LIS OPPORTUNITIES

{Stay Informed, Stay Ahead in Library Science}

www.lisopportunities.com

INTERNSHIP REPORT

ABOUT

"LIS OPPORTUNITIES"

Welcome to LIS Opportunities, your premier resource for information and updates in the field of Library and Information Science (LIS). Our platform offers comprehensive services including job listings, admissions information, and resources for LIS professionals.

Visit our website for more information and resources tailored to your needs: **www.lisopportunities.com**

Our Services:

- Interview Preparation
- CV Writing
- Cover Letter Writing
- Form Filling (for Admission and Jobs)
- Internship Report and Dissertation Assistance
- Guidance and Counselling
- Job Search Assistance
- Admission Information and Assistance

INTERNSHIP PROGRAMME REPORT

DEFENCE SCIENTIFIC INFORMATION AND DOCUMENTATION CENTRE (DESIDOC)

REPORT

Submitted to the Department of Library and Information Science, University of Delhi in partial fulfilment of the requirements of the Paper No. B-111: Work in internship programme report.

2022 - 2023

Bachelor of Library and Information Science

University of Delhi

Submitted by: -   **Supervisor: -**

MANJU YADAV   **Prof. K.P.Singh**

B.L.I.Sc

Roll No. **DLISB2237**

CONTENTS

Content	Page No.

DECLARATION

I hereby declare that the Chapter-1 **"An Internship Programme"** and Chapter-2 internship in **"DESIDOC** (Defence Scientific Information & Documentation Centre)**"** is based on the Internship work carried out by me for partial fulfilment of the requirements of the Paper No. B – 111: Department of Library and Information Science, University of Delhi, Delhi.

Place: Delhi   **MANJU YADAV**

Date: 14-09-2023

CERTIFICATE

This is to certify that the Internship Work Report consisting of entitled **"Chapter-1 "An Internship Programme" and Chapter-2 an internship in "DESIDOC (Defence Scientific Information & Documentation Centre)"** submit to the DESIDOC, University of Delhi, and Delhi in partial fulfilment of the requirements of the Paper No. B – 111 for the award of Degree of Bachelor in Library and Information Science, University of Delhi, has been carried out by Manju.

I am satisfied that this Internship work is worthy of consideration for the award of the degree of Bachelor in Library and Information Science to the best of my knowledge.

Prof. K.P. Singh
Supervisor
Department of Library and
Information Science,
University of Delhi, Delhi.

ACKNOWLEDGEMENT

PREFACE

When one works in a library, the main aim is to fulfil the needs of the users as accurately as possible and save time of the users. To do this, one needs not only theoretical but also practical knowledge concerned with library science and librarianship. Working in a library and efficiently catering to the needs of the users requires a set of skills (like ICT literacy, efficient communication and understanding with the users, systematic management and most importantly a good personality/conscience etc.) that can only be learnt and sharpened when done practically.

An internship is a good opportunity to gain practical knowledge about any real-world concept. Internship bridges the theory with the practice in any particular field of study. Thus, it clarifies the theoretical concept of the students which may not be possible only through class lectures and follow-up examinations. After the completion of the internship program, I have gathered enough experience in the acquisition, processing and dissemination of library reading materials, managerial activities, stock verification, library website, reference services, old manuscript preservation, etc. which I have shared in different chapters of the report.

In the B-111 paper, we were required to physically visit a library for three weeks and learn, understand and experience practically the functioning of a library. For three weeks we visited DESIDOC's Defence Science Library under the guidance of Mr. Nishant Kumar, Head of Library Senior Library, and information officer, DESIDOC's Defence Science Library, New Delhi. Here, we learnt a lot of things about the different sections the library has, its services, software used and methods employed in different sections of this library.

List of Acronyms & Abbreviations Used

DESIDOC- Defence Scientific Information & Documentation Centre

ICT – Information and Communication Technology

MARC - Machine-Readable Cataloguing

ISBN - International Standard Book Number

ISSN - International Standard Serial Number

AACR2 - Anglo-American Cataloguing Rules, 2nd edition (obsolete)

ILL - Interlibrary Loan

OPAC - Online Public Access Catalogue

ILS - Integrated Library System

URL - Uniform Resource Locator

RFID - Radio-Frequency Identification

ERM - Electronic Resource Management

IR - Institutional Repository

DRDO- Defence Research and Development Organization (the organization under which DESIDOC operates).

DEFSIC- Defence Scientific Information Centre (the former name of DESIDOC).

DIITM- Defence Institute of Information Technology & Management (an institution affiliated with DESIDOC).

DLRL- Defence Electronics Research Laboratory (a research facility connected to DRDO).

DLRLS- Defence Laboratory Library and Information Services (associated with DLRL).

DSIAC- Defence Systems Information Analysis Centre (an international partner or affiliate in the defence information field).

CHAPTER I

1 INTRODUCTION

An internship is a temporary job role that's often related to one's academic field of study or career interests. It can offer a beginner in a career field practical experience within a professional role. Internships are often useful to college students and recent graduates, as many internship programs provide college credit rather than an hourly pay rate. Internships may also offer individuals insight on a particular industry's culture and daily operations, assist a young professional with completing a degree or provide an income while a student earns their degree.

An internship is a professional learning experience that offers meaningful, practical work related to a student's field of study or career interest. An internship gives a student the opportunity for career exploration and development, and to learn new skills. It offers the employer the opportunity to bring new ideas and energy into the workplace, develop talent and potentially build a pipeline for future full-time employees.

2 PURPOSE

Identify career goals: An internship can give you an authentic experience in a job role by providing you with an introductory experience to a career path, its duties and daily operations. If you enjoy your internship, this might indicate that your career is on the right path.

Strengthen a resume: Internships can give you workplace experience before you actually enter the workforce. Skill Development: Interns have the opportunity to develop practical skills related to their field of study or career interests. This can include technical skills, soft skills like communication and teamwork, and industry-specific knowledge.

Networking: Internships allow individuals to connect with professionals in their chosen industry, potentially leading to mentorship, references, and future job opportunities.

3 OBJECTIVES

The objectives of an internship can vary depending on the specific goals of the organization offering the internship and the needs of the intern. However, several common objectives are typically associated with internships:

Skill Development: One of the primary objectives of an internship is to provide the intern with the opportunity to develop and enhance their practical skills in a real-world work environment.

Application of Classroom Learning: Internships allow individuals to apply the theoretical knowledge they've gained in the classroom to real-world situations. This helps bridge the gap between academic learning and practical experience.

Networking: Building professional relationships and expanding one's network is a significant objective of internships.

Resume Building: Successful completion of an internship adds valuable work experience to an individual's resume, making them more competitive in the job market.

Mentorship and Learning: Many organizations offer mentorship programs as part of their internships.

4 SCOPE OF THE STUDY

The scope of an internship can vary widely depending on several factors, including the organization, industry, and the intern's goals and skills. Here's an overview of the scope of an internship:

Duration: Internships can range in duration from a few weeks to several months. Some may even extend to a year or more for certain academic or research internships.

