



ANDHARA PRADESH STATE ROAD TRANSPORT CORPORATION

Dy.CME(SM-IT)/ITIM(2)/17-IT

O/o The VC&MD,
RTC House, Vijayawada
Date: 28-07-2017

Joint IT & OPD Circular No: 3/ IT, Dt:28.07.2017

Sub: **ITIMs** - Implementation of Intelligent Ticket Issuing Machines (ITIMs) project in APSRTC
- Guidelines for proper implementation – Reg.

1.INTRODUCTION :

At present there is no facility for issue of tickets at en-route bus stations to the OPRS Service after generation of OPRS auxiliary waybill at origin point, since there is no mechanism to know the no. of tickets issued by the Driver of the running bus and vacant seats available. To overcome the above problems and to issue tickets to the running bus also at en-route bus stations, IT Department has come up with a novel idea of "Intelligent Ticket Issuing Machines"(ITIMs).

ITIM is a GPRS enabled ticket issuing machine which is integrated with the Online Passenger Information System (OPRS). Every ticket issued by the Driver in the bus is updated in OPRS and hence the vacant seats available in the bus at any point of time is visible at en-route RTC Counters, ATB Agents etc., Similarly, the tickets issued at the en-route points also gets updated in the ITIM dynamically for the information of the Driver.

In order to explore this new concept, tenders were called and order was placed on M/s Analogic for supply of 288 ITIMs for utilization in all AC services in the first phase. The pilot project was commenced in the month of July-2016 at Vijayawada Depot. Series of meetings were held with field managers, M/s Analogic and M/s Abhibus during the development stage and pilot implementation to take feedback on problems being faced by the Drivers and to incorporate required additional features.

Initially several problems are noticed like ITIM not connecting to OPRS server, slow printing of 141 and tickets, non updating of tickets issued by ITIM in OPRS server and charging problems. After several stages of testing and field interactions the project is now stabilized.

II. HOW ITIM WORKS:

ITIM is a GPRS based TIM and is provided with SIM card for continuous interaction with Analogic Server. The required servers like Application servers, Database servers, Web servers etc., are hosted in Ctrl-S data center, Hyderabad by M/s Analogics. These servers will interact with the OPRS servers hosted in Ctrl-S by M/s Abhibus. Master files like, ITIMs master, Service master, Fare master etc., are maintained in Analogics server as well as Depot Server

After issuing ITIM in the Depot through DCP waybill issue program, concerned service driver shall collect the auxiliary waybill in OPRS counter. Then he should capture the auxiliary waybill data in to ITIM through GPRS by pressing 141 button and Enter Key.

Once the auxiliary waybill data is captured by the ITIM, the fare table of the trip is automatically printed in ITIM and the details of Reservation Passengers are displayed. The time taken for this process is normally 4 seconds.

For issuing ticket to an unreserved passenger, the Driver should press the 'TKT' button. The seat layout is displayed. The seats reserved in OPRS are displayed in Blue colour for gents, yellow colour for ladies, gray colour for enroute booked seats and white for vacant seats. The normal and special blocked seats in OPRS are also released for booking by the Driver. In case of blocked seats in auxiliary waybill the Driver shall issue tickets only when the blocked seat passengers do not turn up.

Each ticket issued in ITIM is stored in Analogic Server. When the GPRS network connectivity is not available in the ITIM, the ITIM goes to offline mode automatically and Analogic server sends signal to OPRS server to stop booking at en-route OPRS Booking Counters for that particular service. At this moment only the service driver can issue tickets to passengers.

Once the network connectivity is restored, the ITIM sends a signal for issuing tickets through OPRS Booking counters. All these activities are maintained in the back ground.

In case of network failure due to SIM Card problem, server problem etc., ITIM can be utilized as normal off line TIM for issuing tickets to boarded passengers by selecting the required route in off line mode by the Driver. The extent of vacant seat status as per waybill on hand and the en-route booking points are disabled from issuing any tickets.

Advantages observed: Even though 288 ITIMs are procured for 122 identified services only 87 services are operated with ITIMs during the period from Jan 2017 to June 2017 and for the 6 months period 23,839 tickets were issued at en-route points earning additional revenue of Rs. 1,46,07,784/- . This gives an indication of the added advantage of ITIMs over TIMs. It is therefore essential that all the stake holders to get involved in the project in its successful implementation for the benefit of the Corporation.

