TRANSPOREON
transforming transportation

K+S

K+S and Transporeon:
a smart and scalable
collaboration

K+S: a global presence

K+S is a mining company with production sites in Germany and Canada. It is focused on potassium-based products for the agriculture, chemical, pharmaceuticals and food industries, as well as supplying salt and ice melt to communities.

As a shipper with high volumes in both bulk and packaged goods, it makes use of a variety of means of transports, making logistics a core process at K+S. It has a high impact on its cost structure and service level and is crucial to adding value across K+S's entire supply chain. Within its European market alone, **the truck transport volume is about 5.4 million tonnes per year, or approximately 220,000 full truck loads, and total spend is around 100 million euros.** Due to seasonality in both, the fertilizer and de-icing business the transport volume can fluctuate by several hundred thousand tonnes per year, utmost flexibility in the Supply Chain is therefore required.

Initial situation and challenges in logistics at K+S

Prior to working with Transporeon, K+S had a large and heterogeneous European truck carrier portfolio consisting of 490 truck carriers from 17 countries, delivering products direct from its mine sites or from distribution centres and warehouses, equating to around 100 loading places.

Previously, K+S used IT tools, such as the in-house developed Supply Chain Web-Portal. The Supply Chain Web-Portal combined various applications such

as transport assignment, time-slot management and warehousing execution applications. The portal was connected by several interfaces to K+S's SAP system. As time went on, K+S found that these tools would require too much work to keep up with innovations, upgrades and new functions – particularly as technology development was not its core business. K+S found that its in-house tools had a low degree of technical and functional innovation, and it would require too much effort to future-proof these apps for SAP S/4HANA.

Likewise, K+S had many points of communication with carriers across various channels – such as EDI, Email, web portal or fax – and beside the EDI and web portal, K+S had no interfaces for its carriers. This took a lot of effort and required daily support and K+S recognised that it no longer had the resources to support and enhance the carrier connectivity.

K+S decided that the resources that were used to provide support for its own platform users and carriers would be better suited for value-adding activities – rather than trying to match a variety of different transport management interfaces, it was better to have all the data accessible from one platform, such as Transporeon.

"**K+S came to the conclusion that they must offer reliable framework conditions for future investments at carrier side and that an industry-wide standardised business process integration approach is the way to go,**" explained Steffen Brill, Senior Director, Logistics Procurement & Execution. "**With our self-developed and deployed tools, we were no longer able to participate in market developments and the lifetime of those tools came to an end.**"

After an initial evaluation, K+S recognised that it had a low digitalisation level, less visibility when it came to order and delivery status, and that there was a lack of data-driven transparency and exchange in logistics execution. It found that the four biggest challenges in today's logistics industry, such as long waiting times, no transparency, empty runs, and a fragmented communication process, also impacted K+S significantly.

Likewise, at that time, K+S "also had to deal with a more volatile and complex market situation + were confronted with a decreasing attractiveness of K+S as a shipper," noted Brill. Therefore, K+S agreed that they needed a new structure and a unified carrier interface – it required a central platform between its inhouse core SAP and its carrier network outside the company.

Why Transporeon?

After a big opportunity & market analysis, K+S decided that it wanted to partner with Transporeon and with Sixfold. A key consideration for this was Transporeon's existing network with over 1,300 shippers and 130,000 carriers, particularly as a majority of K+S carriers were already working with Transporeon. Likewise, Transporeon's ability to offer carrier support around the clock in 25 languages across different time zones was equally important.

Another key consideration for K+S was Transporeon's ISO-27001 certification and strong SAP connectivity, which meant enhanced opportunities for customisations and a strong security network – something K+S was looking for.

Overall, K+S was looking to eliminate the EDI interfaces and establish a single point of communication with its supply chain partners. Transporeon was an ideal

partner because it was able to manage the connectivity between the platform, the carriers and Sixfold automatically, serving as a single connecting network for K+S.