Goals and Objectives: The scope of an internship should align with the goals and objectives set by both the hosting organization and the intern.

Tasks and Responsibilities: Internships can encompass a wide range of tasks and responsibilities, including research, data analysis, customer service, project management, administrative work, content creation, technical tasks, and more.

5 METHODOLOGY

Creating a successful internship program in a library requires careful planning and implementation. Here's a step-by-step methodology for conducting an internship in a library:

Needs Assessment and Program Design: Identify the specific objectives and goals of the library internship program. Determine what the library hopes to achieve through the program. Assess the library's capacity to host interns, including available resources, staff availability, and supervision capabilities.

Intern Recruitment and Selection: Advertise the internship opportunities through appropriate channels, such as library school programs, university career centres, and the library's website.

Orientation and Training: Conduct a thorough orientation for interns to introduce them to the library's culture, policies, and expectations. Provide training on library systems, software, and tools that interns will use during their internship.

Supervision and Mentorship: Assign a supervisor or mentor to each intern who will provide guidance, support, and regular feedback. Schedule regular check-in meetings to monitor progress, address questions or concerns, and provide opportunities for learning and development.

6 ARRANGEMENTS

Arranging an internship in a library involves several steps and considerations. Here's a guide on how to go about it:

Research Libraries: Identify libraries that align with your goals. Consider the type of library (public, academic, special, etc.), location, and size. Prepare Your Resume and Cover Letter: Tailor your resume to highlight relevant skills and coursework. Write a cover letter expressing your interest and explaining why you'd be a valuable intern. Orientation and Training: Attend any orientation or training sessions provided by the library.

Internship Tasks: Clarify your responsibilities with your supervisor. Internship tasks may include shelving books, assisting patrons, cataloguing materials, and more. Complete the Internship: Ensure you fulfil the required hours and tasks for the internship. Update your resume to include your internship experience.

CHAPTER 2

DESIDOC

Introduction

DESIDOC, which stands for "Defence Scientific Information & Documentation Centre," is a prominent institution located in India with a primary focus on serving the scientific and technical information needs of the country's defence research and development community.

The mission of DESIDOC is centred on providing comprehensive support to defence scientists, engineers, and researchers by facilitating access to a vast repository of scientific literature, technical reports, and information resources. Its services encompass a wide range of functions:

Library Services: DESIDOC operates a specialized library that houses an extensive collection of books, journals, reports, and digital materials related to various fields of science and technology, with a particular emphasis on defence-related topics.

Document Delivery: The institution offers document delivery services, enabling users to obtain research papers, reports, and other critical documents essential for their work.

Research and Analysis: DESIDOC conducts research and analysis on defence-related subjects, providing valuable insights and information to support defence research and development efforts.

Information Dissemination: It disseminates research findings, technical reports, and other relevant information to the defence research community, contributing to knowledge sharing and collaboration.

Knowledge Management Division: The centre actively engages in knowledge management activities by organizing, maintaining, and making accessible a wealth of information resources vital for scientific and technological advancements in defence.

DESIDOC also collaborates with both national and international organizations, libraries, and information centres to enhance its services and expand access to information resources. It continually modernizes and digitizes its facilities and resources to keep pace with technological advancements and to meet the evolving information needs of the defence community.

Overall, DESIDOC plays a pivotal role in supporting India's defence research and development efforts by providing access to crucial scientific and technical information, fostering research collaboration, and contributing to the advancement of defence capabilities in the nation.

Mission

To establish an integrated resource centre and state-of-the-art information management system encompassing knowledge centre, publishing, e-services, printing and multi-media

To collaborate with national and international institutions/academia/ organizations for cooperative partnerships to improve upon quality and bring visibility to DRDO's R&D Publications

To introduce new innovative Defence Research Journals for the benefit of R&D community.

To improve the role of DESIDOC's Defence Science Library by reinventing library functions and services with focus on the perception and expectation of the users

Embracing advanced technologies to provide library and information services on emerging digital platforms.

Introducing digital imprint of DRDO to connect with the scientific and civil society through online community.

Building "single window" facilitation by improving the quality of print-media, multi-media and network services.

Vision

To provide essential science and technical research, development information rapidly, accurately and reliably to support DRDO's Scientists' needs.
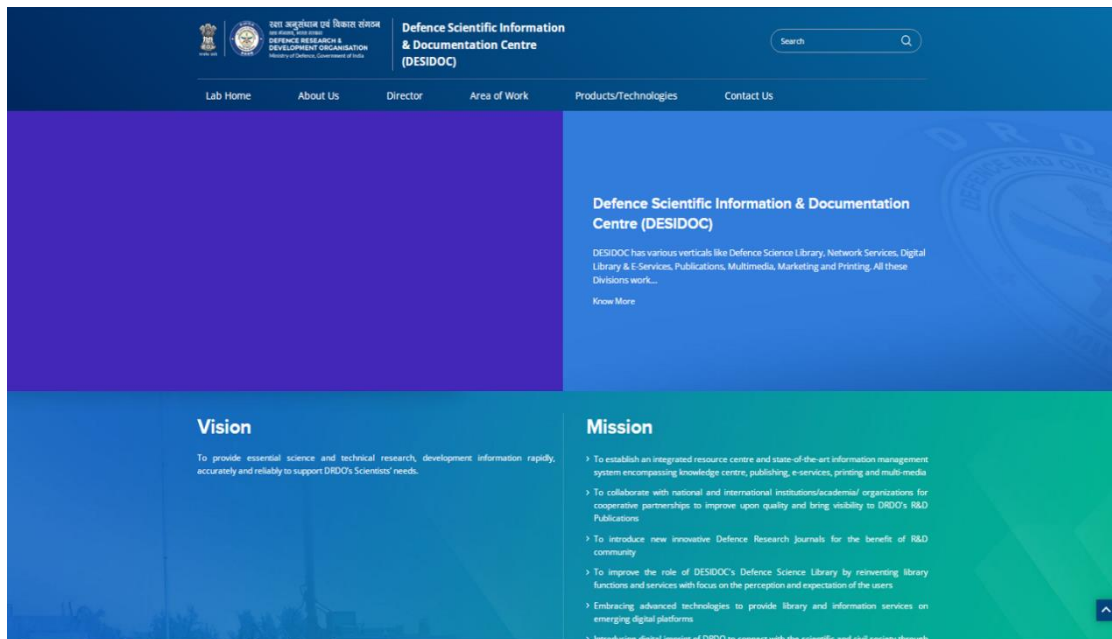
History of DESIDOC

The history of DESIDOC (Defence Scientific Information & Documentation Centre) is closely tied to the growth and development of scientific research and defence-related activities in India. Here is a brief history of DESIDOC:

Establishment (1958): DESIDOC was established in 1958 as the Defence Scientific Information Centre (DEFSIC) in Delhi, India. It was created to cater to the growing need for a centralized information and documentation centre to support the defence research and development community in India.

