CENTRAL COMMISSION FOR THE NAVIGATION OF THE RHINE
COMMISSION CENTRALE POUR LA NAVIGATION DU RHIN
ZENTRALKOMMISSION FÜR DIE RHEINSCHIFFFAHRT
CENTRALE COMMISSIE VOOR DE RIJNVAART

Sustainable Inland Navigation – The Regulatory Framework

Gernot PAULI

Chief Engineer of the Central Commission

Strasbourg, 19th January 2011


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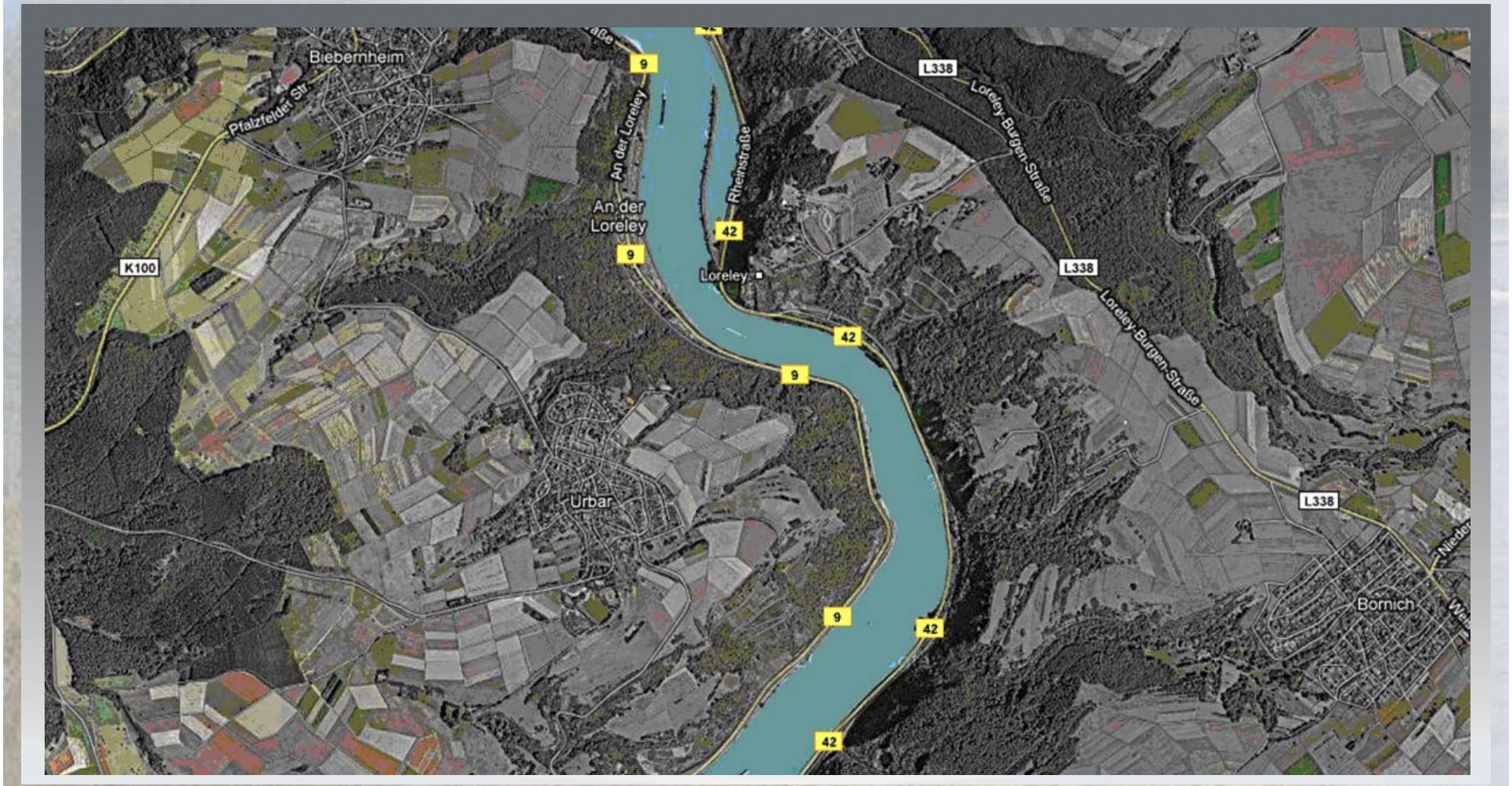
Content of the presentation

