

Parallel Workshop 1 –  
Methods to determine  
the CO<sub>2</sub> emissions from  
inland navigation

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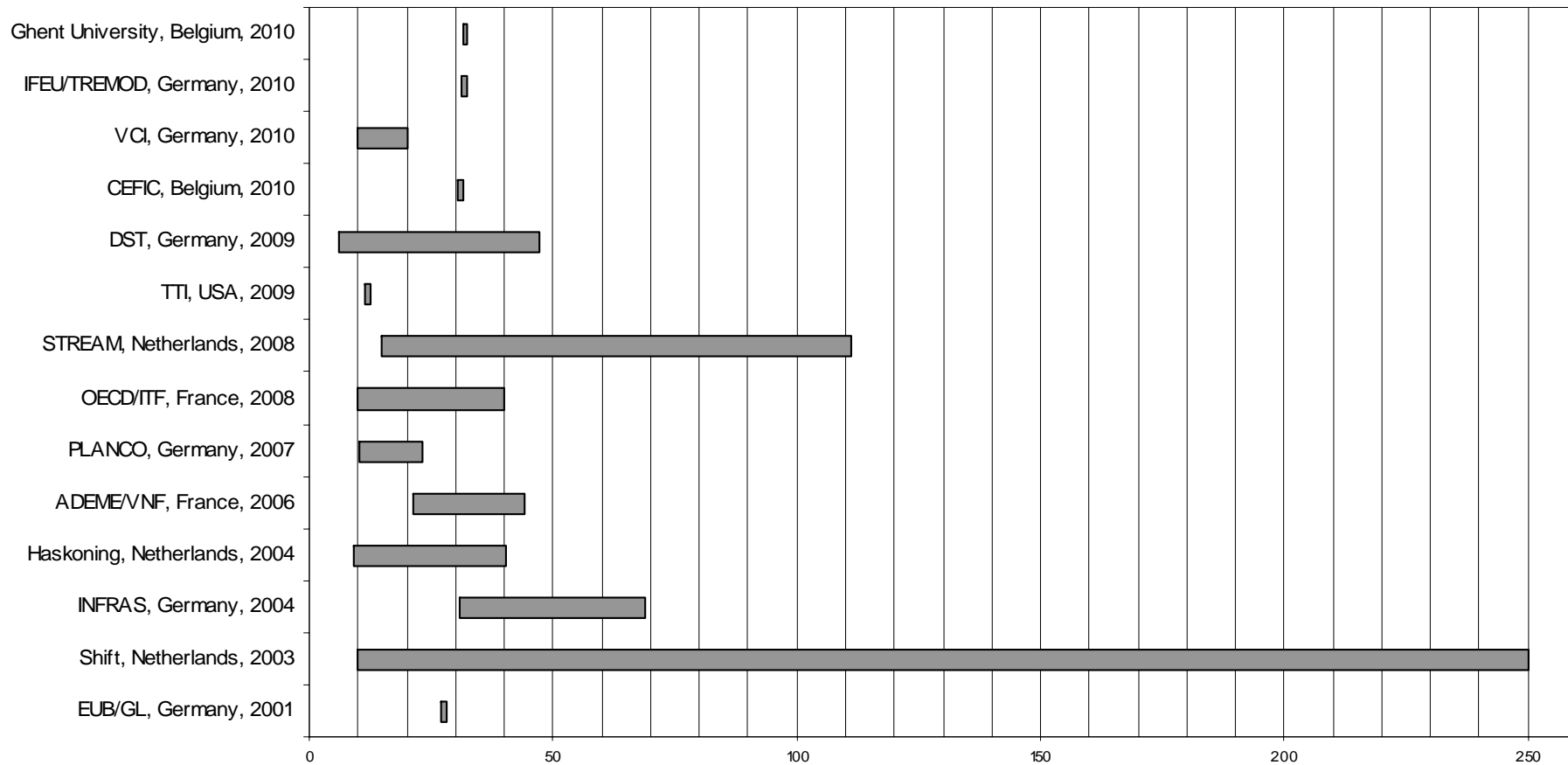
General Secretary, Inland Navigation Europe (INE)

Strasbourg, April 12th, 2011

# Too many studies?



**Figures of different studies for the CO<sub>2</sub>-intensity (CO<sub>2</sub> emission factors) of inland navigation (g/tkm)**



# Presentation 1: Standardizing methodology



## **Standardization of a common methodology for the calculation, declaration and reporting on energy consumption and GHG emissions of transport services**

*Marc Cottignies, ADEME*

### **Main messages of presentation**

- Complexe exercise horizon 2012
- First step with limited scope - No emission values
- Methodology for transport companies
- Input asked on CEN enquiry drafts [www.enquetes-publiques.afnor.org](http://www.enquetes-publiques.afnor.org)
- FR legislation planned to inform on carbon footprint for each transport service (in force mid 2013)

## Presentation 2: CO<sub>2</sub> chemical transport



### Measuring and managing CO<sub>2</sub> emissions of European chemical transport

*Jos Verlinden, CEFIC*

#### Main messages of presentation

- Corporate CO<sub>2</sub> reduction incl. transport due to increasing pressure from policy makers and general public
- Most companies still in the learning phase but growing awareness
- No silver bullet to reach CO<sub>2</sub> targets: combination of actions and intensive collaboration among all public and private stakeholders necessary
- Raising logistics efficiencies and reducing costs in most cases = carbon reduction
- Work for CO<sub>2</sub> footprinting with available values from literature
- Need for more detailed IWT emission factors & validation of values

# Presentation 3: Tool for CO<sub>2</sub> policy making



## Monitoring and assessment tool for CO<sub>2</sub> emissions in inland transport

*Romain Hubert, UNECE*

### Main messages of presentation

- Web assessment tool worldwide
- No new methodology, based on selection of existing methodologies
- Transport policy convertor for impact calculation
- Creation of capacity building workshops

# Presentation 4: Environmental performance



## Environmental performance of inland navigation in comparison with other modes

*Eelco den Boer, CE Delft*

### Main messages of presentation

- Policy support study for modal shift, therefore including detouring and pre- and end haulage
- IWT important carbon reduction mode, but this strongly depends on the specific link, scale of transport and vehicle utilization
- Road transport on the heels of IWT or better regarding air pollutants

# Presentation 5: Calculation CO<sub>2</sub> emissions



## Calculation of CO<sub>2</sub> emissions for a comparison of transport modes

*Frank Trosky, PLANCO Consulting*

### Main messages of presentation

- Policy support study for modal shift
- Uni-modal approach comparing each mode
- Beware of averages: lot of determining factors
- Do not forget the other greenhouse gases
- Vessel size and size of the waterway are most important factors for ecological efficiency
- IWT important carbon reduction mode

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## Main conclusions

- Broad range in CO<sub>2</sub> factors due to different parameters, values and methodologies
- Current approaches still have limited scope due to knowledge gaps
- It is a complex field in development
- Industry often uses an activity-based approach, while a fuel consumption-based approach is more accurate



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## **Main conclusions** (continued)

- Need for 3 types of methodologies:
  - Assessment of fuel consumption by ships (based on real values/EEOI)
  - Carbon footprinting for logistics decision-making (multi-modal) and sector decision-making (intra-modal) - CEN standard
  - Method for policy development and decision-making
- EU level expert exchange, research and neutral validation needed for more detailed and accurate IWT emission relevant data and emission factors which are generally accepted through scientific and stakeholder validation