Council of Ministers

PROGRAMME OF WORK

Joint OECD/ECMT Transport Research Centre
Programme of Work

This document will be examined under Item 4 “Points for Approval: Programme of Work” of the draft Agenda for the Ljubljana Council of Ministers.

Transport Ministers of OECD and ECMT countries are invited to adopt the Strategic Directions and Programme of Work, noting the preliminary nature of the Programme in respect of 2005 and 2006.

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STRATEGIC DIRECTIONS AND PROGRAMME OF WORK

Introduction

This document is in two parts:

- **Part A** sets out the proposed Strategic Directions of the new Joint Transport Research Committee’s programme of work, which were revised taking into account comments made by Committee members at their first meeting in February 2004 and comments received since.

- **Part B** provides details of the Joint Transport Research Committee’s Programme of Work (2004-2006). At its February meeting, the Committee:
  
  - Accepted the current Programme of Work as specified for 2004 and as a preliminary listing of projects and activities for 2005-2006. In this respect, the projects specified for 2004 are: the four Working Groups – Speed Management, Young Driver Risk and Effective Counter-measures, Economic Evaluation of Long-Life Pavements Phase II, and Tackling Traffic Congestion in Larger Metropolitan Areas, five Round Tables – National Systems of Infrastructure Planning, Funding and Evaluation, The Limits of (De-)Regulation of Transport Infrastructure Services, Transport Costs and their Impact on Trade, Transport Infrastructure Investment and Productivity, and Transport and Decentralisation and the Seminar on Future Trends, Forecasts and Scenarios in Transport.

  - Agreed the Programme of Work would be sent for final approval to Ministers of OECD and ECMT countries in May 2004 – as well as to the OECD Council – together with advice that makes clear the preliminary nature of the Programme in respect of 2005 and 2006.
PART A: STRATEGIC DIRECTIONS

1. THE MANDATE OF THE JOINT TRANSPORT RESEARCH CENTRE

The Joint Transport research Centre was set up, from 1 January 2004, following decisions by the OECD Council and the ECMT Council of Ministers. The OECD Council’s Resolution on the establishment of the Joint ECMT/OECD Transport Research Centre sets out the mandate of the Centre as follows:

“The Centre shall promote economic development and contribute to structural improvements of OECD and ECMT economies, through co-operative transport research programmes addressing all modes of inland transport and their intermodal linkages in a wider economic, social, environmental and institutional context.”

ECMT Ministers have agreed that the Centre will provide a much wider international forum devoted to research and related discussions on surface transport with a new intermodal perspective.

2. THE STRATEGIC DIRECTIONS

The orientation and work of the Programme will contribute to the outcomes required by the Centre’s mandate through research that is relevant to policy, with outputs that help meet economic and social needs. The work of the Transport Research Centre will not concentrate narrowly on inland transport but, where it is helpful, include the interconnection of inland transport with air and sea transport.

The strategic directions that are proposed take into account: advice provided by Transport Ministers and ministries on important areas of research; member countries’ transport policy objectives and their assessments of emerging issues; work being undertaken by the ECMT (including through its policy working groups) and the OECD; work being done by other international organisations; and the scope for international co-operative transport research able to help deal with current and future challenges.

The research work should address the performance of the transport system as a whole, which will depend on the performance of all modes of inland transport (road-based, rail and waterway) and their inter-modal linkages. In undertaking this research, there should be strong focus on optimising the operations of the transport system (including inter-modal connections), on the users of the transport system and on the importance of minimising adverse impacts. The work also needs to look beyond the performance of the system on economic and technical grounds and take into account the interactions between the transport sector and other aspects of society such as sustainability, health and the environment.

Given these considerations, it is proposed that the programme should be defined in terms of the following broad areas for research:

- Infrastructure.
- Operations of transport services.
- Transport safety and security.
• Environmental costs and sustainability.
• Globalisation, trade and the spatial effects of transport.

Research in these key areas will encompass a wide range of important aspects including regulatory frameworks, infrastructure planning, financing and development, the cost and quality of transport services, public and private responsibilities for safety, security and the environment and the interactions between transport and wider social objectives, focussing on the improvements that are needed. Such improvements when implemented will lead to lower costs and better services, contributing to economic growth and structural change and helping industries and regions achieve their economic potential.

