AVERROES-MTS

MANAGEMENT TRANSPORTATION SYSTEM

Traffic Planning

Dispatching System

Garaging & Safety

Customer Service

Ticketing System

Bookkeeping System

Chartered Trips

Inspection System

Report Generator

Optimization System

AVERROES
Travel Transportation Tourism

AVERROES MANAGEMENT TRANSPORTATION SYSTEM

Customer expectations, the need to be competitive and the demands of regulatory authorities require that transport operators constantly seek ways to improve their operational and managerial performance. The smart automation of business processes is vital to increasing the efficiency and effectiveness of current systems and at the same identifying opportunities to increase services.

Averroes-MTS, developed by Averroes, is a complete and comprehensive state-of-the-art software package designed to manage complex transport operations. It not only enables clients to manage all operational and administrative aspects of their business, it also provides solutions for management tasks and safety audits.

Averroes-MTS integrates the components of various hardware and software platforms of intelligent transport systems, making it fully hardware flexible. In order to gain most benefit from Averroes-MTS, we strongly recommend the use of: accurate intelligent communication technology, such as a vehicle computer (AVL), a real-time passenger information system (PIS), a passenger counting system (PCS), and automatic fare collection (AFC).

HOW CAN AVERROES-MTS BENEFIT YOUR BUSINESS ?

Averroes-MTS is complete:

all functions are combined in one system
each user gets only what he / she needs
functions are easily added – without limit

Averroes-MTS is convenient:

the system can be tailored to company policy
there is flexibility in the ways of working within standardized work flows
graphic and tabular displays are available

Averroes-MTS is easy to use:

the system has simple menus and tool bars
it is easy to control the process and to monitor operations
the provision of a warning system results in fewer human errors
it can be quickly learned

Averroes-MTS is time-saving:

response times are fast
entries are not duplicated, so there are fewer input errors
planning and adjustment to changes can be carried out more quickly
higher productivity levels can be achieved

Averroes-MTS helps to increase your profit:

lower labor, maintenance and breakdown costs, and lower fuel consumption
better use of vehicles
fewer kilometers and hours that do not generate revenue
reduced customer uncertainty, with increased customer satisfaction and loyalty,
resulting in higher revenues

THE AVERROES-MTS MODULES: MAXIMUM FLEXIBILITY

The modular nature of Averroes-MTS allows operators to choose exactly what they need for their specific business – whether it is providing full public transport services or offering special trips.

Averroes-MTS modules / Users	Planning & Scheduling	Dispatching	Chartered trips	Sales & Ticketing	Customer Service	Garaging & safty	Payroll & Bokkeeping	Inspection System	Optimization
PT operators	b	b		o	o	o	o	o	o
Special trips operators		b	b	o	o	o	o	o	o

b = basic   o = optional

Traffic Planning

A scalable, GPS-integrated tool with a flexible configuration of work maps, and graphic and tabular displays, to manage all normal requirements such as routes, stops, depots, vehicle use and drivers' rosters. This module maximizes fleet and vehicle use, reducing costs, and increasing productivity and learning capacity. It also interfaces to the automatic passenger counting system (PCS) and the vehicle computer (AVL).

Features

- Management of regulatory requirements
- Routes, stops & depots management
- Passenger counting management
- Cartography or GIS displays
- Multi-period planning, including special events and holidays
- Flexible configurations of work maps
- Graphic or tabular display

Sample Reports

- Rosters per division or company, or a combination of these
- Vehicle use per date and time
- Actual working hours per route, vehicle and driver
- Empty seats per route, date and time

Benefits

- Maximization of fleet use
- Reduction of non-revenue km / hours
- Accumulative learning capacity

Dispatching System

Efficient, effective and fast handling of day-to-day duties such as staff and vehicle assignment, management of driver absence and unused vehicles, with real-time alerts provided to personnel and to the garage and maintenance departments.
Integration with any advanced vehicle computer system will reduce the response time when a planned resource allocation needs to be changed. This module improves schedule adherence and operations support, as well as command and control of transit systems, and prevents over-allocation mistakes.

Features

- Duty and staff assignment including sub-contractors' assignments
- Vehicle assignment
- Fast response to real time events
- A block on incorrect driver / vehicle allocations
- Online connection with the maintenance department
- Attendance management, real-time alerts to personnel and maintenance department
- Query alerts, generated per vehicle / driver / route
- Multi-working day display
- Compliance with labor law

Sample Reports

- Fleet / driver count and availability (at department level)
- working hours per driver
- Trips per driver
- Daily schedule
- Chartered fixed trips reports
- Trips per vehicle
- Timetable for drivers
- Reports for PT Authority

Benefits

- Improved schedule adherence (increased time arrivals)
- Increased vehicle revenue per kilometer
- Improved operations support
- Improved command and control of the transit system

This module manages fleet maintenance efficiently. It provides online diagnostics and assessments of vehicle condition, periodic vehicle check management and preventive maintenance schemes. A vehicle computer can easily be integrated into the system for real-time, accurate date exchange and diagnostics.

