



## **Containerised cargo flows ex Port of Hamburg to Poland analysis**

TransBaltic Seminar - Poznan, 10.06.2010



## Content

### **1. Structure of containerised cargo flows**

- 1.1. The share of European Container Traffic Model (ISL)
- 1.2. Data sources for seaborne and hinterland container traffic
- 1.3. Data sources of general economic indicators (HIS Global Insight)

### **2. Analysis of containerised cargo flows**

- 2.1. Split of total traffic
- 2.2. Market shares by hinterland regions

### **3. Forecasts of containerised cargo flows ex Hamburg till 2025**

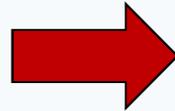
- 3.1. Cargo traffic forecasts



## 1. Structure of containerised cargo flows

### Decomposing the North Range portsqseaborne traffic

- “ Deepsea-Land
- “ *Shortsea-Land*
- “ Transhipment

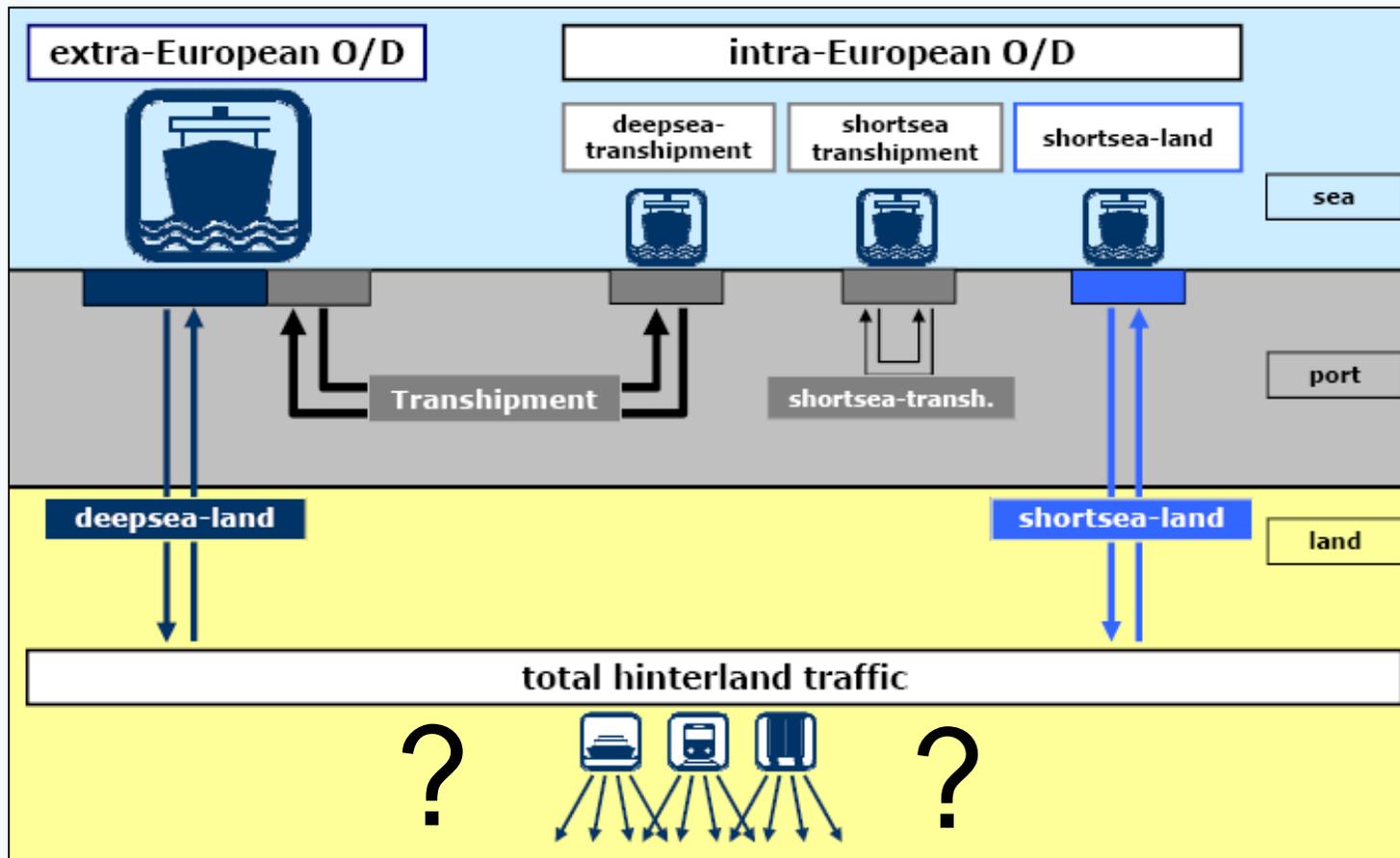


European Container  
Traffic Model



