

ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

No. : Dy.CME-2(Comp)/VTPIS(Cir)/17-IT



Office of the VC&MD,
RTC House, Vijayawada
Dt.12.02.2017.

Joint IT & OPD Circular No: 1 /2017-IT, Dt. 12-02-2017.

Sub: **VT&PIS** – Implementation of Vehicle Tracking & Passenger Information Systems(VT&PIS) project in APSRTC - Steps to be taken for proper tracking of buses - Instructions issued – Reg.

I. INTROCTION:

The VT&PIS project is implemented by M/s Dreamstep Software Innovations Pvt. Ltd., in all District type buses of the Corporation. The project was initially implemented in 2200 buses of OPRS system after successful pilot in 77 buses. Several interactions were held with field managers during the development stage to take feedback and to add new features. After several stages of testing and field interactions the project is stabilized for OPRS services and widely being used by the public. As part of the PIS, Mobile App and public portal was launched. For MIS reports and admin related tasks, Admin App and admin portal was also provided.

Subsequently, the project was extended to the remaining 3000 special type buses and 6000 Telugu Velugu buses including Private Hire buses.

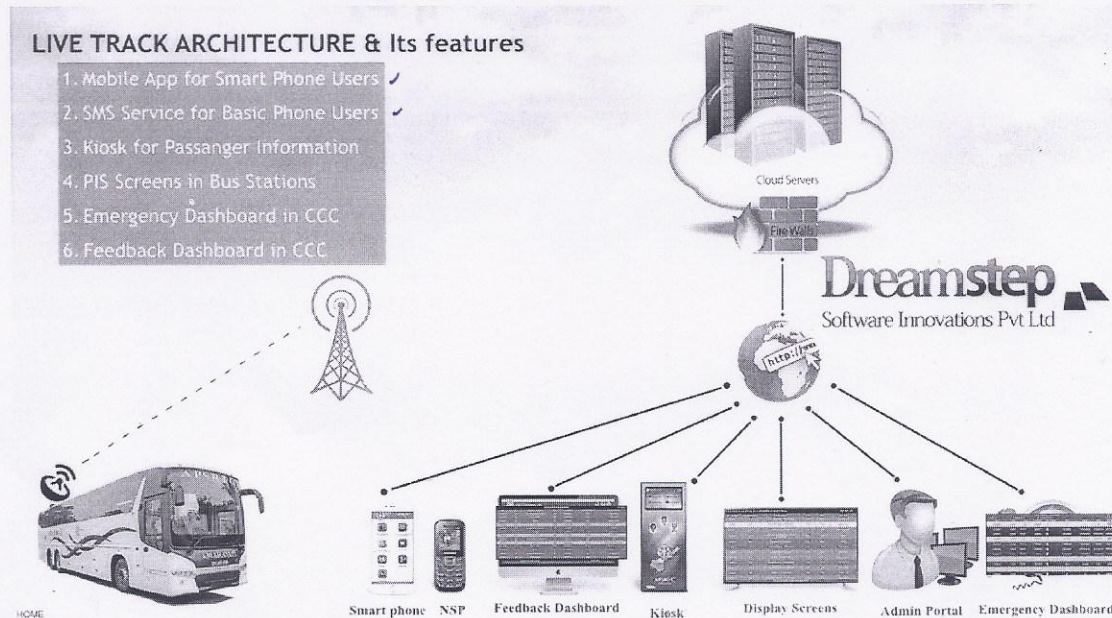
II. HOW VT & PIS WORKS?

Vehicle Mounted GPS Unit(VMU) is installed in each bus. After the bus starts, the GPS receiver in the VMU captures the geographical positional coordinates (Latitude and Longitude) of the bus and transmits them to the Central Data Server every ten seconds, through SIM card installed in the VMU using GPRS technology.

The route travelled by the bus is identified by the system using the details of vehicle assigned to the service. Service number, Bus number, crew details are updated in VTS through Auxiliary waybill issue program for OPRS services and through DCP OLTAS waybill issue program for Non-OPRS services.

The Expected Time of Arrival(ETA) of the bus at the subsequent stages will be calculated by the central application server. The ETA is pushed to the passengers through Mobile App, LCD Displays at bus stations, Passenger information Kiosks and SMS facility and web portal. Various MIS reports useful to the Managers are also generated in the system.

The schematic diagram of the functionality is given hereunder:



The success of tracking thus depends on the correct assignment of the bus to the service. If the bus is not assigned to the correct service, the ETA will not be calculated and MIS reports will be generated wrongly for such services.

III. ROLES & RESPONSIBILITIES:

For successful tracking of all the buses, different categories of employees are involved. Hence the roles and responsibilities of various employees are listed below for strict compliance:

1. Role of Dispatch Mechanic/Shramik:

- He should maintain the list of all services of the Depot with details of S.No., DCP Service No, Service Description and Permanent Bus Number. He should ascertain the availability of fixed buses allotted to different services and provide alternate bus if any fixed bus is not available for service. **The above information shall be given to Waybill Issue ADC duly taking signature of the ADC daily.**
- **As far as possible, the permanent buses to be given to services**

2. Role of Waybill Issue ADC:

- The ADC shall collect the details of buses allotted for all services from Dispatch Mechanic/Shramik before departure of first service
- **The ADC shall feed the correct Bus number, Driver/Conductor numbers in DCP OLTAS waybill issue program without fail.**
- The ADC shall also confirm the details before waybill is issued by verifying the slips issued by the chart controller.
- File the hard copy of above information for verifications by Traffic In-charge/Depot Manager.

