reference numbers.
- e) **Linking the NSNs with Service Database** - The NSNs generated are linked to the services database by populating each NSN against Defence Service Cataloguing Database of tri-services.

7. Cataloguing

Catalogue is a list of items arranged in a particular sequence of their nomenclature (i.e., item name and description). A catalogue is arranged in Groups and Classes based on technical, functional, user or technical-cum-user affinity basis. As nomenclature of the items, consisting of an item name and description are usually rather long, each item must have a short reference or code from which an identifiable description can be decoded. A catalogue,

therefore, consists of the list of items arranged in a number of logical groups and classes. NSN is a universal system of cataloguing. Additional information like specification, titles and references, drawing authority and reference, supplier's/manufacturer's identity and reference along with a host of other technical, logistic, trade and safety can be covered in a Catalogue.

Benefits of Codification

8. A proper and uniform codification of Defence Stores will facilitate inventory control and management of inventory in many ways. These advantages can be operational, economical or environmental as enumerated in the succeeding paragraphs.

9. Operational Advantages

a) This system contributes to equipment standardisation, which support interchangeability and interoperability amongst common weapon systems/platform spare parts across the spectrum of operations.

b) A national repository/database of all available military assets and resources entails:

i) Rationalisation of inventory by sharing resources, spare part lists and maintenance activities between services.

ii) Minimum distribution of essential spare parts during the deployment of forces in a theatre of operation.

iii) Cross service supply between the services.

iv) Sharing of supply support between services through medium of NSN codes.

c) Accurate description of the items through 'Common Supply Language' permits users to readily identify equipment spares, which meets the operational requirements in the field minimising the lead time in making the store available for exploitation and thus facilitating operational efficiency.

d) Use of a common language simplifies the technical dialogue between users. Maximum use of coded data allows language independent communications.

e) Reduces variety, prevents overstocking and reduces purchase costs by revealing duplicate and interchangeable items.

f) Assists in rationalization , standardisation of Defence inventory and propagates the use of standard items.

g) Exchange of goods and information during deployment overseas furthering agreements between India and other countries like USA Logistics Exchange Memorandum of Agreement (LEMOA) with the United States of America (USA).

10. Economic Advantages

a) **Checks Proliferation** - 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.

b) **Variety Reduction** - This practice reduces the variety of items to be managed and eliminates unnecessary costs for experimentation, identification, storage and other related supply functions.

c) Widespread knowledge of spare parts used within the Armed Forces allows purchasing agencies to:

i) **Optimal Inventory** - Avoid unnecessary procurement for a specific user when another user has surplus stocks.

ii) **Economy of Effort** - Combine orders from several users to benefit from price reductions on large purchases.

iii) **Vendor Management** - Gives access to several potential sources of supply, thus generating significant savings by promoting competitiveness between suppliers.

d) **Rationalisation** - The system contributes to the standardisation of the range of equipment performing the same functions, thus reducing the number of spare parts required to manage each weapon system.

e) **Duplicity Check** - The cancellation of duplicates reduces the stock levels and generates savings in storage space, handling assets and personnel.

f) **Export Potential** - Every indigenous item codified and catalogued will be identified and accessed through the database but also offers/ opportunities for export through visibility in the Global database.

g) **HS Codes** - Linking of International HS Codes with the Defence Categorisation Numbers gives the advantage of identifying item with export potential and also helps in minimising import.

11. Environmental Advantages

a) **Hazard Material Identification and Handling** - 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.

b) **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.

Importance of Defence Codification on Joint Services Basis

12. A common method of Codification of Defence Stores on Joint Services basis is an essential requirement for promoting standardisation. To achieve standardisation, reduce proliferation and establish commonality, interoperability and interchangeability between common equipment, adopting a uniform codification methodology by the services and allied establishments like DRDO, DPSUs, OFBs and Private Industry is inescapable. Codification provides the common language and medium amongst services for necessary cataloguing of items on Joint Services basis. This would also enable enhancing operational efficiency in Theatre Command and NSN will work as key reference number in also Joint Logistics Nodes(JLN)

Eco-System for Codification and Vendor Registration

13. In the Standardisation Directive (2023) issued by Ministry of Defence ,the policy laid down with regard to codification and cataloguing is as follows:

“Services Inventory shall be codified and catalogued under the Defence Stores Cataloguing System. This will prove a uniform supply language for the three services. All new introductions shall be catalogued at the first instance so as to avoid accumulation while the remaining Services Inventory will be catalogued on “Priority Weighing”.

14. Contractual Clause in DAP 2020

A codification clause has been introduced in DAP 2020 (Part I of RFP - General Requirements (16(b))) for ab-initio codification of all indigenous defence equipment and to obtain codification details of imported equipment as a part of product support.

15. IDM Portal

India Defence Mart (IDM) facilitates capture of Indian Defence Vendor base through issue of NCAGE Certificate to all existing and prospective defence manufacturers/ suppliers followed by issue of Raksha Udyami Number (RUN) which is based on the capacity verification carried out by DPSUs/ QA establishment. The portal provides the features to upload the equipment/ products manufactured by Indian Defence Manufacturers MSMEs/DPSUs along with NSN and their NCAGE code leading to enhancing visibility and export potential.

Defence Codification Eco System

16. Dte of Standardisation

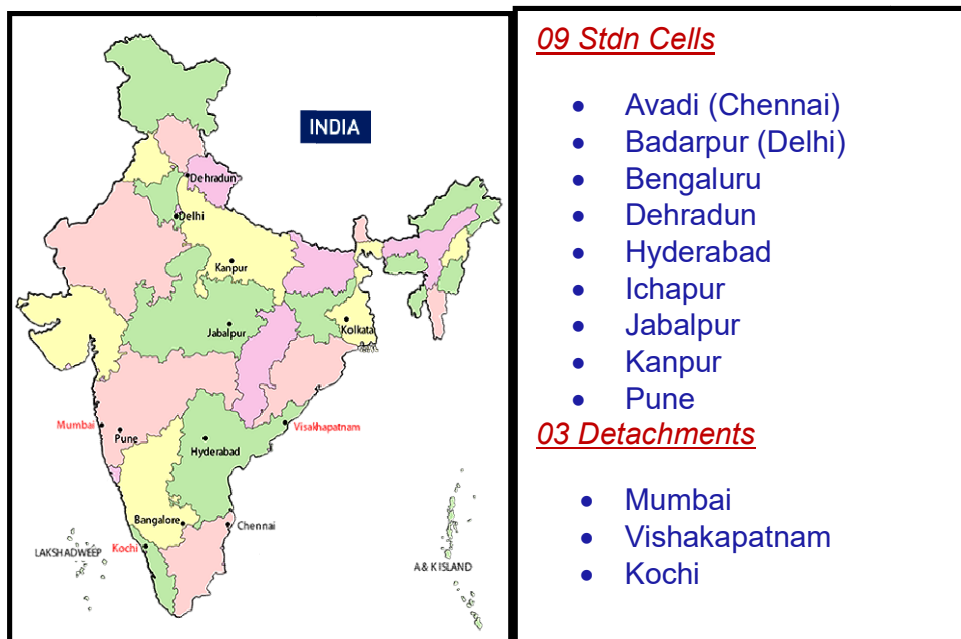
Director, Dte of Standardisation under MoD / DDP is responsible for monitoring codification of defence equipment through NATO Codification System (NCS) adopted by DoS. The tasks of codification are performed by various stakeholders as AsHSP, OEMs, Vendor/Suppliers as well as Services.

17. DoS Organisation

Towards monitoring the standardisation and codification, DoS has the Headquarter at New Delhi and 09 Cells with 03 Detachments at various locations in the country, co located with major defence R&D labs and DPSUs. The details and locations of the DSCs/DSDs are shown in next page.

18. Services Standardisation/Codification Organisation

MoD/DoS interfaces with Services through respective Service Standardisation Cells. EM (Std) for IA, AFSC for IAF and DLS/SNSO for IN as the point of contact for both Standardisation and Codification tasks.



19. Monitoring Mechanism

Codification of all new Eqpt is undertaken by OEM in accordance with DAP 2020 (Part-1, General Requirements 16{b}) and the implementation is monitored as per the following schedule:

- Defence Equipment Codification Committee (DECC)** - DECC is the apex body constituted under the Chairmanship of Joint Secretary (P&C) with Director DoS as Member Secretary and all Defence stakeholders (viz., Services, DGQA, DGAQA, DGNAI, DPSUs etc as members) for monitoring the codification of defence equipment. DECC meeting is conducted annually between May/Jun every year. In DECC 2022, codification tasking was given to the stakeholders based on equipment MRLS/SMT/SME/ Training Aggregates and promulgated through a 3-year roll on plan with priority as indicated by the services/DPSUs.
- Entry Control** - All SOC's pertaining to Capital acquisition cases at AIP and Introduction are to be routed through DoS for scrutiny from standardisation and codification perspective for entry control and variety reduction. While the cases prior placing contract (AIP) are sensitised to ensure codification clause at RFP and Contract, in case of SOC's post contract (for Introduction), AsHSP are to ensure completing the codification activity prior clearance of case file.

CHAPTER - 4

NATO CODIFICATION SYSTEM: GOVERNING PRINCIPLES AND PROCEDURES

1. NATO Codification System (NCS) is a uniform and common system for identification, classification and stock numbering of item of supply of user nations. Initially developed by US as Federal Supply System (FSS) in the post World War II era, NATO countries subsequently adopted the system as 'One Item One Number' concept. The System has been agreed by all signatories of the Alliance and sponsored non-NATO nations for use in identifying equipment and supplies.
2. In 2008, DOS has adopted NATO Codification System (NCS). The NCS was implemented using an indigenously developed New AHSP Codification System (NACS 3.0) wherein **Defence Cataloguing Number** (DCAN) / DS Cat Part no were allotted for all codified items.
3. To meet the increasing requirement of codification, in 2016, DoS had migrated erstwhile **CODI-SAP software** to Web based Codification software i.e. **NCORE-NG software**. Which facilitates seamless codification of indigenous equipment, codification of imported equipment, adoption of imported codification data, access to codified global database and visibility of Indian products to other countries for export. India was awarded Tier II member nation status in 2019 thus facilitating two way exchange of information with presently 31 NATO countries as well as 32 Non-NATO sponsored member nations and access to 36 million codified items in NCS database at present.
4. During bulk migration only approx. 4.53 Lakh codified items could be migrated from vintage **CODI-SAP software** (DCAN) to Web based Codification **NCORE-NG software** (NSN). Rest of codified data could not be migrated due to non compliance of the minimum criteria (Nomenclature, Part Number, OEM Reference Number and minimum MRCs) in DCAN/ DS CAT PART number. Accordingly all codified inventory has already been forwarded to all concerned OEMs/ AsHSP for updation of ICN fields, MRCs and NCAGE etc, as applicable.

Organisational Set Up

5. Apex Body : Allied Committee on Codification (AC/135)

At the apex, NCS is managed by a NATO Codification Group consisting of the National Directors on Codification, Allied Committee 135 (AC/135). The Allied Committee 135 known under the designation of “AC/135” represents the central organ of the management of the NATO Codification System structure. It consists of 31 NATO and 33 non-NATO sponsored nations. This Allied Committee (AC/135) has an objective to enable the support of logistics operation, by providing data exchanges in the field of identification of materials, in an international environment with an efficient and rational manner between members.

6. Conference of National Armaments Directors (CNAD)

The AC/135 belongs to the CNAD as part of NATO's civil structure. This allied committee is responsible for establishing the principles, methods, procedures and achievements of the NCS. The tasks of the AC/135 reflect the needs and priorities of NATO and CNAD but also the concerns of member nations. The AC / 135 organisation and the mandate of AC/135 MG are defined in the “Handbook on Aims, Organization and Working Procedures”, known as “Handbook on Aims”. To improve the efficiency of its operation, AC/135 has created a Sub-committee “Budget and Strategic Plan” (BSC), which advises AC/135 on all matters related to its strategic roadmap, as well as regards to the corresponding budgets.

7. Panel A

The Main Group also has established a group/panel, working on technical aspects, known as Panel A. After the determination of the codification policy by the Group of Directors (AC/135), the Panel A is responsible for the implementation of processes, forms and methods of work. It is also responsible for the study of codification data format to facilitate the automatic processing and exchange through IT communication. Panel A is responsible for the maintenance of the whole rules established in the Manual of Codification ACodP-1.

8. Working Group

The Group of Directors can decide to create working groups dedicated to tasks considered as complex or sub-groups specialised in a particular field. When tasks are considered complex or with longer-term objectives of implementation, AC/135 is supported by the working group in charge of the steering of NCS.

Executive Body

9. NATO Support and Procurement Agency (NSPA)

NSPA is the executive body handling data exchange and day to day maintenance of the software. All NSNs and NCAGEs thus generated are populated on the global database of NMCRL, through xml shipment by NCB (India) to NSPA using NCORE NG software.

10. In each country there is a National Codification Bureau (NCB). NCB Directors meet twice a year within Group of National Directors on Codification, known as AC/135.

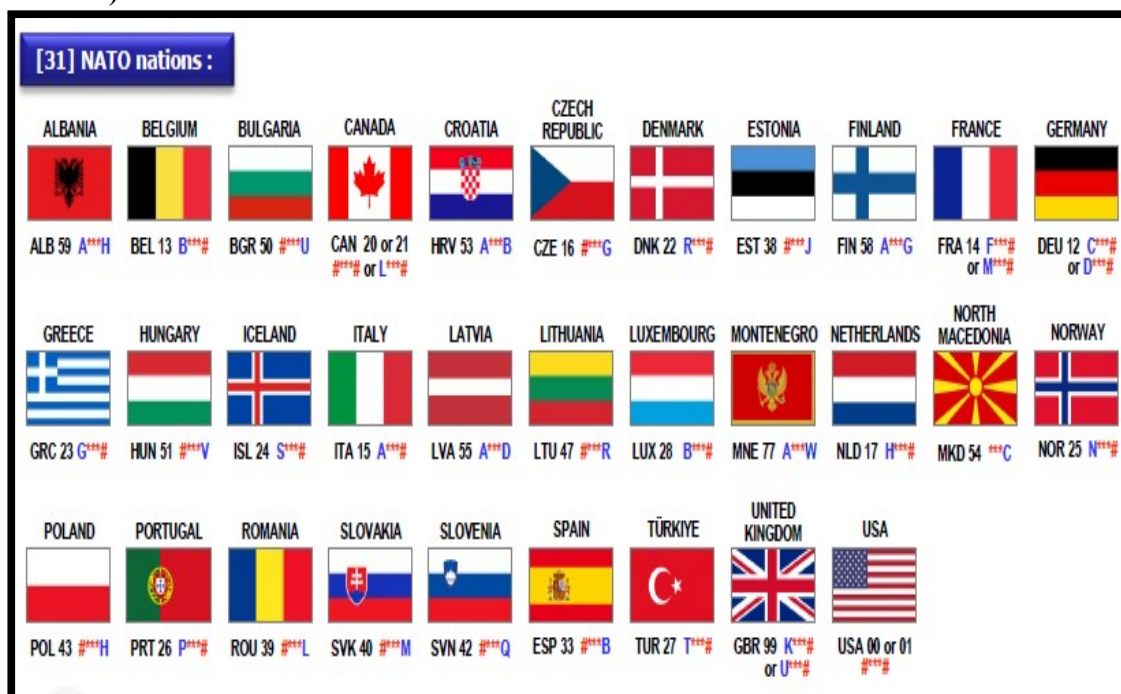
11. National Codification Bureau (NCB, India)

DoS designated as NCB India under MoD/DDP is the nodal agency authorised to undertake all activities pertaining to NCAGE registration and codification of defence inventory through NCS with access to global product database. India was awarded Tier 2 member nation status in 2019 thus facilitating two-way exchange of information.