3. MAJOR AREAS OF RESEARCH

Within each of the key areas of Strategic Direction outlined above, there is a range of developments and issues that influences the transport policy-related socio-economic research required. The following sections identify some key developments and issues and outline related major areas of proposed research.

3.1 Infrastructure

The management and operation of infrastructure, the related regulatory frameworks across transport modes and the impacts of infrastructure construction on transport demand are permanent policy and research concerns. A strong transport policy role is required to develop the necessary overall regulatory frameworks, set infrastructure priorities and develop and use infrastructure technologies that improve quality and reduce costs.

Research is required on infrastructure priorities for road, rail and inland waterway modes of transport and the necessary inter-modal linkages between these modes. This research needs to take into account the changes in demand anticipated in the short term (particularly forecast increases in road transport) and the longer term outlook. It should reflect the need to ensure effective use of available infrastructure, inter-modal opportunities and interoperability. Consideration needs to be given in particular to financing requirements, budgetary restrictions on the infrastructure that can be provided and the funds needed for infrastructure maintenance.

In this context, the technical and economic characteristics of infrastructure (e.g. in terms of size and locational advantages) as an essential input to transport activities can hinder competition between providers of infrastructure services. Research is required on appropriate regulatory measures to ensure optimal outcomes.

In the case of congestion, possible investment in infrastructure needs to be considered as part of a package of measures including pricing and regulatory measures and improvements in other modes that is able to achieve a balance between the costs of reducing congestion and the benefits of improved levels of transport services.

3.2 Operations of transport services

The management and operation of transport systems has a major impact on the quality of services provided to users.

Users need efficient networks of transport services that encompass freight and passenger movements across national boundaries, whose operations should not be hampered by different operating practices. In this regard, there is a need for consistent operating standards, intermodality and inter-operability to enable seamless connections between inland transport modes (road-based, rail and waterway) and with...
international transport services. In setting such standards, transport policy has to strike a balance between the benefits of interoperability and the costs of restricting technological change and responses to changing economic conditions over space and time.

Generally, more competitive transport services (whether in public or private ownership) can be expected to lead to improved quality and reduced costs. However, the increasing diversity of public, private and mixed ownership organisations in more competitive transport markets raises important issues that need to be researched including changing public or private market structures, network economies and the associated tendency towards market concentrations, which require appropriate regulatory/competition policy responses.

Research may be required to investigate specific areas where there are concerns that the transport operations planned could lead to an abuse of market power. For example, transport and logistics firms might gain competitive superiority from the size of their logistic networks. The market power of some individual firms could further reduce the viability and therefore the number of competitors, with negative effects on the intensity of competition and consumer benefits. Research is required to help develop policies appropriate to the efficient operation of transport services across modes, allowing all modes to benefit from network advantages without curtailing competition.

3.3 Transport safety and security

Transport safety and security are priority areas of transport policy and research.

(a) Transport safety

Governments are devoting considerable resources to enhancing safety in all modes. The inherent risks in transport systems and the inability of users and operators to adequately control such risks lead to enormous health and monetary costs, particularly in road safety. Given the level of fatalities and injuries on the roads and policy support for reducing these levels quickly, road safety research remains a priority. The most important sub-areas of research include technical research to reduce accident risks particularly for high risk groups (e.g. young drivers). Regulatory measures such as licensing, speed control and enforcement supported by education, training and information, vehicle technologies able to assist drivers, the use of intelligent transport systems and information and communication technologies and the management of infrastructure operations have a major role in this area of research.

(b) Transport security

The Centre will examine, in follow-up to work underway in OECD, ECMT and elsewhere, how research can contribute in the critical area of transport security. Given their heightened level of security risk, consideration needs to be given in particular to the most effective ways of increasing the security of mass transport systems. As well, research is required on how to achieve such improvements in security measures for the transportation of goods and passengers without an undue impact on the efficiency of the overall transport system.

3.4 Environmental costs and sustainability

Transport is a key to economic growth and to meeting the mobility needs of the communities it serves. At the same time, transport can generate significant health and environmental impacts including problems of noise and local pollution. There are also concerns about transport’s contribution to longer term sustainability, given its reliance on fossil fuels and generation of emissions that contribute to global warming. Transport policies therefore have an eminent role in contributing to more sustainable growth.
In the short term, the major areas for research include measures that can reduce social and environmental costs. At present, cost and price signals are distorted with respect to the relative environmental advantages of the different transport modes. Research is needed to investigate and propose fiscal and regulatory measures to ensure that the private transport costs of individual users reflect their environmental and resource costs.

