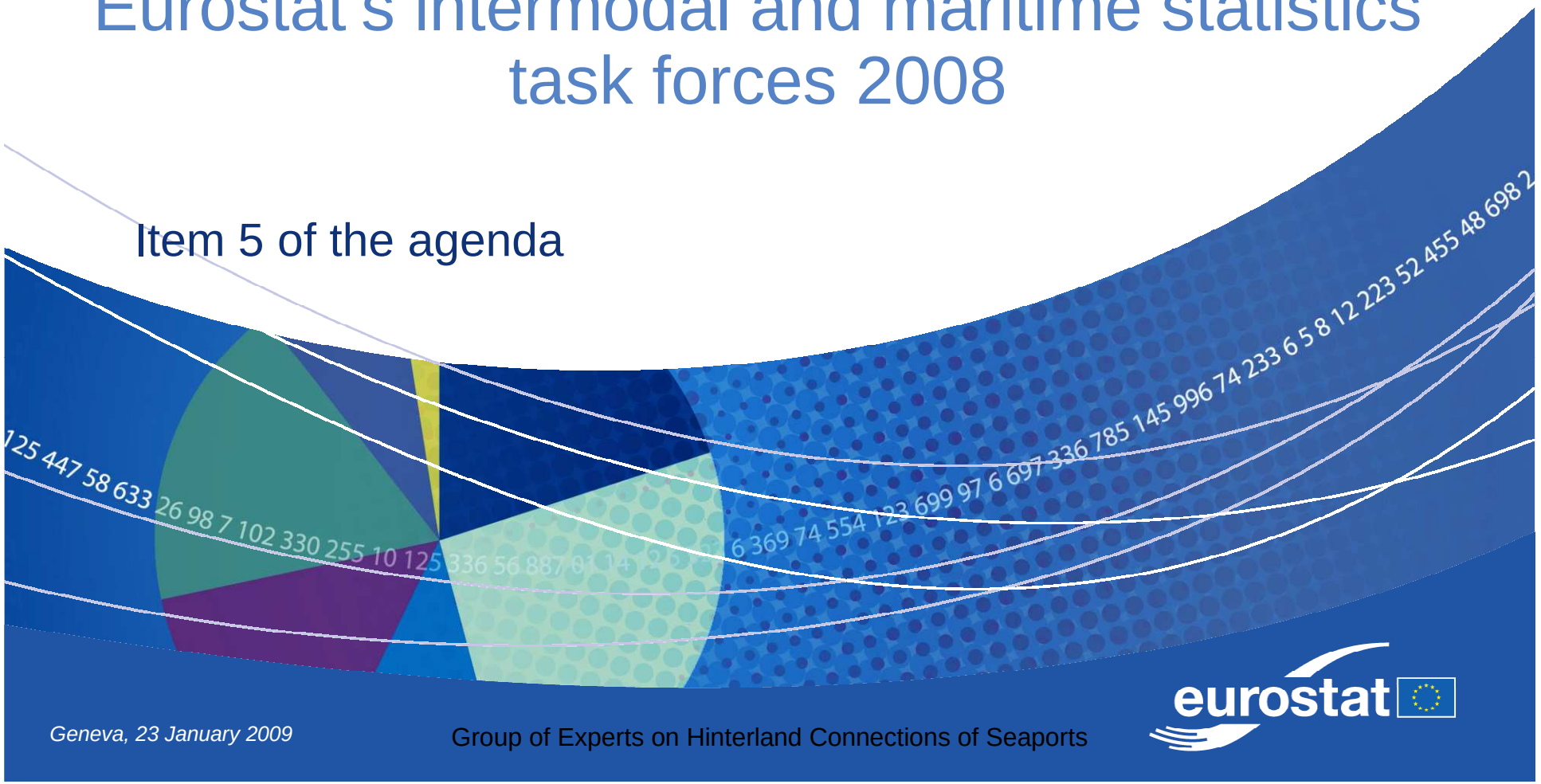
Statistical initiatives

Eurostat's intermodal and maritime statistics task forces 2008

Item 5 of the agenda



Geneva, 23 January 2009

Group of Experts on Hinterland Connections of Seaports

eurostat

Overview of the presentation

- What data are currently collected and needed?
- Eurostat's strategy for intermodal freight data
- Existing intermodal data collections
- Developments of maritime transport statistics
- Options
- Conclusions and the way forward

