

PSV3[®]

Structured Telematics



Do you have questions? We will be glad to assist you!



TIS Technische Informationssysteme GmbH
Barloer Weg 188-190
D-46397 Bocholt

Tel. (+49 28 71) 2722-0
Fax (+49 28 71) 2722-99
info@tis-gmbh.com

www.tis-gmbh.com
www.logistik-telematik.de

MOBILE ORDER MANAGEMENT WITH



PSV3® IS THE OPTIMUM SOLUTION FOR

- Groupage Service
- Freight Transport ... or a mix of both
- Warehouse Solutions
- Disposal Logistics
- Individual Projects of Goods Flow Control
- Special Telematics Requirements



THE COMPONENTS OF THE PSV3® SYSTEM

- Basic PSV3® Components Overview
 - *Server components for your head office*
 - *Mobile solution for your tour*
- WEB-Portal PSV3® InfoDesk



PSV3® MOBILE SOLUTION

- Start-Up-Package
- Additional Modules
- Practical Examples



THE COMPONENTS OF THE PSV3® SYSTEM

OVERVIEW

PSV3® InfoDesk - INTERNETPORTAL

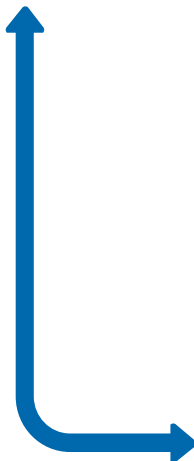
InfoDesk is our WEB-Portal - the access to mobile units and telematics. InfoDesk is an amendment to your dispatching software. Here we visualize current locations of your trucks and current events.



YOUR LOGISTICS AND SHIPPING SOFTWARE



Powerful gateways connect your transport management system to the PSV3® Server. This allows the integration of your drivers into your IT infrastructure in a very convenient way.



PSV3® MOBILE SOLUTION

START-UP-PACKAGE

The start-up-package allows the transfer of order data and messages from and to the truck as well as locating and tracking.



ADDITIONAL MODULES

The start-up-package can be enhanced customised by a broad selection of field-proven additional modules.



HARDWARE

The software of the PSV3® mobile solution runs on many industrial MDT's (Mobile Data Terminals), which conform to the field-proven requirements due to robustness.



PSV3® SERVER

The communication server is either located in your head office or hosted by TIS. The server provides the platform for automated data and file exchange.





InfoDesk SOFTWARE

PSV3® InfoDesk - INTERNET PORTAL

PSV3® InfoDesk is the ideal component to expand your logistics and shipping software. PSV3® InfoDesk closes the information gap anywhere in your company where captured mobile data cannot seamlessly be processed by your IT applications alone.

InfoDesk provides you with all the desired possibilities ranging from **fast order data entry** by the dispatcher and dispatching to the point of comprehensive evaluations you expect from an innovative telematics system by means of regulation and visualization.

On a **digital map** you can track the tours of your fleet and communicate with your drivers over the integrated mailing system.



The special Features of PSV3® InfoDesk

Simple and easy to use information processing:

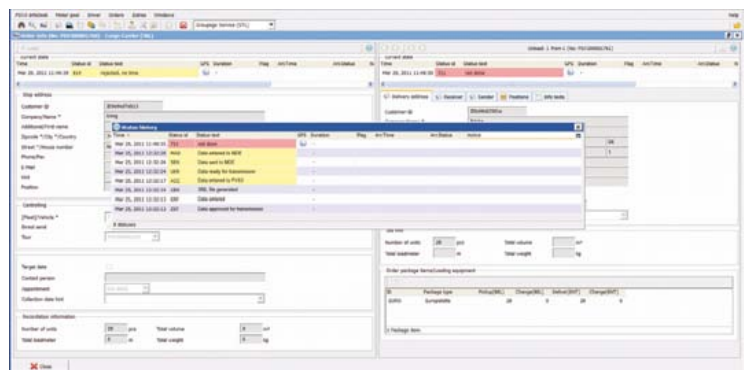
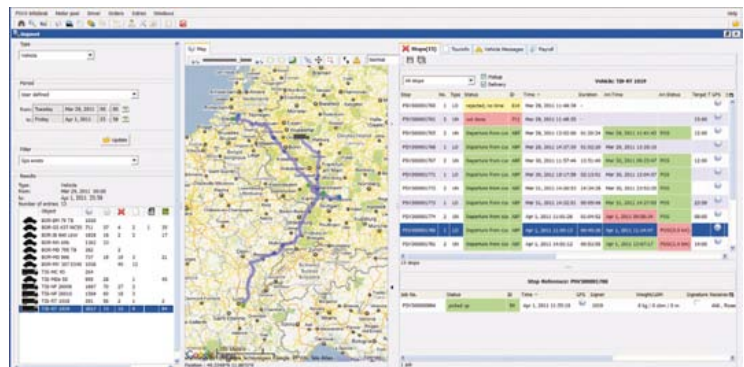
Thanks to our drag&drop menus you do not have to be a magician to enter and assign orders to your drivers and analyze data.

