



Data Inventory

Inland Waterway Tanker Transport (IWTT)

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1 - DOCUMENT OVERVIEW

1 Document overview

1.1 Document history

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2 - PREFACE

Over the past years members of the RIS expert group Electronic Reporting International (ERI) have, in cooperation with the users of inland waterways, worked intensively to prepare, test and evaluate the possibilities of Electronic Reporting. This document is the result of the contributions in the area of inland waterway transport for tank vessels. The project team would like to thank all persons involved for their time, work, knowledge and efforts, without their commitment it would have been impossible to complete our mission.

Acknowledgements

This difficult task would not have been possible without the enthusiastic support of a great number of people who

succeeded over the past 10 years in the drafting the RIS directive. This led to the European wide implementation of the respective standards and procedures. The use of the electronic reporting standards was subsequently made obligatory by the CCNR to ensure a harmonised approach to the reporting towards the competent authorities. The mentioned standards were the basis for all future actions on further standardisation of the used messages, procedures and reference tables.

The authors of this document would like to remember the late Mr Jos van Splunder who with his enthusiasm and drive has made the IWTT project and this resulting document possible.



3 - INTRODUCTION

This Data Inventory describes the respective information elements of the project 'Inland waterway Tanker transport - Data Inventory & Standardisation' which is executed under the Dutch programme IDVV (Impulse Dynamic Traffic management Waterways) of Rijkswaterstaat. This program aims to stimulate the use of the inland waterway network for logistical purposes as one of the alternatives for other means of transport. An important tool to achieve this is the improvement of the information exchange in the whole logistic chain.

The fairways do have the possibilities for the increase of traffic. Inland waterway transport does offer opportunities to ensure a further optimization of the transport chain and the whole logistic chain next to other modes of transport such as road and rail transport.

To enhance the effective exchange of information between trade, transport and the competent authorities there is a necessity for efficient information flows. The reason for initiating this project is the invisible but crucial 'River of Information' necessary to control and manage the flow of cargo, equipment and in particular tank cargo stemming from the increasing International Trade.

The provision of an overall data inventory of the current processes and information exchange in the Inland Waterway Tanker Transport (IWTT) is crucial to come to a harmonised data exchange by means of the definition of standardised messages where possible based on international accepted and available standards. Whilst it is for this project essential to ensure a complete data inventory, it is also of importance to indicate which syntaxes can be used to exchange the necessary information. Within container transport the UN/EDIFACT standard is used for Electronic Data Interchange (Presently millions of messages are daily exchanged based

on this standard). Also for the exchange of data in inland container shipping this standard is used for reasons of continuity and uniformity. The UN/EDIFACT standard ISO 9735 is mature and can as such be considered stable and easy to find and implement. Quite often the UN/EDIFACT standard is used as the basis for message implementation guides from which subsequently XML applications and XSD's can be made.

3.1 Vision Statement

It is foreseen that the transport of (dangerous) goods using inland waterways will increase. This will necessitate increased monitoring and vessel traffic services for the fairway authorities. In its turn this will require correct and up to date (electronic) information. The need for correct data will even become vital in the case of calamity abatement and incident reporting. To support the objective of the fairway authorities for efficient and safe shipping on the respective inland waterways, electronic data exchange between the involved parties (shippers, barge operators, skippers and authorities) will become essential to decrease the (manual) effort for the exchange of the necessary information on documents as well as electronic information.



Moreover, in the not too distant future electronic reporting on the river Rhine for tank vessels will become compulsory (CCNR). Experience from the implementation of the reporting obligation for container vessels in the past has learned that it is important to harmonise and optimise the necessary information and data in close cooperation with all the important stakeholders in this domain. Data exchange based on uniform standards and agreements enables the implementation of automated solutions, so the reporting can be done electronically by the skipper on board (which implies less administrative work).

Standardised, documented (open) frameworks and data exchange (messages) supported by the stakeholders are essential for the implementation of automated solutions in the whole logistic chain. This will improve the quality and availability of the necessary information and in this way support the respective stakeholders in their (daily) tasks.

3.2 Objectives

The main objectives for this data inventory are:

- 1 To document the current IWTT processes and information exchange (between the respective parties and with the involved authorities) including the additional information needs of the most important IWTT stakeholders.
- 2 To lay a fundament in order to standardise the processes and information exchange by defining a standardised open framework including electronic message specifications, based on international accepted standards.

The most important participating IWTT stakeholders in the entire logistic chain for IWTT are the following parties (definitions of the used terminology can be found at the end of the document):

- Consignors, (Shippers),
- Charterers,
- Consignees,
- Brokers,

- Surveyors,
- Barge operators,
- Tank terminals,
- Skippers,
- Competent Authorities, (Fairway authorities, Inspection, waste management, port authorities, safety and security officials)
- Software application developers.

3.3 Scope & Preconditions

The scope of this inventory concerns the (Inland) tanker transport on the inland waterways respectively fairways from Amsterdam ↔ Rotterdam ↔ Antwerp and on the Rhine Netherlands ↔ Germany (stakeholders from the Netherlands, Germany and Belgium).

With respect to the involved processes this document contains all the necessary and used information elements dealing with the various important processes in the Tank Transport Logistic chain, such as: nominating, booking, inspecting, loading, transporting, discharging, storage and reporting to the competent authorities. However there remains internationally and even locally a number of different requirements depending on the various involved parties. This has resulted in a summary of information elements which are not necessarily used everywhere but have been included to ensure completeness.

