



DEPARTMENT FOR PROMOTION OF
INDUSTRY AND INTERNAL TRADE
MINISTRY OF COMMERCE & INDUSTRY,
GOVERNMENT OF INDIA

PM
GatiShakti
National Master Plan for
Multi-Modal Connectivity

E – book on Launch of National Logistics Policy



वाणिज्य एवं
उद्योग मंत्रालय
MINISTRY OF
COMMERCE
AND INDUSTRY

E – book on key
initiatives in Logistics

National Logistics Policy

Logistics efficiency is a function of infrastructure, services (digital systems / processes / regulatory framework) and human resource. PM GatiShakti National Master Plan (NMP) for multimodal connectivity infrastructure to various economic zones, has been launched. It is a transformative approach for improving logistics efficiency and reducing logistics cost, with focus on integrating existing and proposed infrastructure development initiatives of different agencies, to ensure first and last mile connectivity, for seamless movement of people and goods.

While development of integrated infrastructure and network planning is envisaged to be addressed through the PM GatiShakti National Master Plan, for efficiency in services (processes, digital systems, regulatory framework) and human resource, the National Logistics Policy is the logical next step. This will provide a comprehensive agenda for development of entire logistics ecosystem.



Vision

“ To develop a technologically enabled, integrated, cost-efficient, resilient, sustainable and trusted logistics ecosystem in the country for accelerated and inclusive growth.”

Targets

01



Reduce cost of logistics in India to be comparable to global benchmarks by 2030

02



Logistics Performance Index ranking – endeavour to be among top 25 countries by 2030, and

03



Create data driven decision support mechanism for an efficient logistics ecosystem.

Comprehensive Logistics Action Plan (CLAP)

The Policy will be implemented through a Comprehensive Logistics Action Plan (CLAP).

The interventions proposed under the CLAP are divided into eight key action areas:

(i) Integrated Digital Logistics Systems:

Develop a system of unified logistics interface to link multiple data sources and develop cross sectoral use cases for logistics stakeholders.

(ii) Standardisation of physical assets & benchmarking service quality standards:

Enhance interoperability, minimize handling risks, undertake process optimisation, and improve ease of doing business, through standardisation of physical assets and benchmarking of service quality standards in logistics.



(iii) Logistics Human Resources Development and Capacity Building: Develop an overarching logistics human resource strategy and under its guiding principles, line ministries to develop action plans to address skill development related and internal capacity building challenges in the respective sector.

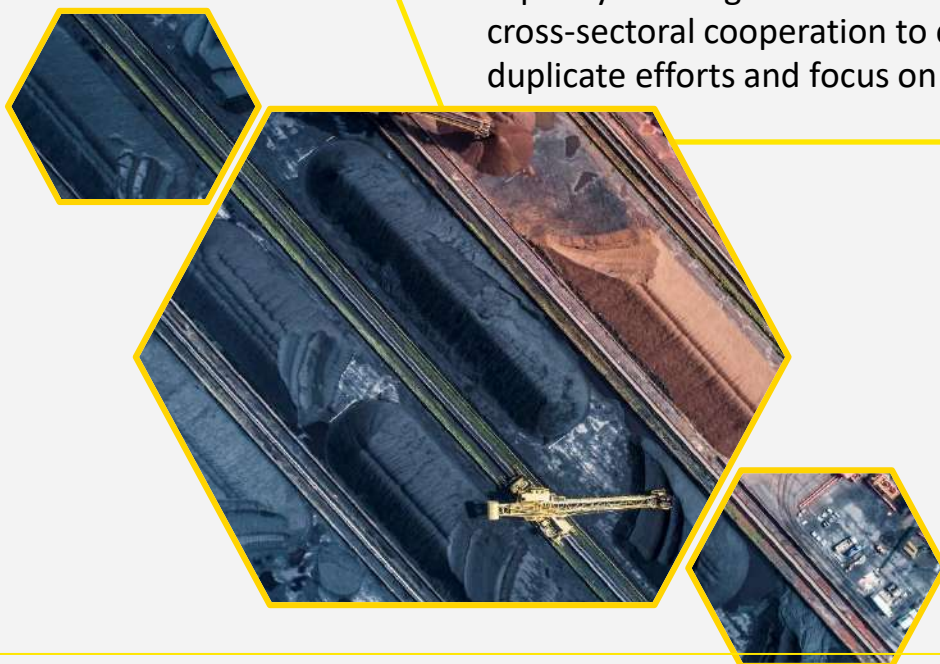
(iv) State Engagement: Provide support for development of state/city level logistics plans, set up institutional framework to take action at city/state level, measure and monitor action by states and rank them.