III. ROLES & RESPONSIBILITIES.

For successful implementation of ITIMs, different categories of employees are involved. Hence roles and responsibilities of various employees are listed below for strict compliance.

Role of IT Department : -

- 1) Testing of ITIMs software from time to time.
- 2) Resolving the hardware and software problems in coordination with M/s Analogic firm and M/s Abhibus
- 3) Imparting training to Officers and Supervisors on Operation and maintaining of ITIMs along with Dy.CTM (Marketing)
- 4) Monitoring the implementation of ITIMs at Depots.
- 5) Review of additional requirement of ITIMs by Depots and follow up with the firm to supply additional quantities of ITIMs.

Role of Operations Department : -

- 1) Review of operation of ITIMs for various AC services and alerting the managers.
- 2) Ensuring ground booking at enroute bus stations to the services operated with ITIMs

- 3) Review of increase in OR and revenue realised at enroute point sales.
- 4) Identification of additional requirement of ITIMs for different services.

Role of RM/Dy.CTM :

- 1) To ensure proper utilisation of ITIMs in all AC/Other required services of the Region.
- 2) To ensure current booking for ITIM services at enroute points.
- 3) To review the performance of ITIM services of the depot.
- 4) To take steps for increasing the sales of ITIM services.
- 5) To communicate the hardware/software issues to HO through RCGs

Role of Depot Manager:

- 1) To ensure proper utilisation of ITIMs in all AC/Other required services of the Depot.
- 2) To ensure current booking for ITIM services at bus station/ATB Agents under jurisdiction of the Depot.
- 3) To review the performance of ITIM services of the depot using Stage Matrix reports.
- 4) To communicate the hardware/software issues to HO through RCGs
- 5) To ensure feeding correct 141 cards in OPRS and ITIM master software.
- 6) To identify the requirement of additional ITIMs for other services of the depot.
- 7) To guide the Traffic Supervisors and ADCs on proper implementation of ITIMs
- 8) To ensure timely attention of ITIM hardware and software problems in coordination with the firm.

Role of Depot Traffic In-charge:

- 1) Identifying OPRS Reservation schedules for operating with ITIMs,
- 2) Preparing MTD-141 fare table and feeding the details of Kms, Type of service, stage names, stage wise schedule departure timings in ITIM software. Feeding ITIM stages and timings in OPRS and ensuring the synchronization of 141 data in OPRS and ITIM servers, for correct fetching of waybills by the ITIM from OPRS.
- 3) Informing correct flexi fare factor for UP and Down OPRS services to depot system in charge.
- 4) Informing the changes in 141 timings to both depot system in-charge and OPRS System In-charge for correction in both OPRS and ITIM software.
- 5) Review and cross verification of service earning using Total Remittance Report, Ticket Report, Passengers Boarding and Alighting Statement.
- 6) Ensuring proper training to the Drivers on usage of ITIMs.
- 7) To ensure current booking for ITIM services at bus station/ATB Agents under jurisdiction of the Depot.
- 8) To ensure timely attention of ITIM hardware and software problems in coordination with the firm

Role of Depot Mechanical In-charge :

- 1) Arranging fixation of stand for ITIM in front of Driver seat and arrange charging plug point for charging the ITIM with Charging Adapter through Bus battery connection.

Role of Regional Core Group :

- 1) To ensure implementation of latest ITIM software in all Depots of the region.
- 2) Cross verifying the MIS reports
- 3) Imparting training to the System In-charge, ADCs and drivers, on operation of ITIMs and maintenance.

- 4) Informing Region Wise and Depot Wise ITIMs operation status periodically to Head Office and to the Regional Manager for taking proper decision.