3. Role of Chart Controller:

- The Chart Controller shall maintain the control chart with permanent bus number allotted against each service in the chart.
- He should collect the details of changed buses from the dispatch mechanic/shramik and write in the control chart.
- The details of bus number and service number shall be written in a slip and given to the Conductor/Driver for feeding the same in waybill issue program by ADC.
- Computers are supplied to all the Depots for automation of the control charts. The PCs shall be utilised for online outgoing chart software to feed the details of bus no, service no, driver no., and conductor no. **The PCs supplied to the Depots shall be placed in control chart room and the same is to be connected to the DCP Server duly purchasing the required CAT-6 cable and connectors. In case the server room is located at a distance more than 90 meters from the present control chart section, the chart room shall be shifted to the location close to DCP server room.**

4. Role of Conductor:

- The Conductor shall note down the bus number allotted to his service and Driver number, in a slip and take the signature of Chart Controller and submit the same to waybill issue ADC.
- **After issue of waybill he/she shall cross check the details of Driver No. and Bus no. printed in STAR**
- **The Conductor is responsible to ensure feeding of the correct bus**

5. Role of Traffic In-charge :

- To ensure feeding of fixed vehicles to all services in Service master and correcting all fields of service master in DCP.
- To ensure updation of Hire Bus drivers details in Hire Bus master and correcting all fields of hire bus master.
- Correcting all MTD-141 data in the formats 1&2 given by M/s Dreamstep and communicating the same to Dy.CTM(CSC) for updating in Dreamstep server.
- Communicating details of transfer of buses and services to other depots to Dy.CTM(CSC), HO for the updation of same in VT&PIS .
- Communicating Link services i.e., DCP Service number1 - DCP Service number2 and also fixed vehicles to services information to Dy.CTM(CSC) for the updation of same in VT&PIS Server.
- Ensure generation of Outgoing chart with correct DCP No. and fixed bus number printed correctly on it.
- To ensure that the Dispatch Mechanic/Shramik hands over the statement of buses allotted to different services every day to waybill issue ADC.
- To ensure feeding of correct Service Number, Bus Number, Driver/Conductor numbers in DCP OLTAS Waybill issue program with Waybill issue ADCs.
- To ensure re-assigning correct Bus number to service through admin portal "rtclivebus.com → vehicle assignment" in case of any wrong assignments.
- To verify Tracking of all Non OPRS services through "rtclivebus.com -> Non OPRS Operations -> Track by DCP service Number" and communicate any issues observed to M/s Dreamstep for 100% tracking of all Non OPRS services.
- To ensure that internet is available and modem is switched ON all the time for continuous flow of waybill data from depot Server to VT&PIS server.

6. Role of Garage In-charge:

- To give the details of buses fixed for all services to the Traffic incharge for feeding the same in service master of DCP.
- To ensure that the Dispatch Mechanic/Shramik hands over the statement of buses allotted to services every day to waybill issue ADC.
- To ensure removal of VMUs alongwith connector from stabled/Hire withdrawn buses with Field Engineers of M/s Dreamstep and keep them in Depot Stores in thick polythene cover for refixing on New buses

- To ensure fitment of VMUs to all new buses received and new PHBs received through Service Engineers of M/s Dreamstep.
- To verify the Inactive VMUs daily through "rtclivebus.com -> MIS Reports -> VMU Status Report" and take steps for rectification by M/s Dreamstep Field Engineers.
- To ensure tracking of all Buses through Mobile App "APSRTC LIVE TRACK -> TRACK BUS BY VEHICLE NUMBER" regularly. If any bus is not tracked inform to M/s Dreamstep Software Innovations Pvt. Ltd., Field Engineers for rectification.

7. Role of Depot Manager:

- To ensure that the above roles of various categories are being followed by exercising checks and cross checks from time to time.
- To review all the MIS reports every day and take corrective action.
- To ensure proper tracking of all buses in the Depot.

The Dy.CTMs shall cross check all the above activities at different depots under their jurisdiction duly inspecting the depots regularly and taking corrective action.

The Regional Managers shall advise the Depot Managers **to ensure that the above instructions are followed in true spirit and take action in case of violations to ensure 100% tracking of non OPRS services.**

M. Malabo
20/2/2017
VICE CHAIRMAN & MANAGING DIRECTOR

To
All Regional Managers

Copy to the Executive Directors, VJA, VZM, NLR, KDP Zones for information.

Copy to the Chief Traffic Manager for information & necessary action.

Copy to the Dy.CTMs for necessary action.

Copy to all DMs for necessary action.