Demonstration case: “Planning the transport”

by Peter Bachl & Elisabeth Steinhuber
Industrie Logistik Linz (ILL)

RISING – IRIS Europe II Final Event
01.12.2011, Duisburg

ILL at a glance

- company name: **Industrie-Logistik-Linz GmbH & Co KG**
- field of business: **logistic services**
- company sites: **Linz (A), Steyr (A), Moerdijk (NL)**
- foundation date: **1993**
- employees: **250**
- quality management: **ISO 9001 certification**

SERVICES

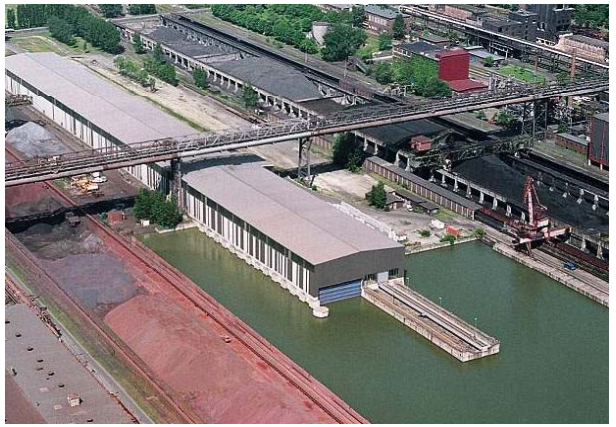
- goods receiving
- storage
- distribution logistics
- after sales logistics
- waste disposal logistics
- packing logistics
- transport logistics
- production logistics
- information logistics

ILL and inland waterway transport

- terminal area: 16.000 m²
- storage capacity: 80.000 to

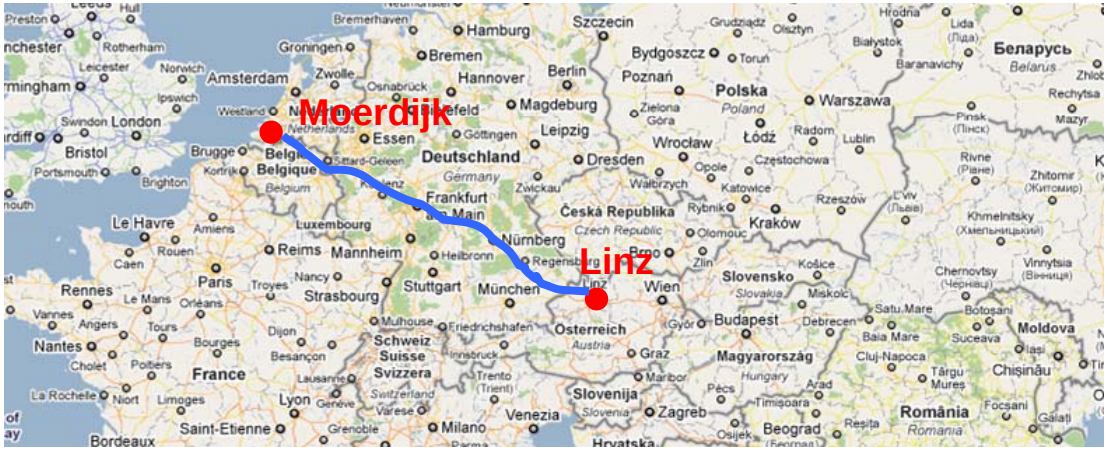
- equipment:
  - indoor dock (110 x 21 meters, depth: 2,5m)
  - travelling cranes (36 to)
  - equipment for floor storage
  - air conditioning (humidity <50%)
  - IT-based storage administration
  - truck loading area
  - railway link

