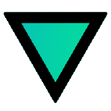
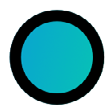
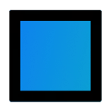
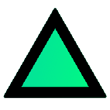
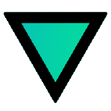
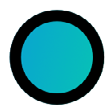
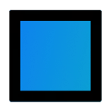
## Introduction



Transport Management Systems for Shippers

When it comes to Transport Management Systems (TMS), people often think of systems that help carriers with scheduling orders, drivers, and the use of their fleet. However, shippers can also benefit greatly from using a transport management system to manage their transport orders. In this white paper, we explain the added value and key aspects of a TMS for shippers. We also debunk the belief that transport management systems are out of reach for smaller organizations due to complicated software integration and high licensing costs. That has changed recently. We will discuss the following topics.

## What is Transport Management?



What is Transport Management?

Get the most out of your contract rates

The power of accurate real-time data

Placing orders in one system: your own system

Automating and digitising transport management

Keeping a TMS scalable and affordable

EDI / API connections

Working with multiple carriers often leads to a more optimal mix of transportation quality, costs, and thus customer satisfaction. A TMS for shippers is then necessary to maintain direct control by automating and digitizing in a smart way

Transport Management is necessary to make transport run as effectively and efficiently as possible. Quality, service, timeliness, speed, and costs are important factors in this regard. To effectively manage transportation operations, accurate, complete, and up-to-date data is needed on rates, orders, performance, and invoices.

For shippers who usually outsource transportation, transport directly affects profit margins (through costs) and customer satisfaction. To optimize the transport operation as much as possible, even when something goes wrong, central control is necessary: transport management or the so-called "control tower".



Transport management is essential to keep your transport effective and efficient.

## When is a TMS for shippers beneficial?

Although central transport management can also be outsourced, it does lead to a high dependency and possible "vendor lock-in". If the logistics partner does not perform well or if the shipper's requirements change over time, there is little flexibility to make changes. Also, the same level of service and quality is not necessarily needed for all transport orders of the shipper. For example, if a carrier has good track & trace capabilities, offering real-time information on where the shipments are, the shipper would be paying for this feature on all shipments, while many customers may only require a predictable delivery time. All logistics service providers have their own strengths and weaknesses in terms of volume (groupage, LTL, FTL) and their network (countries or regions) regarding the location of cross-docks and the use of local transport partners and services offered.

For shippers, working with multiple carriers is often more effective as it allows for optimal utilization of the carriers' different strengths and weaknesses. It also avoids excessive dependence on a single external party. However, booking shipments in the portals of multiple carriers leads to fragmentation of data. To be able to manage effectively, the shipper must have a good overview requiring correct, complete, and up-to-date data: their own TMS provides this. Shippers can then optimize each shipment for what is needed in terms of speed, quality and costs. Shippers can also keep a close watch on the impact of transportation on the rest of the organization (sales, warehouse, production, administration). Knowledge (data) is empowering!

## Get the most out of your contract rates

The first step to good management is good organization. An excellent transport procurement process leads to the selection of an optimal mix of carriers and clarity about contract rates and (fuel) surcharges. By making simulations during the procurement process, or at the start of a year, on how to distribute the shipment profile among the carriers, you can set realistic and achievable targets.

As previously stated, carriers all have their specific strengths and weaknesses. Groupage carriers charge (much) higher rates for LTL and FTL shipments than LTL and FTL specialists. There may also be differences between carriers in countries and regions. If a carrier already travels frequently near your client in southern Germany for example, he doesn't need to detour for you. These specializations are reflected in the rate tables, which have volume brackets and zip zones that match the strengths of each carrier. In our view, a good TMS should provide the ability for carriers to use their own rate tables. A fixed template usually leads to higher costs, see our inspiration blog "the killing rate template" on our website. A TMS can provide insight in contract offers for an individual shipment within seconds, leading to the best choice (lead time, quality and price) at any given time. If you do not have rates for a certain destination or volume, a TMS can easily help you request and compare rates from desired carriers. All without having to send a single email.

A second method to optimise contract rates and prevent dependence is to ensure that there are multiple alternatives for the regular routes. In our view, there should be a limited and reasonable number of alternatives. While adding more carriers may lead to lower costs, adding extra carriers also results in more administration and more transport movements for the warehouse. It is also important to safeguard that all carriers receive sufficient business from the shipper. A good long-term partnership is a two-way street. An in-house TMS not only provides insight into how and why choices are made by the shipper's staff, but also whether carriers are receiving the volume of orders that was forecasted at the beginning of the year. If this is not the case, for example due to a quality issue resulting in fewer bookings, the shipper can discuss this with the carrier in the short term based on objective and accurate data.



Proper management with a TMS starts with organising the right mix of carriers. The TMS should be able to allow carriers to use their own rate structure to achieve optimal costs at the requested quality. Then, a TMS can provide insight into whether carriers are being used according to the 'optimal plan,' and if not, why not.