(v) EXIM (Export-Import) Logistics: Addressing infrastructure and procedural gaps in India's EXIM connectivity and create efficient and reliable logistics network, with transparent and streamlined cross-border trade facilitation, for improved trade competitiveness and greater integration of India with regional and global value chains.



(vi) Service Improvement framework: Improving regulatory interface to enable seamlessness between sectors, promote standardisation, formalisation, inter-operability; eliminate fragmentation in documentation, formats, processes and liability regimes; reduce gaps in regulatory architecture.

(vii) Sectoral Plan for Efficient Logistics: Sectoral Plans for Efficient Logistics (SPEL) aligned with PM GatiShakti, will be developed for each sector with underlying philosophies of inter-operability, resiliency, sustainability, and innovation. Specifically, SPEL would (i) address logistics issues pertaining to infrastructure, processes, digital improvements, policies and regulatory reforms, and capacity building for better workforce, and ii) prioritise cross-sectoral cooperation to complement and not duplicate efforts and focus on optimisation of modal mix.



(viii) Facilitation of Development of Logistics Parks: Logistics parks (eg. Multi Modal Logistics Parks, Air Freight Stations, Inland Container Depots, Container Freight Stations, cargo terminals, etc.) are hubs for intermediary activities (storage, handling, value addition, inter-modal transfers, etc.) in the supply chain connected by a transportation network. It is envisaged to take following steps to facilitate development of logistics parks:

- Draft framework guidelines to facilitate development of Logistics Parks in the country with focus on encouraging private investment.
- Create a network of logistics parks by mapping them on the PM GatiShakti NMP, for enhanced visibility, improved logistics efficiency, optimum utilisation and connectivity.



e-Handbook on Warehousing Standards

Standardisation of physical assets and benchmarking of service quality standards:

Warehousing and related assets are an important segment of the overall logistics sector in the country. In the warehousing value chains, “standardisation” is becoming essential for reducing costs, improving efficiency, and ensuring global compatibility as well as competitiveness.

While there are many generic infrastructure design and operational standards published in India, awareness about applicable warehousing specific standards itself poses a challenge before they are even applied by facility operators, owners, developers and regulatory agencies. A need was thus felt to create a e-handbook collating existing standards and global best practices for easy reference to the sector.

A team of experts from private industry and the Logistics Division, Ministry of Commerce and Industry, Government of India collated existing standards within the country, including international best practices and standards. The Logistics Division, subsequently organised extensive stakeholder consultations and has finalised the present e-handbook.

Identifying all relevant agencies pertaining to Standardisation and publishing by non-government agency:

This e-handbook includes the existing standards that are issued by the standards agencies such as the Bureau of Indian Standards (BIS) and the Warehousing Development and Regulatory Authority (WDRA), and wherever there are gaps those have been identified and suggestions have been made thereof.

The standards followed in the sector go beyond the prescribed mandatory standards by government agencies, industry and international standards based on the needs seamless global supply chain, thus it is necessary for leading members from the industry to involve in the preparation of such handbook to keep it relevant in future.



The expertise from private sector is bound to benefit based on usage pattern, the market can be split into single and co-warehousing segments.

The co-warehousing segment is expected to witness significant growth in the market through 2025 which is dominantly in private domain.

This can be ascribed to the increasing demand for last mile distribution and growing preference for co-warehousing among manufacturers, suppliers, logistic companies as well as start-ups.

India warehousing market was valued USD14.65 billion in 2019 and is forecasted to grow at CAGR of 9.82% to reach USD19.53 billion by 2025 by opening up the sector to private investments ensuring the relevance of the benefit to be gained from private players contribution.



Implementation plan for adoption of Standards by various agencies:

The e-handbook envisages to act as an enabling and guiding handbook for facility operators, owners, developers and regulatory agencies to identify and implement facility and sector specific standards.

Warehousing Association of India (WAI) would support to disseminate, raise awareness in the sector for adoption and revise the e-handbook over time for it to stay relevant.

As India's logistics sector evolves, it is likely to experience several changes in planning, construction and operations of warehouses in the coming years.

