Tanker Transports Data Inventory & Standardisation Project

An initiative to stimulate electronic information exchange (EDI) in the logistic chain for tanker transports on the inland waterways

A project supported by IDVV - Better Utilization of Waterways

Henk van Laar, September 2013
Overview

• What preceded the project
• Summary of field research
• Objectives and approach
• Information flows
• Explanatory film
• Envisaged output
• Workshops
• Planning en follow up
Background

- Electronic reporting RPR/BPR art 12.01
- Extension of mandatory reporting by CCNR
- Administrative burdens & on board inspections
- Availability of EDI in B-to-B
- Support reporting B-to-G
- Safety and calamity abatement
- Efficiency and Single Window
- BTB advise on approach
Guiding principles:

• Report only once to authorities
• Information re-use inside the administration
• The unique source of information
• EDI B-to-B supports B-to-G
• Paperless sailing
EDI standards for bulk transport of mineral oils and chemicals by water

Objective

- To improve and streamline electronic information exchange (on the basis of structured messages such as EDI or XML) in the logistic chain which uses or intends to use the waterways.

- Includes the information exchange both between market and government, as well as between market parties.

- Better information, actual and readily available, and last but not least cheaper automated processing are the common goals.
EDI standards for bulk transport of mineral oils and chemicals by water

Approach

• Well developed EDI in the business leads to easy EDI reporting to authorities.
• Define practical standards for electronic messages, acceptable for all parties, derived from current practice and available international standards
• Two steering committees, supported by a team of international experts who do the actual work
• Support and experts are supplied by Rijkswaterstaat/IDVV
Introduction – Project & Scope

- Take inventory
  - existing processes, responsibilities & information exchange
  - Suggestions for improvement
- Analyze differences and similarities
- Analyze potential “quick win” area’s
- Analyze potential use of existing (de-facto/industry) standards
- Do suggestions for next steps

The objective is to make it possible that
- machines communicate and interpret the electronic information without human intervention
- with or without “translation” between existing formats
TANKER Transports (inland) – Information flow (conceptual)

Process
Starting point

Customers (cargo owners)

1) Planning phase (request, quotation phase)
   - Order(s)
   - Transport request
   - Transport options (available barges)
   - Transport order

2) Planning phase (order preparation phase)
   - Nominations (possible barges)
   - Confirmations (selected barges)

3) Barge Operator(s)

4) Planning & Coordination

5) Orders & Coordination

6) 2a) Execution phase (loading, discharging)
    - Pre announcement (load, discharge)
    - Permission to Load/Discharge

7) 2b) Execution phase (transport)
    - PROTEST Discharge statement

8) Departure (voyage, cargo)
    - Cargo manifest

9) Skipper

10) Communication with authorities

Authorities
- Port authority
- Fairway authority (RWS)
- Customs
- Inspection

LOAD-, UNLOAD-Terminal

Process
Starting point

Customers (cargo owners)

Order(s)

Transport request

Transport options (available barges)

Transport order

Nominations (possible barges)

Confirmations (selected barges)

Planning & Coordination

Orders & Coordination

2a) Execution phase (loading, discharging)

Pre announcement (load, discharge)

Permission to Load/Discharge

2b) Execution phase (transport)

PROTEST Discharge statement

Departure (voyage, cargo)

Cargo manifest

Skipper

Communication with authorities

 Authorities
- Port authority
- Fairway authority (RWS)
- Customs
- Inspection

LOAD-, UNLOAD-Terminal
IWTT Process (visualisation)

Inland Waterway Tanker Transports
Objectives

1. Document IWTT processes and information exchange
2. Defining a standardised (open) framework
3. Implementation guidelines and message specifications
4. Final report
Organisation

IDVV Programme (Track 2)

Steering Committee & overall Management

Expert & Standardisation Working group

Stakeholders group 1
Domain: Planning & Ordering

Stakeholders group 2
Domain: Execution & Transport

Project (core) team

Projectcoodination & Support

⇒ IWTT Data Inventory & Standardisation - Group
Stakeholder group 1 Planning & Ordering:

- Shippers
- Barge operators
- Terminals

- To deliver detailed input and confirm results about processes and information exchange during the planning en ordering phase of IWTT
Stakeholder group 2 Execution & Transport:

• Barge operators
• Skippers
• Terminals
• Authorities

• To deliver detailed input and confirm results about processes and information exchange during the execution and transport phase of IWTT
Work breakdown

IWTT Data Inventory & Standardisation - Project

Project Startup
(Steering committee)
Output:
- Project TOR & planning.
- Project information & organisation.
- Core team meeting reports & actions.