Early Years: In its early years, DEFSIC focused on collecting, cataloguing, and disseminating scientific and technical literature and information resources relevant to defence research and development.
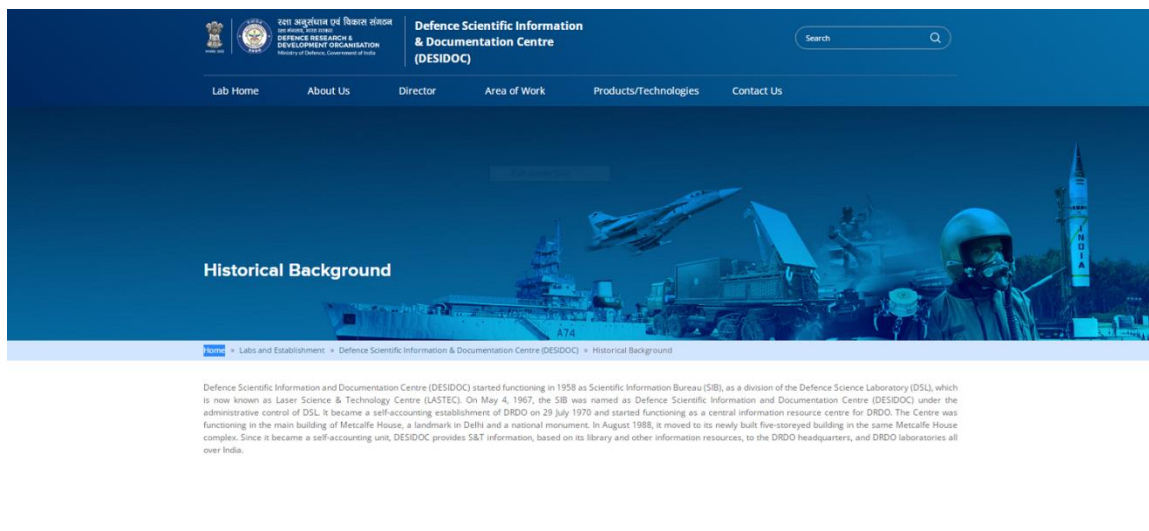
Development of Library and Information Services: DESIDOC continued to develop its library services, including the acquisition of a comprehensive collection of books, journals, technical reports, and digital resources. It also introduced document delivery services to facilitate access to essential research documents.

Today, DESIDOC remains a pivotal institution in India, serving the defence research and development community by providing comprehensive information support, fostering research collaboration, and contributing to the advancement of defence capabilities in the country. It continues to evolve and adapt to the changing needs of the defence sector while playing a vital role in the dissemination of knowledge and information in library and information science.

Infrastructure

Any library having an excellent collection cannot be called a good library if it lacks modem infrastructure and a reasonably aesthetic environment, the latter being necessary for ensuring concentration and necessary inspiration. The new 5-storey building, inaugurated by Dr. VS Arunachalam, SA to RM, on 2 Aug 1988, has separate stacking arrangement for books, back volumes of periodicals, technical reports, and display of current periodicals on various floors.

Ground floor is equipped with the compact shelving with books arranged in them alphabetically; first floor has a rich collection of bound journals which are arranged by their volume number. Second floor has single entry-cum-exit gate of the library head office, the reference section and circulation section is present on the second floor, this floor has collection of reference books like encyclopaedias, periodicals magazines etc. The internet section and intranet is also accessible through the device installed named Vertical signage. A book kiosk is also present on the second floor for easy book search. Third floor is filled for the collection of textbooks arranged by their Classification number. The acquisition of the books and technical processing is also done on the same floor .Fourth and the last floor has the e-resource section, NSD cell, Hindi books collection and DRDO cell where all the publication, annual reports, monographs, symposium and compendium of DRDO are stacked.

Defence Science Library

Defence Science Library (DSL) is a fully automated and an ISO 9001:2008 certified library and a nerve centre for providing information related to Defence Science and Technology to the project leaders, top management, and research community of DRDO within least possible time. It is equipped with RFID technology and has a rich collection in the fields of physics, chemistry, materials, electronics, aerospace, life sciences, computer science, mathematics, remote sensing and defence science technology. It is spread into five floors of DESIDOC and having rich collection of 75,000 books, one lakh technical reports, 30,000 SPIE conference proceedings and latest defence related reference materials. It has special collection of standards, specifications, Jane's publications etc. to meet the information requirement of scientific community. It subscribes to 600 online journals and 200 print periodicals. DSL has one lakh bound volumes of journals from various publishers.
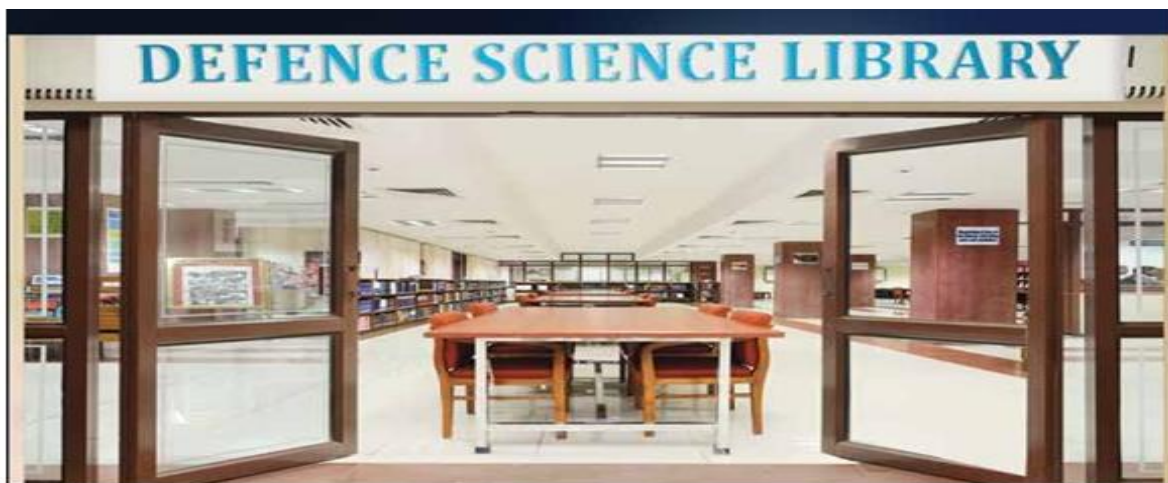
The following services are extended to the scientific community of DRDO

- Digital Library & E-Services (DILES)
- Koha OPAC
- Current Awareness Service
- Selective Dissemination of Information Service
- Infowatch Service(Cluster based)
- Reference Service
- Newspaper Clipping Service