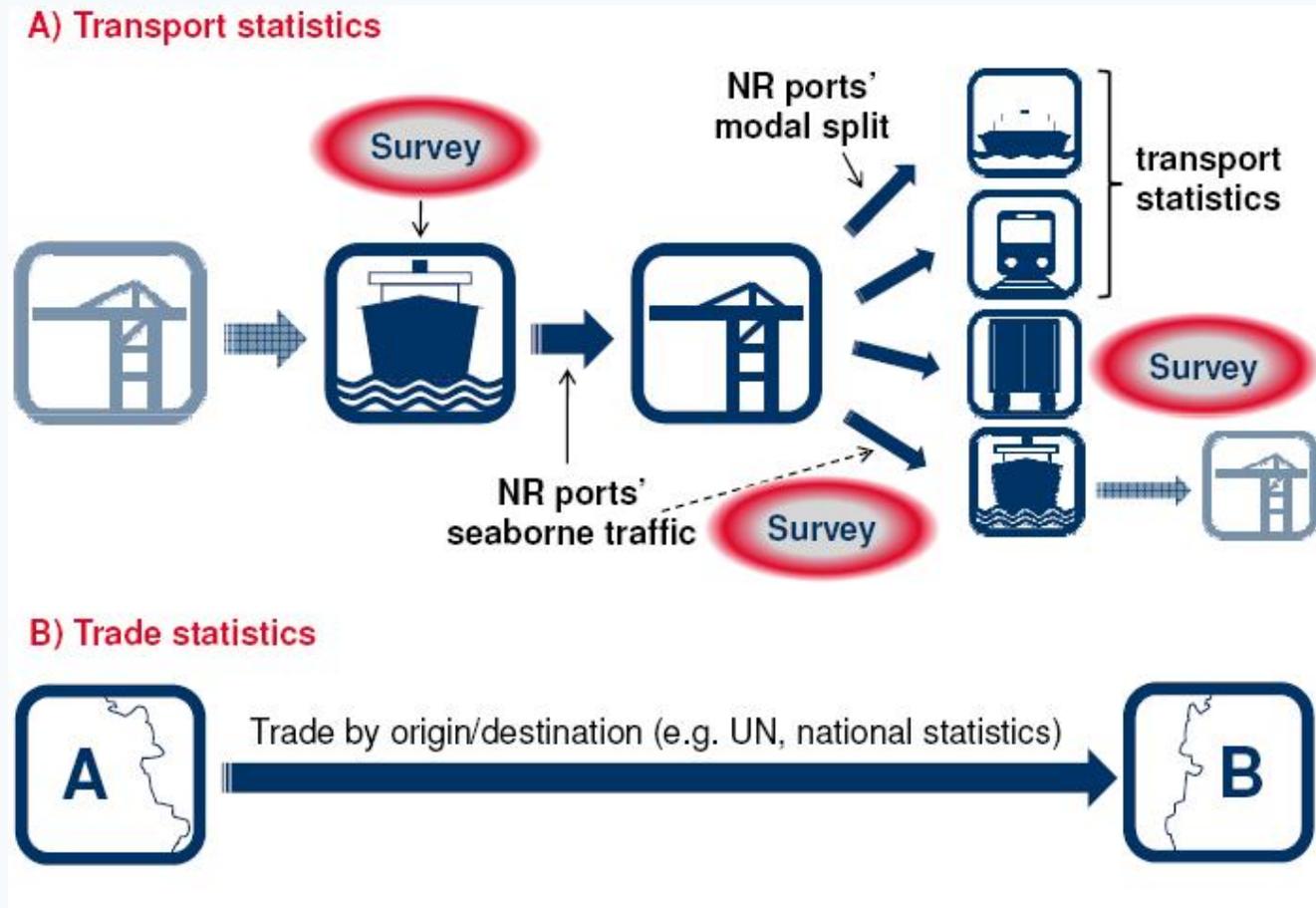


# 1.1. The share of European Container Traffic Model





## 1.2. Data sources for seaborne and hinterland container traffic





## 1.2. Data sources for seaborne and hinterland container traffic

### Modal split statistics from the ports:

- “ distribution of hinterland traffic by modes
- “ for some ports: modal split by hinterland regions



### Transport statistics:

- “ distribution of hinterland traffic by regions for barge and rail
- “ truck traffic: not available or only available for transport companies registered in the respective country



### Surveys:

- “ Extra/intra-European container traffic
- “ ISL Shortsea Shipping Survey
- “ share of transshipment by corresponding ports/regions
- “ distribution of hinterland traffic by regions for truck
- “ modal splits per region
- “ expert interviews / plausibility checks