12. Participating Countries

A total of 64 countries with 31 NATO and 33 Non-NATO Sponsored Countries as on 31 May 2023 (with 19 Tier 2 and 14 Tier 1 Status). Details of the participating countries are as listed below:

a) 31 NATO Countries



b) 33 Non-NATO Sponsored Countries

[33] Sponsored Non-NATO nations :

[19] Tier 2 : Nations have a Codification System that has been certified as being fully compliant with the NCS procedures. Tier 2 sponsorship is characterized by a two-way data exchange and participation in technical NCS management.

ARGENTINA ARG 29 W***#	AUSTRALIA AUS 66 Z***#	AUSTRIA AUT 41 #***N	BRAZIL BRA 19 #***K	COLOMBIA COL 80 A***Z	INDIA IND 72 #***Y	INDONESIA IDN 45 #***Z	ISRAEL ISR 31 #***A	JAPAN JPN 30 J***#	JORDAN JOR 78 A***X	KOREA REPUBLIC OF KOR 37 #***F
MALAYSIA MYS 34 Y***#	MOROCCO MAR 63 A***M	NEW ZEALAND NZL 98 E***#	SERBIA SRB 73 A***S	SINGAPORE SGP 32 Q***#	SWEDEN SWE 64 A***N	UKRAINE UKR 61 A***J	UAE ARE 71 #***W			

[14] Tier 1 : The "basic level" of sponsorship including some use of unclassified NATO Stock Number (NSN) information. Tier 1 sponsorship is characterized by a one-way data exchange.

ALGERIA DZA 82 B***B	BOSNIA & HERZEGOVINA BIH 75 A***U	BRUNEI DARUSSALAM BRN 76 A***V	CHILE CHL 52 A***A	EGYPT EGY 36 #***D	GEORGIA GEO 68 A***R	IRAQ IRQ 62 D***N	OMAN OMN 56 A***E	PAKISTAN PAK 74 A***T	PERU PER 79 A***Y	QATAR QAT 81 B***A
SAUDI ARABIA SAU 70 #***E	SOUTH AFRICA ZAF 18 V***#	THAILAND THA 35 #***C								

Codification: Terminologies and Procedures

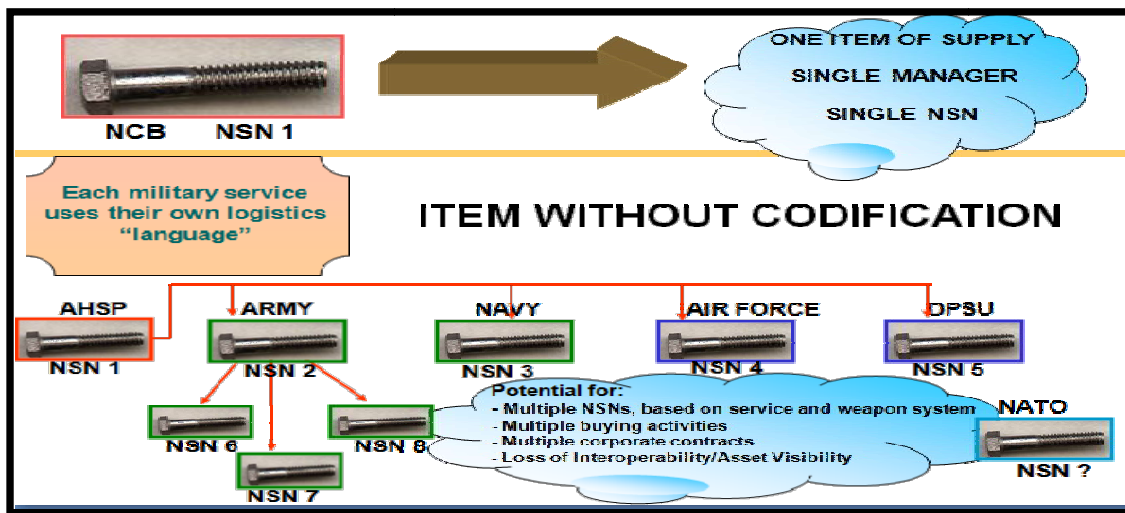
13. Codification Definition

Codification implies evolution and employment of a code or a system that uses uniform pattern of numbering the items and denoting each item by a well-defined scientific nomenclature, which will uniquely identify a store when so referred to. It is a uniform and common system for identification, classification and stock numbering of Items of Supply (IoS) of user nations. The System has been agreed by all signatories of the Alliance and sponsored non-NATO nations for use in identifying equipment and supplies.

14. Item of Supply (IoS) and Item of Production (IoP)

Each item is classified as follows:

- Item of Supply(IoS)** - Item or group of items defined by a qualified logistics service to meet a specific requirement. IoS will define the Form, Fit and Function.
- Item of Production(IoP)** - Item manufactured and/or distributed by one or more companies which meets the concept well-defined by a given IoS. Each IoP will have the same Form, Fit and Function as that of IoS.



15. Principles of Codification

- a) **Principle No. 1** - One Item of Supply (IoS) - One NATO Stock Number (NSN).
- b) **Principle No. 2** - Producing country (NATO+ Tier 2) codifies its products for all users in NATO and non-NATO countries.
- c) **Principle No. 3** - User country (NATO+ Tier 2) codifies products that are produced in non-NATO (Tier 1 + other) countries.

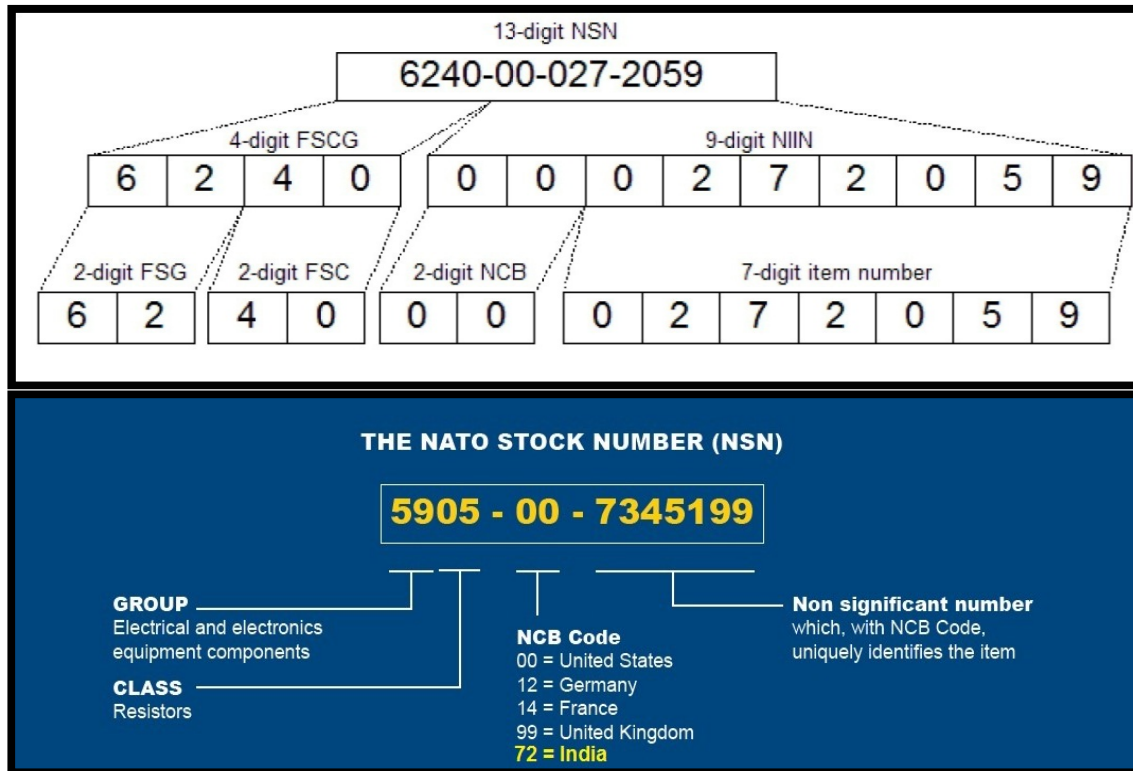
16. NATO Supply Class (NSC)

The NATO Supply Classification System establishes grouping of items and their relationships to fulfil management needs. This system of classification makes it possible for the items to be divided into groups, each of which is subdivided into classes. Each class covers a fairly homogeneous area of commodities which are associated on the basis of one of the following criteria:

- a) Their physical and/or performance characteristics;
- b) Their relationship of parts, attachments and accessories to the next higher assemblies for which they were specifically designed.
- c) The fact that the items are usually procured or issued together.

17. NATO Stock Number (NSN)

A NATO Stock Number (NSN) consists of 13 digits with first 4 digits representing Group and Class (NSC) and a 9 digit NATO Item Identification Number (NIIN) for assigning to an Item of Supply (IoS). The 9 digit NATO Item Identification Number (NIIN) is composed of a 2 digit NATO unique Code for the National Codification Bureau (NCB) plus a 7 digit non-significant number assigned by the individual NCB. The schema is as follows:-



18. Allied Codification Procedures (ACodP-1): NATO Manual on Codification

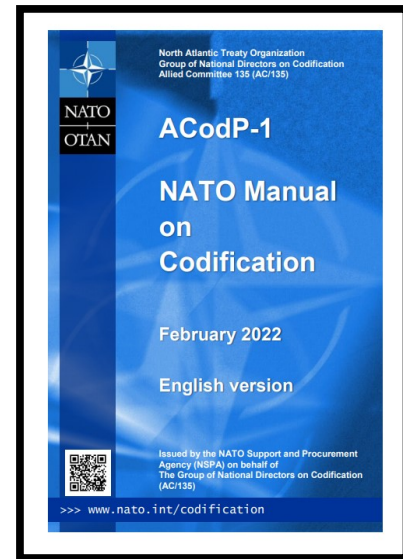
Detailed NATO Codification procedures are published through ACodP-1 publication which sets out principles, responsibilities, procedures, forms and general guidance on the operation of the NATO Codification System. It is issued and updated by the NATO Support Agency (NSPA) under the authority of the NATO Group of National Directors on Codification (AC/135) available on www.nato.int/structure/AC/135/main/links/acodp1.htm. ACodP1 contains the following:

- Principal document of the NATO Codification System (NCS).
- This Manual provides the Principles, Responsibilities, Operating Procedures and ADP (Automatic Data Processing) Regulations for co-ordinated maintenance of the NCS.

c) It is issued and updated by the NATO Support Agency (NSPA) under the authority of the NATO Group of National Directors on Codification (AC/135).

d) The instructions contained in this Manual are mandatory for use by all countries and NSPA participating in the NCS.

e) Allied Codification Publication No.1 (ACodP-1), also known as the NATO Manual on Codification.



19. Federal Logistic Information System (FLIS)

FLIS employed by Defence Logistics Agency of US DoD is the guiding agency for NATO Codification System. The applicability of FLIS is brought out in various Standard NATO Agreements (STANAGs) of AC/135 described in ACodP-1.

Codification Data Exchange: Governing Standards (STANAGs)

20. Currently, the NCS is an organisation with an agreement between countries to exchange codification data. NATO STANAGs are governing standards for codification data exchange and procedures of NCS to be used and implemented by all user nations. Following STANAGs are governing the NATO Codification System.

a) **STANAG 3150 : Codification-Uniform System of Supply Classification** - It Provide a uniform system of supply classification for use by the Armed Forces of the NATO countries.

b) **STANAG 3151 : Codification-Uniform System of Item Identification** - It provides a uniform system of item identification for use by the Armed Forces of the NATO nations, as well as AC/135 sponsored countries.

c) **STANAG 4177: Codification-Uniform System of Data Acquisition** - It provides the policy for execution of a uniform system of data acquisition for use by the armed forces of the NATO countries and by NATO Agencies in Codification through a contractual clause.

d) **STANAG 4199 : Codification-Uniform System of Exchange of Materiel Management Data** - It provides a uniform system of exchange of materiel management data for use by the armed forces of the NATO countries.

e) **STANAG 4438 : Codification-Uniform System of Dissemination of Data Associated with NATO Stock Number (NSN)** - It provides a uniform system for the dissemination of data associated with NATO Stock Numbers (NSNs) for use by the Armed Forces of the NATO countries and AC/135 sponsored nations.

21. Item Identification Guide (IIG) System of Codification

An Item Identification Guide (evolved based on Federal IIG) is a self-contained document for collection, coding, transmittal and retrieval of characteristics and related supply management data for an item of supply for logistical use. The same is updated, revised and maintained by NSPA from time to time. The IIG contains Index of Approved Item Name (AIN) under the Supply Group and Class of FIIG, Applicability Key Index, Item characteristics data requirement with Reply tables. IIG system is a simple XML based utility in the software, forming the basis for INC data along with supply classification.

22. NATO Supply Classification Handbook: H2 Handbook (AcodP2)

The NATO Supply Classification System is published online in the Allied Codification Publication No. 2 (ACodP-2). The NATO Supply Classification System is published nationally in one document called **Cataloguing Handbook H2 - Supply Classification - Groups and Classes**. The multilingual ACodP-2/3 web-based application is accessible at the following URL: www.nato.int.

