



//// TRANSPORT MANAGEMENT WITH SAP ERP

inconso – your consulting and software partner



//// inconso AG

COMPETENCE IN LOGISTICS

With more than 400 employees on nine sites in Germany and one site in France, inconso AG is the leading consulting and software supplier for logistics solutions in Europe.

Our practice based, efficient logistics systems have been in use successfully by numerous large and medium sized companies for years. We are experts in the logistic processes in trade, industry and logistics service provider branches. We offer solutions exactly tailored to meet your needs – and this quickly and optimally integrated in your landscape.

The project approach covers from analysis and consulting, through the conceptualization, realization, Go-live and change management, to the support and lifetime partnership.

//// Competence of inconso AG in Transport Management with SAP

The major focal points lie in Warehouse Management and Transport Management. In addition, ERP processes such as procurement, inventory management and order processing along with integration and business warehouse technology in SAP NetWeaver belong to the service offering of inconso AG. On the basis of the many years of experience with SAP projects, the experts of inconso have also developed their own SAP Best Practices and Add-ons for secure and cost effective SAP implementations.

Along with the software, inconso AG also offers services for technical projects such as networks, radio frequency technology, order picking systems, telematics and databank optimization. Numerous partnerships highlight the competence of inconso for SAP based solution realization.

//// Current Partnerships:

- SAP Special Expertise Partner for SCM
- SAP SME Channel Partner for SAP Business All-in-One for Logistics Service Providers

//// TRANSPORT MANAGEMENT WITH SAP

TRANSPORT MANAGEMENT WITH SAP

Challenges do not arise out of the situation that there are not enough systems available in the market today to cover specific requirements, rather out of the control of processes when the realization of the requirements are distributed across multiple systems.

Continually changing conditions such as delivery chains, guaranteed service levels, smaller order quantities and a permanent cost pressure lead to the processes along the supply chain becoming more complex.

Required software components for the extension of existing processes are often integrated over subsystems in existing system landscapes. This is particularly the case with Transport Management Systems which are often connected to ERP systems via interfaces.

The disadvantages resulting from these system breaks are far-reaching.

They extend from the increased expenditures for system maintenance and interface administration to redundant master data management, suboptimal process design through to the increased risks through inconsistencies, errors during data transfers and system failures as well as lack of process transparency.

Each individual point results in costs that could be minimized with a comprehensive representation of processes in a single system. SAP has comprehensive and trend-setting solutions possibilities with SAP LES-TRA on the ERP platform, SAP TM and SAP Business All-in-One for Logistics Service Providers.

inconso AG helps you to select the right solution for your company and supports you in the realization of your project!



Transport Management with SAP



ERP AS AN UNIFORM PLATFORM

Worldwide, SAP ERP is one of the leading ERP systems and contains comprehensive functions for logistics inclusive Transport Management within its modules LES and LES-TRA. The logistics functions are completely integrated in the preceding and continuing ERP processes such as order management and invoicing. The transport planning occurs as an integral part of the business processes instead of in a vacuum.

The advantages of an integrated approach are, as examples:

- Risk minimization through reduction of error sources
- Reduction of administrative time
- Reduction of IT infrastructure costs
- Comprehensive processing of real-time information

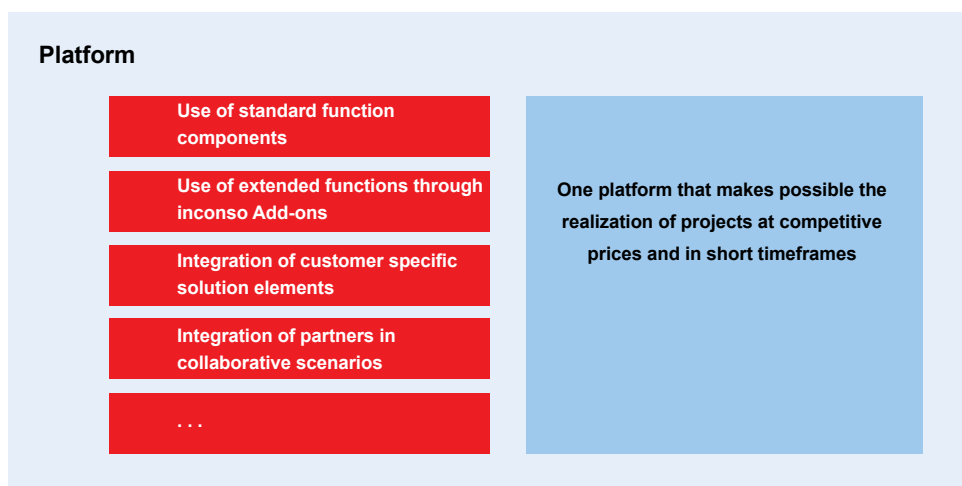
All functions and processes are represented on one platform.