All stakeholders, including developers, occupiers, fund providers, project managers and maintenance operators need to put in a consolidated effort to synchronise their isolated preferences which can be achieved through adoption of e-handbook.



LEADS

The Government of India has prioritised developing a robust and cost-efficient logistics ecosystem. To fulfil this vision, the logistics division of DPIIT, Ministry of Commerce & Industry undertakes an annual “Logistics Ease Across Different States (LEADS)” survey in all States/ UTs to assess and suggest various improvements in logistics sector of the country.

The LEADS survey assesses the viewpoints of various users and stakeholders across value chain (Shippers, Terminal Infrastructure Service Providers, Logistics Service Providers, Transporters and Government agencies) to understand the ‘enabler’ and ‘impediments’ to logistics ecosystem in the country.

Anecdotal evidence (gathered basis industry interactions) also forms a key part of the framework as this anecdotal evidence will be treated as a guide to understand the key issues and challenges faced by the industry stakeholder.

The annual survey processes the data received from stakeholders and States/ UTs; and ranks logistics ecosystem of each State/ UT using a statistical model based on perception inputs and objective data for respective States / UTs using a statistical model.

LEADS focusses on indicators introduced across 3 pillars – Infrastructure, Services and Operating & Regulatory Environment. Infrastructure covers 5 indicators related to quality of available logistics infrastructure. Services covers 9 indicators related to price reasonableness (freight rates & terminal services), timeliness (transportation & terminal services), safety and security (transportation & terminal services) and availability of mobile/ internet connectivity. operating and regulatory environment covers 3 indicators related to extent of facilitation offered by the State/ UT, ease of obtaining all approvals and lastly efficiency of regulatory services.

The two previous LEADS reports were studied and reviewed, and extensively discussed with domain experts. Subsequently two major changes were made in LEADS 2021 exercise.

First was to introduce select Objective parameters as part of the index formulation to expand the LEADS index’s spectrum. The objective parameters in the LEADS 2021 index were introduced by way of objective survey instruments administered to the States/ UTs and by the inclusion of data variables of logistics ease at the State/ UT level.

The second was to extend statistical methodologies to include method for factor analysis.

LEADS 2021 exercise garnered a total of 3,771 responses out of which 3,363 responses were considered after data cleaning (broadly adopted from the earlier studies, along with the use of Multiple Imputation Chained Equation packages in R).

The LEADS 2022 Survey was rolled out in April this year. Physical meetings were held with more than 20 National Associations of Logistics sector and more than 75 Regional Associations across the country. Their active participation resulted in more than 6,000 responses being collated. The States/ UTs extended their support by providing necessary data pertaining to the survey.

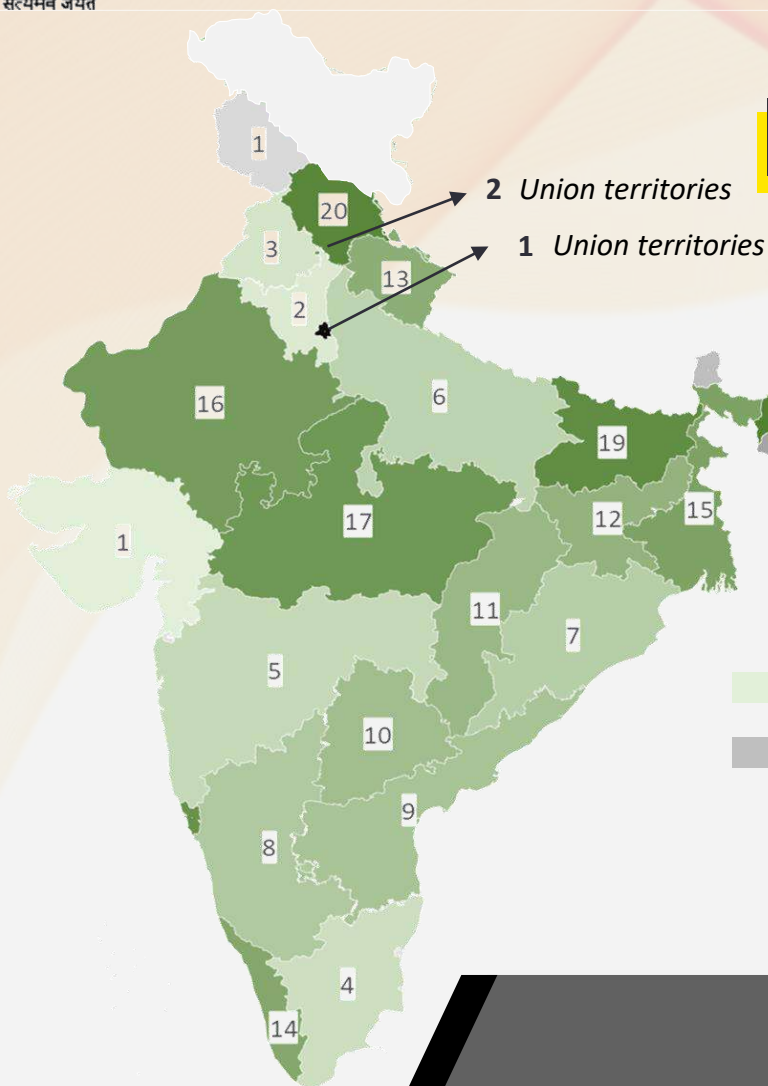
The LEADS 2022 survey also involves a component of PM-GatiShakti initiative (PMGS), as PMGS is playing a crucial role in developing a robust logistics visualisation platform in close coordination with BISAG-N.