"It is good for K+S to have this connection as Transporeon manages the link to Sixfold and all the external partners, meaning K+S only needs to focus on its connection with Transporeon. So, from a technical perspective it's a very smart & scaleable collaboration," said Stefan Grosch, Head of K+S IT Team, Logistics.

Likewise, the constant improvement in ETA accuracy of Transporeon's Sixfold app was another deciding factor for K+S. Based on platform learnings, Sixfold enriches the carrier data with additional information such as traffic jams and driver breaks, which ensures that ETA prediction is improved day by day.

Stefan Grosch
Head of Team Logistics |
IT Sales & Supply Chain

Steffen Brill
Senior Director, Logistics
Procurement & Execution

ETA data enables better loading and unloading processes at the shipping and unloading points
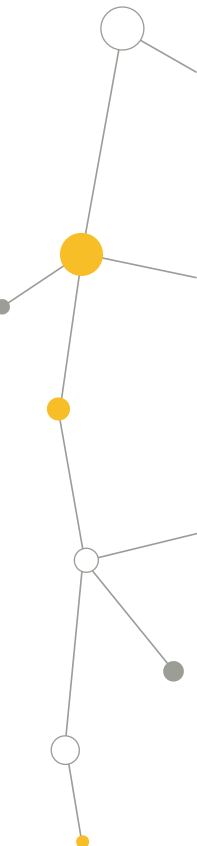
Goals and success factors:

K+S has a variety of customers across Europe from different industries and therefore wanted to provide end-to-end visibility data to inform them of when their shipment is due to arrive. Therefore, K+S implemented "Transporeon's Sixfold app and all modules to create full end-to-end visibility that can be shared with customers through one platform with the same shipment item for all parties. Everyone in the entire supply chain has the same info and ETA data to have a better loading and unloading process at various shipping and unloading points." said Grosch.

More specifically, K+S wanted to challenge and redesign existing business processes around shipping with support of Transporeon's best practice approach to achieve the following goals:

- Support its "one face one carrier" strategy by standardising where possible and ensure there is a clear and consistent strategy for carriers across all K+S loading points
- Achieve a high degree of continuous technical and functional innovation
- Outsource user training and carrier support
- Outsource technical operations and maintenance – this would give K+S the chance to use its own IT business capacity for managing the process rather than the tool
- Usage of the Transporeon SAP Add-on solution for S/4HANA
- Have a combination of different integrated Transporeon modules such as Transporeon's Sixfold app for enabling "dynamic Time Slot Management "
- A scalable roll-out with support from the Transporeon team, meaning less effort for K+S IT

![K+S logo] **K+S**   **TRANSPORE()N**

Reduced waiting and lead times result in optimised operations and cost savings

Implementing Transporeon modules like Sixfold also enabled K+S to benefit from reduced waiting and lead times, resulting in optimised operations and cost savings through:

Optimised control of truck flow (check-in, shipping, check-out) and optimised loading capacity through efficient time slot management

Efficient operation planning (personnel and shipping resources) and improvement of capacity utilisation
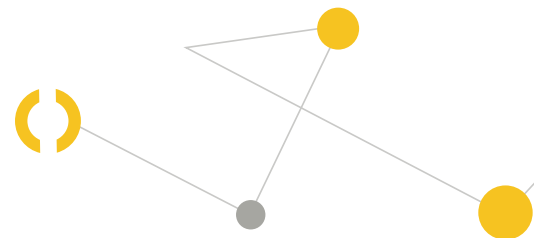
Automated communication and holistic information exchange with all process partners (shipping department, carriers, order management)

Standardisation of processes and frame conditions, as well as reliable rules at all shipping points for a uniform appearance vis-à-vis the carriers

Dynamic, data-based automatic time slot management as a basis for further performance improvement

Solution and implementation

K+S started its real-time visibility journey with Sixfold by Transporeon in late 2019. The decision was made to deploy Transporeon's real-time visibility, Transport Execution and Time Slot Management in the first step. K+S gave itself a project schedule of about three years to deploy all three products across its European network starting with real-time visibility. It decided to do a slow roll-out because of the ability to introduce individual modules from Transporeon.