It must be realised that within the IWTT, the ADN rules and standards are leading, however it has been established, that the so-called Trade names to indicate dangerous goods, when used as the proper shipping name mentioned on the required documents, is often a different name than the one given in the applicable ADN column (2) under name and description. So quite often a difference remains between the Trade names used by the industry and the proper shipping name as indicated in the ADN provisions.

4 - DATA INVENTORY

This chapter describes the respective information elements which are exchanged between the stakeholders in IWTT. This data inventory is the result of several workshops in which the involved stakeholders have participated. For each process step the purpose of the process step and the information elements are described.

The data inventory is based on the division in the different stages of the booking and transport being:

- Trading
- Planning
- Transport request
- Nomination
- Transport order
- Loading information
- Administrative requirements
- Reporting obligations
- Discharge information.

The way in which the various actors in the respective stages of the logistics process interact has been visualised in the information sequence diagram which can be found in appendix A of this document.

4.1 Trading

The trading process has for this document not been considered in detail, as this process is quite often an 'internal' process for the respective trading partners and/or the chemical/oil companies.

One of the instruments important to a contract of sale are the so-called 'Incoterms©' the official ICC rules for the interpretation of trade terms. On the first of January 2011, the ICC Incoterms 2010 did become operational. The purpose of Incoterms is to provide a set of international rules for the interpretation of the most commonly used trade terms in foreign trade. Thus, the uncertainties of different interpretations of such terms in different countries can be avoided or at least reduced to a considerable degree.

It should be stressed that the scope of Incoterms is limited to matters relating to the rights and obligations of the parties to the contract of sale with respect to the

delivery of goods sold. Nevertheless the parties agreement to use a particular Incoterm would necessarily have implications for the other contracts. To mention a few examples, a seller having agreed to a CFR (Cost and Freight) contract cannot perform such a contract by any other mode of transport than carriage by sea, since under these terms he must present a bill of lading or other maritime document to the buyer which is simply not possible if other modes of transport are used.

For ease of understanding the respective terms are grouped in four basically different categories; namely starting with the term whereby the seller only makes the goods available to the buyer at the seller's own premises, followed by a second group whereby the seller is called upon to deliver the goods to a carrier appointed by the buyer. The next group 'C' terms is where the seller has to contract for carriage, but without assuming the risk of loss or damage to the goods and finally the 'D' terms whereby the seller has to bear all costs and risks needed to bring the goods to the place of destination.

Rules for any mode or modes of transport

EXW: ex works

FCA: free carrier

CPT: carriage paid to

CIP: carriage and insurance paid to

DAT: delivered at terminal

DAP: delivered at place

DDP: delivered duty paid



Rules for sea and inland waterway transport

FAS: free alongside ship

FOB: free on board

CFR: cost and freight

CIF: cost insurance and freight

4.2 Planning

This is the operational part of the fulfilment of an order (contract) and is containing the following information elements:

Cargo Product	<ul style="list-style-type: none"> • Trade name of the product • Type • Tons • Volume • Locations from/to • DGSA involvement
Contract of Sale, Terms of sale and delivery	<ul style="list-style-type: none"> • Incoterms¹ (application of rules and obligations such as the moment of transfer of ownership) • Indication of obligations imposed on the parties (such as the distribution of risk or the place of delivery) • Safety data sheet information
Transport terms and conditions	<ul style="list-style-type: none"> • Freight and any low water arrangements • Type of charter party • Demurrage rates and conditions • Transport routes • Loading and discharging berths • Date and period of time when the transportation will take place • Volumes and goods to be transported • Additional requirements
Transport requirements	<ul style="list-style-type: none"> • Type of ship • Dimensions, Length, Width • Deadweight • Available capacity on the ship • Deepest draught • Maximal height above the water • Features • Available tanks • Last cargoes carried

Cargo Product	<ul style="list-style-type: none"> • Trade name of the product • Type • Tons • Volume • Locations from/to • DGSA involvement
Contract of Sale, Terms of sale and delivery	<ul style="list-style-type: none"> • Incoterms² (application of rules and obligations such as the moment of transfer of ownership) • Indication of obligations imposed on the parties (such as the distribution of risk or the place of delivery) • Safety data sheet information
Transport terms and conditions	<ul style="list-style-type: none"> • Freight and any low water arrangements • Type of charter party • Demurrage rates and conditions • Transport routes • Loading and discharging berths • Date and period of time when the transportation will take place • Volumes and goods to be transported • Additional requirements
Transport requirements	<ul style="list-style-type: none"> • Type of ship • Dimensions, Length, Width, • Deadweight • Available capacity on the ship • Deepest draught, • Maximal height above the water • Features • Available tanks • Last cargoes carried

¹ Inco terms such as EXW, FAS, FOB, CIP indicate the division of the Transport Obligations, Costs and Risks see also 4.1

² Inco terms such as EXW, FAS, FOB, CIP indicate the division of the Transport Obligations, Costs and Risks see also 4.2

4.3 Transport request and transport offer

At this stage the shipper requests available vessels from the barge operator in order to transport the indicated cargo.