## 1.3. Data sources of general economic indicators

Quarterly updated trade forecasts based on

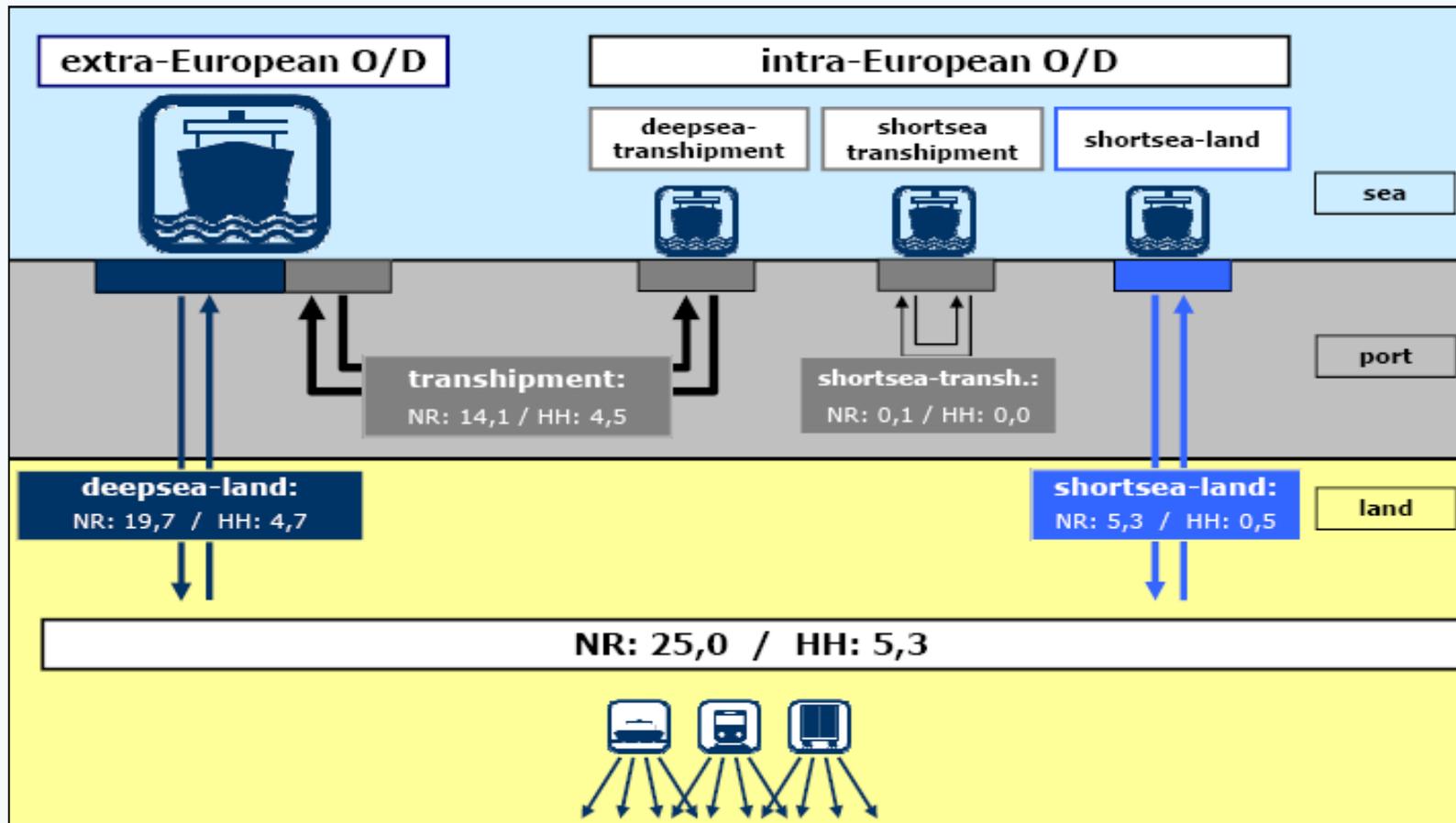
1. Forecasts of general economic indicators by country
  2. Industry forecasts
  3. Expertise from country or regional experts and industry sources
1. Feedback from customers using the service



**forecast of trade matrices for commodity groups:  
countries of origin *x* countries of destination *x* commodity groups**



## 2. Analysis of containerised cargo flows (NR ports, Hamburg in 2008)





## 2.1. Split of total traffic

Structure of cargo traffic for each North Range port and market share (2005/2008)