- turnover > 500.000 tons / year
  600 vessels / year



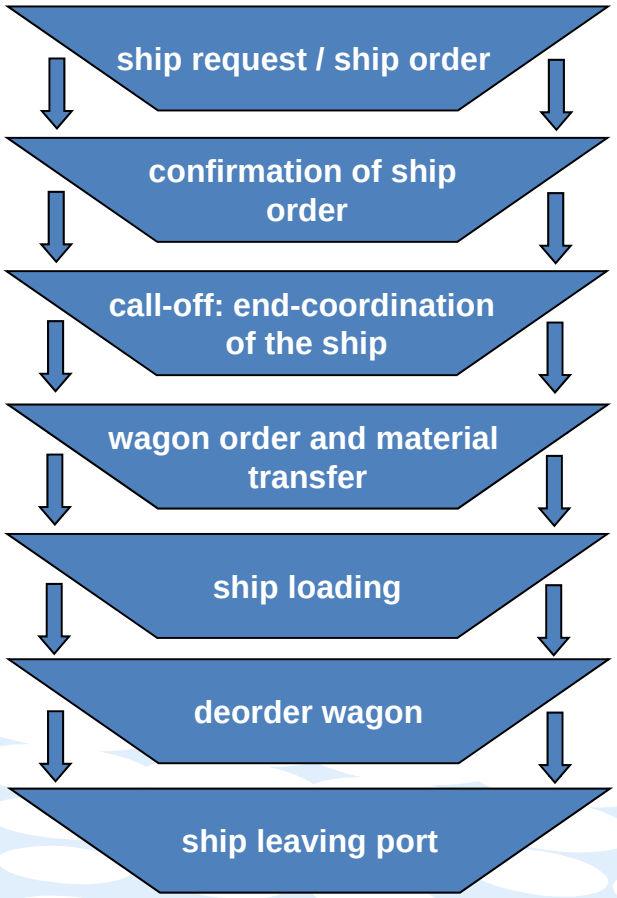
The steel-case

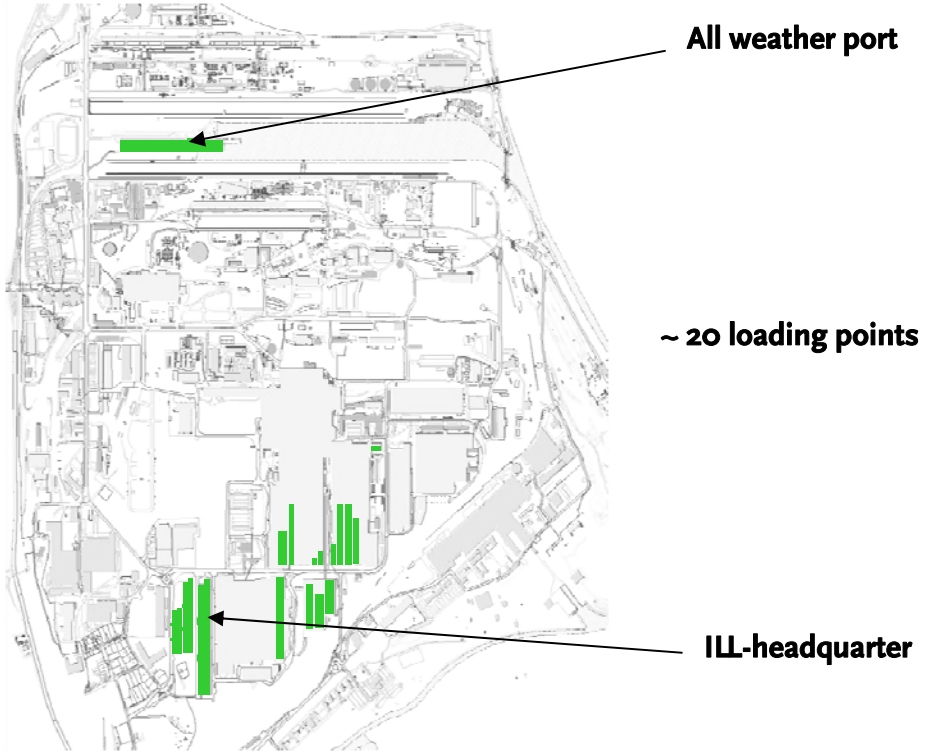
- ILL is acting as demonstrator in the RISING project.
- The case has its focus on the **Danube/Rhine** area. Cargo (steel coils and plates) is shipped from Austria (Port of Linz) to the Netherlands (Port of Moerdijk).