4.3.1 Transport request

The transport request is sent from shipper to barge operator and may contain the following information elements:

Voyage(s) information	<ul style="list-style-type: none"> • Load Location (can be area) • Discharge Location (can be area) • Dates for intended transport
Cargo information	<ul style="list-style-type: none"> • Name of the product • Type • Tons • Volume • Specific Gravity (normalised) • ADN related information
Transport conditions	<ul style="list-style-type: none"> • Heating instructions • Information Vapour pressure • Specific conditions of vessel, such as stainless steel tanks, double hull, etc. • Additional requirements for non-dangerous goods

4.3.2 Vessel availability

The barge operator acknowledges the transport request and submits a list of suitable vessels and may contain the following information elements:

Vessel information	<ul style="list-style-type: none"> • Identification of the vessel (ENI) • Vessel name • Certificates (like ADN, Vessel Substance List) • Vessel features <ul style="list-style-type: none"> - Dimensions - Tank configuration - Heating • Dead weight • Tank capacity • Class approved product list • Last three transported cargoes per tank • Maximal draught • Last EBIS check
Offer information	<ul style="list-style-type: none"> • Conditions • Pricing

4.4 Nomination

Based on the list of available vessels, the shipper executes an internal vetting process. The result of the vetting process is a list of vessels that will be nominated to the loading terminal and may contain the following information elements:

Vessel information	<ul style="list-style-type: none"> • Identification of the vessel (ENI³) • Vessel name • Vessel features <ul style="list-style-type: none"> - Dimensions - Tank configuration - Heating • Dead weight • Tank capacity • Last three transported cargoes per tank • Pre Purging • Tolerance • Maximal draught • Last EBIS check
Order information	<ul style="list-style-type: none"> • Nomination number (internal) • Release number • Surveyor appointed
Cargo	<ul style="list-style-type: none"> • Product name • Type • Tons • Volume • Specific Gravity (normalised) • ADN related information

The loading terminal executes its own internal vetting process and returns the selected vessels to the shipper and may contain the following information elements:

Vessel information	<ul style="list-style-type: none"> • Nomination number (internal) • Selected Yes/No • Period of time and dates of availability
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³ Till 01-01-2017, also the OFS and ERN identification number can be used

In case a terminal needs more information concerning a certain vessel it submits a request for more information to the shipper.

Vessel information	<ul style="list-style-type: none"> • Nomination number (internal) • Extra product details
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The shipper will provide the following information

Vessel information	<ul style="list-style-type: none"> • Identification of the vessel (ENI) • Vessel name • Vessel features <ul style="list-style-type: none"> - Dimensions - Tank configuration - Heating • Pre Purging • Tolerance • Dead weight • Tank capacity • Last three transported cargoes • Maximal draught • Last EBIS check
Order information	<ul style="list-style-type: none"> • Release number • Confirmation number

Once the shipper receives the list of nominated vessels a transport order is sent to the barge operator.

4.5 Transport order

Within IWTT there are two separate transport orders, one from the original cargo owner to the barge operator resulting in another transport order from the barge operator to the skipper. So in practice one transport order is sent from a shipper to a barge operator and consecutively another transport order is sent to the skipper. In this paragraph the information elements for both transport orders are described.

The following information should be made available in a transport request respectively order:

Voyage information	<ul style="list-style-type: none"> • Load and discharge locations • Terminal names • Quay numbers
Vessel information	<ul style="list-style-type: none"> • Identification of the ship • ENI number and Name of the ship • Type of ship • Deadweight • Available capacity on the ship • Length • Width • Deepest draft • Height above the water • Available tanks • Last three products carried per tank • Cleaning/degassing per tank
Cargo information	<ul style="list-style-type: none"> • Cargo type, Product name • Tons • Volume • Specific gravity (normalised) Temperature, Tolerance 5-10% more or less • Number of different lots in the order • Heating instructions • Cargo handling remarks • Waste information, including the respective proper code of the waste
Contract information	<ul style="list-style-type: none"> • Involved parties and their responsibility • Type and form of contract /charter party (TTB terms and conditions) freight costs, • Nomination date and nomination order reference number • Security and safety information • Former Cargo Owner • Release number of the order • Order reference

Note: in principle the general vessel data is available in the (EBIS) vessel database



In accordance with the ADN treaty and in particular article 5.4.1.1.2 and 5.4.1.1.3, the transport documents for carriage in tank vessels shall contain the required information as indicated in the respective paragraphs of those articles.

4.5.1 Article 5.4.1.1.2 of the ADN treaty

In accordance with article 5.4.1.1.2 of the ADN treaty the transport document(s) shall contain information for each dangerous substance or article offered for carriage. Such as the UN number preceded by the letters 'UN' or the substance identification number and the proper shipping name.

It is essential that the right ADN articles are applied for the respective different cargoes such as for Gas and Liquid cargo. There are considerable differences in the way the information should be given in accordance with the rules described in the respective articles under the chapters 5.4 and 8.1 describing the necessary documentation.

4.5.2 Article 5.4.1.1.3 of the ADN treaty

In accordance with article 5.4.1.1.3 Special provisions for wastes.

If waste containing dangerous goods (other than radioactive wastes) is being carried, the proper shipping name shall be preceded by the word 'WASTE', unless this term is part of the proper shipping name. If the provision for waste as set out in 2.1.3.5.5 is applied, the following shall be added to the proper shipping name. The technical name, as prescribed in Chapter 3.3, special provision 274, need not be added.

Remark: Not all this information will be shown on the transport order.

4.6 Loading information

In this stage, all information elements that are used for the process of loading the product into the vessel are described. The generic process steps for the loading stage of the transport are:

- 1 Pre-arrival notification (notification that the vessel is in the area of the loading terminal);
- 2 Notification of readiness (the vessel is moored and safety procedures are executed and the vessel is ready for loading);
- 3 Statement of facts/timesheet (loading is finished and reports are created);
- 4 Transport document (transport document is drafted);
- 5 Letter of protest (optionally if there is a mishap or difference in measurements between terminal and vessel in the quantity loaded).