23. Item Name Directory - H6 Handbook (AcodP3)

It Contains Approved Item Names, Basic Names and, normally, their definitions together with any appropriate inclusions, exclusions and Colloquial Names. In addition, the directory contains Item Name Codes (INC), the NATO Supply Classes in which the items shall be placed and also Item Identification Guide Numbers for all Approved Item Name.

Definitions

24. Some of the commonly used terminology in the process of codification are given below:

a) **Item Name Code (INC)** - The selection or development of a single name for an Item of Supply provides a common terminology. It must be the first step in the identification of an item of supply.

- b) **Item Name** - The name of the item is the key for its correct identification, since it is used to determine the correct class and the applicable Item Identification Guide (IIG) for its description. An item of supply may be codified using an Approved or a Non-Approved Item Name.
- c) **Approved Item Name (AIN)** - An Approved Item Name is the one that is officially selected and carefully delimited to designate a family of items of supply with similar characteristics mostly determined by a definition.
- d) **Non Approved Item Name (Non AIN)** - When an Approved Item Name is not available, the part name given to the item of production by its manufacturer, or an official NCB according to professional practice, will be used as a Non Approved Item Name.
- e) **Item Name Development** - Approved Item Names (AIN) and Non Approved Item Names (NON AIN) are developed in accordance with the Item Name System described in the US Procedures Manual DoD 4100.39-M, Volume 3, Chapter 2 "ITEM NAMES". (also available online at www.logisticsinformationservice.dla.mil/flis_procedures.asp)
- f) **Basic Name** - A Basic Name is either a noun or a phrase which primarily defines an item, without detailing any specific feature application. The Basic Name is delimited by modifiers to form an Approved Item Name.
- g) **Colloquial Name** - A Colloquial Name is any name, by which the item is commonly known by its users. A cross-reference of known Colloquial Item Names to Approved Item Names can be found in [H6](#) and [ACodP-3](#). Basic and Colloquial Names are not to be used to codify items of supply. They just provide help to determine the Approved Item Name that fits the item of supply concept more properly.

25. International Data Exchange

The NATO Maintenance and Supply Agency of NATO (NAMSA) is a spider in the web for communication between countries. The following rules of communication apply:

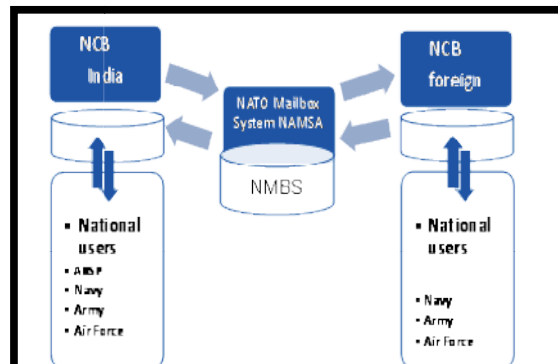
- a) There is no direct link between countries for the interchange of item information.
- b) NCBs communicates with NAMSA and the actual users, national services such as Navy, Army and Airforce have their own means to communicate with their NCBs.

c) NCBs communicate via the NMBS using NCS standards and protocols which are laid down in ACoDP1.

d) The entire process is managed by HQ DoS/ NCB India at New Delhi at the back end and the results of transactions are communicated to all Users in the country by NCB(India) represented by DoS.

26. Method of Data Transmission and Storage

All transactions pertaining to NSNs and NCAGE between all Indian Users and DoS/DCA, as well as between NCB India, Foreign NCBs and Executive body NSPA are transmitted in an .xml format through NATO Mail Box System (NMBS). A pictorial representation is shown below:



27. Data Segments in NSNs

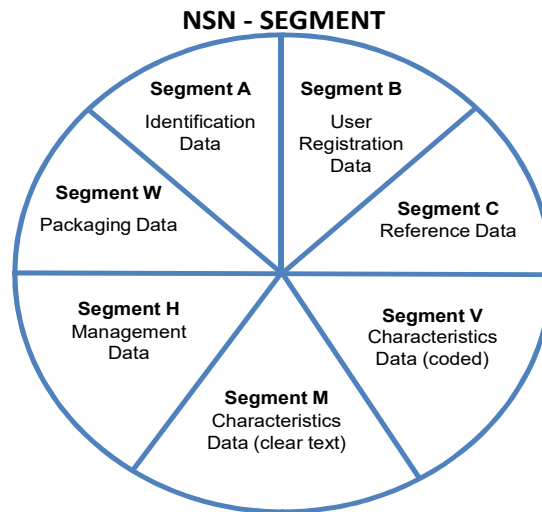
NSN data is stored in various modules known as segments. Each segment is identified by a single character Segment Code and is used for the international exchange of data. The commonly used segments are:

Segment	Description	Contents
A	Identification Data	Specifies the basic data containing NSN number, date of creation, INC, GPCL, FIIG, DCN, RPDmRC, Type, NIIN-Type, Country
B	Major Organisation Entity (MOE) Data	Gives details of Users (IN, IA, IAF, CG, MHA and Other Entities (OE))
C	Reference Data	Gives organization details (NCAGE) and the type of data reference used (RN Codes)for the item
H	Material Management Data	All details pertaining to Price Category etc.
M	Clear Text Characteristics Data	Specifies decoded Reply of MRCs

Concluded

Segment	Description	Contents
V	Coded Characteristics Data	Contains technical parameters to establish form fit and function (MRCs)
W	Packaging Data	Captures Wt, Dimensions, type of packages etc.

STANDARDISED RECORD FORMATS



28. Input /Output NSN Transactions: Foreign NSNs

The most frequently used coded input/output transactions for foreign NSNs are tabulated below:

DIC (Input Code)	Purpose	Result DIC (Output Code)	Explanation
LAU	Add User	KAU	Add India as User to existing foreign NSN
LDU	Delete User	KDU	Delete User to foreign NSN
LAR	Add Reference	KAR	Add Reference of Mfr to the foreign NSN
LCR	Change Reference	KCR	Change reference to the Existing foreign NSN
LDR	Delete Reference	KDR	Delete reference from existing foreign NSN

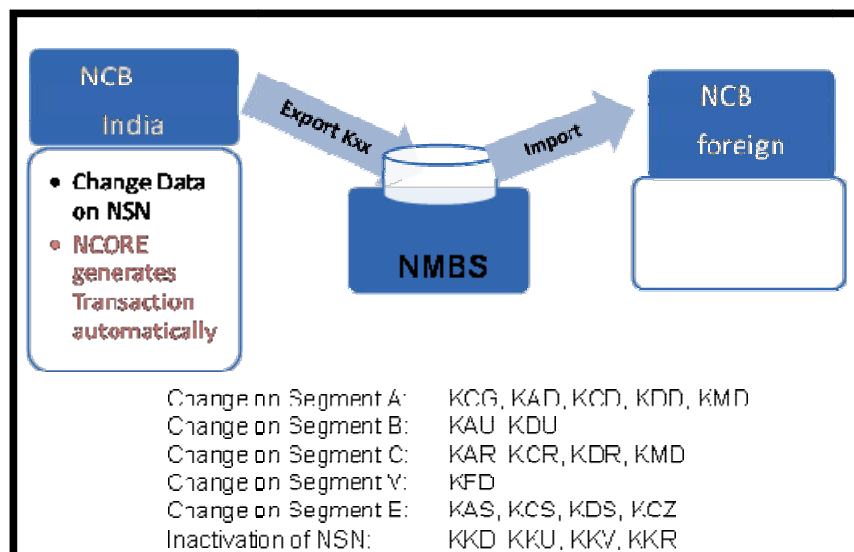
Concluded

DIC (Input Code)	Purpose	Result DIC (Output Code)	Explanation
LTI	Get all data from NSN	KIR	Confirm correctness of NSNs before LAU based on MRC data which is otherwise not visible to users
L**	Any of the above transaction	KRE/KRU	Rejection with reason thereof
LSA+L07	Codification Request	KAT	Codification request to foreign NCB for new item not in NMCRL database
LSA		K27	Rejection of LSA request with reasons thereof
L23	Request for cancellation	K23	Foreign NSN cancellation
LFN	Follow up	KFN	Status of request

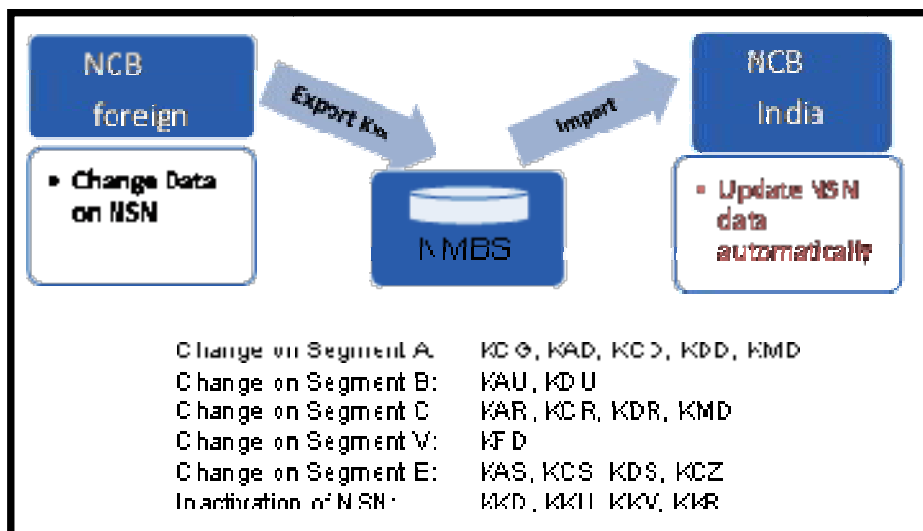
29. Maintenance Transitions (Data exchange/Import procedure): Foreign NSNs

Any updation task of NSN is known as maintenance transaction. These tasks are performed by DCA (Intl Ops) on behalf of DoS/NCB(India). These are of two types viz between foreign NCB and NCB India and vice versa as follows:

- a) **NCB India to foreign NCB.** Requests for change in NSN data is made by NCB(India) to Foreign NCB as transaction K** as shown below:-



- b) **Foreign NCB to NCB India.** Similarly, requests for change in NSN data is made by foreign NCB to NCB(India) as transaction K** as shown below :-



30. Methods of Item Identification

Each item is identified based on Descriptive and Reference method as per following details:

- a) **Descriptive Method** - Establishes identity of an IoS by describing the characteristics of the item. For example, details like Material, Style, Dimension, Power etc are entered as replies to MRCs. This is the most preferred method.
- b) **Reference Method** - Establishes identity of an IoS by reference(s). For example, by specifying Drawing/Part number or Specifications and through NCAGE-RN-RN Codes references. This method is to be used only in exceptional and justified only by urgency.

31. Type of Item Identification

Codification is qualified based on the extent of data populated in order to identify the IoS identification in form, fit and function. The various types of item identifications are:

Type	Explanation
1	Full Descriptive item identification
1A	Full Descriptive- Reference item identification
1B	Full Descriptive - Reference - Descriptive item identification
2	Reference Item Identification
4	Partial Descriptive Item Identification (Type 1 Concept)
4A	Partial Descriptive Item Identification (Type 1A Concept)
4B	Partial Descriptive Item Identification (Type 1B Concept)

32. Reference Number (RN) Codes

A reference is any number used to designate an item of production, to identify an item of supply, either by itself or in conjunction with other reference numbers or to provide some additional information relevant for management purpose. Reference numbers may be either Manufacturer's Part number, Drawing numbers, Source controlling numbers etc. Following types of Codes are used:

a) **Category** - In order to portray exactly how a reference number (Item of Production) relates to a given NSN (Item of supply), each reference number is assigned a reference number category code-RNCC. In conjunction with RNVC, the RNCC depicts the actual relationship of the reference number of the item of supply. Following is the sub-categorisation:

i) **Primary Reference Numbers** - They represent, or form part of, the item of supply concept and are indicated as given below:

aa) Source control reference (RNCC 1).

ab) Official specification or standard (RNCC 2 or 4).

ac) Manufacturer reference number (RNCC 3).

ii) **Additional Reference Numbers** - They are reference number that may or may not be related to the concept of the item of supply; they provide some relevant information for management purposes. These are indicated as below:

aa) Secondary Reference (RNCC 5).

ab) Informative Reference (RNCC 6).

ac) Vendor Item Drawing Reference (RNCC 7).

ad) Reproduced Item Reference (RNCC 8).

ae) Packaging and Related Logistic Data Reference (RNCC A) .

b) **Variation** - The reference number variation code-RNVC is used to indicate the status of the reference number, whether it is item identifying, non-item identifying or for information purpose only. For codification purposes, the following definitions are to be used to distinguish between item identifying and non-item identifying reference numbers:

- i) **Item identifying** - This reference number fully identifies an item of production. This item does not require additional information to give it its unique character and identity (i.e., fit, forms, and function information).
- ii) **Non-item Identifying** - This reference number cannot fully identify an item of production. This item requires additional information to give it its unique character and identity (i.e., fit, forms, and function information).
- c) **Document Availability** - The document availability will be expressed by the one digit document availability code – DAC. The type of document covering the cited Reference Number, its availability from the activity in charge and its security classification are indicated with this code.
- d) **DAC Action Activity** - The activity (or NCB) in charge of the document as indicated by the DAC is quoted by its tow digit Reference Number action activity code –RNAAC.
- e) **Procurement Status** - The procurement status, expressed by the one digit Reference Number status code – RNSC, gives indications as to the procurement of the item of production (Source of supply and invitation for bid).
- f) **Reference Number Justification** - These are codes used to justify the creation of new item identification (II) despite a recognized condition of possible duplication with an existing item. A Reference Number justification code – RNJC is required for each re submittal of an item deification action for assignment of an NSN or reinstatement of a cancelled NSN.
- g) **Reference Number Format** - The reference number format expressed by the one-digit Reference Number format code –RNFC indicates possible modification applied to the reference number before its introduction into ADP.
- h) Details of applicable RN Codes are given in ACod P1 manual of codification.

33. **Salient Aspects for Correct Data Entry : New NSNs/Updation**

Following essential aspects are to be ensured by each codifier of Indigenous items:

- a) **One Main Eqpt NSN** - One NSN for the main equipment is required to be created mandatorily with overall physical and performance characteristics recorded as per the type of NSN created.
- b) **Correctness/Completeness of Technical Data** - The responsibility of data entry rests with the codifier (AHSP/OEM) of the items pertaining to an equipment. In

case of propriety or confidential data, the Type 4 NSN is to be generated with PRPY Code filled in the MRCs.

c) **User Reference Data fields in Segment B and C** - The Codifier is to ensure that all users are entered in the appropriate fields at Segment B followed by filling ICN data fields. In case, the ICN data is not available, the same is to be filled subsequently as a part of updation (appropriate comments to be endorsed in comment box while generating DCN). This is an important parameter to seamlessly establish the commonality between any item/sub-assy/eqpt.

d) **Private Data** - This data field is visible only to Indian users of items codified by Indian entities. The following to be ensured:

i) **AHSP/RO Code** - The code allotted by DoS/CACOSA is to be entered correctly.

ii) **Immediate Use** - It is the next immediate sub-assembly to which the item would be assembled.

iii) **End Use** - The main equipment for which the item is meant for. The equipment name is to be entered in complete with abbreviations, if any, in parenthesis.

