**River Information Services**
Electronic Reporting International

# Inland Waterway Transport with Paperless Trade

**Awareness paper**

Author : Mr. Alexander de Lijster
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**Revision overview**

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# 1. An overview

## Inland Waterway Transport within Paperless Trade

The purpose of this document is to create awareness on the use of electronic data in inland waterway transport.
It is meant for authorities, policy makers, branch organizations and all parties involved in the Trade and Transport chain.

Present developments and signals from both, governments and business, show that in the not too distant future, it should be possible to deal electronically with all procedures and documents necessary for international trade and transport. The term “Paperless Trade” has been used to identify and promote the global exchange of information dealing with trade and transport.
The benefits of paperless trade are considered to be substantial and range from a decrease of costs, better information and increased security of trade and transport. Also reduction of delays and costs at borders plus an increase of the reliability of the supply chain are clear advantages.

But companies will only adopt the use of electronic data if there is a clear benefit for them. For small and even for medium sized companies the use of paper documents is cheap and efficient. Given the low volume of their operations, there might be no net advantage to moving away from paper.
If however there is a clear advantage for the whole transport chain and if governments do recognise the net benefit, small companies might be supported by rewarding those parties who submit the data and documents in electronic format.

Traders are on the supply side for electronic documents, as they are the source of most of the documents and information used in international trade and transport.
Therefore the use of electronic data in the whole transport chain is necessary, starting at the source, to ensure that the benefits are indeed shared and that fast information exchange, efficient data entry and increased security and compliance are the result.
The instruments, such as the standards to do this, are already available. Now it is a question of general acceptance, time, trust and the availability of the systems and agreements to make the use of electronic data common day-to-day practice.
In a number of laws and procedures reference has been made to the possibility of sending data electronically.

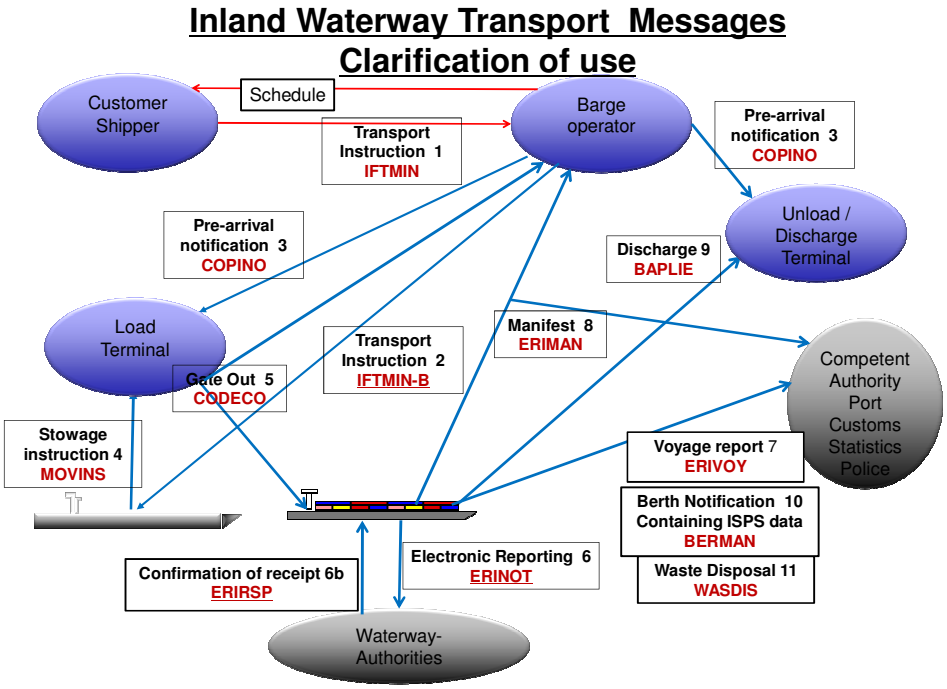
Examples are:
- The development of paperless Customs declaration systems.