Single Window Services
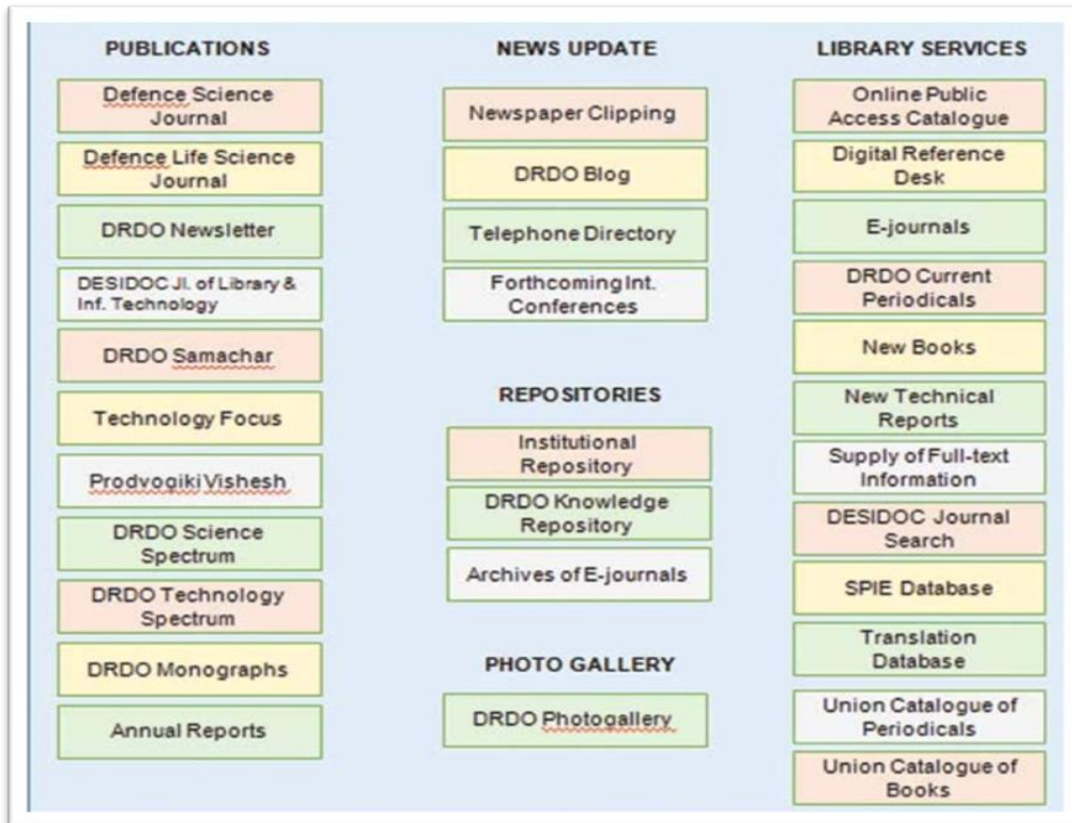
Reference Service

The reference section in a library plays a crucial role in supporting the information needs of library users, researchers, and students. Here are some of the primary functions and tasks performed by the reference section in DESIDOC:

Assisting Library Users: Reference librarians are available to help library users find information, locate materials, and answer questions. They offer guidance and instruction on how to use library resources effectively.

Reference Collection Management: The reference section is responsible for acquiring, cataloguing, and maintaining a collection of reference materials, which may include dictionaries, encyclopaedias, atlases, directories, and more. Librarians ensure that these materials are up to date and in good condition.

Online Resources: Reference librarians often assist users in accessing and navigating online databases, digital libraries, and e-resources. They can help with database searches, online catalogue use, and accessing electronic journals and books.

Research Guidance: Reference librarians provide guidance on conducting research, developing search strategies, evaluating sources for credibility and relevance, and citing sources properly. They can help patrons with bibliographic research and literature reviews.

Interlibrary Loan: When a needed resource is not available in the library's collection, reference librarians can facilitate interlibrary loans, allowing patrons to borrow materials from other libraries.

Reference Desk Services: A reference desk is often located in the reference section, where librarians are available during specified hours to provide immediate assistance to library users. Patrons can approach the desk with their questions and receive real-time support.

Overall, the reference section in a library serves as a hub for information discovery and research support. Its primary goal is to ensure that library users have access to the resources and expertise they need to find accurate, reliable, and relevant information for their academic, professional, or personal pursuits.

Role of reference section is to disseminate the right information to the right user at the right time. DESIDOC tends to serve the information to the scientists of 52 Laboratories.

The queries or request send by the scientist on three platforms (e-digit reference Desk, e-mails , DRONA) which are fulfil by the library staff of DESIDOC.

Types of Reference service offered by DESIDOC DSL are

1. Short Range Service – Short range reference service is a type of library reference service that provides quick and efficient answers to users' information needs. Short Range reference questions typically involve factual information, such as dates, definitions, or statistics, rather than in-depth research or analysis.

The information need fulfil by this method is made available to the Scientist within half an hour by the DSL.

2. Long Range Service – Long-range reference service is a type of library reference service that focuses on providing in-depth research and assistance to users with complex or

specialized information needs. Unlike ready reference services, which typically involve quick answers to factual questions, long-range reference services involve more extensive research and analysis.

The information need fulfil by this method is made available to the Scientist within 7 days by the DSL.

Digital Reference Desk

This service was started for the DRDO scientific community who needed information that was not available in their laboratory. The users send their requirements to DESIDOC which are generally fulfilled within two working days if available with DESIDOC. The non-available documents are obtained from national and international organisations and delivered. Users can look for information on this page for printing or downloading. Referred article section lists article/documents provided by DESIDOC to users.

This service is fully automated using PHP and MySQL. Once the demand is uploaded, an automatic e-mail alert is sent to the user. The database also has search facility to find out the documents uploaded earlier. For providing pin-pointed information in least possible time. This service provides list of collection held at DSL on books, SPIE Conference Proceedings, etc. Each record contains the name(s) of author(s)/ editor(s), title, place of publication, name of publisher and year of publication, accession number and ISBN.

Dissemination through DRDO Digital Reference Desk

First the user create new request on digital reference desk portal containing information

1   User name

2   email id (Drona) 3 Lab name

In next section

The user has to enter the details of the document requested by him/her 1 Resource Type (Journals, Technical Report, Patent, and Standard)

2   Title

3   Author

Some additional fields are also entered by the user while requesting different type of resources –

1 Journals (Title , Author , Journal name , Volume , Issue , year) 2 Patents (Title , Author , Patent no.)

3 Technical Report (Title, Author, Report no.) 4 Standard (Title, Author, Standard no.)

Admin Portal Should is checked properly for the new request by the Reference staff .After finding the resources it should be uploaded on the portal and the email generated by the software is sent to the user for updating him/her. After uploading information to the user it would be deleted by the staff after 7 days from the portal.

If the document requested by the user is only available in print form then with the help of KMD (Knowledge Management Division), it is digitized and sends to the user through email.

Dissemination through DRDO mail

Mail is also one method for dissemination of Information to the user. The user requests the document or information through the Drona mail id with all the necessary information of the user and the document as well. After finding the information it is uploaded on the mail and send to the mail id of that particular user.

