

**ELEKTRONISCHE ANBINDUNG VON BINNENHÄFEN UND  
-SCHIFFEN AN SEEHÄFEN**

***ELECTRONIC INTERCONNECTION OF SEAPORTS, INLAND  
TERMINALS AND BARGES***

von / by  
Ernie SCHEERLINCK

# ***Electronic Interconnection of Seaports, Inland Terminals and Barges***

**NAVILOG 2002**

**University of Hannover**

**26/03/2002**

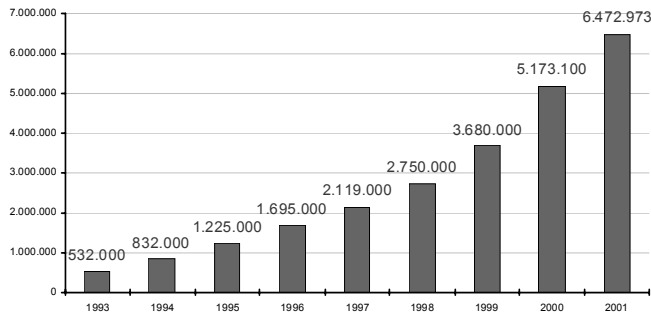
## ***Milestones***

- **EDI for Antwerp Maritime Industry**
  - **Creation of a network**
  - **EDI focused applications**
  - **Message design**
- **EDI for correspondents of Antwerp Maritime Industry**
- **Interconnects between networks**
- **“Single point of entry”**
- **Internet Service Provider (ISP)**
- **Subcontractor for BCS and ZEDIS**
- **EDI for non Maritime industries**
- **Embracing the new technologies**
  - **WEB - EDI**
  - **...**

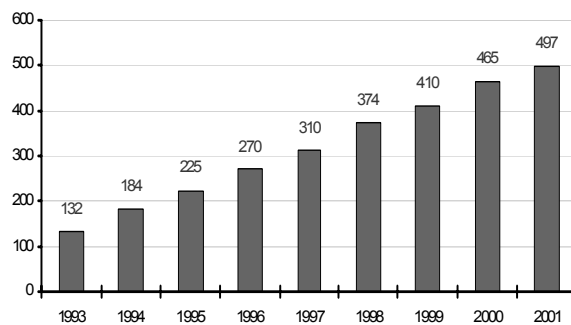


# Statistics

**EDI messages exchanged**



**Companies connected**



# Seagha Products

## System level

### Seagha Bridge

- EDIFACT translator
- Front-End processor

### Seagha Connect

- Open communication protocol

### Seagha Explorer

- Management module

## End-users level

### Sadbel (Customs declaration)

### WBS

(Berthing requests)

### DGN

(Dangerous Cargo Declaration)

### Expag

(Forwarder-Agent)



## ***Seagha Services***

- ▣ **Seagha Clearing**
  - ▣ Mailbox system / X400- X25 - ISDN – OFTP-TCPIP
- ▣ **Interconnects**
  - ▣ VAN's (Value Added Network) / Ports / CCS (Cargo Community System)
- ▣ **Telex/Fax gateway**
- ▣ **ISP** (Internet Service Provider)
  - ▣ Issue of IP addresses (BGP4 level provider)
- ▣ **Single point of Entry**
- ▣ **E-Business**
- ▣ **EDI consulting**
- ▣ **Mapping**



## ***Problem of an Inland Terminal***

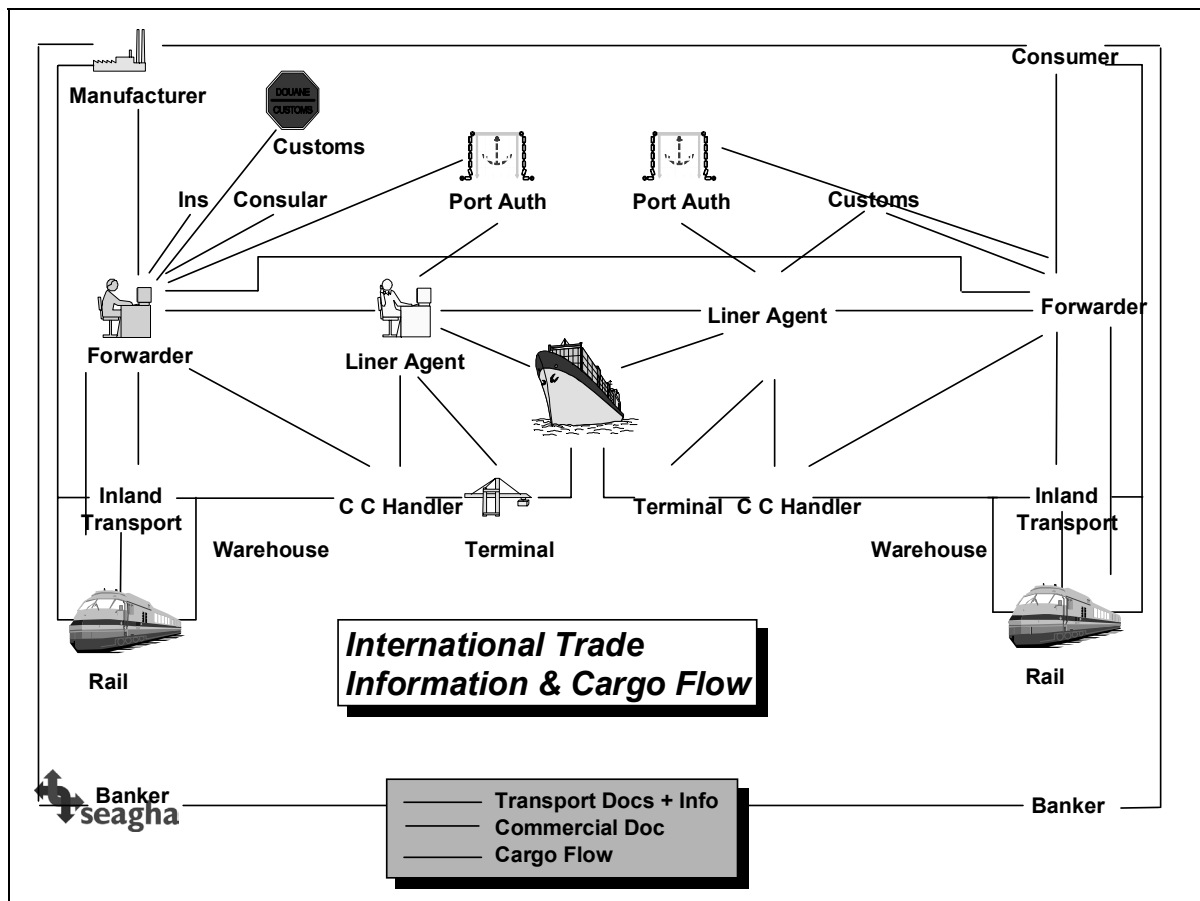
- ▣ **Communication to :**
  - ▣ Shipping Lines
  - ▣ Agents
  - ▣ Forwarders
  - ▣ Customs
  - ▣ Deep Sea Terminals
    - ▣ Some inland Terminals are also Barge operators.
  - ▣ Barge Operators
  - ▣ Truckers...
- ▣ **Same environment as a deep sea terminal with the same solutions**