The module also manages driver information and fitness / qualifications (health checks, licenses, training etc.) as well as the management of accident data and follow-up tasks. Using the module leads to a reduction in non-revenue kilometers and hours, reduced fuel consumption and a reduction in critical damage to expensive components.

Features

- Management of periodic checks per vehicle model / type / manufacturer
- Preventive maintenance schemes
- Management of driver information and fitness / qualifications
- Vehicle service management
- Management of accident and insurance claims
- An interface to the dispatching system

Sample Reports

- Vehicles for service / license renewal
- Drivers for license renewal / physical examinations
- Vehicle history
- Accident record history

Benefits

- Reduction of non-revenue kilometers and hours
- Reduced fuel consumption
- Reduction in critical damage to expensive components

Customer Service

Manages the recording and follow-up of customer complaints, service improvement suggestions and 'lost and found'. The module also controls all passenger information displays and supports all kinds of formats for those displays.

By using data from the Planning & Scheduling, and Dispatching, modules, it can provide planned timetables as well as real-time changes to passenger numbers for trip and journey planning. The result is elimination of uncertainty in trip planning, with greater customer satisfaction and loyalty, and fewer customer complaints. The Customer Service module is compatible with the hardware of advanced passenger information systems.

Features

- Production of detailed timetables and route stops
- Recording of queries per route / time / stops
- Support for all types of information delivery (mobiles, websites, SMS, passenger information monitors, terminal monitors)
- Management of customer complaints
- Journey planner

Sample Reports

- Planned timetables
- Real-time changes to timetables
- Customer complaints per driver / route

Benefits

- Greater customer satisfaction and loyalty
- Fewer customer complaints
- Reduction of uncertainty in trips planning

Sales & Tickets System

Manages all aspects of manual ticket operations, such as ticket orders, inventory and sales; route pricing; fare collection evasion and cost reduction – and human error. In addition, the module interfaces to automatic and Smart Card ticketing machines for ordering, managing inventories and reporting sales.

Features

- Ticket order management
- Ticket inventory management
- Ticket sales management
- Route pricing management
- Printing house management

Sample Reports

- Periodic sales reports per route / stop
- Periodic sales reports per ticket / passenger type
- Periodic sales reports per driver

Benefits

- Reduced fare collection costs
- Reduced human errors
- Reduced labor costs
- Reduced fare evasion

Payroll & Bookkeeping System

Assists in the evaluation and remuneration of drivers / employees and enables automatic and fast payroll processing according to drivers' actual working hours and / or commissions. Invoices to customers, as well as cash management, bank deposits and transfer transactions to accounting systems can be issued directly.

The module offers complete auditing support, personnel management, cost controls, payroll tracking functions and statistical reporting.

Features

- Fast and accurate payroll processing
- Fast and accurate commission calculation per driver
- Record of changes to planned work schedules

Sample Reports

- Cost analysis per route / vehicle type / drivers
- Planned versus actual driving hours
- Actual driving hours per driver

Benefits

- costs for generating the payroll
- Reduction in human errors

Chartered Trips

With minimal labor cost, this tool provides operators with a single point for managing all operational and administrative tasks of ad-hoc special trips as well as scheduled chartered trips (for schools, factories, etc.). This includes pricing, client and contact management, management of sub-contractors and suppliers, and vehicle availability checks.

Features

- Pricing of chartered trips according to different criteria such as type tour / regular, kilometers, duration, point of dispatch, overnight, holidays etc
- Client management
- Management of sub-contractors
- Management of contractors
- Management of suppliers
- Recording and printing of price offers for customers (client name / code, date, destination)
- Availability checks for vehicles per date / time
- Issuing of single and group invoices
- Status per order
- Dispatcher queries by status / client
- Cross division dispatching

Sample Reports

- Daily rosters per driver
- Order status per date / client / subcontractor
- Invoices
- Receipts

Benefits

- Automated daily operations
- Flexible and efficient pricing
- Improved customer service standards
- Minimization of labor costs

Inspection System

This module ensures the provision of a high level of service. It facilitates the work of inspectors in the field, and keeps management abreast of the work flow of daily operations, and adherence to service levels.

Features

- Management of inspectors' logs
- Follow-up management
- Immediate reporting to dispatcher / management
- Support for handheld equipment

Sample Reports

- Service quality reports
- Service violations reports per driver / vehicle / route

Benefits

- Increased adherence to service levels
- Increased awareness of service standards
- Immediate and continuous updates to management level

Optimization System

This module manages the different constraints in transport operations, and provides a very powerful tool to make best use of the business's resources. By combining various optimization parameters such as capacity, non-revenue trips, layover time etc. the module maximizes the use of vehicles, minimizes labor costs and thereby maximizes business profitability.

Features

- Allocations of trips selected from various routes according to variable guidelines
- Different optimization parameters (capacity, non-revenue trips, layover time etc.)

Sample Reports

- Vehicle working reports
- Vehicle working sequence
- Statistics and performance evaluation

Benefits

- Maximized use of vehicles
- Minimized labor costs
- Maximized profits