Newspaper Clipping Service

This service is one of the highly used and appreciated services by the DRDO research community. It is a compilation based on daily newspapers (covering 17 newspapers) on topics related to DRDO, defence, science and technology, etc.,. This service is available on DRDO Intranet and Internet. The end user can search/browse the contents on the said topics.
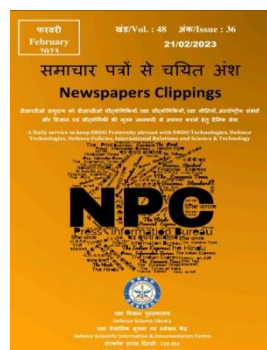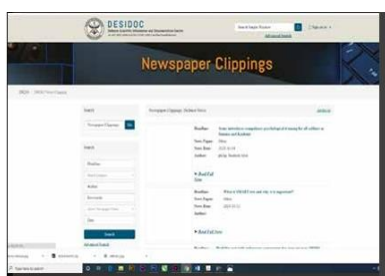
Translation Service

This is the one of the important service maintained by DSL covering French, German and Japanese language articles translated into English language. The articles translated nearly 25 years back were all digitised and made available in a digital library. A user can search the articles on title, author, and language. This service provide by on demand of the user because it is very time consuming.

Online Public Access Catalogue (OPAC)

Online Public Access Catalogue (OPAC) is accessible through Intranet. It covers bibliographic details of books, Conference Proceedings and technical reports held by the DSL. Users can search the OPAC by simple and advanced searches using Boolean operators. Search can also be performed by author/editor, title, accession number, descriptors, subject, ISBN, report number and any word occurring in the title.

Current Awareness Service

Infowatch Service: Fortnightly compilation of news/recent developments in military S&T from Jane's publications. A Current Awareness Service (CAS) is a specialized information service offered by libraries, research institutions, and other organizations to help individuals and professionals stay up-to-date with the latest developments, research, publications, and news in specific fields of interest. CAS is particularly valuable for researchers, academics, professionals, and anyone who relies on timely and relevant information in their work or studies. Content Types**:** CAS may cover a wide range of content types, including research papers, articles, conference abstracts, patents, news articles, and reports. The goal is to ensure that subscribers have access to a diverse range of information relevant to their interests.

Technical Section

In a library, the technical section refers to a department or area responsible for managing various technical aspects of library operations and services. The technical section plays a crucial role in acquiring, processing, organizing, and maintaining library materials to ensure they are accessible to library users. Here are some key functions and responsibilities typically associated with the technical section in a library: Acquisition of Materials: The technical section is responsible for acquiring library materials, including books, journals, electronic resources, audio-visual materials, and more. This involves tasks such as selecting vendors, ordering materials, and tracking orders.

Cataloguing and Classification: Library materials need to be catalogued and classified to make them discoverable to library users. Cataloguers in the technical section create bibliographic records, assign call numbers (using systems like Dewey Decimal Classification or Library of Congress Classification), and input metadata into the library's catalogue.

Processing and Physical Preparation: Library materials must be prepared for circulation. This involves tasks such as affixing labels, barcodes, RFID tags, security strips, and covers to books, as well as ensuring that materials are in good condition.

Inventory Control: The technical section is responsible for maintaining accurate records of the library's holdings, including tracking additions, deletions, and changes in the collection. This helps in preventing loss and ensuring that items are not missing.

Serials Management: Serials or periodicals (such as magazines and journals) require specialized handling. The technical section oversees the receipt, check-in, and shelving of serials, as well as addressing issues related to missing or damaged issues.

The technical section plays a critical role in ensuring that library materials are organized, accessible, and well-maintained. This, in turn, supports the library's mission to provide valuable resources and services to its patrons. The specific structure and responsibilities of the technical section may vary depending on the size and type of the library.

ITC Software- Koha

Koha is a full-featured open-source enterprise-class library system solution. The product is being used by public, academic, and special libraries around the world. Hence, it is available in a wide range of languages with more being added every year. It is flexible enough to support operations of single-location libraries and consortiums. And, as a free open-source platform, there is no vendor lock-in.

Key Features

- Streamlines cataloging processes with automation tools
- Online and offline circulation management
- Label printing
- It is compliant with library standards such as Z39.50 and MARC 21, thus being interoperable with other systems.

KOHA Module

- Acquisition
- Cataloguing
- OPAC (Online Public Access Catalogue)
- Serial Control
- Circulation
- Patron Management
- Searching: Basic/Advance
- Report
- Tools
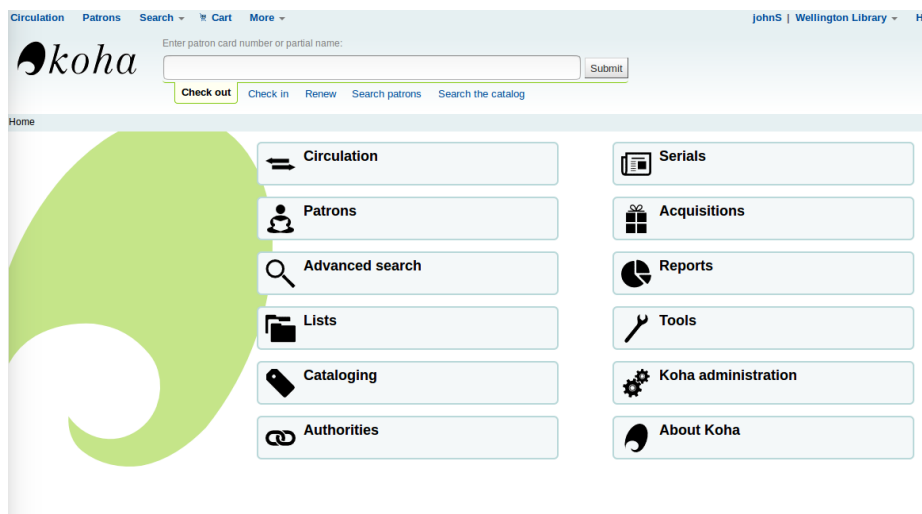
Acquisition Section

Acquisition section is responsible for the selection and purchase of materials or resources. It is the section which manages the budget utilization for purchase of resources. Recommended book list is submitted by each department which undergo duplicate checking against Library holdings; which are then placed in the meeting of Standing Committee for book Selection. Supply order is placed for procurement of the approved books. Books once received are accessioned and entered into the system by this section which is then transferred to Technical Section for technical processing.

The Koha Acquisitions module manages the library orders placed with vendors and manages the purchase budgets. One can add items to catalogue through acquisitions, track vendors and spending against budgets. The Acquisition Module has the functions like setup the budgets/ funding, set the vendors – addition and deletion. One can manage the contracts and suggestions. It has the common functions of placing the orders, creating a basket, receiving the orders, invoicing, claims and late orders. The module also allows making acquisition searches.