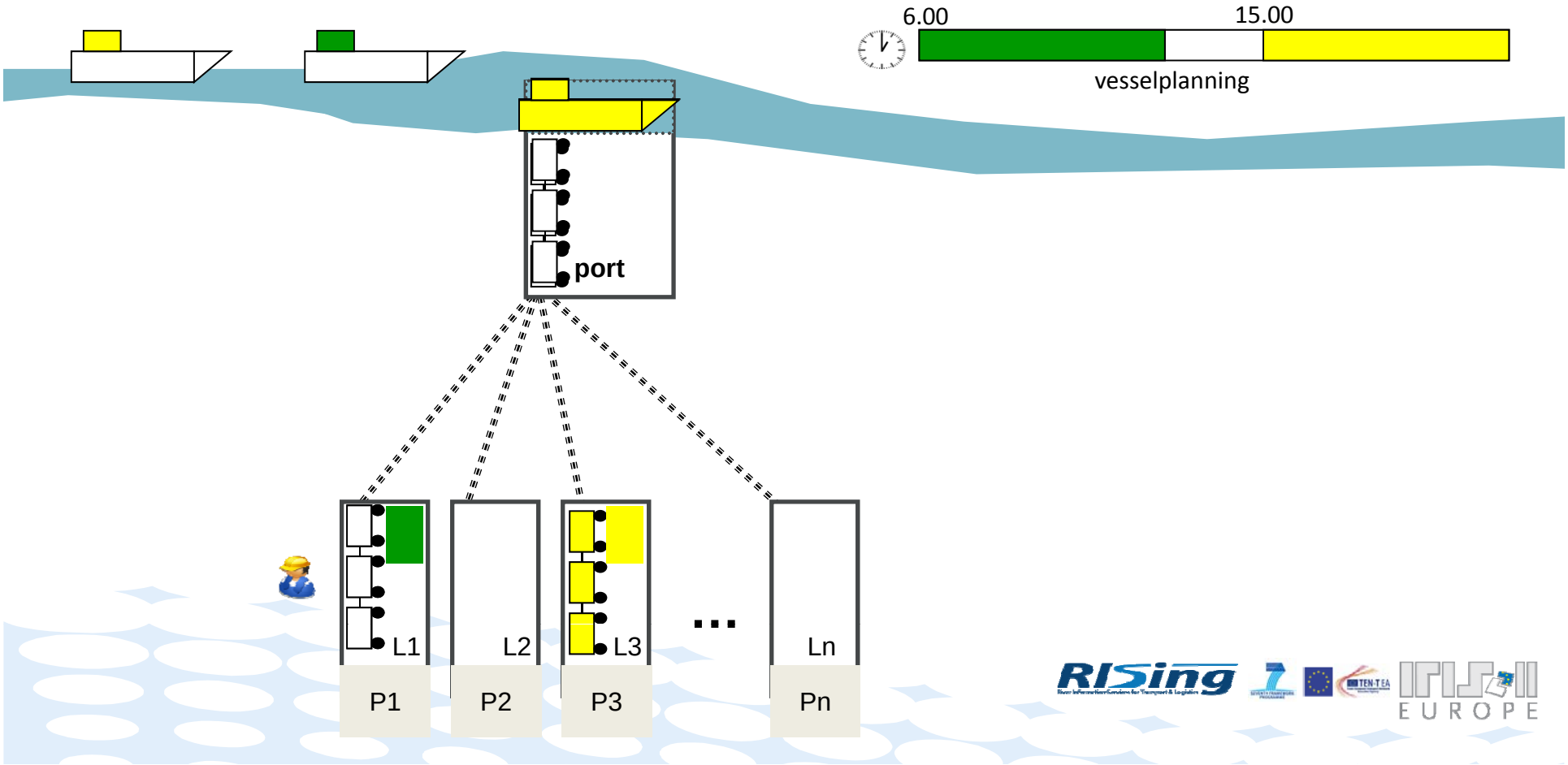
- The design of a new management process is necessary in order to increase transparency and improve planning and information exchange in the waterway section. This should reduce the total supply chain costs.
- Traffic information distributed by RIS providers will be integrated into in-house transport logistics tools and applications.

