

# Fast-track Business Growth by Delivering on the Promise

Increase Safety, Efficiency, and Customer Satisfaction with NEC's Integrated Logistics and Supply Chain Solutions

Transportation and logistics stand among the most evolved industries in the post-pandemic era. Altered customer behaviours, new ordering and delivery channels, personalized interactions, enabled by a new wave of digital technologies, are putting new demands on logistic service providers to disrupt and differentiate in order to thrive in the digital era.

NEC offers a comprehensive suite of cutting-edge logistics solutions, backed by in-depth domain knowledge and technical expertise, to create unified digital platforms that:



Automate end-to-end operational flow



Streamline exchange of cargo between stakeholders



Enable real-time shipment visibility



Induce data-driven decision-making

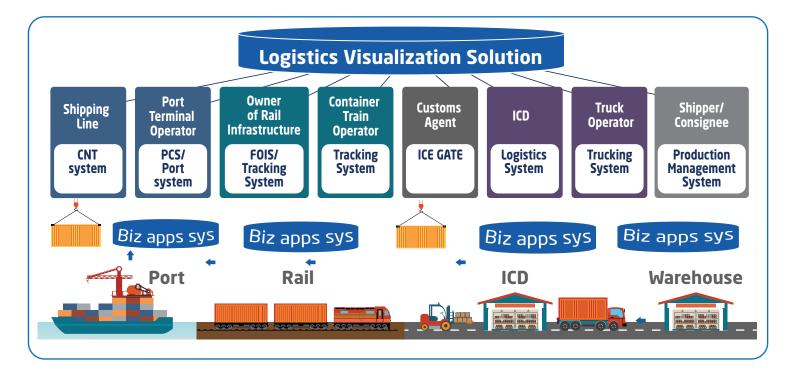
# NEC Logistics Solutions

- Logistics Visualization Solution
- Integrated Command & Control Center
- Gate Operating System
- Yard Management Solution
- Warehouse Management Solution
- Touchless Access Control Solution





EXIM cycles inevitably confront visibility challenges, affecting the planning and scheduling of activities due to lack of transparency and accountability across the supply chain. NEC Logistics Visualization Solution provides complete container visibility to the stakeholders through a unified data service platform to visualize port-to-door marine container transportation data in India.



#### **Key Benefits**

- Complete container visibility
- Real-time tracking with GPS, RFID, and IoT devices
- Estimated time of arrivals/departures of any tagged vehicle to/fro, source and destination locations such as port/ CFS/ICD/warehouse/ vard/etc.
- Real-time alerts for onroute violations, overspeeding and journey halts
- Historical data of the device and device monitoring - battery, tamper status, etc.

#### **Case Study**

## Logistics Data Bank (LDB) and Unified Logistics Interface Platform (ULIP)

LBD is a game changing solution that uses Cloud, IoT (RFID technology), and Big Data to integrate the information available with various agencies across the supply chain and provide detailed, near real-time visibility of EXIM container movement through a single window i.e. www.ldb.co.in.

ULIP has been designed to further enhance efficiency and reduce the cost of logistics in India by creating a transparent, one-window platform that provides real-time visibility to all stakeholders multi-modal transport, and all the existing systems of various ministries, governing bodies, and private stakeholders.

Currently 0/0 of India's container volume is tracked through LDB

containers

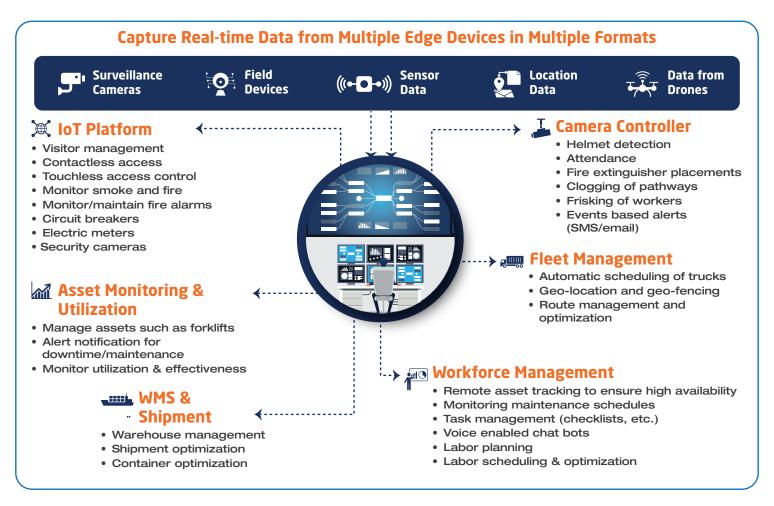
tracked using LDB (August 2022)





To transition from a support function to a critical component of an organization's overall profitability, supply chain planning and operations must be powered by robust data management and intelligent analytics.

NEC Integrated Command and Control Center is envisioned to be the core for logistics operations, exception handling, and situation management. It utilizes sensors and edge devices that capture real-time data from multiple utilities and generate appropriate results for stakeholder action.



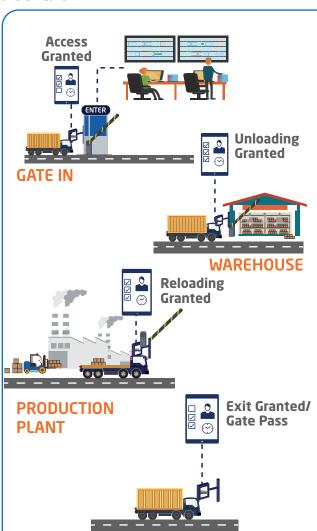
#### **Key Benefits**

- Acts as the "nerve center" for operations management integrating data from various applications
- Enables administration to do more with less
- Reduces the complexity of dealing with multiple systems/applications
- Day-to-day exception handing and disaster management
- Provides contextual insights by processing complex data sets at an aggregated level to derive intelligence for improved planning and policy making





An intermediary system that communicates with customer's different systems to completely automate gate operations and eliminate lane congestion and burdensome manual paper-based verification at the Port/CFS/ICD.