34. Codification Instructions and Advisories

Codification Instructions No CI 1 to CI 7 and various advisories/policy matters are to be disseminated to all stake holders by DoS from time to time in aid of codification. List of Codification Instructions are as follows:

- a) CI 1 – User management – Codification Software.
- b) CI 2 – ‘Function Role Template’ Management – NCORE NG Software.
- c) CI 3 – Codification Guide and Special Instructions - NCORE NG Software.
- d) CI 4 – Maintenance of national NSNs – LNM Transactions.
- e) CI 5 – Codification of Imported Items.
- f) CI 6 – Software Access to private OEMs.
- g) CI 6 Rev 1 – NSN for main equipment.

- h) CI 6 Rev 2 – Emergency Codification Request.

35. Data Screening

Data Screening is used to fetch the details of already codify items (NSN) available in NCORE-NG software. Following data is required on excel file format for screening:

- a) Reference Number - Mandatory
- b) Item Name - Desirable
- c) MFRR Name/NCAGE - Desirable

CHAPTER - 5

NCAGE REGISTRATION

1. NATO Commercial and Government Entity (NCAGE) Code, is a unique identifier assigned to manufacturer, suppliers, various government and defence agencies. NCAGE codes provide a standardised method of identifying a given facility at a specific location. Example :0001Y OCTAGON PRECISION (I) PVT LTD. Determination of the real source for an item of supply is one of the most important prerequisites for proper application of the Uniform System of Item Identification (STANAG No 3151). It is the source where documentation will be obtained from and its location normally gives advice for codification responsibility.

2. Although the NCS uses NCAGE codes principally to identify manufacturers, NCAGE codes are broadly used in many countries in a variety of logistics processes. As such, they are often assigned to a variety of organisations, including distributors, standards bodies, government organisations, and service providers.

NCAGE Code

3. Organisations Eligible

For generating a NSN and to process a codification order the codifier should have an NCAGE Code. Primary use of organisational entity coding is in data operations related to logistics programs, such as codification, standardisation, and procurement. The following types of entities are eligible for NCAGE code:

- a) Manufacturing organisations that are the sources from which items of supply are obtained.
- b) Government or commercial organisations that control the design of items but not necessarily manufacture nor sell them directly.
- c) Distributors who are sources of supply in their own country for items produced by manufacturers located in their own or in any foreign country.
- d) Government agencies that manufacture items entering the supply system of an individual NATO or Tier 2 sponsored country or control the design of such items without actually manufacturing them.

- e) Manufacturers who supply materials for incorporation into the products of manufacturers who provide drawings of these products.
- f) Organisations connected with the development of national or international standards/specifications or related documents NATO Production or Logistics Organisations.
- g) Providers of services working in the field of logistics (repair shops, carriers) but not providing items of production they referenced in their system.
- h) Providers of services, including consultation, training, research studies.

4. Format for NCAGE

Following formats are applicable for NCAGE Codes as per the Status (Tier 1/Tier 2) and country wise:

- a) **Tier 1** - This is the basic level of sponsorship for nations that do not have codification system. These are characterised by one way exchange of data (can only see the NSNs but cannot create). Tier I country are assigned country codes with S***# referred as SCAGE Code.
- b) **Tier 2** - This is for nations that have a codification system that has been certified as being fully compliant with the NCS procedures for international data exchange. As Tier II member nation, India has been authorised to allot a NCAGE Code in the format “#***Y” (# - numerical, * - alphanumeric).

5. NCAGE Registration linked to Vendor Assessment (JSG 015: 2015)

On undertaking the capacity assessment of defence vendors, each of the services QA agency is to forward a copy of the vendor assessment certification whilst ensuring that the organisation concurrently applies for NCAGE registration. A copy of JSG is available on DoS website www.ddpdos.gov.in.

6. India Defence Mart (IDM): Web based Vendor Registration

To realise the goal of self-reliance in line with “AATMANIRBHAR BHARAT” initiatives, the idea of INDIA DEFENCE MART Portal was conceived for online registration of Defence Manufacturers:

- a) For allocation of internationally recognised NCAGE Code.

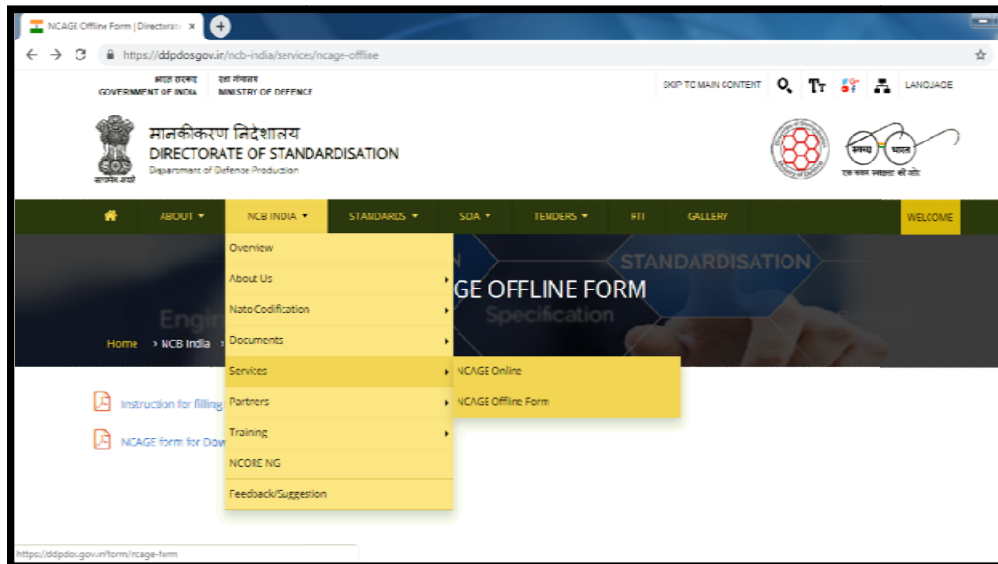
- b) Display of products along with NATO Stock Number (NSN) towards enhancing export potential among the members of NATO Codification System and streamlining the procedures for selection of products by users towards procurement processes.

Procedure for Allotment of NCAGE

7. Through DoS

Manufacturers/Suppliers/vendors can apply for online registration through DDP (DoS) website <https://ddpdos.gov.in> and forward soft copies of the following supporting documents for address proof/verification as valid entity:

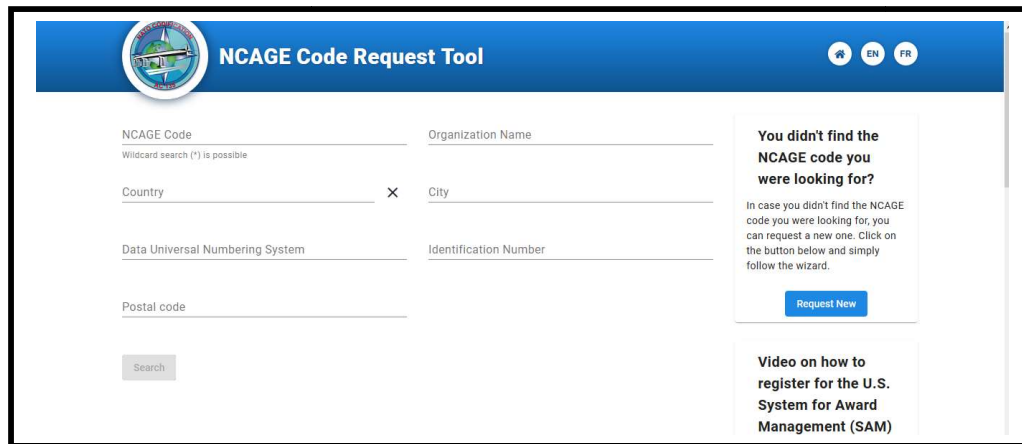
- a) GST
- b) PAN
- c) Udyog Aadhar (if applicable)
- d) Any other Document (TIN etc)



Website : <https://ddpdos.gov.in>

8. Through NSPA Website

Manufacturer/Supplier/vendor can also apply for online registration through NSPA website with the same supporting documents as mentioned at Para 7 above.



The image shows the 'NCAGE Code Request Tool' web interface. It features a blue header with the tool's name and language options (EN, FR). The main area contains several input fields: 'NCAGE Code' (with a note that wildcard search is possible), 'Organization Name', 'Country' (with a dropdown arrow), 'City', 'Data Universal Numbering System', 'Identification Number', and 'Postal code'. A 'Search' button is located at the bottom left. On the right, there is a section titled 'You didn't find the NCAGE code you were looking for?' which includes a brief explanation and a 'Request New' button. Below this is a link to a 'Video on how to register for the U.S. System for Award Management (SAM)'.

Web site <https://eportal.nspa.nato.int/AC135Public/CageTool>.

9. Through IDM Portal

Registration through IDM portal can be undertaken by accessing www.idm.gov.in web portal of MoD and following the user assisted process. In the first part, on completion of providing basic organisational details, NCAGE registration Certification will be issued by DoS online. Further, the second part consists of allocation of Raksha Udyami Number (RUN) post certification by the AsHSP concerned based on the product/capacity assessment already undertaken by the DRDO/DPSUs/DGQA/DGAQA/DGNAI. The benefit of RUN is that once registered for a particular product or process, the registration certificate is valid across the country for that product/process in all defence procurements.



The image displays the 'India Defence Mart' website header and two certificate templates. The header features the Ministry of Defence logo, the text 'India Defence Mart', and images of military equipment (helicopter, tank, jet, and missile). Below the header, there are two certificate templates. The left template is for an 'NCAGE Certificate' and the right is for a 'RUN Certificate'. Both certificates are issued by the Government of India, Ministry of Defence, Dept. of Defence Production. The NCAGE certificate includes fields for 'Name of Registered Firm' (XXXX XXX XXX) and 'NCAGE Code' (XXXXY). The RUN certificate includes fields for 'Name of Registered Firm' (XXXX XXX XXX (BEL- Gaziabad)), 'Raksha Udyami Number' (XXXXXX (e.g 000001)), and 'Product Line' (e.g Electronic Eqpt).

11. NSN Generation through IDM

Once NCAGE/RUN Certificate is generated through IDM, NSN details of the main equipment and details thereof are to be populated. In case NSNs are not available, NSNs are to be generated as per procedures of codification enumerated on the DoS website <https://ddpdos.gov.in>

Benefits of NCAGE Registration

12. NCAGE registration is mandatory to capture the defence manufacturers/vendors on a common platform of NCS. The following are the benefits to services/defence manufacturers:-

- a) Once registered through IDM portal with RUN Certificate, NCAGE will be recognised by all defence procurement agencies in the country.
- b) Identify Foreign and Indian Defence Manufacturer's on a common platform with the product profile.
- c) Services can use the software to search for indigenous and foreign production agencies for the desired product profile and range.
- d) To expand the MSME customer base in defence production across the globe through visibility of the products to more than 64 participating nations.
- e) To boost export potential by giving global visibility to Indian entities.
- f) To facilitate Indian manufacturers & other companies to do business with US government by registering in SAM (System Award Management).
- g) To generate NSN for codification.

For further assistance on NCAGE and IDM Portal Registration

Email to oicncbindia.defstand@gov.in

CHAPTER - 6

DEFENCE INVENTORY: CODIFICATION TASKING AND RESPONSIBILITIES

1. DoS as NCB (India) is responsible for approving NSNs, based on codification requests generated by AsHSP/ROs. Codification activity entails a series of steps which include pre-codification, codification and post codification tasks (maintenance of NSNs) during entire life span of the equipment viz from Introduction/ Scaling/ INCATing to Obsolescence. The steps involved in codification are enumerated in the following paragraphs.

Pre- Codification Tasks

2. The following actions are to be completed as pre requisite to codification:

a) **Step 1 : NCAGE Registration (Onboarding)** - NCAGE for Vendors/ Manufacturers Registration) is the first step in codification. NCAGE registration entails allotment of a unique 5-digit alpha-numeric code by DoS, which is recognised globally through NCS. Every defence manufacturer is required to be on-boarded as per NCAGE registration procedure enumerated in Chapter 5.

b) **Step 2 : AHSP/Responsible Organisation Code** - Once created, NSN is required to be maintained over the item life cycle in a 'womb to tomb concept' by the AsHSP/RO. Therefore, every NSN generated by Indian entity or Adopted from Foreign OEM, is linked with AsHSP code in the NSN (Private Data Field). This will ensure the ownership of the NSN at the time of its Creation (Introduction Stage), Maintenance (for updation of data) and Deletion (on being declared obsolete). Format for applying AsHSP/RO code is placed at **Appendix B**. Post verification the AsHSP/RO Code will be allotted by CACOSA.

c) **Step 3 : Training** - NCORE NG software is techno-logistic software, which involves capturing a host of logistic and technical data to identify the item uniquely in Form, Fit and Function. RIST Badarpur and IST Pune conducts training to all codifiers as a pre-requisite with hands on experience as per ATP promulgated on <https://ddpdos.gov.in>. Access to software is accorded only post successfully completing the training capsule.

d) **Step 4 (a) : Issue of User ID Password**

i) Access to the web based NCORE NG software is through three level authentications viz User ID, Password and Grid Card. The access codes are issued by OiC CACOSA, based on request in the specified format (**Appendix C**) from the codifying agency(OEM/AsHSP/RO) duly recommended by the designated AsHSP. These are to be held securely by the User and returned as per instructions. Loss of Card is to be immediately intimated to Director, DoS, for necessary action from security perspective.

ii) Access to NCORE NG software is provided through DoS website in codification drop down menu (<https://ddpdos.gov.in>).

iii) It is the responsibility of all stakeholders to make sure that accounts user id and passwords are kept secured and are not compromised by adhering to protocols defined from time to time. This should be enforced with user awareness training and education on the best practices in choosing and handling passwords and grid cards.

iv) Any request for change of any personal particular or transfer of User ID or change in role or organisation will be treated as a new USER ID allotment request.

v) The User ID found not being used for a period of three months will be deactivated. Also all users posted out/transferred from role/released must surrender their User ID form to their Head of Organisation and intimation be given promptly to Director/ OIC CACOSA for deactivation of User ID. The Heads of respective organisation must ensure that the User IDs are submitted with them for all personnel placed under him before they leave place of duty.

vi) A quarterly audit of User IDs (both active and deactivated) will be carried out by the OIC CACOSA via a feedback mechanism through DS Cells to ensure that the User IDs are used by authorised Users only.

e) **Step 4 (b) : Function Role Management** - To effectively restrict the misuse of software, it is very important to ensure that all users are allotted with User Ids and have sufficient privileges linked to their account at the same time they can fulfil their role and task using NCORE NG software. The process of carrying out assigning rights to user is carried out in Administration Module under heading Function Role. Function Role is a right/restriction related to an activity or logic in the software related to a user. A Function Role Template is a collection of rights and privileges to user that allows user to edit, search and process data. The Function Role Template can be created , modified, edited and deleted by an Administrator with sufficient privileges e.g. OIC CACOSA.