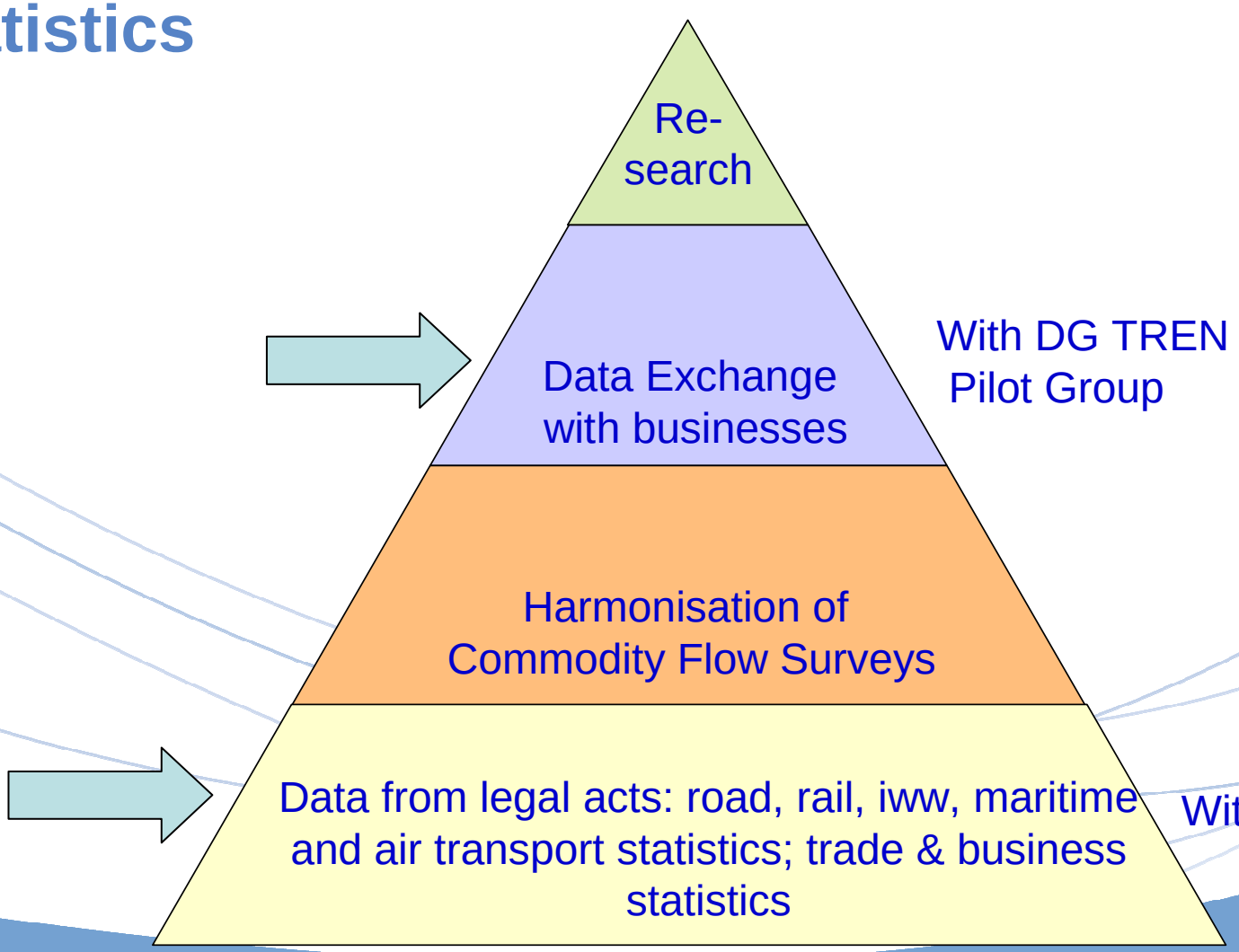
What data are currently collected?