ACQUISITION MODULE

Document Requests Book on Approval +Book Reviews

↓

Bibliographical Verification

↓

Duplicate Checking → **If Yes** → Information to Intender

No

↓

Entry in acquisition module + List Preparation

↓

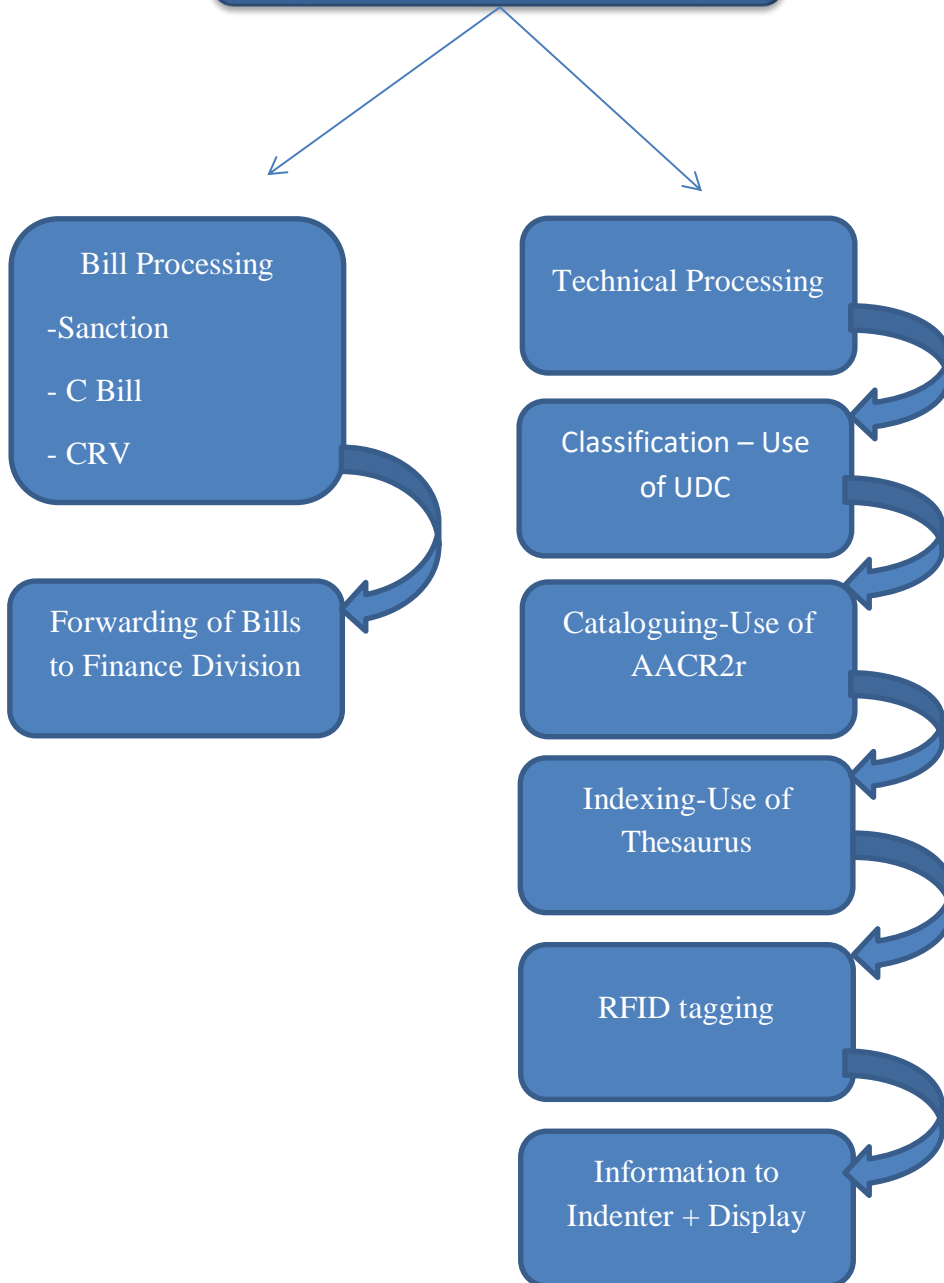Approval from LAC & Director

↓

Supply order to Register Vendor

↓

Receiving ordered Book, Checking

↓

Accessioning

```
                    ┌─────────────────────┐
                    │    Accessioning     │
                    └─────────────────────┘
                       ╱              ╲
                      ╱                ╲
        ┌──────────────────┐      ┌──────────────────┐
        │  Bill Processing │      │ Technical Processing │
        │  -Sanction       │      └──────────────────┘
        │  - C Bill        │      ┌──────────────────┐
        │  - CRV           │      │ Classification – Use │
        └──────────────────┘      │     of UDC         │
                                  └──────────────────┘
        ┌──────────────────┐      ┌──────────────────┐
        │ Forwarding of Bills │   │ Cataloguing-Use of │
        │ to Finance Division │   │     AACR2r         │
        └──────────────────┘      └──────────────────┘
                                  ┌──────────────────┐
                                  │  Indexing-Use of  │
                                  │    Thesaurus      │
                                  └──────────────────┘
                                  ┌──────────────────┐
                                  │   RFID tagging    │
                                  └──────────────────┘
                                  ┌──────────────────┐
                                  │  Information to   │
                                  │ Indenter + Display │
                                  └──────────────────┘
```

Accessioning

Bill Processing
-Sanction
- C Bill
- CRV

Forwarding of Bills to Finance Division

Technical Processing

Classification – Use of UDC

Cataloguing-Use of AACR2r

Indexing-Use of Thesaurus

RFID tagging

Information to Indenter + Display

Circulation Services

Circulation service is a fundamental component of library operations, and it involves the lending, borrowing, and management of library materials, such as books, periodicals, audio visual materials, and other resources. The primary goal of circulation services is to ensure that library users can easily and efficiently access and use the library's collection. Here are some key aspects of circulation service: Borrowing and Returning Materials: Circulation desks or self-checkout stations in libraries are where patrons can borrow library materials by presenting their library cards and returning them when they are due. Staff or automated systems handle the transactions.

Library Cards: Patrons typically need a valid library card to borrow materials. Library staff issue library cards to eligible individuals, and these cards serve as a form of identification for patrons.

Check-out

Check –in

Radio Frequency Identification (RFID)


Radio Frequency Identification (RFID) system is used in DSL which operates at a frequency of 13.56 MHz. The chips are inserted in the book for enabling the issue, return, renewal and stock verification of books. Through RFID a user can also get the books issued/returned by their own self. An electronic article surveillance system is also deployed at the main entrance of the DSL.