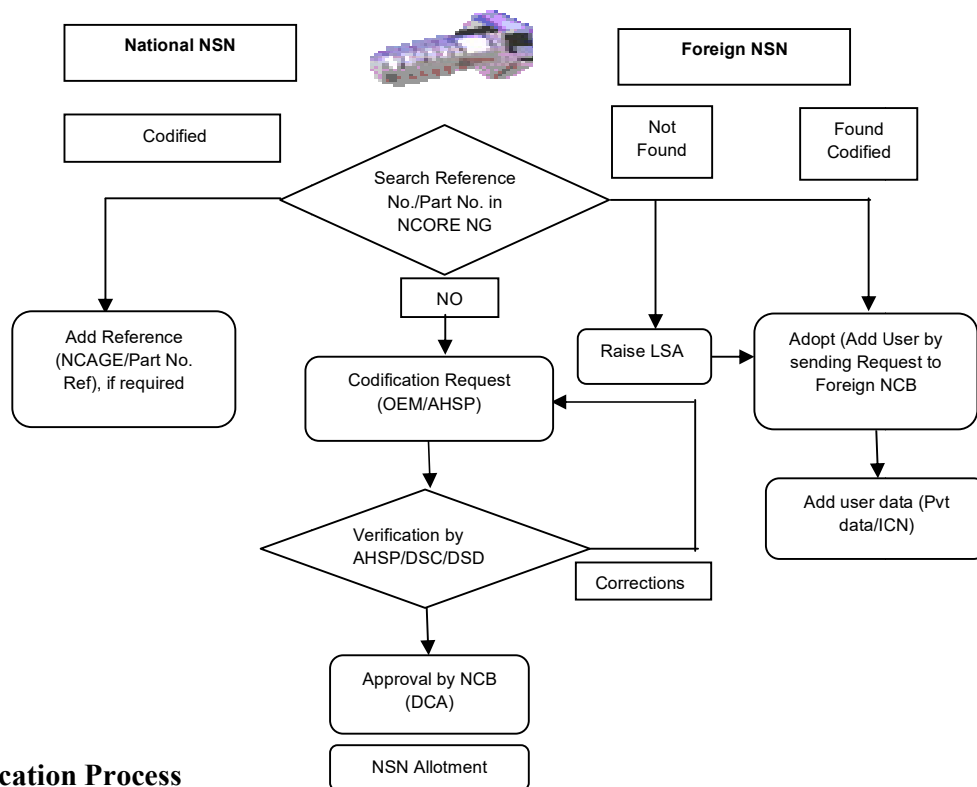
f) **Step 5 : Sharing Technical Details** - Equipment based codification has been promulgated in DECC 2022 as a part of Roll-on-Plan (ROP). Every indigenous eqpt. with MRLS as per contract, is required to be codified, in accordance with DAP 2020 (as per Para 16(b) Schedule I to Chapter II and Article 33 Chapter VI) by respective OEM/ AsHSP. The following details are required to be shared with DoS:-

- i) Contract No and date.
- ii) Nomenclature of the Main Equipment.
- iii) OEM/AsHSP/Responsible Organisation details.
- iv) No. of Items to be codified along with Part Numbers(MRLS/SMT/SME) and nomenclature to be provide by services.

g) **Step 6 : Project Management** - OEM/AsHSP is to forward the Group Class, INC and Immediate Use, for creating codification task for each equipment through Project Management (PM) Module. The progress/completion of the codification will be monitored for time-bound completion and will ensure streamlined data entry process with correct syntax and end/immediate use.

3. Codification Decision Matrix

Decision matrix for codification ensures that before codification, the applicable conditions are verified by the Codifier to satisfy that no duplicate NSNs are generated and in case of foreign items, the matter is referred to foreign OEM through respective NCB for initiating codification and adoption thereof. The codification decision matrix is as shown below :-



Codification Process

4. Codification Responsibility

The responsibility of codification is as follows:

- At Design & Development Stage: DRDO** - DRDO to ensure codification of its equipment in local database ab-initio through designated Production Partner (OEM) through ToT agreement. NSNs of products designed and developed by DRDO should contain the Designer and Manufacturers NCAGE. The codification is undertaken by using either designer/source control drawings/specifications or manufacturer drawings as per ToT document. In case the NSNs are not created ab initio, DRDO to ensure codification through production partner in a phased manner and issue suitable policy directives.
- Production Stage : OEM** - Any indigenous eqpt manufactured by a production entity either under ToT through DRDO or Joint Venture/Collaboration with foreign OEM, the responsibility of codification rests with OEM, in accordance with codification clause in DAP 2020 (Para 16(b) Chap II at RFP stage and Chap VI, Article 33.5 of Contract). Extract of the same is placed at **Appendix D**. In this case, In-service AsHSP will verify the codification request prior approval of NSN by DCA

at HQ DoS. For indigenous aviation assets developed by DPSUs, for codification purposes, they are considered as AsHSP.

c) **In-Service AHSP/RO** - In case of In-service equipment where the eqpt does not have a codification clause in contract, DGQA/DGAQA/DGNAI or the Professional Dtes identified by services will be designated as AsHSP /Responsible Organisation (RO). The codification will be undertaken by the designated AsHSP/RO, as per the logistic requirements based on VED concept (Vital, Essential and/or Desirable). In case of foreign equipment, details of foreign contracts to be shared with DoS for liaison with respective NCB of the foreign nation, towards provision of NSNs and subsequent adoption process by DoS and designated RO.

d) **Codification by Private OEM**

i) **Software Access to Private Entities**

aa) In some cases private entities are being provided rights to access NCORE NG software and undertake codification by themselves. However, this access is to be provided only to reputed officers of reputed companies, on requirement basis, for specific codification activity.

ab) DoS will have full right to refuse, reject, or withdraw the UID from Private Sector Manufactures, anytime, without assigning any reason.

ac) The UID will be provided to private entities based upon the recommendations by Service HQ/AsHSP or by producing export related documents.

ad) The Private Manufactures to clearly define the number of lines to be codified w.r.t Equipments/Spares parts to be/being supplied to Services (or) Exported.

ae) The function role of **Private Codifier** will be allotted to private entities and Service HQ/AsHSP will be given **Verifier Role**.

af) Presently, the allotment of UID to Codifiers of Private Sector Manufacturers is at free of cost. However, in future, DoS may decide the Charges from User Organisation on Pro-rata basis (or) adopting other methodology.

ag) The UID issued to the codifiers of Private Sector Manufacturers is only for the purpose of codification of specific equipments/spares. Any deviation in scope of work to be intimated to

DoS for approval. While carrying out codification, user will be responsible for safe access of software, and not to allow any unauthorised access. Users to ensure that no data/information available to be downloaded, stored (or) shared to other person/Organisation. An undertaking in this regard to be forward by user, duly countersigned by the Head of the Organisation (or) Authorised Signatory of Private Sector Manufacturers. Format is placed at Annexure A.

ah) DSC/DSD to monitor the above Codification activities. Observations and clarifications, if any, to be brought to notice of NCB India/ DoS on priority. DCA to verify the Codification orders for allotment the NSNs on priority. Shortfall in data quality to be immediately communicated to Private Sector Organisation, respective Service HQ/AsHSP and concerned DSC/DSD.

ii) **NSN for main Equipment**

aa) In accordance with requirement projected by MoD/DDP, one NSN is to be generated for each of the main equipment indigenously developed/manufactured by Defence Private Entities (MSMEs/Start-Ups under IDEX, Start Up Challenges, Make II etc) for the 'Atmanirbhar Bharat Abhiyan' and 'Make in India'. The NSNs so generated will play an important role in future in enhancing maximum export potential in the global defence market.

ab) To meet the above requirement, One NSN of the Main Equipment is required to be generated. However, for the products developed by defence industry wherein products are not contracted by Services (no AsHSP/RO applicable for codification/verification), following steps needs to be undertaken:

aaa) Step 1: Based on the codification requirement by MoD, the concerned firm (with NCAGE) will be directed by DoS to approach local DSC/DSD to undertake codification of one NSN based on technical parameters & product specification. The same is applicable for request for codification received through IDM Portal also.

aab) Step 2: At the first instance DSC/DSD is required to obtain an undertaking from the firm as per format placed at Appendix 'E'.

aac) Step 3: The local DSC/DSD is to Codify & Verify main equipment with own AsHSP Code. NCAGE of the private entities of the & without ICD fields & Segment B (User) fields (Same to be endorsed in Comment Box). DCN is to be forwarded to DoS.

aad) Step 4: On receipt of DCN, DoS will accord approval of NSNs.

e) **Imported Eqpt**

i) NATO Codification system (NCS) for codification of Defence Inventory is adopted by DoS. As a member of NCS, the NCB India will allot NSN only to items which are either produced within the country or in Non-NATO/Tier-1 countries. NCB India will not allot NSN to items which are produced by other NATO/NATO Tier-2 countries.

ii) In accordance with the rules of Codification, the foreign items are codified by the respective foreign OEM. The user country adopts the NSNs and fills relevant fields (Private and ICN). Russian eqpt are codified by the respective user agency, as required for logistic purposes, and maintained in the internal databases.

iii) In case of NSN not created by NATO/NATO Tier II countries, NCB India will send request to concerned NCB for generation of NSN and register India as user for NSN by LSA transaction.

iv) National reference can be added to NSN by LAR transaction. Presently adding of Ref No. with RNCC-5 is only possible online. In all other cases written request will be sent to concerned NCB

v) In exceptional cases, temporary NSN may be allotted by NCB India where LSA/L07 transaction has been sent to NATO/NATO Tier-2 country for codification of that item, and delay anticipated in receiving of official NSN. On getting official NSN, temporary NSN will be cancelled and replaced with official NSN.

f) **Introduction into Service** - As per DGCD SOP 01504/Gen/GSEPC/GS/CD-1 dated 30 Sep 2022, every equipment/sub-assembly is to be codified prior introduction. Similar procedures have been promulgated by IN through revised INBR 622 and suitable guidelines have also been promulgated by IAF. Salient points from SOP with regards to codification are brought out as below:

i) **Actions Before Conclusion of Contract**

aa) **RFP Stage** - RFP in consonance with provisions contained in DAP 2020 should include provisions for the bidding vendors to provide NSN Codes at the time of contract conclusion. A final codified list of part list (incl MRLS) to be provided by the vendor before CNC and the same list duly authenticated by Dte of Standardisation will be part of documents required for release of advance payment for first lot of delivery. The nominated AsHSP and Dte of Standardisation will render suitable assistance through Sponsor Dtes at various stages of procurement process. In case of eqpt being procured is already introduced into any other sister services, Vendor(s) be asked to submit the details alongwith Tech /Commercial bid.

ab) **CNC Stage** - Upon identification, successful vendor(s) would be referred to Dte of Standardisation for finalization of coding before the final contract. The NSN will be submitted to AsHSP/RO for issue of DGQA approval & floating of Assignment List.

ii) **Actions During Contract Stage till GSEPC** - For intro into Service, A SOC id required to be initiated by Sponsoring Dte. While the same is to be initiated post JRI/FOPM validation, certain portions will have to be completed during the acquisition process:

aa) **Contract Stage** - Codification to be completed by the time contracts are concluded and a certificate duly authenticated by Dte of Standardisation would be appended as part of contract.

ab) **Eqpt Already Intro in Service with Other Services** - In case a particular equipment under procurement is already intro in other services, vendor(s) may provide the details at the time of submission of Bid.

5. Emergency Codification

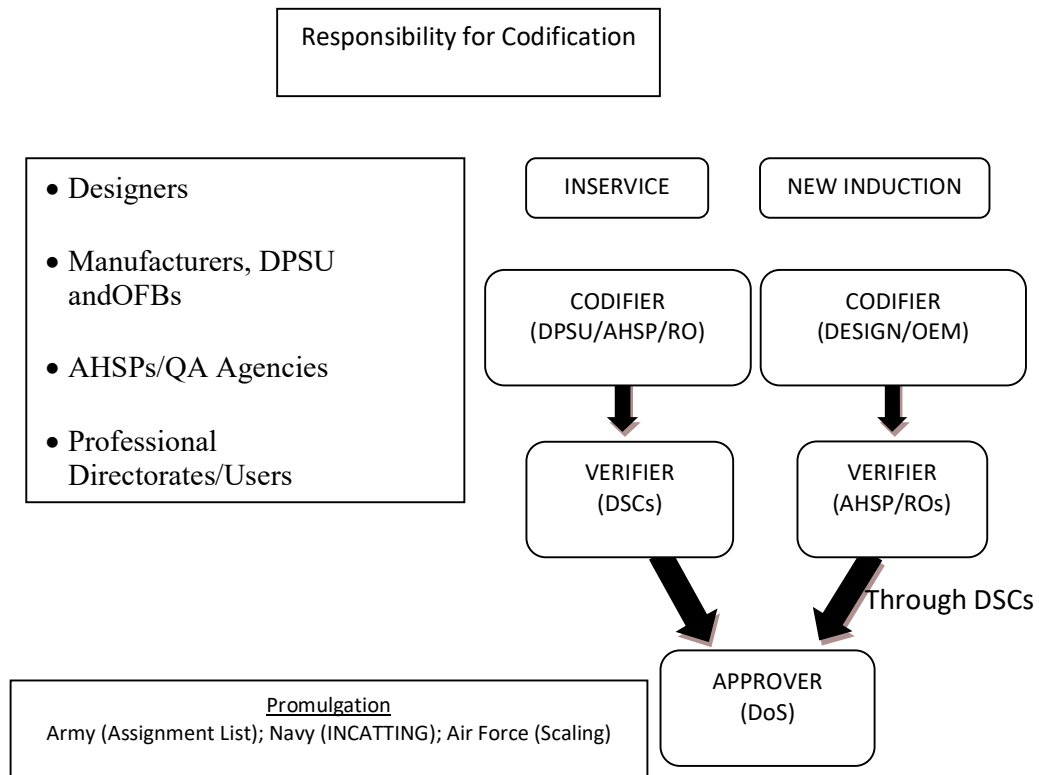
a) The requirement of emergency codification may arise if new items are being supplied to Defence Services or are being exported. The codification requirement is must in both cases. The requirement of emergency codification can be initiated by any of the following:

i) **Dte of Standardisation**

- ii) AsHSP/Manufacturer (on intimation from Directorate)
 - iii) Foreign NCB (LSA) for exported items
- b) The reference/technical data to emergency codification request be captured by following:
- i) DPSU/PSU/OFB/Other Govt. Organisation - For Manufactured/Supplied items (or)
 - ii) AsHSP (Army/Navy/Air Force) - Item Supplied to services by Private Manufacturer/Suppliers (or)
 - iii) By Other organisations/Directorate, as decided by Directorate
- c) The requirement of NCAGE Code is mandatory for allotment of NSN. The emergency NCAGE Code request will also be initiated as per para 5 (a) above, by manufacturer/AsHSP or Directorate to meet the requirement.
- d) Updation/Maintenance of NSNs - The responsibility of Updation/Maintenance of NSNs will be of concern Design Control Authority (AsHSP/RO), holding the Design/Sealed particulars.
- e) Processing of Request - The emergency Codification request is processed within the time frame of 07 working days.