The LEADS exercise envisages the following outcomes: -

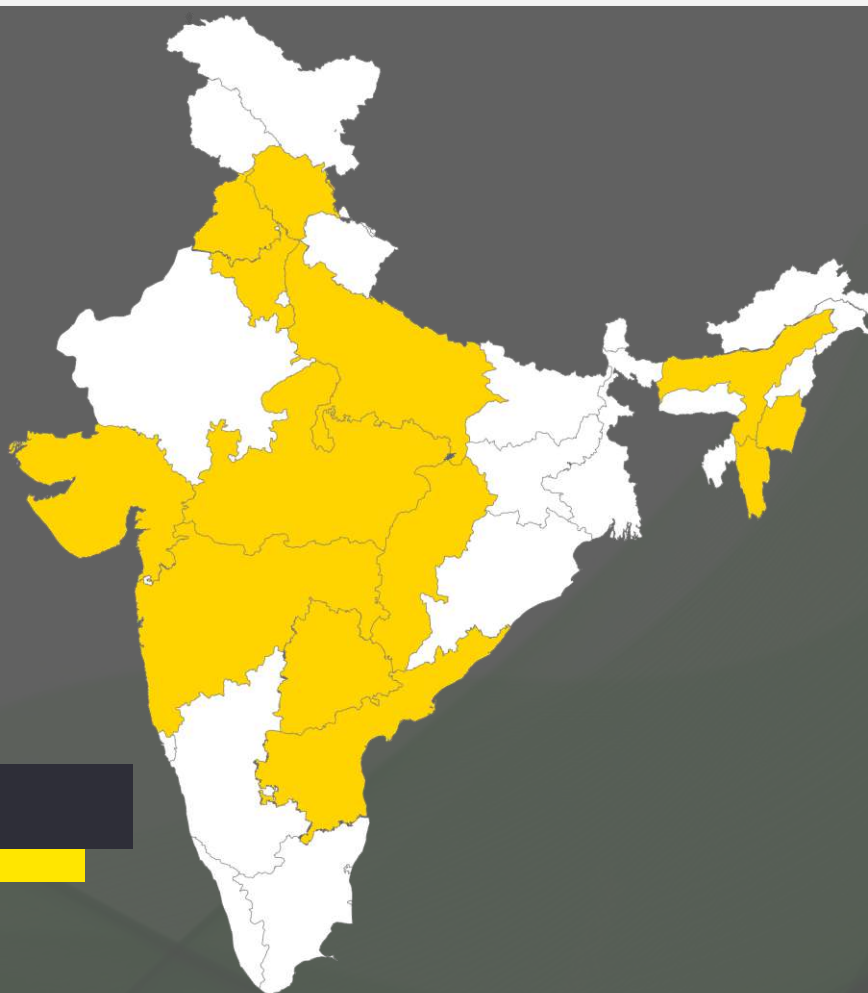
1. **Action for state/ UT governments** – LEADS a ready reckoner document of issues faced by industry on ground and suggestive mitigatory measures, laying foundation for possible logistics vision for the State/UT. It encourages States to make logistics sector a priority on their list and establish an institutional mechanism for logistics. It also nudges the States to take proactive policy initiatives in the form of State Logistics Policy and Plans and encouraged to create a repository of datapoints pertaining to major covenants on logistics.
2. **Interaction with private stakeholders** – LEADS serves as a platform to interact with private stakeholders in form of associations, traders, shippers, logistics companies, transport companies etc. and gauge their issues with respect to logistics, this makes the overall logistics eco-system much more responsive and healthier.
3. **Cooperative Competitive Federalism** – LEADS further promotes the concept of Cooperative Competitive Federalism where States / UTs not only learn from one another but also imbibe a competitive spirit to accelerate initiatives and development in logistics sector

