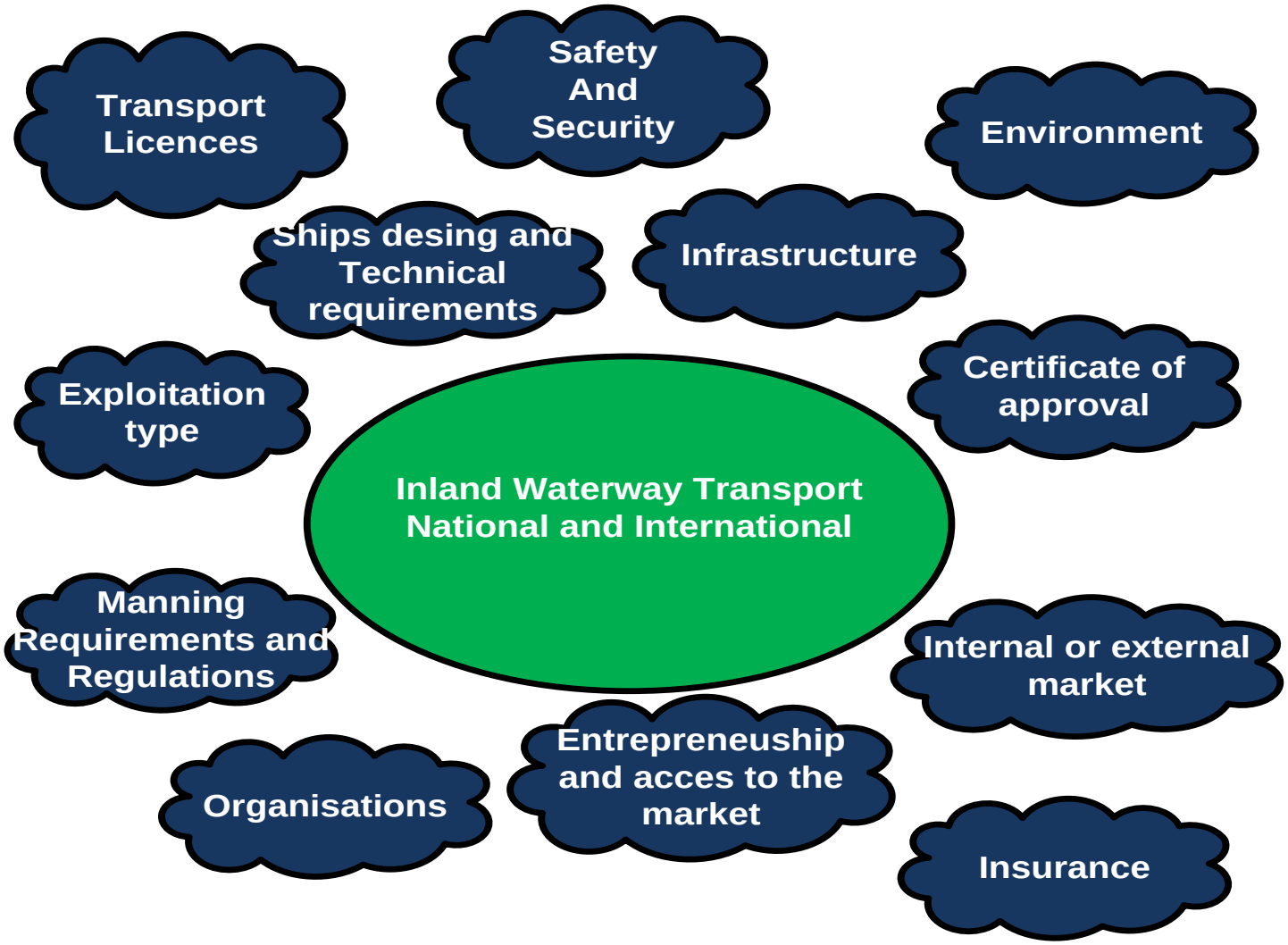
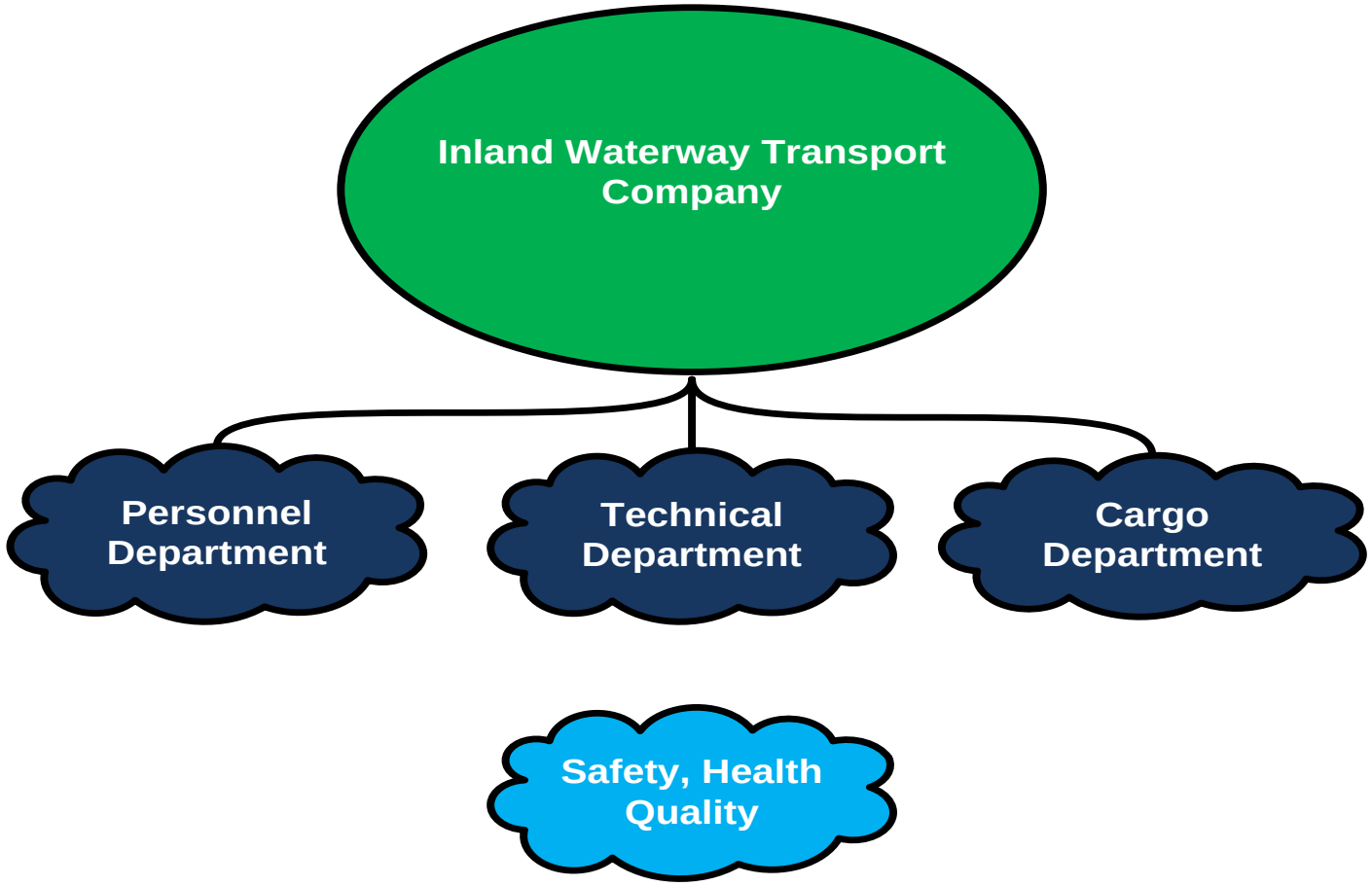
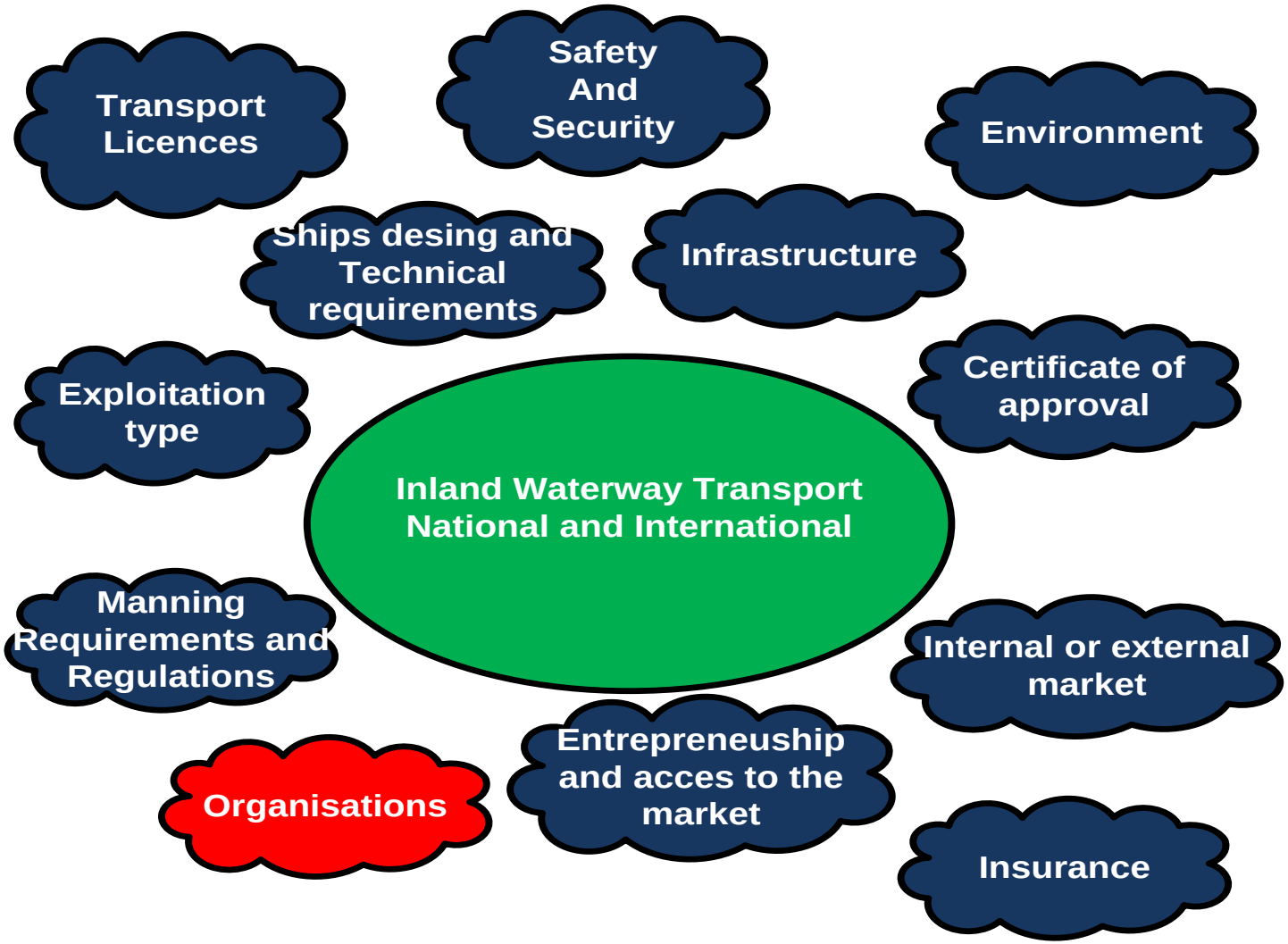
Internationaal beleid en wetgeving



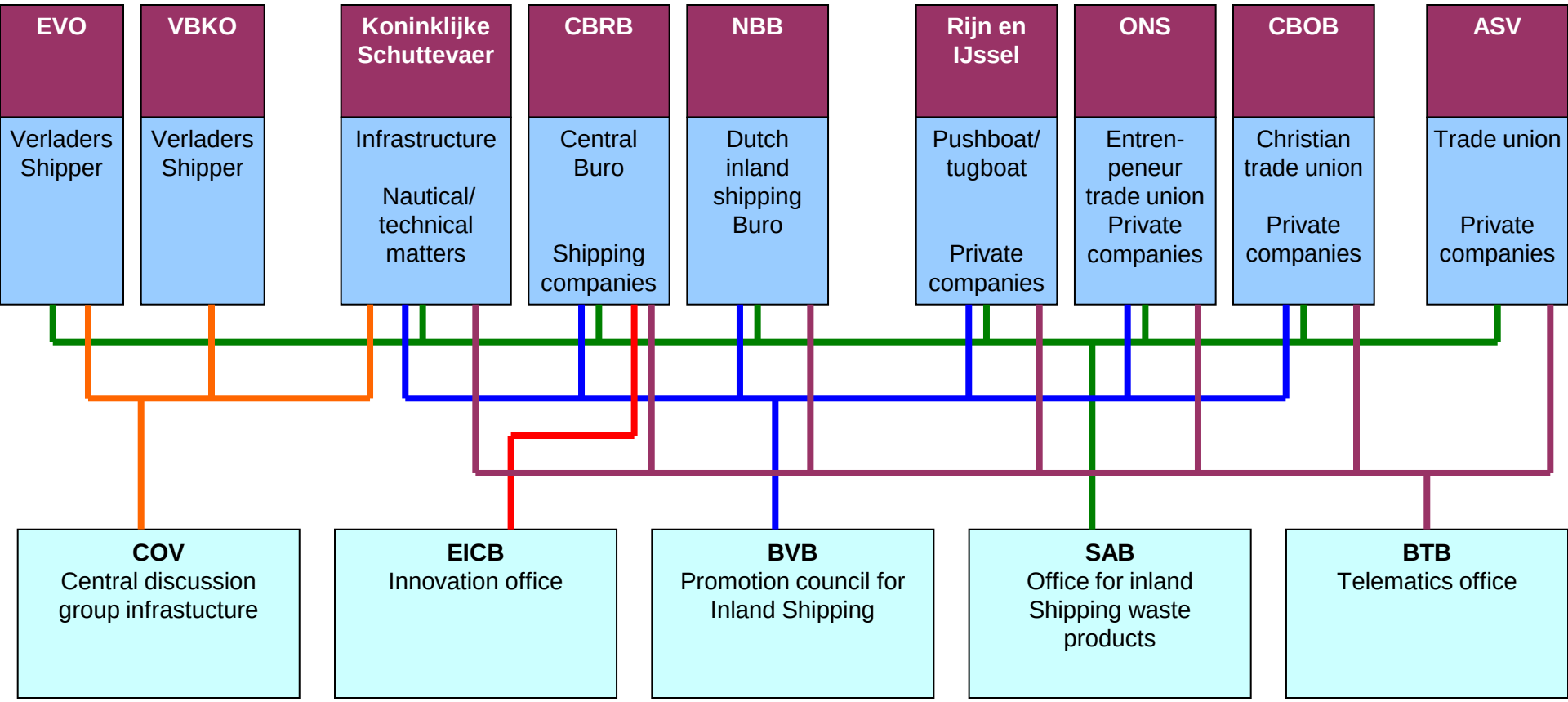
Management of a IWT company



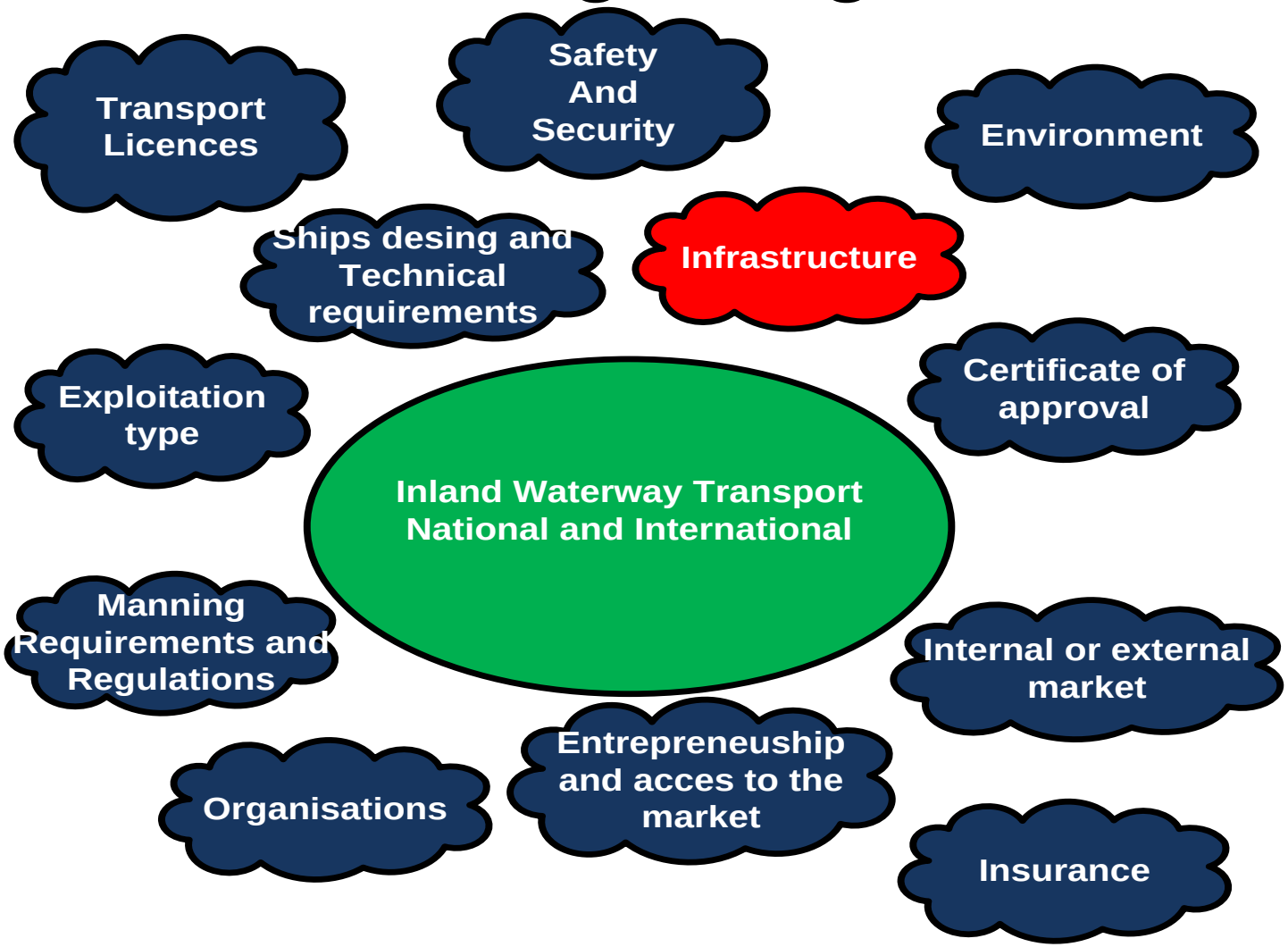
Internationaal beleid en wetgeving



Supporting Organisations National and International



Internationaal beleid en wetgeving



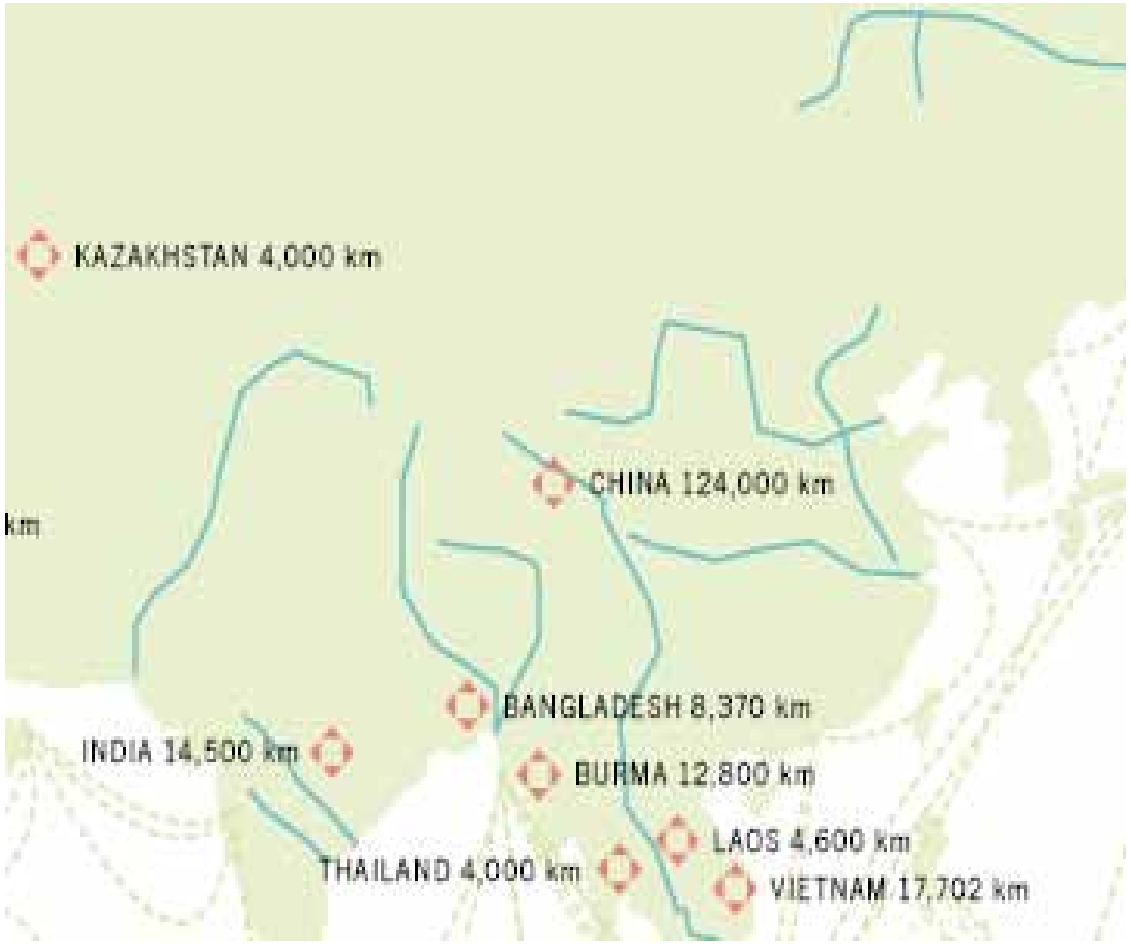
Total length of navigable waterways per country