Project management & coordination
(Steering committee + Project coordination & support group)
Output:
- Meeting reports & actions
- Current processes & information flow (=input from stakeholders)
- Approved input & standardisation concepts (input for expert group)
- Recommendations & (optional) deviating opinions.

Workshops phase (collecting input)
(Chairs + Stakeholders & Expert group members)
Input:
- Project TOR & Organisation.
- Committed & active participants.
- Knowledge, expertise & information about own processes.

Standardisation & Specification phase
(Expert group in cooperation with Stakeholders)
Input:
- Confirmed input (workshop results) from stakeholders.
- International standards & regulations.
- Reviews from stakeholders & other experts.
- Stakeholders approvals, regarding standardisation.

Final Output:
- Publications & Communications.
- Project deliverables.
- Project closed/archived.

Project Closure
(Steering committee)
Proposed groups?

(to be discussed)

**Group #1, Planning, orders**
- BP Shipping Ltd. Nederland
- Vopak
- DOW Chemical
- EVO
- Shell Nederland Raffinaderij B.V.
- Vereniging van de Nederlandse Chemische Industrie.
- Wijnhoff & Van Gulpen & Larsen B.V.
- Yara Sluiskil B.V.
- BASF België
- BP Germany

**Group #2, Transport execution**
- Interstream Barging Netherlands B.V.
- Unibarge B.V.
- Tankvaartonderneming BAS Shipping
Stakeholders **Execution & Transport:**

- Barge operators
- Skippers
- Terminals
- Authorities

- To deliver detailed input and confirm results about processes and information exchange during the execution and **transport phase** of IWTT
**Conceptual Diagram (today’s focus)**

**TANKER Transports (inland) – Information flow (conceptual)**

1. **Order(s)**
   - 1a) Planning phase (request, quotation phase)
     - Transport request
     - Transport options (available barges)
     - Transport order

2. **Transport request**
   - 2b) Execution phase (transport)
     - Orders & Coordination

3. **Nominations**
   - (possible barges)
   - Confirmations (selected barges)

4. **Planning & Coordination**
   - 2a) Execution phase (loading, discharging)
     - Pre announcement (load, discharge)
     - Permission to Load/Discharge
     - Load-, Discharge reports

5. **Orders & Coordination**
   - 5

6. **PROTEST**
   - 7

7. **Communication with authorities**
   - 8

8. **Departure**
   - (voyage, cargo)

9. **Cargo manifest**

10. **Skipper**
    - 9

**Authorities**
- Port authority
- Fairway authority (RWS)
- Customs
- Inspection

**Process**
- Starting point
- Customers (cargo owners)
- Shipper
- Barge Operator(s)
- LOAD-, UNLOAD-Terminal

**TRANSPORT Phase**
- 1b) Planning phase (order preparation phase)
- 3

** Authorities**
- Communication with authorities
- Permission to Load/Discharge
- Load-, Discharge reports

**Repeat Transport cycle**

**Conceptual Diagram**

**18**
The several IWTT (work)processes

1. Orders
2-4. Transport Planning & orders
5-6. Load/Discharge Planning & Coordination
7,10. Transport documentation
9. Reporting (Voyage Cargo)

Core Data set?
Workshop

- Input on the **Details** of information exchange in the several steps:
  - Transport order + Coordination with Terminal, steps 4, 5
  - Pre announcement (**loading**) + Load reports, steps 6, 9
  - Transport document and or Protest, step 7
  - Reporting to authorities (**ERINOT**), step 8
  - Pre announcement (**discharge**) + Discharge reports, step 6, 9
  - Discharge statement and or Protest, step 10
  - Other?
Workshop

Important:

• Information exchange (what) and timing (when).

• Responsibilities (who delivers input & who is responsible).

• Possible Changes (when, who, how many).
TANKER Transports (inland) – Information flow (Loading phase) (conceptual)

Execution phase - Information flow
Shore->Ship, between:
- Barge operators.
- Skipper(s).
- Terminal operators.
- Authorities.

Ordering & Transport Planning

Process
Starting point (execution phase)

1. Pre announcement (load, discharge)
2. Permission to Load/Discharge
3. Load-, Discharge reports
4. Transport order
5. Planning & Coordination
6. Orders & Coordination
7. PROTEST
8. Transport-document
9. Departure (voyage, cargo)
Transport order – Information (steps 4, 5)?