For greater sustainability, policy measures are needed that ensure that costs are not transferred to future generations, minimise the environmental damage resulting from the construction and use of transport systems and ensure transport systems do not make excessive use of non-renewable resources. The research will examine how transport can contribute to achieving sustainable mobility and a more sustainable society. The longer term research focus is on alternative fuel, technology and vehicle emissions, but also needs to reflect the scarcity of natural resources and other inputs to transport services.

3.5 Globalisation, trade and spatial effects of transport

Transport systems are a major determinant of international and interregional flows of goods and services. Beyond immediate consequences of transport policies in terms of reduced monetary and time costs of transport, they induce changes in regional and national advantages in the production of goods and services as well as in location patterns of firms and households. Transport policies therefore have to anticipate and to proactively respond to changes in international trade, interregional specialisations and spatial effects resulting from associated location decisions. This includes the need for improved coordination requirements between policy makers of different jurisdictions. The research work will examine the interrelationships between growing trade and transport.

Transport policies of national governments, regions and communities impact on the economies of other jurisdictions at all levels. The research work will need to support the co-ordination of local policies to achieve overall efficiency and sustainability of transport systems across different jurisdictions. This includes the co-ordination of transport policies that help to take account of the induced relocation of firms and households which in turn influences the pattern of urbanisation. Research should also study the interaction of transport with land use and housing based on the effects of agglomeration economies and the consequences for urban transport policies.

4. PROGRAMME OF WORK AND REPORTING

The Programme of Work (2004-2006) is based on the broad orientation outlined in the Strategic Directions and major research areas, as set out above. [Details of the proposed Programme of Work are provided in Part II of the current document].

The Joint Transport Research Committee will report in the first instance to the Enlarged Committee of Deputies and then to the Extended ECMT Ministerial Council and the OECD Council. The Enlarged Committee of Deputies will decide on the relevance of the working programme, its scope and the amount of resources allocated to it.

The Joint Transport Research Centre will pursue the Committee’s Programme of Work in cooperation with both ECMT and OECD member countries. As set out in the OECD Convention and Article 3 of the ECMT Final Act Protocol, both these institutions aim to contribute to economic efficiency and sustainable economic growth of their member countries. The Joint Transport Research Centre will also aim to contribute to the roles of these organisations in shaping globalisation for the benefit of all and in co-ordination between national governments and international organisations.

Research projects will focus on transport policy issues in an international and global perspective. This includes special technical research and research in countries at greatly differing levels of economic
prosperity. The Centre will work co-operatively with other organisations to achieve synergies where possible and avoid duplication.

Researchers involved in the Joint Transport Research Centre’s activities will produce papers and contribute to discussions as experts. The work should take a long-term view, should research and discuss transport policy in a broad perspective without being confined to disciplinary boundaries of government portfolios. Discussions of planning and evaluation topics will include the process of political decision making as an object of study. The research outcomes will be published in the established publication series to maintain their high respective reputations.

The results of the research undertaken will be tailored to suit the target audience, which may differ depending on the issues studied and research undertaken. The audience could include transport administrations, researchers, interested public and private sector organisations and journalists. A communications strategy will be adopted to ensure that the outputs of the Centre find their way on an economic basis to the appropriate audience. Dissemination will be achieved through the OECD’s publication services and other channels including in electronic form, via the media, at seminars and workshops, directly to key stakeholders and through the presentation of the Centre’s work in conferences and other research fora.

The aim of the Centre is to have transport-related research that is relevant to political decision-making. Interaction between researchers and policy-makers is important in ensuring that research topics of the Centre reflect policy needs. A clear distinction is needed between research results and implementation of such results in policy-making. The former should be independent of short term political considerations, whereas the latter falls under the responsibility of policy-makers.