Waterways

Top 5 longest waterways

China	124,000 km
Rusland	102,000 km
Europa	51,668 km
Brazilië	50,000 km
Verenigde staten	41,009 km

Source: Nation Master 2008




LATVIA
LITHUANIA
RUSSIA
BELARUSSIA
BRITAIN
GERMANY
POLAND
2.000 km
UKRAINE
CZECH
SLOVAKIA
MOLDOVA
HUNGARY
FRANCE
AUSTRIA
ROMANIA
BALKAN
ITALY
BULGARIA
SPAIN
TURKEY
GREECE


Tianjin
Dalian
2.000 km
Yellow River
Qingdao
Shanghai
Yangtze River
Ningbo
Xiamen
Guangzhou
Shenzhen
Hong Kong


Yichang
宜昌
Wuhan
武汉
Nanjing
Shanghai
Chongqing
宜宾
钢陵
湖口
城陵矶


Yichang
宜昌
Wuhan
武汉
Nanjing
Shanghai
Chongqing
重庆
宜宾
钢陵
湖口
城陵矶

二、国际内河航运信息化相关发展

ü 欧洲**RIS**系统

20世纪末期，欧洲各国开发了本国的内河信息系统

- 荷兰的**IVS90** 系统
- 比利时的**IBIS/GINA** 系统
- 德国的**ELWIS** 系统
- 法国的**VNF2000** 系统
- **匈牙利的DISR** 系统
- 奥地利的**DoRIS** 系统

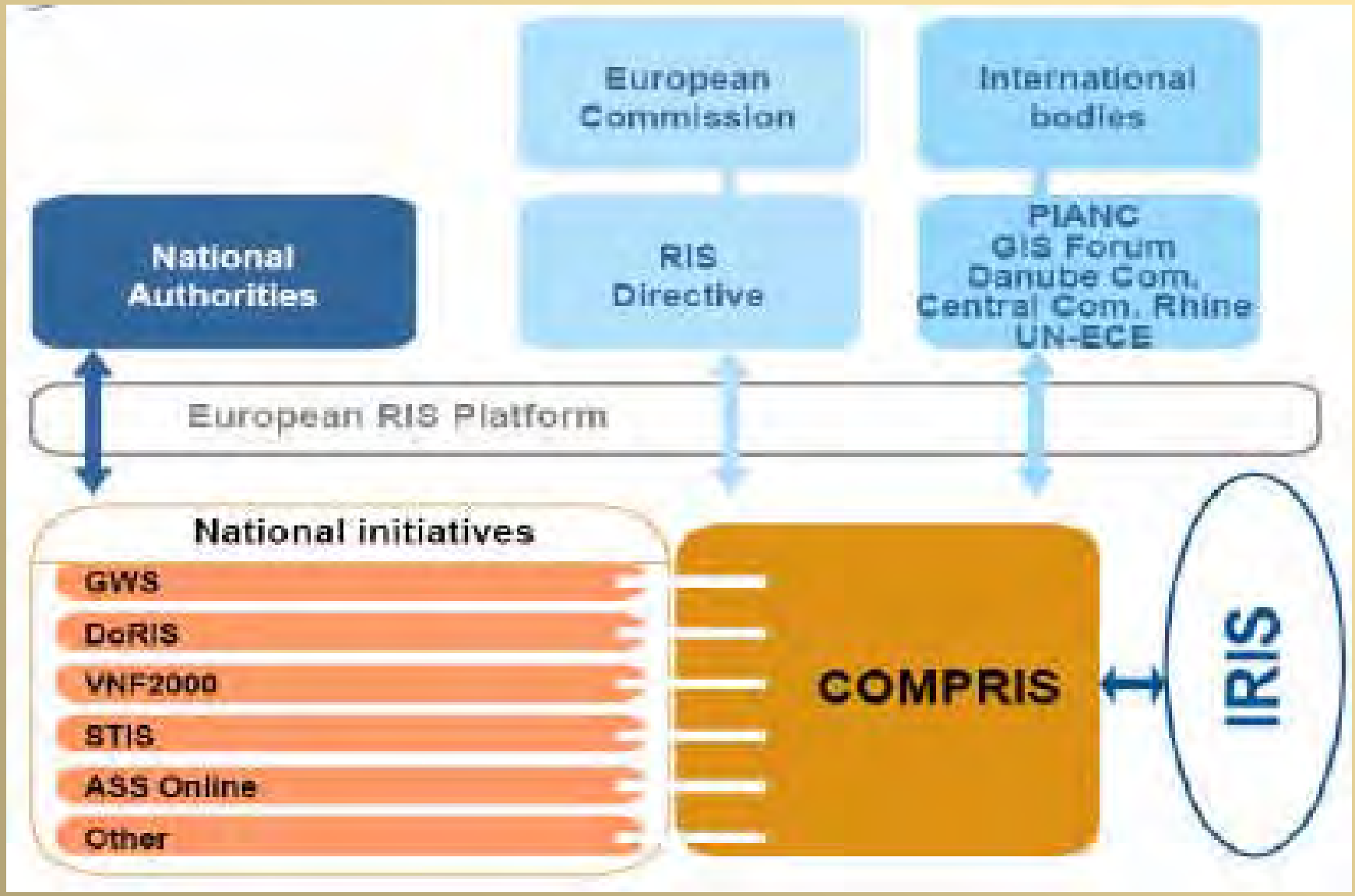
Ø **相对独立、资源整合难、信息共享程度不高、系统兼容性差**

二、国际内河航运信息化相关发展

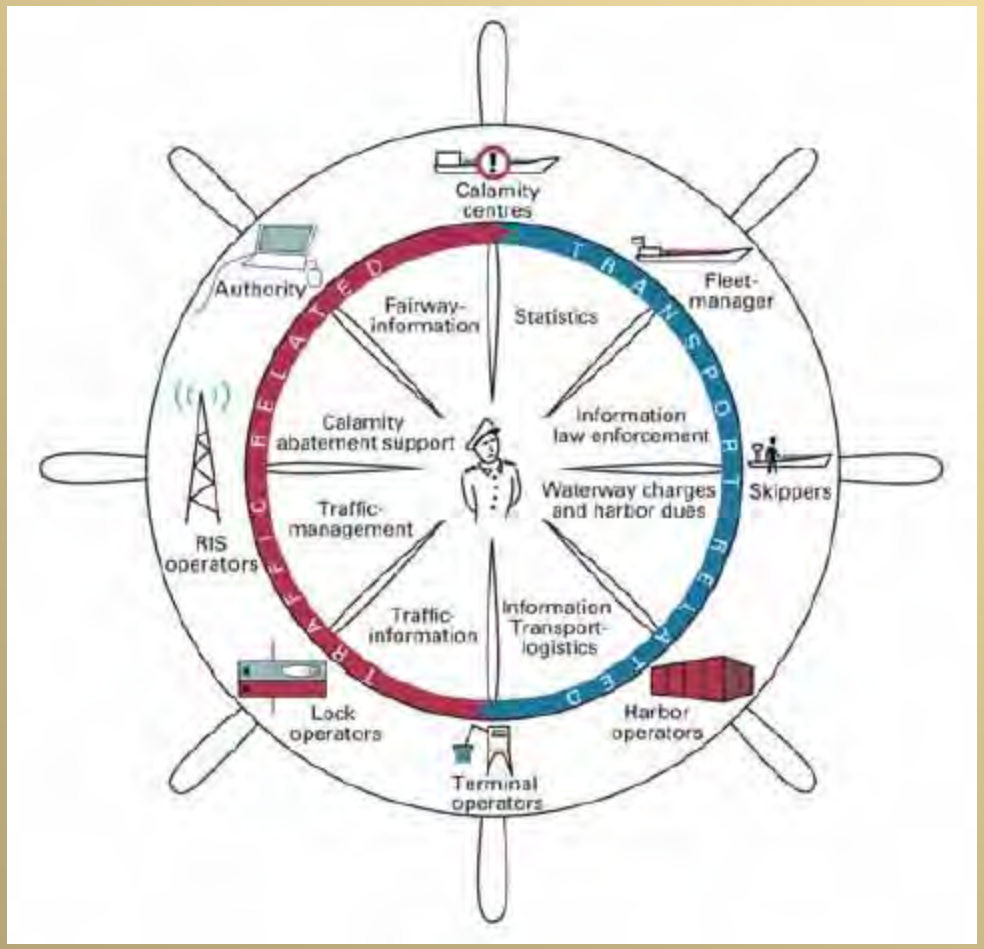
ü 欧洲RIS系统

- 为此，欧盟提出了发展内河航运综合信息服务（River Information Service，RIS），即通过构建统一的RIS 系统，促进欧洲内河航运信息系统的协同化与规范化，消除各国制度、法规不一致所带来的障碍，以保障内河跨国、跨区域航运的高效、经济与安全性，进而推动欧洲内河航运业整体发展。

二、国际内河航运信息化相关发展



三、欧洲RIS的功能和优点



信息和通信技术创新

» 航道信息服务
(动态，静态)