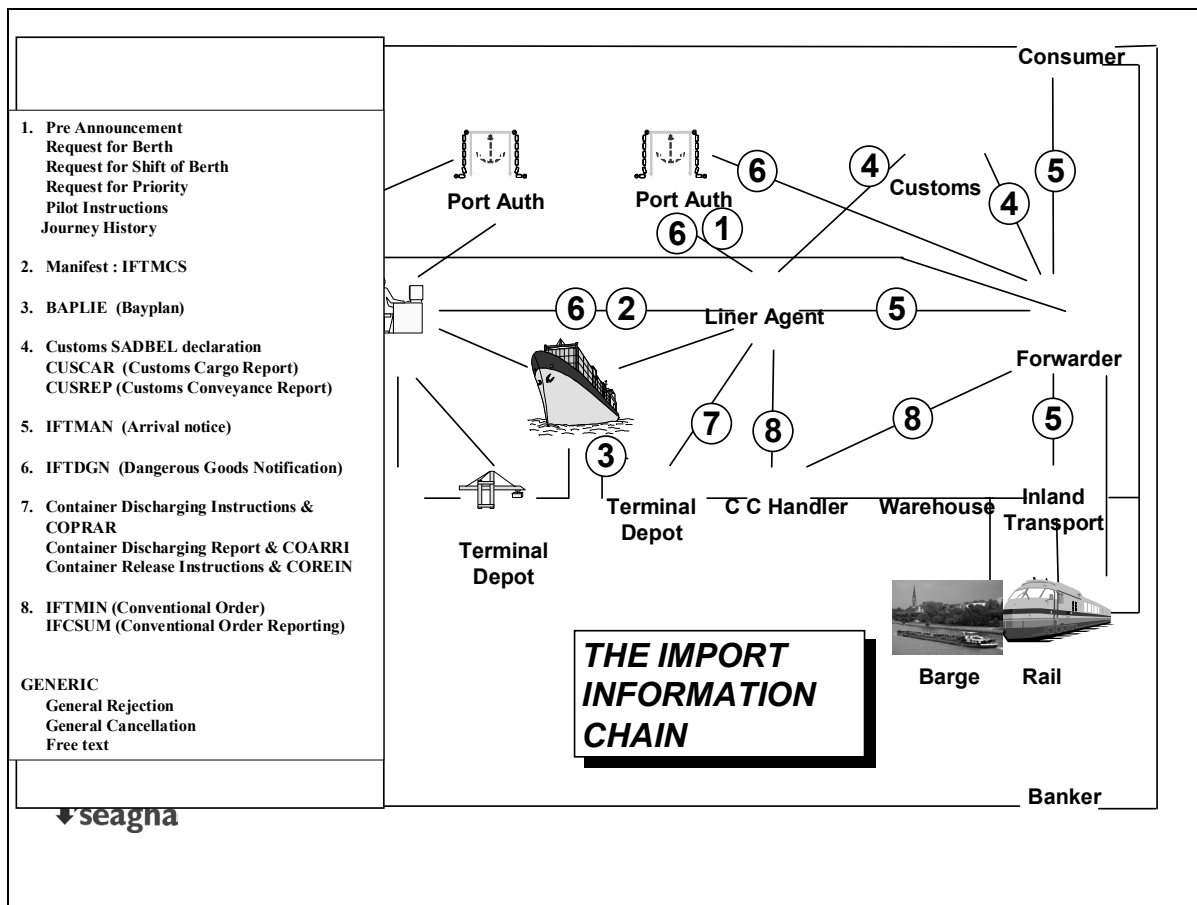
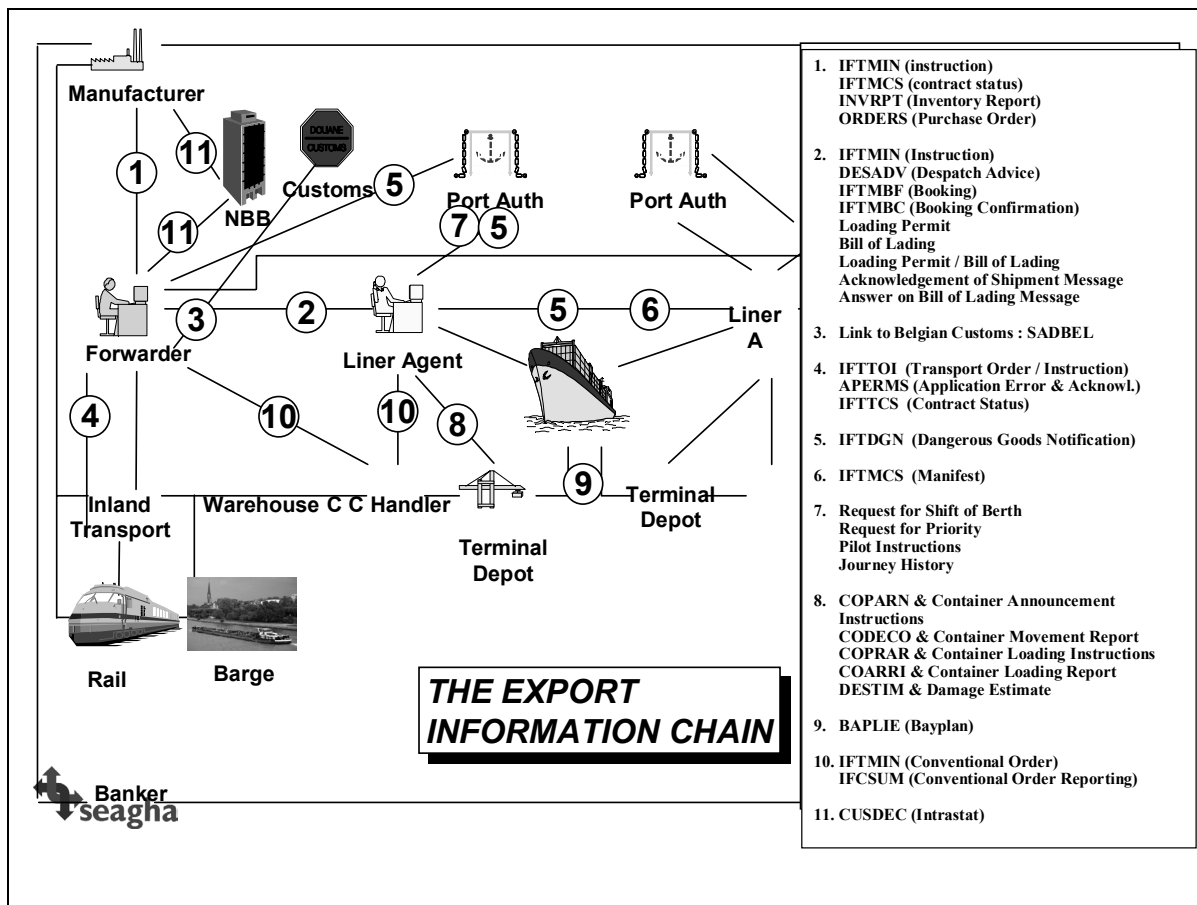


