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# ECLAC: thirty years of contributing to transport infrastructure institution-building in Latin America and the Caribbean

## Introduction

For more than 30 years, the ECLAC Infrastructure Services Unit (heir to the Transport Unit, formerly the Transport and Communications Division) has been providing support for building the institutional, operating and regulatory framework for international cargo and passenger transport in Latin America and the Caribbean. This edition of the *Bulletin* looks at key documents issued by ECLAC since it was founded, Infrastructure Services Unit studies and *FAL bulletins* from the past 15 years, reviewing the main contributions that ECLAC has made to the development and promotion of infrastructure and transport in Latin America and the Caribbean.

## I. Infrastructure and transport services and integration

Many ECLAC studies have explained the role that infrastructure, transport and related services play in developing national competitiveness and productivity, identifying infrastructure as a requisite for development<sup>1</sup> along with other

<sup>1</sup> Infrastructure and GDP growth are linked in many important ways. For example, the accessibility that infrastructure brings makes it possible to adapt the national or subnational space for economic activity. Infrastructure is intentionally designed and equipped in order to create or link regions within a single national space. Roads, trains, ports, communications, energy, potable water and irrigation all contribute to domestic social integration and help improve well-being. Infrastructure ties in with economic and policy integration at the supranational level, where it is a crucial factor. The lack of infrastructure can block or hamper integration and trade. Inadequate or scarce infrastructure can make a country less competitive. Indeed, infrastructure determines how a territory is organized and its economic development, too, helping make countries more productive and competitive.

This edition of the *FAL Bulletin* summarizes the principal contributions by ECLAC and its Infrastructure Services Unit to creating and strengthening transport service infrastructure institutions in Latin America and the Caribbean. The examination is based on a bibliography of key documents issued by ECLAC since it was founded, on studies conducted by the Infrastructure Services Unit and on *FAL Bulletins* from the past 15 years. The author of this article is Silvana Sánchez.

For additional information, please contact [trans@cepal.org](mailto:trans@cepal.org).



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crucial factors like quality of institutions, design and implementation of economic policy, trade openness, planning for sustainable development, economic regulation, security for private investment, access to financing, human capital development and standards for evaluating projects and allocating scarce resources. A good example is the study on agricultural areas in central and northern Argentina,<sup>2</sup> whose ports are the point of departure for more than 80%, by volume, of the country's agricultural exports<sup>3</sup> and where investment in transport infrastructure is obviously a prerequisite for the productive development of the region. This is especially true of infrastructure linked to foreign trade, such as ports and waterways: as such infrastructure develops (bringing lower costs, shorter travel times, greater reliability and new services), the agricultural frontier expands and agricultural yield, production and industrialization grow.

But the ECLAC Infrastructure Services Unit went beyond the well-known positive correlation between infrastructure and economic growth<sup>4</sup> to focus on how infrastructure impacts social development. Ferro and Lentini<sup>5</sup> (2008) looked at the social impact of sanitation and transport infrastructure, systematizing the public policies in place in countries of Latin America and the Caribbean, in search of good practices that could be replicated elsewhere in the region. An examination of many examples throughout the region showed that in most instances, despite differences in institutional models and available economic resources, the countries have sought to subsidize access for and consumption by the poor. So an appropriate mix of categories, location, self-selection and administrative filters could yield reasonable results in terms of errors of inclusion and exclusion at an affordable cost.

Developing transport infrastructure also reduces the economic distance between productive centres and their destination markets, influencing both the spatial distribution of national economic activity and the way that international trade flows are structured. Although this relationship is well known, Latin America has substantial infrastructure weaknesses in general, and in transport in particular. One of the reasons for this lag is the decline in total investment in transport in the region over the past two decades: as a percentage of GDP, it has fallen to one third of the level recorded in the mid-1980s. This stands

in contrast with the countries of Asia, for example, where infrastructure investment increased during the period.

Recent studies<sup>6</sup> on this issue have focused on identifying transport infrastructure saturation points in Latin America that could be hobbling trade expansion and the future development of the region. It is obvious that despite rising GDP and trade in the countries of Latin America over the past few years, investment in transport capital has fallen short of expectations in both pace and results despite extensive private sector involvement in providing infrastructure. But this lag is seen not only in ports and airports, but in inland legs as well, where the greatest weaknesses and logistics cost overruns are. Add to this the traditional problems in transport facilitation, border crossings, transport service operations and logistics. There is therefore a pressing need to improve public policies for providing infrastructure. The state has a pivotal role to play here, monitoring not only infrastructure design and construction but also the quality of the service provided.

