European River Cruising

Greening measures and ecological aspects of river cruises

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Members represent more than 70% of the European River Cruise Industry

Scope of Activities:
- Nautical + Technical Regulations
- Tax Issues + Administrative Law
- Safety Regulations + Training
- Social Standards
- Sustainability + Environmental Protection
Cruise Tourism

Ocean Cruises

- Length: Ø 200 m
- Breadth: Ø 26 m
- Capacity (LB): Ø 1,290 passengers

(European) River Cruises

- Length: Ø 108 m
- Breadth: Ø 11 m
- Capacity: Ø 143 passengers

Source: SeaConsult Databases
A Typical River Cruise Vessel

Length:
- 110 m / ~ 130-150 passengers
- 135 m / ~ 160-200 passengers

Draft: 1,6 m

Beam: 11,45 m

Air draft: 6,0 m

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Regions of River Cruising
Important Rivers within Europe

<table>
<thead>
<tr>
<th>River Cruise Vessels vs. Merchant River Vessels</th>
<th>Ca. Number of Vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>River Cruise Vessels</td>
<td>260</td>
</tr>
<tr>
<td>River Merchant Vessels</td>
<td>12,000</td>
</tr>
</tbody>
</table>

Source: IVR (2011), BdB, SeaConsult Databases

http://www.noble-caledonia.co.uk/images/rivers/europe_large.gif
Key Data:
European River Cruise Fleet

• Ca. 260 River Cruise Vessels

• Data of “the average” river cruise vessel:
  – Passengers: 143 (lower berth)
  – Average age: 17 years

• European Orderbook (2014):
  – Amount of vessels: 28 vessels
  – Average amount of passengers: 170

Source: SeaConsult Databases
Orderbook for European Waterways
(per annum; 2005 - 2014)

Source: SeaConsult Databases
Development of Total International River Cruise Passengers (all river cruise regions worldwide)

Sources: DRV, PSA, ICCA, Viking River Cruises projections, *figures estimated

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Source Market Shares on European Rivers 2012

(Estimated)

GER 37%
UK 15%
US* 30%
FR* 10%
CH* 3%
A* 3%
AUS 2%
NZ 0.3%

~ 840,000 PAX

Sources: ICCA, PSA, DRV, Viking River Cruises,*figures estimate

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River Cruise
Impact on European Economy

- > 12,000 direct jobs onboard
- > 10,000 jobs involved outside vessels
- > €1,1 bn. newbuilding investment within two years (2013 - 2014)
- **Passenger Expenditure** (Cruise only & Onboard Revenue) ca. €1,3 bn.
- **Shoreside Expenditure** (Shopping, Restaurants, etc.) ca. €0,5 bn.
GREENING MEASURES AND ECOLOGICAL ASPECTS OF RIVER CRUISES
Responsible River Cruising

Output Water:
- Zero Discharge of Waste Water
- Clean Output due to Sewage Treatment Plant
- Non hazardous underwater Conservation
- Harmless Ballast Water Discharge due to short Distances

Output Air:
- Lower Emissions by Diesel Usage only
- Shore Power Supply
(dependent on availability and sufficient power output)

Output Land:
- Onboard Waste Treatment Plant
- Usage of Recyclables
- Preparation of Waste for Shore side Handling

Safety:
- Separated Engine Rooms
- Water tight Compartments
- Safe Return to Port

Solar Energy

Strictly regulated by international administrations (examples):
Central Commission for the Navigation of the Rhine, Danube Commission and national Governments

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Handling of Air Emissions

**Fuel used** (examples)
- Ultra-low-sulfur diesel (ULSD) with a maximum of 10 ppm (10 ppm = 0,001%)
- Gasoil DIN 590

**Option of Shore Power**
- Increasing amount of shore power facilities within Europe (ca. 35 facilities in 2011)
  - Problems:
    - Consistent provision of sufficient power still a problem
    - Pier may be part of flood protection area
    - Varying systems for connection do exist
    - Length of cables often not sufficient
Handling of Waste and Sewage of a Cruise Vessel

Regular Waste
• Coverage of waste reception possibilities is sufficient
  – Problem: Different cities = varying processes/systems of waste separation

Toxic Waste (oil, excrements, sludge, ...)
• Disposal only with specialized and commissioned companies (not regularly available)
  – Problems:
    • Only few companies in the market
    • Companies often only located in larger cities

Sewage
• New vessels are mostly equipped with sewage treatment facilities
• Older vessels usually are not equipped with adequate facilities
  – Problems:
    • Strictness of regulations/policies varies in different regions (countries)
    • Documentation of sewage disposal (often) required
Age Structure of the European River Cruise Fleet
(according to amount of vessels)

- 27% younger than 5 years
- 18% 5-9 years
- 22% 10-14 years
- 12% 15-24 years
- 8% 25-34 years
- 6% 35-44 years
- 3% 45-54 years
- 4% older than 54 years

Source: SeaConsult Databases
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Infrastructure Demands
of the River Cruise Industry

• **Touristic Demands**
  – Pier / Quay close to city center
  – Easy accessibility for busses and taxis

• **Operational Demands**
  – *Standardized & adequate*
    • Waste Reception Facilities
    • Sewage Handling Facilities
    • Shore-side Power Supply / alternative options
    • Accessibility (e.g. for Disabled passengers or Ship Supply)
    • Fresh water supply
    • Bunker supply
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Thank you!

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