- ▣ **Messages exchanged**
  - ▣ Container Messages
  - ▣ Customs declarations

## Problem of the Barge (operator)

- Movement of the ship on the inland waterways
  - Pre-announcement at bridges, locks ..
- Proper documentation on the cargo
  - Operational info
  - Customs info
- Planning for operations on deep sea terminals
  - Experiments in R'dam
- Commercial part of a barge transport





## Inventory of EDI environments

### Types of Players

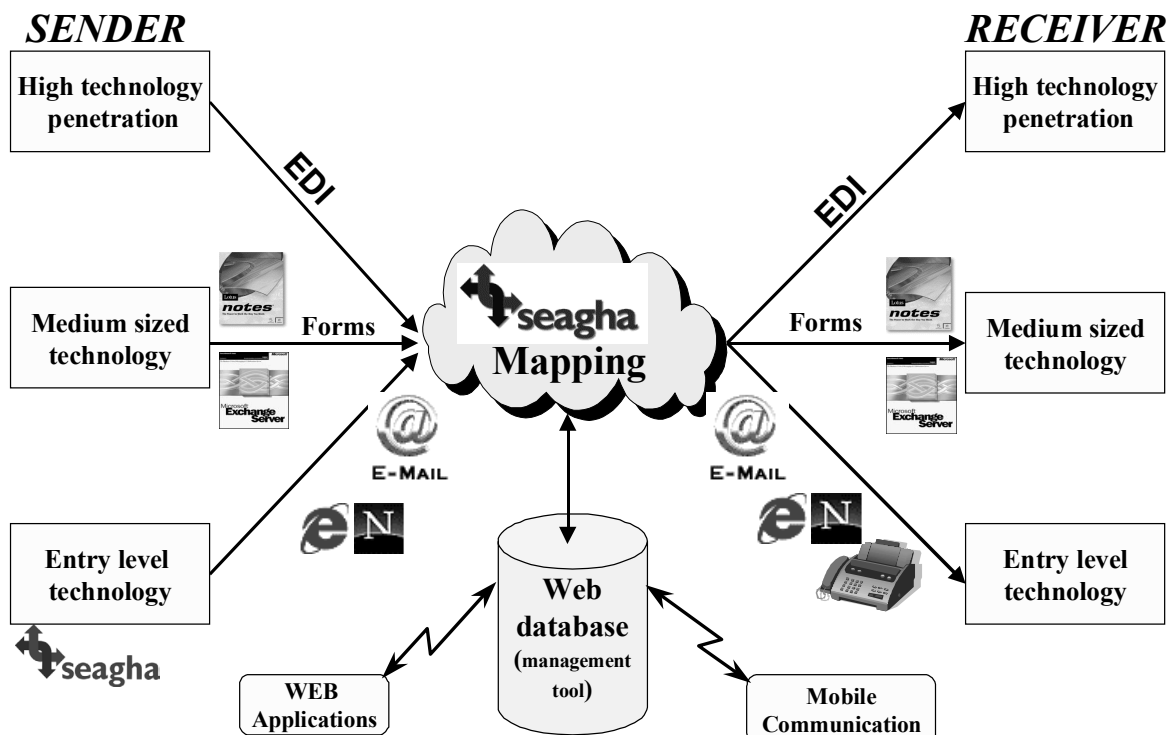
- High degree of ICT
- Medium sized ICT infrastructure
- Entry level ICT

