



“I-Track”

Prepared by

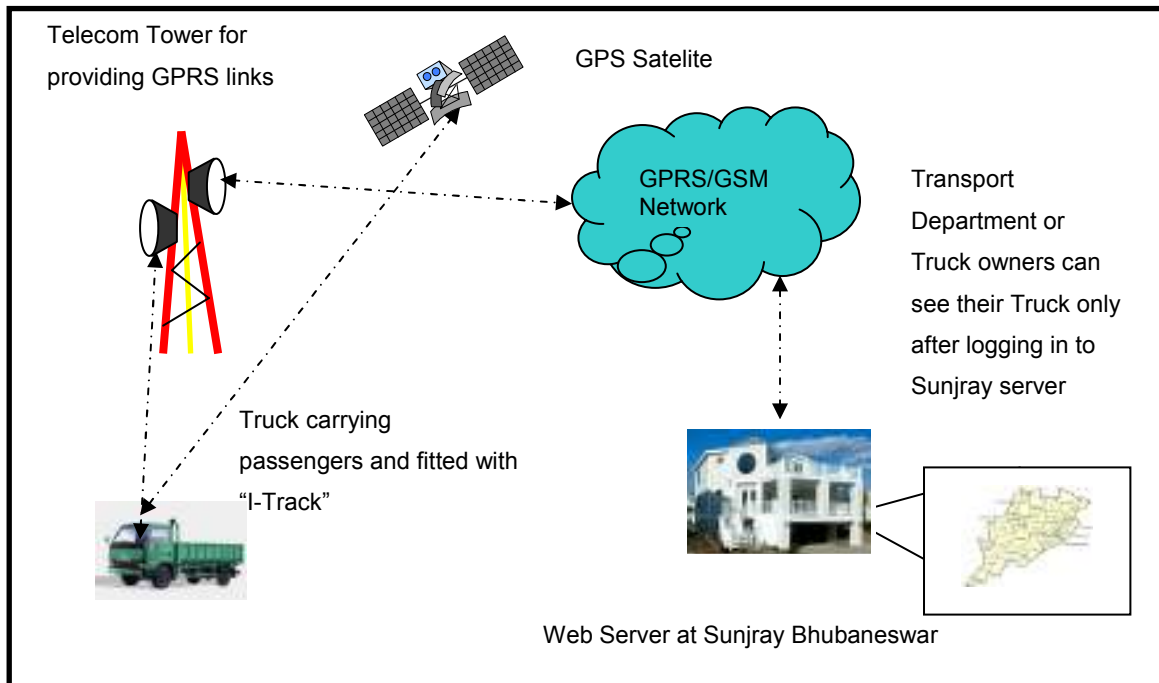
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1.0 Introduction

This scope specifies the functionalities of “I-Track” (GPS/GPRS Product of Sunjay) that can be helpful to all truck owners to conduct a smooth business without any interruption or without appointing any extra staffs to follow the trucks.

This system consists of two technologies such as Global Positioning Satellites (GPS) and General Packet Radio Service (GPRS). Global Positioning Satellites (GPS) can track all kinds of mobile objects with respect to their real time positions. The location can (latitude/longitude information of the mobile asset at a specific point of time) be captured by a satellite and provided the data to the main server by GPRS. The message can be transmitted to any trucks using the GPRS link. The following picture shows the overall diagram of the system.



The above picture shows both GPS and GPRS technology used to track a truck/vehicle.

2.0 Modules

2.1 Tracking the Truck speed

“I-Track” consists of a tracking device, which will be installed in the Truck that is to be tracked and can be controlled remotely. This device will transmit data related to the speed of the Truck,



2.2 Tracking the Truck location

"I-Track" can locate the Truck location (latitude and longitude) with respect to the road network of India.

2.3 Tracking the Truck direction

"I-Track" can also provide the feedback about the direction of the Truck moving towards.

All the above points such as speed, direction and locations can be tracked in every 16 seconds by the satellite available above India. These data are provided to the Sunjray's Web server through GPRS link for further calculation and reporting.

2.4 Communication with Driver

The driver can be communicated with the Truck owner through GPRS link. The Truck owner operator can send message to a specific driver after knowing the location or communicate with the driver through voice. At the same time, the driver can also send message to the Truck owner or call the owner in any critical condition. All these communication can be saved in an Operational Data Source for future use.

2.5 Controlling the Truck

"I-Track" is already integrated with controlling facilities to control the movement of the Truck. For clarity sake, if the truck owner wants to stop the Truck while going towards a dangerous area or beyond geo fencing areas, the Truck owner can send a signal through GPRS to de-activate the fuel supply or stop the engine of the truck.

3.0 "I-Track" System

The software is running in Sunjray's office at Bhubaneswar in a high end web server. The application has a user module. The truck owners are the administrator of their trucks only. They can see all the information related to their trucks, communicate with their trucks and control their trucks only through the web browser. Sunjray host the application and provide supports to each truck owners.

4.0 Features

"I-Track" has the following features.

1. Visualize all the Truck with high versatile precision maps in any web browser.
2. Visualize the speed, direction and location easily.



3. Visualize the Truck detail and the device ID detail
4. Show the Route History of each Truck
5. Play back the route history whenever required.
6. Truck owner can set a boundary (Geo Fencing) for limiting the region of the Truck movements.
7. Generate Vehicle/trackers Report (daily, monthly and yearly reports)
8. Online control of vehicles (Engine Power ON/OFF or Fuel ON/OFF)
9. Route Trace and Scheduling the Route

5.0 Benefits

Using "I-Track" has following benefits

1. Location, speed and direction can be found out easily
2. Movement of each step can be found out easily
3. communication with truck can be achieved
4. Controlling the Truck can be achieved