

Overview of PIARC TC2.4

STRATEGIC THEME 2、 COMMITTEE (C 2.4)

"FREIGHT TRANSPORT AND INTERMODALITY"

Chairperson : **Eiichi Taniguchi**

1. Overview

Objective

The research work by TC2.4 focuses on...

- a. current status of freight transport in member countries
- b. How challenges regarding freight transport and logistics should be tackled

Committee Members

Members joined from Japan, European countries such as France, Italy, Switzerland, and developing countries such as Mongolia and Burkina Faso

Chairman : Prof. Eiichi Taniguchi Kyoto Univ.

Secretaries : Yoshi Imanishi Public Planning & Policy Studies, Inc.

Jean-Charles POUTCHY-TIXIER, France

Subgroup1 Younoussa KOÏTA, Guinea (Facilitator)

Olivier COLIGNON, France

Jean-Louis GLUME, Belgium

Harouna CISSE, Mali

Mircea NICOLAU, Romania

Emanuele SCOTTO, Italia

Ali TRAORE, Burkina Faso

Subgroup2 Hans SILBORN, Norway (Facilitator)

Csaba OROSZ, Hungary

Jean-Charles POUTCHY-TIXIER, France

Martin RUESCH, Switzerland

Wanda DEBAUCHE, Belgium

Subgroup3 Pieter DE WINNE, Belgium (Facilitator)

Jan FRANCKE, Netherlands

Yoshi Imanishi Public Planning & Policy Studies, Inc.

Anders LUNDQVIST, Sweden

Subgroup4 Baasankhuu MANDUUL, Mongolia (Facilitator)

1. Overview

Meetings and Seminars

6 international technical meetings and 2 seminars were held between 2004 and 2027 period.

Dates and Places of
Technical Committee meetings

Date	Place
20 th – 22 nd , Apr., 2004	Paris (France)
23 rd – 24 th , Sep., 2004	Stockholm (Sweden)
13 th , Jun., 2005	Ouagadougou (Burkina Faso)
17 th – 18 th , Nov., 2005	Tokyo (Japan)
8 th – 9 th , Jun., 2006	Oslo (Norway)
4 th – 5 th , Sep., 2006	Ulaanbaatar (Mongol)
23 rd – 25 th , Apr., 2007	Zurich (Switzerland)

Dates and Places of
Seminars

Date	Place
14 th Jun., 2005	Ouagadougou (Burkina Faso)
4 th – 5 th , Sep., 2006	Ulaanbaatar (Mongol)

4 Subgroups Worked on Own their Themes

Subgroup 1 : *Development of logistics*

- a. Review how countries have dealt with increased freight traffic
- b. Consider examples of how freight logistics has changed and developed
- c. Consider what the key aspects are for the future for countries at different stages

Subgroup 2 : *Alternatives and terminals*

- a. Review the solutions envisaged as alternatives to freight movement by road
- b. Analyse how intermodal terminals facilitated improvements in freight capacity

Subgroup 3 : *Impacts mitigation*

- a. Investigate the present and possible innovations in goods vehicles and their potential impacts
- b. Review in social and environmental effect of cases of intermodal freight transport

Subgroup 4 : *Guideline for Developing countries*

Draft a guidance for developing countries to building a sustainable freight transport system

2. Each Subgroup's Work Summary

Subgroup 2 : *Alternatives and terminals*

1. Need for “Intermodal Transport”

(Background)

- Increase in Freight Transport > Increase in GDP
- Increase in Freight Transport > Increase in Passenger Transport
- Road Transport > Other modes (the tendency becoming noticeable year by year)
- Social & Environmental issues caused by big demand of Freight Transport

2. Intermodal Transport Enhancement Measures

- Marco Polo
- Motorways of the Sea
- Targeted Research
- NAIADES programme

3. Best Practices of Intermodal Transport Enhancement

- Austria
- Belgium
- France
- Italy
- Netherlands
- Switzerland
- Germany

Shows effectiveness of measure

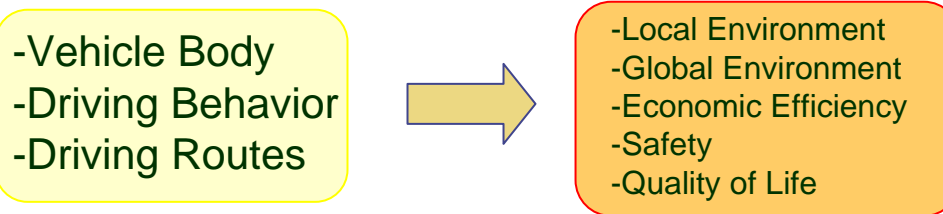
Road/rail intermodal transport increased dramatically in 15 years

2. Each Subgroup's Work Summary

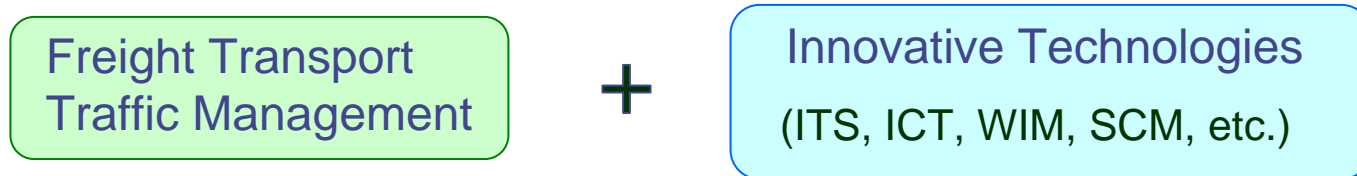
Subgroup 3 : *Impacts mitigation*

1. Mechanism of negative impacts derived by freight vehicles

Various characteristics of Freight Vehicles have negative impacts



2. Prospects for policies to reduce negative impacts



3. Characteristics of Freight vehicle accidents and reducing effects by Freight Transport Traffic Management

Estimated Accident reduction rates

- (1) Shifting Traffic.....5% ~ 17%
- (2) Increasing Loads.....2.5%
- (3) making Traffic Safer.....10%

2. Each Subgroup's Work Summary

Subgroup 4 : *Guideline for Developing countries*

1. Researched international multi-modal transport by region

- EU/North America.....all modes cooperates with each other
- Central Asia (Mongolia, Russia, China).....several bottlenecks exist
- South Asia.....road networks well developed
- Asia (Pacific region).....waterways well developed
- CIS (Commonwealth of Independent States).....railways & pipelines for energy goods
- Latin American countries.....road transportation dominated

2. Transport Development Policies

-Key aspect identified (it differs country to country)

Land use planning	Prevalence of multi public authorities	Resource management and waste utilization
Congestion free system	Decentralization	Sustainable energy source
Safety and quality of services	National consultation	Intelligent transport systems
Social development tool	Environmental protection	Intermodal compatibility
Development plan	Blending with the natural environment	Design and planning team
Assessment of economic benefits	Prioritization of projects	Supporting secondary services

-Key aspect for international border crossing (it differs country to country)

Multilateral agreements	Dimension of the vehicles
Vehicle emission	Tariffs, road user charges, and transit fees
Axle load control	Transport services