- The data integration of administrative and regulatory bodies through the use of Single Windows.
- The use of Port Information Systems.
- The use of electronic data for Port and Terminal operations.

The introduction of Electronic Reporting for Inland Waterway traffic and transport has been a very first step towards a paperless handling of all information necessary for dealing with the inland waterway transport procedures and the necessary controls and services.
Although a lot has happened and more and more companies are using electronic data to facilitate the business, the use of open standards is still lagging behind, whilst to ensure common solutions and the sharing of data between the responsible parties open standards are a must.
For inland waterway transport this means not only the use of standard messages for reporting purposes but also, among others, the use of standard transport instructions, the use of announcement messages, the use of electronic voyage reports and the use of stowage applications. Moreover the use of standard messages to declare the waste on board and messages to deal with electronic payment of fairway and harbour duties may be required in the near future.
As has been seen during the introduction of electronic reporting in inland waterway transport, the availability of clear, easy and understandable user guidelines, which contain clarifications and definitions are a precondition for good and similar interpretation of the standards.
These user message guides must be available to all parties implementing electronic data interchange. This will prevent misunderstanding and different interpretations of the used electronic messages.
Competent authorities will by the use of electronic information and open standards throughout the entire trade and transport chain, be able to perform their necessary legislative tasks and controls without any delays for the vessel and the cargo. By receiving reliable and good quality information in advance and electronically, the regulatory requirements and controls can be simplified leading to less costs for all parties involved.

# 2. Scenario of messages

A scenario of the various standard messages used in inland waterway transport as is foreseen in future is pictured below.
The indicated recipient of the messages should be seen as a possibility but is dependent on local rules and regulations. This may differ from country to country and even region to region.
It should be realised that wherever the term system and stowage plan are used that these are applicable for bulk cargo, general cargo and containers.



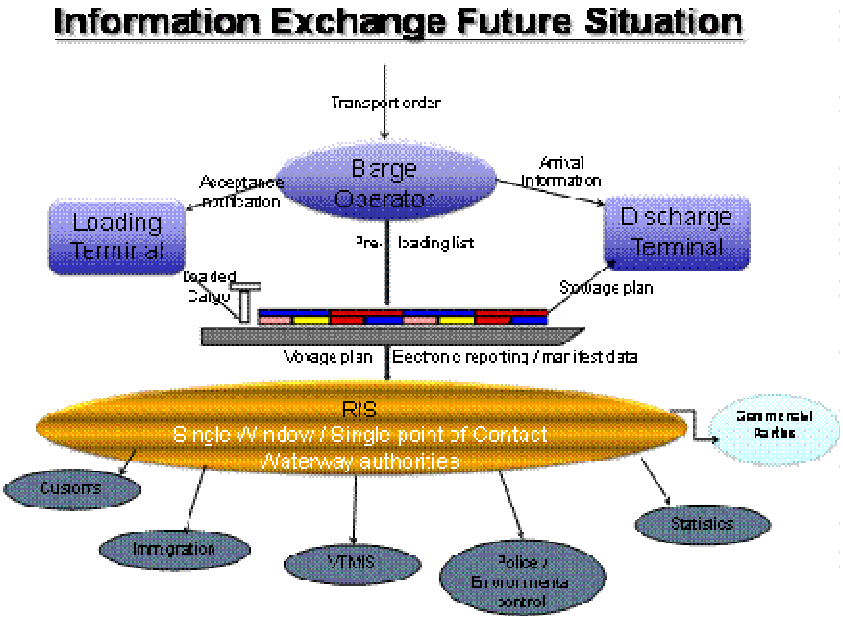

1. The transport instruction. (IFTMIN) this message will, for inland waterway transport, come from the party wanting to transport the goods such as a shipper (for instance a trader), a freight forwarder, a maritime carrier or where applicable a terminal. Quite often this transport order is based on a schedule (IFTSAI) provided to the shipper. In all cases these parties are acting as the customer (shipper) of the transport operator. This party needs to give all particulars enabling the transport of the goods and is as such the source of the information and has the responsibility to ensure that the information is complete and correct.
2. The transport instruction (2) (IFTMIN_B) from the barge operator to the skipper of the vessel. This message gives the skipper the details of the cargo to be expected, including the destination and all other data such as the dangerous goods, reefer containers with their set temperature, special requirements of the cargo and the expected time of arrival of the goods and the destination such as a specific terminal. The skipper will now use a stowage application to determine the stowage of the booked cargo.