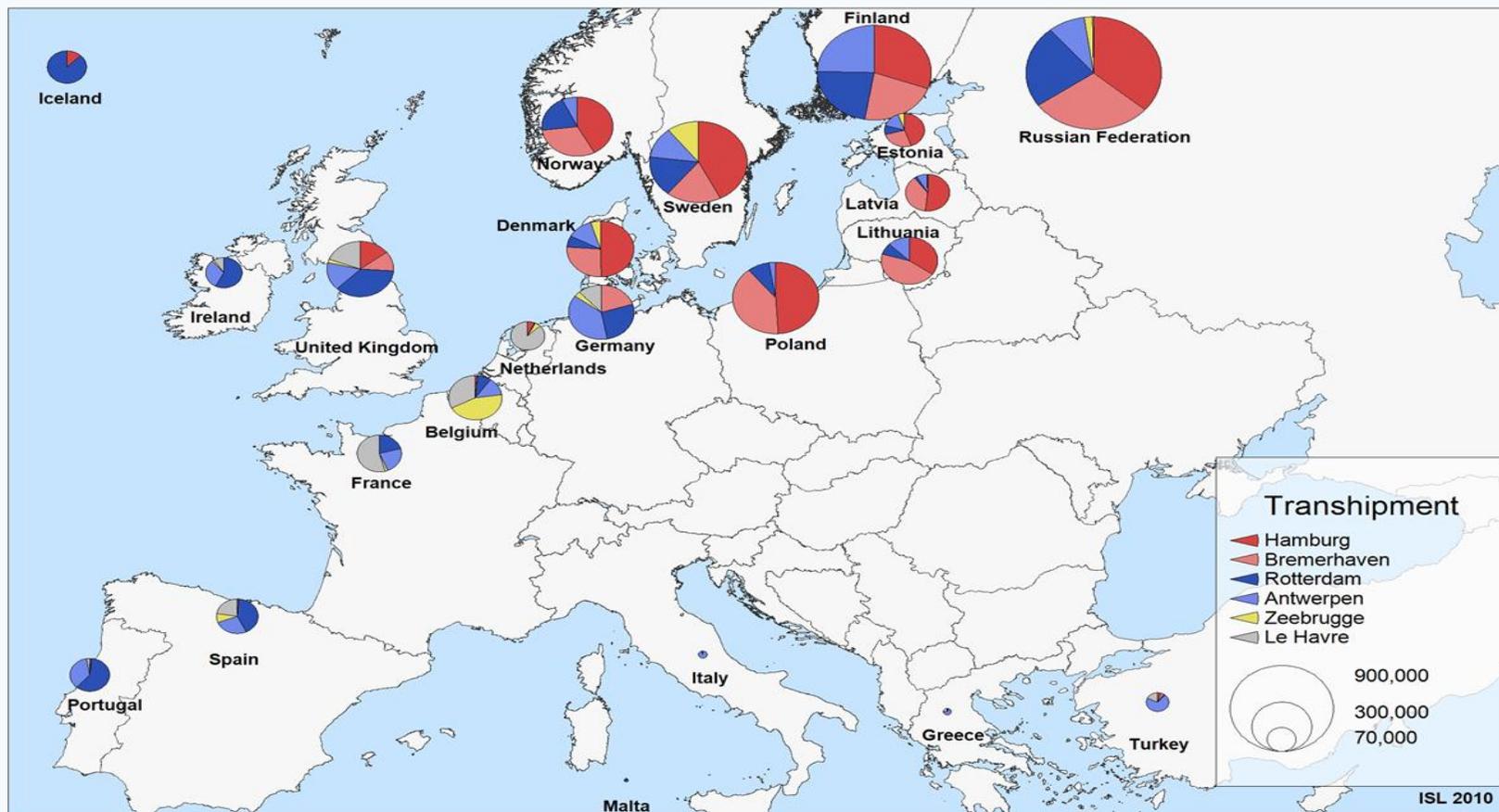
Häfen	Deepsea-Land			Shortsea-Land			Transshipment			Gesamt		
	2005 <sup>r</sup>	2008	Ø WR	2005 <sup>r</sup>	2008	Ø WR	2005 <sup>r</sup>	2008	Ø WR	2005 <sup>r</sup>	2008	Ø WR
Hamburg	3781	4752	7,9%	477	548	4,8%	3837	4469	5,2%	8095	9769	6,5%
Bremen/Bhv.	1189	2007	19,1%	146	248	19,2%	2404	3229	10,3%	3739	5483	13,6%
Rotterdam	4958	5623	4,3%	2090	2013	-1,2%	2180	3029	11,6%	9228	10665	4,9%
Antwerpen	4225	5102	6,5%	927	1328	12,7%	1330	2148	17,3%	6482	8578	9,8%
Zeebrügge	383	722	23,6%	764	916	6,2%	261	572	29,8%	1408	2210	16,2%
Le Havre	1112	1466	9,6%	161	185	4,7%	845	838	-0,3%	2119	2489	5,5%
<b>Gesamt</b>	<b>15648</b>	<b>19672</b>	<b>7,9%</b>	<b>4565</b>	<b>5237</b>	<b>4,7%</b>	<b>10858</b>	<b>14284</b>	<b>9,6%</b>	<b>31071</b>	<b>39194</b>	<b>8,0%</b>