Mode	Legal basis	Data on port hinterland?
Sea freight	Dir. 95/64/EC	Goods loaded and unloaded in ports, by type of cargo, origin/destination overseas
Road freight	Reg. 1172/98	Goods loaded and unloaded in NUTS-3 regions, by type of goods and cargo (sample)
Rail freight	Reg. 91/2003	Goods loaded and unloaded in NUTS-2 regions every 5 years; country level type of goods and cargo
Inland waterways freight	Reg. 1365/2006	Goods loaded and unloaded in NUTS-2 regions; type of goods and container
Air freight	Reg. 437/2003	Goods and mail loaded and unloaded at airports; origin/destination airports

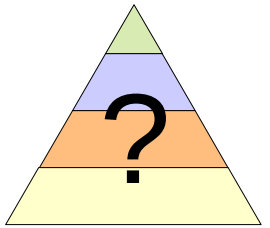
What is missing?

- Information on previous or next mode of transport, in particular on intermodal transport units (containers, swap-bodies and (semi-)trailers ("transport chains")
  - Sea ports
  - Inland freight terminals (road, rail and inland waterways)
- Performance in transhipment terminals, for example, waiting times
- Criteria behind modal choice: How to make rail, inland waterways and sea transport more attractive to complement road freight?

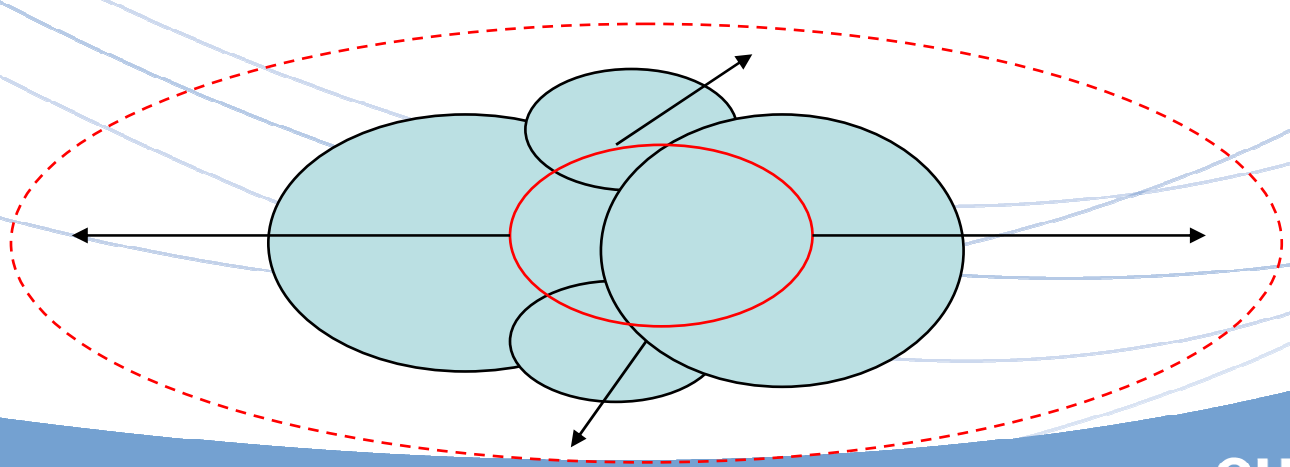
Eurostat's strategy for intermodal transport statistics



Eurostat's role in the future



- Re-orientation: from "intermodal transport statistics" to "logistics and co-modality indicators"
  - "Intermodal transport" is a restricted phenomenon of freight transport (defined: "transport and handling of boxes over several modes")
  - "Logistics and co-modality" is a ubiquitous way of thinking



Existing intermodal data collections and projects

- Commodity Flow Survey/Shippers' survey
  - Sweden
  - France
  - USA
- Compilation of detailed unimodal transport statistics
  - Germany
- Identification of goods in containers
  - The Netherlands
- Port hinterland survey
  - UNECE wp.5/wp.24

Commodity Flow Survey/Shippers' survey

Report burden U.S.: **805 000 hours**

Table 5: Burden-Hour Estimates for Selected BLS and Census GPS/R Surveys of Businesses in Fiscal Year 1998