The steel-case before RISING

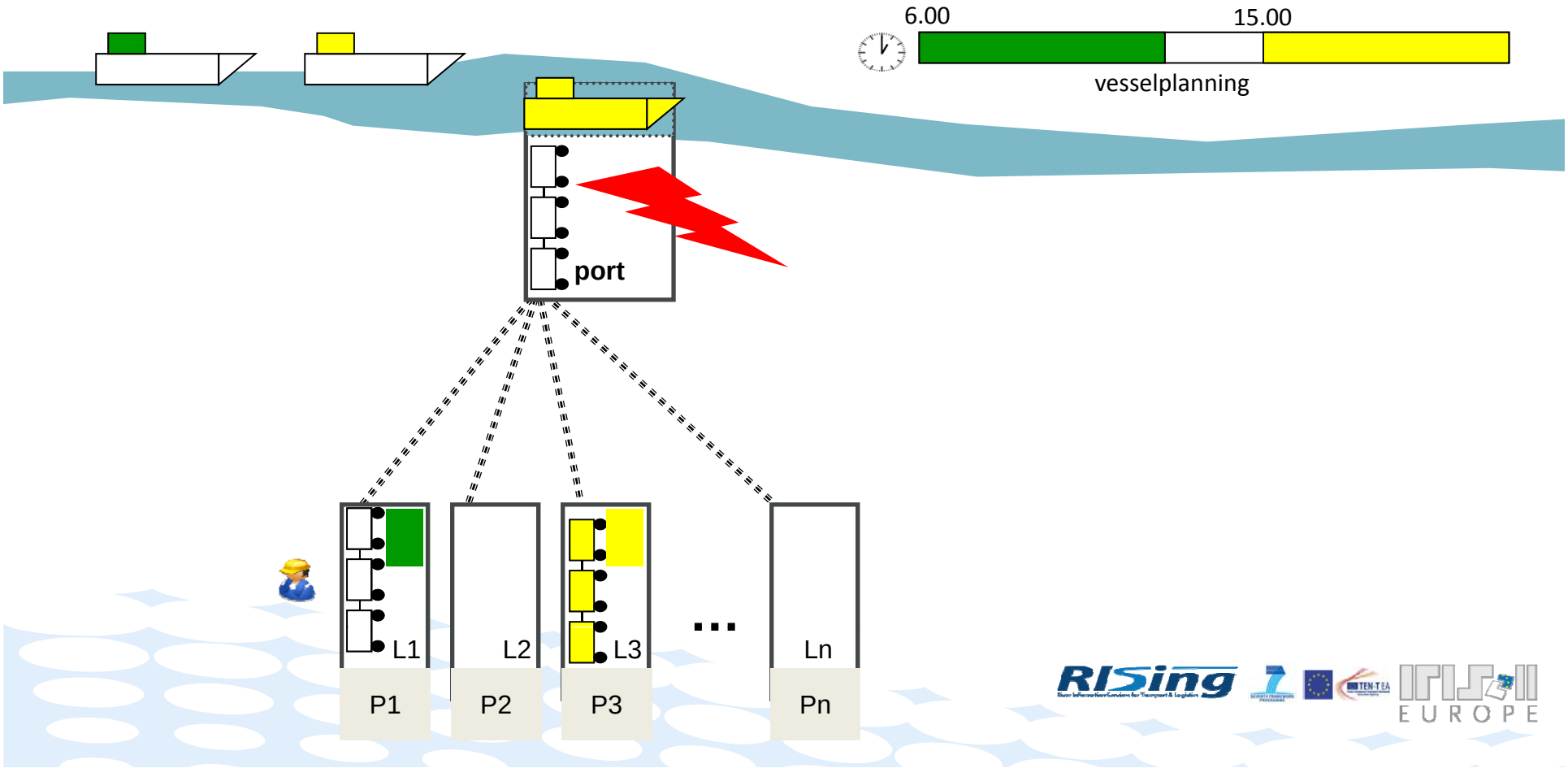




Example ILL

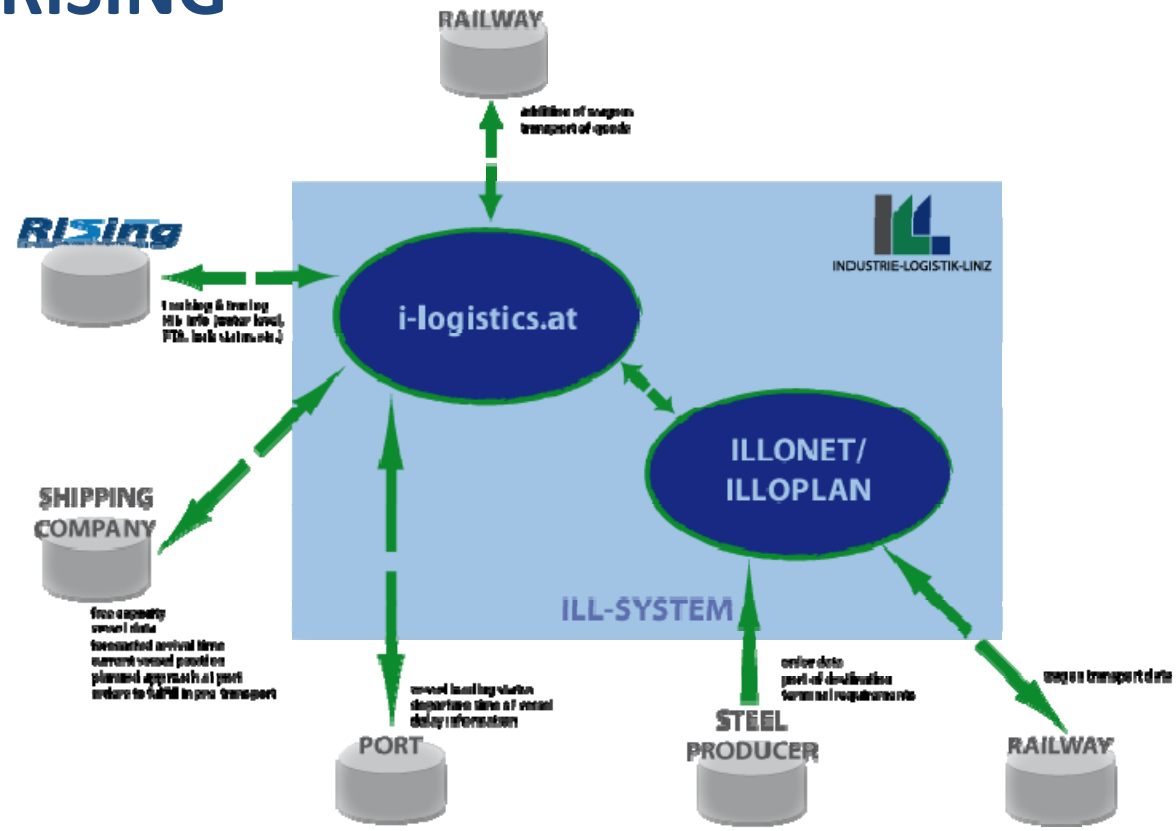


Example ILL (effect of vessel being late)



The steel-case after RISING

- planning, tracking and tracing, event management
- internet-platform **ilogistics.at**



Benefits for ILL

- optimization of planning
- improved process performance and therefore reduced waiting times of vessels, wagons and workers
- more transparency throughout the whole process
- cost reduction of total supply chain costs
- reduction of paperwork

Thank you for your attention!

RISING – IRIS Europe II Final Event
01.12.2011, Duisburg

by Peter Bachl & Elisabeth Steinhuber

Industrie-Logistik-Linz GmbH & Co KG
Stahlstraße 60, 4031 Linz, Austria
www.ill.co.at
peter.bachl@ill.co.at
elisabeth.steinhuber@ill.co.at

Demonstration case: “Planning the transport”

by Lukas Seemann – via donau

RISING – IRIS Europe II Final Event
01.12.2011, Duisburg

Danube case: The ore supply chain

Description:

- The IWT operator will transport ore products from the lower Danube to the port of Linz, where an Austrian steel plant is located
- Currently, ILL does not exactly know when the ore transport will approach the port, this causes for instance
  - inefficiencies in the field of inventory planning
  - berth/terminal planning lacks in optimisation due to missing ETA of vessels and loaded cargo

Danube case: The ore supply chain

Objectives:

- Keep the inland port (Linz) and logistics company (ILL) along this transnational route regularly informed about any changes and updates of transport execution status
- This demo case supports the concept of a floating stock and cargo tracking by the usage of RIS data
- Providing information for instance about
  - the type and quantity of cargo (ore) which is loaded on a specific vessel
  - the Estimated Time of Arrival (ETA) at the inland port