Technologies and technological approaches such as

- Service Oriented Architecture (SOA)
- SAP NetWeaver
- SAP Business Objects Enterprise XI

guarantee a high flexibility in the features and design of processes.

Use the experience of inconso AG for the implementation and optimization of ERP processes – especially for logistics related topics such as Warehouse and Transport Management.





//// ERP as an uniform platform

TRANSPORT MANAGEMENT WITH SAP LES-TRA

Do you know the possibilities which are available in the standard functions of SAP LES-TRA?

With the standard functions of SAP LES-TRA, complex transport processes from the planning through to the invoicing can be represented. For example, there is the possibility of transport planning for inbound and outbound transports for different carriers and modes of transport. Such plans occur manually or supported by rules-based approaches.

Deliveries are consolidated into transports based on criteria such as regions or routes. Transport planning is possible for single and multi-level transport chains. The required transport segments for the plan are automatically created.

Furthermore, it is possible to plan transports in collaborative scenarios with your logistics partner. Transport processing via parcel service providers is also possible with the standard functions.

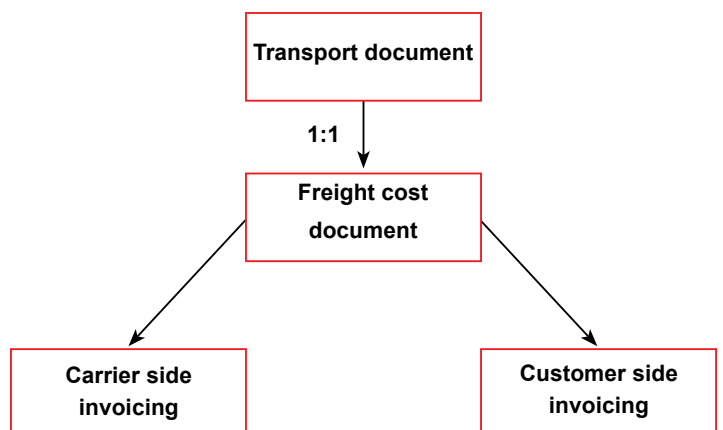
The results of the transport planning are documented in the transport documents. The transport document is the basis for the functions of the transport execution and freight calculation.

Within the transport execution, the transport status is tracked as an example. The freight calculation occurs on the basis of rules setups.

At the end of the freight calculation, the freight cost document is the result. Via this document, invoices with the customers and freight forwarders can be completed.

The invoicing with the different partners can occur in the invoice processes and credit note processes.

You would like to know more about the possibilities which are offered in the SAP standard? Contact us!



Even complex transport processes can be optimally controlled.