» 交通信息服务

» 交通管理

» 运输和物流信息

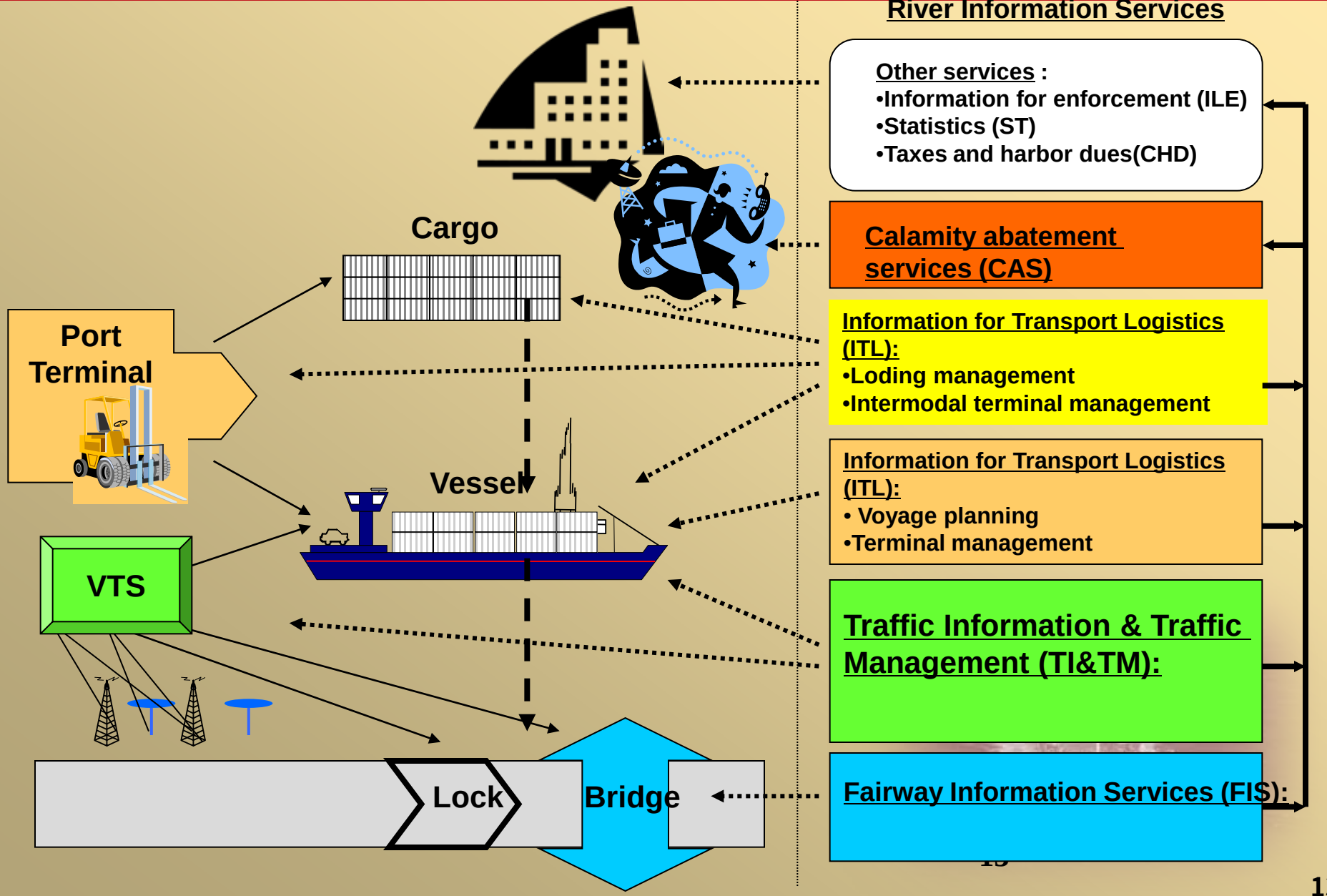
» 执法信息

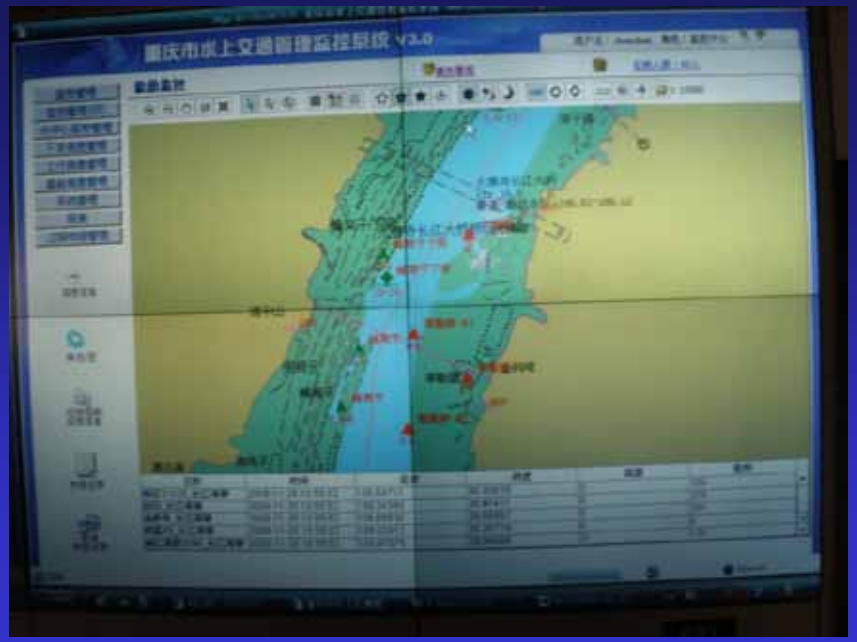
» 消除隐患

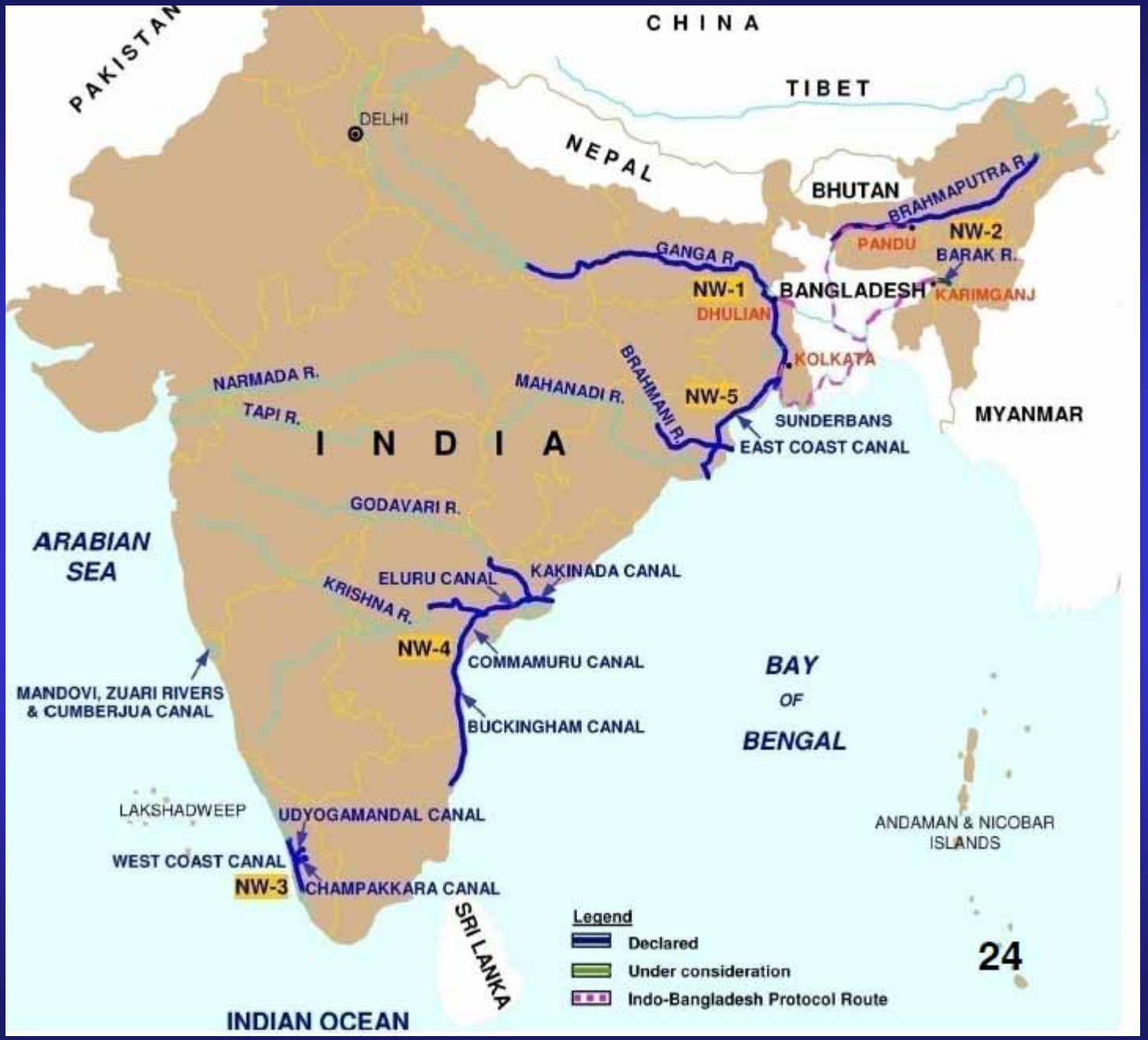
» 航道和港口收费

» 统计

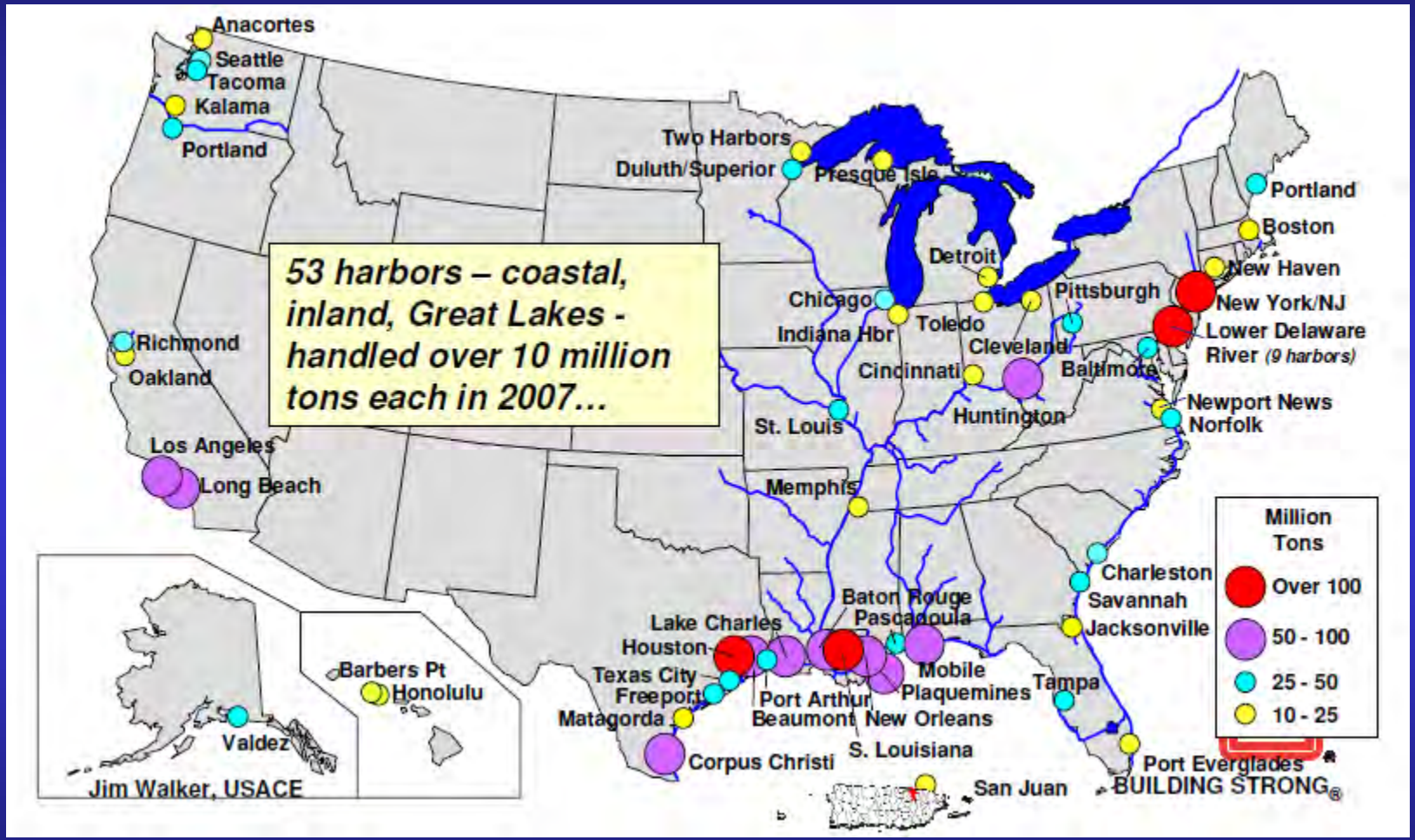
三、欧洲RIS的功能和优点

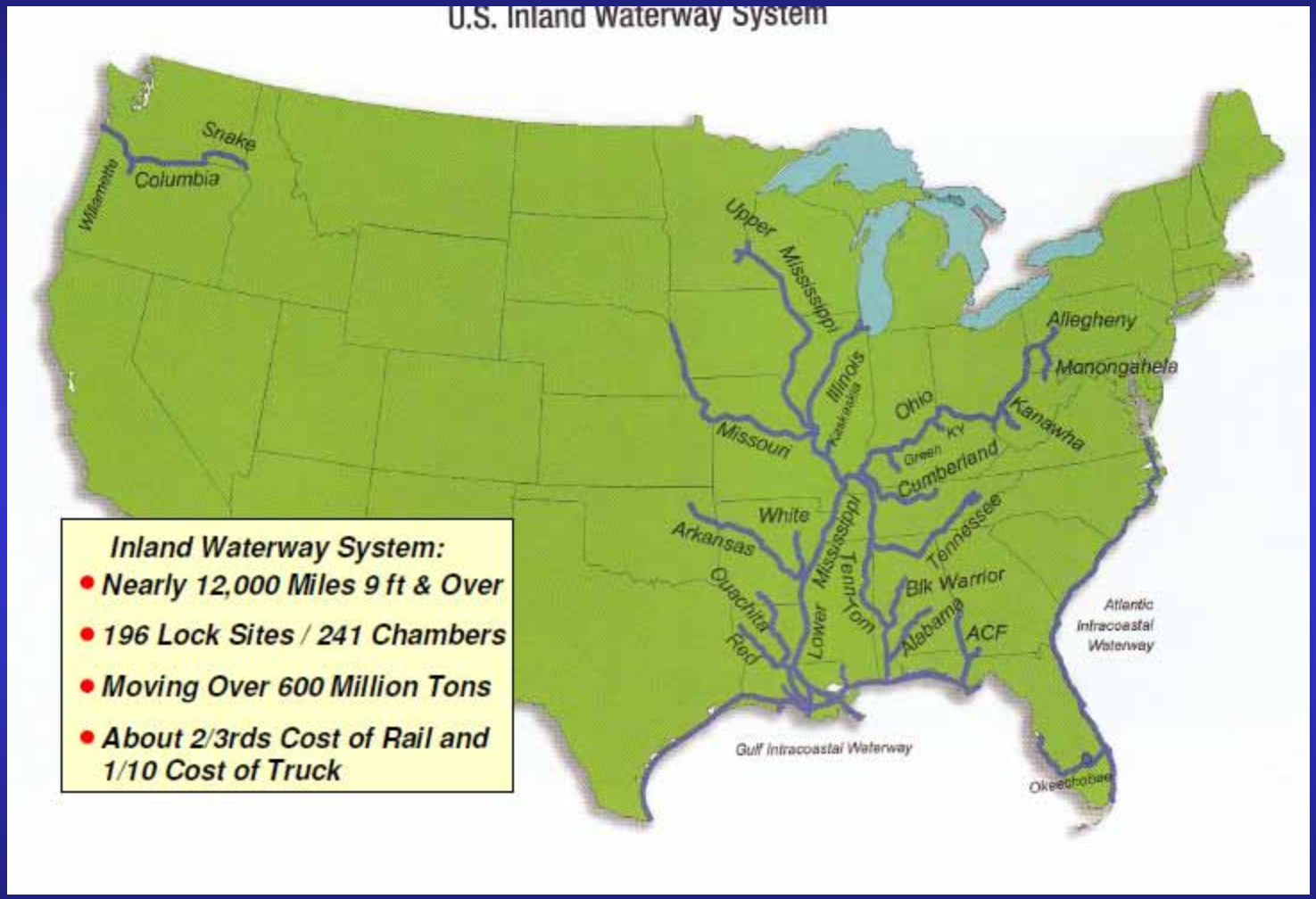



重庆市水上交通管理监控系统 V3.0


PAKISTAN
CHINA
TIBET
DELHI
NEPAL
BHUTAN
BRAHMAPUTRA R.
NW-2
PANDU
BARAK R.
GANGA R.
NW-1
BANGLADESH
KARIMGANJ
DHULIAN
KOLKATA
NARMADA R.
MAHANADI R.
BRAHMANI R.
NW-5
TAPI R.
SUNDERBANS
EAST COAST CANAL
MYANMAR
I N D I A
GODAVARI R.
ARABIAN SEA
ELURU CANAL
KAKINADA CANAL
KRISHNA R.
NW-4
COMMAMURU CANAL
MANDOVI, ZUARI RIVERS & CUMBERJUA CANAL
BUCKINGHAM CANAL
BAY OF BENGAL
LAKSHADWEEP
UDYOGAMANDAL CANAL
ANDAMAN & NICOBAR ISLANDS
WEST COAST CANAL
NW-3
CHAMPAKKARA CANAL
SRI LANKA
Legend
Declared
Under consideration
Indo-Bangladesh Protocol Route
INDIAN OCEAN
24


National Waterway-1
Ganga – Bhagirathi – Hooghly river system
Haldia(Sagar island) – Allahabad –1620 km
N
SIKKIM
LUCKNOW
FAIZABAD
KANPUR
GANGA
UTTAR PRADESH
YAMUNA
GHAGHARA
GANDAK
BALLIA
CHHAPRA
MUZZAFARPUR
BIHAR
DALKOLE
PURNIA
KARAGOLA
NW-1
ALLAHABAD
VARANASI
BUXAR
SON
PATNA
Barh
Kahalgaon
BHAGALPUR
CHUNAR
SASARAM
GAYA
FARAKKA
Farakka
BANGLADESH
REWA
INDIA
PADMA
BHAGIRATHI
MADHYA PRADESH
HAZARIBAG
DHANBAD
ASANSOL
JHARKHAND
BARDHAMAN
RANCHI
WEST BENGAL
HOOGHLY
JAMSHEDPUR
CHHATTISGARH
KOLKATA
KHARGPUR
HALDIA
NW-5
Legend
Declared waterway
Road
Rail
Important places
ORISSA
Bay of Bengal
-Population of UP, Bihar, Jharkhand & WB - 380 million


Anacortes
Seattle
Tacoma
Kalama
Portland
Two Harbors
Duluth/Superior
Presque Isle
Portland
Boston
New Haven
Detroit
Chicago
Pittsburgh
New York/NJ
Indiana Hbr
Toledo
Lower Delaware River (9 harbors)
Cleveland
Cincinnati
Baltimore
Richmond
Oakland
Huntington
Newport News
Norfolk
St. Louis
Los Angeles
Long Beach
Memphis
Million Tons
Over 100
50 - 100
25 - 50
10 - 25
Charleston
Savannah
Jacksonville
Baton Rouge
Pascagoula
Lake Charles
Houston
Mobile
Plaquemines
Texas City
Freeport
Port Arthur
Beaumont
New Orleans
Tampa
Matagorda
S. Louisiana
Corpus Christi
Port Everglades
San Juan
Barbers Pt
Honolulu
Valdez
Jim Walker, USACE
53 harbors – coastal, inland, Great Lakes - handled over 10 million tons each in 2007…
BUILDING STRONG®


U.S. Inland Waterway System
Snake
Columbia
Willamette
Upper Mississippi
Illinois
Missouri
Ohio
KY
Green
Cumberland
Kanawha
Allegheny
Monongahela
White
Arkansas
Ouachita
Red
Lower Mississippi
Tenn-Tom
Tennessee
Blk Warrior
Alabama
ACF
Atlantic Intracoastal Waterway
Gulf Intracoastal Waterway
Okeechobee
Inland Waterway System:
• Nearly 12,000 Miles 9 ft & Over
• 196 Lock Sites / 241 Chambers
• Moving Over 600 Million Tons
• About 2/3rds Cost of Rail and 1/10 Cost of Truck

Total length of navigable waterways per country

Waterways

Top 5 longest waterways

China	124,000 km
Rusland	102,000 km
Europa	51,668 km
Brazilië	50,000 km
Verenigde staten	41,009 km

Source: Nation Master 2008

Inland Waterway Transport in Brazil

1. Background
a) Main Inland Waterways
b) Brazilian Most Important Locks
c) Inland Waterway Transport Characteristic
d) Inland Waterway Transport Main Problems

2. Present and Future Measures
a) National Plan of Logistics and Transport
b) Guidelines for a National Policy on Inland Waterway Transport
c) Strategic Inland Waterway Plan

11 Main Inland Waterways
Total Lenght: 63.000 km but only 13.000km are used.

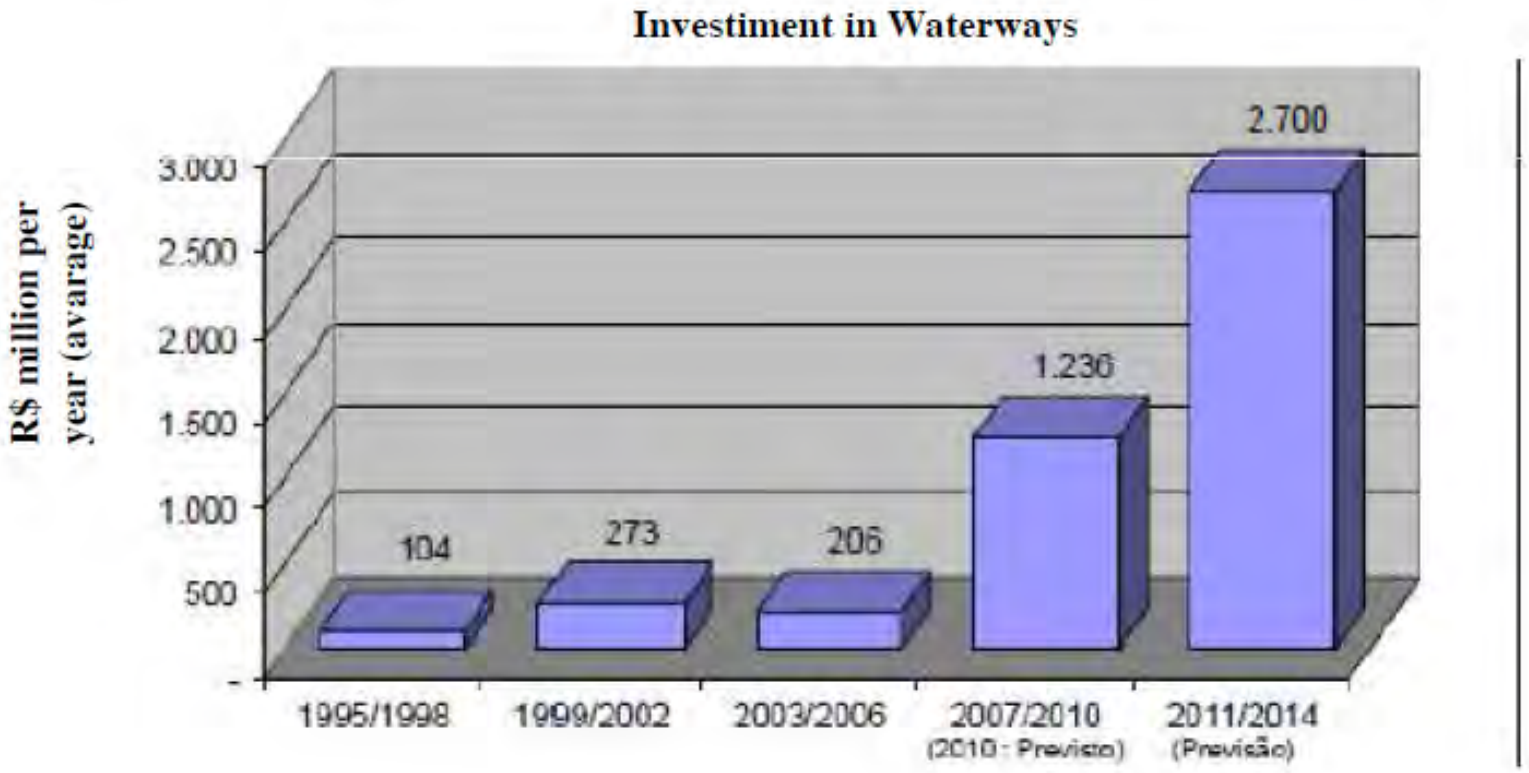
- Amazon Basin
- North-eastern Basin
- São Francisco Basin
- Tocantins Araguaia Basin
- Paraguay Basin
- Tietê-Paraná Basin
- Southeast Basin
- South Basin

Brazil IWT : Main problems

- Insufficient regulatory framework
- Lack of integration with other transport modes
- Connection with sea ports
- Maintenance dredging required
- Long procedures to get environmental licenses
- Construction of hydroelectric plants without locks

National Plan of Logistics and Transport

The Federal Government established a broad long term strategy of investments in the waterway transport sector



Guidelines for a National Policy on Inland Waterway Transport

1.Strengthen public management in the waterway sector:

- Qualified technical staff
- Resources for studies, design and construction
- Appropriate organizational structure

2. Improve the service level of passenger transportation;

- Modernization of port infrastructure
- More rigorous monitoring and greater effectiveness in regulating
- Modernization of vessels and financial system for shipbuilding stimulation

3. Implement the priority locks(62 locks until 2026): 12,7 bilions of euros

Guidelines for a National Policy on Inland Waterway Transport

4. Regulate the environmental licensing of interventions in waterways;

- Object to be licensed
- Common understanding of technical concepts

5. Develop national program of waterway maintenance;

6. Expand the knowledge on navigability conditions;

7. Priority to specific links: high fesibility and assure acess to important sea ports;

8. Give support to the brazilian Navy program to train human resources for inland waterway transport

Guidelines for a National Policy on Inland Waterway Transport

9.Develop intermodal terminals and rail and highway access in the waterways;

10.Assure inaland waterway access to northern ports;

11.Propose institutional measures to promote inland waterway transport

- Exemptions for fuels and lubricants
- Multimodal Operator: law improvement
- Policy to promote the renewal of the brazilian shipbuilding industry
- Permit the vessels importation

Guidelines for a National Policy on Inland Waterway Transport

12.Create a board of users of inland waterway transport in the watersheds

13.Expand the relationship with the control institutions

14. Promote the inland navigation: Public and private organizations

- Industrial, agricultural, comercial and tourism sectors
- Universities, schools and research centers
- Financing institutions

Conclusion

- An increase in the role of inland waterway transport should be considered a national priority in the context of the national transport policy.

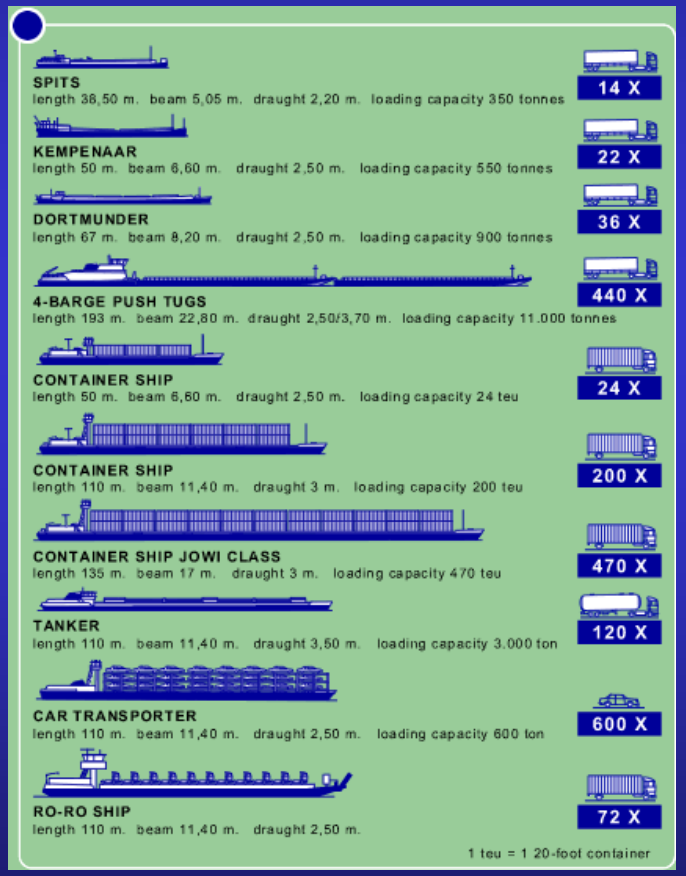
- We would like:
  - Partnerships
  - Convince brazilian people about IWT benefits
  - Learn the best practices
  - Technical support

- We offer:
  - Favorable climate for good business
  - Possibility to contribute for Global Sustainable Development
  - Increasing levels of investiments in IWT infraestructure
  - Stable and strong economy

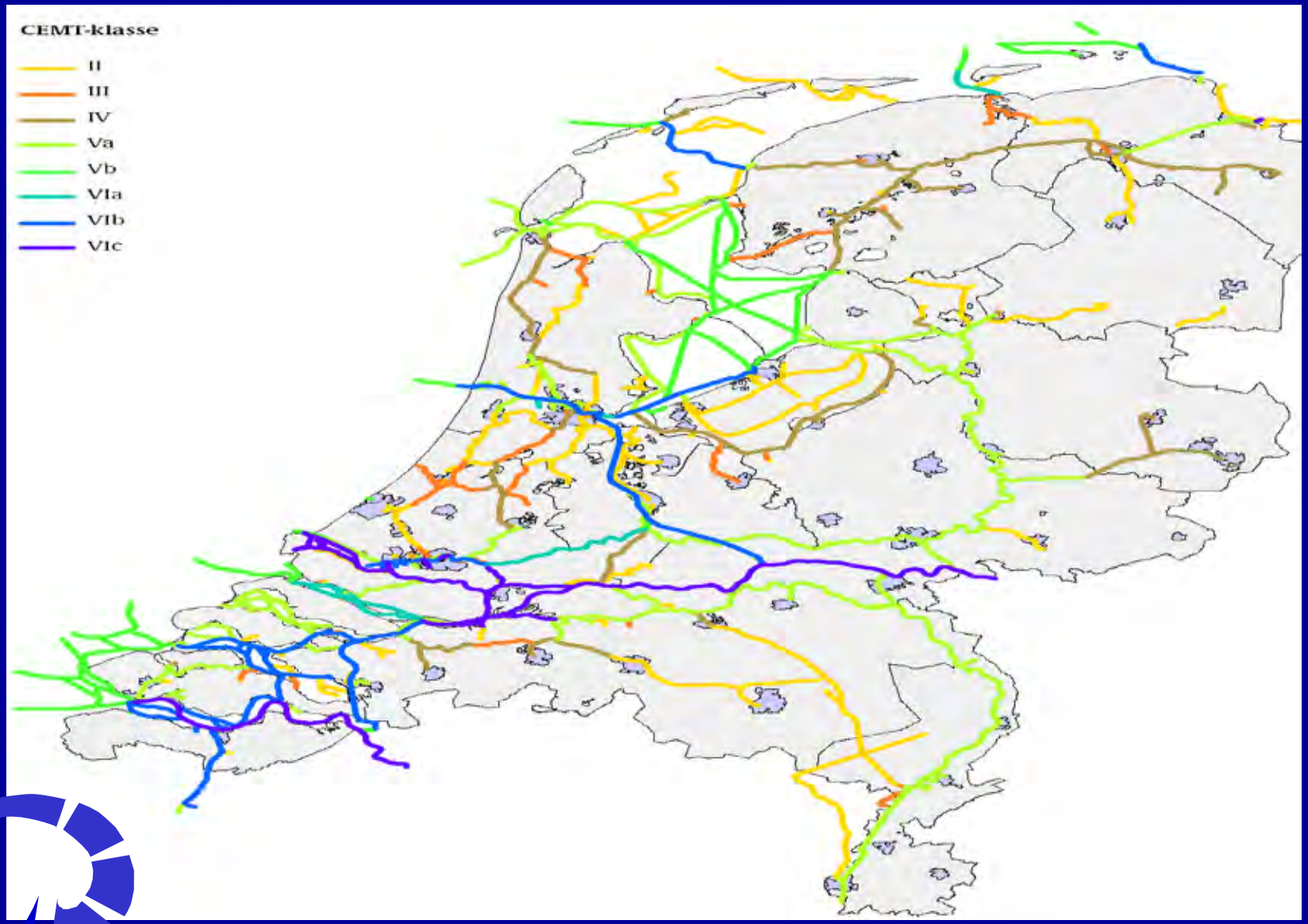
Dimensions of waterways

Classification of waterways and barges

waterways are divided in different classes, depending on the measurements of the structural works