Accessioning

Accessioning forms part of the legal and ethical obligations of a repository when they take in material. By documenting receipt of legal agreements and accounting for contents, accessioning helps to authenticate the provenance of the records by accounting for chain of custody as well as address any transfer of physical or intellectual property.
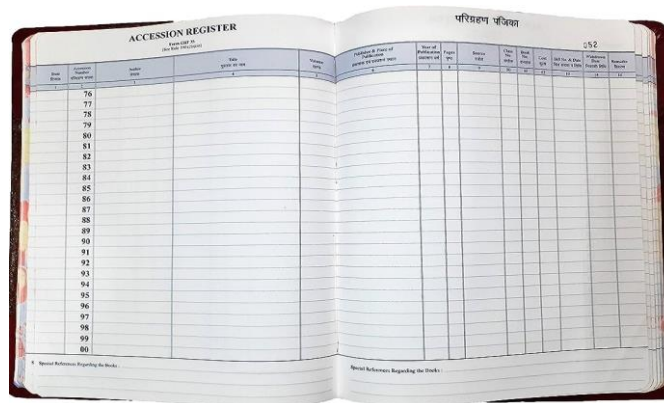
Barcoding

Barcode technology is nothing but changing the data in to the black and white stripes which in turn will be read by the Optical Scanners. This will facilitate in reducing the human errors. This is almost foolproof technology. Though it is not widely used yet in the libraries but this is a technology which will improve the efficiency and speeding up of the operations like issues, returns and renewals at the circulation counters. It will also help in taking the inventory of the books with some additional equipment to facilitate the books inventory faster. Software plays vital role in printing barcode labels. One can use ordinary stationery or pre-printed labels also to print barcode labels. There are various ways to generate the barcodes. Dot matrix printers, laser printers and special printers like Thermal Transfer Printers are used to print barcode labels.

Classification

DESIDOC uses UDC classification scheme. The Universal Decimal Classification (UDC) is a widely used classification system for organizing and categorizing the subjects of books and other materials in libraries and information centres. Developed by Paul Otlet and Henri La Fontaine in the late 19th century, the UDC system is based on the Dewey decimal classification and the Cutter Expansive Classification, but it offers greater flexibility and specificity. Here are some key features and aspects of the UDC classification system:

Notation System: UDC uses a notation system consisting of Arabic numerals and letters. The notation represents the main subject of a work, as well as its relationships to broader and narrower topics.

Decimal Structure: The UDC notation follows a decimal structure, where each number represents a specific aspect or facet of the subject. The notation is divided into three main parts: the main class, division, and section.

Main Class: The first digit represents the primary subject area or class, such as 1 for Philosophy, 5 for Mathematics, and 6 for Technology.

Division: The second digit refines the subject further within the main class.

Section: The third digit provides even more specific subject details.

Auxiliary Tables: UDC uses auxiliary tables to extend and refine the classification. These tables include various tables for geographic areas, form divisions, languages, and more.

Faceted Structure: UDC is known for its faceted structure, which allows for the combination of different facets (subject, form, place, time, etc.) to create a more precise classification. This feature makes UDC highly versatile for classifying a wide range of materials.

Relative Index: UDC provides a Relative Index (a list of keywords or terms) that helps users find materials within the classification system. It acts as a guide to the classification scheme.

Multilingual: UDC is designed to be used in multiple languages, making it suitable for international libraries and information systems.

UDC FILING ORDER

The filing order of UDC symbols is based on a progression from the general to the particular. Thus, a common auxiliary used as an independent number is filed before a main number. This is followed by a compound number having the plus sign or the stroke in it, as it is broader in meaning than a simple number. Next, The simple numbers are filed in the order of increasing length. The length indicates specificity(due to an auxiliary) or particularity (dud to hierarchicaldivision)

SYMBOL	EXAMPLE	TITLE
+	622+699	Mining and Metallurgy
/	622/693	Mining and Military Science
Simple Number	622	Mining
:	622:338.3	Productivity in Mining
=	622=112.2	Documents in German aboutmining
(0...)	622(0.035.2)	Microform documents about mining
(1/9)	622(430)	Mining in Germany
(=..)	622(=1.366)	Mining among the ancient British
"="	622"18"	Mining in the nineteenth Centaury
*	622*Fe2O3	Mining of red hematite
A/Z	622GOE	Mining of named ores goethite
-0	622-057.2	Manual workers in mining
-1/-9	622-78	Protective devices and measures in mining
.0	622.03	Geological Character of oredeposits
'	622'17	Trailings,waste,residues,from mining
Next Simple Number	622.3	Mining(extraction) of specificminerals

Cataloguing

Cataloguing is a crucial process in libraries and information management that involves the creation of bibliographic records for library materials to make them discoverable and accessible to library users. The primary goal of cataloguing is to provide accurate and consistent descriptions of library items, facilitating efficient retrieval of these items when users search the library's catalogue or database.

Union Catalogue of Periodicals: It is a database developed by using PHP and MySQL as tool to access journal holdings information across all DRDO libraries. Its collection covers all the periodicals subscribed by the labs from various publishers. The labs can also update their titles after receipt of the new issues. Using this database, users can check the availability of the journals from sister labs and can send the demand to the lab directly.

Union Catalogue of Books: The software system has been developed for unified online library catalogue of books available in all DRDO libraries. The union database contains bibliographic description, location and holdings information for books in all subject areas available in DRDO libraries across the country. A web-based interface is designed to provide easy access to the merged catalogues. This catalogue is a major source of bibliographic information that can be used for inter-library loan, collections development as well as for copy cataloguing and retro-conversion of bibliographic records. **Through KOHA.**

Periodical Section

A periodical is a serial publication. A serial is any publication that is published at regular intervals (Daily, weekly, monthly, quarterly, or annually) under the same title and intended to continue indefinitely. Periodicals, magazines, newspapers, journals, annual reports, etc. are all serial publications. Periodicals are also referred to as journals. In general, the information in periodicals is timelier, current and up-to- date than information in books. Periodicals are of many types such as scholarly periodicals, trade and business periodicals, popular periodicals and magazines. Periodicals are published by learned societies, R&D organizations, universities, trade and business organizations and commercial publishers.

The work in the periodicals division can be divided into different stages:

a)   Receiving, recording and stamping the received issues of the periodicals.

b)   Sending periodicals to the reading room for use. This includes arranging current periodicals for display or sending them to the shelves if not displayed.

c)   Tracing the missing issues and maintaining correspondence with the publishers or vendor or whosoever the suppliers are.

d)   Maintaining all the relevant record related to periodicals.

e)   Maintaining the periodicals display rooms by placing only the latest issues on the display racks and sending or keeping away the previous issues in proper places.

f)   Shelf maintenance and shelving of bound and current periodicals

g)   Collecting and collating different issues of periodicals for binding.

h)   Carrying out preservation activities related to periodicals

i)   Weeding, withdrawal, and disposition of periodicals.

The periodicals division supports research mission of the research libraries by providing public assistance, access, storage, maintenance and management of periodical collection. For this, libraries usually display periodicals for the benefit of their users. By actually seeing the displayed periodicals, users can be attracted towards them, thereby resulting in greater use of this category of library materials. Methods of display of periodicals are determined by a number of factors which include:

a)   Type of periodicals acquired

b)   Floor space available

c)   Layout of the library

d)   Type of users coming to the library

The periodicals can be arranged by different ways on the display racks. The best method of course is the alphabetical arrangement.

Collection of periodicals in DESIDOC 8 Magazines are subscribed, 13 newspapers, DRDO publications, Encyclopaedias, handbooks, yearbooks, Jane's publication, publication on Military Science, electronic, Technology etc.