3. The barge operator will inform the load terminal of all cargo (e.g. containers) to be expected through a pre arrival notification (COPINO) indicating the numbers and weight of the various containers and or other cargo.
4. The vessel will through its system on board dealing with the stowage particulars, inform the terminal of the required stowage (MOVINS) of the cargo (containers), in other words the skipper looking after the stability of the vessel and the requirements, for instance for the carriage of dangerous and harmful goods, will instruct the terminal where the cargo should be stowed on board.
5. After finalisation of the loading the terminal will inform the skipper of the final stowage particulars through the gate out electronic message (CODECO).
6. Upon departure of the vessel the skipper will report electronically to the competent waterway authorities through the standard electronic reporting (ERINOT) message. The information is similar to the information reported through for instance the VHF and consists of among others the name of the vessel, the cargo and its details, the people on board, the destination and the route the vessel wants to take. This advance information will enable the authorities to ensure a safe and expedient voyage of the vessel, without any procedural delays and with advance information about the vessel for locks, bridges and other traffic. In case of border crossing the necessary information is passed on by the authorities to the competent authorities of the next country or region. So the skipper has to report all required details only once for the whole trip and this can be done fully automated by using the information already provided during steps 1 to 5. The waterway authorities will confirm the receipt of the data using the ERIRSP message step 6b
7. Where appropriate the master will send a voyage report plan (ERIVOY) stating the details of the route and the expected time of arrival at the various waypoints to the barge operator and other interested parties.
8. For logistical purposes the vessel will send the electronic manifest (ERIMAN) (the list containing the specification of the goods on board) to the barge operator and if applicable to the customs and other competent authorities.
9. With the stowage plan, (BAPLIE) giving the exact position of the cargo in a standard way to the receiving terminal, by using this so called bay-plan, the terminal is able to prepare the gear (cranes in the right position) and allocate the people to start the discharge of the vessel as soon as it arrives alongside the terminal.
10. Before entering a port it might be necessary to send an advance notification (BERMAN) to the respective competent authorities in the form of a general declaration and ISPS notification for security purposes. More and more ports have now a procedure in their regulations that a vessel has to report in advance to the port authorities the general data of the vessel and the security level.
11. For the purpose of controlling the waste report and the waste log some ports do require a waste disposal message (WASDIS) indicating the amount of waste in the various tanks and the place where this will be discharged.

12. For all mentioned messages it is possible to use an answering message ERIRSP which is similar to the APERAK to notify the sender that the information has been received in good order by the recipient.

# 3. Where is this leading

In order to minimize the administrative burden of the skipper more and more co-operation between the various authorities will be necessary in the course of the coming years. This will probably lead to the introduction of a so called Single Window. This is a facility that allows the parties involved to lodge standard information dealing with all regulatory requirements with one single entry point.
In effect this should be considered as a single point of contact to deliver all required information to one single administrative unit, which will take care that the required data is delivered to the respective competent authorities starting with the vessel traffic information services and on towards the customs, immigration, statistical bureaus and also the information meant for the next party in the logistics chain such as terminals, freight forwarders and consignees.




Messages used for electronic reporting in inland waterway transport are divided in messages meant for the competent authorities, messages meant for the next party in the transport chain e.g. terminal and messages for commercial purposes such as a transport order.
For the competent authorities there are two distinct functions, which are: The traffic information, data on the route to be taken and the particulars of the vessel and information necessary to deal with the procedures and controls. The messages for commercial use may be used for other logistical purposes but are considered to be outside the scope of this document.