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INTERNATIONAL FUTURES PROGRAMME

**OECD Futures Project on Transcontinental Infrastructure Needs to
2030: Ports, Airports, Rail Corridors, Oil and Gas Pipelines,**

PRELIMINARY DRAFT PROJECT PROPOSAL

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OECD Futures Project on Transcontinental Infrastructure Needs to 2030: Ports, Airports, Rail Corridors, Oil and Gas Pipelines

Purpose

The purpose of this Project is to bring together experts from the public and private sector to take stock of the long-term opportunities and challenges facing transcontinental infrastructure worldwide, (ports, airports, rail corridors, pipelines) and to put forward a set of policy proposals to OECD Governments which aim to enhance infrastructures' contribution to economic and social development in the years to come. This Project follows on from work recently completed by the Futures Project on Infrastructure Needs to 2030 which covered telecoms, water, electricity and surface transport, but did not include ports, airports and other major infrastructures crossing or connecting continents.

Objectives

1. Assess growth prospects in international trade and movements of people to 2025/2030, examining in particular flows between and across continents, but also other forces (population, income levels, impacts of climate change, etc.).shaping future economic growth and developments in infrastructure.
2. Assess current and planned capacity of ports, airports, transcontinental rail routes, oil and gas pipelines, with a view to identifying future capacity shortfalls, critical congestion points, and vulnerability to risk of major disruption.
3. Provide, under a range of different assumptions, estimates of the level of infrastructure investment required in these activities to 2030.
4. Identify and discuss the most critical issues that may affect the short and longer term prospects of these infrastructure sectors: those which are mostly policy dependent, and those which are mostly independent of policy.
5. Explore traditional and new funding models in order to identify the most promising approaches and highlight the conditions required for successful models to emerge.
6. Draw implications regarding the supportive measures that could be put in place to foster the development of promising business models and reduce obstacles to their successful implementation
7. Identify what measures governments and international bodies could take to provide a policy framework – legal, regulatory and institutional – which would be more conducive to the development of transcontinental infrastructures.

This document is intended to provide interested parties with first indications about the rationale, purpose, expected output, structure and management of the Project, as well as a tentative timetable for its completion. Once a critical mass of participation has been achieved in the coming months, a final version of this Proposal will be prepared for approval after the exploratory meeting which will be held in the OECD on November 18th, 2008. Thereafter it can be further refined at the first meeting of the Steering Group scheduled for the first quarter of 2009. The final project proposal will take into account the views expressed by those institutions that will actually participate and contribute financially to the Project.

The present proposal is based, in part, on the results of the wide-ranging consultation of infrastructure experts and decision-makers carried out over the last few years by OECD Advisory Unit staff, as well as on inputs from the Steering Group and experts invited to contribute to the two OECD reports on Infrastructure 2030 published in 2006 and 2007.

Rationale

Over the next 20 years or so, international trade is expected to expand strongly at an average annual rate of about 5%-7% per year. But will there be sufficient capacity at airports and seaports, on transcontinental rail routes and pipelines to handle the increased flows of goods and passengers? Preliminary evidence suggests that for some key infrastructures and some major regions of the world this may not be the case.

- Worldwide, demand for air transport is expected to reach 7 billion passengers by 2020 (9 billion by 2025), while capacity is expected to be able to deal comfortably with only about 6 billion. Alone in Europe, more than 60 airports are likely to be unable to meet demand by 2025 and it is thought that at least 10 new major airports and 15 new mid-sized airports will need to be built. Asia will be the fastest growing aviation market. The Chinese government, for example, is planning to build 97 new regional airports by 2020 (45 of them by 2010) at an estimated cost of USD 62.5 billion.
- Seaborne trade, which has already doubled since the mid-1980s, is expected to continue to expand, putting continued pressure on port handling capacity around the globe. Between now and 2030 Europe's main ports, for example, are likely to see the volume of solid bulk goods increase by 85% and the handling of container goods by a massive 620%. Despite planned port facility expansion, Europe's container handling infrastructure is expected to come under severe strain. Congestion is also rife at many major ports in North America and Asia, not only in the ports themselves but also on the infrastructures (road and rail) providing access to and exit from the port facilities.
- With the possibility of growing congestion at main ports and the risks to principal international shipping routes notably at potential bottlenecks (e.g. Bosphorus, English Channel, Strait of Gibraltar, Strait of Malacca etc.) attention could turn increasingly to alternative transcontinental rail routes (e.g. Trans-Siberia). While such routes offer

considerable potential time and cost savings, it is unlikely that they could handle substantial increases in freight traffic without major investments.

- Notwithstanding substitution effects or the relief that new transcontinental rail routes may offer, one of the main potential bottlenecks for freight capacity is likely to be in North America, and also in parts of Europe where insufficient rail capacity and inadequate interoperability between national networks are affecting capacity. As already discussed in *Infrastructure to 2030*, OECD, 2006-2007, large container terminals in North America and Europe are already facing difficulties in connecting efficiently to the hinterland.