For each step a more detailed explanation is given and then the information elements for that specific step (or document) are given.

4.6.1 Pre-arrival notification:

The pre-arrival notification is used to inform the loading master of the terminal that the vessel is in the area of the loading terminal. The information is sent between one and three hours before the estimated arrival of the vessel at the terminal by the skipper. The loading master uses this information to organise his planning of the berths and responds to the skipper whether the product is available, if there are delays, etc. The arrival time is used for demurrage costs in case of waiting.

The following information could be made available in a Pre-arrival notification respectively order:

Voyage information	<ul style="list-style-type: none"> • ETA • Name of skipper (responsible person on board), • Contact information (e-mail, phone, fax) • Destination • Nomination date • Nomination number
Vessel information	<ul style="list-style-type: none"> • Identification of the ship (ENI number) • Name of the ship • Deadweight • Type of ship • Available capacity on the ship • Last three products carried per tank • Length • Width • Deepest draft, • Height above the water, • Available tanks, • Diameter manifold adapters available • Maximum load/discharge speed in cubic metres per hour
Cargo information	<ul style="list-style-type: none"> • Name inspector/surveyor • Vapour return line required • Gas free certificate available.
Contract Information	<ul style="list-style-type: none"> • Release number



4.6.2 Notice of readiness (ship to terminal)

When a vessel is called (by the loading master) to come to a specific berth, the vessel will be moored and certain safety procedures and checks (EBIS, ISGOTT or ISGINTT and in some cases ISPS) are executed in a manual process. Also, in this step the vessel will be connected to the loading terminal's loading point. After this step has been executed, the vessel is ready for loading. The timestamp of this point in the process is registered as well.

The following information should be made available in the notice of readiness:

Voyage information	<ul style="list-style-type: none"> • Actual arrival time (ATA) • Berthing time • Destination
Vessel information	<ul style="list-style-type: none"> • Vessel name
Cargo information	<ul style="list-style-type: none"> • Cargo type and quantity
Information on persons on board	<ul style="list-style-type: none"> • Crew list, list of extra persons • Time Notice of readiness tendered • Time Notice of readiness accepted • Inspection survey passed, • Permission to load

4.6.3 Statement of facts/time sheet

After the loading of the product has been finished, both skipper and loading master (terminal) create a statement of facts and a timesheet. On this statement of facts, the product, quantity loaded and other details are registered. The timesheet can be combined in the statement of facts and may contain an overview of the events of the loading process, containing information such as arrival, order planned, loading started, loading ended, waiting for analyses, Interrupt times, etc.

The following information should be made available in a Statement of Facts/Time Sheet:

Voyage information	<ul style="list-style-type: none"> • Shipper • Destination • Order reference number • Barge Operator • Sender • Consignee • Remarks
Vessel information	<ul style="list-style-type: none"> • Vessel identification, ENI number • Product code • Statement of fact number
Cargo information	<ul style="list-style-type: none"> • Per lot of goods: <ul style="list-style-type: none"> - ADN Goods information (UN Number, technical name, NST⁴ number) - Quantity loaded - Temperature loading - Density - Volume weight - Weight

Timesheet information elements	<p>Timestamp of the following possible events</p> <ul style="list-style-type: none"> • Report time • Arrival at Terminal • Called to Berth • Arrival at Berth • Arrival time (all fastened) • Delay times and delay reasons (as required) • Hose connected • Surveyor on board • Discharge declaration of the previous port shown • Time start loading • Cargo Started • Inspector/Samples taken (as required) • Sample time • Cargo Finished • End time loading • Lay time • Interrupt times • Waiting time (analyses, checking) • Time on demurrage • Documents on board • Estimated Departure • Undock time
Documents	<ul style="list-style-type: none"> • Ullage report before loading • Ullage report after loading • Quality Certificate
Signature	<ul style="list-style-type: none"> • Name of filler • Name and signature of loading master • Name and signature of skipper

4 The NTRS-code list is obsolete and replaced by NST



4.6.4 Note (Letter) of protest (Letter of remarks)

If, based on the statement of facts, differences are found between the facts described by the terminal and the findings of the vessel or any other mishap has happened during the loading process, both parties (but generally the skipper) will create a letter of protest, which will be signed by the other party for receipt only. Within the letter of protest the facts as found by the vessel will be reported. Part of the information on this letter is the identity of the vessel and the respective signatories such as the surveyor and the skipper.

4.6.5 Survey report

Possibly a surveyor can be called by any stakeholder to determine independently what has happened during the loading/discharging process.

Surveyor	<ul style="list-style-type: none"> • Company name • Name of surveyor • Sort of survey e.g. discharge declaration • Ullage/Dip report • Quantity & Quality report • Tank inspection report
Voyage Information	<ul style="list-style-type: none"> • Location • Date/time
Vessel information	<ul style="list-style-type: none"> • Name of the vessel/barge • Tanks
Cargo information	<ul style="list-style-type: none"> • Product name • Quantity loaded/discharged • Specific gravity at mentioned temperature • Correction factor • Source of sample
Signatories	<ul style="list-style-type: none"> • Master delivering ship • Master receiving ship • Terminal representative • Surveyor name (signature)

4.6.6 Sailing advice

In some cases a sailing advice is given which states the loading confirmation together with the particulars of the transport.