Workstation software installation not required:

InfoDesk is a browser based application, you can use InfoDesk anywhere you have access to a browser and the Internet.

A Multi-User Application:

Several users can work with InfoDesk simultaneously. Our pricing is based on the number of simultaneous users and not on the number of potential users.





THE START-UP-PACKAGE

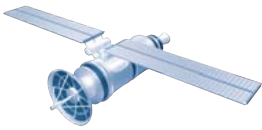
The start-up-package is the perfect starter-kit for all PSV3® driver's computers and already includes all the basic features necessary for a comprehensive and very fast mobile order processing:

ORDER MANAGEMENT



- Tour, loading and unloading stops in long-distance traffic
- Package delivery and pickup in local traffic
- Separated or mixed stop lists
- Scanning and status assignment to shipments and packages with cargo outturn report processing by choice of a related status
- Collection on delivery procedure, receipts for single and collective billing with clear writing of the issuer, digital signing and much more

GPS-INTEGRATION



Transfer of location data to a GPS receiver and transmission to the head office connected to the status transmission, either upon request of the head office or by tracing

DRIVER'S MAILING SYSTEM



- Transfer, display and storage of messages from the head office
- Convenient sending of prepared short messages to the head office
- Integration into the host email system is recommended

We care for individuality and ergonomics

- The operating functions will be configured individually and accordingly to the desired process organization (several hundred configuration possibilities existing!)
- Adaptive programmings, which cover special project requirements, are possible upon request
- The status concept will be discussed with you in detail and will be accordingly configured
- The user interface comes in German and English by default. If you deliver your own translations for other languages, our support team will gladly assist you with the integration of other desired languages
- Menus and icons are graphically designed by following ergonomic aspects and simplify the use even for untrained staff



ADDITIONAL MODULES

Telematics custom tailored

The additional modules complete the basic software to your custom tailored solution:

Virtual package covering sheet

Qualified package processing for delivery and pickup and increment of the billing dialogue to the package overview. No-exchange reasons are individually configurable. Allows use of the paper covering sheet and creates qualified data sets for fast and efficient processing of the package accounting.

Driver dispatching

Order rerouting (mobile2mobile) for delivery and pickup by the dispatcher for his assigned drivers (incl. master data) and transmission of the related status to the head office. This allows the effective use of zoned subcontractors.

Activity report

The activities are freely configurable, e.g. start and end of working time, rest periods, breaks, LZU, standby time, vehicle care. This allows determination and qualification of waiting times and other relevant order times as well as the preparation of staff and expense billing.

Photo documentation

Capturing of 2D images/photographs for status documentation, e.g. for delivery damages (device needs to be equipped with a photo capturing software).

Truck/Trailer Status

Documentation of the exchangeable container activities (semitrailer, roll trailer, swap trailer) with consideration of host preferences.

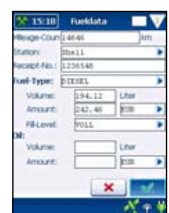
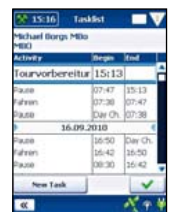
With just a few clicks the driver can enter relevant data like: container ID, container position (front/back), condition, seal ID, seal condition, time-stamp, activity status (e.g. loading/unloading/undocking) Thus the driver can conveniently and directly forward data of the exchangeable container for your accounting up-to-the-minute (not part of this additional module).

Refueling

Entry of relevant data of refueling procedures, e.g. payment method, fuel quantity, kilometer reading etc. (available on demand).

Reading software digital tachometer for Dako, Zauner, BTC

Reading of the digital tachometer and the digital driver's card via TRAK or reading of the digital driver's card by a smart card reader.