<sup>r</sup> auf Basis von neuen Befragungsergebnissen revidierte Ergebnisse



## 2.1. Split of total traffic

Structure of cargo traffic into shortsea-land and transhipment in 2008





## 2.1. Split of total traffic

### Structure of cargo traffic and market share (Hamburg, NR) 2005 /2008

Fahrtgebiete	Hamburg				übr. Nordrangehäfen				Gesamt		
	1000 TEU		Marktanteil		1000 TEU		Marktanteil		1000 TEU		Ø WR
	2005 <sup>r</sup>	2008	2005 <sup>r</sup>	2008	2005 <sup>r</sup>	2008	2005 <sup>r</sup>	2008	2005 <sup>r</sup>	2008	05-08
Ostsee	1.891	2.165	48,0%	39,2%	2.049	3.360	52,0%	60,8%	3.941	5.526	11,9%
<i>Nord-/Westeuropa</i>	<i>1.171</i>	<i>1.059</i>	<i>50,5%</i>	<i>37,5%</i>	<i>1.147</i>	<i>1.765</i>	<i>49,5%</i>	<i>62,5%</i>	<i>2.317</i>	<i>2.824</i>	<i>6,8%</i>
<i>Mittel- und Osteuropa</i>	<i>721</i>	<i>1.106</i>	<i>44,4%</i>	<i>40,9%</i>	<i>902</i>	<i>1.596</i>	<i>55,6%</i>	<i>59,1%</i>	<i>1.623</i>	<i>2.702</i>	<i>18,5%</i>
Nordrange	3	9	0,5%	1,2%	615	755	99,5%	98,8%	618	764	7,3%
Britische Inseln	17	55	3,5%	11,3%	457	431	96,5%	88,7%	474	486	0,8%
Atlantik	1	2	0,3%	0,6%	314	293	99,7%	99,4%	315	295	-2,2%
Mittelmeer/Schwarzes Meer	6	3	7,7%	4,7%	75	68	92,3%	95,3%	81	71	-4,2%
<b>Insgesamt</b>	<b>1.919</b>	<b>2.234</b>	<b>35,3%</b>	<b>31,3%</b>	<b>3.510</b>	<b>4.908</b>	<b>64,7%</b>	<b>68,7%</b>	<b>5.429</b>	<b>7.142</b>	<b>9,6%</b>