- Tanker accident MV Waldhof 13.1.2011 on the Rhine
- Regulatory framework for inland navigation (technical regulations)
- Regulations and sustainability
- Key sustainability issues

Tanker accident MV Waldhof 13.1.2011 – background information



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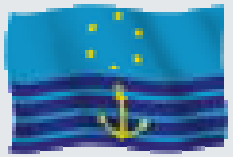
Tanker accident MV Waldhof 13.1.2011– background information

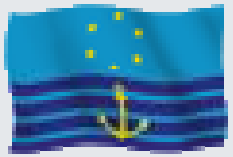


- Middle Rhine (Bingen to Koblenz)
- UNESCO World Cultural Heritage
- Difficult to navigate (bends, currents)
- Traffic management system in place
- High water at time of accident
- Modern vessel, German owner
- Full load (2500 tons) of sulfuric acid

Tanker accident MV Waldhof 13.1.2011– current status

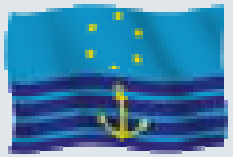
Foto: Holger Weinandt

Tanker accident MV Waldhof 13.1.2011– current status



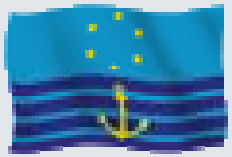
- Sudden capsize, no other vessel involved
- Cause of accident to be investigated
- 2 of 4 crew missing
- No cargo leakage
- Position of vessel unstable (local erosion) *
- Navigation interrupted in both directions
- Salvage equipment to arrive within 5 days

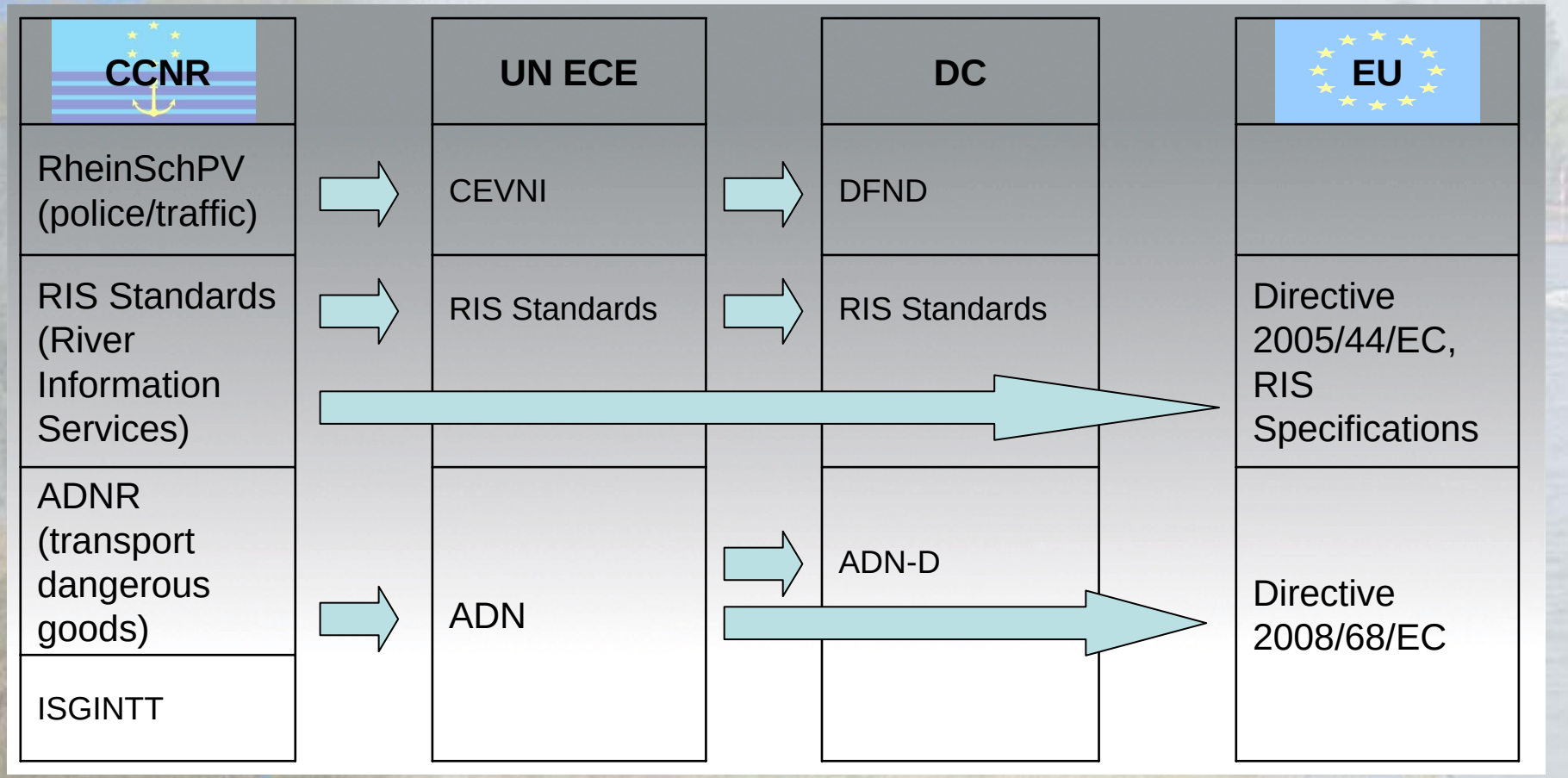
Technical regulations (recommendations) for inland navigation in Europe (1/2)