Ultimately, initiatives like LEADS & PMGS aim to improve the logistics efficiency of the country which will not only improve our domestic and EXIM movement but also improve our rankings in international exercises such as Logistics Performance Index (LPI) conducted biennially by the World Bank.

The LEADS 2022 exercise is scheduled to be completed by end of September 2022 and subsequently release of LEADS 2022 report is scheduled in October 2022.



**States that have framed
logistics Policy**



Unified Logistics Interface Platform (ULIP)

Background

To achieve an “Atmanirbhar Bharat” in the logistics sector, Unified Logistics Interface Platform (ULIP) has been identified as a promising initiative which has been conceptualised to provide an integrated platform that can be effectively utilized by the stakeholders to enhance efficiency, utilize technology, and reduce the cost of logistics in India.

As per the vision of Hon’ble Prime Minister, ULIP was identified as one of the seven initiatives under the “Technology Commons” initiative which leverages technology in specifically identified priority areas by developing world-class products /services incorporating key user and stakeholder requirements.

Development

NICDC’s Logistics Data Bank Project has been leveraged to develop ULIP. It is in line with the overall objective of PM GatiShakti which aims at breaking individual silos, promote integration among various Ministries/Departments and create a single window thus bringing efficiency and transparency in the logistics industry and thus making India cost competitive.

This platform will be utilised by various Govt. and private agencies, service providers, shippers, consignees etc. to enable information exchange on a real/near real time basis amongst all stakeholders in a confidential manner. ULIP will address the challenges of delayed processes and manual activities in India’s logistics sector and will be a game changer for the Indian logistics landscape.