ECLAC studies on transport policies geared towards promoting productive development centred on different transport modes. The need for deeper port reform encompassing the connection between transport infrastructure and logistics was analysed. Recommendations in this area referred to:

- Deepening efforts to bring private capital into port management;
- Adapting public structures to make them proactive in planning and oversight and in taking on a new role following port reform;
- Modernizing customs standards and practices in keeping with the systemic competitiveness needs of the countries;
- Resolving the smaller countries' problems of economies of scale, promoting regional integration and cooperation;
- Sustaining and deepening processes for defending competition; and
- Reviewing practices and mechanisms for evaluating projects and assessing critical assets in port reforms so as to improve service pricing policy and make it clearer.

Studies on railways and highways focused on the outcomes of concessioning them, because not all of the competitive imbalance issues between trucking and railways have been resolved.

<sup>2</sup> Economic Commission for Latin America and the Caribbean (ECLAC), "Infrastructure, transport and production development in an agricultural region: a case in Argentina", *FAL Bulletin*, No. 207, Santiago, Chile, November 2003.

<sup>3</sup> Agribusiness accounts for 58% of the total value of Argentina's exports.

<sup>4</sup> Rozas, Patricio and Ricardo Sánchez, "Desarrollo de infraestructura y crecimiento económico: revisión conceptual", *Recursos naturales e infraestructura series*, No. 75 (LCL.2182-P/E), Santiago, Chile, October 2004.

<sup>5</sup> Economic Commission for Latin America and the Caribbean (ECLAC), "Infrastructure, integration and equity: The social impact of the health and public transport infrastructure", *FAL Bulletin*, No. 268, Santiago, Chile, December 2008.

<sup>6</sup> Economic Commission for Latin America and the Caribbean (ECLAC), "The transport and trade infrastructure growth gap in Latin America", *FAL Bulletin*, No. 276, Santiago, Chile, August 2008 and "Caracterización de la brecha de infraestructura económica de América Latina y el Caribe", *FAL Bulletin*, No. 293, Santiago, Chile, December 2010.

Another finding emerging from this examination, and one that ECLAC has also studied, is the strengthening and autonomy of the agencies that oversee the highway sector. It has been recommended that the reforms put in place in the countries seek to strengthen this sector and make it autonomous so as to avoid distorting the way it operates and keep it from being captured by sectoral interests. Project evaluation methods are in need of revision, as are the mechanisms for analysing and projecting demand because of the disastrous effects that an incorrect estimate can have for an infrastructure concession. The structure for financing a highway concession programme should also be rethought, as should how funding for highway concessions is structured (especially, risk-sharing and the explicit or implicit guarantees provided by the state) in order to avoid encouraging overinvestment.

Road maintenance has also been a matter of interest for ECLAC over the past two decades, chiefly because highway networks in poor condition make countries and regions less competitive and hamper continental integration. Although keeping roads in better condition entails a higher cost for the state, there are substantial operating and logistics cost savings that justify the investment in maintenance. ECLAC reports entitled *Caminos: un nuevo enfoque para la gestión y conservación de redes viales*<sup>7</sup> and *Legislación modelo de conservación vial*<sup>8</sup> propose setting up user-financed highway maintenance funds, introducing service-level or performance-based highway maintenance agreements<sup>9</sup> and making institutional arrangements to involve users.

As for urban mobility, investments in transport are crucial if a city is to be competitive, and they require appropriate transport planning to reconcile economic development with protecting the quality of life. In this regard, ECLAC posited<sup>10</sup> that by changing mobility costs a transport system can impact the economy. It analysed plans that favoured the mobility of persons over vehicle mobility to ensure the development of sustainable transit systems with significant benefits for the population.

In short, it is essential that the governments of Latin America and the Caribbean improve and enhance their institutions, increase coordination and consistency within

the state and strengthen the relationship with the private sector by means of modern regulatory frameworks, balancing investment planning, evaluation, capacity and maturation and focusing less on financing and more on comprehensive economic development that encompasses infrastructure transport services.