6. Responsibility Matrix

The responsibility for codification, verification and approval of NSNs is based on the stage of codification viz design, production, in-service or new induction. The responsibility matrix is as below:



7. NSNs for Indigenous defence Eqpt designed/developed by defence organisations/ Entities (Services/DRDO/DPSU/Private Organisations/ MHA etc). The process of allotment of NSNs is as follows (NSN Generation flowchart is placed at Appendix 'F'):

a) **Codifier** - Designated codifiers of each organisations allotted with User IDs are responsible for codification of the equipment for which they are the AsHSP. On completion of codification of each Item, software generates DCN (Document Control Number), for tracing the status of allotment process, till NSN is generated. The DCN is routed through designated Verifier as per the work flow created by DoS/CACOSA at the time of AsHSP code. Entry of correct technical parameters is the responsibility of AsHSP.

b) **Verifier** - On receipt of the DCN, the verifier scrutinises the correctness of the DCN as per the process and procedures and forwards it to HQ DoS for approval. In case of any corrections, DCN is returned to Codifier for necessary corrections. The verifier is to ensure no duplicate NSNs are generated (potential match), correctness of RN codes, completion of Private and ICN data prior forwarding for approval to DCA.

- c) **Approval (Allotment of NSNs)** - On receipt of DCNs, the second level of verification is undertaken by DCA as per procedures and for completeness of codification data.

8. DCA (International Operations). At HQ DoS, DCA (Intl Ops), is responsible for dealing on all matters related to foreign NSNs on behalf of NCB (India). The following are the steps involved in codification of foreign eqpt:

- a) **Requirement with Extract of Contract/MRLS** - NCB (India) is to be provided with copy of first two pages of the contract containing:

- i) Contracting authorities and list of MRLS available.
- ii) Point of Contact in the Foreign OEM as per contract.
- iii) Designated AsHSP/ROs in Services.
- iv) List of MRLS Contracted with Nomenclature and Part/Reference Number (in soft copy) .

- b) **Screening of NSNs in Software** - From the list and nomenclature of MRLS provided, the availability of NSN is screened in the NCORE NG Software (Reference + Nomenclature). Based on the result of screening the following actions are to be initiated:-

- i) **For Single NSNs** - If the nomenclature is matching with the MRLS, the foreign NSN is right away adopted.
- ii) **Multiple NSNs** - During the search, if for the same Ref Number of items are available; AHSP will be requested to confirm the correct NSN based on the technical parameters of the item.
- iii) **Items for which NSNs are not available (LSA Transaction)n** - Codification Request (LSA) will be initiated with the Foreign OEM. The codification request can be undertaken in the following ways:-

- aa) **Provision through Contractual Clause as per DAP 2020** - In accordance with STANAG 4177 every NATO/Sponsored country is to share the NSN details of the equipment produced nationally with the contracting country. Accordingly, in every contract placed on a foreign OEM, the Codification Clause as per DAP 2020 to be mandatorily

included. The NSNs so obtained for each of the MRLS/STE/SME are to be shared with DoS.

ab) **Obtain from OEM** - Contracting authority (Services/DPSU/ Pvt Entity) may liaise directly with the foreign OEM and obtain NSNs directly.

ac) **DoS/NCB(India) facilitates NSNs through Foreign NCBs** - With 64 participating countries, DoS as NCB(India) will liaise with foreign NCB, to provide NSNs. Towards this, the contracting authority is to share copy of the first two pages of the contract, details of nominated RO along with copy of list of MRLS contracted.

c) **Adoption (LAU Transaction)** - Every foreign NSN is to be adopted by NCB (India) as a User country by initiating LAU transaction with the NCB of the manufacturing/producing country. On approval of LAU, in the Segment B of the foreign NSN, India **Code 'ZI'** will be added.

9. Task to be carried out by a codifier

The following tasks are to be undertaken by the codifier:

- a) Screening of reference number in Total Item Record (TIR).
- b) Creation of codification order through codification module.
- c) Search codification orders by Document control number (DCN).
- d) Assigning codification order to other user/organisation.
- e) Updation of NSN.
- f) Handling of duplicity found during codification.

10. AHSP/Responsible Organisations (RO)

In accordance with of DAP 2020, codification of in-service inventory is undertaken by OEMs for indigenous Eqpt. For imported Eqpt, foreign NSNs are to be by provisioned by the Contracting/Sponsoring Directorate of the Service for adoption by DoS & subsequent updation/maintenance by the designated RO. Towards this service have promulgated the following governing policy letters/ documents designating AHSP/ROs as follows:

- a) **Army - DGQA** through respective CQAs as per following:
 - i) **All types of Eqpt** - On introduction of Eqpt, DGQA must ensure publication of Assignment list by all CQAs as per the updated format (incorporating Internal part No and NSN No). Updated format of Assignment list is placed at Appendix 'G'.
 - ii) **Aviation Eqpt** - DGAQA/CQA(S) is the designated AsHSP for all aviation Eqpt including RPAVs/ UAVs.
- b) **Indian Air force** - Considering that majority of Eqpt is procured through import, the following ROs have been promulgated:
 - i) **For Indigenised Eqpt** - List of AsHSP promulgated by AFSC vide letter AFSC letter Air HQ/S 94831/1/AFSC (BM-I) dated 30 Nov 2021) is placed at **Appendix H**.
 - ii) **For imported Eqpt** - The respective CMCs of Air force dealing with the Eqpt as Responsible Organisations (RO) vide letter AFSC letter Air HQ/ 94801/1/AFSC(BM-II) dated 15 Dec 2022 is placed at Appendix 'J'.
- c) **Indian Navy** - List of Responsible Organisations/AsHSP/Professional Directorate for Naval Equipments is placed at Appendix 'K'.
 - i) **For aviation Assets** - DAPP/NAQAS is the designated as AsHSP.
 - ii) **For Ships/Shipyards** - As per policy, respective DPSUs manufacturing the platform are to codify.

Post Codification Tasks

11. Maintenance/Updation (LNM Transactions)

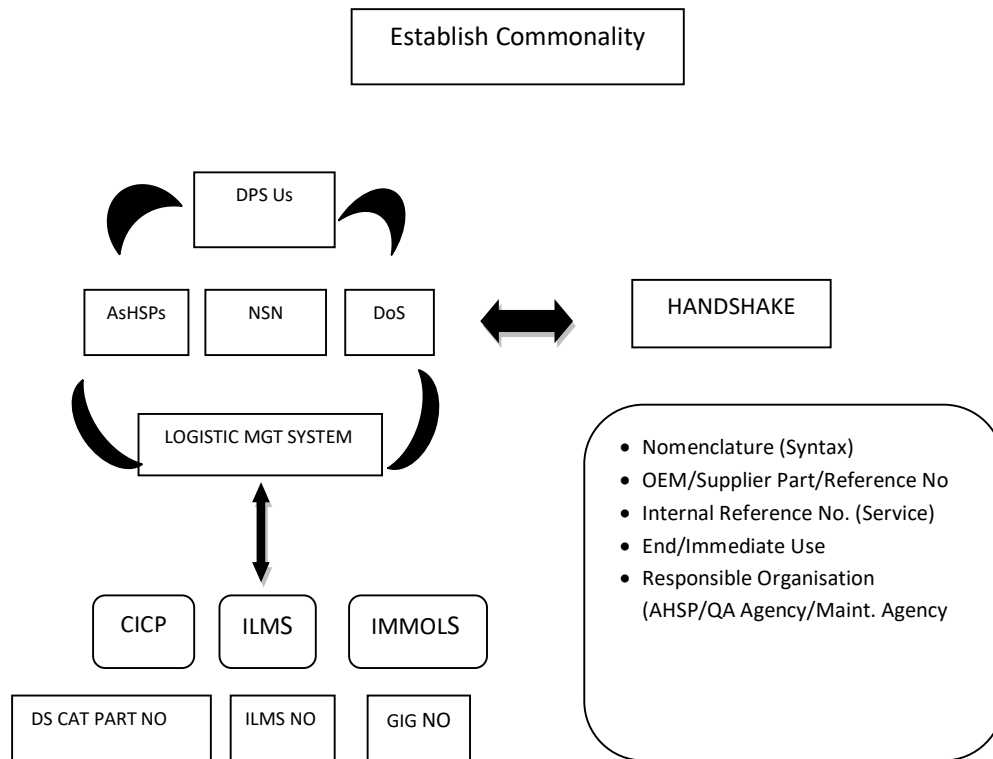
Every NSN created by OEMs/DPSUs/ROs is to be maintained and updated during the entire life cycle of the eqpt/ sub-assy/components through LNM Transaction. The occasions of NSN Maintenance/Updation are as follows:

- a) **Foreign NSNs Adopted** - On adoption of foreign NSNs as per Para 8(c) above, the India specific data is to be filled by the AsHSP/RO in the following fields:-
 - i) **User Data Field** - Users data (IA, IAF, IN, CG, MHA or other entities) as applicable to be updated.

- ii) **Private Data Field** - Filling Responsible Organisation Code, Immediate Use, End Use and Local Name.
 - iii) **ICN Data Field** - ICN data is to be filled in Segment C for linking NSNs with service specific reference number viz DS CAT Part No/MAT NR for CIG of IA, GIG for IMMOLS of IAF and ILMS/ILMS(Air)/WLMS/INAMS Ref for IN).
 - iv) **NCAGE Data Field** - In case of alternate Indian manufacturer, the request for adding NCAGE is to be forwarded to foreign NCB for adding Indian manufacturer NCAGE in Segment C.
- b) **Migrated NSNs** - In 2016, the codification platform was migrated from legacy CodiSAP (SAP based software NACS) to a web-based software NCORE NG. During the process, more than 5 lakh NSNs were bulk migrated. Due to incompatibility of the certain data fields, the NSN data has errors/incomplete data fields. These are to be updated by AsHSP/RO in a time bound manner focusing on correctness of NCAGE, ICN, MRCs (Type I/IV), End/ Immediate Use etc.
 - c) **Design/Drawing/Spec Changes** - Any product improvements or changes in the drawings during the currency of the eqpt are to be updated in the NSN as a part of maintenance activity for both Indian and imported NSNs, in the relevant data fields.
 - d) **Obsolescence** - In case of any eqpt being made obsolete, the NSN is to be made inactive, based on the recommendation of the AsHSP/RO after ensuring that all other national users (if applicable) are also not using the said item.

12. Establishing Commonality of Tri-Service Eqpt

Codification is a tool for establishing commonality of inter-services equipment. Considering that each of the service is having its own procurement, identification, stocking and maintenance methodology, through service logistic database management system, commonality is to be established by linking the Services references with NSNs. Towards this, Services references (MAT NR/ILMS/GIG numbers) are populated on NSNs by AsHSP/ROs and the NSNs are populated onto the services logistic systems by the respective organisations (CIG of IA, ILMS/WLMS/ILMS(Air)/INAMS of IN and IMMOLS of IAF). In case for any equipment, the reference number/ICN data of any user (i.e. IA/IN/IAF) is having maximum population that reference number/ICN data may be adopted by other users for ensuring commonality of equipment/items. The common fields to be populated by each service is as follows:



13. Monitoring Mechanism: DECC

Effective implementation of the codification process is monitored through the annual Defence Equipment Codification Committee (DECC) meeting under the Chairmanship of JS(P&C) with Director, DoS as member Secretary.

CHAPTER - 7

CENTRE FOR ADVANCE COMPUTING AND SYSTEM APPLICATION (CACOSA) **NETWORKING OF NCS**

1. CACOSA at HQ DoS, is responsible for smooth functioning of codification software and maintenance of the database. The web-based codification software, NCORE-NG is operated through production system (one application server and one data base server) hosted on cloud at NIC. Which is much secured network and also keeping backup on daily basis of both servers i.e. application and data base server .DoS/CACOSA also hosts two other system i.e. Test and training system for testing purpose of new patch updates and Training system for the training of new codifiers. DoS/CACOSA is responsible for maintenance of all three systems and their database management through AMC partner and OEM.

2. Network Architecture

There are three systems (six servers) to monitor work load:

a) **Production System** - Comprises of one-application server and one-database server. Production servers are virtual servers of DoS centrally installed at National Informatics Centre (NIC) on cloud services. All codification data is processed and stored on production system. CACOSA also serves as central database of all information related to codification of defence inventory. The virtual servers at NIC cloud are maintained by CACOSA.

b) **Training System** - Comprises of one-application server and one-database server. The training servers are held physically at DoS/CACOSA and are used for training the codifiers and activated during the training phases. Temporary User IDs and passwords are issued to all the trainees for practice on the NCORE NG software and are de-activated on completion of the training.

c) **Test System** - Comprises of one-application server and one-database server. These are also physically held at DoS/CACOSA and are used for running the software patches and any modification done on the software. On satisfactory testing, the software patches are updated.