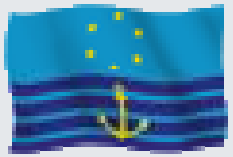
CCNR	EU	UNECE	DK
RheinSchUO (technical requirements for vessels)	Directive 2006/87/EC	Resolution 61	Recommen-dation
Air pollutants regulations	Directive 97/68/EC	Resolution 61	Recommen-dation
Requirements for Radar	Directive 2006/87/EC, EN 320 194		
Requirements for Navigation Lights	Directive 2006/87/EC, EN 14744		

Technical regulations (recommendations) for inland navigation in Europe (2/2)



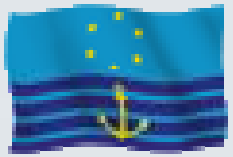


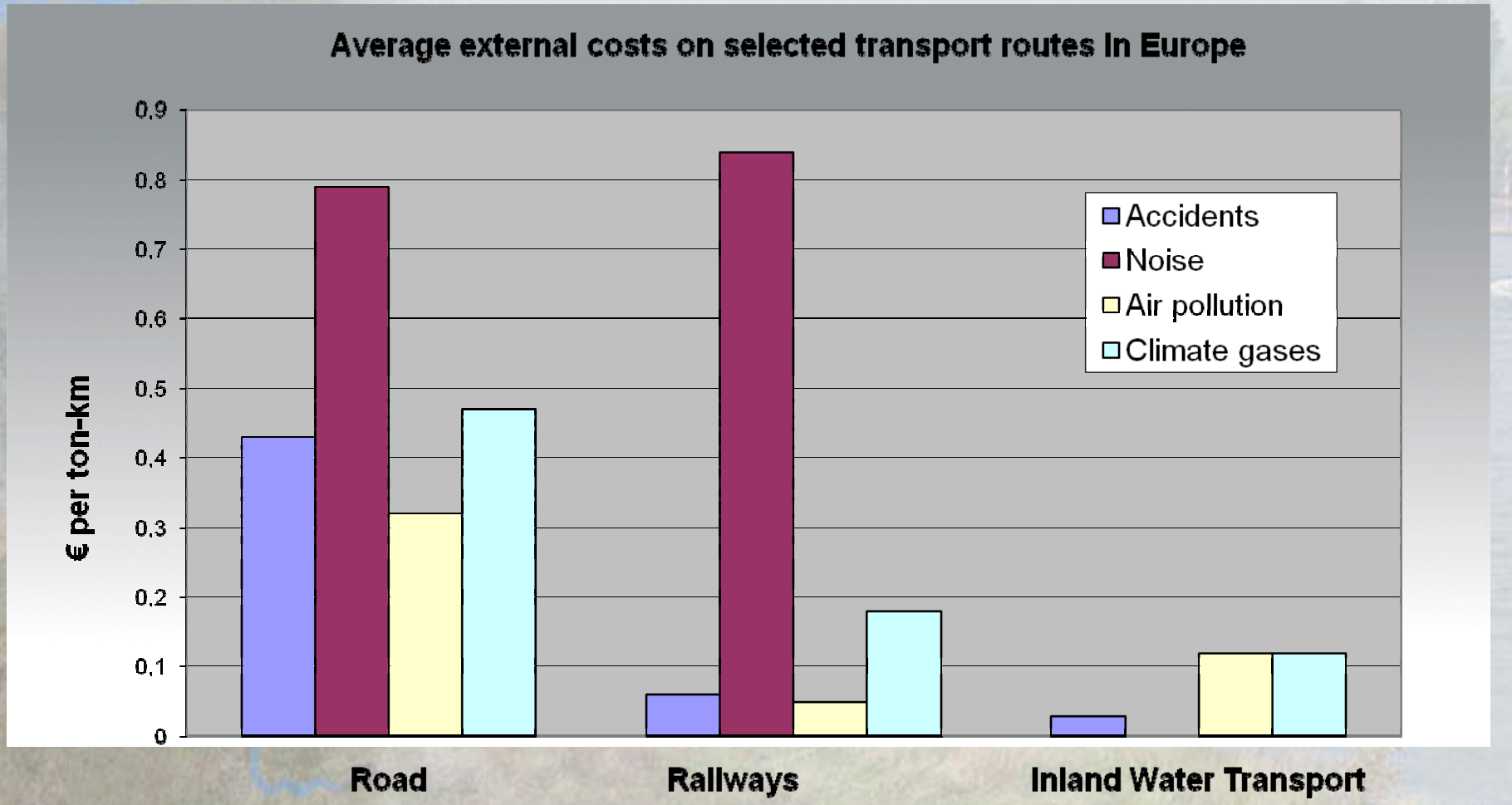
Environmental objectives of regulations concerning inland navigation



Regulations	Objectives
River Information Services (CCNR Standards, 2005/44/EC)	Safety
Police / traffic (RheinSchPV)	
Transport of dangerous goods (ADN, 2008/68/EC)	
Technical requirements vessels (RheinSchUO, 2006/87/EC)	
Waste Disposal (CDNI)	
Air pollution (RheinSchUO, 97/68/EC)	
Fuel quality (2009/30/EC)	
Water / nature protection (2000/60/EC, 92/43/EEC)	Environmental sustainability

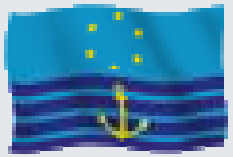
Inland navigation – more sustainable than other modes of transport

