

RIVER INFORMATION SERVICES - RIS

Integrating waterways in logistics supply chains

Logistics companies in Europe are in continuous search of more flexible processes, lower administrative costs and fewer errors to respond to competitive pressures and to satisfy customers' demands. Synchronising real-time data between trading partners on freight flows between warehouse and final destination plays an essential role in obtaining greater levels of efficiency. Multi-modal transport only can reach a competitive edge in modern supply chain management when allowing logisticians to gain visibility into shipments and to offset the additional costs of transshipment.

River Information Services (RIS) has initially been developed by national waterway authorities in Europe to increase the efficiency and safety of inland waterway transport. Today, state-of-the-art projects show RIS holds the key to integrate multi-modal waterborne logistics into the supply chain, as it enables all involved parties to participate in intelligent information routing.

What is River Information Services - RIS

RIS is a concept for harmonised information services, which supports traffic and transport management in inland navigation, including interfaces to other transport modes. In the early nineties, a group of Member States joined forces to carry out, with EU support, research on the added value of ICT to streamline the information exchange between public and private parties in inland waterway transport. Integrated applications on board, based on common standards for interoperable cross-border services, optimise voyage planning and avoid accidents.

Directive 2005/44 lays down the framework for the deployment and use of harmonised RIS throughout the EU including the aim to facilitate interfaces with other transport modes.

RIS international

The Inland ECDIS Standard developed within the framework of RIS and based on the maritime ECDIS standard will not only be used in the EU, but also in the United States and Russia. With the current interest of China, India and Brazil, RIS becomes a successful European export product.

RIS holds key for multi-modal waterborne logistics

According to the EU RIS Directive, Member States shall encourage operators and users to fully profit from the services and facilitate the interfaces with other modes. This is the key to the integration of inland waterway transport into the multimodal supply chain.



1. **Making the required traffic information such as electronic charts, standardised messages and documents available to a wider range of logistics players by means of a single window creates a European data exchange platform providing relevant information on waterways, ships, their movements and cargo.** To ensure data protection, the owner of the data shall decide if the data is communicated to other commercial parties. RIS is not interfering with trade procedures but is a tool to support trade by provision of dedicated information. An open architecture with common messaging has a clear advantage over closed systems of large companies to which SMEs, the large majority of the companies in the EU, often have no access.
2. **RIS is not a finished product and can evolve towards one-stop administrative shopping** where operators and logistics players exchange data in a coordinated way while they have a single point of entry towards all national administrations leading to paperless navigation.
3. **The development should be finally geared towards interoperability with other modal systems in an open architecture** to make multimodality as simple and easy for transport users as unimodal transport solutions.

What to do?

1. Quick implementation of the RIS directive

Member States started with the deployment of RIS services in order to fulfill the traffic management related requirement or the so-called "minimum requirements" to transmit traffic information from authorities to ship operators as laid down in the Directive 2005/44.

The EU funded IRIS project estimates the total costs for national administrations in the EU and Accession Countries to comply with the RIS Directive at EUR 250 million in the period 2006-2010. All national and cross-border projects, which implement the RIS directive, should be supported at EU level.

2. Creation of a logistics data platform

The RIS Committee, which has been set up in the framework of the EU RIS Directive to support RIS and to ensure the interoperability, should examine with representatives of logistics and inland shipping stakeholders the set-up of a successful single window concept for exchanging electronic data. Public-private partnerships could play a significant role in this process.

A coordinated approach is necessary to ensure the open architecture of the system. An open architecture is of vital importance if it is to attract the widest range of transport users and the best guarantee to achieve interoperability with other modal systems.

Creating a European single window would imply almost no additional cost, since RIS data only have to be made accessible to logistics service providers. Nevertheless, the added value would be maximal as it lowers the threshold to opt for inland waterway transport in logistics solutions and unlock industry sites along waterways.



What are the strategic benefits of RIS

1. Towards service-oriented infrastructure managers

Faced with the current transport challenges, waterway management is in some countries in transition, but in too many states infrastructure provision still is a public aim in itself. To take account of the user needs in terms of safe, secure and reliable mobility options, the creation of optimal framework conditions are however required to ensure improved asset utilisation, interoperability and consistent service levels. RIS entirely fits in this evolution. The in-advance and real-time supply of up-to-date information increases transparency and allows to take well-informed decisions.

2. Administrative one-stop-shops

Just-in-time scenarios demand increasingly fast document turnaround. The single window-concept of RIS can facilitate the coordination between public services and the harmonisation of administrative requirements. RIS comprises services such as fairway information, traffic information, traffic management, calamity abatement support, transport management information, statistics, customs services, waterway charges and port dues, an ideal starting point for streamlined processes and the creation of one-stop-shops to relieve the administrative burden on companies.

3. Multi-modal logistics

RIS adds value to logistics. The ongoing EU-wide implementation of RIS has raised the interest of big shippers who want to integrate inland waterway transport in their supply chains. RIS projects with one single point of entry successfully tested the access to one certified data pool allowing quick and efficient exchange of supply chain data with transport operators and plan logistics processes, increasing overall transparency and reducing considerably the costs of multi-modal transport through time savings and optimal resource allocation (Airbus, Voest Alpine Stahl).

4. Energy savings and emission reduction

Improved navigation information as well as services supporting logistics operations (e.g. tracking and tracing) leads to a better utilisation of vessels. Lock, bridge and terminal management as well as advanced voyage planning applications facilitate homogeneous cruising speeds of vessels. Both of these effects will lead to an estimated reduction of fuel consumption of 5% per tonne-kilometre and a cut in exhaust emissions. A total amount of external costs of at least EUR 136 million per year can be saved by implementing RIS on European waterways in a harmonised way.

5. Enhanced safety and security

Inland waterway transport is well known for its outstanding safety record. The use of electronic charts, precise positioning data and information about current fairway and weather conditions are an additional tool to prevent accidents and make inland waterway transport even safer. Moreover, RIS enables detailed monitoring of dangerous goods transports. In case of an accident, calamity abatement support services ensure the delivery without delay of all relevant data to the emergency services. The tracking of shipments across multiple locations, participants and stages can help to check critical facilities whilst not imposing requirements that impact disproportionately on the effectiveness and efficiency of industry operations.