





# Main problems in physical infrastructure integration and development

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## Integration and Development of Regional Infrastructure in South America

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#### Outline of presentation by Pitou van Dijck October 10, 2009, afternoon session

The presentation focuses on four critical questions related to the significance of IIRSA in the context of economic development and integration in Latin America:

(1) Is the physical integration the starting point or last step in a stronger integration process?;

(2) What is the experience in other regions (European Union)?;

(3) Is IIRSA an efficient response for the development of integration infrastructure?;

(4) What are its strengths and what are its weaknesses?

Is the physical integration the starting point or last step in a stronger integration process?

Investment in infrastructure is a major component of a process to support integration from shallow integration to deeper integration. Integration is essentially a market-based process which can be stimulated by trade liberalisation, trade facilitation and traderelated capacity building.

Clarification:

The process of trade liberalisation was initiated relatively recently in Latin America and was implemented with rigour, resulting in significant reductions of tariff and non-tariff barriers to trade at the borders. Active participation in GATT/WTO liberalisation on a most-favoured nation (MFN) basis since the mid 1980s and the creation of a spaghetti bowl of partly overlapping preferential trade linkages among countries in the region since the early 1990s have stimulated trade and integration.

While trade policy has reduced nominal and effective rates of protection, non-border barriers to trade need be tackled to reduce the tariff equivalent of transportation costs. Two types of nonborder measures may be distinguished in this regard: trade facilitation and trade-related capacity building. Trade facilitation includes the reduction of the trade-impeding consequences of tedious customs clearance, high port charges, high freight costs and slow handling of trade. Trade-related capacity building involves improvement of physical infrastructure.

To the extent that these types of facilities have the character of (regional) public goods or quasi public goods, there is a role for government to play in providing such facilities or in organizing their provision through public-private partnerships.

Aid for trade and development to support trade facilitation and trade-related capacity building have become a priority in the international agenda as reflected by the Doha Development Agenda of the World Trade Organization, the Millennium Development Goals and the Monterrey Consensus.

## What is the experience in other regions (European Union)?;

Support for infrastructural development has been a critical component in the integration process of the European Union. It should be noted that financial means for infrastructural development have been made available particularly as an integrated component in broader programmes in support of accessation of new members and in support of development in socalled weak and backward regions in the European Union.

#### Clarification:

In no other region in the world has the process of integration among neighbouring countries been pursued over such a long period of time, among such a large number of countries and in such a comprehensive manner. Indeed, the programme started with the signing of the Treaty of Rome by six Western European countries on March 25, 1957 and has evolved by now into a European Union with 27 member states and a population of about half a billion inhabitants. The agenda has involved liberalisation of intra-regional trade, reduction of technical barriers to trade, facilitation of movement of capital and persons, harmonisation of monetary and fiscal policy, introduction of the euro as a common currency, as well as a programme of infrastructural development in support of regional integration. In time, support for infrastructural development, particularly road infrastructure, has been a critical component of EU programmes in support of accessation of new members and to tackle regional imbalances. In the early stages of expansion of the Union's member states, support for infrastructural development was focused on Spain, Portugal and Greece, while more recently support is orientated towards the new members in Central and Eastern Europe, particularly Poland. Support programmes with a substantial infrastructure component were orientated towards the Union's regions with classic underdevelopment problems, particularly the Italian Mezzogiorno. Support has also been focused towards areas that suffer from adjustment problems and economic decline as a consequence of the accessation and integration process itself.

The principal instrument initially was the European Regional Development Fund (ERDF) established in 1975 which supported infrastructure investment, particularly in weak areas. The main focus of the programme is on basic infrastructure, particularly road development, and telecommunications. However, the budget of the fund used to be modest as compared to the problem to be tackled.

The Union designed socalled Structural and Cohesion Funds to promote regional development and to support convergence.

To support accessation of new members in eastern and Central Europe with economies at levels of development significantly below the average level of the Union, the Phare programme was established in 1989.

In all these cases funds to finance infrastructure were made available in the context of a broader overall plan focusing on the facilitation of integration and convergence.

The EU-wide infrastructure programmes involve not only road infrastructure but railways and waterways as well. Moreover, requirements regarding environmental assessment studies, environmental standards and measures to abate environmental effects have been upgraded in the course of time.

