

Transport Management System (TMS)

Smart. Secure. Scalable. Future-Ready.

Roysoft Technologies - Enterprise Software Solutions

1. Platform Overview

The Transport Management System (TMS) is an enterprise-grade logistics ecosystem engineered to streamline dispatch operations, automate financial settlements, optimize routes, and deliver complete transparency across the transportation lifecycle.

Key Capabilities:

- Real-time GPS tracking and route monitoring
 - Automated toll deduction and FASTag integration
 - Escrow-based settlement engine
 - Route optimization and ETA intelligence
 - Regulatory compliance automation
 - AI-powered analytics and predictive maintenance
 - Multi-role dashboards for Storekeepers, Vehicle Owners, Drivers, and Admins
-

2. Core User Modules

Storekeeper Dashboard

- MFA-secured login and registration
- Create dispatch jobs with cargo details
- Live cargo tracking on interactive map
- Manage job history, pricing, and reviews
- Digital wallet for payments, withdrawals, and history

Vehicle Owner Dashboard

- Vehicle and driver registration
- Fleet status monitoring
- Expense and earning tracking per vehicle
- Driver-vehicle assignment
- Real-time job tracking
- Wallet with escrow, reimbursements, toll deductions

Driver Dashboard

- Accept jobs and upload loading/delivery photos
- Post job-related expenses
- Offline trip and POD support
- Auto-sync when online
- Multi-language interface

Admin Dashboard

- Route registration and dynamic pricing
- Automated toll subsystem with geofencing
- FASTag, E-Way Bill, GSTN, and E-Invoice integration
- Compliance and permit tracking
- Full audit trail and system-wide monitoring

3. Marketplace & Load Matching

Load Board

- Storekeepers publish loads
- Vehicle owners bid or instantly book
- Reverse auction for competitive pricing

Vehicle Availability Board

- Vehicle owners publish available vehicles
- Storekeepers filter by type, capacity, route, price

Broker Module

- Dedicated broker role
 - Commission tracking
 - Multi-party booking workflows
-

4. Documentation, Alerts & Billing

- Automated confirmations for registrations, pickups, deliveries
 - Real-time push notifications and SMS alerts
 - PDF invoicing with GST, toll breakdowns, and settlement details
-

5. Regulatory & Compliance Automation

- FASTag toll sync and reconciliation
 - E-Way Bill generation and expiry alerts
 - GST-compliant e-invoicing with IRN and QR code
 - Permit tracking: National, State, PUC, Fitness, Insurance, Road Tax
 - Automated renewal reminders
-

6. Fleet Maintenance Management

- Preventive maintenance schedules
- Kilometer/time-based servicing

- Workshop and vendor management
 - Tyre, battery, and spare parts inventory
 - Breakdown assistance and nearest workshop identification
-

7. Business Intelligence & Analytics

Executive Dashboard

- Revenue
- Active vehicles and jobs
- Profitability
- Customer growth

Operations Dashboard

- Delayed deliveries
- Idle vehicles
- Driver utilization
- Route performance

Predictive Analytics

- Vehicle demand forecasting
 - Revenue prediction
 - Fuel cost estimation
 - Fleet utilization trends
-

8. Warehouse Management Integration

- Dock scheduling and queue management
- Digital gate pass system

- Vehicle waiting time and demurrage tracking
-

9. Financial & Credit Management

- Credit limits and scoring
 - Weekly/monthly settlements
 - Automated reconciliation
 - UPI, NEFT, RTGS, IMPS support
 - Escrow automation with milestone-based release
-

10. AI-Powered Capabilities

- AI Transport Assistant for job creation and support
 - AI Document Processing (RC, DL, Insurance, POD extraction)
 - Predictive maintenance using telematics
 - Smart ETA engine using traffic, weather, and driver behavior
-

11. Security & Compliance

- Multi-Factor Authentication (MFA)
 - End-to-end encryption
 - Role-Based Access Control (RBAC)
 - Secure wallet management
 - Device authentication and session monitoring
 - Immutable audit logs for all critical actions
-

12. End-to-End Job Lifecycle & Escrow Workflow

Job Creation & Quotation

- Automated cost estimation
- Route optimization
- Driver and vehicle compliance checks
- Competitive bidding or fixed-price acceptance

Escrow Lock

- Wallet balance verification
- Escrow lock for freight, handling, GST, insurance
- Pro-forma invoice generation

Pickup Validation

- Cargo photos, signatures, GPS confirmation
- Storekeeper approval
- Tracking activation

Transit Monitoring

- Live GPS tracking
- Route adherence
- Driver behavior monitoring
- Alerts for deviations, idle time, SOS

Delivery Verification & Settlement

- Delivery photos, ePOD, QR scan
- Storekeeper confirmation
- Automatic settlement to vehicle owner and driver

Invoice Generation & Job Closure

- Final tax invoice

- Settlement statement
 - POD package
 - Dispute management workflow
-

13. Profitability & Earnings Model (User-Wise)

Storekeeper Profitability

- 10-18% route savings
- 5-12% toll reconciliation savings
- 8-15% delay reduction
- 12-20% inventory turnover improvement

Vehicle Owner Profitability

- 15-25% higher fleet utilization
- 10-18% revenue increase
- 8-14% fuel savings
- 12-22% maintenance savings

Driver Profitability

- 12-20% higher earnings
- 10-15% idle time reduction
- 8-12% route savings
- 5-10% incentive gains

Broker Profitability

- 2-8% commission
- 10-20% higher booking volume

Platform Profitability

- 8-15% per transaction
 - 20-35% marketplace adoption
 - 12-18% compliance module revenue
-

Contact

Roysoft

📞 +91-9007140327

✉️ sales@roysoft.in

🌐 www.roysoft.in