#### Checking illegal trespassing at ports

Better utilization of manpower and increased security

#### Optimize scheduling at CFS/ICD

Container stuffing/ de-stuffing activity and better utilization of trailers

#### E-seal scanning/ tamper status for customs

Better scheduling of customs activities at gates, reducing gate congestion

#### Importers/ exporters and shipping lines

Better scheduling/ tracking/ visibility of packages

#### **Transporters/freight** forwarders

Reduced empty trailer trips

- Automated gate operations
- OCR enabled technology
- FRS enabled access control module

**GATE OUT** 

- **Exception management system**
- Seamless integration with the host/Terminal Operating Systems (TOS)
- · End-to-end solution includes design, implementation, and configuration network, server, OS, HA, DB, backup & monitoring
- Value-added services like big data analytics and helpdesk services
- Device monitoring battery, tamper status, etc.

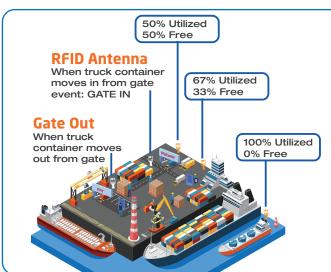
#### **Key Benefits**

- Reduced clearance time and gate congestion
- Automated gate operations and improved productivity
- Enhanced security and safety of operations
- Reduced carbon footprint and fuel wastage
- Better EoDB and LPI rank





An efficient yard management system that tracks the movement of trucks and trailers to provide end-to-end container visibility in real-time to optimize container retrieval, space utilization, billing, and schedule planning.



- Capture the requisition of incoming/outgoing container at the yard
- Automated Gate-in (bar-code scanning) & container storage process to speed up movement of containers within the yard
- Real-time container location tracking through map based web user interface
- Optimized container storage and retrieval suggestions
- Recording & tracking of every movement & trail of container
- Analytics dashboard to enable performance monitoring

#### **Key Benefits**

- Improved operational efficiency and control
- Optimal resouce planning and utilization
- Reduced labor and maintenance costs
- Reduced carbon footprint and fuel wastage
- Informed decision-making

# Warehouse Management System (WMS)

**Your Window to Smart Warehouse Management** 

An on-prem/cloud-based flexible, integrated and customizable solution catering end-to-end warehouse management needs such as inbound & outbound operations, inventory, and resource management along with integration support.

#### Outbound +

- Picking & dispatch
- Kitting
- Wave management
- Material sorting
- Shipping management

#### Configuration $\leftarrow$

- SKU/batch mixing
- Integration layer
- Inventory methods FIFO/FEFO/LIFO/ **FMFO**
- Configurable putaway & picking algorithm
- Configurable UOM management
- Multilingual support

Receiving of items

Cross docking

Quality audit

Putaway in warehouse

Vehicle management

Order management

### nventory Management

Access control

User management

Warehouse design

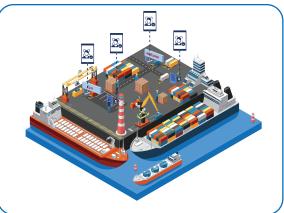
**BoM** management

- Real-time data
- Barcoding/serial/ lot/batch tracking
- Cycle count & inventory adjustment
- Tracking & traceability
- Reporting & analytics

#### **Key Benefits**

- Optimized storage and space utilization
- Lower labor costs and operating expenses
- Improved inventory visibility
- Effective shipping management
- Real-time decisions based on alerts
- Avoidance mis-picks, wastage, and accidents





NEC's state-of-the-art Face Recognition System (FRS) based access control solution enables touchless entry to doors, facilities, and accurately monitors the movements of staff, employees, workers, watch-listed entities, common people across any facility, raises the requisite alerts/ notifications based on business needs, and provides the required authorizations across different locations.

#### **Key Benefits**

- Maintain hygenic, safe and clean working environment
- Reduce person-to-person contact via over-the-air credentialing
- Minimize personal interactions in managing lobbies and visitors
- Provide real-time building occupancy data to help with compliance and social distancing





**Engagement** to understand operational issues and provide customized solutions

**Consulting** 



**High Quality** industry proven solution



**Implementing Point Solution** for operational excellence



**Global Best Practices** 



**Strong Technical Capabilities** for managing large scale enterprise projects

## **About NEC**

NEC is a leader in the integration of IT and network technologies and brings more than 120 years of expertise in technological innovation to provide solutions for empowering people, businesses, and society. Headquartered in Japan, NEC started its operations in India in the 1950s and expanded its business from telecommunications to public safety, logistics, transportation, retail, finance, unified communications, and IT platforms, serving across governments, businesses, and individuals. NEC Logistics Solutions help streamline operations, save costs and optimize resources across industries.

#### NEC

Fortune Global 500 ICT Company

Established

160+

109K+

For further queries & demonstration, please contact

♥ NEC Corporation India Pvt. Ltd., 18th & 19th Floor, Tower C, Advant Navis Business Park, Plot 7, Sector 142, Noida, Uttar Pradesh 201305