Finally, it should be noted that several major initiatives to create transport corridors with a significant EU-wide impact on

transportation flows were not initiated at the level of the Union. Cases in point are the French fast-train system TGV with connections to neighbouring countries, and the Rhine-Main-Danube Canal or Europa Canal, linking the river Rhine with the river Donau by a 171 long canal.

It is noteworthy that requirements pertaining to the ex ante impact studies of infrastructure works and environmental standards have been upgraded significantly in the course of time and have become costly and time consuming. A legal framework for SEAs has existed since 1985. Since the Amsterdam Treaty (1997) the focus on the principle of integrating environmental considerations into Community Policies has increased (Article 6). The UN-Economic Commission for Europe (UN-ECE) Espoo Convention of 1991 deals with Environmental Impact Assessment in a Transboundary Context. It prescribes the content of the environmental impact assessment documentation. Such assessments are prescribed in the case of, inter alia, construction of motorways, express roads, realignment and widening of existing roads, lines for longdistance railway traffic, airports, trading ports and inland waterways, large diameter pipelines, , construction of overhead electrical power lines, large dams and reservoirs, deforestation of large areas. The Protocol on Strategic Environmental Assessment (SEA), Kiev 2003, is a follow up.

Is IIRSA an efficient response for the development of integration infrastructure?;

Efficiency may be approached at three different levels of ambition:

Level 1: efficiency in terms of the organisation of delivering cross-border infrastructure in support of integration;

Level 2: efficiency in terms of generating economic integration and and convergence at the regional level;

Level 3: efficiency in terms of generating (economic and environmentally) sustainable growth.

By way of clarification some reflections are presented pertaining to all three levels of ambition. Level 1.

Regarding the organisation of IIRSA the issue of public-private partnership comes forward. So far, such partnerships have been realised only to a very limited extent. More generally, there is little experience in Latin America with that form of infrastructure financing. A major exception is the public private financing of infrastructure in Mato Grosso, Brazil, but that is a very special case indeed and not necessarily a good example of efficient infrastructure development, at least not from the perspective of the public partner and society at large.

Level 2.

The concept of IIRSA as an investment programme in support of infrastructure that essentially links or improves already existing national systems of infrastructure is potentially efficient as relative little investment is required to generate large economic benefits from increased trade and crowding in effects of private investment. However, two caveats are in place here.

First, nearly all ex ante assessments of the efficiency of infrastructure programmes significantly underestimate the costs of construction and maintenance. Second, economic models are hardly capable to assess longer term effects of investment in infrastructure on the economy of the region.

In view of the probability of increasing scarcity and costs of fuel in the longer term, the issue may become pertinent whether road infrastructure, which is key in the IIRSA programme so far as reflected by the Consensus Agenda 2006-2010, is the most efficient form of infrastructure for massive transportation of bulk such as soya, sugar, wood and meat, as compared to railways and waterways, or a multimodal approach of transportation.

Level 3.

The third level of ambition - infrastructure to contribute to sustainable development at the level of the region - is essentially the level of ambition as reflected by the concepts applied in the context of IIRSA. The ten hubs envisaged in the IIRSA plan and Consensus Agenda are aimed to be development hubs, *ejes de*  *desarollo*: roads surrounded by a large impact area, área de influencia, with enhanced economic activity.

As the impact of infrastructure may be significant, geographically widespread, long-term and multi-dimensional, a comprehensive strategic environmental assessment is required. It is questionable that a budget limit of 600,000 US dollar and a time limit of six months, as has been proposed in this context, would be appropriate. In that regard, lessons may be learned from the Corredor Norte Study (2006), undertaken by DHV for the IDB in Bolivia.

Moreover, the impact of infrastructure may be enhanced by starting with a regional development plan. The EU experience may be useful in that regard.

What are its strengths and what are its weaknesses?

Strengths:

Large potential to generate benefits with relatively little investment.

Coordination by using a Consensus Agenda and involving little burocratic intervention.

Weaknesses:

Little use of public-private partnerships; Risks of limited strategic assessment studies; Risks of limited regional development plan to fit the development hub into

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