Maximum vessel dimensions according to CEMT (1992)						
Motor vessels						
Class	Tonnage	Length	Width	Draught		
		m.	m.	m.		
I	300	38,50	5,05	2,20		
II	650	55,00	6,60	2,50		
III	1.000	80,00	8,20	2,50		
IV	1.500	85,00	9,50	2,50		
V a	2.500	110,00	11,40	2,80		
VI b	6.000	140,00	15,00	3,90		
Push convoys					**Barges**	
IV	1.500	85,00	9,50	2,80	1	
V a	3.000	110,00	11,40	4,50	1	
V b	6.000	185,00	11,40	4,50	2	
VI a	6.000	110,00	22,80	4,50	2	
VI b	12.000	195,00	22,80	4,50	4	
VI c	18.000	270,00	22,80	4,50	6	
VI c	18.000	195,00	34,20	4,50	6	


CEMT-klasse
II
III
IV
Va
Vb
VIa
VIb
VIc

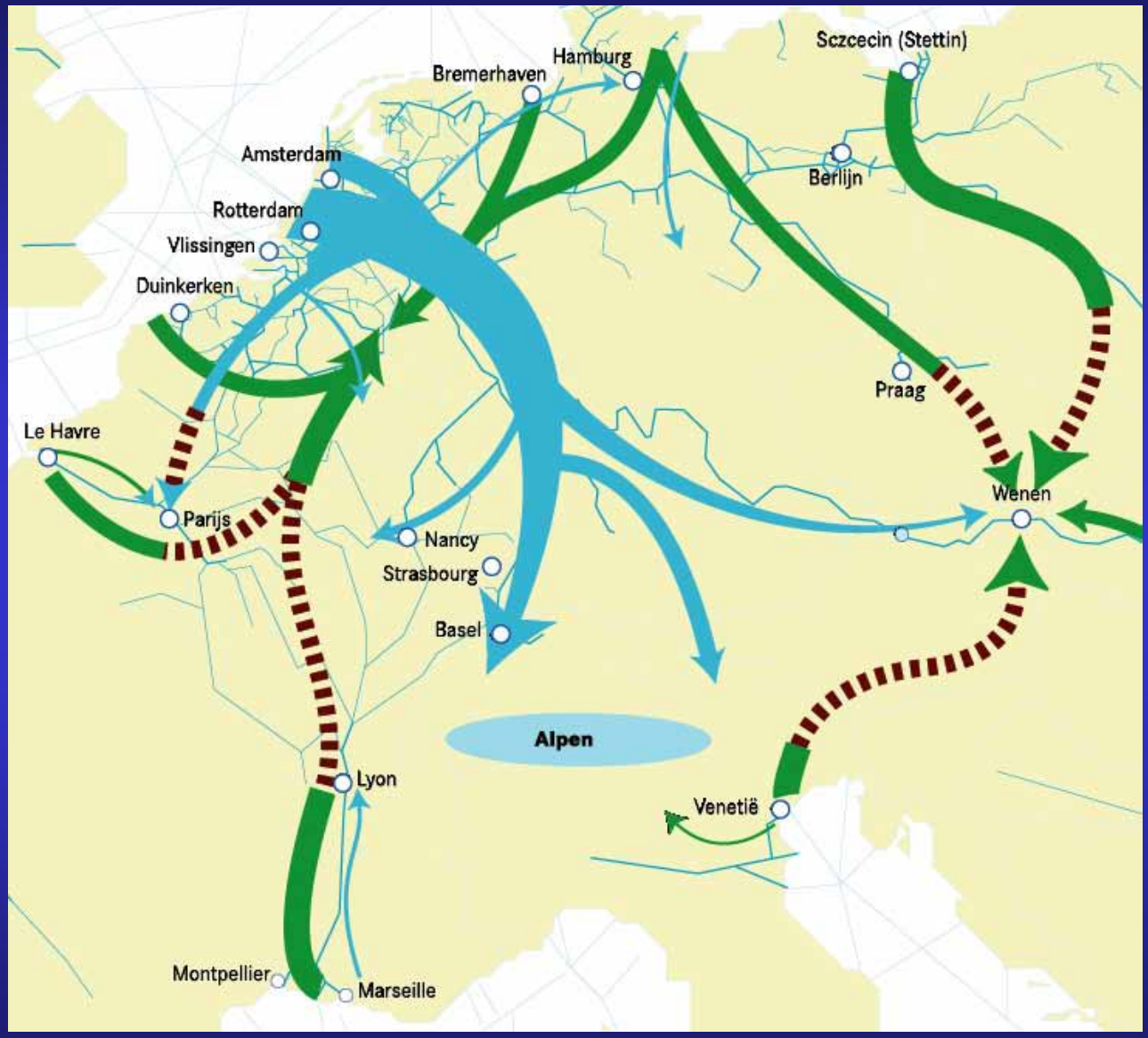

PROJECT N° 18
DG TREN
Trans-European Transport Network
Priority Projects
WATERWAY AXIS
RHINE/MEUSE-MAIN-DANUBE
Existing inland waterway
Planned inland waterway
Priority axis n° 18
Priority sections
Other priority axes
Hamburg
Bremen
Amsterdam
Berlin
Hannover
Warszawa
Kyjiv
London
Rotterdam
Antwerpen
Duisburg
Leipzig
Dresden
Bruxelles
Köln
Praha
Frankfurt am Main
Luxembourg
Nürnberg
Paris
Saarbrücken
Stuttgart
Strasbourg
Linz
Wien
Bratislava
Chisinau
München
Budapest
Salzburg
Basel
Innsbruck
Bern
Ljubljana
Zagreb
Lyon
Trieste
Milano
Venezia
Beograd
Bucuresti
Constanta
Torino
Varna
Genova
Sarajevo
Bourgas
Sofia
Marseille
Istanbul
Skopje

PROJECT N° 30

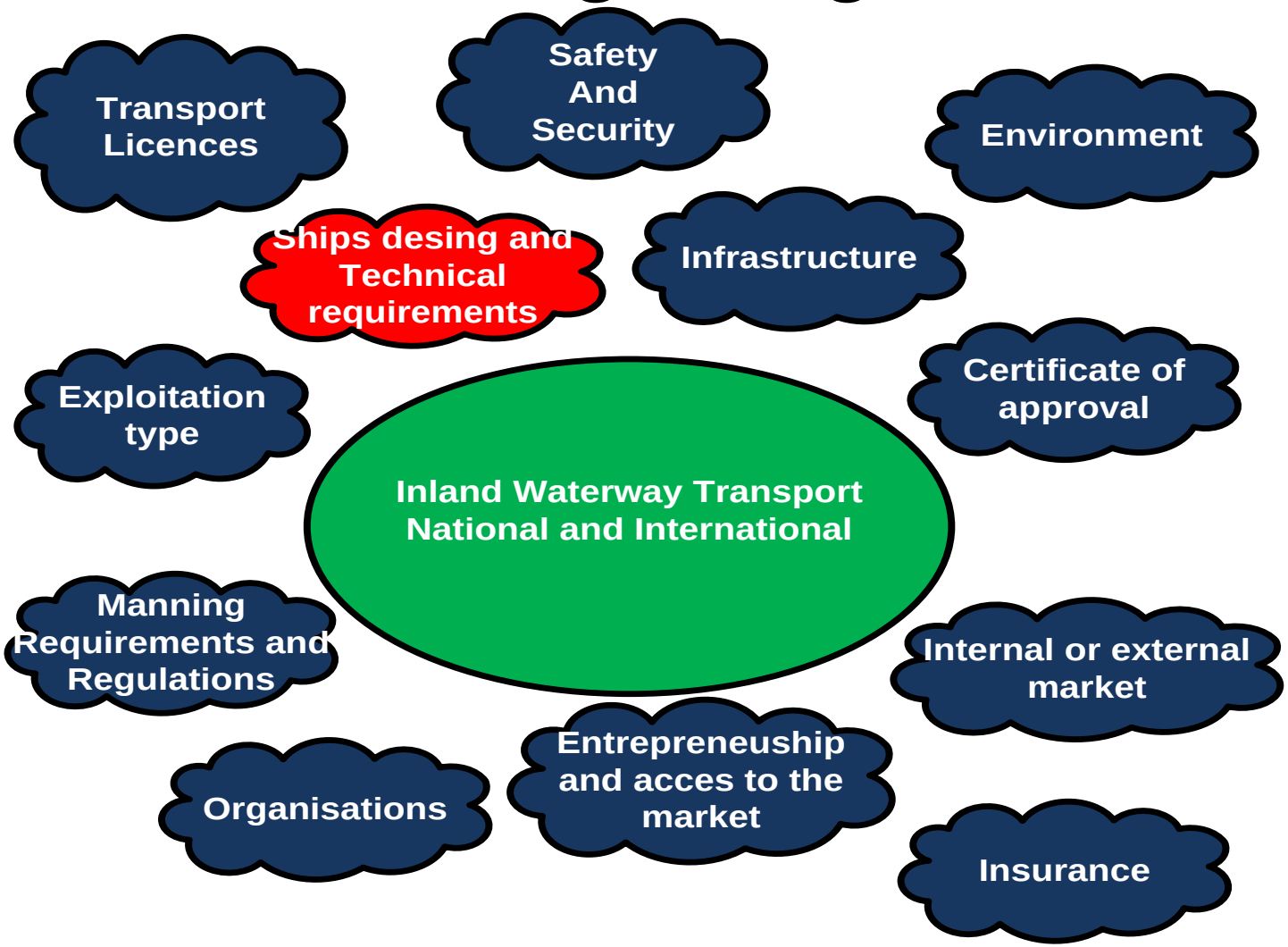
Trans-European transport network
Priority projects

INLAND WATERWAY

SEINE-SCHELDT


Sczcecin (Stettin)
Hamburg
Bremerhaven
Amsterdam
Berlijn
Rotterdam
Vlissingen
Duinkerken
Praag
Le Havre
Wenen
Parijs
Nancy
Strasbourg
Basel
Alpen
Lyon
Venetië
Montpellier
Marseille

Internationaal beleid en wetgeving




TURQUOISE
SABLE CAPE

Building and requirement demands for an inland ship

- Technical condition:
- Certificate of investigation provided by the Shipping Inspectorate (EC 2006/87)

- Technical conditions for ships which are used for transport of dangerous goods:
- Certificate of approval type N, C or G.


38
36
32
3M
28

Lengte:	110.00 m.
Breedte:	11.45 m.
Diepgang:	3.44 m.
Holte:	3.65 m.
Tonnage:	3006 ton
Max. teu's:	208
Motor:	Mitsubishi S 16 R-MPTK, 1250 kW/1700 pk, 1600 rpm


VH 46
VH 50

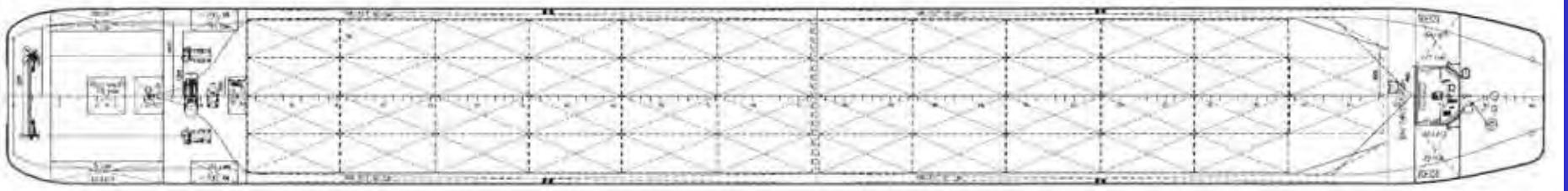
Lengte:	104.00 / 86.00 m.
Breedte:	11.45 m.
Diepgang:	3.60 m.
Tonnage:	3189 / 2786 ton
Max. teu's:	4 lagen 208 / 192
Motor:	2 x ABC 6 DZC, 1103 kW/1500 pk, 800 rpm

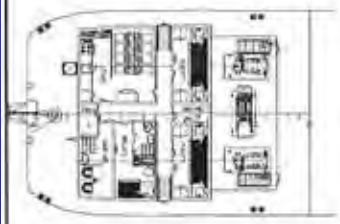
Inland Tankers

Lengte:	110.00 m.
Breedte:	13.50 m.
Diepgang:	4.20 m.
Tonnage:	4207 ton
Motor:	Caterpillar 3516 (B), 1492 kW/2028 pk, 1600 rpm

Lengte:	110.00 m.
Breedte:	11.45 m.
Diepgang:	2.80 m.
Holte:	5.60 m.
M³ :	2800 m³
Motor:	2 x Mitsubishi, Type S12R-MPTA, 1197 PK, 1600rpm.

Lengte:	109.80 m.
Breedte:	11.40 m.
Diepgang:	3.56 m.
Holte:	5.05 m.
Tonnage:	2948 ton
M³ :	3250 (97%) m³
Motor:	MTU 12 V 4000 M 60, 1321 kW/1797 pk, 1800 rpm





PRINCIPAL DIMENSIONS

[illegible]	[illegible] m
[illegible]	[illegible] m
[illegible]	[illegible] m
[illegible]	[illegible] m
DEPTH	[illegible] m
[illegible]	[illegible] m
[illegible]	[illegible] m
[illegible]	[illegible]

MAIN CHARACTERISTICS

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

CLASS NOTATION

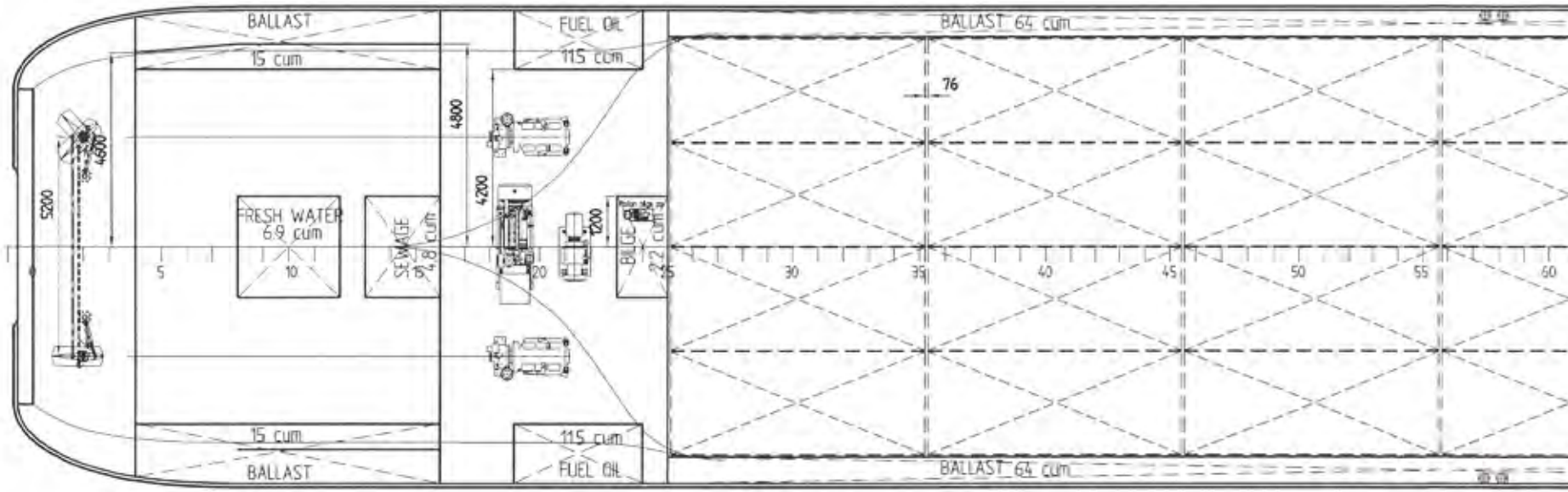
[illegible]

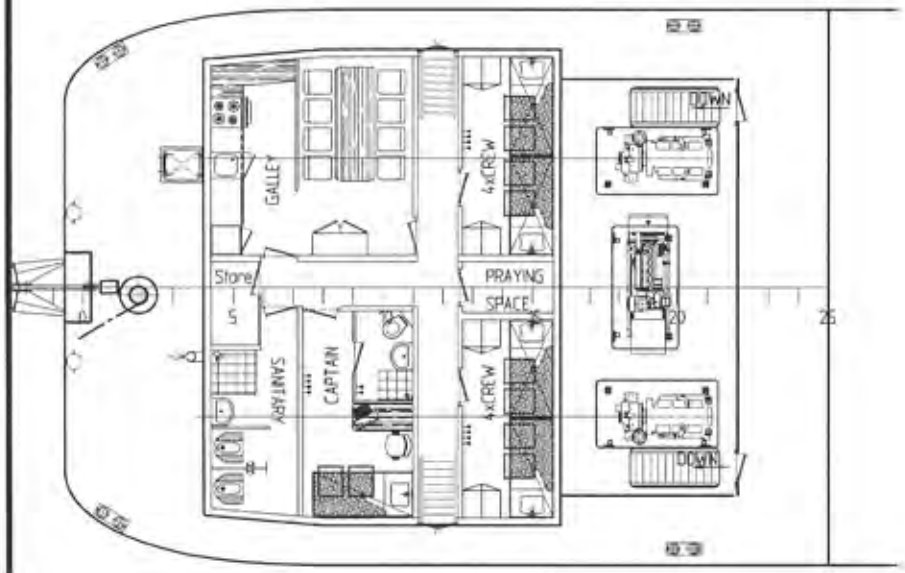
SHIP DESIGN GROUP

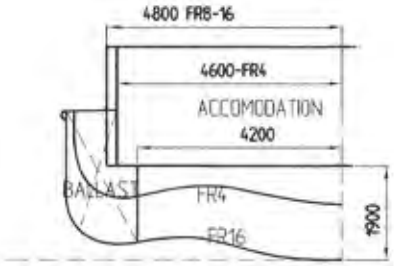
[illegible]

GENERAL ARRANGEMENT
SELFPROPELLED BARGE FOR NILE

[illegible]

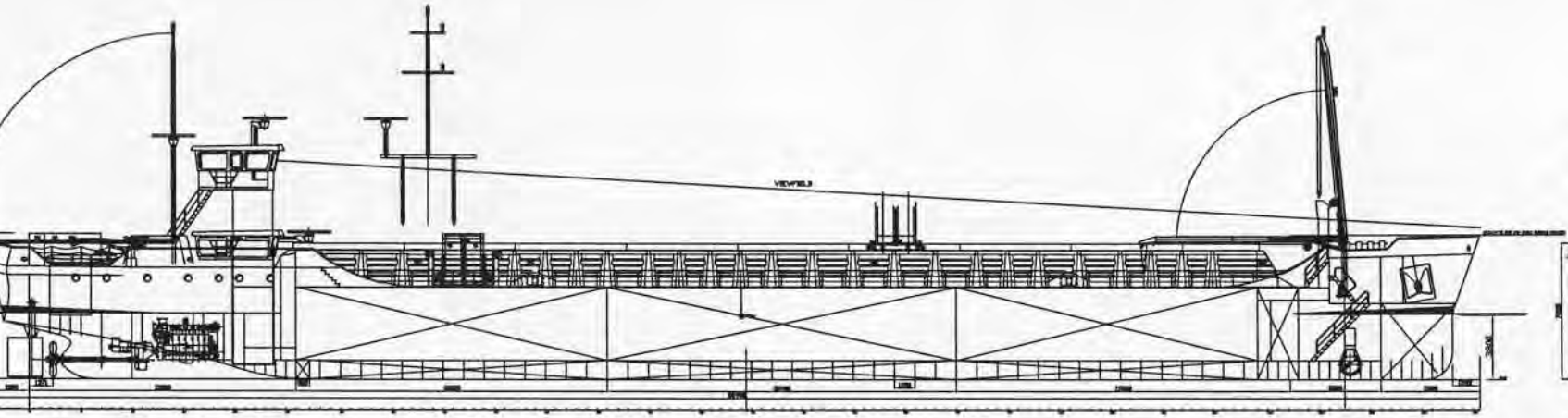

BALLAST
15 cum
FUEL OIL
115 cum
BALLAST 64 cum
76
4800
4200
5200
4600
FRESH WATER
6.9 cum
SEWAGE
4.8 cum
1200
BILGE
2.2 cum
5
10
20
25
30
35
40
45
50
55
60
15 cum
BALLAST
115 cum
FUEL OIL
BALLAST 64 cum