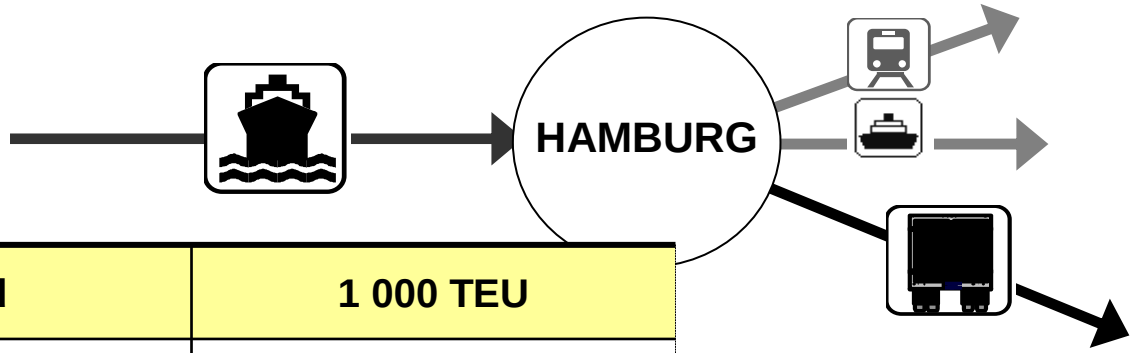
Survey	Est. survey completion time (minutes)	Survey frequency	Est. number of respondents (thousands)	Est. annual burden hours (thousands)
Bureau of Labor Statistics				
Occupational Injuries and Illnesses Survey	54	Annually	230	207
Multiple Worksite Report	10 to 60	Quarterly	113	167
Current Employment Survey	2 to 15	Monthly	437	596
Annual Refiling Survey	5 to 15	Annually	2,086	203
Occupational Employment Survey	45	Annually	337	251
Producer Price Index				
Initial Visit	120	Once	(6)	(13)
Monthly Repricing	5 to 30	Monthly	27	378
Total			**3,230**	**1,802**
Bureau of the Census				
SED	3 to 11	Each shipment	159	1,316
Economic Census of Manufactures	120 to 360	Once every 5 years	210	762
Economic Census of Wholesale Trade Sector	70	Once every 5 years	540	634
Economic Census of Transportation/ Commodity Flow Survey	120	Quarterly during a 1-year period every 5 years	100	805
Economic Census of Retail Trade	46	Once every 5 years	1,291	993
Economic Census of Professionals	37	Once every 5 years	1,443	900
Economic Census of Utilities	74	Once every 5 years	625	766
SMOBE/SWOBE	10	Once every 5 years	2,500	417
Total			**6,868**	**6,593**
Total for BLS and Census			**10,098**	**8,395**

Compilation of detailed unimodal transport statistics

- Germany uses the following elements to compile intermodal transport statistics
  - Maritime transport statistics
  - National rail freight transport statistics
  - National inland waterways transport statistics
  - Road freight transport survey
  - Expert interviews in harbours

Less burden

Example Hamburg: Outgoing (final leg) by road



Final leg by road	1 000 TEU
Total	2 364
by German road vehicles total	1 891
of which	
to Hamburg	887
around Hamburg [1])	576
other parts of Germany	244
foreign countries	184
by foreign road vehicles	2364-1891 = 473

51,2 %

Source: Uwe Reim's presentation

Identification of the contents of containers

- Pilot project in the Netherlands: 60% of the contents of containers can be identified using free text search of EDIFACT messages
- Container id can link maritime transport of containers to inland transport.

UNECE port hinterland statistics

- Guidelines on port hinterland connections to UNECE member states' governments:
  - Survey
  - Conference in Piraeus

Task Force on Maritime Transport Statistics (October 2008)

- **Joint meeting with Inter-modal and Logistics Task Force**
  - The Dutch research merging Trade and Transport Statistics
  - The German compilation of intermodal data:
    - -- to estimate movements of cargo in ports, covering all the modes (ports as logistics hubs)
    - -- possibility to estimate "transhipment" ➔ to improve data breakdown in Short Sea Shipping to better monitor modal shift and co-modality
- Cooperation with team in charge of developing a **socio-economic database** to support the EU maritime policy ("blue book" October 2007)
- Cooperation with **EMSA, ESPO, ECSA, UNECE:**
  - to join efforts
  - to avoid duplication of work
  - specific cooperation (examples):
    - -- ESPO is working on the Ro-Ro standard measurement unit
    - -- EMSA: safety indicators, centralised vessel database (?)