//// inconso Add-ons

inconso ADD-ONS FOR SAP TRANSPORT MANAGEMENT

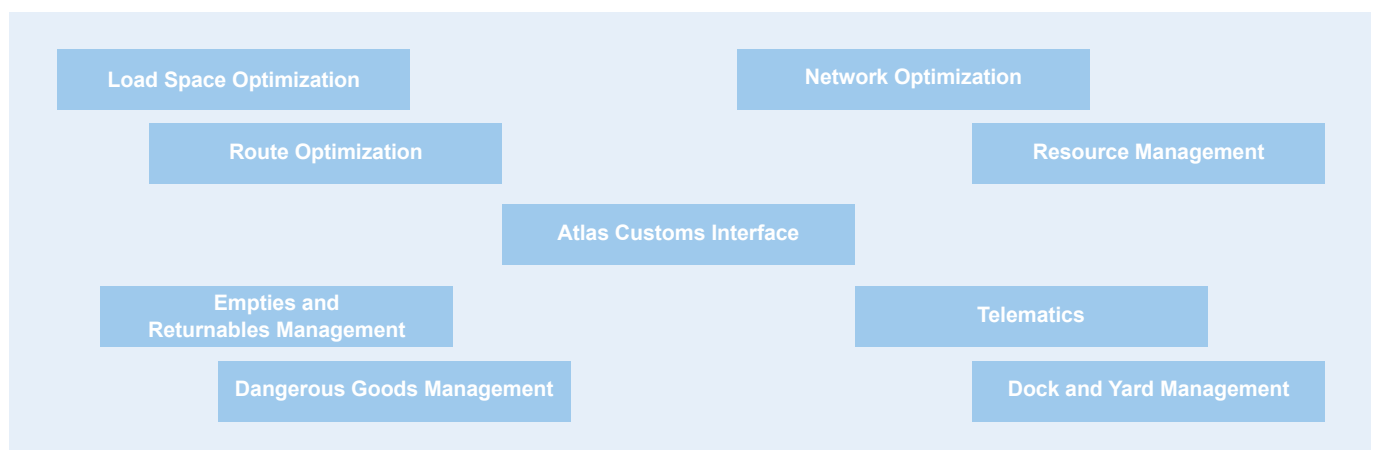
Based on the experience gathered in many customer projects, inconso has gained expert knowledge about the possibilities and limitations of the SAP standard functionality and the associated processes.

With the goal of being able to offer additional functions for the Transport Management, to close gaps identified within the processes and enable the use of functions from other process chains in the area of transport planning and controlling, inconso has developed numerous SAP Add-ons. These Add-ons extend the functional scope of SAP for Transport Management and increase the value of the functions offered.

inconso Add-ons for the Transport Management support the logistics processes on administrative, planning and control levels. Add-ons contain pre-set processes via customizing, additional functionality through user exits and optimization engines (algorithms) for optimizing processes.

All Add-ons are developed within the SAP registered inconso name space and use the SAP standard function components and transactions. Your SAP system remains release-capable!

Increase also the efficiency and quality in the planning through the use of inconso Add-ons.



inconso Add-ons support the entire logistics processes – for an optimal Transport Management

//// inconsoS/LSO

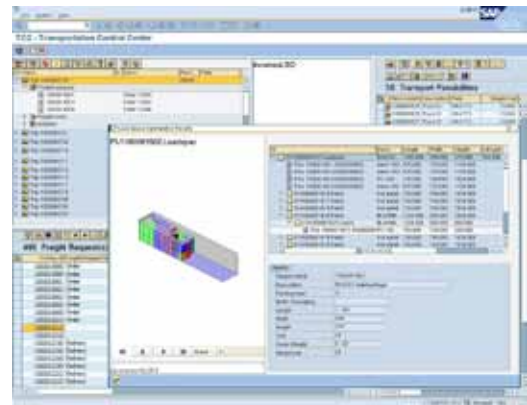
LOAD SPACE OPTIMIZATION

Transport planning without exact knowledge about the required quantity of floor spots or loading meters is often difficult, but often required since the required actual capacities are often known only after order picking is completed.

Simulation of the expected shipping units is the solution which the inconso Add-on inconsoS/LSO supports. This shows just one of the application areas for load space optimization.

inconsoS/LSO contains algorithms for the 3-D optimization of cartons, pallets and load spaces. Via the high-performance algorithms, the items are loading into shipping cartons, packed onto pallets and loaded into loading spaces or containers. The processes can be run both individually and in a process chain. The basis for the calculation is orders and deliveries.

Logistic properties such as stack factor and stackability of the item are considered along with the customer specific restrictions during the carton, pallet and load space optimization.



Planning board (Transport Control Center)

//// Features:

- **Supporting transport planning**
Planning and optimization of the loads for all normal transport load spaces
- **Carton / Pallet optimization**
Calculation of the quantity and content of the required shipping units as an instruction for the warehouse
- **Simulation**
Calculation of the packing proposals for customer support and for the transport planning
- **Shipping carton optimization**
Calculation of quantity and type of cartons required for the shipment

//// inconsoS/VPS

ROUTE PLANNING AND OPTIMIZATION WITH inconsoS/VPS

Achieving cost savings through efficient and optimal consolidation of orders and deliveries to routes:

This is the goal of the Add-on inconsoS/VPS. The main components of this Add-on are algorithms for master route planning, route planning and dynamic daily route optimization. All three components work with algorithms and work towards the goal of minimizing costs.