Role of Depot System Supervisor:-

- 1) Feeding of Correct MTD-141 fare table details in ITIM software
- 2) Ensuring the synchronization of 141 time table in OPRS and ITIM software.
- 3) To ensure timely attention of ITIM hardware and software problems in coordination with the firm.
- 4) Cross verifying the MIS reports of the Depot
- 5) To ensure internet is working properly

Role of Dispatch ADC:

- 1) Ensure I-TIM is fully charged before dispatch. When we touch with finger nail or stylus stick at battery icon (light green color symbol) located at right side of status bar, the battery charging level percentage is displayed.
- 2) Ensure GPRS network connectivity of I-TIM. (Gray color single horizontal Electric bulb position located at right side of status bar indicates network connectivity. If two bulbs are displayed on the status bar it indicates net work is disconnected.)
- 3) After ensuring the charging and signal availability in ITIM, enter correct service No., Driver/conductor and I-TIM No. correctly and issue I-TIM to the Driver.
- 4) While dispatching the I-TIM the following I-TIM accessories are to be dispatched along with the I-TIM. a) Pouch b) Battery charger c) Stylus stick d) STAR & MTD-141 e) I-TIM Paper roll.

Role of Receiving ADC :

- 1) To ensure that the bus cash is tallied with Total Remittance report, tickets reports generated through I-TIM, while receiving the cash from the Driver.
- 2) To collect the I-TIM the following I-TIM accessories without damage:
a) Pouch b) Battery charger c) Stylus stick d) STAR e) MTD-141 card
- 3) Soon after Uploading the I-TIM data keep the I-TIM under charging. Ensure that the charger green light is blinking which indicates that the Battery is under charging. If the green light goes to off mode position it indicates fully charged.
- 4) Handle the I-TIM safely and do not throw and keep I-TIM one over the other to prevent LCD screen damages.
- 5) If any discrepancy is observed viz., problems on software, hardware and bus cash inform to the DC(E) duly endorsing details in the log book.

Role of Depot Clerk: The following guide lines are given for Depot Clerk (Earning Section).

- 1) After receiving ITIMS from Zonal Stores. He has endorse each ITIM details as per PO, I-TIM NO. SIM CARD NO. Charger, Pouch and Communication Cables (USB to USB) and RS-232 Serial port cables etc, into locality register.
- 2) All Spare I-TIMS are to kept at DC Room and keep under proper maintenance for dispatching to any service.
- 3) Failure, Breakdown and damaged I-TIMS details are to be informed to the DM/AM(T)/ STI and to Head Office Computer Section for immediate rectification.
- 4) Cross verify the I-TIM ticket amount with Total Remittance report, I-TIM ticket report.
- 5) Give Proper training on Uploading and Downloading of I-TIM through Way bill issue and Way

Bill Receipt program when new ADCs are reported at Earning section on promotion and on transfer from other depots with Assistance of System Supervisor /Regional Core Group Supervisors.

- 6) Maintain of ample stock of I-TIM paper rolls for issuing I-TIMs.
- 7) Ensure proper issuing and receiving of I-TIM accessories like , pouch, charger, paper rolls etc.,
- 8) Obtain written explanation from concerned ADC/Operator/Driver regarding on line failure of I-TIM and inform to DM/AM(T)/STI for taking necessary action.

Role of M/s Analogics::

- 1) The firm shall set up backend servers with required bandwidth in a secured data center.
- 2) The firm shall provide SIM cards with GPRS connectivity to all the ITIMs and ensure timely payment of monthly charges to the mobile operator.
- 3) The firm shall modify the software as per APSRTC requirements from time to time in coordination with M/s Abhibus for OPRS related integration.
- 4) The firm shall attend all hardware and software problems identified by APSRTC duly deputing the service engineers to the depots.

Role of M/s Abhibus – OPRS :

- 1) The firm shall modify the software as per APSRTC requirements from time to time.
- 2) The firm shall extend proper coordination to M/s Analogic by providing required APIs.
- 3) The firm shall inform M/s Analogic and APSRTC regarding deployment of new versions in production server well in advance.

The Dy.CTMs and Dy.CMEs 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 Mangers to ensure that the above instructions are followed in true spirit and take action in case of violations to ensure proper operation of ITIM services regularly.

VICE CHAIRMAN & MANAGING DIRECTOR

To
All Regional Mangaers

Copy to the Executive Directors, VJA,VZM,NLR,KDP Zones for information.
Copy to all Dy.CTMs / Dy.CMEs for necessary action.
Copy to all DMs for necessary action.