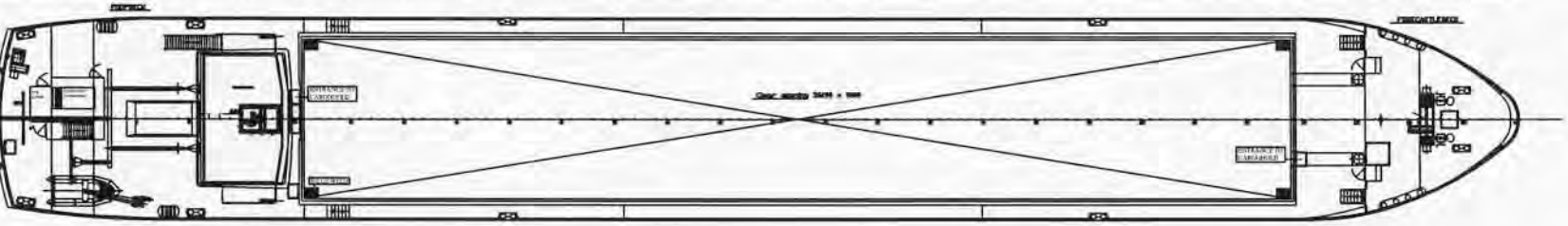

GALLEY
4xCREW
DOWN
Store
5
PRAYING
SPACE
20
25
SANITARY
CAPTAIN
4xCREW
DOWN

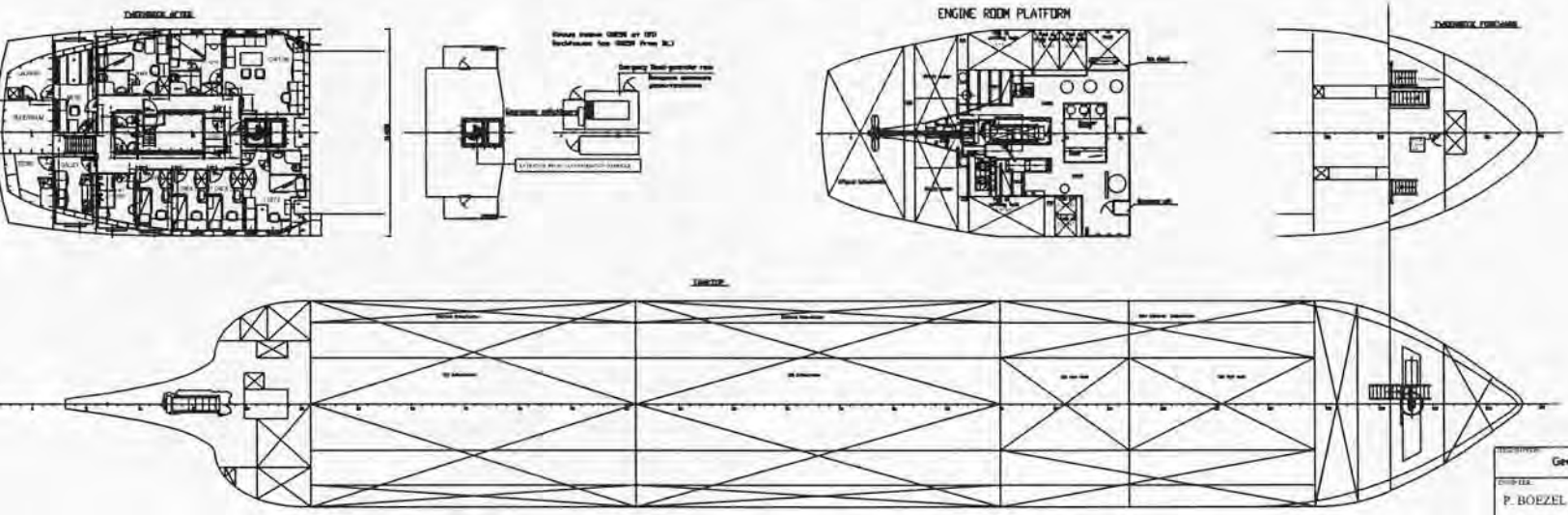

4800 FR8-16
4600-FR4
ACCOMODATION
4200
BALLAST
FR4
FR16
4600

Shortsea shipping

- Is an intermodal transport of intra-european cargo on the basis of door/door, mostly in containers ore trailers.
  A considerable part of the transport route goes over sea.







ENGINE ROOM PLATFORM

Length over all
Length betweem perp's
Breadth over all
Breadth moulded
Depth
Draught
Hold capacity
Tonnage approx

Main engine (medium speed) approx
Speed loaded trail condition approx

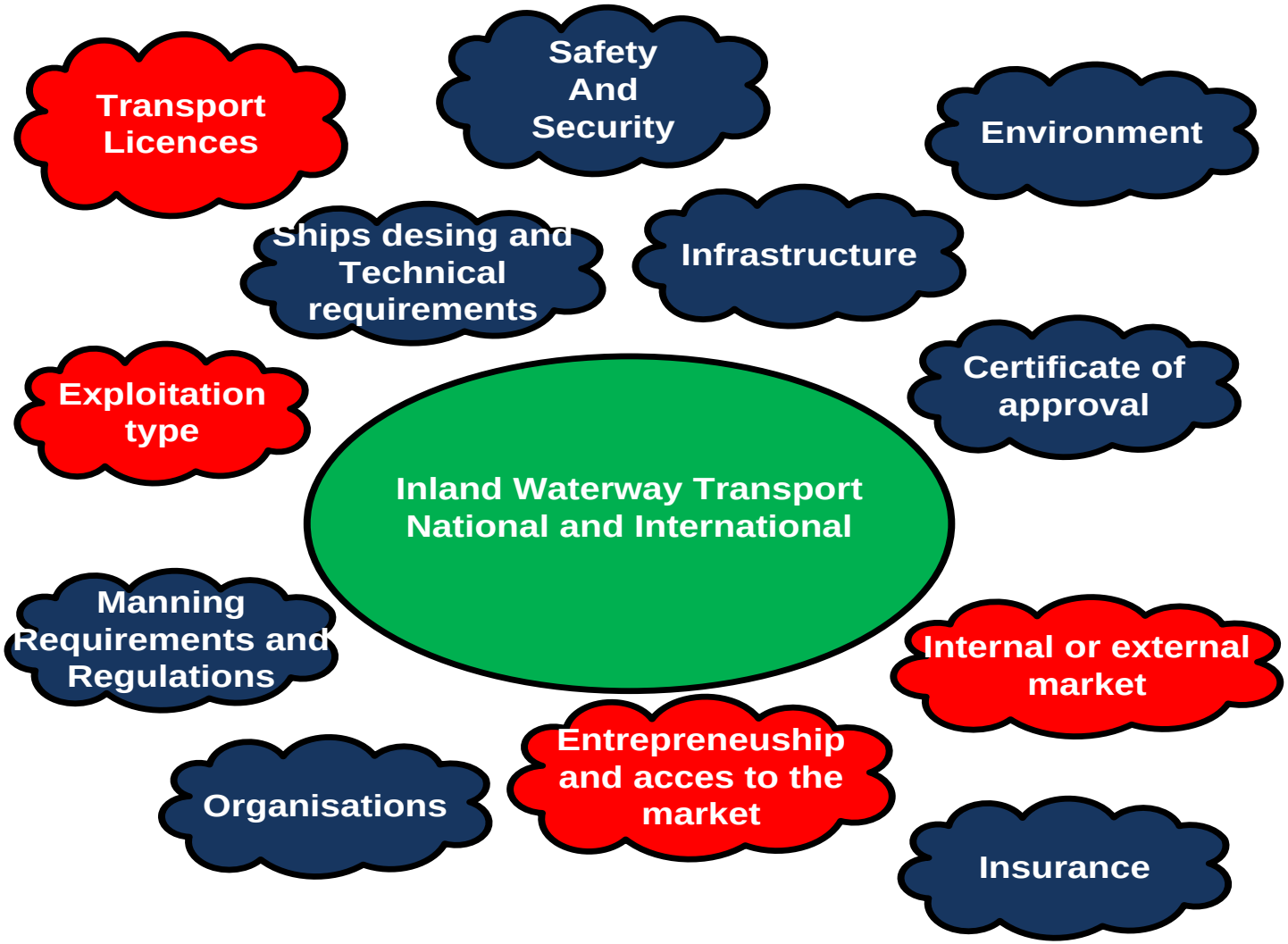
Tankcapacacities: ballastwater approx
gasoil bunkers approx
potable water approx

General arrangement plan			ANKE
P. BOEZEL	A0	1:100	
Shipbuilding			Dutch Shipbuilding Services BV

KA 9

Lengte:	82.25 m.
Breedte:	11.30 m.
Diepgang:	3.45 m.
Tonnage:	1842 ton
Max. teu's:	48
Motor:	Caterpillar 3512 (B), 955kW/1299 pk, 1600 rpm

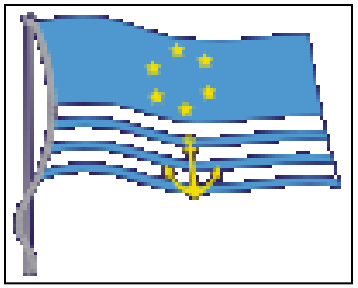
Internationaal beleid en wetgeving



Organisations

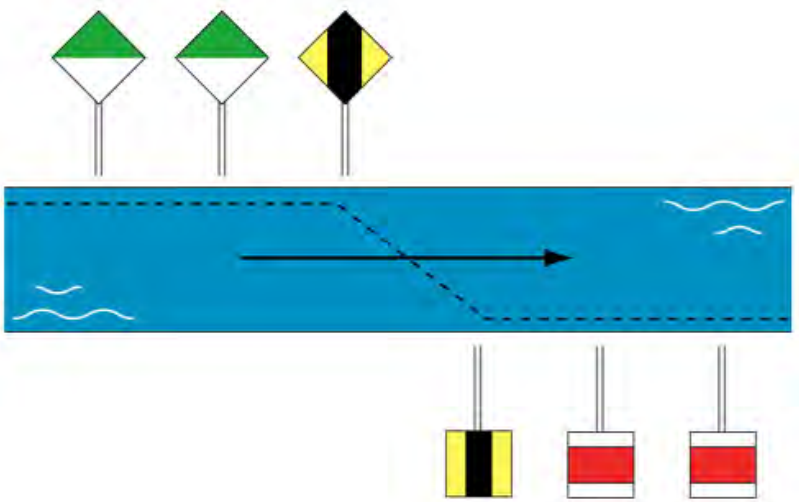
- Different organisations play a role in determining the transport-related legislative framework of inland navigation in Europe:
- the Inland Transport Committee of the United Nations Economic Commission for Europe (UN/ECE),
- the European Community,
- the national authorities, and
- several River commissions.






Navigation Police Regulations

- Navigation police regulations have been harmonised across Europe to a large extent.
- CEVNI European Code for Inland Waterways (UN/ECE)
- The CEVNI consists of seven chapters:
  - Chapter 1: general provisions
  - Chapter 2: marks and draught scales on vessels
  - Chapter 3: visual signals (marking) used on vessels (e.g. lights, boards, flags)
  - Chapter 4: sound signals on vessels – radiotelephony
  - Chapter 5: waterway signs and marking
  - Chapter 6: rules of the road
  - Chapter 7: berthing rules



legal framework for IWT regarding liability regimes for civil law.

- The CMNI and CRDNI Conventions on liability in inland waterway transport.
- The situation of legal regimes on the Rhine and the Danube as well as national law.

legal framework for IWT regarding liability regimes for civil law.

- Liability rules (referring to situations in which a person is liable for, e.g., damage to property or reputation and is therefore responsible to pay compensation for any damage incurred) and contract law are still mostly based on national regulations and are therefore not harmonised on an international level

legal framework for IWT regarding liability regimes for civil law.

- To improve this situation measurements have already been taken, or are currently under consideration, in the form of the:
- Strasbourg Convention on the Limitation of Liability in Inland Navigation (CLNI)
- Budapest Convention on the Contract for the Carriage of Goods by Inland Waterways (CMNI)

Convention on the Limitation of Liability in Inland Navigation.

- The CLNI harmonises laws regarding the limitation of liability for ship owners, rescue and salvage forces, and transport insurance companies that insure claims resulting from the CLNI agreement. I
- t is based on the principle of the personal liability of the vessel owner or salvor limited to a specific amount.
- The CCNR is the depositary of the convention, which can be acceded by other states (many have been invited to do so).

  the CLNI has been incorporated in national law by Germany, Luxemburg, the Netherlands, and Switzerland.

Manning requirements and social standards

- The requirements on a ship's log and tachograph.
- As regards the minimum crew number, a distinction is made for three types of operation:
- A1 represents daytime navigation for a maximum of 14 hours,
- A2 is semi-continuous navigation for not more than 18 hours, and
- B reflects continuous navigation for 24 hours and more

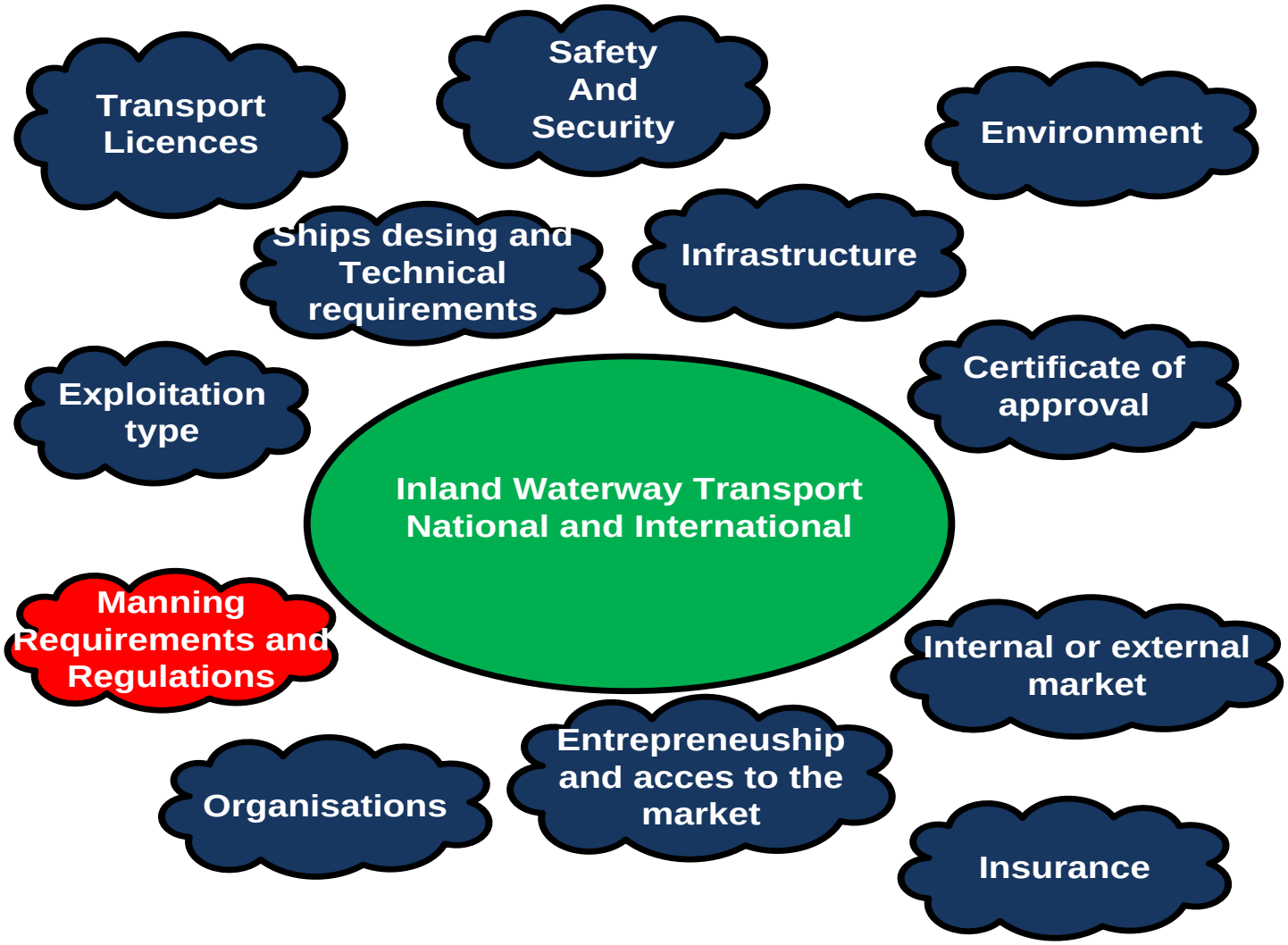
MARKETS AND FLEET

Dry load vessel in continuous deployment
Length 110 m , Width 10.50 m, Load capacity 2,583 tonnes,
Speed at full load 18.7 km/h, Capacity 1,242 HP

Example journey:
2,500 tonnes of gravel Breisach (D) > Utrecht (NL) (loaded downstream)

Annual costs		**Cost example journey**		**Total per tonne**
Labour	**€ 572,718.–**	**Labour**	**€ 5,911.–**	**Labour € 2.36**
Capital	**€ 291,857.–**	**Capital**	**€ 3,012.–**	**Capital € 1.20**
Other	**€ 127,961.–**	**Other**	**€ 1,321.–**	**Other € 0.53**
Fuel	**€ 761,789.–**	**Fuel**	**€ 7,863.–**	**Fuel € 3.15**
				Costs per tonne € 7.24

Internationaal beleid en wetgeving



Minimum crew for self-propelled vessels and pushers

Group		Crew members	Number of crew members for operating mode A1, A2 or B and for equipment standard S1 or S2					
			A1		A2		B	
			S1	S2	S1	S2	S1	S2
1	L ≤ 70 m	boatmaster helmsman able crewman ordinary crewman apprentice	1 - - 1 -		2 - - - -		2 - - 1 1[1]	2 - - - 2[1 3]
2	70 m £ L ≤ 86 m	boatmaster helmsman able crewman ordinary crewman apprentice	1 or 1 - - 1 - - 1 - 1	1 - - 1 1	2 - - - 1[1]		2 - - 2 -	2 - - 1 1
3	L > 86 m	boatmaster helmsman able crewman ordinary crewman apprentice	1 or 1 1 1 - 1 - - 2	1 1 - - 1	2 - - 1 1[1]	2 - - - 2[1]	2 or 2 1 1[2] - - 2 1 - -	2 1 - 1 1

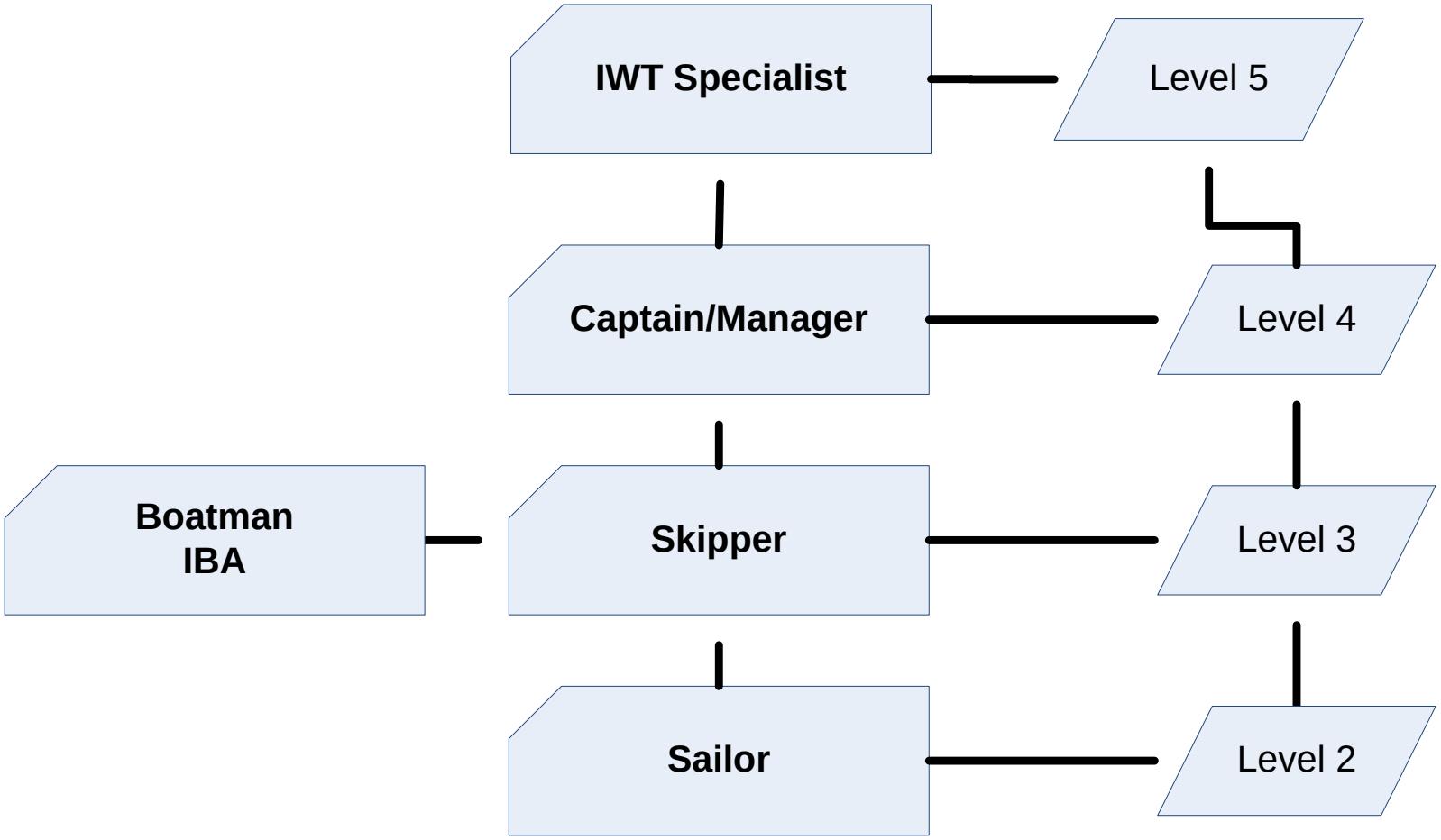
Vessel Type	Capacity	Capt	Ass. Capt.	Skilled Skipper	Skipper	Public.B. Capt.	Private.B. Capt.	Skilled Sailor	Sailor	Eng.	1e Mech	Mech	Ass Mech	1e Elec	Elec	Ass. Elec	Cable worker
Tourist Nile Cruiser	0 – 50	1	-	1	-	-	-	1	4	-	1	1	-	-	1	-	1
	51 - 100	1	1	1	1	-	-	1	4	1	1	1	1	1	-	1	1
	101 - 150	1	1	1	1	-	-	2	6	1	1	1	1	1	-	1	1
	151 >	1	1	1	1	-	-	2	6	1	1	1	1	1	1	1	1
Passenger & Recreation vessels	0 – 10	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-
	11 – 30	-	-	-	-	1	-	-	1	-	-	-	1	-	-	-	-
	31 – 100	-	-	1	-	-	-	1	1	-	-	-	1	-	-	-	-
	101 – 200	-	-	1	1	-	-	1	2	-	-	1	-	-	-	-	-
	201 – 300	-	-	1	1	-	-	1	3	-	-	1	1	-	-	-	-
	301 – 400	-	-	2	1	-	-	2	3	-	-	1	1	-	-	-	-
	401 – 500	-	-	2	1	-	-	2	4	-	-	1	1	-	-	-	-
	501 – 600	-	1	1	1	-	-	2	4	-	-	1	1	-	-	-	-
	601 – 700	-	1	1	1	-	-	2	5	-	-	1	2	-	-	-	-
	701 – 800	1	-	2	1	-	-	2	5	-	-	1	2	-	-	-	-
	801 >																