The planning occurs on the basis of geodata and considers numerous restrictions such as delivery dates, time windows and allowed vehicle types.

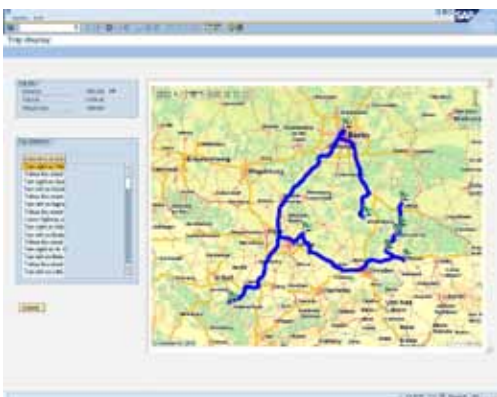
The components can be used individually or as in combination with one another. This allows, for example, that deliveries are first

planned in the master routes and then optimize the routes or manually edit the results.

Plans are completed in a planning board in which the results are displayed in tables with comprehensive Key Performance Indicators (KPI) and graphically on maps.

//// Features:

- **Master route planning**
For this type of planning, master routes are set up as templates in the master data. The freight requests to be planned are automatically planned in the master routes and trips created from this step.
- **Route planning**
Route planning optimizes the stop sequence in the trips while considering restrictions.
- **Route optimization**
Dynamic route optimization supports the automatic planning of freight requests to resources. During the optimization, numerous restrictions such as time windows, allowed vehicle types, driver restrictions are considered.



Planning board

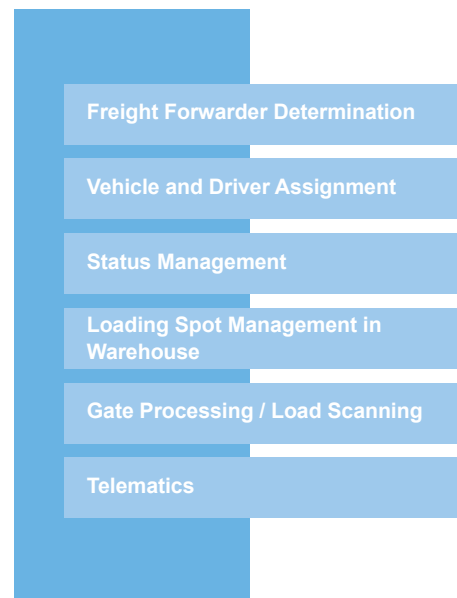
//// inconsoS/TEX

TRANSPORT PROCESSING WITH inconsoS/TEX

The transport planning is connected with the transport processing. It contains the operative functions and the control functions. Depending on the process variation, this covers from freight carrier determination to the control of warehouse activities through to the carrier localization.

//// Features:

- Freight carrier determination and optimization based on transport costs or rules based, for example based on agreed quotas or relations
- Vehicle and driver assignment
- Control of the order picked goods from the warehouse through to the truck or container
- Loading spot management for the staging of order picked / staged goods
- Scanner-supported gate processing and loading control
- Status tracking (Tracking & Tracing)
- Connection to telematic systems



The optimal transport process – perfect control thanks to inconsoS/TEX



//// inconsoS/RPA

FLEET MANAGEMENT WITH inconsoS/RPA

Whether freight forwarders or your own fleet – always complete transparency about the fleet – in the planning as well as in the controlling.