Task Force on Maritime Transport Statistics (2009)

- Follow up of recent and new developments, including:
  - System of Trade and Transport Statistics
  - Transhipment
  - goods in containers
  - use of container number
  - centralised vessel database
  - sources and methods
  - Ro-Ro standard measurement unit
  - Cooperation; EMSA, ESPO, ECSA, UNECE, Others

Options: Share of unitisation

A0 - Share of unitised freight transport (per country and year, in million tkm)				
	Road	Rail	Inland waterways	Sea
20 ft containers				
40 ft containers				
Swap-bodies				
Other units				
Trailers and semi-trailers (unaccompanied)				
Road freight vehicles (accompanied)				

Options: Co-modality

B0 - Co-modality in freight transport

National transport	Share of weight (%tonnes)	Share of value (%euro)	Share of performance (%tonne-km)	Share of consignments (%nbr)
Road				
Road and sea				
Air or air and road				
Railways or railways and road				
Inland waterways or iww and road				
Sea				
Other				
TOTAL				
International transport - outbound	**Share of weight (%tonnes)**	**Share of value (%euro)**	**Share of performance (%tonne-km)**	**Share of consignments (%nbr)**
Road				
Road and sea				
Air or air and road				
Railways or railways and road				
Inland waterways or iww and road				
Sea				
Other				
TOTAL				
International transport - inbound	**Share of weight (%tonnes)**	**Share of value (%euro)**	**Share of performance (%tonne-km)**	**Share of consignments (%nbr)**
Road				
Road and sea				
Air or air and road				
Railways or railways and road				
Inland waterways or iww and road				
Sea				
Other				
TOTAL				

Options: Port/terminal container balance sheets

C0 - Port container balance sheet (1000 TEU)

Port of Hamburg 2005	"Seabound"	"Hinterlandbound"
Road	2104	2174
Rail	658	849
Inland waterways	50	44
Sea	1067	1139
Other		
TOTAL	**3879**	**4206**
Net loaded/unoaded in the port		327

Options: Freight transport logistics indicators

D0 - Freight transport logistics indicators

	Road	Rail	Inland waterways	Sea
Transport performance (tonne-km)/traffic performance (vehicle-km)				
Energy costs (€)/transport performance (tonne-km)				
Personnel costs (€)/transport performance (tonne-km)				
Value added (€)/transport performance (tonne-km)				

Conclusions (1)

- As the main conclusion, the needs and the uses for additional statistics must be identified and well justified.
- Several participants of the Task Force meeting showed interest towards compiling unitised transport data, collected under road, rail, inland waterways and maritime statistics, similarly to the German method
  - No extra burden to undertakings
  - Full exploitation of the existing data
  - Focus on the major transhipment centres

Conclusions (2)

- Commodity Flow/Shippers' surveys were generally feared because of their extra burden to undertakings
  - Still, why do the USA continue with Commodity Flow Surveys?
- The complementarity of the current transport statistics on one hand and other surveys (shippers' survey, survey of warehouses) on the other was highlighted by several participants.
- The proposal on logistics indicators was not yet considered as sufficiently elaborated and well justified.

The way forward…

1. DG TREN will elaborate an inventory of needs and uses of data on intermodal freight transport, co-modality and freight transport logistics indicators.
2. Eurostat will draft the Mandate of the Task Force
3. The next meeting of the Task Force will be convened after the approval of the Mandate
    1. The first meeting will focus on needs and uses of the data (e.g. transport modelling)
    2. Work could be split into two lines: (1) statistics on transhipment terminals (2) logistics performance indicators

Mandate for the intermodal freight Task Force

- Some ideas…
  - Investigation into **the needs and uses** of the data on intermodal transport, co-modality and logistics performance indicators; data needs in transport modelling
  - Recommendations for **compiling existing data**, with focus on transhipment terminals ("the German method")
    - Impact on data collections covering unimodal transport
    - Impact on European unimodal transport statistics and data transmission to Eurostat
  - Identification of **complementary data collections** and use of these additional data to Eurostat statistics
  - Investigation into **production of logistics performance indicators**
    - Scope of logistics performance indicators inside transport statistics
    - Selection of a short list of indicators
    - Recommendation for production and distribution of roles within European Statistical System

THANK YOU
FOR
YOUR ATTENTION