<sup>r</sup> auf Basis von neuen Befragungsergebnissen revidierte Ergebnisse



## 2.2. Market shares by hinterland regions (Hamburg, NR)

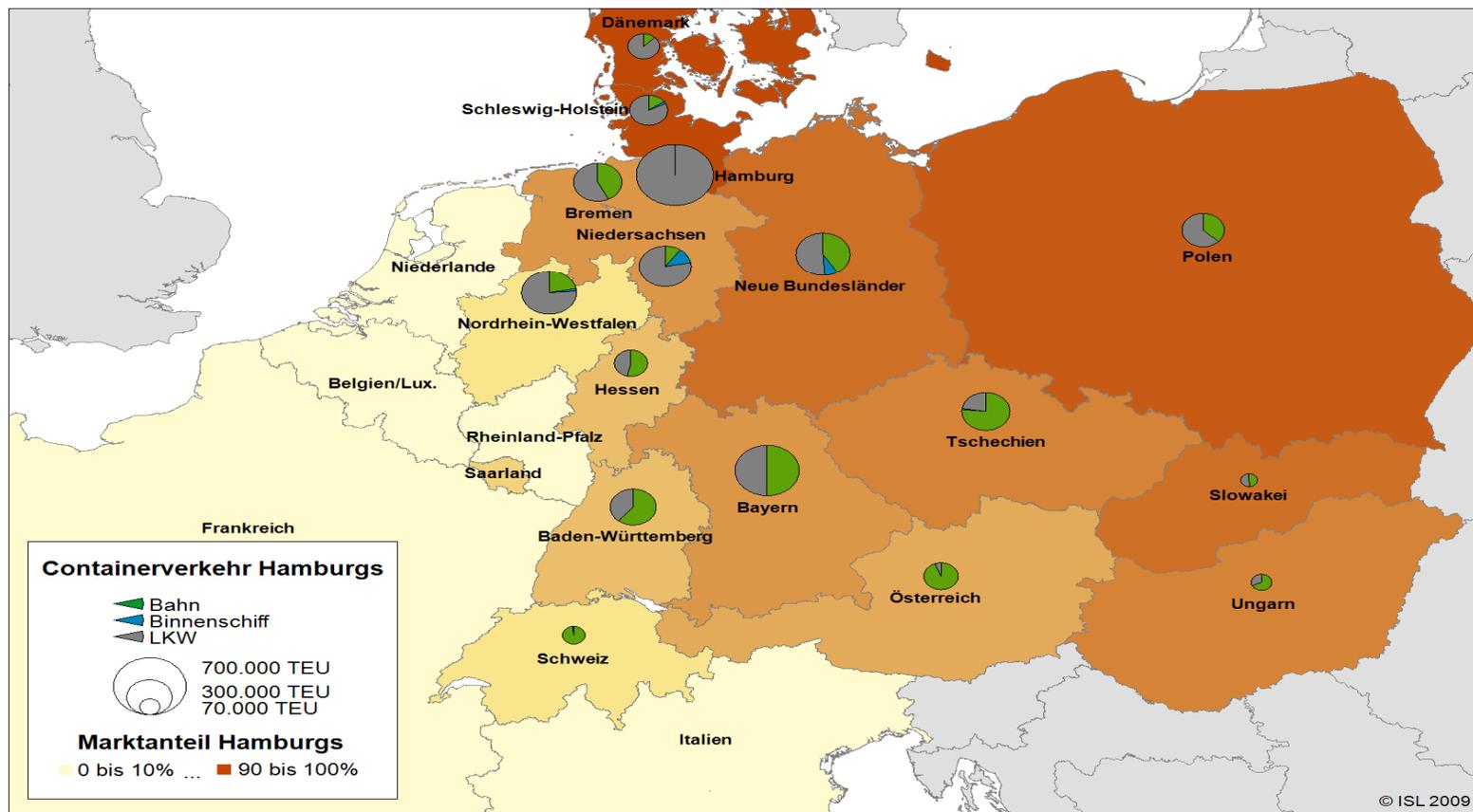
### Modal Split (rail, barge and truck) in 2008

Hinterlandregionen	Hamburg					übrige Nordrangehäfen					Gesamt
	1000 TEU	Marktanteil	Modal Split			1000 TEU	Modal Split			1000 TEU	
			Bahn	Binnen-schiff	LKW		Bahn	Binnen-schiff	LKW		
Polen	282	86%	37%	0%	63%	45	89%	0%	11%	327	
Tschechien	365	70%	77%	1%	23%	158	95%	0%	5%	523	
Slowakei	43	78%	50%	0%	50%	12	96%	0%	4%	55	
Ungarn	66	69%	68%	0%	32%	29	96%	0%	4%	95	
<b>Mittel- und Osteuropa</b>	<b>756</b>	<b>76%</b>	<b>60%</b>	<b>0%</b>	<b>40%</b>	<b>244</b>	<b>94%</b>	<b>0%</b>	<b>6%</b>	<b>1000</b>	
Österreich	186	47%	94%	0%	6%	208	71%	0%	29%	394	
Schweiz	80	17%	98%	0%	2%	397	29%	49%	22%	478	
<b>Alpenländer</b>	<b>266</b>	<b>31%</b>	<b>95%</b>	<b>0%</b>	<b>5%</b>	<b>606</b>	<b>43%</b>	<b>32%</b>	<b>25%</b>	<b>872</b>	
Italien	0	0%	33%	0%	67%	414	85%	0%	15%	414	
Frankreich	1	0%	45%	0%	55%	2947	19%	5%	77%	2948	
Belgien/Luxemburg	1	0%	0%	0%	100%	4832	6%	28%	66%	4833	
Niederlande	3	0%	0%	0%	100%	5238	10%	26%	64%	5240	
Dänemark	157	99%	13%	0%	87%	2	23%	0%	77%	159	
sonstige Länder	0	2%	50%	0%	50%	17	82%	0%	18%	17	
<b>übriges Europa</b>	<b>161</b>	<b>1%</b>	<b>13%</b>	<b>0%</b>	<b>87%</b>	<b>13450</b>	<b>13%</b>	<b>21%</b>	<b>66%</b>	<b>13611</b>	
<b>Insgesamt</b>	<b>5300</b>	<b>21%</b>	<b>36%</b>	<b>2%</b>	<b>62%</b>	<b>19610</b>	<b>17%</b>	<b>23%</b>	<b>59%</b>	<b>24910</b>	