LOONTABEL MOTORVRACHTSCHEPEN DATUM VAN INGANG: 1 januari 2010	Maandloon	Weekloon	Vergoeding niet genoten vrije dag	5-DAAGSE WERKWEEK / GEMIDDELDE DIENSTTIJD					5-DAAGSE WERKWEEK			SYSTEEMVAART	
				Toeslag per uur		Overwerk per uur			Continutoeslag per dag			Overwerk per uur	Continu-toeslag per dag
				Zaterdag	Zondag en verg. reisuur	Normaal	Zaterdag	Zondag	Normaal	Zaterdag	Zondag		
KAPITEIN													
laadverm. meer dan 2500 ton	2.048,95	471,24	94,25	5,89	11,78	13,72	17,67	21,20	78,89	101,60	121,90	15,90	58,90
lengte meer dan 86 m	2.009,82	462,24	92,45	5,78	11,56	13,47	17,34	20,81	77,45	99,71	119,66	15,61	57,80
lengte 70-86 m	1.967,95	452,61	90,52	5,66	11,32	13,19	16,98	20,38	75,84	97,64	117,19	15,28	56,60
lengte minder dan 70 m	1.927,95	443,41	88,68	5,55	11,09	12,92	16,64	19,96	74,29	95,68	114,77	14,97	55,45
SCHIPPER	1.850,86	425,68	85,14	5,32	10,64	12,40	15,96	19,15	71,30	91,77	110,11	14,36	53,20
MACHINIST	1.714,76	394,38	78,88	4,93	9,86	11,49	14,79	17,75	66,07	85,04	102,06	13,31	49,30
STUURMAN	1.682,46	386,95	77,39	4,84	9,67	11,27	14,51	17,41	64,80	83,43	100,11	13,05	48,35
VOLMATROOS/ MATROOS-MOTORDRIJVER													
leeftijd 23 jr. of ouder	1.650,59	379,62	75,92	4,75	9,49	11,06	14,24	17,08	63,60	81,88	98,21	12,81	47,45
leeftijd onder 23 jr.													
3 functiejaren	1.577,19	362,74	72,55	4,54	9,07	10,57	13,61	16,33	60,78	78,26	93,90	12,24	45,35
2 functiejaren	1.432,45	329,45	65,89	4,12	8,24	9,60	12,36	14,83	55,20	71,07	85,27	11,12	41,20
1 functiejaar	1.287,66	296,15	59,23	3,70	7,40	8,62	11,10	13,32	49,57	63,83	76,59	9,99	37,00
geen functiejaren	1.143,13	262,91	52,58	3,29	6,57	7,65	9,86	11,83	43,99	56,70	68,02	8,87	32,85
MATROOS													
leeftijd 23 jr. of ouder	1.625,85	373,93	74,79	4,68	9,35	10,89	14,03	16,83	62,62	80,67	96,77	12,62	46,75
leeftijd onder 23 jr:													
3 functiejaren	1.417,10	325,92	65,18	4,08	8,15	9,49	12,23	14,67	54,57	70,32	84,35	11,00	40,75
2 functiejaren	1.271,92	292,53	58,51	3,66	7,31	8,52	10,97	13,16	48,99	63,08	75,67	9,87	36,55
1 functiejaar	1.127,18	259,24	51,85	3,24	6,48	7,55	9,72	11,66	43,41	55,89	67,05	8,75	32,40
geen functiejaren	982,56	225,98	45,20	2,83	5,65	6,58	8,48	10,17	37,84	48,76	58,48	7,63	28,25
LICHTMATROOS													
leeftijd 23 jr. of ouder	1.407,60	324,85	64,97	4,06	8,12	9,46	12,18	14,62	54,40	70,04	84,07	10,96	40,60
leeftijd 22 jr.	1.196,45	276,10	55,22	3,45	6,90	8,04	10,35	12,42	46,23	59,51	71,42	9,32	34,50
leeftijd 21 jr.	1.020,50	235,50	47,10	2,95	5,89	6,86	8,84	10,60	39,45	50,83	60,95	7,95	29,45
leeftijd 20 jr.	865,65	199,75	39,95	2,50	4,99	5,81	7,49	8,98	33,41	43,07	51,64	6,74	24,95
leeftijd 19 jr.	739,00	170,55	34,11	2,13	4,26	4,96	6,39	7,67	28,52	36,74	44,10	5,75	21,30
leeftijd 18 jr.	640,45	147,80	29,56	1,85	3,70	4,31	5,55	6,66	24,78	31,91	38,30	5,00	18,50
leeftijd 17 jr.	556,00	128,30	25,66	1,61	3,21	3,74	4,82	5,78	21,51	27,72	33,24	4,33	16,05
leeftijd 16 jr.	485,60	112,05	22,41	1,40	2,80	3,26	4,20	5,04	18,75	24,15	28,98	3,78	14,00

STC-GROUP

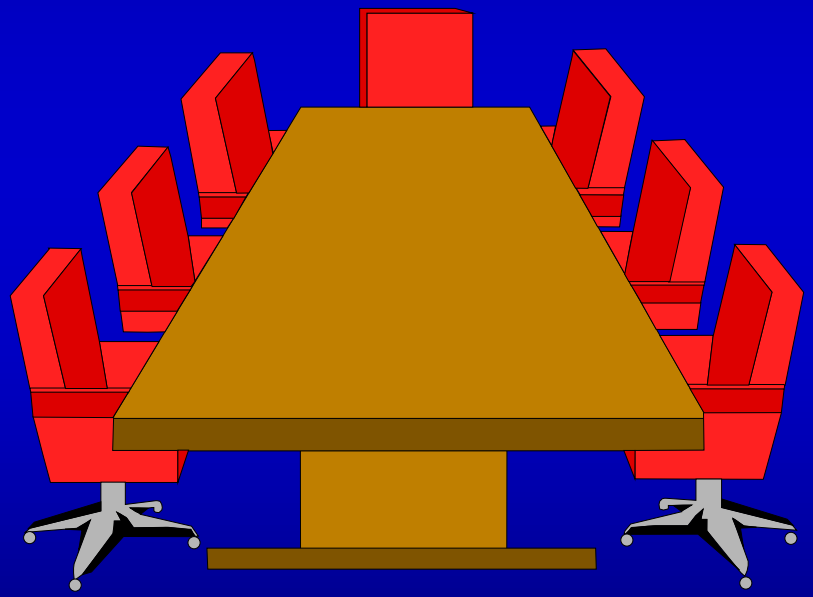
Education and Training

Public & Private Vocational Education



Steering Committee of Education for Inland Shipping

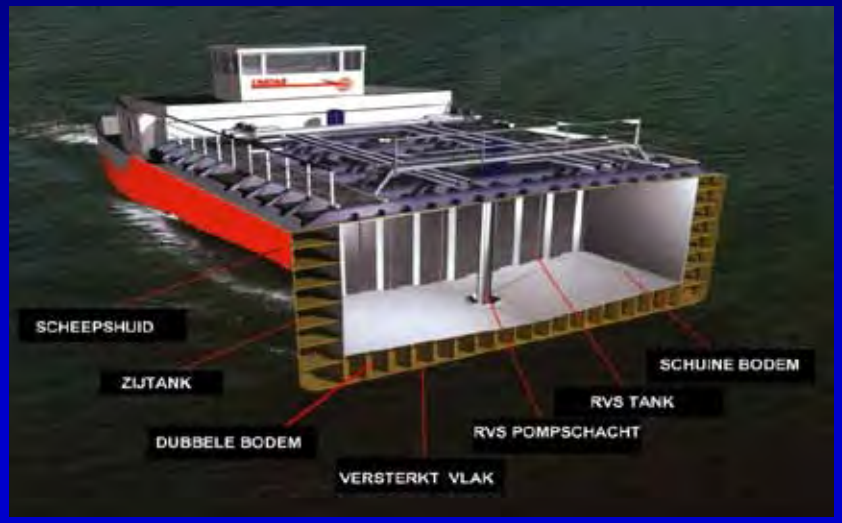
- Members of the committee are appointed by their organisations.
- Authority
- School
- IWT Companies

