

Project Overview

Guardian Yan is an advanced accident detection and response system designed to reduce fatalities and injuries in road accidents. This system includes a module that can be installed in cars and bikes, which detects collisions and sends alerts to local authorities and a centralized database. Furthermore, it deploys drones equipped with cameras and fire extinguishing tools to the accident site.

How Guardian Yan Works

1. Vehicle Module Installation:

- Each vehicle is equipped with a module costing under ₹1000.
- The module includes an Accident Detector System, a location System and communication module system.

2. Accident Detection:

- The Detector continuously monitors for abnormal readings.
- If an accident is detected, a 15-second beeper activates inside the vehicle.
- If the beeper is not cancelled within 15 seconds, the system assumes an accident has occurred.

3. Alert System:

- The system sends a location message to local authorities and a centralized database.
- The message includes the location, severity, and type of vehicle involved in the accident.

4. Drone Response:

- The nearest drone centre (within 10-20 kilometres) is identified.
- A drone is launched to the accident site with:
 - A regular camera for live feed to emergency responders.
 - An infrared camera to detect internal injuries.
 - Fireballs to extinguish potential fires.

Funding and Support Requirements

To successfully implement Guardian Yan, we require the following funding and support from the government:

1. Funding for Vehicle Modules:

- Installation of modules in 10,000 vehicles: ₹1 Crore (₹1000 per vehicle).

2. Establishment of Drone Centres:

- Setting up 10 drone centres across strategic locations: ₹5 Crores.
- Each centre will be equipped with drones, cameras, and fire extinguishing tools.

3. Research and Development Support:

- Collaborating with research institutions for advanced accelerometer and infrared camera technology: ₹50 Lakhs.
- Data analysis and machine learning for accident prediction and severity assessment: ₹1 Crore.

4. Operational Costs:

- Annual operational and maintenance costs: ₹2 Crores.

5. Total Funding Required:

- Initial setup and first-year operational costs: ₹9.5 Crores.

6. Initial Sheet Funding: 10.L

Benefits of Guardian Yan

- Rapid Emergency Response: Immediate detection and alerting of accidents to local authorities.
- Preparedness: Live video feeds help emergency responders prepare for the situation.
- Fire Prevention: Onboard fireballs address fires quickly, reducing damage and saving lives.
- Automated System: Reduces human error in reporting and responding to accidents.
- Data Collection: Provides valuable data for traffic safety improvements and accident prevention strategies.

Request for Support

We kindly request the following from you for:

1. Financial Support: Direct funding to cover the setup and operational costs.
2. Regulatory Support: Facilitation in getting necessary approvals and clearances.