## 2.2. Market shares by Hamburgs hinterland regions

Modal Split (barge, rail and truck) in 2008





## 2.2. Modal Split by Hamburgs hinterland regions

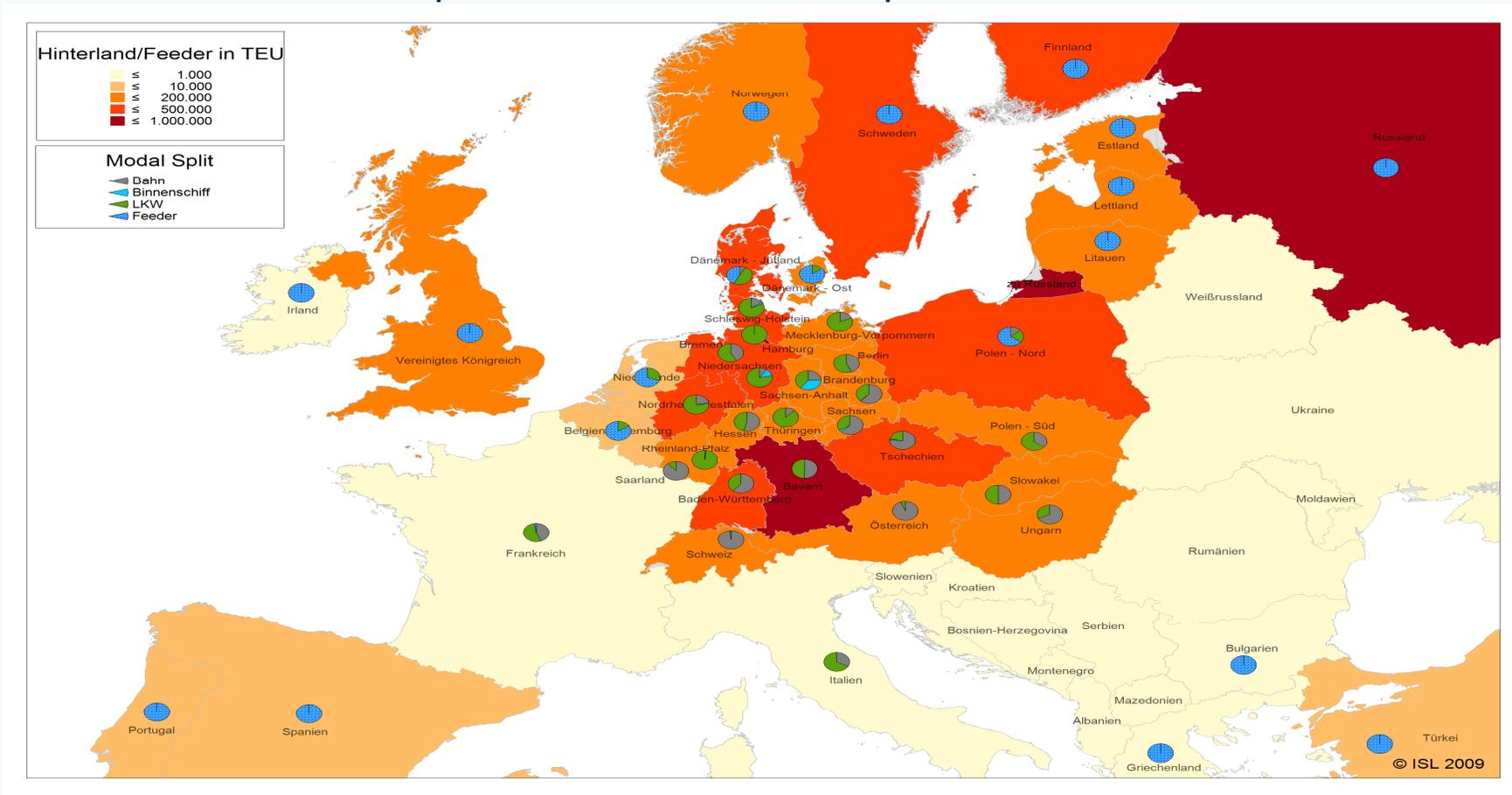
Modal Split (rail, barge, truck and feeder) in 2008 (1.000 TEU)

Hinterlandregionen	1000 TEU	<u>Modal Split (inkl. Feeder)</u>				<u>Anteil an Gesamt</u>	
		Bahn	schiff	LKW	Feeder	Verkehr	Umschlag*
<b>Mittel- und Osteuropa</b>	<b>1862</b>	<b>24%</b>	<b>0%</b>	<b>16%</b>	<b>59%</b>	<b>25%</b>	<b>30%</b>
Polen	588	18%	0%	30%	52%	8%	9%
<i>Polen - Nord</i>	471	13%	0%	22%	65%	6%	8%
<i>Polen - Süd</i>	118	35%	0%	65%	0%	2%	1%
Tschechische Republik	365	77%	1%	23%	0%	5%	4%
Slowakei	43	50%	0%	50%	0%	1%	0%
Ungarn	66	68%	0%	32%	0%	1%	1%
Baltische Staaten	240	0%	0%	0%	100%	3%	5%
Russland	561	0%	0%	0%	100%	7%	11%