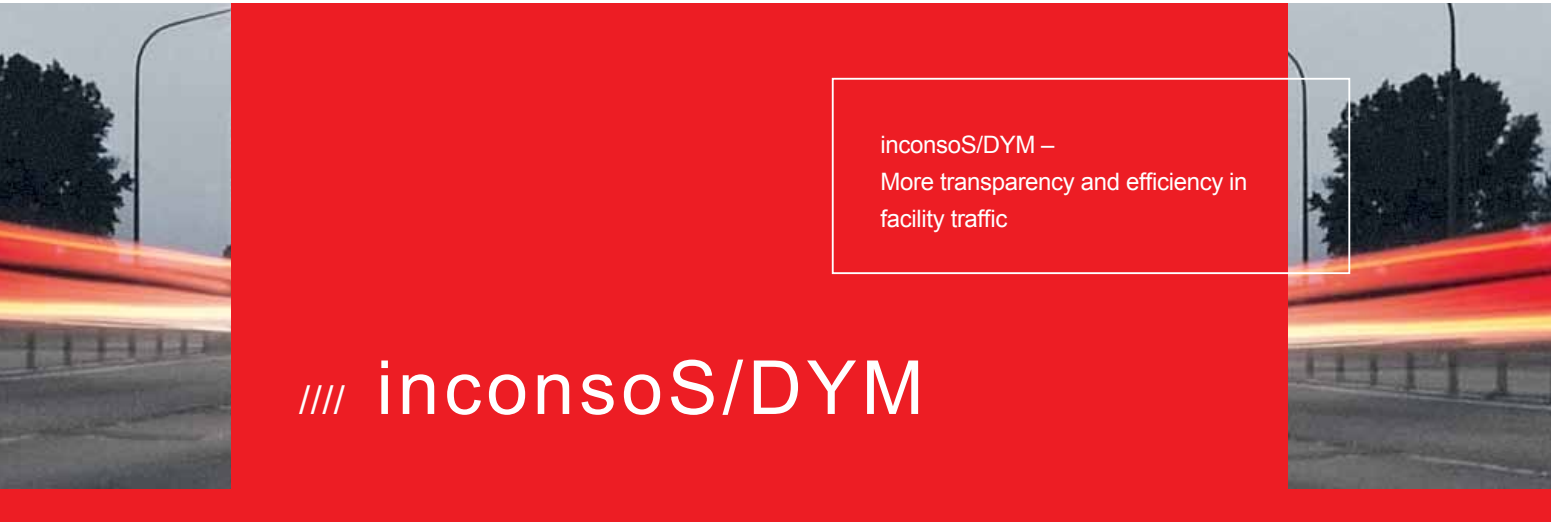
This goal is achieved with the Add-on inconsoS/RPA. It connects the standard functions of the module SAP PM (Plant Maintenance) and SAP CS (Customer Service) with the transport planning functions of SAP LES-TRA.

On one side, the current vehicle data are always available in the transport planning. On the other side, the complete transparency regarding performance KPIs such as vehicle utilization, consumption, mileage and costs are available.

In addition, standard functions of the module SAP PM such as maintenance processing for the completion of cleaning activities are used.

//// Features:

- Management of vehicles using equipment master record
- Management of vehicle availabilities
- Monitoring of vehicle utilization
- Monitoring of mileage
- Recording of maintenance orders for vehicles and containers
- Recording of consumption via interface
- Protocolling of history of vehicles
- Import external toll and fuel data



YARD AND RAMP MANAGEMENT WITH inconsoS/DYM

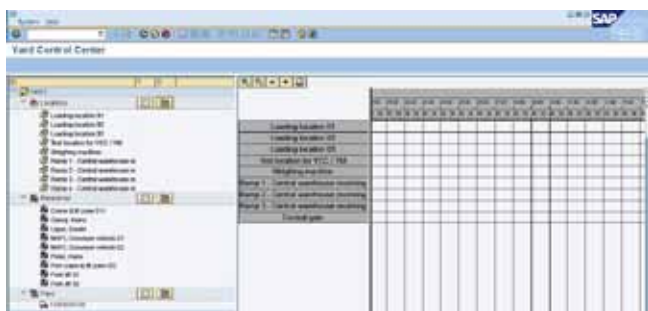
Often, transport planning occurs independent from the warehouse logistics. The result is processes which are not coordinated and can lead to waiting times and increased processing times for the vehicle processing as well as a peak demand causing increased personnel demand. Tap into the existing savings potential with inconsoS/DYM. inconsoS/DYM contains functions for the planning, controlling and monitoring of internal transports.

In the planning, transports are broken down into transport segments and the required resources in the form of personnel, equipment and vehicles for the processing are booked. Activities occurring in the individual transport segments are controlled and monitored. inconsoS/DYM is multi-yard capable and is able to process data from different sources.

Planning results are displayed in tables and graphically in a Gantt diagram. All planning results can be manually edited.