ADDITIONAL MODULES

Data transfer from the digital tachometer and from the FMS port

Delivers data from the FMS port as well as from the digital tachometer. The amount of delivered data may vary depending on manufacturer and installation. Typically this regards fuel economy data, data about driving characteristics and specific vehicle data, which can be evaluated by certain software in host systems or our additional module InfoDesk. This module also transmits activity information from the tachograph. The digital tachometer requires the TruckBox Basic, D-tacho + FMS port require Truck-Box Plus.

Weighing

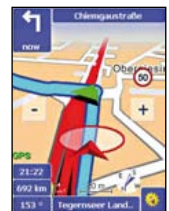
Allows wireless connection to mobile scales in the warehouse or at the truck. Data transmission from a truck scale, controlling of the weighing process (taring, weighing/printing) according to the product card table, printing of order receipts in coordination with the printing of the weighing result (please ask us for supported scale manufacturers).

Integration process of the terminal emulation TelnetCE

Integration of TelnetCE and the casing of third party applications (we recommend Telnet CE from Wavelink) or remote clients in PSV3® and of third party applications.

Integrationsprozess PTV-Navigation

Access to and parameterization of PTV fleet or truck navigator, automated transfer of the destination address, controlled task change with PSV3® application, sharing of the GPS receiver. Transfer of the estimated arrival time and the distance to the destination address.



VPN-Client

With the VPN-Client (Virtual Private Networks) from NCP the PSV3® system can be enhanced by an additional security tool. This software allows highly secured and encrypted data transfer over all public networks, WLANs and the Internet. By this the VPN-Tool – in combination with PSV3® – ensures communication and data transfer of storage levels or important company data between drivers and head office protected against the access of unauthorised parties.



*We are constantly developing new additional modules.
Please, ask us, if you are missing a function in this list!*



TIS also offers a broad selection of
HARDWARE SOLUTIONS

These solutions will be introduced in separate data sheets.



MORE EFFICIENCY WITH PSV3®

The pressure of efficiency constantly increases in groupage service:

Piled up appointments, tightening deadlines, nervous clients on the one hand. On the other hand tightened social regulations, increasing expectations due to dispatching quality and documentation liabilities as well as bonus malus systems connected to decreasing prices.

At the same time the flexibilization of freight transport is in full swing.

Delivery schedules are getting shorter, package sizes are shrinking, while the amount of stops increases enormously in the field of freight transport.

Trucks are used for long-distance traffic at night and for local traffic during the day, and depending on the economic situation transports are being executed with leased vehicles or subcontractors.

Last but not least the fleet sizes are heavily alternating and being flexibly adjusted depending on the respective needs.

This accelerating breakup of the formerly existing clear differences between long-distance and local traffic requires a virtually mobile order management solution without the necessity of a fixed installation: The TIS PSV3®-TL solution.

The PSV3®-TL telematics system is the efficient tool for transparency and fleet controlling. Driver and Dispatching are constantly on the same level of information.

The dispatcher uses the WEB-Portal InfoDesk to accomplish routine tasks in a more effective way and to distribute orders.

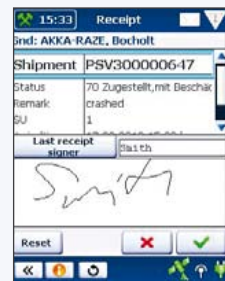
The driver can perform and keep records of his deliveries and pick ups very fast.

At the same time he can monitor his remaining driving time, while the navigation quickly leads him to his destination.

ORDER TRACKING WITHOUT GAPS

PSV3®-TL is documenting the transfer of perils at every point in the transport chain.

The desired workflow can be displayed by PSV3®. This helps you and your drivers to conduct your transport services highly efficient and with top quality.



All work steps are submitted to the head office instantly - it feels like you are on the road with your drivers personally.

A STEP AHEAD BY TECHNOLOGY

But PSV3® is even more powerful.

The innovative solution connects several wire-less technologies with each other and thus provides a high level of integration of all processes of your system logistics.

Components like GPS, GPRS module, scanner, camera and RFID technology for automated identification - upon request - are integrated as well as card reader and transponder for warehouse processing.

The basic software already includes all necessary features for pickup, delivery, tracking, digital signing and messaging between driver and head office.