## II. Regional integration as facilitator of economic development

It is to be expected that progress in providing infrastructure will lead to improvements in the economy, thanks to better connectivity, lower transport costs and a better logistics chain overall. Regional integration is essential for better connectivity. Generally speaking, it is a process with at least three dimensions: economic and trade integration, with its different degrees and stages (ranging from preferential trade agreements to free trade areas, customs unions, common markets and economic and currency unions); policy integration, which entails coordinating and harmonizing government and institutional actions among members; and physical integration, in which infrastructure and the services it provides take centre stage.

ECLAC was already homing in on economic integration 50 years ago. The creation of the Latin American Free Trade Association (LAFTA) was, to a great extent, due to economic and promotional studies conducted by ECLAC in the 1950s. From the outset, work centred on how economic development in the countries of Latin America was constrained by limited productive capacity. The structure of their exports (mainly primary products) was hampering the transformation of markets in industrial countries in order to produce enough to finance their import requirements. In view of this constraint, the position taken by ECLAC provided guidance and a rationale for import substitution, based on the need to expand exports in order to develop and on the premise that it is better for those exports to go to neighbouring countries than to markets outside the area. Economic integration was thus a logical attempt to broaden a process that had already begun individually in each country in the region.

A reference point for this research was Robert Brown, former chief of the ECLAC Transport Division, who described and analysed economic integration in the countries of Latin America and how this process is related to transport. Interest grew following creation of LAFTA.<sup>11</sup> In 1966 Brown published his book *Transport and the Economic Integration of South America*,<sup>12</sup> explaining the relationship between transport and economic development and stressing

<sup>7</sup> Schliessler, Andreas and Alberto Bull, *Caminos: un nuevo enfoque para la gestión y conservación de redes viales* (LC/L. 696/Rev. 1), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 1994.

<sup>8</sup> Alberto Bull, Juan Alberto Rabah and Carlos Villegas Quiroga, "Legislación modelo de conservación vial" (LC/L.899), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 1995.

<sup>9</sup> Economic Commission for Latin America and the Caribbean (ECLAC), "Road maintenance, funds and fund management", *FAL Bulletin*, No. 139, Santiago, Chile, January 1998; "New approaches by highway agencies in dealing with road users", *FAL Bulletin*, No. 148, Santiago, Chile, September 1998; "Progress of road maintenance in Latin America" *FAL Bulletin*, No. 160, Santiago, Chile, December 1998.

<sup>10</sup> For further details, Economic Commission for Latin America and the Caribbean (ECLAC), "Transport planning and its impact on city competitiveness", *FAL Bulletin*, No. 212, Santiago, Chile, April 2004 and: "Convergencia y divergencia en las políticas de movilidad en América Latina: ausencia de co-modalismo urbano", *FAL Bulletin*, No. 289, Santiago, Chile, September 2009.

<sup>11</sup> Latin American intergovernmental organization that existed between 1960 and 1980. It was created on 18 February 1960 by the Treaty of Montevideo and was subsequently replaced by the Latin American Integration Association (ALADI).

<sup>12</sup> Brown, Robert T. "Transport and the economic integration of South America" Washington, D.C.: The Brookings Institution, 1966.



that economic integration should be one of the efforts undertaken by South America in order to increase per capita income. Because the geographical distribution of the greater benefits of industrialization should be as wide as possible, Brown proposed explicitly using transport policies to ensure appropriate, consistent distribution of higher national revenues. Transport would thus be one of the building blocks of regional integration.

Along these lines, the author described transport mode problems and opportunities for the countries of the region, understanding that replacing one mode with another depended on the specific institutional and geographical patterns present in each country. Based on studies of transport and its integrating effect, the author discovered that in the Southern Cone more than a dozen international railway connections were underutilized. He believed that this was due to administrative errors that translated into poor business and operating coordination between countries and external dependency in key decisions, disrupting the use of costly infrastructure. Reading the document is interesting in that, despite the time gone by, Brown's diagnosis is still valid and makes it even more necessary to approach regional integration in a way that integrates infrastructure planning and transport policies with the services provided because more and better coordination between these components will foster competitive development of regions.

ECLAC has contributed to institutional integration on several fronts. One of them has to do with the Recife Agreement for coordinating border controls, approved by the Common Market Council in 1993,<sup>13</sup> as well as technical and operational measures to regulate integrated border control operations between MERCOSUR member states. Other measures include the Convention on mutual assistance and cooperation between customs administrations, adopted in June 1997 to prevent customs fraud; and the Asunción Programme for simplifying foreign trade and customs procedures by regulating the requirements for preshipment inspection and foreign trade licences, certificates and clearances from national authorities in each MERCOSUR member state. In

June 2000 the model regulation for integrated cargo control was approved, with technical and quality control standards for mutual recognition and equivalence of control systems and technical standards harmonized at the subregional level, including sanitary and phytosanitary controls. As for quality standards, ECLAC published<sup>14</sup> a study on ISO 9000 standards, to help see quality as part of a strategy for competitiveness.

