



International SAP Metals & Mining Summit

How SAP TM is Used to Manage Transportation Logistics at Severstal

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Severstal's innovative project on multimodal transportation management powered by SAP TM

Russia's first SAP TM solution for metallurgy



Russia's first SAP TM solution powered by HANA



Russia's first SAP TM solution for sea and river transport



Russia's first SAP TM solution for railway transportation management



CIS' first

solution for interaction with carriers powered by Collaboration Portal





Key Success Factors for the Implementation of SAP TM by Severstal







Key success factors for the implementation:

- 1. Deep analysis of the business case and economic effects from the implementation
- Support from project owners (business stakeholders)
- Co-innovation project supervised by SAP Digital Business Services and aimed at the implementation of a process for railway transportation management with the help of SAP solutions localized for Russia









BearingPoint.

BearingPoint.



Goals for the implementation of SAP TM at Severstal







- Ensure end-to-end planning and optimization of railway shipments
- Increase the number of group shipments to receive discounts from RZD

- Conduct tenders in order to lower the price
- Ensure a faster turnaround of vehicles
- Provide optimal route planning

 Accelerate the dispatch of shipload lots from the port

Reduce inventories and free up working capital





Modified Operating Model for Railway Transportation



Centralized preparation of documents for railway transportation

Execution of delivery notes in a single Center in cooperation with RZD



Group shipments allowing for discounts from RZD

Intershop and inter-shift grouping of cars during handover to the network



Reduction of fines on the part of RZD for not using GU-12

Scheduling of transportation on the basis of actual shipping dates from SAP APO



Introduction of paperless technology

Optimization of workflow involving RZD



New customer service in the SAP Hybris online store

Transportation statuses and shipping documents are now available



Operational Model for Railway Traffic Scheduling

Transportation Scheduling







Sales and Planning

- Receiving and processing of sales
- Production planning determination of planned shipment dates for existing orders

Fleet Management Office

- Preparation of estimates of tonnage requirements
- Reconciliation of monthly transportation schedules (application form GU-12) with RZD
- Adjustment of estimates of tonnage requirements within the current month (adjustment of applications)

RZD

 Reconciliation of GU-12 applications in terms of cargo parameters and transportation directions



orders

Operational Model for Railway Traffic Management

Transportation Execution





Workshops and QCD

Fleet Management Office

RZD

- Issuing certificates of quality
- Loading of goods into the car and registration of the fact of loading in the MES system
- Preparation and grouping of GU-27 delivery notes based on actual information about cargo
- Elimination of errors
- Monitoring of transportation

- Approval of GU-27 delivery notes in ETRAN
- Reception of cars in the network of RZD





Modified Operating Model for Road Transportation



Interaction with carriers via the Collaboration Portal

Reduction of labor costs associated with routine operations



Conduct tenders in order to choose a carrier

Reduction of transportation costs, ensuring full transparency in choosing a carrier



Automated assessment of the level of service provided by carriers

Ensuring transparency of quota allocation and motivation for improvement



Automated invoice processing

Centralized and transparent invoice processing



New customer service in the SAP Hybris online store

Transportation statuses and shipping documents are now available



Operational Model for Road Transportation Leveraging SAP TM Collaboration Portal







Fleet Management Office

Carrier Portal

Carriers

- Sales order processing
- Transportation planning
- Monitoring of transportation
- Checking of invoices
- Payment
- Assessment of carriers and calculation of quotas

- Confirmation of applications for transportation
- Tendering
 - Updating data in the system
- Issue of passes
- Billing

- Confirmation of applications for transportation
- Applying for passes
- Marking of events in the course of transportation
- Execution of payment documents through the Portal





Modified Model and Practices for Arranging Shipload Lots



Planning of shipload lots using SAP TM

Determination of the desired shipment date based on the planned dispatch date of the shipload lot, registration of the ship lot indicator in SAP APO



Changes in the production plan will be analyzed in terms of their impact on the following processes:

- Trends in the accumulation of shipload lots at the port of shipment
- Readiness of the shipload lot in the seaport of shipment
 Quick adjustment of shipload lots and shipping dates for the port



End-to-end monitoring for arranging shipload lots

Ensuring that production re-planning and executed shipments are taken into account



Tracking of shipload lots at all stages

Monitoring of the location of river vessels, trucks, and railway cars used for transportation of the shipload lot; monitoring of unloading and loading of the shipload lot on a ship for transportation by sea



Operational Model for Managing Shipload Lots

Desired dates Monitoring Preliminary Tracking of Picking up of **Modification of** arrangement of a shipload lot production and the shipload lot a shipload lot in the seaport of delivery shipment Picking up of the **Obtaining and** Making changes shipload lot in the **Planning** signing of to production of production seaport of specifications plan / production shipment; billing **Accounting for Financial** restrictions result **SAP ERP** SAP TM SAP APO

Thank you.

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