In order to achieve real-time visibility, K+S needed to first onboard its carriers. K+S decided to do this gradually, carrier-by-carrier to ensure full carrier support and to achieve a high onboarding success rate.

K+S found that this worked well and that it is useful to follow a clear timeline and not rush through the project. It also found that taking a partnership approach and keeping carriers well informed was crucial. For example, K+S sent a general introduction letter and additional agreement to carriers, informing carriers individually about the upcoming collaboration setup.

K+S also ensured that it kept carriers updated of each step, such as activation of the platform and the Go-Live date and found that providing an early information flow and explanations as to why or how was beneficial for both parties.

Additionally, making the decision to have its own inhouse project team and having dedicated support from Transporeon & Sixfold, such as user training, was also very helpful for K+S during the onboarding process.
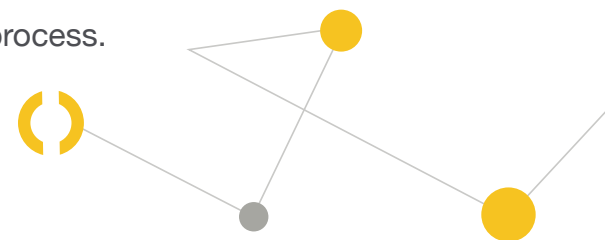
K+S has assigned 150,000 shipments via the Transporeon platform – most of them via the no-touch order.

Benefits of real-time visibility for carriers

Transporeon's Sixfold tracking engine provides real-time status updates on the location of a shipment and proactively alerts you to problems. Having a digital record of deliveries and knowing what went wrong and what went right, helps to **improve the overall service – for both shippers and carriers.**

Having access to this information helps to **avoid check calls, reduce truck waiting times** as warehouses and distribution centres can ensure they are ready for any incoming trucks which, in turn, improves overall truck lead times. Likewise, **communication across the entire supply chain is greatly improved** and any issues can be dealt with collaboratively in real-time.

Also, access to real-time visibility insights helps shippers to develop **stronger relationships with carriers through improved communication** sharing KPIs and receiving monthly insights to stay on top of goals.

Understandably, data security is a concern for many carriers. Luckily, Transporeon's Sixfold covers 130,000 carriers and 1,300 shippers across 100 countries, making it a trusted partner for many carriers. The Transporeon Sixfold network is GDPR-compliant and highly secure thanks to an intelligent algorithm which restricts real-time visibility data. This means that data can only be seen by the shipper, carrier, and goods recipient for the portion of the journey that is relevant to them – once a journey is completed, the truck is no longer tracked.

For example, once the vehicle has been allocated to a transport, the shipper

will start seeing the licence plate. When the vehicle is 150km from the loading point, only then will the shipper be able to see the ETA and delay status. The vehicle's real-time location is not shown on the map until the truck arrives at the first loading stop and full visibility is only shown between the first and last stop. Once the carrier has assigned a licence plate to the transport and tracking has begun, no additional input is required. Data is automatically shared between Transporeon and Sixfold. Only transport data, such as truck departure and arrival times, loading and unloading status and ETA is required. No additional information regarding the truck is shared, such as contents value.

Additionally, getting onboarded to Transporeon's Sixfold network couldn't be easier. With ready-made integrations with 700+ telematic systems, including freight management systems, the onboarding process takes three minutes. No prior IT knowledge is required: all carriers need to do is click on a link to start the process.

Results

In 2022, K+S uses Transporeon's main applications, such as Transport Execution, Freight Procurement, Market Intelligence, Time Slot Management, Real-Time Tracking and Visibility, and Analytics.