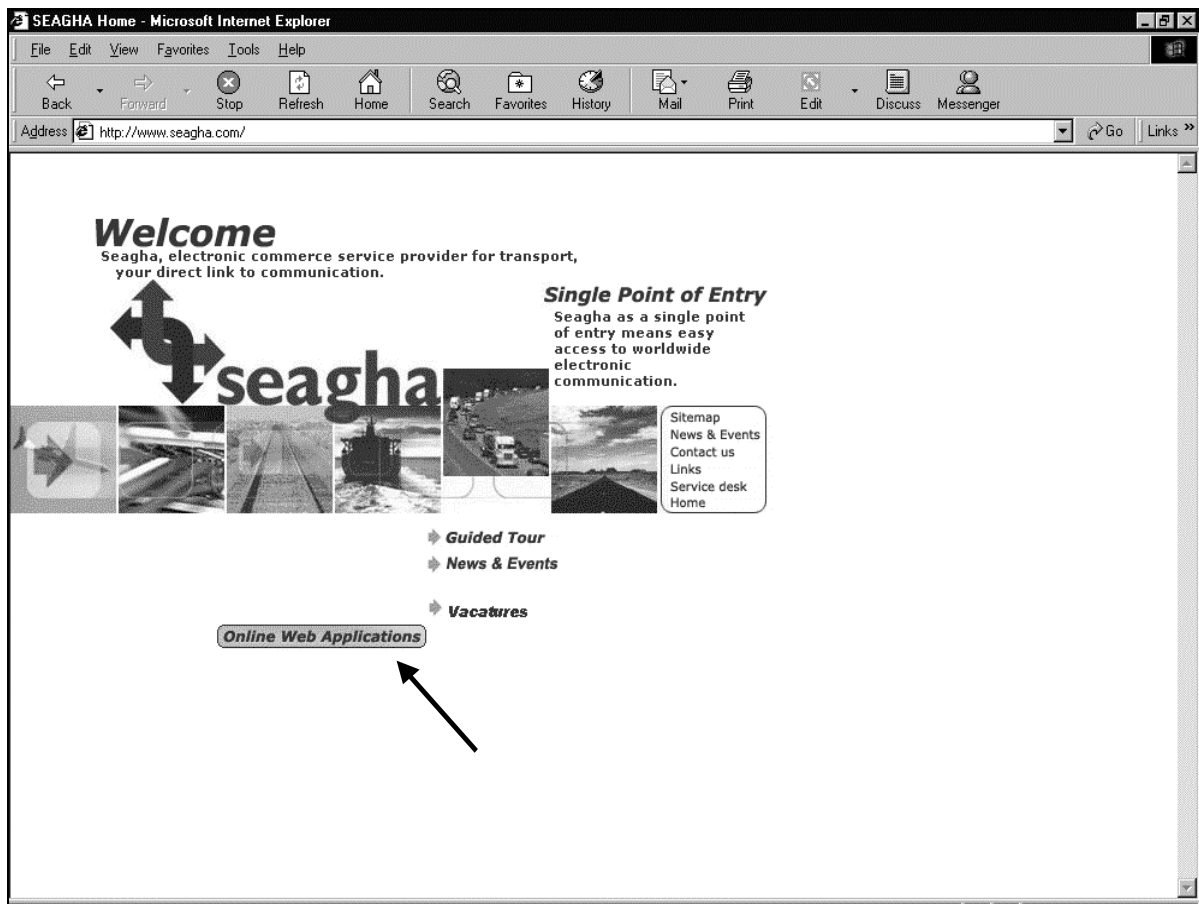
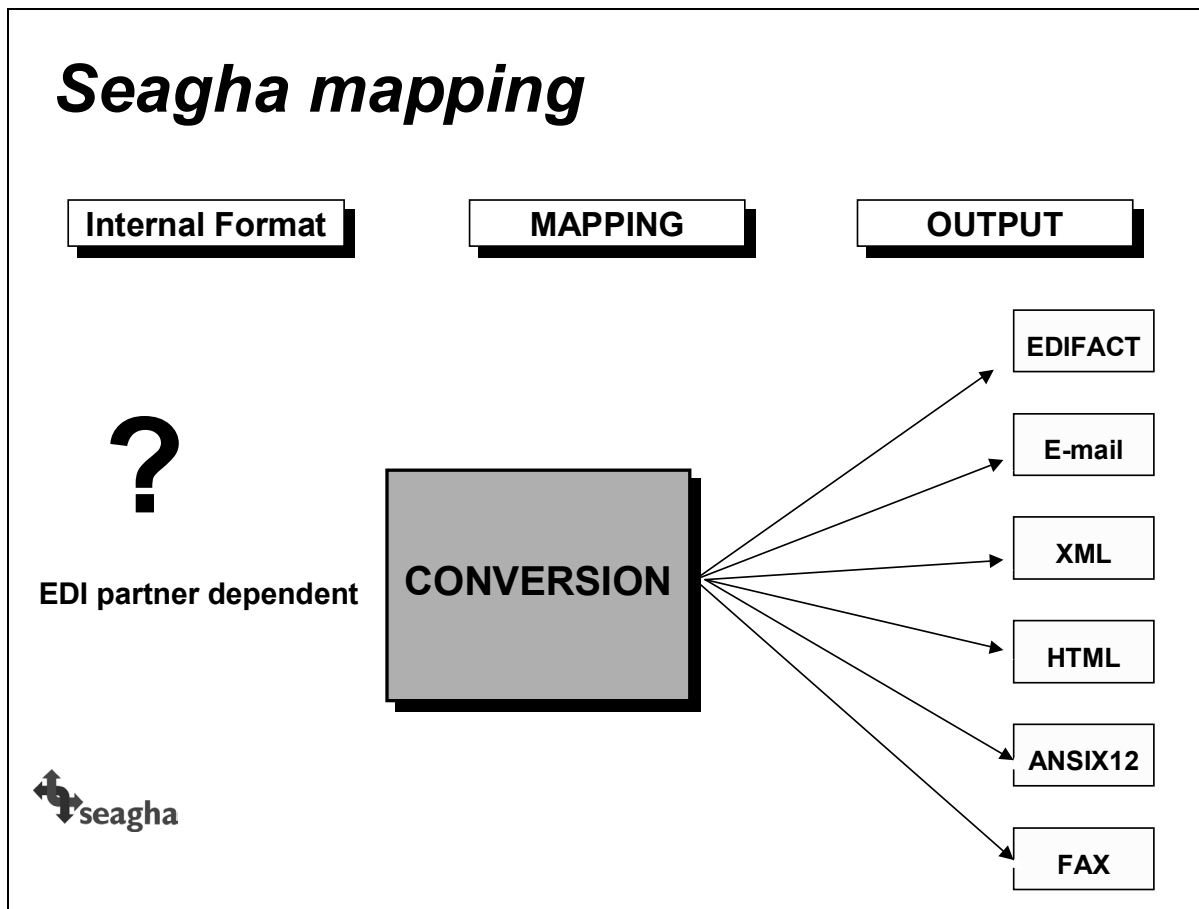
### Types of Data