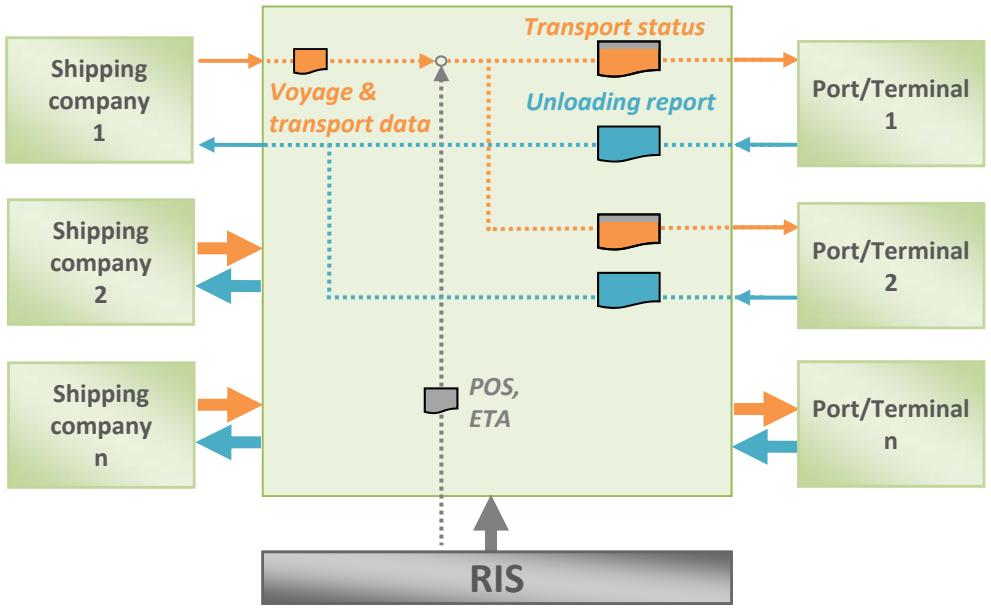
Expected results:

- Control of in-house inventories and also the individual transport which are still in transit
- Improved planning of available berth and terminal capacities
- As soon as the transport was completed, the unloading report can be transmitted to the IWT operator

RISing EUROPE

Danube case: The ore supply chain

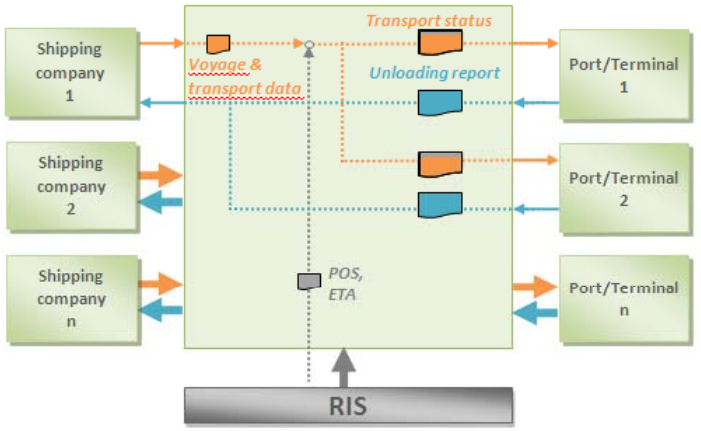
Logical system architecture – Transport Execution Status Platform