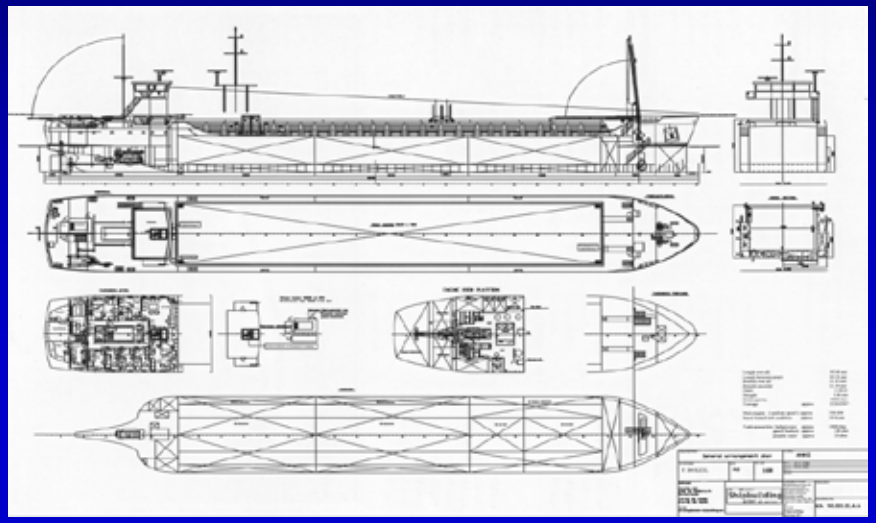


MAINTENANCE & REPAIR

SAFETY & ENVIRONMENT

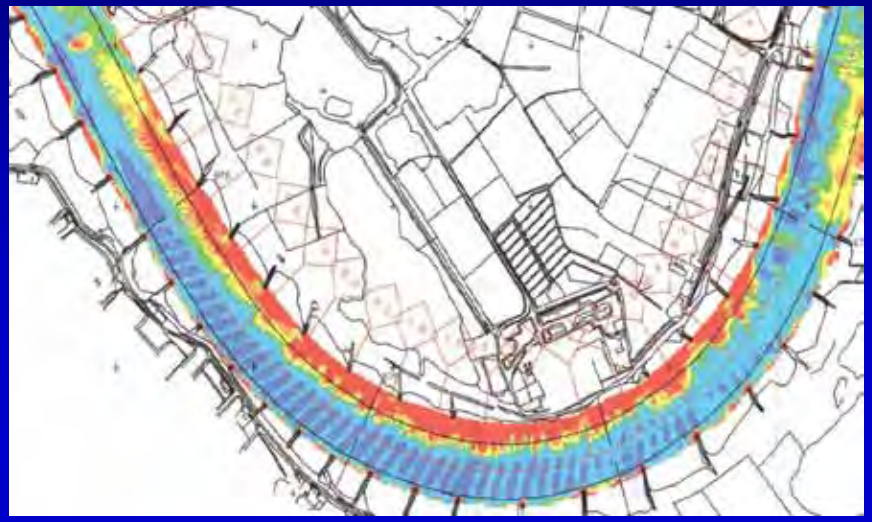
SHIPBUILDING & EQUIPMENT

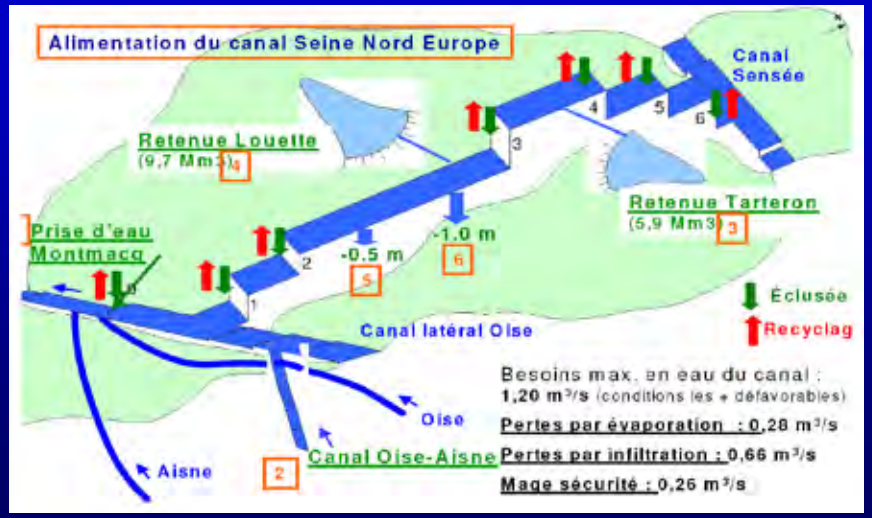




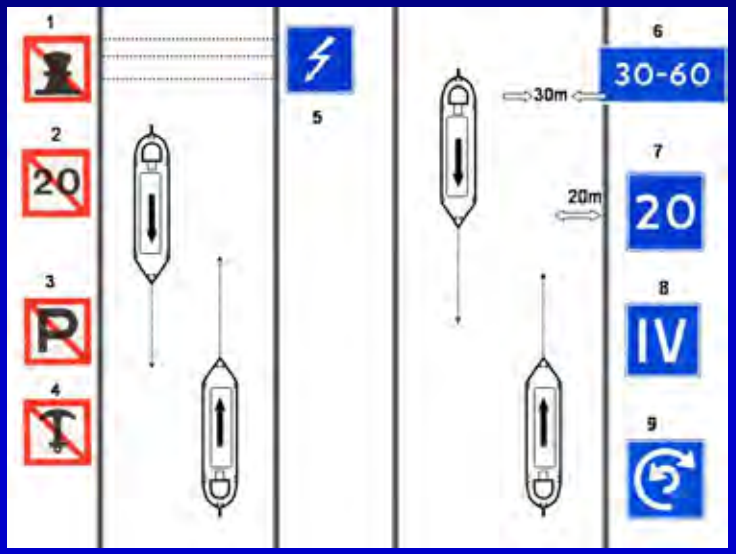
CARGO HANDLING

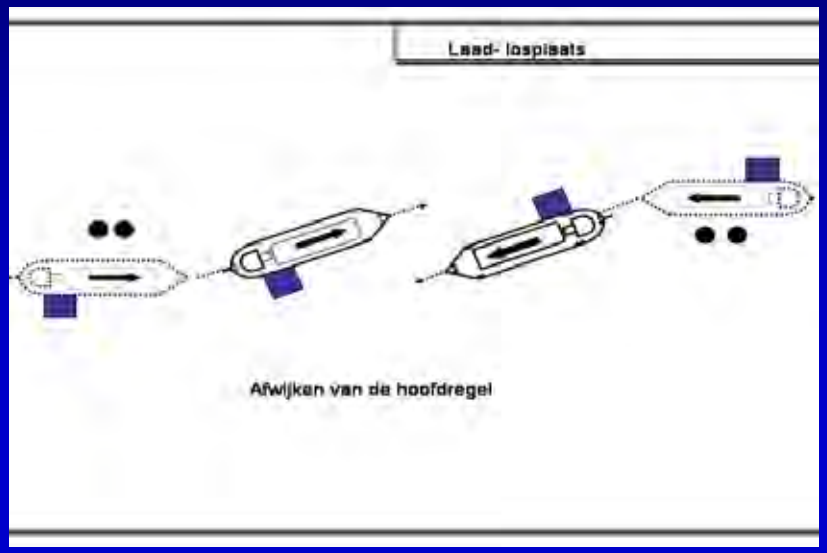
WATERWAY KNOWLEGDE

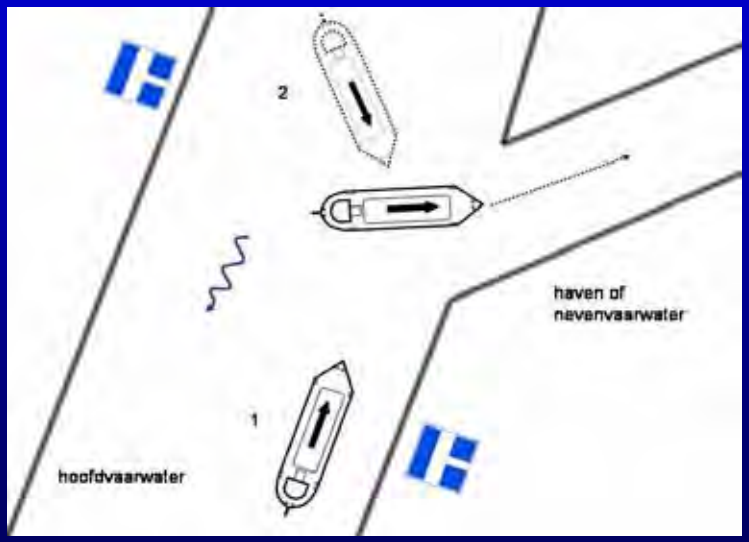


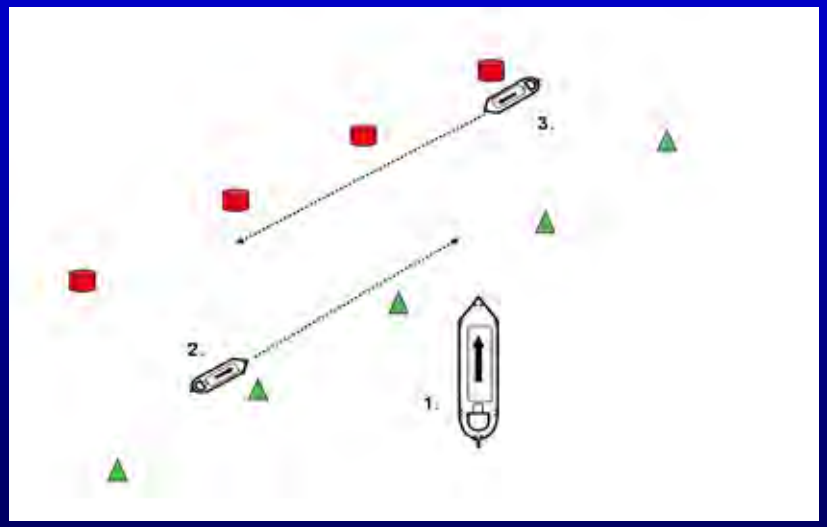


INLAND WATERWAY REGULATIONS







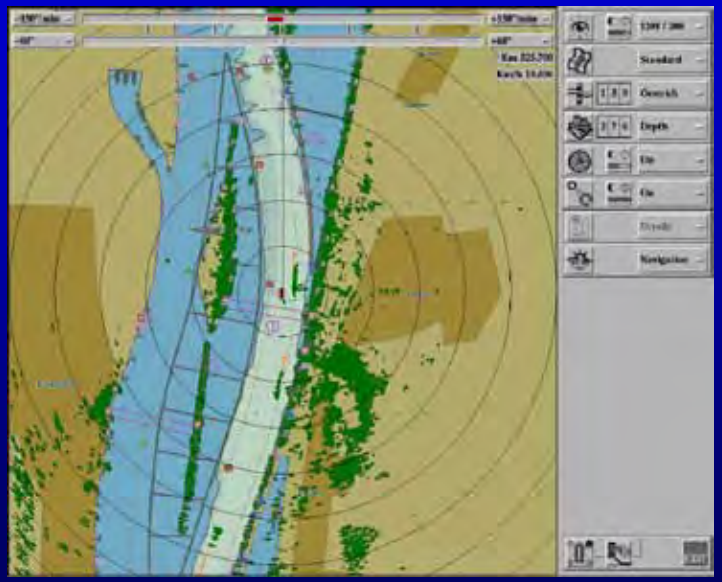


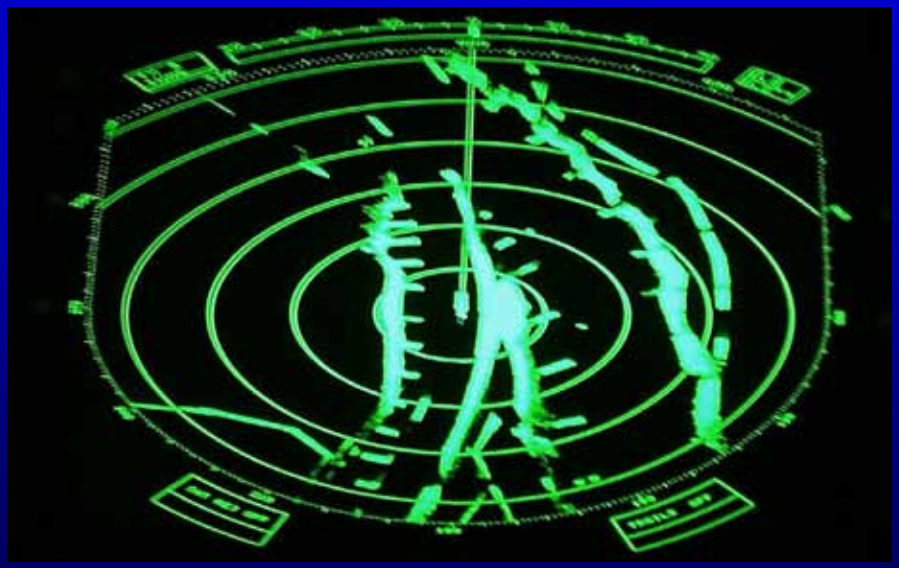
COMMUNICATION

&

LANGUAGE

NAVIGATION & SHIPHANDLING





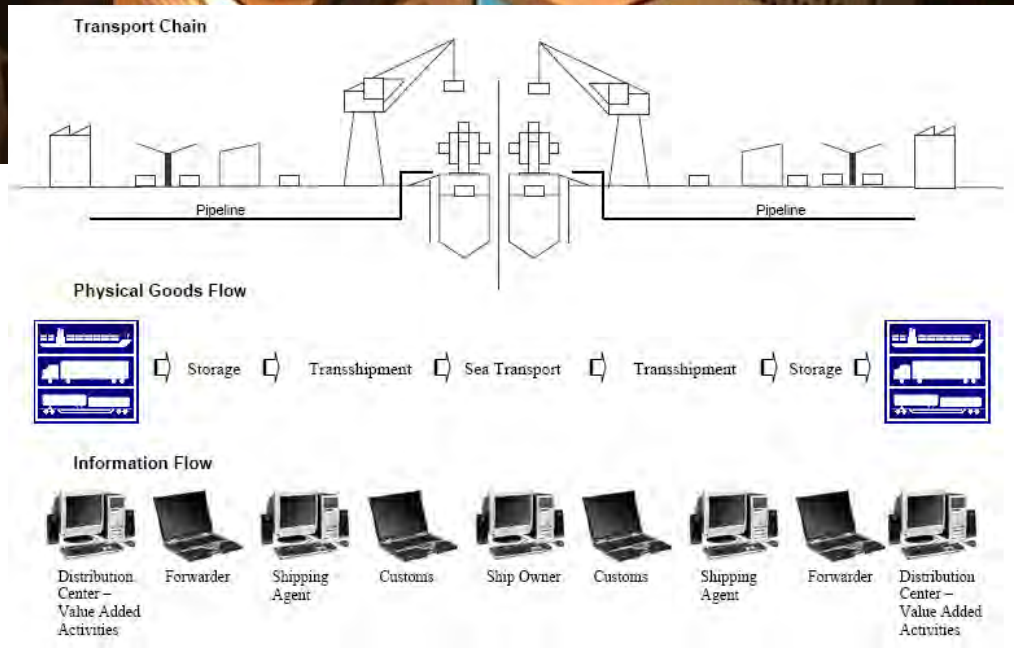
MARINE ENGINERING

CALAMITY & DAMAGE CONTROL

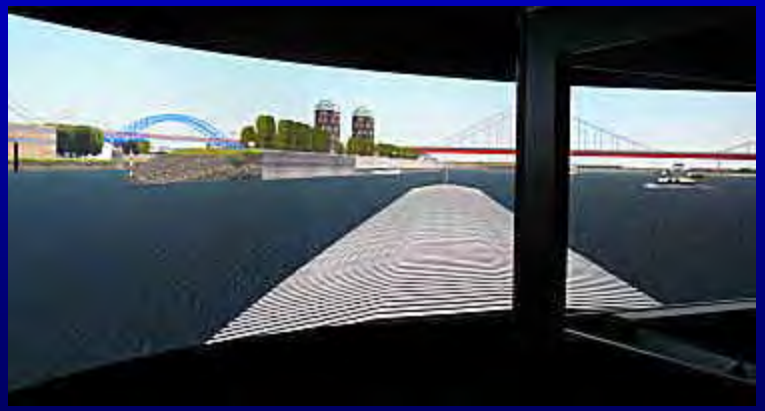
Dangerous Goods

Certificate for transport of dangerous goods

Logistics


Transport Chain
Pipeline
Pipeline
Physical Goods Flow
Storage
Transshipment
Sea Transport
Transshipment
Storage
Information Flow
Distribution Center – Value Added Activities
Forwarder
Shipping Agent
Customs
Ship Owner
Customs
Shipping Agent
Forwarder
Distribution Center – Value Added Activities

TRAINING IN PRACTICE



TRAINING IN PRACTICE

www.naiades.info

Opening your door to inland waterway transport in Europe

Home | Fast Facts | Useful tools | Downloads | FAQs | PLATINA

top stories

26.11.2009
Don't ignore the backbone
Intermodal initiative to reach out to Barroso [more]

25.11.2009
Port of Rotterdam lowers port tariffs
Crisis rebate to kick-start the market [more]

23.11.2009
20 percent more goods on the river Elbe
Inland navigation associations urge for development measures

Welcome !

On this website you will find topical information about inland waterway transport in Europe. Eco-friendly and efficient transport is a cornerstone of the EU's transport policy. 2006 a multi-annual action programme was launched: NAIADES - Navigation and Inland Waterway Action and Development in Europe.

Why inland waterway

COMMUNICATION, PERCEPTION AND IMAGE

platina

PROJECT PARTNERS: PBV, INE, VIA DONAU, VNF, BOE, BVB, CRUP, CBRB, FWA, RIA and RSOE

Introduction

The strategic objective of the communication initiative is to solve the following problem:

Despite the multiplicities of communication efforts across the EU:
- Communication inputs or number to raise Inland Waterway Transport (IWT)
- There is no clear message across communication initiatives and the messages get lost in noise

The overall objective of IWT-C is to solve solutions for this problem by:
- Developing a communication strategy that reaches to relevant target groups and has a decisive influence and impact
- Identifying activities required for clear breakthrough messages across the EU with no noise

Actions

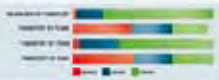
1. Reputation survey
2. Defined desired image
3. Defined brand characteristics
4. Communication strategy
5. Communication plan

"A united voice makes our message louder, clearer and better understood!"

Results

1. The reputation survey showed that if inland waterway transport was an animal, it would be a rhinoceros - large, slow and unaffected.

2. Inland waterway transport is clean, but uncaring. Awareness among respondents is levelled to average:



3. Inland Waterway transport takes transport services. Inland Waterway Transport offers modern, integrated, and positive solutions, which are cost efficient and sustainable.
4. Open, Agile, Durable and Co-operative are the core characteristics of the brand.
5. Increase the knowledge level of the target audience in order to change behavior, and strengthen the already positive attitude. This will result in increased uptake of services.
6. Realistic "voice" and values that fits easily as a whole communication in an holistic manner.

Conclusions

1. Two primary target groups:
   - Manufacturing industry
   - Political key figures and policy makers
2. Secondary target groups:
   - NGO's
   - Media
3. Key messages:
   - Perfect mode for all kind of goods
   - Available capacity
   - Integrated solutions

Further work

- Building up of network is ongoing, finished by 2010
- Twelve presentation kits began, first results, tools and means available by 06/10.

FLEET AND INNOVATIONS

platina

PROJECT PARTNERS: VNF(2.1 LEAD), VIA DONAU(2.3 LEAD), BOE, INE, DVS, DST(2.2 LEAD), BVB, CRUP, CBRB, FWA, CLT and RSOE

Introduction

The strategic objective of the fleet and innovation initiative is to improve the logistics efficiency as well as the economic, environmental and safety performance of IWT, thus enhancing competitiveness:

This will be done by:
- Improving economic performance by stimulating fleet and logistics innovation
- Maintaining the commercial viability abroad of inland navigation
- Enhancing the environmental performance of inland navigation

The following tasks will be implemented:
1. Coordinate an innovation expert group of specialists from 20 river Europe
2. Development an Innovation Database
3. Create and disseminate tools for innovation
4. Support the development of the interoperable Hull Database

Major Actions

1. Create innovation expert group
2. Create inland waterway transport innovation database
3. Develop strategic research agenda
4. Identify and disseminate new innovation support instruments
5. Create green list of promising inland waterway technologies and innovations
6. Publish and list of barriers to innovation
7. Develop European Hull database
8. Develop Technical and Administrative Agreement on European Hull Database exchange

Results

1. The innovation database tool has been designed on a web principle. Experts will be able to upload and edit new innovation projects. The database can be accessed at www.inside-inland.

2. The European switch group on innovation has been constituted and held its first meeting in Duisburg in May 2009.

Fields of expertise: Ship building industry, engineers, logistics, hydrodynamics, propulsion and automation, propulsion systems (including fuel cells), container ships, high speed engines, bio-energy, traffic management, ro-ro traffic.

3. A functional prototype of the European Hull Database has been developed.

4. The Technical and Administrative Agreement on European Hull Data Exchange has been drafted.

Conclusions

1. The innovation database will have a high usability for organizations and companies of the sector.
2. Innovation is crucial for the further development of the IWT sector.
3. The expert group will play an important role in the collection and analysis of research needs and will make recommendations on future strategic fields of research.
4. The European Hull Database is an important element in the harmonized vessel registration regime, facilitating seamless data exchange.

Further work

- Publish strategic research agenda
- Continue to develop inland waterway transport innovation database
- Identify and disseminate new innovation support instruments
- Create green list of promising inland waterway technologies and innovations
- Publish consolidated Database of Directive on technical requirements (2006/87/EC)
- Continue to develop European Hull database and Technical Administrative Agreement

MARKETS

platina

PROJECT PARTNERS: VIA DONAU, VNF, BOE, PBV, INE, NEA, ECO, DST, BVB, CRUP, CBRB, RIA and RSOE

Introduction

The strategic objective of the markets initiative is to further establish inland waterway transport in higher-value transport markets.
- **Information and data on the advantages of inland waterway transport** should be made accessible more easily
- **Administrative and regulatory barriers** hampering the development of inland navigation in Europe need to be monitored
- **Success stories from the sector will** be shared in a coordinated manner to promote European inland navigation

Actions

1. **Creation and operation of European IWT information service:**
   - Setting up a European Inland Waterway Transport Information Portal (www.inlandnavigation.eu)
   - Providing detailed information on funds and subsidies available for inland navigation across Europe
2. **Monitoring administrative barriers.**
   - Establishing a European Monitoring Group on administrative barriers in Inland Waterway Transport
   - Publishing an annual monitoring report on achieved milestones and the work in progress
3. **Benchmarks and good practices:**
   - Collecting good practices
   - Publishing good practice manuals and an online good practice handbook

Results

1. European Inland Waterway Transport Information Portal

2. European Funding Database on Inland Waterway Transport: www.inside-info/funding

3. Good practice report – first edition

Conclusions

1. Information and data on inland navigation in Europe are scattered over a wide range of media and sources. PLATINA is collecting and structuring this information and disseminating it via www.inside-info
2. The Funding Guide for Inland Waterway Transport in Europe and the European Funding Database on Inland Waterway Transport has been well received.
3. A first consultative meeting on administrative and regulatory barriers in inland waterway transport, held on 11 March 2009 showed that:
   - the results of the screening seminar have to be updated and validated in close cooperation with Member States, professional organizations and river commissions
   - focusing on a set of priority barriers will be the most effective approach to achieve a simplification
4. Good practices in inland navigation are widely scattered all over Europe. Collecting, structuring and presenting them in a suitable fashion is an important task.

Further work

- Continuously extending and updating the Information Portal and the European Funding Database on Inland Waterway Transport
- Assisting in the implementation of the communication and promotion strategy by providing a robust effort for all activities
- Creating a common understanding on administrative barriers by in depth discussions with authorities and industry representatives
- Analysing and assessing perceived barriers in order to develop strategies for a simplification of administrative procedures
- Publishing future "Good practice manuals" as well as a collection of best practices to demonstrate the merits of inland navigation through different aspects

INFRASTRUCTURE

platina

PROJECT PARTNERS: DVS (0.1 AND 0.2 LEAD), BOE(2), CBRB, CCTMET, CRUP, DST, ECORYS, ICPDR (0.3 LEAD), INE, NEA, PBV, RIA, RSOE, VIA DONAU and VNF

Introduction

The strategic objective of the infrastructure initiative is to enhance the physical and virtual infrastructural opportunities for sustainable inland waterway transport

Despite the wide range of actions of policy initiatives across the EU:
- The EU waterways lack a common European IWT infrastructure development plan
- River Information Services (RIS) implementation on the various European waterways is not yet completed
- The interactions and involvement of various stakeholders and their interests in waterway planning and management is unbalanced.

The overall objective of the work package is to contribute to solutions for this problem by:
- Creating a knowledge base on physical IWT infrastructure issues
- Assisting the development of integrated River Information Services
- Developing Guidelines on integrated waterway planning

Major actions

1. Identify bottlenecks and missing links
2. Develop an EU wide IWT network approach
3. Assist the RIS expert groups (EIP - electronic reporting international, RTT - vessel tracking and tracing, ECDIS - inland electronic chart display and information system and NTS - notices to skippers)
4. Create a single portal – www.RIS.eu – for European River Information Services
5. Multi-stakeholder workshops on interdisciplinary waterway planning
6. Good Practice Manual on sustainable inland waterway planning

Results

1. Overview of major IWT freight flows in Europe (2007)

2. Assistance for RIS expert groups: ERC Task Force Maintenance requirements and RIS Community Portal design

RIS Community portal design

RIVER INFORMATION SERVICES RIS

Keywords: connecting, bridging, water, and EU

3. Draft Good Practice Manual on integral waterways planning presented workshop 1 Zagreb 4/5 June 2009.

Conclusions

1. PLATINA will help to deliver:
   - Knowledge base on European inland waterway transport infrastructure
   - Standardized approach for European wide RIS implementation
   - Interdisciplinary approach for integral EU waterway planning
2. The interaction and involvement of all stakeholders is the key to success.

Further work

2009
- Inventory of missing know how on inland waterways development
- RIS Community portal design
- Integrated Study on Hydro-morphological alterations on the Danube

2010
- Support preparation RIS Reference Data and Index (incl. implementation)

2011
- Raising acceptance and commitment for an EU infrastructure development plan
- Implementation support for Fairway Information Services and Traffic Management
- Best Practice Manual on integral waterways planning and Workshop Manual

JOBS AND SKILLS

platina
platform for the implementation of NAIADES

JÖRG RUSCHE – WORK PACKAGE LEADER (BDB)

PROJECT PARTNERS: BDB, VIA DONAU, VNF, ADB, PBV, BVB, CRUP, CBRB, RIA, RSOE, STC, CERONAV and IMST

Introduction

The strategic objective of the jobs and skills initiative is to ensure the availability of qualified personnel for the efficient operation and competitiveness of tomorrow's European inland waterways.

As a lack of skilled labour poses a major problem "Jobs and Skills" wants to:

- Raise awareness of and improve career opportunities in the inland navigation sector
- Foster mutual recognition of qualifications
- Support the implementation of harmonised training curricula
- Strengthen the cooperation among major education and training institutions

Therefore 3 sub-work packages have been identied as follows:

1. Set-up of a European IWT educational network
2. A life-long learning initiative
3. Set-up of a European IWT recruitment campaign

Actions

1. Inventory of existing IWT education and training institutes and curricula
2. Preparation of organisational structure of the network (EDINNA)
3. EDINNA working programme
4. Inventory of IWT education and training demands
5. Strategy for harmonised IWT education and training standards, establishment of a Joint Working Group including Social Partners, EDINNA and Representatives from river commissions
6. Set-up of an exchange programme
7. Inventory of IWT related logistics education institutions and training content
8. Strategy for the integration of IWT knowledge in general logistics education
9. Web-database of common IWT learning materials
10. General recruitment strategy
11. Tool box for national recruitment campaigns

Results

1. Inventory of existing IWT education and training institutes:

IWT schools and training institutes were identified in AT, B, BG, HR, CZ, F, DE, HU, I, NL, PL, RO, SR, SE

2. EDINNA (EDucation INLand NAvigation) was officially founded on 5th February 2009 in Rotterdam. The EDINNA Board was elected: Arjen Mintjes, Umuiden (NL) - Chairman, Hans-Günter Portmann, Duisburg (DE) - Vice-Chair, Rob van Reem, Rotterdam (NL) - Secretary and Treasurer and Doina Munteanu, Galati (RO) and Mihai Ghiba, Craiova (RO) as advisory officers

Conclusions

1. Existing IWT education and training systems are very different ranging from shorter practically oriented courses to longer theoretical University diplomas
2. The curricula in use set different emphases which need to be analysed further
3. The partners of EDINNA are eager to learn from each other, exchange their views on educational and training matters and pursue their activities on a more concerted European level
4. All EDINNA and Joint Working Group (JWG) partners aim at developing common recommendations for educational and training standards, both on an operational and management level

Further work

- Continue initiatives regarding the harmonisation of education, i.e. next meeting of JWG; Questionnaires on demands in education
- Next EDINNA General Assembly in September 2009 in Duisburg

PLATINA is funded by the European Union (DG-TREN) under the 7th Framework Programme for RTD

STC - Rotterdam 04-02-2009

First Formation and Assembly meeting

20 EU Inland Navigation Schools Member of Edinna

www.edinna.eu

STCIN

Standards of Training and Certification for personnel in Inland Navigation

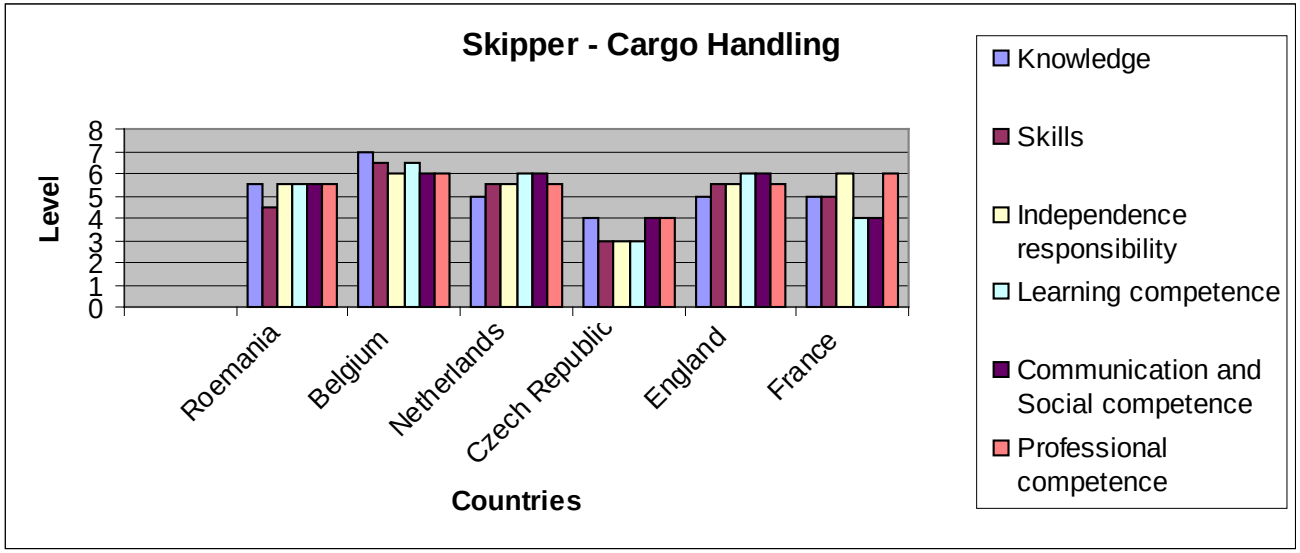


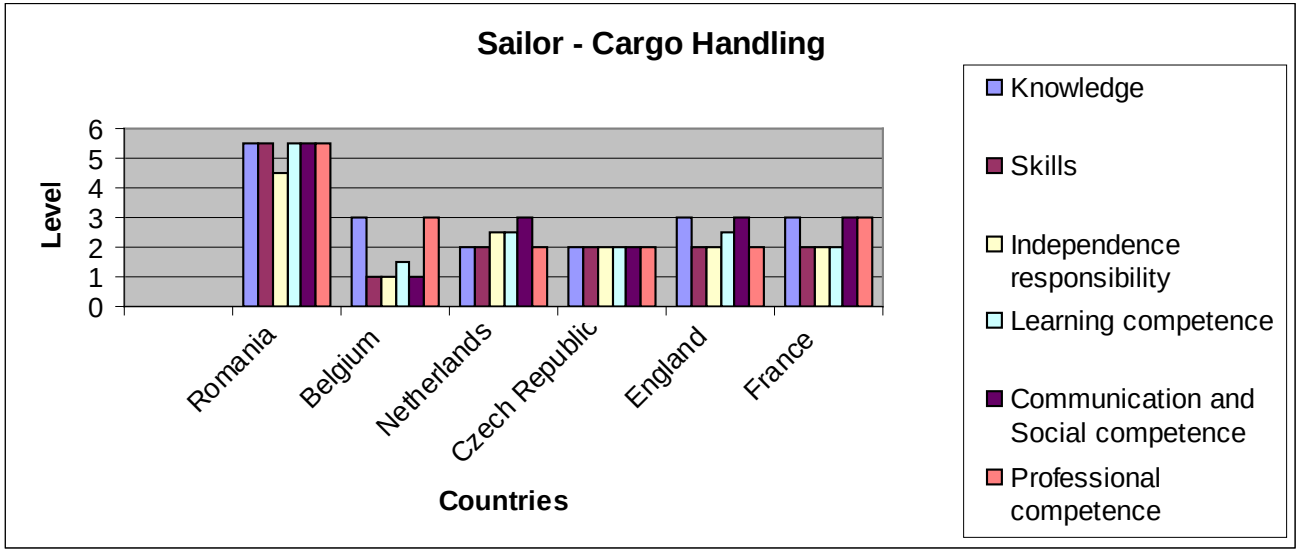

Introduction

- There is no level playing field with respect to education, training and certification on European Inland Waterways.