- Automatically processable "Data" (EDI)
- Hybride "Data" man/machine (WEB-EDI)
- Negotiable and transferable "Documents"
  - Systems based on "trusted third parties" and "keys" and "certificates"



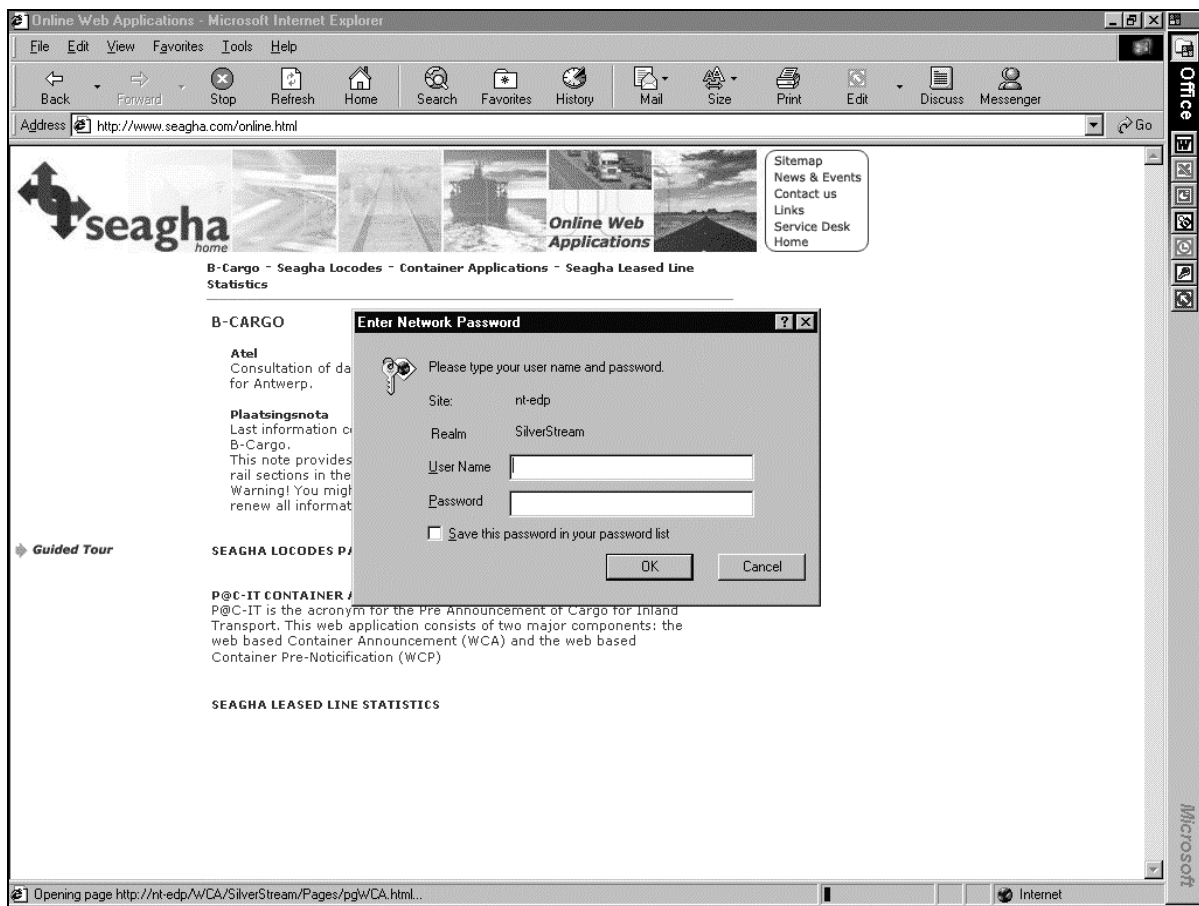
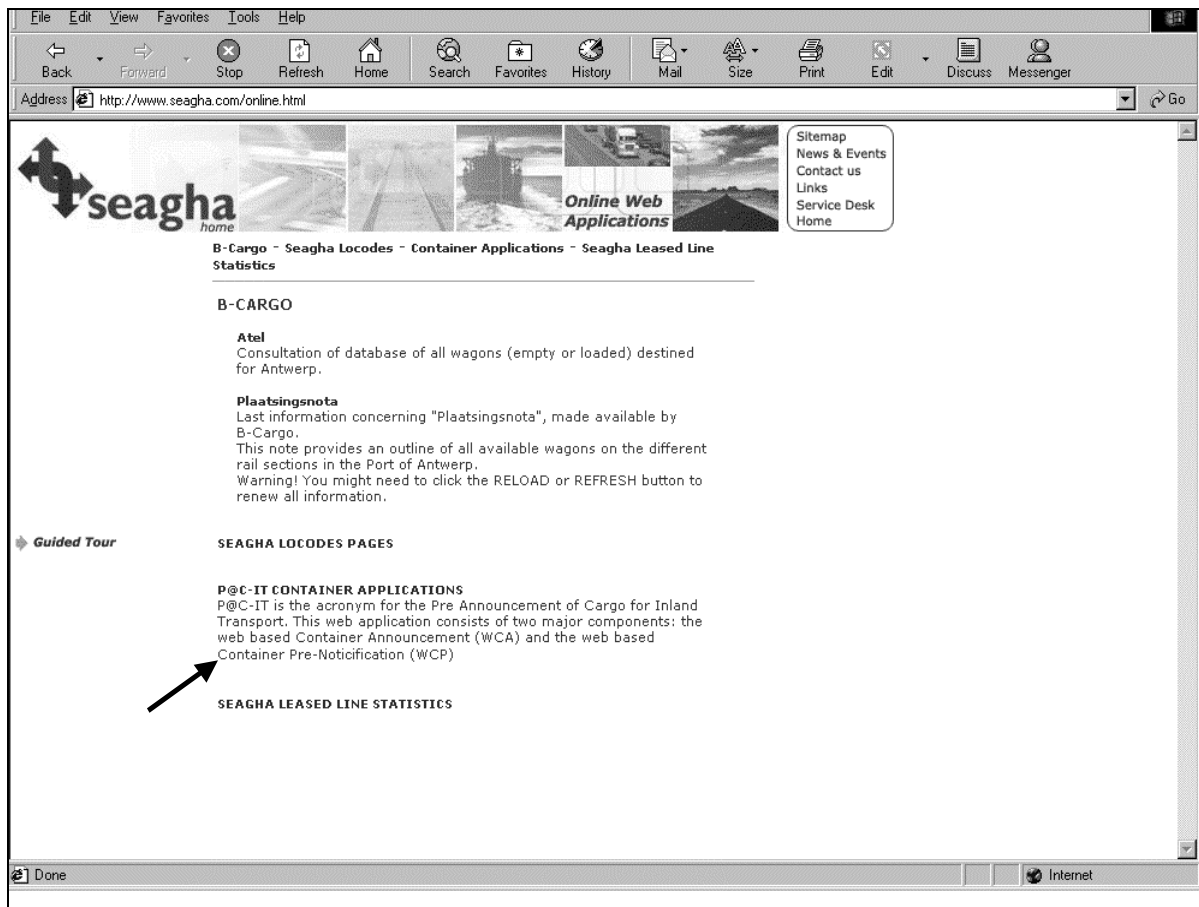
## Virtual Port Community







Teil A: Betrieb und Management von Seehäfen und Binnenhäfen  
**Section A: Operation and Management of Seaports and Inland Terminals**



# P@C-IT

## ■ Pre Announcement of Cargo for Inland Transport

■ Communication link between principal, inland transport and destination.