ULIP Architecture

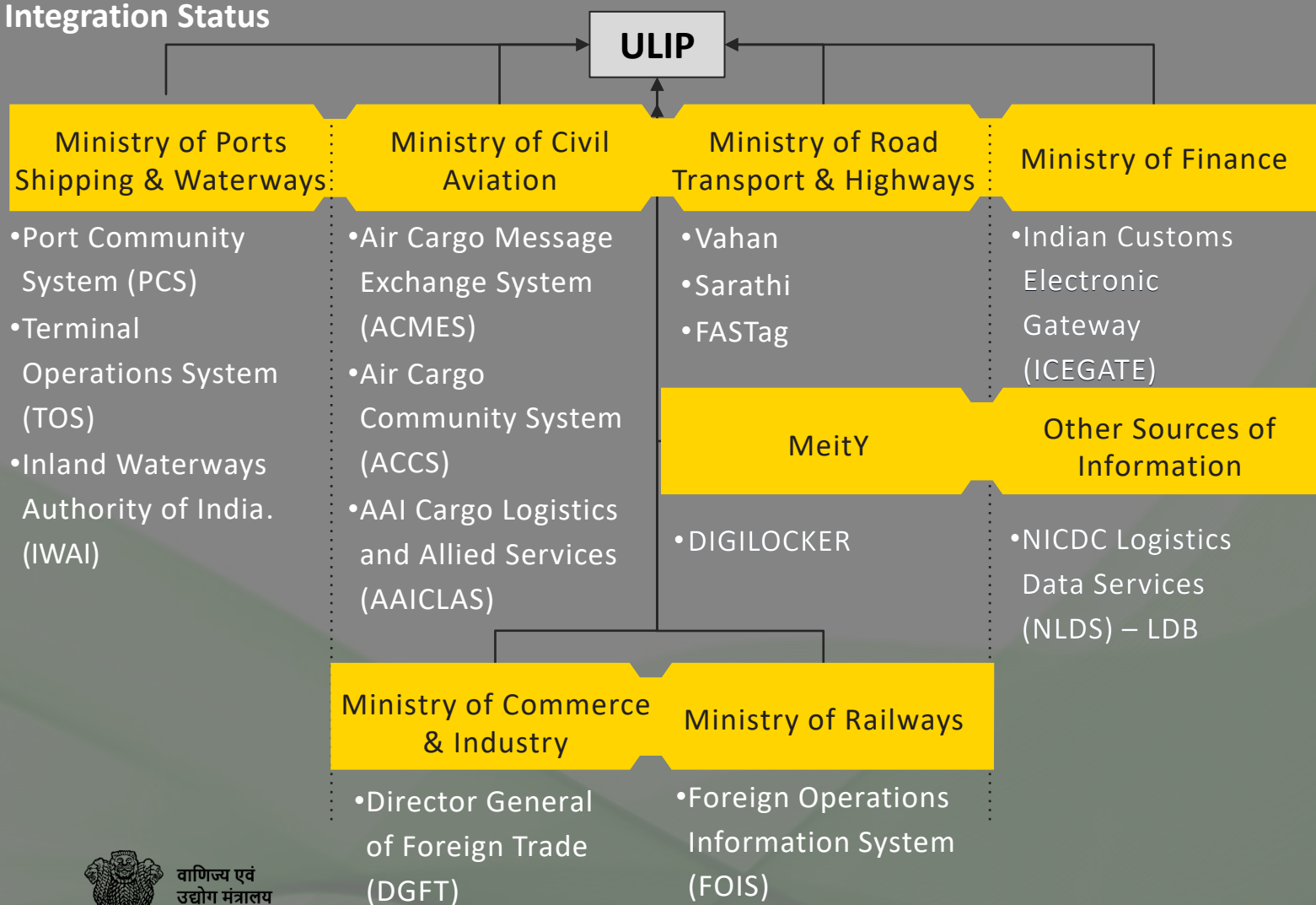
ULIP is an open-source platform which works on a request & response-based system that integrates multiple systems of different stakeholders. The platform is a three tier structure comprising of Application Layer, Governance Layer and Presentation Layer.

Application Layer acts as a bridge between the data source and the user of the data. While the Governance Layer helps the Policy Makers to ensure compliances and take policy decision. Private Sector players are being promoted for the purpose of developing Presentation Layer which will act as an interface with the end customer.

Current Status

The ULIP platform as a whole is divided into three layers namely Integration layer, Governance layer and Presentation layer. Under the Integration layer and the Governance layer, 30 logistics systems of 07 Ministries/Departments covering over 1600 fields have been integrated through 102 APIs with ULIP. The aim is to create a UPI kind of a structure in which every single transaction of the logistic department can be authenticated. The Presentation layer is to be developed by involving the private sector.

Integration Status





Benefits

ULIP would have direct and indirect benefits to all stakeholders of the logistics ecosystem. By utilizing the information available with ULIP, the stakeholders can avail following benefits:

Benefit to the Govt. authorities /agencies:

- i. Support as a planning tool for prioritizing and building logistics infrastructure.
- ii. Robust information and process structure to improve international competitiveness.
- iii. Support inter-ministry / inter-agency collaborations, promoting ease-of-doing-business.
- iv. Help in better handshaking between the stakeholders which in turn will encourage optimised utilization of various modes of transportation available.

Benefit to shipper/consignees:

- i. Support for informed decision making and “Just-In-time” inventory management.
- ii. Real-time process and cargo movement monitoring on a single platform.
- iii. Identification of cheaper logistics modes.

Benefit to Truckers:

- i. Source of information for transport demand identification.
- ii. With transparency and visibility, truckers shall be able to reduce empty movement and waiting time, thus reducing the operations and maintenance cost.

Benefit to logistics service providers:

- i. Support stakeholders for simplification of the tedious documentation process.
- ii. Enable various value-added services to end-customers
- iii. Facilitating stakeholders for information-driven pricing strategy, cost & labor optimization.

ULIP will help logistic stakeholders in multiple ways. It is in line with the overall objective of PM GatiShakti which aims at breaking individual silos, promote integration among various Ministries/Departments and create a single window thus bringing efficiency and transparency in the logistics industry and thus making India cost competitive and ‘Atmanirbhar’ in the logistics sector.