//// Features:

- Internet based time window booking for carriers
- Simulation for evaluating changes (for example, deactivation of loading sites, changes of availability times, etc.)
- Forecast of resource demands
- Forecast of utilization peaks
- Time requirements for adjacent processes such as carrier assignment or order picking control
- Automatic planning of arriving vehicles
- Support of workers at the locations via monitors
- Monitoring and inclusion of results and disruptions
- Event controlled triggers of any process relevant actions such as printing of shipping documents or creation of transport orders for delivered goods
- Execution of movements in the yard via mobile equipment



Monitor route allocation



//// inconsoS/ERH

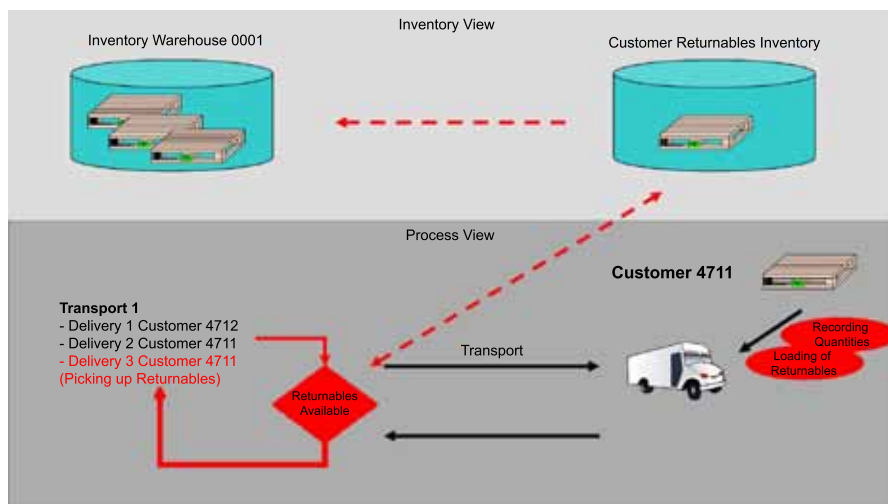
EMPTIES AND RETURNABLES MANAGEMENT WITH inconsoS/ERH

Empties and Returnables Management is a topic that means additional administrative expenditures and higher costs through capital binding and restocking.

An effective integration of processes for empties and returnables management directly in the planning process simplifies the processes, increases the transparency and reduces the management expenditure and costs of capital binding and restocking.

//// Features:

- Representation of the returnables loading, returnables pickup and returnables credits and debits
- Automatic setup of deliveries for returnables pickup
- Inventory information for returnables stocks
- Linking of returnable HUs in PM Equipment for tank container
- Automatic setup of maintenance orders for arriving empties
- Creation of delivery positions for the returnables loading – selectable from the packing process in the delivery, the transport or for individual customers
- Status management of returnables



Process overview returnables processing



//// inconsoS/FTD

FOREIGN TRADE MANAGEMENT WITH inconsoS/FTD

Together with TIA innovations GmbH, inconso offers a completely SAP integrated version of the application software AES 2.0 (Automated Export System), which is the only process for export reporting to the customs authorities in Germany since July 1, 2009.

As one of the AES 2.0 certified vendors of AES software, TIA supplies a version of the AES software which is integrated into SAP in the inconso SAP Add-on inconsoS/FTD.

This integration allows the user the ability to process the entire communication with the customs authority completely from within SAP – from the export registration to the export documents (ABD) through to the confirmation of the export by the customs authority. The user no longer has to switch from one application to another to complete its task.

A special highlight of this application is the „Fair Price“ invoicing model with which each user can set up its own invoicing type – whether flat rate, position or transaction related. The invoicing form can be changed at any time online.



The cooperation between TIA as a supplier of the AES 2.0 certified software and inconso offers SAP users an attractive, stream-lined alternative to the SAP GTS.

The software running as a background process checks the entries in SAP and takes over the communication with the customs authority.