- Ships/barges: Identification, Type, Capacity, length, width, deepest draft, max height above water, the amount of tanks.

- Cargo: Type, Tons, Volume, Specific Gravity, Needed Ullage.

- Availability: When and where to be available (Ship & Cargo to load).

- Load / Discharge location(s): Terminal names and locations.

- Type/ form of charter party, inspection date and reports.

- Statement of facts and time sheets, loading (contractual & quality).
TANKER Transports (inland) – Information flow (Loading phase) (conceptual)

Execution phase - Information flow
Shore->Ship, between:
- Barge operators.
- Skipper(s).
- Terminal operators.
- Authorities.

Pre loading: Arrival @terminal & loading

Process Starting point
(execution phase)
(Pre)-announcement – Information (steps 6, 9)?

*(loading phase)*

- Statement of facts (loading), Vessel Name, from / to, cargo type and amount.

- (Arrival time, Berthing time, Notice of readiness, Notice accepted, Commenced loading).

- Timesheet for loading: Date, Hours, Lay time, Time on demurrage.

- Load reports.
ADN Transport Document – Information (step 7)?
(pre transport phase)

- UN No or substance identification No.
- Class / Classification code & Packing group.
- Proper shipping name and description.
- Danger, hazards inherent in the dangerous substance.
- Type of tank vessel.
- Cargo tank design, type & equipment.
- Opening pressure of the high velocity vent valve in kPa.
- Max degree of filling.
- Relative density at 20 degr. C, Type of sampling device.
- Pump room below deck permitted, Temperature class.
- Explosion group / Anti-explosion protection required.
- Equipment required.
- Number of cones/blue lights.
TANKER Transports (inland) – Information flow (Sailing phase) (conceptual)

Execution phase - Information flow
Shore->Ship, between:
- Barge operators.
- Skipper(s).
- Terminal operators.
- Authorities.

Report to Authorities

Process
Starting point (transport phase)

2b) Execution phase (transport)
Reporting Voyage/Cargo Information (step 8)

RPR # 12.01
(transport phase)

- Name and Type of the ship/vessel;
- Location, sailing direction
- Common European ship number or official number, for sea-going vessels the IMO number;
- Deadweight;
- Length and width of the vessel
- Type, length and width of the convoy;
- Draught (only on special request);
- Sailing route;
- Port of loading & discharge;

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Reporting data information step 8

- in case of dangerous goods, behind ADN:
  - 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 (not ADN):
  - the nature of the charge (chemical name, amount of substance);
- 0, 1, 2, 3 blue lights and blue cone;
- the number of persons on board;
- Stowage position (optional).
TANKER Transports (inland) – Information flow (Discharging) (conceptual)

Execution phase - Information flow Shore->Ship, between:
- Barge operators.
- Skipper(s).
- Terminal operators.
- Authorities.

**Discharging:**
Arrival @terminal & discharging

Process Starting point (discharge phase)
Pre-announcement – Information (steps 6, 9 & 10)?
(discharging phase)

• Port and terminal, amount and type of cargo:
• Statement of facts, Arrival time, berthing time, Notice of readiness tendered, accepted, Commenced discharge, Completed discharge

• Time sheet for discharge, Date, Hours, Lay time, Completed discharge, Total dispatch

• Demurrage

• Discharge reports & discharge statement.

• Ship’s 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.
Other (administrative) – Information? (tanker transports)

- Certification information?
- Security information?
- Time administration?

Transport phase (conceptual)

1. **Process Starting point**
2. **Authority**
3. **Customs**
4. **Fairway authority (RWS)**
5. **Authority**
6. **Barge Operator(s)**
7. **Orders & Coordination**
8. **Departure (voyage, cargo)**
9. **Cargo manifest**
10. **Transport document**

- Certification information?
- Security information?
- Time administration?
Next steps & actions

• Recap of previous workshop
• Next workshop with the focus on the Planning phase.
• Standardisation experts will use your input in the analysis and specification phase, to define frame works where applicable for:
  - B to G,
  - B to B,
  - G to B communication
• Specification will be validated (reviewed by stakeholders) and supplemented with (your) recommendations.

Planned Deliverables:
• Current IWTT processes, responsibilities and information exchange.
• Standardised IWTT framework and applicable message specifications.
• Final Report, conclusions & recommendations.
Tanker Transports
Data Inventory & Standardisation Project