- EDI integration
  - WEB
- } Or combined

■ Link with mobile communication systems

- WAP-SMS-GPS-PDA

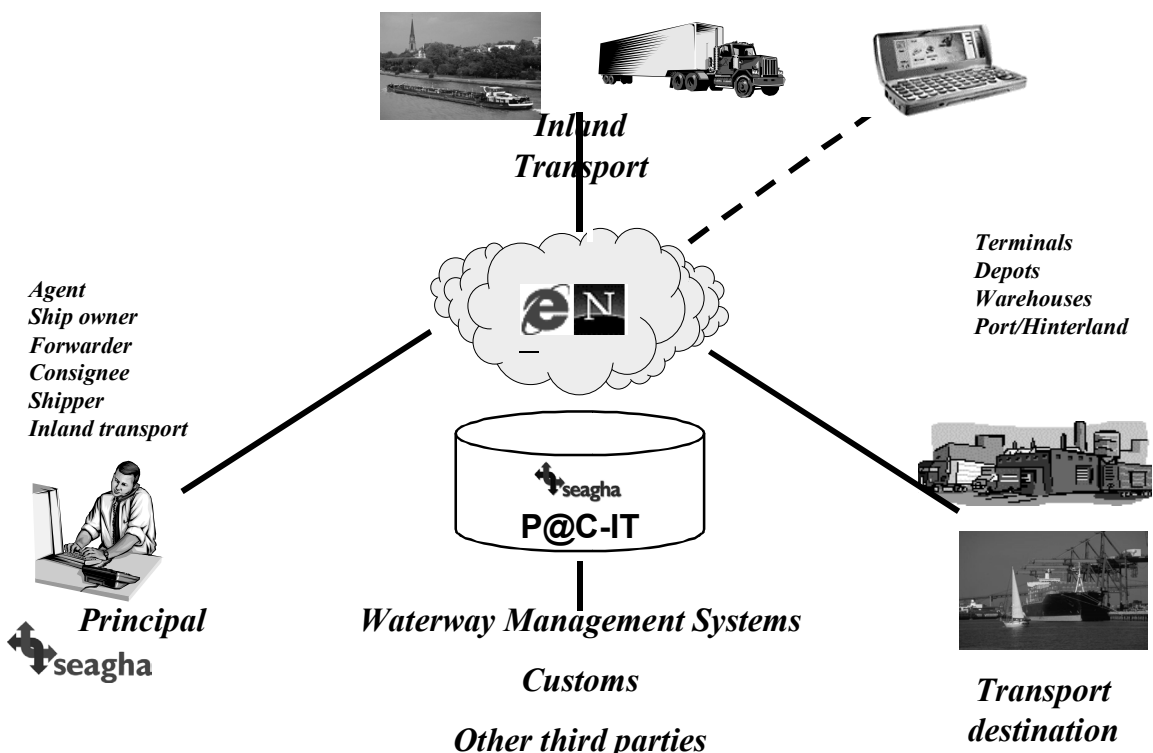
■ Link with invoicing and payment systems

- EDI integration
  - WEB
- } Or combined

■ Link with content of professional organisations



# P@C-IT (The transportportal??)



Teil A: Betrieb und Management von Seehäfen und Binnenhäfen  
**Section A: Operation and Management of Seaports and Inland Terminals**

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Back Forward Stop Refresh Home Search Favorites History Mail Size Print Edit Discuss Messenger

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Centrale Navigatie

Welkom **Instructies** Locaties Parties Gebruiker

\* Om een item in detail te bekijken, klik op zijn Instructie Referentie.  
 \* Bekijk de tabel door gebruik te maken van de scrollbar aan de rechterkant.

Vernieuw Nieuw Afdrukken Toewijzen PARTY3

INSTR. REF.	REDERIJ TRANSPORT.	SCHEEPSNAAM	SCHEEPSLIJN REIS N°	PORT / DISCH.	# CONT.	DATUM CREATIE	STATUS	AANVAARD
▲								
▼								

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Ingave Instructie

Ingave Instructie - Schip

Instructie Referentie :

Schip **Kosten** Container Alg. Info

Scheepsgebonden Informatie

Reis N° :  Call Sign :

Lloyd's N° :  Scheepslijn :

Scheepsnaam :

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Schip **Kosten** Container Alg. Info

**Kostengebonden Informatie**

Afgesproken Kost :

Bijkomende Kosten :

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Done Local intranet Maandag, 14 mei

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Schip Kosten **Container** Alg. Info

[Voeg Container Toe ...](#)

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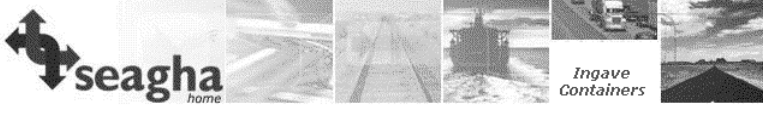
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Ingave Instructie > Toevoegen Container - Container


Container N° :

Container Route Oversized Temperatuur Zegels Goederen

Size/Type :

Vol :  Leeg :

Gewicht :  kg



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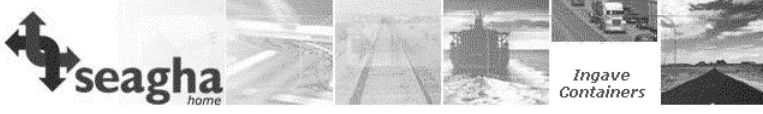
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Ingave Container - Microsoft Internet Explorer

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Ingave Instructie > Toevoegen Container - Route

Container N° :

Container Route Oversized Temperatuur Zegels Goederen


Ophalen : Afzetten : Herleveren :

Locatie :

Referentie :

Datum :  mei   mei   mei

Tijd :



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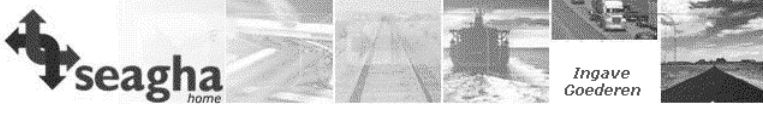
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Back Forward Stop Refresh Home Search Favorites History Mail Size Print Edit Discuss Messenger

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**Ingave Instructie > Toevoegen Container > Toevoegen Goederen**

Technische Naam :

Omschrijving :

ADR Code :  IMDG Code :  UNGD Code :

Flashpoint :   Cel.  Fahr.

Douane Status :  Cleared ?