To function properly, the international trading system will need adequate and properly functioning international infrastructure. Where will the principal bottlenecks and “hotspots” occur? How much investment will be required and how can adequate financing be mobilised to build the much needed additional capacity? What can be done to raise capacity by improving the management of these infrastructures and better managing the demand for them? The proposed OECD/IFP project sets out to answer these and other key questions about the future of international gateway infrastructure, building on the previous work performed for the “Infrastructure to 2030” exercise.

The OECD is well placed to contribute to a forward-looking policy analysis of these problems and of the remedies that need to be applied if the benefits that the infrastructure sector can offer are to be fully realised. First, most of the key players in the sector are in the OECD area. Second, infrastructure extends to a broad range of activities where OECD Governments have a major responsibility. Third, the OECD provides advice to its Member countries on a wide range of policy issues that have an important bearing on the future evolution of infrastructure needs and on the sector itself. Finally, within the OECD, the Advisory Unit is well equipped to carry out a project in this area because of its expertise in conducting long-term policy analysis on complex emerging issues and also because of its demonstrated ability to establish a fruitful dialogue between public and private actors.

Preparatory Work

In the event that significant funding is forthcoming in the course of 2008, substantive work could be started early in two areas: 1) preparation of a scoping report which would assess the current global situation in each of the infrastructure sectors under review and provide a first indication of the key issues to be addressed in the course of the project; 2) work could begin in co-operation with other parts of the OECD and its sister agencies (e.g. IEA) to adapt existing OECD globalisation models to the needs of the project, for example, to estimate under a range of different assumptions future volumes and directions of merchandise flows among major regions of the world, future demand for oil and gas deliveries through pipelines, projections of air traffic by major region, specific modules to estimate growth in various categories of seaborne trade (containers, oil, LNG, etc.). Much of this work could be ready for the first meeting of the Steering Group if adequate funding can be put in place soon enough.

Proposed Project Timetable and Key Milestones

Date	Milestone
18 November 2008	The Project proposal is discussed with potential participants.
February 2009	Critical mass of participation is achieved.
March or April 2009	First meeting of the Steering Group: The finalised work plan is approved and a draft report on the current state of the transnational infrastructure sector is presented to the Group for discussion. [Results of work on projections to 2030 for global merchandise trade, air and maritime traffic, oil and gas transport etc. could also be discussed, provided sufficient funding was already in place by third quarter of 2008]. Option for a first interim OECD report is discussed.
23 October 2009	Second meeting of the Steering Group: The Project Team submits to the Steering Group a draft report on projections of transcontinental infrastructure needs to 2030, the future evolution of the sector, as well as the proposed list of critical issues to be considered and their grouping into clusters. A preliminary discussion of key issues and promising models is held. Option for a second interim OECD report can be discussed.
June 2010	Third meeting of the Steering Group: The Project Team reports to the Steering Group on the main conclusions regarding the key issues and financing models. A discussion of conclusions and policy proposals is held.

Between meetings of the Steering Group, participants will be invited to send to the Project Team any documents they may have which they think could contribute to the Project. They will also receive from the Project Team interim papers for comments.

Who should participate in the Project?

Major public and private stakeholders in the infrastructure sector within the OECD area are invited to participate. These include all main players in the sector: from departments in charge of regulating transnational infrastructure to port and airport authorities, and agencies in charge of free trade zones, customs, export financing or development, from engineering corporations to operators, banks or pension funds. But the invitation extends also to a broader range of entities, public or private, potentially interested in other aspects of the Project, e.g. new technologies, frameworks for services infrastructure, safety or security, the emergence of new suppliers or users of infrastructure services. Non-OECD stakeholders could also be invited on an ad hoc basis. The number of seats for each participating OECD country (public and private representatives together) is limited in order to avoid undue concentration of interests.

Financing of the Project

The overall budget for the Project is estimated to be between 0,7 and 0,9 million Euros.

The Project will be funded by voluntary contributions from Government ministries and agencies and by grants from operators and private sector firms. Such financing has to be sufficient to cover, *inter alia*, the following costs: OECD Project Team, commissioning of external papers; organisation of some three meetings of the Steering Group; production and distribution of the final report; Project-related travel; and perhaps support for non-OECD participants.

Appendix One

Proposed Preliminary Timetable and Main Steps for the Completion of the Project

- Initialisation: 1. Searching for seed money to fund initial work (March to December 2008)
2. Building a Steering Group of participants in the Project (November 18, 2008 – March 2009)



Part I: Assessment of transnational infrastructure needs and list of critical issues
(March to October 2009)

Option for a first interim OECD report



Part 2: Discussion of critical issues, Identification of promising funding/business models, Conclusions and Recommendations
(November 2009 to June 2010)

**Publication of the final report
(July to September 2010)**

Options for inputs to OECD events such as the annual OECD Forum and other events linked to Ministerial level meetings in 2009-2011