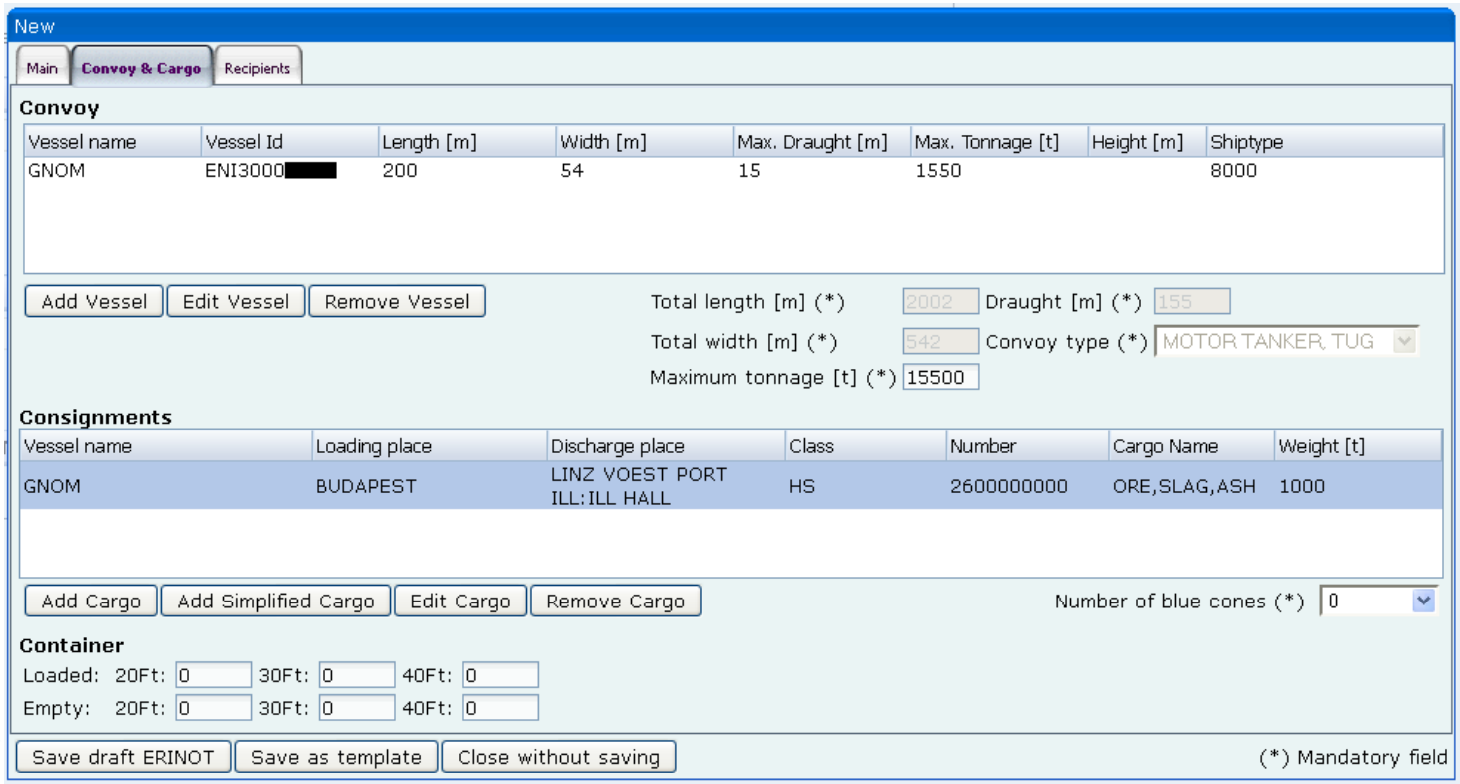
Danube case: The ore supply chain

Logical system architecture – Transport Execution Status Platform

- Implementation of open platform for all IWT operators to facilitate the provision of reliable and up-to-date transport status information
- Receiving and processing specific transport and voyage information from a published or updated ERINOT message
- Interface to River Information Services in order to receive RIS information for all vessels stated in received ERINOT
- Compile appropriate transport status information (ERINOT + POS + ETA) by means of the Transport Execution Status (TES)
- Dynamic user authorization: port/terminal only has access to transport and traffic information related to the cargo that will be transshipped at the port