3. System Management and Data Security

CACOSA ensures system management and data security through the following:

- a) **Data Back Up** - In addition to the NIC cloud, codified data is taken as back up in storage server in Storage Area Network (SAN) for both application server (on weekly basis) and Data base server in daily basis.
- b) **Implementation of IT/Cyber Security Policies** - The software is run on Oracle database software and all IT policies, certifications and Cybersecurity measures applicable to the defence users as per guidelines promulgated by MoD/ MeitY are implemented and system audited by CDAC annually.
- c) **System User Management** - User IDs and passwords are issued only to valid users post authentication, usage monitored and withdrawn based on the recommendation of AsHSP. The operating system and firewalls are also updated by IT professionals from time to time (as required) to ensure the system files and version/patch updates are supported and safe.
- d) **Monitor Server Security** - IT professionals at CACOSA ensure system health through constantly ensure updating system files, analysing server errors/defects. The system access by users is also closely monitored to ensure no unauthorised access of server. The system is operated through a firewall for additional security measure.
- e) **Optimisation of Resources to Enhance Performance** - For enhanced performance and uninterrupted availability of the web-based application 24x7, with minimum down time, CACOSA through IT professionals ensures timely patch updates, prompt problem resolution, regular cleaning of servicer space and other maintenance activities specified by OEM.
- f) **Import NMCRL Raw Data into NCORE Software** - The details of NCAGE (H4 data) and NATO Master Catalogue of References for Logistics (NMCRL) received from NSPA are imported in N-CORE NG software i.e. Production, Training and Test on a regular basis through IT professionals.
- g) **Import System Support Files into NCORE Software** - IT professionals at CACOSA will ensure that The following System Support Flies (SSF) are required to be imported as a part of software updates:
 - i) Supply Classes and Item Names (H2/H6)
 - ii) Master Requirements Directory (MRD)
 - iii) Federal Item Identification Guide (FIIGs)
 - iv) IIGXML Library

4. User Interface

CACOSA is responsible for issue of User Ids/password (both Govt. and Private entities) with two factor authenticated Grid Card and AsHSP Codes to all entitled /valid users post confirmation by the respective AsHSP in the specified format (Appendix 'C'). CACOSA to maintain updated records of 400 users account of Codifiers, Verifiers and Approvers updated.

5. System/Data Base Administrator

As system/database administrator, CACOSA is responsible for the maintenance of database server of all three systems i.e. Production, Test and Training and ensuring timely version updates through IT professionals.

6. NMCRL Access Management

The global NSN database is infused into the system through NSPA on a web-based platform NMCRL. DoS annually subscribes to the NMCRL database and it is available to all users through NCORE NG software (updated regularly through software updates). The same can also be accessed through internet through 5 user IDs/passwords provided to DoS.

7. Maintenance of National NSNs (LNM Transaction)

Consequent to version update of the software (Version 1.7.3 as on 31 May 2023) , procedures for NSN updation and maintenance have been modified wherein only one transaction will be initiated online for all updation and maintenance tasks through a new transaction known as **LNM** (Request NSN Maintenance). Accordingly, all amendments/ updation pertaining to NSNs viz Addition, Deletion, Change of status etc, will be termed as 'NSN Maintenance task'. Detailed procedures for processing LNM transactions are brought out in the succeeding paragraphs.

8. NSN Maintenance Task (LNM): Addition/Deletions

a) **Creation of LNM** - NSN Maintenance task is initiated by using the existing 'Edit' button in the TIR. An 'LNM' transaction is thus created. All changes can be made by the codifier at a time. In other words, transactions LAU, LAR, LAI, LAD, LCC, LCI, LCD and LMD are merged under one 'LNM' transaction.

b) **Viewing LNM Created** - All the important NSN segments (Segment A, B, C, V, ICD & Private Data) to be changed/updated as per requirement of the AsHSP/ codifier are done through LNM transaction. LNM transactions can be seen in 'Codification Module' under 'Document Identifier Code (DIC) icon. The changes made can be viewed through 'LNx Diff' button.

c) **Forwarding LNM to Verifier** - On generation of LNM transaction codifier is to be forwarded to verifier for verification.

d) **Forwarding LNM to Approver** - Correctly verified LNM transaction is to be forwarded to Approver for approval through five unique IDs created for the purpose (NSNMAINTIC, NSNMAINTIC1, NSNMAINTIC2, NSNMAINTIC3 and NSNMAINTIC4).

9. Maintenance of NSN: Change of Status

Maintenance of NSN entails important activities such as removal of duplicate NSNs, Introduction or Obsolescent/Obsolete of existing items will also be carried by CACOSA through DEO's, post scrutiny of Assignment Lists (Army) or requests by AsHSP/Prof. Dtes with justification in case of Air Force, Navy and other users. The following actions are envisaged:-

a) **Cancel-Duplicate** - The process to be performed to cancel legacy duplicate NSN in system. The duplicate NSNs be cancelled (made inactive) and linked to active one.

b) **Cancel-Use** - The process to be performed to change 'Item of Supply' where existing item is cancelled and replaced by one/two new 'Items of Supply'. The cancelled NSN be linked to active one.

c) **Cancel-Invalid** - The process to be performed for 'Items of Supply' which become obsolete. However, items under Obsolescence will be scrutinised for other user from services prior making them obsolete.

10. NSN Maintenance : NSN Rework Task

A new feature 'NSN Rework Task' has been introduced in the software for online tasking and monitoring of the rework. The powers of initiating rework task lies with CACOSA. Post scrutiny of the existing national NSNs in the database, AsHSP wise tasking will be initiated online by CACOSA.

11. In case of any difficulties in processing LNM transactions, the matter may be taken up directly with CACOSA through email oiiccacosa.defstandgov.in / cacosa1-defstand@gov.in or on 011-23075340 and 011-23043297/217.

MINISTRY OF DEFENCE
STANDARDISATION DIRECTIVE

1. PURPOSE

This Directive lays down the policies and assigns responsibilities for the Defence Standardisation Programme and Codification by the Standardisation Committee to issue the Standardisation and Codification Manuals for dissemination of procedures and methodology for furtherance of the policies formulated herein.

2. APPLICABILITY

The provisions of this Directive apply to the Defence Services and the various Defence Organisations concerned, such as DRDO, Inspection, Quality Assurance, Procurement, Defence Public Sector Undertakings and other organisations handling defence stores including Indian Private Defence Manufacturers.

3. SCOPE

This Directive pertains to the preparation of Standardisation documents viz. Joint Services Guides(JSG), Joint Services Qualitative Requirements(JSQR), Joint Services Specifications(JSS), Joint Services Preferred Ranges(JSPR) and Joint Services Rationalised List(JSRL) of Stores by various Standardisation Sub Committees(SSCs) to ensure 'Entry Control', 'Variety Reduction' and inter-service commonality of Stores, carrying out the activities of Codification and Rationalisation of existing stores used by the Defence Services. All standardisation document will be finally approved and notified by Director, Dte of Standardisation, MoD/DDP.

4. OBJECTIVE

The Defence Standardisation Programme has its objective towards the control of item proliferation within the Defence Services through the exercise of disciplines and procedures prescribed in the Manual of Standardisation and Manual of Codification. This objective is achieved by:

- a) Preparation of Standardisation Documents and adopting Standard/Preferred Ranges of all items to guide, design, development, production, inspection & procurement.
- b) Using Standard/Inter-changeable equipment and material.

- c) Codifying the Service Inventory in such a detailed manner that an effective inventory catalogue is established, thereby preventing the preparation of duplicate and overlapping descriptions of material and stores.
- d) Achieving 'Entry Control' in the case of equipment commercially produced by restricting procurement from nominated manufacturers.
- e) Ensuring codification of all indigenous Defence Equipment in line with internationally accepted system towards Aatmanirbharata and enhancing export potential of Indian Defence Manufacturers.

5. POLICIES

Within the Ministry of Defence 'A Single Integrated Standardisation Programme' shall be adopted to achieve the objectives stated in Para 4 above. The Standardisation Programme shall be managed in accordance with the following guidelines:

- a) Joint Services Specifications and Preferred Ranges for equipment, stores, parts and practices shall be used during the development and procurement process. The engineering initiative manufacturer should be promoted to ensure full utilisation of new technology to achieve specified performance parameters of the equipment/system.
- b) The Standardisation documents, Specifications, Preferred Ranges of Stores and other documents issued by the Directorate of Standardisation will be used by design, manufacturing, inspection, procuring and allied agencies.
- c) 'Entry Control' through Standardisation shall be planned and implemented for preventing variety of items from entering the supply system. When one Service wishes to introduce any item, it shall first refer to the Preferred Ranges or Joint Services Specifications issued on similar items. When any Service wishes to introduce an item dissimilar to that listed in Preferred Ranges or Joint Services Specifications, it shall do so only after referring the case to the Directorate of Standardisation.
- d) Rationalisation of existing inventory shall be carried out on intra and inter Service basis. Intra service rationalisation in respect of equipment specific to a particular service will be done by the Services in consultation with AsHSP and items of Inter-Service nature will be rationalised by the Directorate of Standardisation.
- e) Services Inventory shall be codified and catalogued under the Codification System adopted by Directorate of Standardisation/National Codification Bureau of India. This will provide a uniform supply language for the three Services. All new introductions shall be codified at the first instance prior introduction into service inventory so as to avoid accumulation while the remaining Services inventory will be catalogued on a 'Priority Weighing'.

f) Defence Services and all Defence Organisations shall adopt the 'System International' (SI).

g) Directorate of Standardisation shall monitor and coordinate the entire Defence Standardisation activity.

h) Guidelines for the execution shall be laid down by the Standardisation Committee.

6. STANDARDISATION COMMITTEE

Standardisation Committee shall be the foremost guiding body on all matters of Standardisation. The Directorate of Standardisation shall provide the secretariat support for the Standardisation Committee. The Committee shall meet at least once in six months.

7. COMPOSITION OF STANDARDISATION COMMITTEE

Chairman – Scientific Advisor to Raksha Mantri

Members

- Additional Secretary (Defence Production).
- Master General of Sustenance, Army HQ
- Chief of Material, Naval HQ
- Air Officer-in-Charge-Maintenance, Air HQ.
- Deputy Chief of Integrated Defence Staff (Perspective Planning and Force Development) (DCIDS (PP & FD)), HQIDS.
- Director General (PC & SI), DRDO.
- Director General of Quality Assurance (DGQA).
- Director General Aeronautical Quality Assurance(DGAQA)
- Joint Secretary (Planning & Coordination)
- Director General Naval Armament Inspection (DGNAI)
- Rep Indian Industry

Co-opted -- Director General (Acquisition) MoD
-- Director General of Bureau of Indian Standards

Member – Director, Directorate of Standardisation.
Secretary

8. The Standardisation Committee may Co-opt / invite representatives from various Organisations on as required basis.

9. FUNCTIONS OF STANDARDISATION COMMITTEE

- a) To lay down policy guidelines concerning Standardisation and other matters coming within the scope of this Directive, for the purposes of evaluation, selection and introduction of major new weapons and equipment by the Defence Services.
- b) To lay down the policy of Joint Service Standardisation.
- c) To review and guide the Standardisation activities.
- d) To liaise with other National & International Standardisation Organisations.

10. STANDARDISATION SUB-COMMITTEE

To assist the Standardisation Committee in implementation of the policy, Standardisation Sub-Committee with adequate and appropriate representation of the Services, Inspection, Defence Research and Development Organisations, Rep Indian Industry and concerned agencies would be formed in required field with approval of the Chairman.

11. RESPONSIBILITIES

Responsibilities for administration and implementation of Defence Standardisation Programme are assigned as follows:

- a) The General responsibility for conducting standardisation work within the Ministry of Defence and the handling of standardisation interests in all fields, devolves directly on the Director of Standardisation. He will function under the control of Department of Defence Production, within the broad policies enunciated by the Standardisation Committee and is authorised to approve and notify the Standardisation documents. Detailed technical instructions stating the procedures and methods for implementing the policy of Standardisation and Codification will be issued by Directorate of Standardisation.
- b) Joint Services Specifications, Preferred Ranges of Stores and such other standardisation documents prepared by the Standardisation Sub-Committees and the Defence Codification Authority/National Codification Bureau of India will be made available on web page of the Directorate of Standardisation.
- c) The Defence Services, Research & Development Organisations, Defence Inspection, Quality Assurance Organisation, Procurement Agencies shall plan, programme, budget and implement Defence Standardisation programme on a level sufficient to assure support to the Inter-Services Standardisation programme and the efforts of the Standardisation Committee. These Organisations shall nominate Senior Officers to act as focal points for all Standardisation matters.

d) Service Standardisation Cells headed by Senior Officers established in each Service Headquarters to deal with all Standardisation matters on behalf of the particular Service. These Standardisation Cells would not only provide a contact with the Directorate of Standardisation but also would be responsible for:-

i) INTRA SERVICE rationalisation and simplification of existing variety of equipment and stores specific to the Service.

ii) Planning and projecting Standardisation programme for INTER SERVICE rationalisation and “ENTRY CONTROL”. They will indicate the necessary priority to be accorded to such proposals.

iii) Monitoring the application for the Standards issued by the Directorate of Standardisation and the relevant Indian Standards.

e) Standardisation Committee members and Heads of other Organisations shall issue suitable directive for implementation of Defence Standardisation Policy.

12. BIS SPECIFICATIONS

Adoption of Indian Standards issued by the Bureau of Indian Standards for materials and equipment, Test Methods, Glossary of Terms etc in all the fields is of paramount importance from the point of view of developing common source of supply for both Defence and Civil needs. This adoption will be regularised by issue of Approval Notification (AN) by Standardisation Sub Committee and approved/ notified by Directorate of Standardisation. Defence Standardisation Programme will, therefore, provide for active participation in the preparation of Indian Standards and their eventual adoption. This will make it possible to include the commonly available commercial products in Defence Production.

(Approved by Standardisation Committee)

Date : 16 May 2023

Place : New Delhi

APPENDIX 'B'
(Referred at Chap 6, Para 2(b))

AHSP CODE/ORGANISATION CODE
(REGISTRATION FORM)

Part- I

Field Name	Details	Remarks
AHSP Name /Org.Name:-		
Long Name:-		
Address:-		
Pine Code:-		
Phone No.:-		
Fax No.:-		
E-mail:-		

(Approved/Signature by Head of Department)

(Recommendations of OIC DSC/DSD)

Part- II (To be filled by Dte of Stdn (CACOSA))

AsHSP Code/ Org Code	
AHSP Name /Org. Name	

(Signature of OIC CACOSA)

(Signature of JD (C&C))

APPLICATION FORM FOR CODIFICATION SOFTWARE-GOVT ENTITY
USER REGISTRATION FROM (U1)

(PART -1)

Name of Organisation		
Address of Organisation		
Contract detail of Organisation	Phone /Fax	email:
Type of Organisation (AHSP of Service /DPSU/Government)		
First Name of Individual		
Surname of Individual		
Employee ID No		
Designation/Rank		
Contract Detail	Phone /Fax	email:

It is certified that above Organisation is AHSP /Manufacturer/Depot (or) Professional Directorate under Service (IA/IN/IAF)/Government (or) DPSUs and responsible for codification of Defence Inventory.