5. EVALUATION

To ensure that work and outputs are of high quality, the Committee will establish an evaluation mechanism, involving regular appraisal, by member countries and outside experts, of the research work undertaken by the Centre in accordance with the Committee’s Programme of Work. The evaluation criteria are expected to encompass the following basic dimensions: policy relevance; potential and actual value added by the work programme and the research output, respectively, and the quality of the research process and its outcomes.

The relevance of the work programme is expected to be assessed by its potential to provide answers to current and up-coming transport policy questions. The research will be expected to achieve results that are applicable to a variety of policy contexts.

6 OUTREACH

The ECMT and OECD recognise the importance of outreach activities and encourage outreach to non-member countries. The outreach activities undertaken by the Joint Centre will aim to transfer knowledge and experience to less developed and developing countries. As the Programme has limited resources, such outreach activities will be undertaken subject to member countries assuming a leadership role as well as financial and organisational responsibility for the activity or event. The Secretariat will work co-operatively with other organisations which are able to make a useful contribution to the diffusion of the Centre’s work and publications on a world-wide basis.
PART B: PROGRAMME OF WORK (2004-2006)

PROJECTS AND ACTIVITIES

1. Introduction

This part outlines the proposed projects and activities of the first Programme of Work of the new Joint OECD/ECMT Transport Research Committee.

OECD Council decisions required that the Programme of Work submitted for the Joint Transport Research Committee’s consideration use as a base the draft programme of work for the period 2004 to 2006 of the RTR Steering Committee [DSTI/DOT/RTR/SC(2003)3] and the draft programme of the ECMT Economic Research Committee [ECMT/CS/RE(2003)2].

A preliminary listing of work projects and activities for the new Committee’s programme [COM/CEMT/DSTI(2003)88] was prepared on this basis and considered by members of the former OECD RTR Steering Committee and the ECMT ERC at a Joint Meeting held in October 2003. This preliminary listing was subsequently revised to take into account comments made at the Joint Meeting and extended to include additional activities in 2005 and 2006 in response to the view expressed at the Joint Meeting that a full three year programme should be presented to the new Committee.

The proposed programme which resulted [CEMT/OCDE/JTRC(2004)3] was then considered by the Joint Transport Research Committee at its first meeting held in February 2004.


The projects and activities concentrate on policy-oriented research that will promote economic growth and contribute to structural improvement in member countries and focus in particular on:

- Transport infrastructure – including infrastructure investment, planning, development and regulation as well as impacts on economic development and productivity.
- Traffic congestion in larger metropolitan areas.
- Road safety – researching measures to protect vulnerable young drivers, manage speed and achieve road safety targets.
- Transport’s contribution to sustainable mobility – and a sustainable society.
- Transport’s interaction with international trade, regulation, the spatial effects of transport and the relationships between decentralisation and transport.

3. Projects and Activities in 2004

To ensure continuity of the work and no loss of momentum in the transition from the separate RTR and ERC Programmes to the new programme, the Joint Transport Research Committee endorsed early initiation of the following projects and activities, to be undertaken/started in 2004:

3.1 Round Tables to be undertaken in 2004

- **National Systems of Infrastructure Planning, Funding and Evaluation.** The Round Table was held on 26/27 February. Six background papers had been prepared by experts from France, Italy, Germany, the Netherlands, Spain and the United Kingdom. The discussion focused on the basic evaluation criteria that should be used, and the interdependence of physical and financial planning. Participants studied in detail the adequacy of planning institutions and the needs for reform of planning procedures resulting from privatisation and the financing of infrastructure by returns from user charges.

- **The Limits of (De-)Regulation of Transport Infrastructure Services.** Starting point of the discussion is the reduced expectations with respect to the efficiency enhancing effects of privatization and deregulation. The first part of the discussion looks into the limits of competition in the infrastructure sector and the associated negative consequences for user benefits. It studies the question whether competition for the market (auctions and franchise contracts) can substitute for competition in the market. Moreover, the Round Table looks into the requirements for regulation and the appropriate regulatory concepts. A review of the experience of deregulation in correspondence to national governance structures concludes the Round Table.

- **Transport and Decentralisation.** The Round Table will study the basic arguments in favour of decentralization, i.e. the expected efficiency gains from interjurisdictional competition and the greater accountability of government bodies at the local level. The conceptual of transport policy decentralisation will be discussed and selective country experience reviewed. The pros and cons of a greater centralisation of transport policy within the European Union will be discussed.