4.6.7 Mates receipt, B/L (Transport document) Connossement

The transport document is created by the terminal and given to the skipper. According to the ADN treaty and Regulation 11 (1960/11/EEG), some specific information elements are required on the transport document (Currently a physical document).

The connossement is drafted by the skipper stating the place of loading and place of delivery, together with the undertaking that the cargo has been received and will be delivered in good order and condition and will be delivered in the same condition and indicating that only one original of the document has been signed.

The following information should be made available in the Mates-receipt respectively B/L (Transport document):

Voyage Information	<ul style="list-style-type: none"> • Place of Departure • Place of Destination • Name and address of shipper • Name and address of recipient
Vessel information	<ul style="list-style-type: none"> • Vessel name • Name of Skipper (responsible person on board)
Cargo information	<ul style="list-style-type: none"> • Load and discharge locations • Cargo type • Product name • Proper Shipping Name • Technical name, if applicable • Cargo handling remarks • Blanking • Scrubbing • Stripping • Packing group • Tons • Volume • Specific gravity (normalised) Temperature • Tolerance 5 - 10% more or less • Number of different lots in the cargo • Heating instructions • Cargo handling remarks • Arc reference number • Inhibitor certificate
Documents	<ul style="list-style-type: none"> • Number of signed originals of the document

4.7 Reporting data information elements

Within certain regulations (Rhine Police Regulations, Dutch Police Regulations) it is mandatory for skippers to report their voyage to the fairway authorities for calamity abatement in case of the transport of dangerous goods (or statistical requirements of other target vessels). This information must be supplied to the fairway authority before leaving the loading terminal. Possibly, other regulations can be applicable as well. The information elements required to be reported are mentioned underneath.

4.7.1 Police Regulations

According to river police regulations, dangerous goods transports shall be reported to the fairway authorities for calamity abatement and to improve the safety of the fairways. The skipper must send this information to the fairway authority prior to departure from the loading terminal. The skipper has the option to report electronically (e.g. using BICS software) or via VHF. On the Rhine the following information should be submitted to the competent authorities in accordance with River Rhine Police Regulations (RPR).



Voyage Information	<ul style="list-style-type: none"> • Location • Sailing direction • Port of loading & discharge • The number of persons on board • 0, 1, 2, 3 blue cones • Type, length and width of the convoy • Draught (only on special request) • Sailing route
Vessel information	<ul style="list-style-type: none"> • Name and Type of the ship/vessel • Common European ship number or official number, for sea-going vessels the IMO number • Deadweight • Length and width of the vessel
Cargo information	<ul style="list-style-type: none"> • In case of dangerous goods, in accordance with ADN: <ul style="list-style-type: none"> - the UN number or substance number, - the official name for the transport, where available supplemented by the technical name - the class, classification code and, where applicable, the packing group - the total quantity of dangerous goods subject to this information • For other goods/substances/products: <ul style="list-style-type: none"> - the nature of the product (chemical name, quantity of substance)

4.8 Customs information

As the customs clearance has already been given before the loading of the goods to the terminal, there are no direct reporting requirements by customs. However, the following information is made available, pending on the specific customs state of the goods, during the voyage from loading terminal to discharge terminal.

- NCTS information
- T1 declaration
- MRN number
- ARC number
- Excise Movement and Control System (EMCS)

4.9 Discharge information

In this stage the steps needed to discharge the cargo is described. In general, the following steps are executed in this process.

- 1 Pre-arrival notification (notification that the vessel is in the area of the loading terminal)
- 2 Notification of readiness (the vessel is moored and safety procedures are executed and the vessel is ready for loading)
- 3 Statement of facts/timesheet (loading is finished and reports are created)
- 4 Letter of protest (optionally if there is a mishap or difference in measurements between terminal and vessel in the quantity loaded)
- 5 Survey report
- 6 Discharge declaration

For each step a more detailed explanation is given and then the information elements for that specific step (or document) is given.

4.9.1 Pre-arrival notification

The pre-arrival notification is used to inform the loading master of the terminal that the vessel is in the area of the discharge terminal. The information is sent between one and three hours before the estimated arrival of the vessel at the terminal, by the skipper. The loading master uses this information to organize his planning of the berths, verifies with the customs if there is permission to discharge and other administrative processes. The loading master then responds to the skipper whether there are delays or other issues.

The arrival time is used for demurrage costs in case of waiting.

The following information should be made available on the Pre-arrival notification:

Voyage information	<ul style="list-style-type: none"> • ETA • Last three products carried • Name of skipper (responsible person on board) • Contact information (email, phone, fax) • Origin of goods • Former cargo owner • Nomination date • Order reference number • Release number
Vessel information	<ul style="list-style-type: none"> • Identification of the ship, ENI number • Name of the ship • Deadweight • Type of ship • Available capacity on the ship • Length • Width • Deepest draft • Height above the water • Available tanks • Diameter manifold • Adapters available • Maximum load/discharge speed in cubic metres per hour
Cargo information	<ul style="list-style-type: none"> • Name inspector/surveyor, vapour control required • Gas free certificate available • Gas measurement report where required • Transport document on board • Customs documents on board: T1 (customs reference numbers, such as MRN, ARC) • Incident reporting procedures
Contract Information	<ul style="list-style-type: none"> • Cargo release number and date • Type/kind of charter party

4.9.2 Notice of readiness

When a vessel is called (by the loading master) to come to a specific berth, the vessel will be moored and certain safety procedures and checks (EBIS, ISGOTT or ISGINTT) are executed in a manual process. Also, in this step the vessel will be connected to the terminal's discharging point. After this step has been executed, the vessel is ready to start the discharge. The timestamp of this point in the process is registered as well.