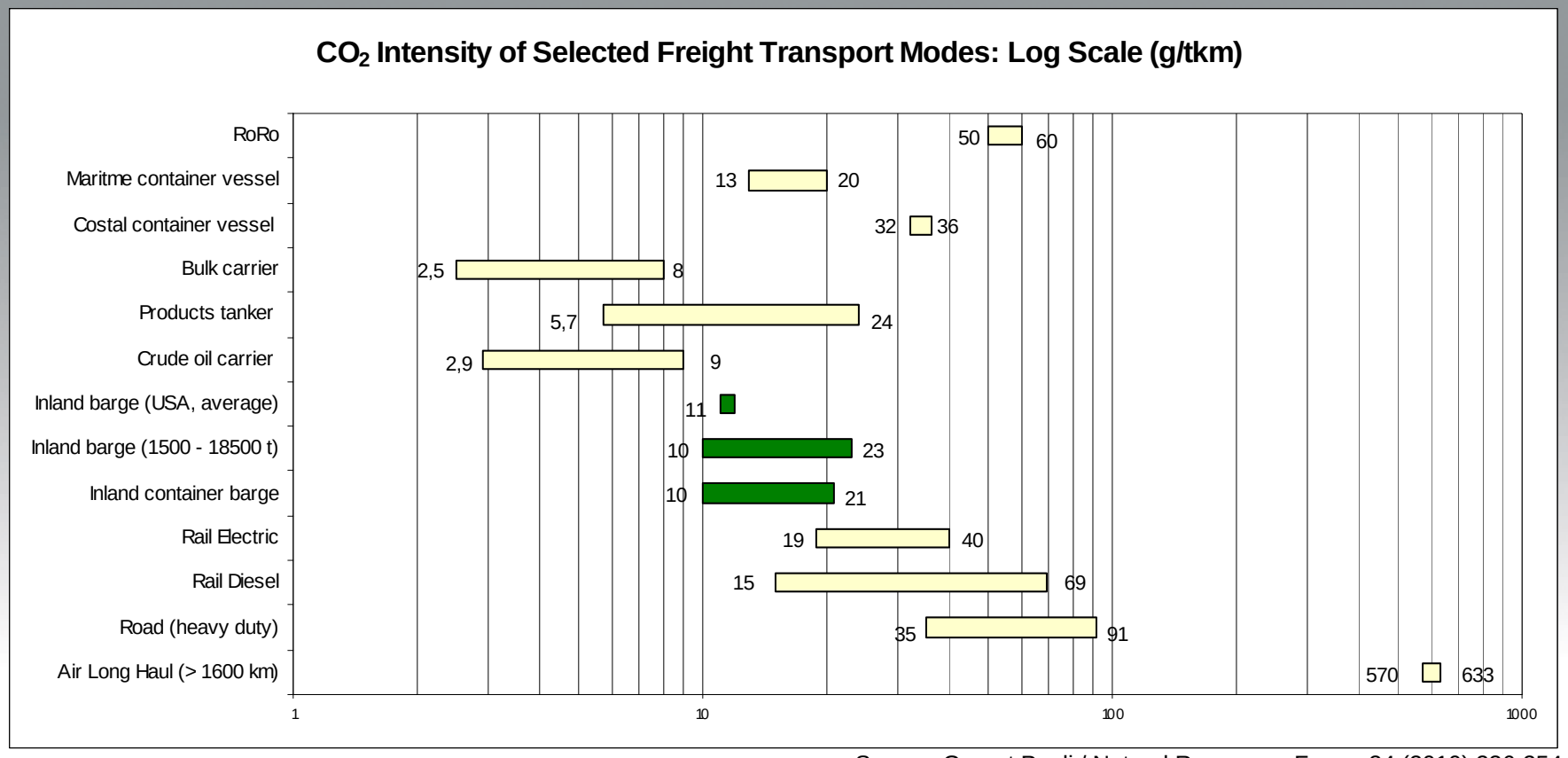




Source: PLANCO, Verkehrsträgervergleich, 2007, Essen

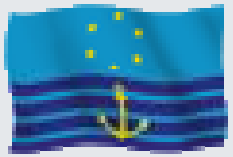
Inland navigation – smallest carbon footprint in land transport





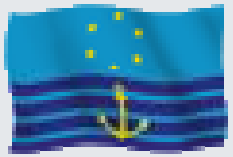
Source: Gernot Pauli / Natural Resources Forum 34 (2010) 236-254

Inland navigation – perspectives for alternative fuels



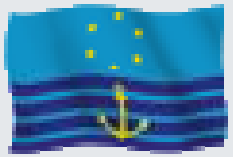
- Current situation: 99% mineral oil based fuels
  ⇨ unsustainable resource use
- Medium term: natural gas, electric propulsion
  ⇨ less CO_2, less pollutants, unsustainable
- Long term: bio fuels (liquid, gas), hydrogen (fuel cells) ⇨ most likely sustainable
- In 2011 CCNR adaptation of regulatory framework to enable use of alternative fuels

Inland navigation – reducing the impact on the aquatic environment



- Cooperation with river protection commissions (ICPR, ICPDR)
- Contributing to implementation of Water Framework and FFH Directives
- Support of new instruments (PIANC: “Working with Nature”, DG ENV + DG MOVE: “Working Group on Rivers”)
- Encouraging examples

Conclusions



- Inland navigation not without accidents, but safer than other modes of transport
- Up-to-date regulatory framework needed for safe transport
- Inland navigation not yet sustainable, but more sustainable than other transport modes
- Modern regulatory framework supports shift to sustainable transport

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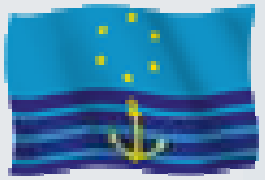

Thank you for your attention!

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