

## Advancements in Road Safety through NHAI's ERS App and MOIS Standards

(NHA's ERS app and MOIS standards mark a paradigm shift in Indian road safety, integrating advanced technology for swift emergency response and collision prevention, reinforcing the government's commitment to a safer and more connected road environment.)



(Source: Edunovations)

In recent developments, the National Highways Authority of India (NHA) has introduced the NHA ERS (Emergency Response System) Mobile Application, marking a significant stride in bolstering emergency response mechanisms on national highways. This innovative tool, developed by Ajeevi Technologies Pvt Ltd, is designed to revolutionize the way emergency situations are handled, providing a seamless dispatch of information to on-road emergency response units.

### NHA ERS Mobile App: A Game-Changer in Emergency Response

#### A. Objectives and Functionality

##### 1. Primary Objective:

The NHA ERS mobile app aims to provide a rapid and seamless response mechanism during critical situations such as accidents or medical emergencies. By connecting road users directly to the NHA's command and control center, the app empowers users to seek immediate assistance, expediting emergency services' arrival. This enhancement in emergency response significantly impacts the safety and security of commuters.

##### 2. Key Features and Benefits:

**(i) Swift Response Mechanism:** The app allows users to alert authorities about incidents with precise location and nature details, ensuring a rapid response from emergency services.

**(ii) Golden Hour Response Time:** NHA ERS aims to improve the Golden Hour Response Time on NHA roads, minimizing the loss of life of accident victims.

**(iii) Optimal Route Guidance:** The app provides on-road units with the optimal route to reach the destination, ensuring timely assistance to accident victims.

**(iv) Enhanced Coordination:** By integrating technology, NHA ERS facilitates better communication and coordination between emergency response teams, streamlining the overall emergency management process.

## B. Historical Context and Government Initiatives



(Source: Google play)

### Government's Prioritization:

- (i) The introduction of the NHAI ERS app builds upon ongoing efforts to modernize India's highway infrastructure and emergency response systems.
- (ii) Recent years have seen the government prioritizing the development of national highways and implementing various measures to enhance road safety across the country.

## MOIS Standards: A Technological Leap for Road Safety

### A. Formulation and Recognition

#### 1. Steps by Committees:

The Central Motor Vehicle Rules-Technical Standing Committee (CMVR-TSC) and the Automotive Industry Standards Committee (AISC) have recognized the crucial role of technology.

#### 2. Moving Off Information Systems (MOIS):

Proactive steps have been taken by formulating standards specifically tailored for MOIS, emphasizing the commitment to incorporating advanced technologies for safer road experiences.

### B. Applicability and Vehicle Categories

#### 1. Categories Under Central Motor Vehicle Rules:

The standardized norms for MOIS will be applicable to vehicles falling under categories M2, M3, N2, and N3, as stipulated by the Central Motor Vehicle Rules.

#### 2. Category Definitions:

- (i) **M2 Category:** Motor vehicles used for the carriage of passengers, comprising nine or more seats,

with a maximum Gross Vehicle Weight not exceeding five tonnes.

(ii) **M3 Category:** Motor vehicles for passengers, with a Gross Vehicle Weight exceeding five tonnes.

(iii) **N2 Category:** Motor vehicles used for the carriage of goods, with a Gross Vehicle Weight exceeding 3.5 tonnes but not exceeding 12 tonnes.

(iv) **N3 Category:** Motor vehicles for the carriage of goods, with a Gross Vehicle Weight exceeding 12 tonnes.

## C. MOIS as an Advanced Driver Assistance System



(Source: Google play)

### 1. Addressing Low-Speed Maneuvers:

(i) MOIS serves as an advanced driver assistance system designed to aid drivers during low-speed moving off from rest maneuvers.

(ii) Focus on collision prevention with vulnerable road users such as pedestrians and cyclists.

### 2. Blind-Spot Detection:

MOIS is equipped to detect and inform the driver of the presence of pedestrians and cyclists in the close-proximity forward blind-spot of the vehicle.

## D. Contribution to Road Safety

### Revolutionizing Road Safety:

(i) The integration of MOIS has the potential to revolutionize road safety by addressing potential collisions and improving driver awareness.

(ii) The Motor Vehicles Act and Central Motor Vehicle Rules, alongside initiatives like MOIS, contribute significantly to creating a safer and more secure road environment for all.

## Comprehensive Analysis: Synergy Between NHAI ERS and MOIS Standards



## A. Integration for Safer Roads

### Complementary Roles:

- (i) NHAI ERS and MOIS standards complement each other by collectively contributing to a safer and more efficient road environment.
- (ii) NHAI ERS focuses on real-time communication during emergencies, while MOIS anticipates and addresses potential collisions, synergizing to enhance overall road safety.

## B. Government's Technological Commitment

### Evident Commitment:

- (i) The government's commitment to leveraging technology for road safety is evident in initiatives like NHAI ERS and MOIS standards.
- (ii) Technological advancements streamline emergency response, improve road safety, and underscore the government's proactive adoption of technology for public welfare and infrastructure development.

## C. Stakeholder Benefits

### Enhanced Commute Safety:

- (i) The integration of NHAI ERS and MOIS benefits commuters by ensuring swift emergency responses and addressing potential collisions, fostering a safer commuting environment.
- (ii) Improved efficiency in emergency management on national highways.

### Case Study: NHAI ERS App in Action

#### A. Ajeevi Technologies Pvt Ltd's Role

##### 1. Development and Deployment:

- (i) Ajeevi Technologies Pvt Ltd's contribution to the NHAI ERS app.
- (ii) The free personalization app for Android devices.

##### 2. Optimal Route Guidance:

- (i) NHAI ERS app provides optimal routes for on-road units, minimizing response time.
- (ii) Assistance to on-road units with the best route to Hospital/Trauma Centre/PHC.

### Future Implications and Roadmap

#### A. Expansion and Integration

##### 1. Nationwide Implementation:

- (i) Potential for nationwide implementation of NHAI ERS app and MOIS standards.
- (ii) Comprehensive road safety measures across the country.

##### 2. Integration with Smart Infrastructure:

- (i) Possibility of integrating ERS and MOIS with smart infrastructure for enhanced coordination.





(ii) Exploring IoT and AI applications for real-time monitoring and response.

## B. Public Awareness and Education

### 1. Public Awareness Campaigns:

- (i) Importance of NHA ERS and MOIS communicated through public awareness campaigns.
- (ii) Informed and responsible road users contribute to a safer road environment.

### 2. Driver Training Programs:

- (i) Incorporating NHA ERS and MOIS awareness in driver training programs.
- (ii) Widespread knowledge and utilization among drivers.

In conclusion, the introduction of the NHA ERS mobile app and the formulation of MOIS standards represent crucial advancements in road safety in India. These initiatives showcase the government's commitment to leveraging technology for the welfare of the public and the development of robust infrastructure. The synergistic approach of NHA ERS and MOIS standards holds the promise of creating a safer and more secure road environment for all road users, marking a significant milestone in the evolution of India's traffic norms and emergency response systems. As these innovations continue to evolve, the collaborative efforts of NHA, Ajeevi Technologies Pvt Ltd, and regulatory bodies set the stage for a safer and technologically advanced future for road users across the country.