E-LogS - Dashboard for Ease of Logistics Services

Service Improvement Framework of National Logistics Policy

Logistics efficiency is a function of infrastructure, services (digital systems/processes/regulatory framework) and human resource.

PM GatiShakti, a transformative approach for improving logistics efficiency and reducing logistics cost, has been launched for integrated infrastructure development in the country.

For a holistic approach to logistics efficiency, The National Logistics Policy 2022 (NLP) proposes to establish a Services Improvement Framework for:

- ✓ Improving regulatory interface to enable seamless handshaking between logistics sectors
- ✓ Promote standardization, formalization, and inter-operability
- ✓ Streamline fragmentation in documentation, formats, and processes
- ✓ Reduce gaps in any existing regulatory architecture



The Framework is envisaged to be operationalized through:

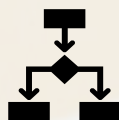
- 1. Formation of a Services Improvement Group (SIG)** on the lines of the Network Planning Group (NPG). SIG will comprise of officers nominated from various user ministries and will provide for the monitoring and coordination mechanism for unresolved user issues pertaining to services, documentation, processes, policy, along with identification of interventions for improving user interface.
- 2. Creation of a Digital Dashboard - E-LogS: Ease of Logistics:** A digital system for registering, coordinating, and monitoring resolution of user issues is being developed on which authorized user associations will register and upload their issues/suggestions. This portal has been developed by the Logistics Division, DPIIT to facilitate time-bound resolution of issues.



Features & Deployment plan



Single-portal for
submission of logistics
service-related
issues/suggestions



Evidence based decision
making



Digitized recording,
tracking, and resolution



Established SLAs and
escalation matrices



Institutional knowledge
repository

Authorized Users Registered on E-LogS

E-LogS: Process Flow

Step 1: Log-in

Step 2: Add Issue/ Suggestion with single/
multiple stakeholders

Step 3: Add title, priority and upload
relevant documents. Create issue with a
single click. All stakeholders notified via e-
mail in real-time

Step 4: SIG in consultation with Ministry/
Department uploads the decision

Step 5: Resolution of the Issue is shown to
the concerned User

- Dashboard to present metrics on timelines, status of resolution, and attached evidences.
- Services Improvement Group (SIG) to do overall coordination and monitoring



Training Courses on IGoT Platform

India is emerging as a global

powerhouse in backend operations and planning side of the supply chain. Hence, it provides for a unique opportunity for taking lead in the skilled manpower to address the needs of the global supply chains.

To achieve this, the capacity development in the Central and State Governments should reach up to the cutting edge/ implementation level.

To carry through, mandatory certificate courses with evaluation are being designed using Integrated Government Online Training (IGoT) platform of Department of Personnel Training (DoPT), as they have the mandate of training the government officials. It is an e-learning platform for civil servants dispersed across the country.



“

A course on PM GatiShakti Initiative is being developed for the overall capacity building of the Civil servants, dealing in infrastructure-related projects, both at the Centre and State.



Module 1: Introduction of PM GatiShakti

- i. Understand concept of PM GatiShakti
- ii. List the objectives of PM GatiShakti National Master Plan
- iii. Identify the expected outcomes of PM GatiShakti
- iv. Present Case Studies on use of PM GatiShakti NMP



Module 2: Planning & Decision-Making Tools under NMP Portal

- i. Tools for efficient planning & decision making are discussed:
 - Road Alignment Tool
 - Utility Shifting Tool
 - Tree Cutting Tool
 - Road cutting/Filling Tool
 - Land acquisition including Land Parcel Valuation Tool
 - Swipe Tool
 - Data creation Tool
 - Go/ No-Go Area Tool
 - Dynamic Query Tool
 - Navigation Tool
 - Proximity Analysis Tool
 - Intersection Tool
- ii. Need Identification for Tools



Module 3: State Engagement

- i. Role of the State in the PM GatiShakti
- ii. Institutional Framework at State Level
- iii. Data Layers from State
- iv. State Master Plan
- v. Project Monitoring through PMG
- vi. Special Assistance to States for Capital Investment
- vii. Present Case Example of PM GatiShakti State Master Plan (SMP)



Module 4: Project Monitoring Framework

Integration of NMP with

- i. PMG Portal
- ii. Role of Proponent Ministry
- iii. Role of Other Ministries
- iv. Role of State Government
- v. Issue Resolution Mechanism
- vi. Milestone Based Plan Monitoring