



Central Commission for the Navigation of the Rhine

Workshop
Inland Navigation CO₂ emissions
How to measure them? How to reduce them?
April 12th, 2011
Strasbourg, Palais du Rhin

Programme of Parallel Workshops

Short information about the historic wine cellars

For over six centuries, until 1999, wine was made in the historic cellars of the Hôpital de Strasbourg. Since then, an association of over thirty winemakers have given the tradition a new lease of life.

This agricultural collective has, together with the Strasbourg Hôpital Civil, organised the restoration of the cellars so as to be able to age a selection of their regional wines in the traditional manner.

The wines of the Strasbourg Hospital have a soul, they symbolize the tradition of the greatest Alsatian wines. Ancestral knowledge, the diversity and the beauty of the Alsace.

<http://www.vins-des-hospices-de-strasbourg.fr/fr>

Meeting point on April 11th:

5.50 p.m.: CCNR, Palais du Rhin, 2 Place de la République

or

6.15 p.m.: Hôpital Civil, 1 place de l'hôpital Civil, at the entrance "Porte de l'Hôpital", (Tram A, Stop "Porte de l'hôpital")

Please let us know

- which Parallel Workshop you would like to assist
- if you would like to join us for the visit of the historic wine cellars of the Strasbourg Hospice at April 11th, 2011. (The costs of about 10 € per person shall be borne by the participants.)

You can let us know per Email or per phone.

Email: co2-iwt@ccr-zkr.org

Tel.: 00 33 (0)3 88 52 20 11

The highly topical focus of this workshop is to determine the amount of inland navigation CO₂ emissions and examine measures to reduce them.

Due to the complexity of this issue and the rapid development of measures, the topics will be debated in four parallel workshops. For a programme of each workshop, see verso. Every workshop will consist of four or five presentations and their discussion. The results of the discussions will be brought together in a conclusive event for which all groups will convene together.

The Secretariat of the CCNR will issue each participant with a number of questions, also visible at www.ccr-zkr.org. These should help structure the discussions during the workshops and also the Secretariat will collect the answers and make them available to government and industry. By doing this, the Secretariat hopes to support future work concerning CO₂ emissions of inland navigation

We also want to remind you that on the eve of the workshop participants have the opportunity to visit the historic wine cellars of the Strasbourg Hospice and to taste wines from the Alsace.

Workshop Inland Navigation CO₂ emissions

Parallel Workshop 1 - Methods to determine the CO₂ emissions from inland navigation

Chair: Karin de Schepper, Secretary-General, INE – Inland Navigation Europe, Brussels

- **Standardization of a common methodology for the calculation, declaration and reporting on energy consumption and GHG emissions of transport services**
Marc Cottignies, ADEME, Valbonne
- **Measuring and managing CO₂ emissions of European chemical transport**
Jos Verlinden, CEFIC, Brussels
- **Monitoring and assessment tool for CO₂ emissions in inland transport**
Romain Hubert, UNECE, Geneva
- **Environmental performance of inland navigation in comparison with other modes**
Eelco den Boer, CE Delft
- **Calculation of CO₂ emissions for a comparison of transport modes**
Frank Trosky, PLANCO Consulting, Essen

Parallel Workshop 2 - Hydrodynamic measures to reduce the CO₂ emissions from inland navigation

Chair: Juha Schweighofer, via donau - Österreichische Wasserstraßen-Gesellschaft, Vienna

- **CO₂ reduction by fleet modernisation and improvement of transport efficiency, considering effects of shallow water**
Thomas Guesnet, DST- Entwicklungszentrum für Schiffstechnik und Transportsysteme, Duisburg
- **CO₂ emission reduction by hull form optimisation using CFD (Computational Fluid Dynamics)**
Karola van der Meij, MARIN - Maritime Research Institute Netherlands, Wageningen
- **Air lubrication as a means to reduce cost and CO₂ emissions of inland shipping**
Peter van Terwisga, Damen Shipyards Group, Gorinchem
- **CO₂ emission reduction by diesel-electric propulsion with contra rotating propellers**
Hideki Shuto, IHI Marine United, Capelle aan den IJssel

April 12th, 2011

Parallel Workshop 3 - Propulsion-related measures to reduce the CO₂ emissions from inland navigation

Chair: Henk Croo, Commissioner of the Belgian Delegation to the CCNR, Berchem

- **Options for the minimizing CO₂ emissions from inland navigation engines by reducing fuel consumption and using alternative fuels**
Peter Scherm, EUROMOT – The European Association of Internal Combustion Engine Manufacturers, Frankfurt
- **LNG as a fuel for inland navigation – challenges and solutions**
Bert de Vries, Holland Shipbuilding Association, Zoetermeer
- **Reduction of CO₂ emissions by diesel-electric propulsion system for an existing cargo vessel**
Claus-D. Christophel, Torque Marine IPS, Hamburg
- **Reduction of CO₂ emissions by diesel-electric propulsion system for a new built cabin vessel**
Peter Andersen, e-powered marine solutions, Hamburg
- **Reduction of CO₂ emissions by heat recovery from inland navigation engines**
Marcel Flipse, Voith Turbo, Heidenheim

Parallel Workshop 4 - Operational measures to reduce the CO₂ emissions from inland navigation

Chair: Ivo ten Broeke, Commissioner of the Dutch Delegation to the CCNR, Rotterdam

- **The Energy Efficiency Indices of the IMO (design/operation) – useful tools also for inland navigation?**
Torsten Mundt, Germanischer Lloyd, Hamburg
- **CO₂-reduction of inland navigation in the Netherlands**
Martin Koopmans, Ministry of Infrastructure and the Environment, The Hague
- **Reduction of fuel consumption by using automatic navigation systems**
Alexander Lutz, University Stuttgart
- **Operational measures to reduce fuel consumption in inland navigation**
Desire Savelkoul, Autena Marine, Nijmegen
- **CO₂ reduction due to "topography orientated" voyage-planning and navigation – Prerequisites of ship handling simulators as training tool**
Olaf Kammertöns, DST- Entwicklungszentrum für Schiffstechnik und Transportsysteme, Duisburg