//// Features:

- Creation and communication of export registrations and export documents
- Customs authority confirmation of export
- Fair Price invoicing model



//// inconsoS/DGM

SIMPLIFIED DANGEROUS GOODS MANAGEMENT WITH inconsoS/DGM

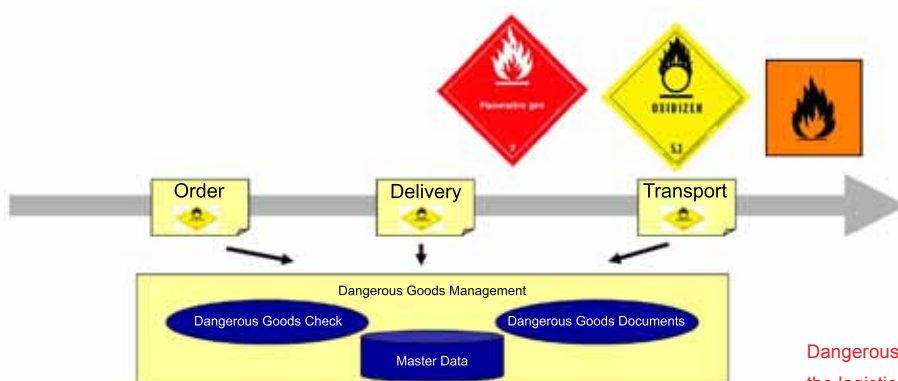
Storage and transport of dangerous materials places high expectations and requirements on the safety. This is mirrored in the numerous regulations and laws which must be adhered to. Safety and legal relevant master data have to be maintained and continually updated to achieve this. Both the goods receiving and goods issue processes must be designed to meet the requirements for safety.

For example, the putaway strategies must be set up to meet the clustering restrictions or the quantity limitations must be considered. For goods issue, the mandatory labels must be applied and the transport and accompanying documents required based on the valid dangerous goods laws must be printed in the dictated language. For the transport planning, the load consolidation regulations must be checked and validated. inconsoS/DGM is an effective and stream-lined solution for your dangerous materials and goods management.

//// Features:

- Management and maintenance of specific master data for dangerous materials and goods
- Maintenance of text fields in different languages via field-dependent text templates
- Agreement check on material and warehouse location during warehouse bookings
- Checking of allowed loading combinations of dangerous goods for transport
- Consideration of transport reliefs according to ADR 1.1.3.6 („1000 points rule“) as well as exempt and limited quantities (EQ, LQ)
- Printing of dangerous goods relevant transportation documents

inconsoS/DGM already considers the GHS (Globally Harmonized System of Classification and Labeling of Chemicals), which is being implemented worldwide for the simplifying of classification and designation of dangerous materials.



Dangerous materials demand higher requirements in the logistics.

//// inconso AG Product and Services Portfolio

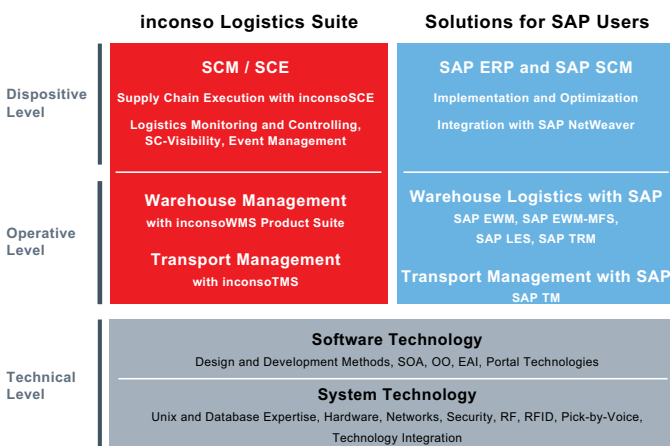
inconso – the leading consulting and software company for logistics solutions in Europe.

inconso stands for competent, professional project execution - from the analysis and consulting, designing, realization, implementation, change management and the support and Lifetime Partnership.

//// Services

Our service offering – a short overview

- **Logistics and IT consulting**
 - **Supply Chain Execution and Visibility Solutions**
Logistics monitoring and controlling of logistics networks with inconsoSCE, consulting, individual developments
 - **Warehouse Management with the inconsoWMS Product Suite**
 - **Transport Management with inconsoTMS**
- **Solutions for SAP Users**
 - **Intralogistics Solutions with SAP**
SAP EWM + MFS, SAP LES + TRM
 - **Transport Management with SAP**
SAP TM, SAP LE-TRA
 - **SAP ERP Solutions**
SAP Business All-in-One for LSP
- **Complete solutions from a single source**
 - Process consulting, Software and Technology, RFID, RF, Pick-by-Voice, Pick-by-Light



inconso service offering at a glance

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