- **Transport Costs and their Impact on Trade.** The Round Table will look into the development of costs of international trade and transport costs in particular. It will discuss the importance of transport policy for the intensification of international trade and foreign direct investments as the main features of globalisation. Moreover, the conceptual background and the empirical evidence of the transport sector’s role in providing poorer countries access to international markets and the associated development impact will be analysed.

- **Transport Infrastructure Investment and Productivity.** The Round Table revisits the topic of the overall economic effects of infrastructure investment in general and transport infrastructure investment in particular. The activity is motivated by newly available statistical techniques to solve the problems of interpreting econometric results that beset the earlier literature. It will compare the results of basing the productivity analysis on physical data or investment data, collected by ECMT. The empirical analyses will allow to evaluate the effectiveness of the overall investment levels. In addition the evidence on whether maintenance and new investment have different productivity effects will be studied.

3.2 Research Working Groups projects starting in 2004

- **Economic Evaluation of Long-Life Pavements – Phase II.** The first Phase of this project explored the economic viability of innovative long life wearing course materials for road pavements. Phase
II encompasses comprehensive joint testing of candidate wearing course materials. Up to ten laboratories will participate co-operatively in the Phase II project work with resources over the period to 2006 carried by individual laboratories/countries.

- **Speed Management.** This project will identify better approaches to managing and controlling speed and contribute to policy work on achieving ambitious road safety targets. The work will encompass: driving environments and driver behaviour; speed limits and social attitudes; technology options/measures; and cost-effectiveness. The report will make policy-oriented recommendations for improved speed management and safety outcomes.

- **Young Driver Risk and Effective Counter-measures.** This project will also aim to contribute to policy work on achieving ambitious road safety targets. The work will encompass: young driver behaviour/risk exposure; counter measures including education/training; graduated licensing/enforcement; support measures; and cost-effectiveness. The work will lead to policy-oriented recommendations for reducing young driver risks and improving safety outcomes.

- **Tackling Traffic Congestion in Larger Metropolitan Areas.** This project will focus on the congestion outlook in larger metropolitan areas, which will be considered in a broader congestion context. The work will assess the possible contribution of innovative measures, policies and targets, institutional and regulatory factors, financial aspects and public attitudes as they relate to congestion – and will be co-ordinated with the ECMT’s work on Sustainable Urban Travel.

### 3.3 Seminars

- **A Workshop on Future Trends/Forecasts and Scenarios in Transport.** The workshop will explore the opportunities of the Joint OECD/ECMT Transport Research Centre to inform policy makers about the likely trends of the transport sector. It will review the scale and the methodologies of forecasting activities of national governments and international organisations as well as the use of scenarios in transport policy-related assessments. The workshop will aim at selecting a set of indicators to characterise the sectoral development. It will conclude with the derivation of options for the forecasting activities of the Centre depending on the prospective resources available and what forecasts are provided by other institutions. The conclusions will help define the future activities of the Centre in this area.

### 4. Projects and Activities in 2005 and 2006

The Joint Transport Research Committee accepted as a preliminary listing the projects and activities specified for 2005 and 2006. The Committee felt that some further consideration was needed on the key topics and detailed proposals, the proposed working methods and co-ordination with policy activities. The Committee therefore agreed the Programme of Work would be forwarded for final approval with advice that makes clear the preliminary nature of the Programme in respect of 2005 and 2006.

The research Working Group projects specified to be initiated in 2005 and completed in 2006 are:

- **Achieving Ambitious Road Safety Targets: Transport Research.**

- **Transport Infrastructure Investment: Public-Private Partnerships.**

- **Sustainable Surface Transport Policies.**

The Round Tables specified for 2005 and 2006 are:
• Trade liberalisation and transport.
• The role of maintenance versus new investment for productivity effects of infrastructure.
• Transport costs and regional concentration.
• Privatisation of urban public transport.
• Empirical approaches to cost observation in order to regulate firms.
• Transport infrastructure charges and investment capacity expansion.
• Transport, urban form and economic growth.
• Insurance and accident risks.
• Effectiveness of regulatory institutions: appointments versus elections.
• Cost-benefit analysis and secondary effects of transport policy.

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Transport Ministers of OECD and ECMT countries are asked to: