

Measures promoting alternatives to the road and intermodal terminals

PIARC Technical Committee C2.4

Hans Silborn, Norway

Wanda Debauche, Belgium

Csaba Orosz, Hungary

Jean-Charles Poutchy-Tixier, France

Martin Ruesch, Switzerland

Based on PIARC strategic plan

The report complies with the two themes in PIARC strategic plan 2003-2007 which are aimed to face the increase in freight transport:

- Range of the solutions envisaged as alternatives to freight movement by road
- Key aspects of intermodal terminals to facilitate improvement of freight capacity

Scope

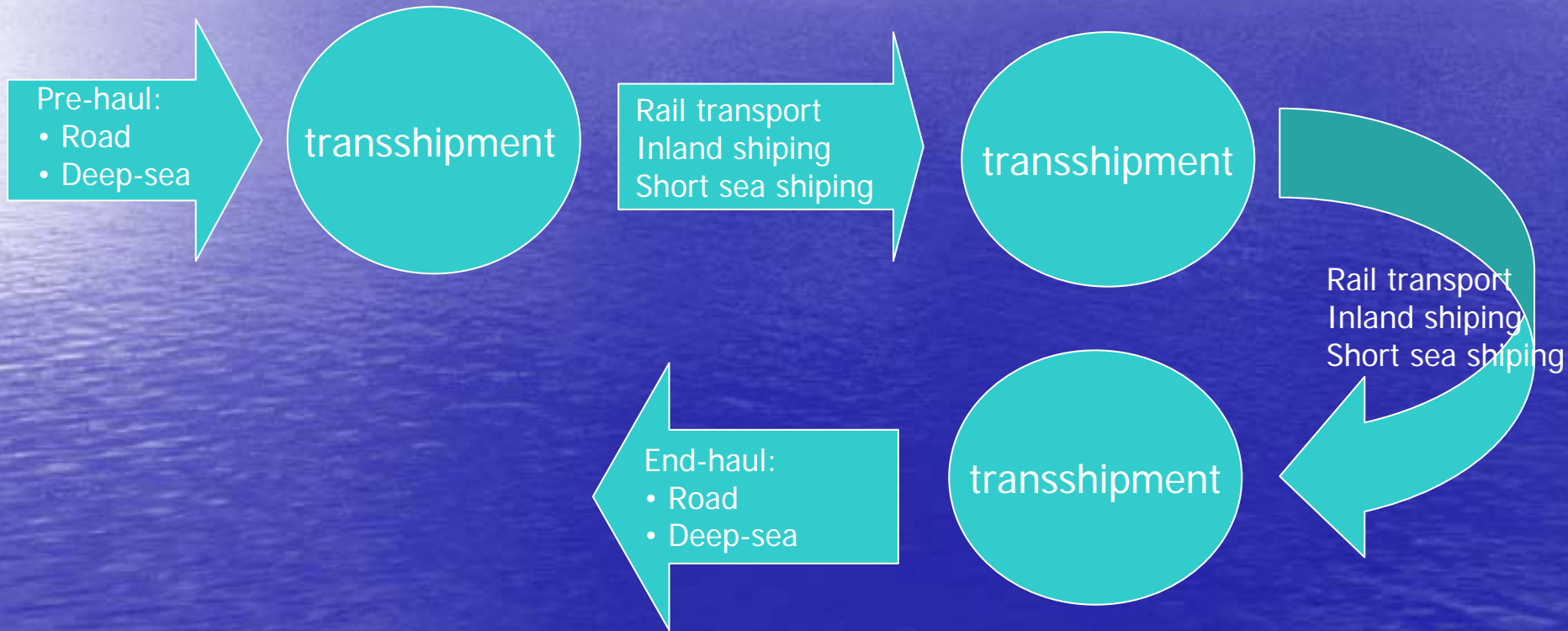
- Heavily increasing freight transport on road, with negative environmentally impacts, stresses the need for an effective intermodal transport network as an alternative to road freight transport
- To overcome obstacles to intermodal transport this report focuses on governmental measures promoting intermodal transport

What is intermodal transport

- “The movement of goods in one and the same loading unit or vehicle which uses successively two or more modes of transport without handling of the goods themselves in changing modes” (UNECE)



Intermodal chain



Main barriers and key problems

- **Organisational barriers**
 - Low degree of cooperation between involved actors
 - Unclear responsibility for intermodal transport and terminals
- **Operational, logistical and service related barriers**
 - Lack of integrated commercial services throughout the international logistics chain
 - Lack of slots for railway freight transport
 - Lack of security
 - Poor performance of the railway system
- **Infrastructural barriers**
 - Missing infrastructure links (railway tracks, port and terminal infrastructure)
 - Bad access to freight terminals
- **Technical barriers**
 - Lack of standardisation and harmonisation
- **Financial and economical barriers**
- **Political barriers (framework conditions)**

Why should the public sector support intermodal transport?

- There is a great need for a more balanced modal split to
 - Increase efficiency of freight transport
 - Contribute to more environmentally sustainable freight transport with fewer pollutant emissions
 - Get more safety
 - Reduce congestion problems
- Governmental measures supporting and promoting intermodal transport can lead to a modal shift from pure road transport to intermodal transport chains

Recommended measures to promote intermodal transport

- Intermodal transport has to be considered in national and regional transport policies
- Locations of intermodal terminal have to be secured in national transport plans
- Access to terminals has to be secured by infrastructural and operational measures (road, rail and inland waterway services)
- National authorities have to co-fund intermodal terminals when it is necessary
- Subsidies for intermodal operations in the starting phase
- The performance of each mode should be improved

Recommended measures to promote intermodal transport

- Further international standardization
- Harmonizing of framework conditions
- The communication situation in intermodal transport should be improved
- Co-funding of research and development
- Creating of intermodal development centers
- Improvement of intermodal transport statistics
- Monitoring and controlling effects of measures
- Access to seaports for landlocked countries

Governmental accompanying measures

- Road freight transport regulation on and control of driving hours, weight etc.
- Heavy goods vehicle fees
- Road freight transport management (slot management, reservation systems, information systems etc.)

Best practice

- The report presents best practice mainly from Europe, but also shortly from Africa, Japan and Latin America.
- Development projects of river and waterways transport in Africa show that alternative freight transport modes can be in use also in developing countries.
- Best practice from Japan shows that new intermodal solutions can give a significant reduction of CO₂ emissions.
- There seems to be a connection between governmental support schemes and growth in European intermodal transport. This development has resulted in benefits for the society and the environment, as well as for private sector (but there are very few ex post evaluations).

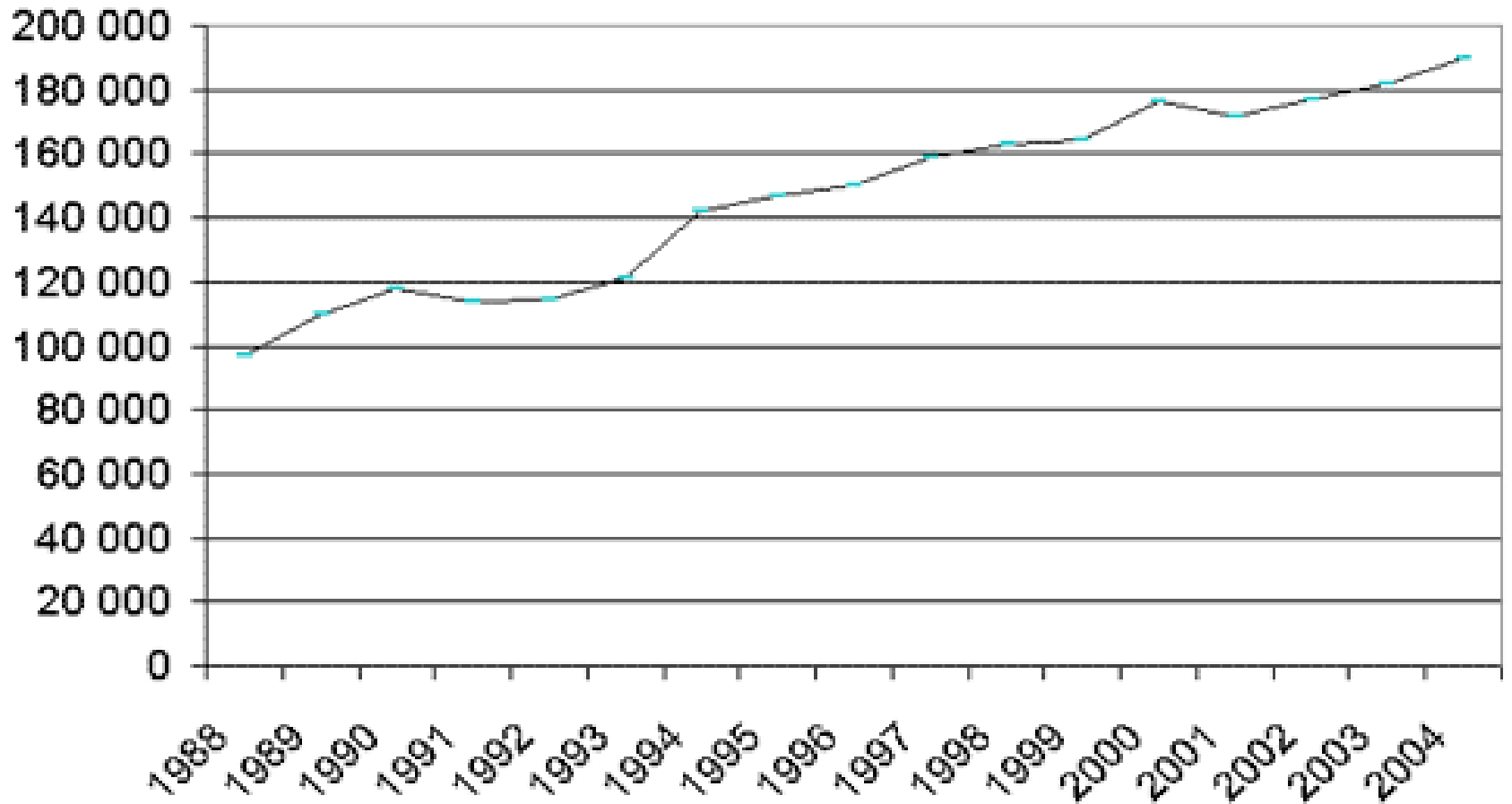
Best practise

Austria	Germany	Italy
Funding of intermodal terminals and infrastructure	Funding of intermodal terminals	Funding of intermodal terminals
Subsidies for intermodal transport through the Alps	Subsidies for equipment to intermodal transport and for operation in a starting phase	Subsidies for intermodal operations on railways and for equipment
Reimbursement of taxes for trucks used in intermodal transport	Exemptions from some rules for trucks in intermodal transport	Many different aid schemes are approved by the EU

Benefits of measures to support intermodal transport

- Improvement in efficiency and quality of intermodal services
- Increasing awareness on intermodal options
- Improvement of road access to freight terminals
- Improvement of cooperation in the intermodal transport chain
- Reduction of costs for intermodal transport

**Growth in combined transport by rail (in thousands of tonnes) –
Total for EU + Switzerland and Norway –
Average annual growth rate: + 5,1% source : UIC**



Benefits of modal shift

- Better use of the capacity of the whole transport system
- Relief from road freight transport
 - reduction of environmental burdens like CO₂-emissions, air pollution and noise
 - Improvement of safety

The report

The report

"Measures promoting alternatives to the road and intermodal terminals"

is available at:

<http://www.piarc.org>

ISBN 2-84060-192-3