As for sectoral institutions, for more than 30 years ECLAC has been providing support for building the institutional, operating and regulatory framework for international cargo and passenger transport in Latin America and the Caribbean. It has played a key role in coordinating regional accords and mechanisms like the Conference of South American Ministers of Transport, Communications and Public Works, which ECLAC has been attending since 1967 and which has contributed to the leap in trade, tourism and business exchange in the region since the 1990s. Second is the integrated transit system for importing merchandise going to the Plurinational State of Bolivia, developed and implemented between 1973 and 1976. It was one of the most significant advances ever in transport facilitation, both in South America and throughout the world, making direct trans-shipment of cargo possible for the first time and, therefore, allowing the design of intermodal transport operations.

In 1982, ECLAC case studies analysing the advisability of South America's adopting and enforcing the United Nations Convention on International Multimodal Transport of Goods and effective coverage of transport risks in trade in the region demonstrated the need for shared responsibility for international land transport. Years later, in 1992, ECLAC once again contributed to better implementation of the Convention on Civil Liability for Damage caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels.

In 1991, when the Conference of South American Ministers of Transport, Communications and Public Works was created, what was at the time the ECLAC Transport Division worked with the Service Department of the Latin American Integration Association (ALADI) and the Physical Integration Department of the Board of the Cartagena Agreement (JUNAC) on preparing the document for the Conference. In 1999, background on and drafts of the rules for the Conference were used to design the system for organizing the executive committee of the Western Hemisphere Transport Initiative (WHTI). ECLAC cooperated closely on

<sup>13</sup> In 1994 ALADI adopted the first additional protocol to the Recife Agreement. Both the original accord and the additional protocol remained unchanged until June 2000, when both were reviewed and modified by the Common Market Council. For additional information, see Economic Commission for Latin America and the Caribbean (ECLAC) "Trade facilitation in MERCOSUR - the most important regulatory advances", *FAL Bulletin*, No. 171. Santiago, Chile, November 2000.

<sup>14</sup> Economic Commission for Latin America and the Caribbean (ECLAC), "ISO 9000 standards: quality as a market strategy", *FAL Bulletin*, No. 152, Santiago, Chile, April 1999.



this, helping to define the purpose and competencies of WHTI and to establish mechanisms for coordinating regional transport systems.

In 1994, ECLAC advised the working group in charge of examining the integration of international land transport management standards in the Southern Cone and the Andean Community. Noteworthy among more recent initiatives is the active involvement of ECLAC in preparing the multimodal transport standards that were subsequently adopted by the Andean Community and MERCOSUR and throughout South America.

For more than a quarter century ECLAC has pioneered the quest for greater physical integration between the countries of Latin America, especially in the area of transport, encompassing highways, railways and inland water and multimodal transport. Initially, the spotlight was on railways, whose contribution was examined in depth in the study *Los ferrocarriles internacionales de Sudamérica y la integración económica regional*.<sup>15</sup> This concern also emerged from an edition of the *FAL Bulletin*, which highlighted part of the research done by the ECLAC Transport Division for the Institute for the Integration of Latin America and the Caribbean (INTAL): “Physical integration of Mercosur-Bolivia-Chile-Peru: The potential contribution of the railway systems”.<sup>16</sup> Subsequently, at the request of the Inter-American Development Bank/INTAL, ECLAC examined the role of railways in transport in the Southern Cone and their investment requirements in the face of ultimate transfer to private operators. The report *Los ferrocarriles del Cono Sur de América Latina y su contribución al comercio internacional* was first published by INTAL in 1996. It is interesting to note that it covers issues discussed in the ECLAC study *Los ferrocarriles internacionales de Sudamérica y la integración económica regional* published a quarter century earlier, when transport infrastructure concessions were a fairly new idea.

ECLAC also examined infrastructure weaknesses for regional integration, published in the 1996 report *Una primera aproximación al estudio de los servicios de transporte en los espacios de integración: el caso de Argentina y Chile*. The report also analysed the trans-Andean railways and the prospects for resumption of service,<sup>17</sup> highlighting new opportunities for integration between these countries.<sup>18</sup>

These two studies and their subsequent updates in 2009<sup>19</sup> reveal how important physical integration is for regional integration, even in times of economic crisis.

### III. Facilitating trade and transport

Considering that trade facilitation<sup>20</sup> in its broadest sense is the original spirit of the *FAL Bulletin*, ECLAC has issued several studies on this topic<sup>21</sup> and observed developments in trade facilitation under the Free Trade Area of the Americas integration agreement. The *Bulletin*<sup>22</sup> has also discussed other Latin American agreements, such as the North American Free Trade Agreement (NAFTA), the Andean Community of Nations (CAN), the Central American Common Market (CACM) and the Caribbean Community (CARICOM).

The insertion of the countries of the region in the globalized economy called for a look at trade facilitation with other regions of the world as well. That is why the *FAL Bulletin* has discussed this issue in connection the Asia Pacific Economic Cooperation (APEC) forum<sup>23</sup> and the European Union.

A large part of Latin America, and of the rest of the world as well, has been implementing good practices aimed at simplifying or eliminating trade facilitation procedures to make their products more competitive by cutting international transport times for their goods. But there has been little progress in transport facilitation; while it might be implicit in the topics discussed above it has more to do with inland legs. Transport facilitation, then, can be defined as a participatory process between public and private institutions with the goal of cutting the time and logistics costs associated with moving cargo and people within a territory. These issues have been discussed in meetings of experts and documented in the *FAL Bulletin*.<sup>24</sup>

<sup>15</sup> *Los ferrocarriles internacionales de Sudamérica y la integración económica regional* (E/CN.12/914/Rev.1) published in 1972.

<sup>16</sup> Economic Commission for Latin America and the Caribbean (ECLAC), “Physical integration of Mercosur-Bolivia-Chile-Peru: the potential contribution of the railway systems”, *FAL Bulletin*, No. 127, Santiago, Chile, September/October 1996.

<sup>17</sup> For further information, see Economic Commission for Latin America and the Caribbean (ECLAC), “Transandean railroads: the interruption of service and prospects for resumption”, *FAL Bulletin*, No. 180, Santiago, Chile, August 2001.

<sup>18</sup> Two of the three deactivated railways could re-enter service soon, and there is the possibility of building a new transandean railway that would cross the Andes farther south at an elevation of less than 1,750 metres above sea level.

<sup>19</sup> For further information, see Economic Commission for Latin America and the Caribbean (ECLAC) “Physical infrastructure and regional integration”, *FAL Bulletin*, No. 280, Santiago, Chile, December 2009. This report looks at three ongoing initiatives in Latin America and the Caribbean that include a scheme for physical regional integration: the South American Regional Infrastructure Integration Initiative (IIRSA) in South America; the Mesoamerica Project in Central America; and CARICOM in the Caribbean), with which ECLAC —particularly the Infrastructure Services Unit— is working in close coordination.

<sup>20</sup> There is a series of cross-cited articles on facilitating international trade that later gave rise to M. Izam, “Facilitación del comercio: un concepto urgente para un tema recurrente”, *Comercio internacional series*, No. 19 (LC/L.1680-PIE), Economic Commission for Latin America and the Caribbean (ECLAC), December 2001. For a summary of that study, see Economic Commission for Latin America and the Caribbean (ECLAC), “Defining trade facilitation at the international level”, *FAL Bulletin*, No. 189, Santiago, Chile, May 2002.

<sup>21</sup> The term “trade facilitation” has yet to be clearly defined. It refers to a wide variety of thematic areas, including customs; technical, quality, phytosanitary and zoosanitary standards; dissemination of trade information; and services related to commercial exchange.

<sup>22</sup> Economic Commission for Latin America and the Caribbean (ECLAC), “The facilitation of trade in some integration agreements in the Americas”, *FAL Bulletin*, No. 187, Santiago, Chile, March 2002. Economic Commission for Latin America and the Caribbean (ECLAC), “ECLAC - Mesoamerica Project cooperation: Support for the facilitation of trade and transport in Mesoamerica”, *FAL Bulletin*, No. 273, Santiago, Chile, May 2009.

<sup>23</sup> Economic Commission for Latin America and the Caribbean (ECLAC), “Trade facilitation within the forum, Asia-Pacific Economic Cooperation (APEC)”, *FAL Bulletin*, No. 181, Santiago, Chile, September 2001.