The following information should be made available on the Notice of Readiness:

Voyage information	<ul style="list-style-type: none"> • Actual Time of Arrival (ATA) • Berthing time • Place of Departure
Vessel information	<ul style="list-style-type: none"> • Vessel name
Cargo information	<ul style="list-style-type: none"> • Cargo type and quantity • Time Notice of readiness tendered • Time Notice of readiness accepted • Inspection survey passed, • Permission to discharge

4.9.3 Statement of facts/time sheet

After the discharge of the product has been finished, both skipper and loading master (terminal) create a statement of facts and a timesheet. On this statement of facts, the product, quantity discharged and other details are registered. The timesheet can be combined in such a document and contains an overview of the events of the loading process, containing information such as (arrival, order planned, discharge started, discharge ended, etc.)

The following information should be made available in a Statement of Facts/Time Sheet:

Voyage information	<ul style="list-style-type: none"> • Shipper • Destination • Order reference number • Barge Operator • Sender • Consignee • Remarks
Vessel information	<ul style="list-style-type: none"> • Vessel identification, ENI number • Product code • Statement of fact number • Per lot of goods: <ul style="list-style-type: none"> - ADN Goods information (UN Number, technical name, NST⁵ number) - Quantity loaded - Temperature loading - Density - Volume weight - Weight <p>Timestamp of the following events</p> <ul style="list-style-type: none"> • Report time • Arrival at Terminal • Called to Berth • Arrival at Berth • Arrival time (all fastened) • Delay times and delay reasons (as required) • Hose connected • Surveyor on board • Cargo Started • Inspector/Samples taken (as required) • Cargo Finished • Time start loading • End time loading • Lay time • Interrupt times • Waiting time (analyses, checking) • Time on demurrage • Documents on board • Estimated Departure • Undock time • Ullage report before loading • Ullage report after loading • Quality Certificate • • Name of filler • Name and signature of loading master • Name and signature of skipper

⁵ The NTRS-code list is obsolete and replaced by NST

4.9.4 Note (Letter) of protest (Letter of remarks)

If, based on the statement of facts, differences are found between the facts described by the terminal and the findings of the vessel or any other mishap has happened during the discharge process, both parties (but generally the skipper) will create a letter of protest, which will be signed by the other party for receipt only. Within the letter of protest the facts as found by the vessel will be reported. Part of the information on this letter is the identity of the vessel, the signatories such as the surveyor.

4.9.5 Survey report

Possibly a surveyor can be called by any stakeholder to determine independently what has happened during the loading/discharging process.

Surveyor	<ul style="list-style-type: none"> • Company name • Name of surveyor • Sort of survey e.g. discharge declaration • Ullage/Dip report • Quantity & Quality report • Tank inspection report
Voyage information	<ul style="list-style-type: none"> • Location • Date/time
Vessel information	<ul style="list-style-type: none"> • Name of the vessel/barge • Tanks
Cargo information	<ul style="list-style-type: none"> • Product name • Quantity loaded /discharged • Specific gravity at mentioned temperature • Correction factor • Source of sample
Signatories	<ul style="list-style-type: none"> • Master delivering ship • Master receiving ship • Terminal representative • Surveyor name signature

4.9.6 Discharge declaration (CDNI)

In compliance with the CDNI treaty (Convention on the collection, deposit and reception of waste produced During Navigation on the Rhine and Inland waterways) after each discharge a so-called discharge declaration needs to be created and signed upon discharge by the loading master and the skipper. The declaration is jointly created between skipper and loading master. Three copies of this declaration are created, one for the terminal, one for the skipper and one for the next loading terminal. The declaration needs to be archived for at least six months.

The following information should be made available in a Discharge declaration⁶

Information entered by terminal	<ul style="list-style-type: none"> • Discharge terminal name, address • Vessel name • Vessel identification • Tank numbers • Quantity discharged • UN Number • Product name • Arrival Date and Time • Date and time of start discharge • Date and time of end discharge • Dutch regulation: Not cleared of rest cargo, vessel declares transport of uniformity • What happens with rest cargo, wash water, rain water, ballast water • Date, time, location, name of loading master and signature loading master
Information entered by skipper	<ul style="list-style-type: none"> • Confirmation of items entered by terminal • Whether tanks are 'Pumped Clean' • Remarks • Date, time, location, name of skipper/master and signature of skipper/master