Benodigde Documenten :

Clearing Place :

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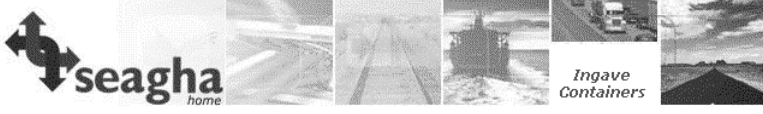
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**Ingave Instructie > Toevoegen Container - Goederen**

Container N° :

Container Route Oversized Temperatuur Zegels Goederen

#	OMSCHREJVING	TECH. NAAM	IMDG	UNDG	FLASHPOINT
1		CHLORODIFLUOROETHANE	2.1	2517	

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**Section A: Operation and Management of Seaports and Inland Terminals**

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**Ingave Instructie - Alg. Info**

Instructie Referentie :

Schip Kosten Container **Alg. Info**

**Algemene Informatie**

VOOR LOSSING MOET EEN HERMETISCHE POMP MEEGEBRACHT WORDEN INKL. EXPLOSIEVRIJE KAST




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**seagha home** *Validatie Instructie*

<< Terug Opslaan Annuleren

<b>Instruction Reference</b>	012 610 035	<b>Creation Date</b>	15/05/2001 08:59	
<b>Shipping Line</b>	Sealand	<b>Vessel Name</b>	MS ALIGATOR PRIDE	
<b>Port of Discharge</b>	????????????	<b>Voyage Number</b>	CL19.12	
<b>Party From</b>	Agent2	<b>Party To</b>	Agent2	
<b>Contact</b>	Agent Two	<b>Contact</b>	Agent Two	
<b>Number of Containers</b>	1			
<b>Pick up</b>		<b>Redelivery</b>		
<b>Location</b>	IFBZ Haven 380 Zomerweg 24 BEL2030Antwerpen	<b>Location</b>	IFBC Cirkeldijk NDLRotterdam	
<b>Date/Time</b>	18/05/2001 08:00	<b>Date/Time</b>	18/05/2001 00:00	
<b>Reference</b>	OREF 012 610 035	<b>Reference</b>	NRIU 1005494	
<b>Number</b>	NRIU 1005494	<b>Size/Type</b>	2077 ()	
<b>Off-Dimensions</b>				
<b>Front / Left / Right / Back / Height (cm)</b>	0 / 0 / 0 / 0 / 0			
<b>Gross Weight</b>	15490 kg			
<b>Cargo Handling Location</b>		<b>Date/Time</b>	<b>Reference</b>	
<b>DG Cargo</b>				
<b>No</b>	<b>Technical Name</b>	<b>UNDG Number</b>	<b>Hazard Class</b>	<b>Flash Point</b>
1	CHLORODIFLUOROETHANE	2517	2.1	5



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Teil A: Betrieb und Management von Seehäfen und Binnenhäfen  
**Section A: Operation and Management of Seaports and Inland Terminals**

http://nt-edp/WCP/Instruction?id=103&type=pdf - Microsoft Internet Explorer

AgentParty2 Agentenstraat 5 Fax: 55.55.555 Contact: Agent Two		<b>TRANSPORT ORDER</b>		
Shipping Line: Sealand (SEA)		Reference: 012 610 035 Date: 15/05/2001 08:59		
Vessel: MS ALIGATOR PRIDE	To: ???	Voyage Number: CL19.12	Call Sign:	Lloyd's Number:
Agreed Costs:		Additional Costs:		
Container #1 / 1		Number: NRIU 1005494		
Size/Type: 2077 - Tank cont. for dangerous gases, pressure 10,5 bar		Status: F		
Pick up at: IFBZ Haven 380  Zomerweg 24 BEL 2030 Antwerpen reference: OREF 012 610 035 date/time: 18/05/2001 08:00		Redelivery at: IFBC Cirkeldijk NDL Rotterdam reference: ANTL29911 date/time: 19/05/2001 00:00		
Off Dimensions	Front: 0 cm	Back: 0 cm	Left: 0 cm	Right: 0 cm
Temperature Setting:	Gross Weight: 15490 kg			
Goods Description	ADR	IMDG	UNDG	Flash Point
	2.2	2.1	2517	5.0 CEL
<b>General Info</b>				
VOOR LOSSING MOET EEN HERMETISCHE POMP MEEGEBRACHT WORDEN INKL. EXPLOSIEVRIJE KAST				


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Welkom **Instructies** Locaties Parties Gebruiker

Vernieuw Bewerken Afdrukken CMR... Aanvaarden Weigeren Doorverwijzen Inland2

	STATUS	INSTRUCTIE REF. AGENT	OPHALEN	AFZETTEN	# CONT.	SCHEEPSNAAM	
<input type="checkbox"/>	C	012 610 035 PARTY5	IFBZ 18/05/2001 8:00	IF&C 19/05/2001 0:00	1	MS ALIGATOR PRIDE	Info
<input type="checkbox"/>	C	abcd12345 Party2	LOC2 10/03/2001 18:30		1	Titanic	Info
<input type="checkbox"/>	C	tr002 Party2			2	boot	Info
<input type="checkbox"/>	C	ins001 PARTY1			1		Info
<input type="checkbox"/>	C	tr003 Party2			2	boot	Info

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## ***The extended enterprise???***

- **Bring together partners with a specific competence to deliver bundled solutions to the customers**

- **Wireless Single point of Entry**
- **ASP solution for SME offering order entry, invoicing and accounting.**

- **Interface with other third parties**
  - **Waterway management systems**
  - **E-Market systems**



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- **Content**

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**Any questions?**