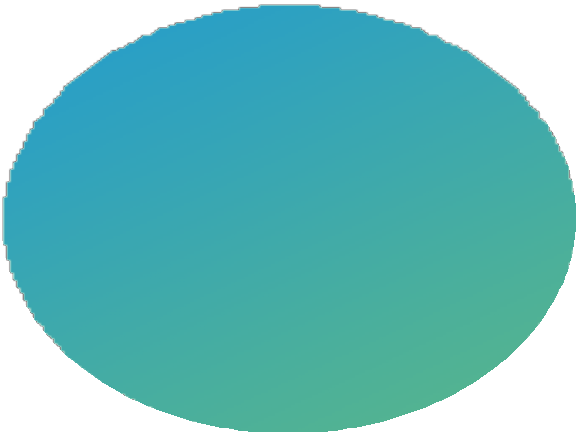
## The importance of “real-time” data

"Forewarned is forearmed," as the saying goes. In practice, for many shippers, transport management is mostly about "looking back." Invoices that arrive weeks later with unexpected surcharges and customers telling you that a shipment was late instead of the other way around. Additional costs for express shipments, the impact of which on your profit margins only becomes clear when the annual report is drawn up.

To manage effectively, you need to know two things: where do you want to go, and where are you now? For "where you want to go", it has already been discussed that a simulation at the start of the year (or in a procurement process) gives a good impression of the optimal distribution. Realistic and measurable targets can then be set for the transport operation.

A good TMS allows you to see (anytime, anywhere) where you are relative to the set targets. The earlier deviations are visible, the more effective an intervention is. In daily operations, there are always deviations in the primary processes that impact transport and vice versa. For example, if production is structurally late, causing logistics to have to book many urgent shipments, this leads to high transport costs. If these are "hidden" in monthly invoices, it is not immediately clear where the real problem of high transport costs lies. Another example is that many transport movements with relatively few loading and unloading docks lead to waiting times and therefore extra costs for the carriers and extra workload in your own warehouse. This can be solved with dock planning/management functionality in a TMS. The shipment profile can also be different due to the loss or addition of customers.

Real-time data allows the logistics department to make the best choice at any time and gain insight into bottlenecks. This allows addressing incidents as well as structural problems in a timely manner. For the finance department, it provides immediate insight into transport costs versus the budget.



Timely data empowers timely actions and continuous improvement.

A TMS

# HELPS FINDING THE ROOT CAUSE OF YOUR PROBLEMS.

## All data in one systeem, your system!

One of the main reasons for shippers to use their own TMS is to have all data automatically available in one place. The biggest problem for shippers in managing transportation is data that is not complete, not correct and/or not up-to-date and not in one place. This is not only a handicap in daily operations, but also in transport procurement. Carriers need a well-detailed overview of shipment details to prepare quotes accurately and relevant for your profile.

Data is often scattered and carriers may know more about your transport operation than you do. This data can be brought together in one place, but it often takes time to retrieve and consolidate it, especially when the data sources have different formats. In addition, it may only show what has been booked, but not what could have been booked (cost-saving potential).

If part of the management and especially the daily communication with carriers takes place via email, agreements that impact prices (waiting times, extra surcharges) may not be properly registered, which makes invoice verification difficult. Traceability and transparency are also enhanced by having your own TMS.

Even if you work with only one carrier, there are still benefits. If you work in their portal, you have everything in one system, but not in your own system. If you want to switch to another carrier, you will need to start from scratch again.



Using their own TMS allows shippers to build their own dataset directly and automatically, all in one central location. Having insight, overview and traceability leads to effectiveness and efficiency in the operation. Additionally, structured data is an optimal starting point for a procurement process (transport tender).

## Automating and Digitising

If a shipper works without a TMS, there are a number of tasks that can be time consuming. Firstly, looking up rates for each shipment in the contract agreements. This can be relevant for sales (when making a quote) and of course the logistics department. If these rates are only stored in separate (Excel or PDF) files, it is very time-consuming to search through multiple contracts. In practice, this usually doesn't happen at all because **shippers take the easy way out**. For example, a carrier is assigned for each country so that the correct rate agreement can be found 'easily', or bookings are made 'blind'. Our experience has shown that optimizing per shipment based on multiple rate tables from multiple carriers can save up to 10% annually. So 'penny wise' (low workload due to a suboptimal workaround) is again 'pound foolish'.

Without a TMS, booking transport orders or registering shipments is done by email, phone, or in the carrier's portal. If multiple carriers are used, multiple portals must also be logged into. Even when an order is booked, correspondence often goes by email. price agreements made in this way, such as certain surcharges, are often not transparently and traceably recorded. This leads to additional effort later on during invoice verification.

Shippers without a TMS sometimes have the ability to automatically send orders to the correct carrier using their ERP system. However, these solutions often have limitations in terms of surcharges and communication. For example, carriers may not be able to provide additional costs, confirm orders, make changes, add documents, request rates, etcetera. Much of the work and knowledge is still hidden in emails. Time saved in the logistics department leads to additional time in the financial department.

A TMS with rate selection, ordering, and communication capabilities can structure this process with little workload. In addition, it becomes easy for employees to take over each other's work in case of absence or illness without the need to dig into email boxes. Everything is available in the TMS.