4.10 Miscellaneous

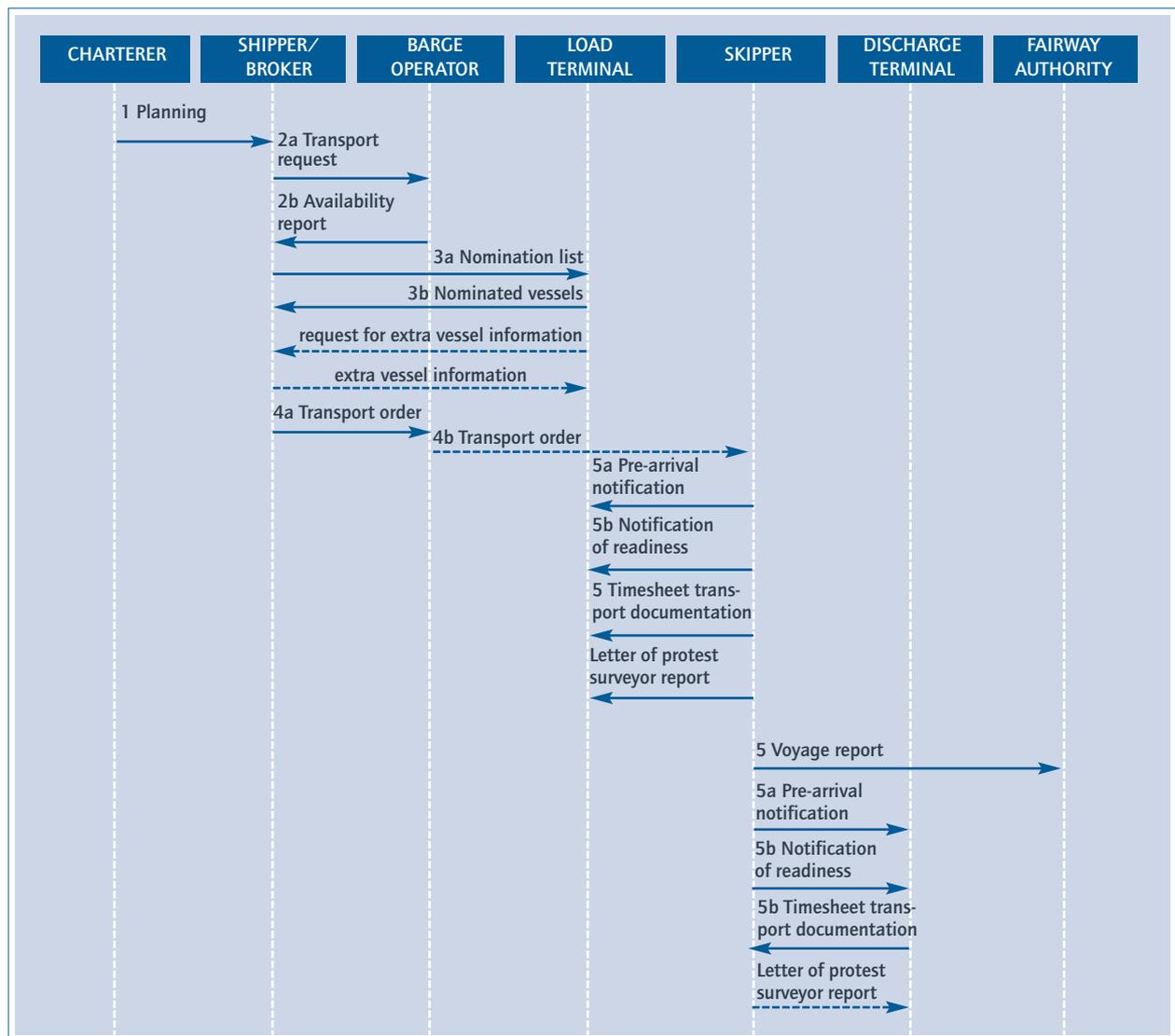
The documents mentioned underneath are examples of the information exchange between the stakeholders resulting in arranging, conducting and reporting the transport of (non-)dangerous goods. However, it is evident that there are various other rules and regulations including those resulting from certain so called 'custom, of the ports' which may require other documents. These documents are often not directly related to the transport, and might have a more generic format for both the used information elements and or the structure of the document in general.

To ensure completeness and to provide all information gathered during the research, the respective documents are listed here and might be taken into consideration as input in the whole standardization process.

- Certificate of quality
- ADN documentation
- Connossement
- Timesheet
- Tank inspection report
- List of previous cargoes per tank
- Route planning
- Discharge and Cleaning declaration (Entladebescheinigung)
- Emptiness report
- Cargo book
- Voyage registration/Stowage plan
- Declaration of measurement (Scheepsmeting)
- Cofferdam control report
- Ullage/Dip report - Quantity report
- Stability report
- Instruction in writing for the skipper
- ISPS documentation
- Safety plan per terminal
- CREWLIST



5 - APPENDIX A: INFORMATION SEQUENCE DIAGRAM



6 - APPENDIX B: (DATA PROTECTION)

Recognising that the protection of personal and economic sensitive data is strictly settled by European and National legislation, it is of the utmost importance that in the exchange of data, a level of protection is achieved which at least equals the protection resulting from the principles of the Council of Europe Convention of 28 January 1981 (ETS 108) for the protection of individuals with regard to automatic processing of data.

In accordance with the RIS directive (2005/44/EC) and specifically article 9 (Rules on privacy, security and the re-use of information), reiterated in paragraph 10 of this directive.

- 1 Member States shall ensure that processing of personal data necessary for the operation of RIS is carried out in accordance with the Community rules protecting the freedoms and fundamental rights of individuals, including Directives 95/46/EC and 2002/58/EC.
- 2 Member States shall implement and maintain security measures to protect RIS messages and records against untoward events or misuse, including improper access, alteration or loss.
- 3 Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information shall apply.

Moreover it is stated in Paragraph 10 that:

- The introduction of RIS should not lead to uncontrolled processing of economically sensitive data relating to market operators.
- The following text should be seen as guidelines to clarify the legal position of the various parties involved in the electronic exchange of data in inland waterway traffic and transport.