> **"Transport Execution is almost fully implemented in our European network. All the transport orders concerned from K+S are now routed with the Transporeon platform. Transporeon's TSM has been implemented as well,"** said Grosch. As of March 2022, more than 50,000 time slots have been booked.

Since implementing the Transporeon platform, K+S has found that the entire framework of how it works together with carriers has changed. Instead of having several connection points to carriers, everything is done through the Transporeon platform.

There was also a major change for K+S from an IT perspective. It is no longer allocating resources to its own multiple inhouse connectivity layers and can now focus more on monitoring the interface between SAP and Transporeon, focusing on continuous improvements that come with the platform as well as connecting and managing carrier relations.

Overall, things have become more streamlined, easier and more straightforward now that K+S has one point of communication with carriers when it comes to transport assignment, time slot management and data exchange.

Likewise, from a business perspective, processes will be easier and quicker in the long-term. **"It is now a lot easier to introduce new partners due to the scalability of the platform as well as the size of the network,"** noted Brill.

It is also very important for K+S that its carriers get the best IT service. **"Shippers work as partners with carriers, so we also take care of them,"** explained Grosch. **"Because various carriers use a lot of their own transport management systems and have their own requirements regarding the connection, it's easier to connect them through Transporeon."**

K+S also found that it had access to better reporting and analytics opportunities when it comes to the operation of the business. For example, the no-touch order allows K+S to receive reports on the carrier response rate. This information helps K+S to gain an understanding of the acceptance rate from carriers, allowing it to identify areas for improvement and establish more collaborative relationships.

> We now have an advantage in having the most advanced software available from Transporeon, which would have been very expensive for K+S to develop in-house.
>
> Steffen Brill, Senior Director –
> Logistics Procurement & Execution, K+S.
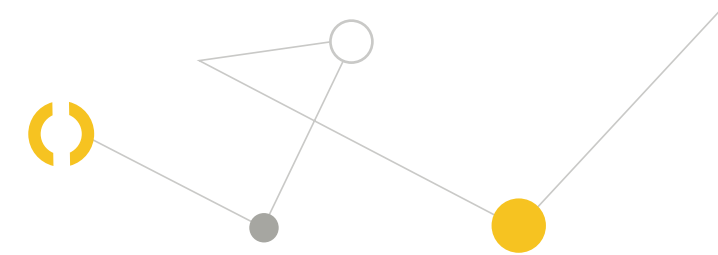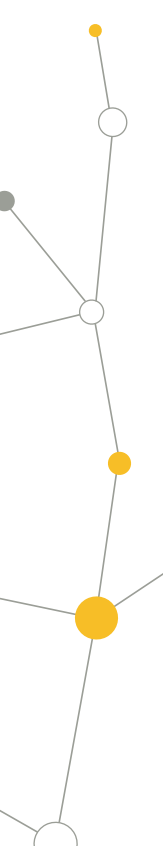
Next steps with Sixfold:
Data-driven apps &
Carbon Visibility

K+S found that when working with Transporeon expectations were met and exceeded in certain areas. K+S was pleased with how well both teams cooperated, including consistent direct contact between the teams. As a result, K+S was able to achieve its goals one year ahead of schedule: **"When it comes to Transport Execution and Time Slot Management, K+S had a timeline of how it wanted the project to be rolled out – because of the good cooperation and good project structure, K+S is almost a year ahead of schedule and has reached 100% coverage of the affected loading points,"** said Brill.

Having paved the road with using Transporeon's main applications, such as Sixfold, Time Slot Management and Transport Execution, K+S feels it has established solid bases within digitalisation and going forward they believe there will most likely be more to come. K+S has expressed interest in e-CMR technology, analytics tools and making use of the data gathered as well as dynamic Time Slot Management.

Likewise, understanding the importance of reducing emissions, K+s will be a beta tester for the Carbon Visibility tool and is also open to exploring the Sixfold's ocean visibility offering as additional value.