By performing the entire selection and booking process as well as communication around orders in your own TMS, a lot of time is saved while working optimally.

## Keeping a TMS scalable and affordable

TMS systems for shippers are not new. However, traditionally they are bulky IT systems that are integrated with other software that the shipper already has. This requires a significant investment in time and money for integration, in addition to usage costs. To have a good business case, there must be a large transport volume, which means that TMS is usually only interesting for multinational corporations and large companies. Usually it is "all or nothing" in terms of functionality and rate sheets are often based on a spreadsheet-like format.

In our view, a TMS for shippers should be scalable and affordable, making them accessible to all shippers who need structural transport. With that mission, we have developed alpha-TMS. In essence, it is a web-based application that can be used standalone without integrations. With a modular setup, only those modules that are truly needed can be used. With this approach, a TMS becomes within reach of much more companies, bringing TMS software up to par with general SaaS software developments of the 21st century. Integration with the shipper's software should be possible, but as an option and not necessarily the norm (see next section).

In addition to scalability, flexibility is also an important requirement. Shippers have different wishes and demands for transport, for example, different relevant surcharges. A wholesaler who supplies supermarkets has different requirements than a factory in the chemical sector. A TMS must also enable carriers to use their specific strengths, as described earlier.

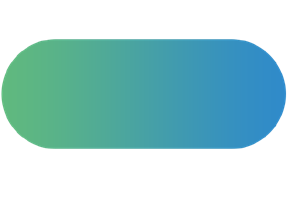


De are of large, inflexible TMS software packages is over. To provide solutions to a larger group of shippers, there is a need for scalable and affordable TMS solutions, that are modular and flexible.

## The power of centralised EDI/API connections

Although a stand-alone TMS can already be very powerful, there is certainly room for improvement with software integration. This can be achieved through so-called API (Application Programming Interfaces) and EDI (Electronic Data Interchange) connections. The basic requirement is that this must be cost-effective. It must provide more value than the time and money it takes to establish and maintain the connection. If both the shipper and carriers are connected to the TMS, it becomes possible to directly import transport orders from the shipper into the TMS, select the best transport option for each shipment and send the order directly to the carriers' systems. This saves time and prevents mistakes.

If you want to automate connections but don't have a TMS, a new API/EDI connection will need to be established and maintained for each carrier-shipper combination. This creates a lot of overhead for IT departments and creates an unwanted barrier for selecting or switching to a new carrier. The danger of "vendor lock-in" resulting from all the automation carried out is the result. A TMS ensures that a shipper only needs one connection, the connection that links the ERP package to the TMS. All connections with carriers are provided by the TMS provider. If a TMS is not needed because there are enough functionalities in the ERP package, a connectivity solution such as XDock can also provide flexibility and lower costs in terms of EDI/API connections.

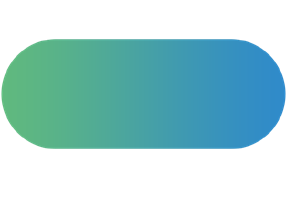


Shipper

Carrier 1

Carrier 2

Carrier 3



Carrier 1

Shipper

XDock

TMS/

Carrier 2

Carrier 3

Without TMS / XDock: Each new collaboration requires a new connection.

With TMS / XDock Shippers need only 1 connection, also when new partners are added.



API/EDI connections can further automate the process from customer order in the system of the shippers to transport order in the system of the carriers. A cost-benefit analysis is needed to determine if this is really a good idea. Connecting via a TMS or an application like XDock has a huge advantage for shippers because only one connection needs to be made and maintained by the shipper's IT department, even if logistics partners are added or changed.

## Final Remarks

A TMS is a means to an end and not a goal in itself. In our view, it should bring structure to operations and support a strategy that optimizes shippers' transport in terms of quality, delivery time, and cost. For this, structural cooperation with multiple carriers is often opportune and can save 10% to 30% in costs at the desired service level. With their own TMS, shippers receive better data automatically (and therefore in real time) to make decisions. This gives them more control over the process, which leads to monitoring the commercial margin on their products and customer satisfaction. It also reduces emails and communication, and enables teams to seamlessly collaborate even during outages or absences.

However, a TMS must be scalable and affordable, through a modular design and the use of the latest software technologies. The TMS must be flexible enough to accommodate the specific needs of shippers and their industries, while also being flexible enough to utilize the strengths of carriers. By acting as the "hub" for API/EDI connections, further automation can be achieved with minimal IT overhead.

Transinnovate is always looking for innovations in processes and software solutions that add value for shippers. Our own applications are 100% driven by questions and challenges from our customers. Would you like to discuss our vision of a TMS or learn more about how our TMS (alpha-TMS) could cost-effectively support and relieve you? Please feel free to contact us to learn what a TMS can bring for your case.

Contact



Transinnovate Group BV Leidse Schouw 2

2408 AE Alphen aan den Rijn

[info@transinnovate.com](mailto:info@transinnovate.com)

+31 172 74 00 90