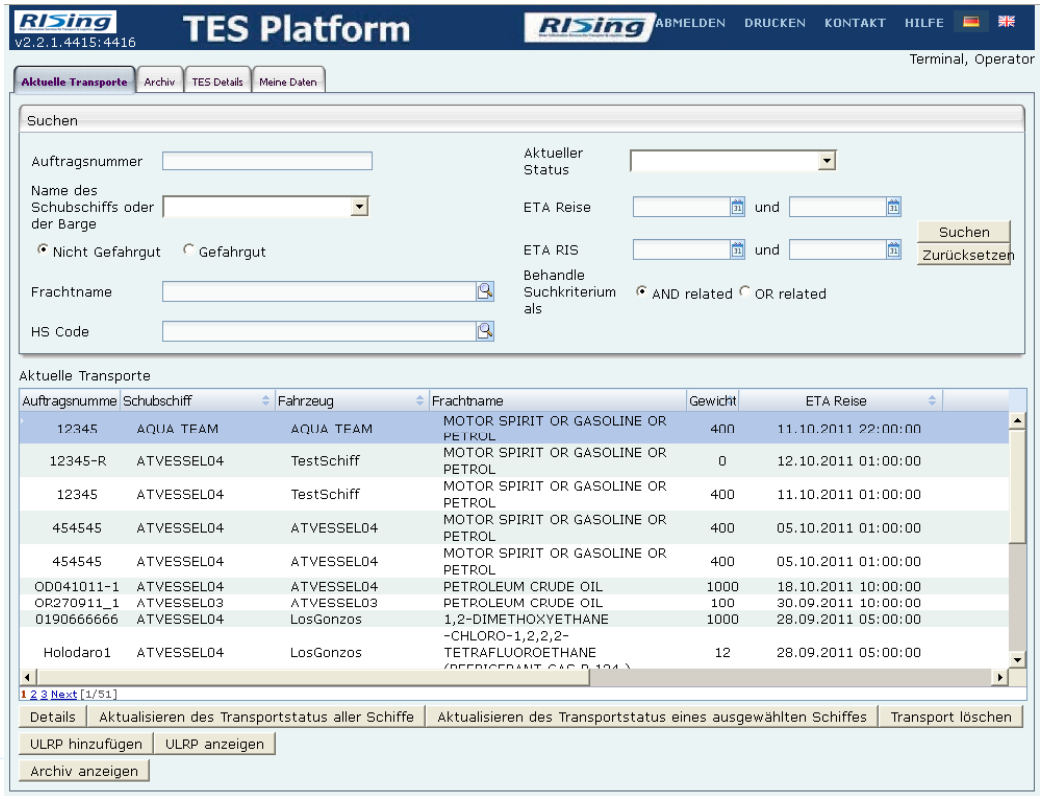


Danube case: The ore supply chain



Web-GUI for shipping company (DGW/ERI application)

Danube case: The ore supply chain



Web-GUI for port/terminal operators (TES platform)

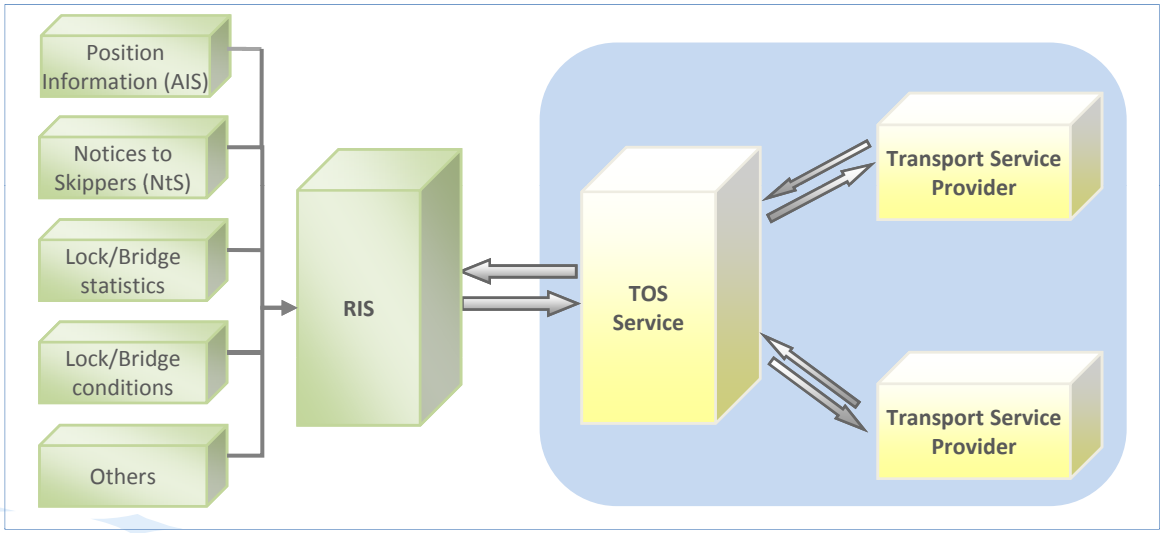
Danube case: The ore supply chain

Web-GUI for port/terminal operators (TES platform)

Summary of used RIS services and messages

The steel-case

- TOS service - Transport Operation Status (Freightweise)
- Calculation of Estimated Time of Arrival (ETA); provision via web service interface



Summary of used RIS services and messages

The ore supply chain

- TES service - Transport Execution Status (Freightweise)
- Original structure and content of TES message was adapted for RISING purposes
- TES message contains
  - Cargo, voyage and hull related data (ERINOT)
  - Current position of vessel (AIS); International RIS data exchange is used in case vessel is sailing abroad
  - Estimated time of arrival (TOS service)
  - Unloading report

Thank you for your attention!

RISING – IRIS Europe II Final Event
01.12.2011, Duisburg

by Lukas Seemann

via donau – Österreichische Wasserstraßen-Gesellschaft mbH

A-1220 Wien, Donau-City-Straße 1
Tel +43 50 4321 1631, Fax +43 50 4321 1050
Lukas.Seemann@via-donau.org

www.via-donau.org