PSV3® IS THE OPTIMUM SOLUTION FOR

TRANSPORT & LOGISTICS

MORE FLEXIBILITY WITH PSV3®

A STEP AHEAD BY MOBILITY

With the MDT (Mobile Data Terminal) of the PSV3® solution you are gaining unprecedented flexibility, which assures you real advantages in competition.

You can use your MDT's for your own fleet as well as for leased trucks or subcontractors. Moreover additional functions are enhancing the efficiency of your order management, like swap trailer management via barcode and transponder, signature of the receipt issuer, paper bill, copying of documents, damage documentation by photograph and much more.

By this PSV3® assures you a carefree order management without "blind" spots.



PSV3®-TL

The efficient telematics solution without fixed installation

PSV3®-TL offers all functions of a classic fixed installed telematics solution.

It provides mobile order management, communication system, technical monitoring and driver time management all at once and connects the multiple processes in combined shipment logistics and freight traffic in a highly flexible way.

What make it so special? Thanks to modern Bluetooth technology PSV3®-TL does not require any fixed installation.

With only one single move the mobile device can easily be fixed and picked up in the driver's cab. Fixed installation and changeover times do not even occur.

New possibilities for you.



PRACTICAL EXAMPLES

CASE I

Online warehouse scanning with damage photography

Forwarder "turnover" has 50 short-distance trucks in use. The drivers are going to be equipped with MBU as well as with load and unload scanning and damage documentation via digital photograph.

Load and unload scanning are a function of the host software, which can be accessed with a terminal emulation. The photographs of the damage will be indexed with the scanned barcode and transmitted to a server drive for later transmission to the archive via FTP.

PSV3® SOLUTION

MOBILE SOLUTION

- Software start-up-package

HARDWARE:

- Mobile device with
- WLAN
- Barcode scanner
- Camera

ADDL. MODULES

- Integration process
- Terminal emulation
- Photo-documentation
- Terminal emulation Wavelink

ADVANTAGE: The driver devices can be in use for scanning during loading and unloading. Picture taking out of the terminal emulation normally is impossible. This obstacle can be bypassed with the additional module "photo documentation".

CASE II

Driver rating

Forwarder "international long-distance traffic" operates a truck fleet only with partial truck load and full truck load traffic. The PSV3® system is in use for order management and visualization of the vehicle location. Now the company is looking for a possibility to analyze the driving characteristics and optimizing it in a resource preserving way by means of recommendations for the drivers.

For this purpose the trucks are being equipped not only with PSV3®-MBUs, but also with truckboxes. Connected to the FSM-Bus the truckbox wirelessly transmits vehicle data via Bluetooth to the MBU. The MBU transfers the data to the central InfoDesk Server, which analyses the driver's performance.

PSV3® SOLUTION

MOBILE SOLUTION

- Software start-up-package

ADDL. MODULES

- Activities
- FMS-gateway
- Data transfer from Digitacho

HARDWARE

- Mobil device with GPRS/UMTS
- Truckbox plus

SERVER-SIDE

- InfoDesk

SERVER

ADDL. MODULES

- Driver rating
- InfoDesk

ADVANTAGE: In spite of the FMS tap the driver's devices remain mobile. The vehicle data is being transmitted together with the tour and order data to InfoDesk where it stands by for the driver rating. There are no add-ons needed for the host system.

CASE III

Driving time

Forwarder "near and far" operates a mixed fleet of 50 trucks for local traffic as well as for long-distance traffic. The dispatchers need a simple supporting tool in order to consider the remaining driving time of every driver while dispatching the orders.

The vehicles are equipped with modern PSV3®-MBUs. Now the drivers insert their digital drivers cards into the card reader of the TIS-Multi-Cradle for reading once a day.

The driving time information is automatically being transmitted by the MBU to the PSV3® Server. With just one click the dispatchers can now easily check the remaining driving time of every driver for the day in the web interface of InfoDesk.

PSV3® SOLUTION

MOBILE SOLUTION

- Software start-up-package

HARDWARE

- Mobile device with GPRS/UMTS
- TIS Multi-Cradle with card reader

ADDL. MODULES

- Activities
- InfoDesk

ADVANTAGE: The driver's devices can read the digital driving card by means of the Multi-Cradle. The data of the remaining driving time is being transmitted together with the tour and order data to InfoDesk where it stands by for evaluation. There are no add-ons needed for the host system.

With us you are in good hands,
we care for your success!



The 5 essential pillars of our services help you to target your goals.



**Are you looking for the best solution for your needs?
..... contact us!**