Network Services

DESIDOC caters to the variety of users and provides access to various DRDO activities through Internet and Intranet. DESIDOC is Sub-Main Routing Centre of DRDO Intranet and is responsible for taking care of Intranet network for all DRDO labs in Metcalfe House complex. It is also responsible for live webcasting of all major events of DRDO. DESIDOC is responsible for design, development, hosting, and maintaining DRDO website on Internet. Advancement in information and communication technologies had a multiplier effect on the exponential growth of information and its availability at the click of the mouse. DESIDOC being the hub of information caters to the variety of users and provides access to its services through Internet and Intranet.

DRDO INTERNET WEBSITE

As the Internet website of DRDO is viewed globally, maintaining its smooth operation, timely updating and above all, its security from imminent cyber-attacks, have been a responsibility of utmost importance and is well taken care by DESIDOC. All the latest news, events like DRDO@60 celebrations, Dare to Dream contest,

DRDO's participation in international events like Aero India, DefExpo, along with recruitment related information is being maintained bilingually by DESIDOC through the DRDO website. It remains one of the most visited government websites. The website recorded around 3 million hits in 2019. The average visit per day is 78,082. The website maintains more than 99.85 per cent uptime annually.

DRDO INTRANET SERVICES: DRONA

DESIDOC is also a Main Routing Centre for DRDO Intranet. It is responsible for taking care of local Intranet network in the Metcalfe House based DRDO labs. It is also responsible for live webcasting of all major events through Intranet. Besides this, DESIDOC also upkeeps

and maintains all Intranet equipment ISG-D, Routers and leased lines at all the labs in the Metcalfe House campus and provide Video conferencing support and modifications in the firewall entries of labs.

DESIDOC also hosts various information and knowledge services placed under a single window service page on DESIDOC website on local Intranet for DRDO users. A bilingual DESIDOC website on DRDO Intranet covers information on DESIDOC achievements, Director's profile, activities of various divisions, services provided under Single Window Service and features such as video and photo coverage of various functions held at DESIDOC.

DESIDOC work in close connection with academic institutions for building strong knowledge base. The prominent ones are:

NISCAIR   IIT Delhi

Delhi University   DELNET

JNU   IIM Lucknow

Interactive Kiosk

A touch screen kiosk terminal has been established at DESIDOC. It provides instant information on books, journals, and periodicals available at DESIDOC. Users can access Online Public Access Catalogue (OPAC) through this Kiosk and search for books of their interest. The Single Window Service can also be accessed. A similar set- up is also planned at DRDO Knowledge Centre at DRDO HQrs.

DRDO E-library services

DRDO e-Library of DESIDOC that serves users on-the go access on mobile of a massive collection of over 5 Lakh+ e-resources and information feeds including e-journals, eBooks, open source resources, expert talks, etc. anywhere-anytime without worrying about IP-based authentication.
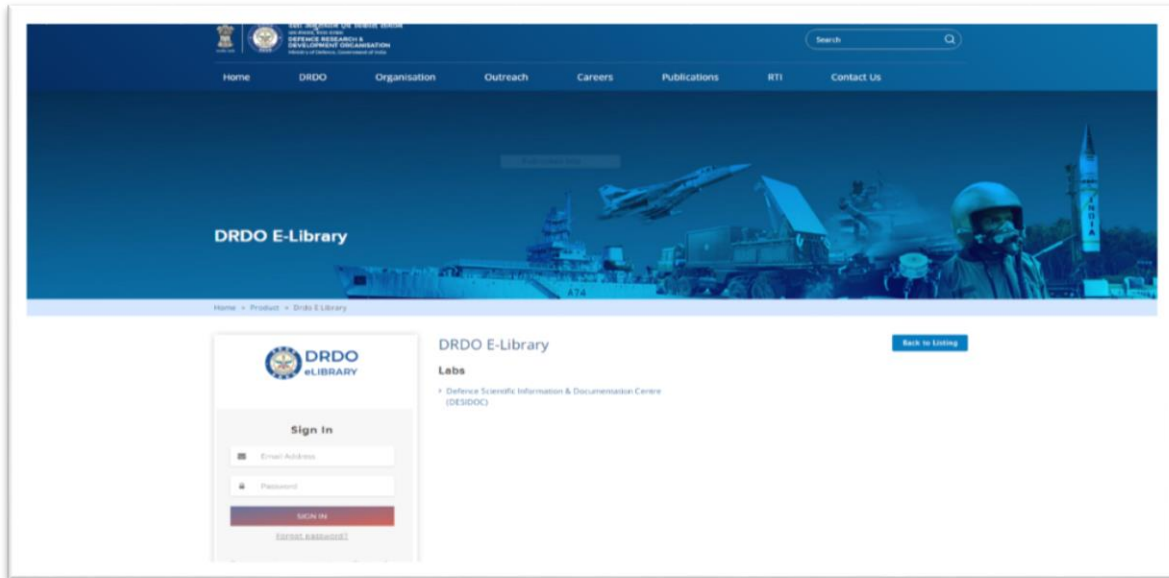
Printing Services

DESIDOC has high-end digital and offset machines to handle printing of both regular and ad-hoc DRDO publications and materials like booklets, pamphlets, brochures, posters, etc,. from DRDO HQrs, Delhi-based and on demand from DRDO Labs.

DESIDOC has facility for the preparation of positives, Pre-sensitised (PS) and Metijet printing plates, offset and digital printing. It is also equipped with Computer-to-Plate (CtP) system for preparation of CtP plates, computerised printing down frame for exposing the offset plates, punch registration system with pin bars for correct registration of the colour jobs.

Conclusion

DESIDOC stands for "Defence Scientific Information & Documentation Centre," which is an organization under the Defence Research and Development Organization (DRDO) in India. It primarily focuses on scientific information management, documentation, and research support services for the defence and security sectors.

Significant Contribution: DESIDOC plays a crucial role in supporting defence research and development in India. It provides valuable information resources, research support, and scientific documentation services to scientists, researchers, and defence personnel.

Information Management: The organization excels in the management of scientific and technical information related to defence and security. It collects, organizes, and disseminates this information, ensuring it's readily available to researchers and decision-makers.

Research Support: DESIDOC supports defence and security research through its library services, access to databases, and collaboration with various research institutions. It aids in knowledge sharing and collaboration within the defence and scientific community.

Digital Transformation: In the era of digitalization, DESIDOC has embraced modern technologies to enhance its information services. This includes the digitization of documents, online databases, and digital libraries to facilitate easier access to information.

Collaborative Initiatives: The organization often collaborates with national and international institutions, libraries, and information centres, promoting the exchange of knowledge and expertise in the field of scientific information and documentation.

REFERENCES

https://www.drdo.gov.in/drdo-e-library
https://www.drdo.gov.in/
Official Website of Koha Library Software (koha-community.org)
Publications | Defence Research and Development Organisation - DRDO, Ministry of Defence, Government of India