## 2.2. Market shares by Hamburgs hinterland regions (2008)

### Container traffic per relation and modal split





### 3. Forecasts of containerised cargo flows ex Hamburg till 2025

Container traffic per relation (1.000 TEU) and growth rate

Fahrtgebiete	Containerumschlag in 1.000 TEU					Jährl. Wachstumsraten				
	2008	2009*	2015	2020	2025	'08-09*	'09-'15	'15-'20	'20-'25	'09-'25
<b>Europa</b>	<b>3138</b>	<b>1947</b>	<b>3491</b>	<b>4558</b>	<b>6065</b>	<b>-38,0%</b>	<b>10,2%</b>	<b>5,5%</b>	<b>5,9%</b>	<b>7,4%</b>
Westeuropa	526	451	633	789	986	-14,3%	5,8%	4,5%	4,5%	5,0%
Nordeuropa	1247	802	1438	1821	2366	-35,7%	10,2%	4,8%	5,4%	7,0%
Mittel- und Osteuropa	1326	661	1380	1901	2658	-50,2%	13,1%	6,6%	6,9%	9,1%
Südosteuropa	38	34	39	46	55	-12,5%	2,7%	3,2%	3,4%	3,1%
<b>Deepsea</b>	<b>6631</b>	<b>5082</b>	<b>8285</b>	<b>10876</b>	<b>14157</b>	<b>-23,4%</b>	<b>8,5%</b>	<b>5,6%</b>	<b>5,4%</b>	<b>6,6%</b>
Nordafrika	68	61	86	103	122	-10,5%	6,1%	3,5%	3,5%	4,5%
Westafrika	67	59	84	98	118	-12,0%	6,0%	3,3%	3,7%	4,4%
Ostafrika	1	0	1	1	1	-12,8%	6,4%	3,4%	3,1%	4,4%
Südafrika	52	46	63	72	86	-11,6%	5,4%	2,8%	3,4%	4,0%
Nordamerika	358	249	365	438	524	-30,4%	6,6%	3,7%	3,7%	4,8%
Mittelamerika	69	51	76	89	105	-25,8%	6,8%	3,2%	3,4%	4,6%
Südamerika	438	335	515	601	705	-23,3%	7,4%	3,1%	3,2%	4,8%
Westasien	390	342	477	578	692	-12,3%	5,7%	3,9%	3,7%	4,5%
Südostasien	1323	1068	1624	2019	2487	-19,3%	7,2%	4,4%	4,3%	5,4%
Nordostasien	3818	2830	4943	6818	9251	-25,9%	9,7%	6,6%	6,3%	7,7%
Ozeanien	47	40	52	59	67	-15,3%	4,4%	2,7%	2,7%	3,3%



### 3. Forecasts of containerised cargo flows ex Hamburg till 2025

Hinterland regions (mill TEU) and growth rate

Hinterlandregionen	Mio. TEU					Järl. Wachstumsrate		Anteil an Gesamt	
	2008	2009*	2015	2020	2025	2008-2009	2009-2025	2009*	2025
Deutschland	4,1	3,7	5,3	6,7	8,5	-10,8%	5,4%	78%	77%
übr. West- und Nordeuropa	0,4	0,4	0,5	0,7	0,8	-11,9%	4,9%	8%	7%
<i>Österreich</i>	0,2	0,2	0,2	0,3	0,3	-12,6%	4,6%	4%	3%
Mittel- und Osteuropa	0,8	0,7	1,0	1,4	1,8	-12,3%	6,3%	14%	16%
<i>Tschechien</i>	0,4	0,3	0,5	0,7	0,9	-12,0%	6,5%	7%	8%
<i>Polen</i>	0,3	0,2	0,4	0,5	0,7	-11,9%	6,3%	5%	6%
<b>Hinterland gesamt</b>	<b>5,3</b>	<b>4,7</b>	<b>6,8</b>	<b>8,7</b>	<b>11,1</b>	<b>-11,1%</b>	<b>5,5%</b>	<b>100%</b>	<b>100%</b>



**Thank you for your attention!**

## **Contact**

HPA Hamburg Port Authority AöR

Neuer Wandrahm 4

20457 Hamburg

[www.hamburg-port-authority.de](http://www.hamburg-port-authority.de)

Marco Hofmann

Tel.: +49 40 42847-3041

E-Mail: marco.hofmann@hpa.hamburg.de