(Signature of Individual)

(Signature of Controlling Officer)

(Recommendations of OIC, DSC/DSD)

(Signature of OIC, DSC/DSD)

(PART -2)

Whether AHSP Code allotted in Software	Yes/No, if yes, code
User ID/License type already allotted to Organisation	
Function Roll/License recommendation	
Remark	

(Signature of OIC CACOSA)

Approval by JD (C&C)

(Signature of JD (C&C))

(For CACOSA Use)

Organization Code allotted (if not available)	
User ID Allotted	
First Login Password	
Grid Card SI No	
Deputy	
Function Role	As approved
Type of License	As approved

(Signature of OIC CACOSA)

NOTE - USER ID/Password request will be approved only after Codifier has undergone training to be certified by AHSP.

ANNEXURE 'A'

CODIFICATION SOFTWARE-USER REGISTRATION FORM (U-1B)
FOR CODIFIER OF PRIVATE SECTOR ORGANISATION

Name of Private Sector Organisation		
Address of Organisation		
Contact Details of Organisation	Email ID:	
Name of the Equipment to be codified		
Contracting Service/AHSP, Contract No.		
No. of Items to be codified		
Appx. Period	From	To
First Name of Individual		
Surname of Individual		
Employee ID No. (Please attach copy)		
Government Issued ID Card No. (Please attach copy)		
Designation/Rank		
Qualification		
No. of years experienced in Organisation		
Contact Details	Phone/Fax	Email ID:

It is understood that the above UID to be issued to me only for restricted use, to codify above mentioned Items. No data/information available in software to be downloaded stored (or) shared to other person/Organisation by me. I will undertake the codification of Items, as approved by DoS.

(Signature of Individual)

(Recommendation of Authorised Signatory of Private Sector Organisation)

It is certified that Sh. _____ is reputed employee of our Organisation. The UID to be issued to be utilized for codification of above items. No data/information available in software to be downloaded. Stored (or) shared by our Organisation. Our Organisation will take codification task as approved by DoS.

Signature-
Name -

(Recommendation of SHQ/ AsHSP)

Name of the equipment to be codified	
Contract No.	
No. of items to be codified	
Duration	
Name of the Officer to be assigned verifier role (existing NCORE-NG codifier)	

(Signature of Controlling Officer,
SHQ/AHSP)

Approval by Director

(Recommendation of JD(C&C))

(Director, Dos)

(For CACOSA Use)

User ID Allotted	
First Login Password	
Grid Card SI No.	
Function Role	Private Codifier
Type of License	a-Licence
Period	

(Signature of OIC CACOSA)

- Encl:**
1. Copy of User Employee ID Card
 2. Copy of User Government issued ID Card
 3. List of Items to be codified (To be forwarded to NCB OPS/DCA)

Note: USER ID/Password request will be approved only after Codifier has undergone training. To be certified by AHSP.

APPENDIX 'D'

(Referred at Chap 6, Para 4(b))

EXTRACT FROM DAP-2020
(AS PER PARA 16(B) SCHEDULE I TO CHAPTER II
AND ARTICLE 33 CHAPTER VI)

Codification

1. The Bidder agrees to provide existing NATO Stock Numbers (NSNs) of OEM for each item supplied under the contract as per part list (including MRLS). In case, the NSNs are not available, the bidder agrees to codify using basic technical characteristics as required for codification in consultation with MoD/Directorate of Standardisation. In case of IPR issues, codification will be undertaken as Type IV Codification (where only the manufacturer details and part number are to be provided).
2. The SELLER undertakes to provide existing NATO Stock Numbers (NSNs) of OEM for each item supplied under the contract as per part list (including MRLS). In case, the NSNs are not available, the SELLER agrees to codify using basic technical characteristics as required for codification in consultation with MoD/Directorate of Standardisation. In case of IPR issues, codification will be undertaken as Type IV codification (where only the manufacturer details and part number are to be provided).

FORMAT

REQUEST FOR ONE NSN GENERATION
UNDERTAKING FROM THE FIRM/ OEM
(Only for Indigenously Developed Products)

1. **Name of the Organisation/ Manufacturer:**
2. **Address:**
3. **NCAGE:**
4. **Product Detail (Copy with Name, Part No. to be attached)**
 - a) Name of Equipment
 - b) No. of Sub-Assemblies
 - c) No. of MRLS(Spares)

5. **Order received to date**

S. No.	Source	Ogranisation	Contract No. and Date	Remarks
a)	Indian	i)		NA to be indicated in case of no orders
		ii)		
b)	Foreign	i)		
		ii)		

6. **Undertaking by the Firm**

Certified that No Contract/ Purchase Order has been received from services (IA, IN, IAF) / DPSUs to date for the subject equipment. In case any Contract/ SO is received, the same will be intimated to DoS.

7. **Request for NSN**

It is requested that one NSN for main equipment be generated.

Place:

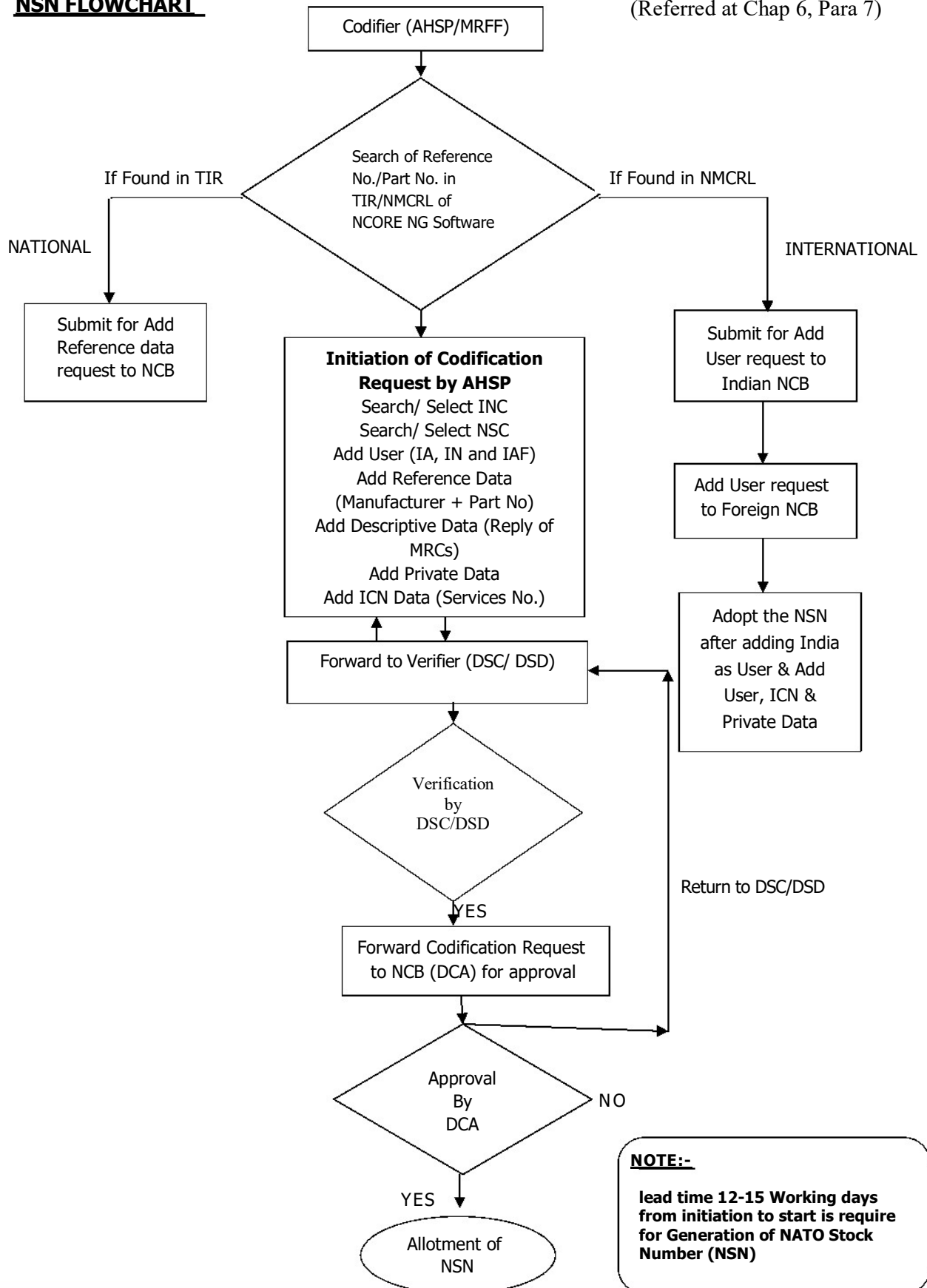
Authorised Signatory

Date:

(With Designation & Stamp)

NSN FLOWCHART

APPENDIX 'F'
(Referred at Chap 6, Para 7)



APPENDIX 'G'

(Referred at Chap 6,
Para 10(a) (i))

ORGANISATION DETAILS (letter head)

**ASSIGNMENT LIST: PROMULGATION OF NSN
(INTRODUCTION/CHANGE OF STATUS/OBT/OBE)**

Name of the AHSP/ Organisation :

Contract No and date:

Assignment List No:

Authority: SOP(Navy Order/Air Force Order) and DAP 2020 (Chapter II Para 16 and Chap VI SCD Article 33)

S. No.	Casualty	OLD PARTICULARS				NEW PARTICULARS				Drf No./ Design Ref.	Remarks of Authority & Reasons
		Cat/* Part No.	NSN	Item Name	Main Eqpt	Cat/* Part No.	NSN	Item Name	Main Eqpt		
1	2	3	4	5	6	7	8	9	10	11	
(a)	NSN Promul- gation										
(b)	Alloment and supression										
(c)	Extension of use										

***Note**

DS CAT PART NO/MAT NR - 'P' Item

OEM PART NO

- 'NP' Item

File Reference :

Date :

Distrubution :

(Authorised Signatory)

Internal (as per service requirement)

Dte of Standardisatio

APPENDIX 'H'
(Referred at Chap-6)
Para 10(b)(i))

**LIST OF ASHP PROMULAGATED BY AFSC FOR
OF IAF EQUIPMENTS**

(Auth: AFSC letter Air HQ/S 94831/1/AFSC(BM-I) dated 30 Nov 2021)

S. No.	TYPE OF EQUIPMENT/STORE	AsHSP
1.	Aircraft Platforms and System Supplied by DPSUs	Respective DPSUs (Manufacturer)
2.	Imported items	OEMs
3.	Indigenised items	BRDs/1CIMD
4.	Flying Clothing Items	DEBEL and DGAQA(JD Aeromed)
5.	Non-Flying Clothing Stores	HQ MC
6.	Technical stores	DGAQA - Aviation stores DGQA - Non –aviation stores.

APPENDIX 'J'

(Referred at
Chap-6) Para 10(b)(i))

LIST OF RO/AHSP FOR RESPECTIVE PLATFORM – IAF
(Auth: AFSC letter Air HQ/ 94801/1/AFSC(BM-II) dated 15 Dec 2022)

S. No.	Fleet	RO	Remarks
1.	Boeing-737	Gp Capt Eng T (VIP)	Nil
2.	Boeing-777	Gp Capt Eng T (VIP)	Nil
3.	Apache Helicopter (Boeing AH-64)	Gp Capt Eng H (W)	Nil
4.	Chinook Helicopter (Boeing AH-47)	Gp Capt Eng H (W)	Nil
5.	Globe Master (C-17)	Gp Capt Eng T (W)	Nil
6.	Hercules (C-130)	Gp Capt Eng T (W)	Nil
7.	HAWK	Gp Capt HAWK (Maint)	Nil
8.	UAV	Gp Capt Eng C	Nil
9.	Rafale	Gp Capt (Rafale)	Nil

APPENDIX 'K'

(Referred at Chap 6, Para 10(c))

PROFESSIONAL DIRECTORATES RESPONSIBLE FOR NAVAL EQUIPMENT
(Auth: COM Memo COM/405/Memo dated 21 Mar 2016)

S. No.	Prof Dte's	Equipment /Stores
1.	DME	Marine engineering equipment like Diesel Engines, Gas Turbines, A/C & Ref plants, HP Air Compressors, Machinery Instrumentation & Control system, RO plants, Pumps, Pipes, Valves etc.
2.	DNA	Ship Building/Structure, steel, Anchor, Capstan/Windlass, Davits, Boats, paints, etc
3.	DEE	Power Generation & Distribution, Electrical Motors, Starters, Rectifiers, Converters, Surveillance radars, navigation and Fitted Communication equipment, ESM/ECM, etc.
4.	DNBCD	Nuclear, Biological, Chemical, Damage Control and Fire Fighting systems.
5.	DAPP	Aviation equipment/system
6.	DSOD	Diving Equipment
7.	DIT	IT & System, Information Security, etc.
8.	DNS	Portables Communication Equipment and Telecom Systems
9.	DNSO	Satellite and Space Communications

PROFESSIONAL DIRECTORATES AS AHSPs FOR NAVAL EQUIPMENT

(Auth: COM Memo COM/405/Memo dated 21 Mar 2016)

S. No.	Prof Dte's (AHSPs)	Equipment/Stores
1.	DNAI	Guns and ammunition (except small arms and associated ammunition), Mortars, Rockets, Mines, Depth Charges, Bombs, Torpedoes and Missiles
2.	DONA	Non automatic small arms, Accessories and accoutrements, Apparatus and tools other than proof apparatus, test and calibration equipments and naval armament gauges for non automatic small arms, Workshop test equipment, tools and handling devices of all torpedoes, mines and guided missiles for which Directorate General of Armament Supply is responsible, Labels, Stencils and seals pertaining to naval armament packages except those of DGNAI
3.	DWE	Fire Control radars, Fire control computers, Sonar, Electronic Equipments of Naval Guns/Missile, etc
4.	DASE (for NAQAS)	All aviation Equipment and Systems
5.	DOI	Indigenised Stores
6.	DCV	Clothing and victualling stores