EDINNA
EDUCATION INLAND NAVIGATION

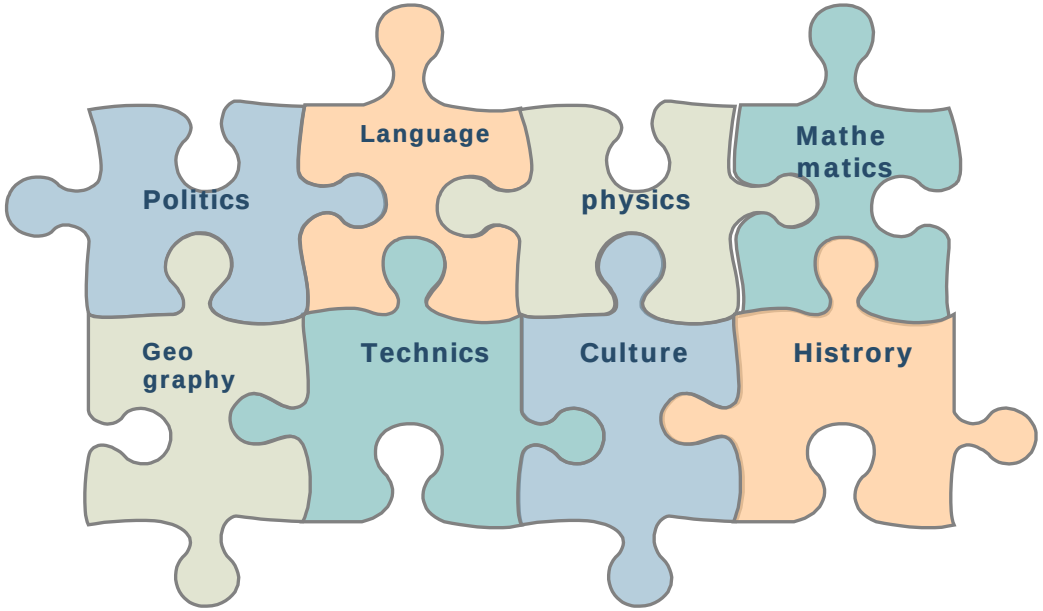
Differences



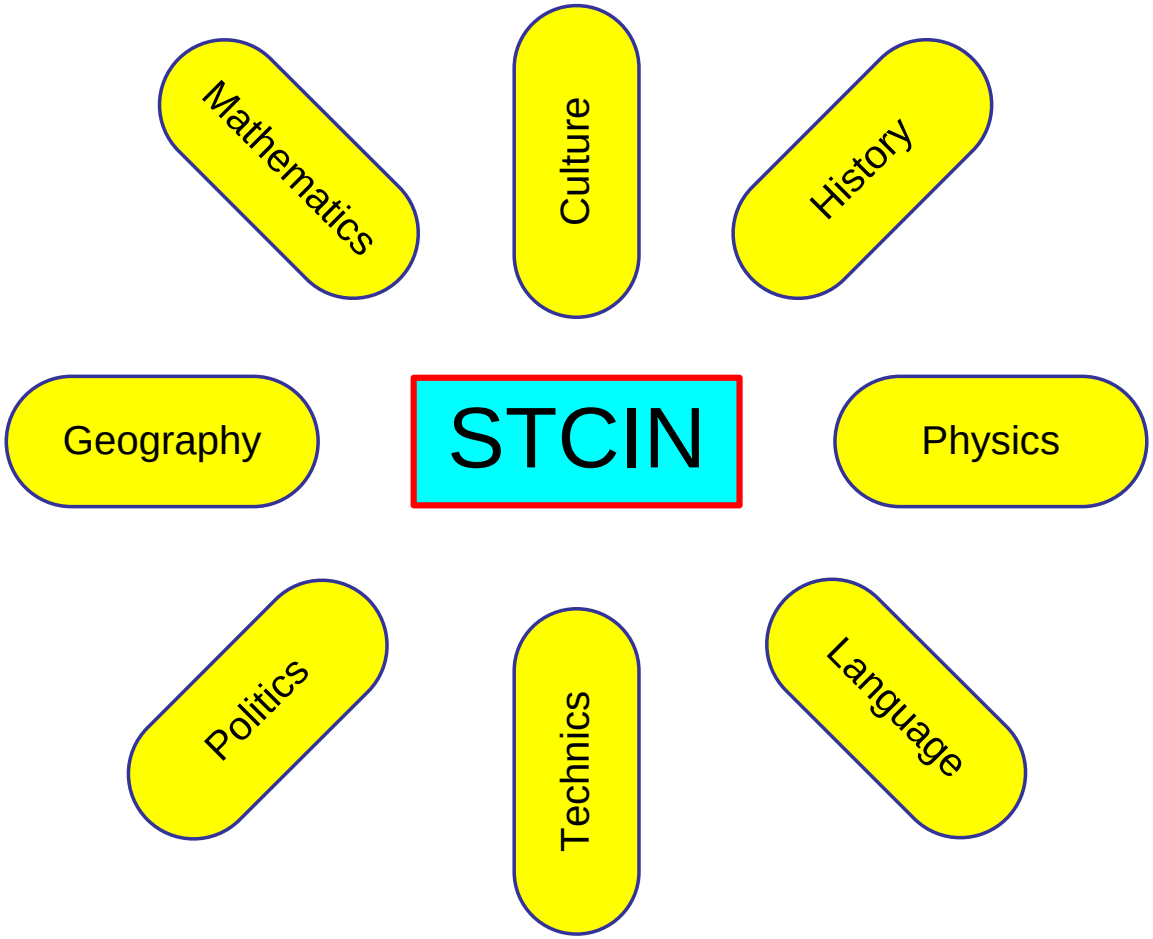


Vocational education

- Comparison on national level difficult because of various training programmes
- Vocational training connected to national legislations



STCIN integrated in education



Standards operational level

Deckhand/Sailor and prerequisite for management level

- Safety & Environment
- Navigation & Shiphandling
- Cargo Handling and stowage
- Controlling the operation of the ship
- Marine engineering
- Electrical ,electronic and control Engineering

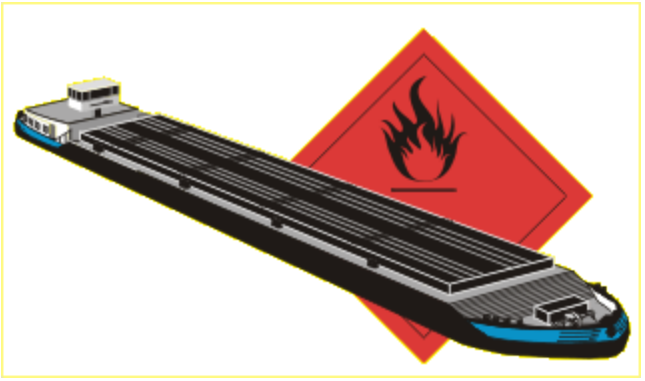
Standards (general) management level

(Master IWT)

- Safety & Environment
- Navigation & Shiphandling
- Cargo Handling and stowage
- Controlling the operation of the ship
- Marine engineering
- Electrical ,electronic and control Engineering

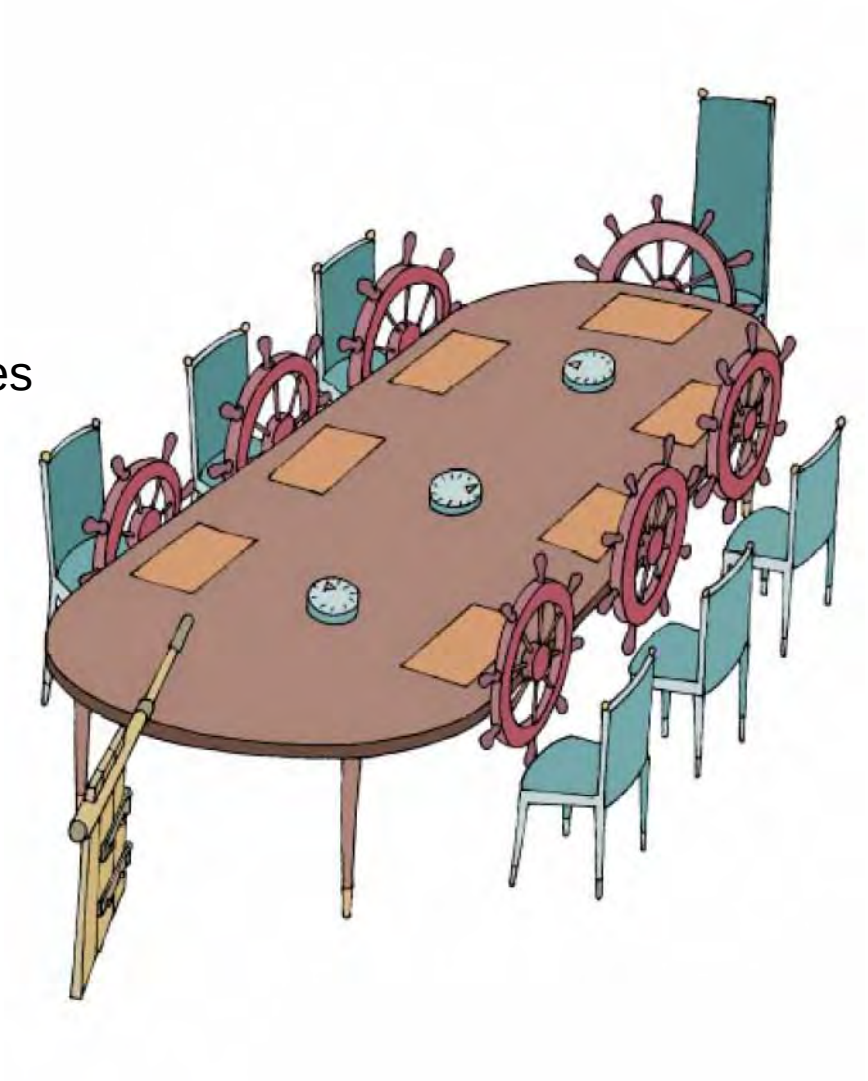
Supplements

- Dangerous goods – ADN(R) N-C-G
- Management & Entrepreneurship
- Crisis-Crowd Management (Passenger)



Joint Working Group

- PLATINA
- Social Partners
- River Commissions
- Waterway Authorities
- Edinna



Standards of

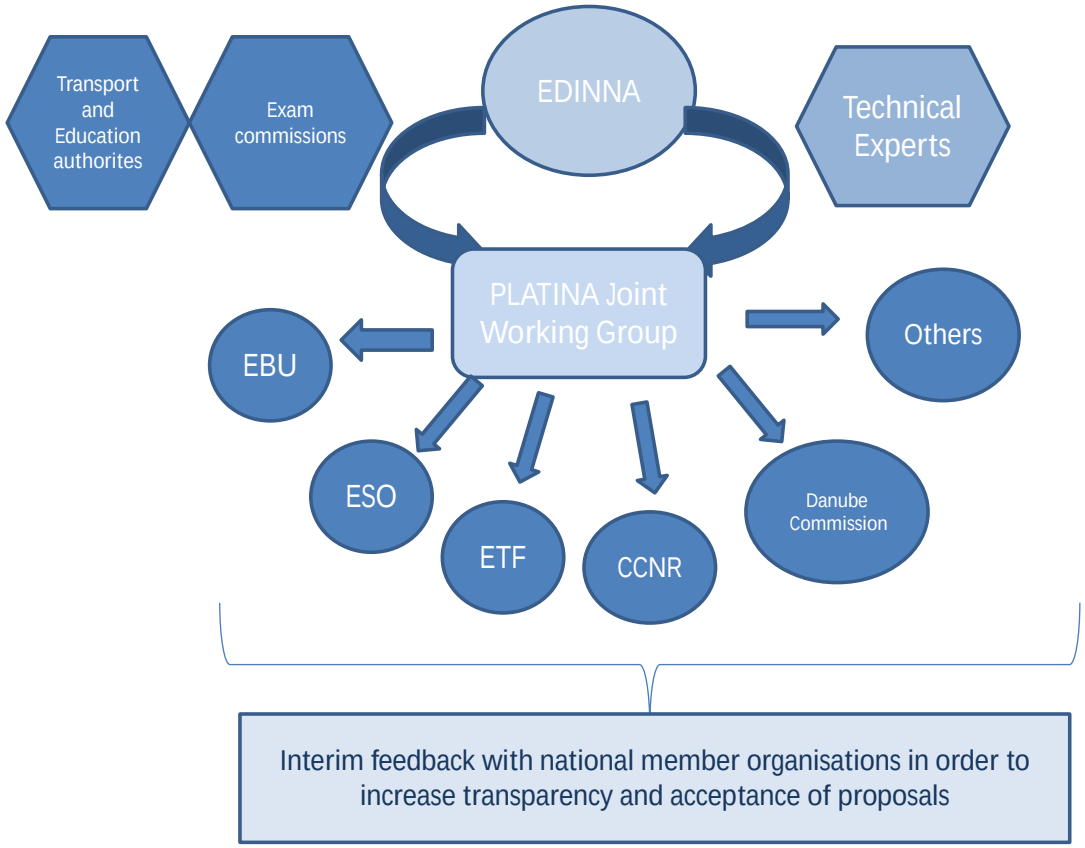
Training and

Certification for

Personnel in

Inland **N**avigation

Joint Working Group



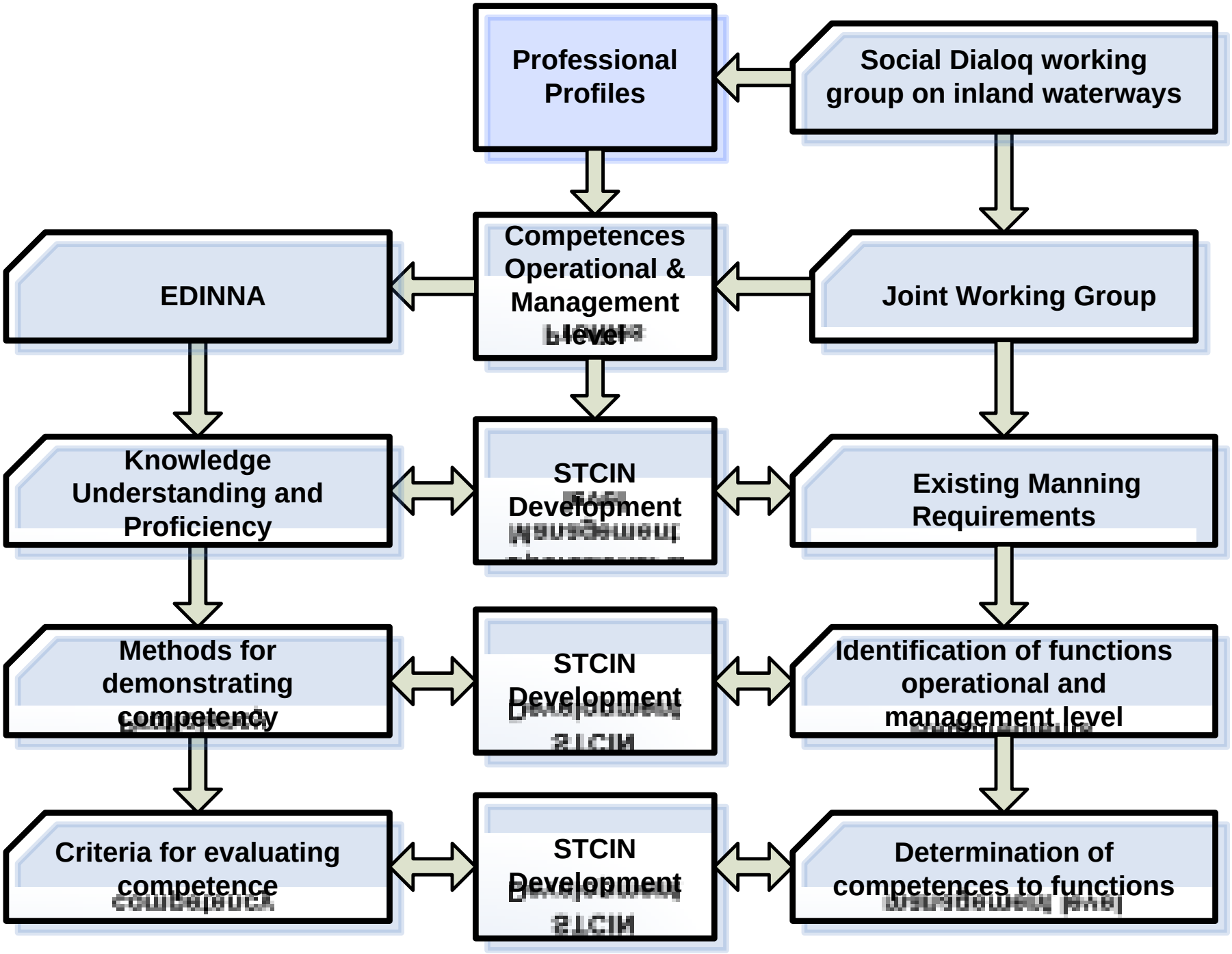
Competences operational & management level

Assists the ships management in situations of manoeuvring and handling a ship on inland waterways.

Sails and manoeuvres ensuring safe operation of the vessel in all conditions on inland ans maritime waterways.

assist with mooring, unmooring and hauling (towage) operations
assist with couple operations of push barge combinations
assist with anchoring operations

Navigate and manoeuvre taking Into account characteristics of the inland waterways
Give order to moor and unmoor vessels


Professional Profiles
Social Dialoq working group on inland waterways
Competences Operational & Management level
EDINNA
Joint Working Group
Knowledge Understanding and Proficiency
STCIN Development
Existing Manning Requirements
Methods for demonstrating competency
STCIN Development
Identification of functions operational and management level
Criteria for evaluating competence
STCIN Development
Determination of competences to functions

Standards of Training and Certification for personnel in Inland Navigation

- General Provisions
- Certificates and endorsements
- Training and assessment
- Qualifications of instructors, supervisors and assessors
- Standards governing the use of simulators.
- Standards governing the use of training ships.
- Standards governing the use of labatories.

STCIN Mandatory Requirements

- for certification of inland waterway personnel at operational level
- for certification of inland waterway personnel at management level
- for the training and qualifications of masters on ships with dangerous goods
- for the training and qualifications of inland waterway master/entrepreneur of private owned companies
- for the training and qualifications of inland waterway master of passenger ships
- for the safety training for personnel providing safety to passengers on passenger ships

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STCIN

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	METHODS FOR DEMONSTRATING COMPETENCE	CRITERIA FOR EVALUATING COMPETENCE
Assists the ships management in situations of manoeuvring and handling a ship on inland waterways, using all types of waterways and ports and is able to:	Types of bollards and winches on push/tow vessels and barges, self-propelled vessels and ashore. Demonstrates handling of wires and ropes during mooring and unmooring operations, such as: Demonstrates the use of head ropes, stern ropes and springs; Demonstrates the safety measures to be taken when handling mooring ropes and wires. Demonstrates how to attach mooring ropes or wires to various types of bollards and other facilities. Demonstrates the use of various winches	Knowledge: Theoretical exam Understanding and proficiency: Practical training and exam on (school) training vessel Training record book during work placement practice.	Candidate is able to: Prepare the ship for mooring operation; Take care of the fenders and to place them in position; Select the wire or rope usable in case of a mooring operation; Understand the communication (orders) between the wheelhouse and wanted deck activities; Handle the wires and ropes in the wanted sequence taking in account the safe working rules.