- To ensure that an adequate level of data protection is maintained, whilst also a free flow of data across borders and among the parties involved in International Trade and Transport operations is accomplished, these guidelines will constitute the basis for interchange agreements between governments mutually, the private sector and between the private sector and governmental agencies.
- Security of personal data includes protection against unauthorised use of, access to or disclosure of personal information, including all measures designed to prevent, detect and enable investigation of unauthorised use, access and disclosure.
- Electronic reporting or the exchange of data is always done by the owner of the information or by the party appointed by the owner of the data. However this party will act on behalf of the owner and only will provide electronic information to those parties or companies agreed with the owner.

6.1 Principles

Confidentiality and privacy:

- The parties in the exchange and in particular the owner of the data should have the certainty that confidential information is indeed treated as such. The right to privacy must be assured.
- Before starting the electronic exchange of data it should be recorded and agreed between the parties exchanging the data for which purpose the respective information will be used.

- The submitted electronic data will only be used for the legitimate and anticipated purpose for which it has been sent. It is to be prevented that such information is forwarded to third parties without the consent of the owner of the information or that the information is used for other purposes than originally has been agreed. The only exception to this principle would be where disclosure is ordered by a competent authority.
- Each organisation responsible for the generation, maintenance, use, delivery or otherwise processing of data, must ensure the reliability of the data for the purpose of processing and shall take adequate measures to prevent misuse of this data.
- No systems should exist for the processing of data related to persons and other data subjects which are kept secret from the owners of that data. The responsible parties for the collection of data are liable for the insurance of full compliance with these principles and rules.
- The receiving party should be able to rely on the correctness and completeness of the information supplied.
- For the supplier of the information it must be clear, understandable, logical and verifiable what information subject to what conditions is relevant for the respective parties and is being used for that purpose (Transparency forms the basis of trust).
- Personal data can only be submitted to services such as immigration and to security officers on terminals or quays and only in the context of execution of the ISPS code, rules and regulations in those places where the ISPS code is applicable.
- Personal data should not be kept longer than necessary for the purpose for which the data have been submitted. If the personal data are provided to terminals in the context of ISPS the data will only be kept for the period of stay of the vessel at any terminal.
- It is not allowed to link personal data from a data subject to the personal data from other data subjects.
- It should be possible for a person to know which personal data has been gathered for a certain purpose and how this data has been processed.
- Personal data can only be exchanged after the explicit permission of the person concerned and only to by that person named organisations, companies or authorities for a named purpose. In so far as personal data is passed on to third parties, this shall only be done with the consent of the person concerned or in exceptional cases in accordance with a legal duty.



7 - DEFINITION OF TERMS AND ABBREVIATIONS

ADN	Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure/ European Agreement (regulation) concerning the International Carriage of Dangerous Goods by Inland Waterways.
ATA	Actual Time of Arrival
ARC	Administrative Reference Code
Broker	Person who acts as an agent or intermediary in negotiating contracts
BTB	Bureau Telematica Binnenvaart (Agency for Telematics in Inland Shipping).
CCNR	Central Commission for the Navigation of the Rhine
CDNI	Convention on the collection, deposit and reception of waste produced During Navigation on the rhine and Inland waterways
Connekt	IDVV (delegated) programme management (www.connekt.nl).
Consignee	The party such as mentioned in the transport document by whom the goods, cargo or containers are to be received
DGSA	Dangerous Goods Safety Advisor, as of January 2000, Council directive 96/35 of the European Union
ETA	Estimated Time of Arrival
eAD	electronic Administrative Document
EBIS	European Barge Inspection System (Scheme)
ERI	Electronic Reporting International in Inland Navigation
ERINOT	Electronic Reporting International Notification message (International standardised message for the so called Electronic Reporting Duty)
ETA	Expected Time of Arrival
HS	Harmonised commodity description and coding system
ICC	International Chamber of Commerce
IDVV	Impulse Dynamic Traffic management Waterways (Dutch: 'Impuls Dynamisch Verkeersmanagement Vaarwegen'). A programme which aims to stimulate the use of the waterway network for logistical purposes as an alternative for road transport.
IWTT	Inland Waterway Tanker Transports (transport of liquid/gas cargo over inland waterways).
ISGINNT	International Safety Guide for Inland Navigation Tank-barges and Terminals
ISGOTT	International Safety Guide for Oil Tankers and Terminals - or ISGOTT
ISPS	International Ship and Port facility Security Code is an amendment on the IMO SOLAS convention (Safety Of Live At Sea).

NST	Nomenclature uniforme de marchandises pour les statistiques de transport/Standard goods classification for transport statistics/ revised
NSTR	This code list is obsolete and replaced by NST
RIS	River Information Services (framework of (interacting) services)
Shipper	The merchant (person) by whom, in whose name or on whose behalf a contract of carriage of goods has been concluded with a carrier or any party by whom the goods are actually delivered to the carrier in relation to the contract of carriage
Ship's note of protest	In case of any damage to a vessel or her cargo or other circumstances/issues were the skipper of a vessel sees fit, he will register a protest before the competent authorities.
Skipper (Captain)	A person who has command of a vessel used for inland navigation
UN	United Nations
UN/EDIFACT	The ISO and UN standard for Electronic Data Interchange for Administration, Commerce and Transport (a syntax and data standard)
XML	Extensible Mark-up Language (XML) is a mark-up language that defines a set of rules for encoding documents (electronic messages) in a format that is both human-readable and machine-readable.
XSD	W3C XML Schema Definition Language



Colofon

Data Inventory
Inland Waterway Tanker Transport (IWTT)

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