<sup>24</sup> See Economic Commission for Latin America and the Caribbean (ECLAC), “Transport facilitation: experts workshop in Peru”, *FAL Bulletin*, No. 278, Santiago, Chile, October 2009 containing a summary of the main presentations and conclusions of the expert workshop organized by ECLAC in Lima in June 2009.

Trade facilitation substantially improves the development of international trade; transport facilitation will yield better outcomes if infrastructure services are improved, enhancing the components that lead to national, regional and international facilitation and where the logistics cost is a more important variable than trade barriers themselves as a component of overall commercial cost.

#### IV. Logistics

The unimodal infrastructure and transport policies traditionally followed in Latin America have made it impossible to efficiently provide goods for public use and of strategic interest. A recent study by the Infrastructure Services Unit<sup>25</sup> examines the role of logistics as part of an appropriate, integrated public policy for developing economic competitiveness, with logistics playing a key role in maximizing the contribution of the transport infrastructure to making economies more productive and competitive. The report proposes the concept of “advanced logistics,” expanding the scope of traditional logistics and adding facilitation, distribution and planning of the entire value chain, in both the private and the public sphere, to the inherent challenges of managing the supply and transport chain.

Implementing information and communication technologies and, especially, intelligent transport systems has greatly advanced the development of contemporary logistics. Here, ECLAC studied<sup>26</sup> the development of new technologies applied to transport that arose precisely in response to the growing need for effective solutions to problems such as vehicle congestion and the physical distribution of goods.

For most countries, logistics costs are a significant portion of overall trade costs, in most cases far more than customs tariffs are. That is why it is so important to assess and address potential improvements in logistics strategy at the national level, coordinated at the regional level, because logistics is essential for promoting the economic and social development of Latin America and the Caribbean. There are two basic public policy issues to be taken into account concerning advanced logistics. The first is to generate economic and policy conditions for implementing modern and flexible logistics geared towards greater economic and social development. The second is to formulate a consensus-based national strategy—and promote it at the regional level—to implement logistics that support sustainable transport and low-carbon infrastructures<sup>27</sup> as recently put forth by ECLAC.

One of the main concerns of ECLAC at present—particularly for its Infrastructure Services Unit—is the lack of integrated infrastructure, transport and logistics policies. This affects logistics performance and national competitiveness and has significant repercussions at the state level, especially in the social sphere. That is why the ECLAC Infrastructure Services Unit has been calling for a shift in transport policy focus, in favour of comprehensive policies<sup>28</sup> that see the development of infrastructure, transport services, logistics and regulation as part of an integrated, multidisciplinary whole that is coordinated with the sectors and stakeholders involved. The studies cover cases (Finland, France, Germany and the Republic of Korea, among others) where these components were brought together at the policy level. While each case involves a different reality, there are real, specific alternatives for advancing towards an integrated infrastructure, transport and logistics policy resulting in primary recommendations for developing and implementing integrated policies in this area. The role of the state in developing logistics platforms<sup>29</sup> that support national and regional competitiveness has also been analysed.

#### V. Conclusions

Infrastructure, transport and logistics help determine potential capacity for economic and social development in a country or a region. That is why they have been a prime subject for ECLAC research since the outset, in its desire to further research in the field, deepen interdisciplinary approaches that can group the highest number of variables in order to help implement sector-based policies and formulate comprehensive solutions to ensure the well-being of the entire population of Latin America and the Caribbean.

We must advance towards national policy that is seen as a whole instead of as a sum of sector-based development plans. Policy should be geared towards supporting the competitiveness and productivity of the goods or services that a country markets instead of just being based on the mode of transport that prevails in the region. That is why, instead of talking about the need for national policies for maritime, highway or railway transport, what is needed is a national logistics policy that favours sustainable national and regional development.

<sup>25</sup> G. Cipoletta, G. Pérez and R. Sánchez, “Políticas integradas de infraestructura, transporte y logística: experiencias internacionales y propuestas iniciales”, *Recursos naturales e infraestructura series*, No. 150, Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), May 2010.

<sup>26</sup> G. Pérez, “New information and telecommunications technology in the transport sector” *FAL Bulletin*, No. 177 and “Technologies applied to the transport sector: electronic fare collection systems” *FAL Bulletin*, No. 193, 2003.

<sup>27</sup> E. Claro, “Towards low-carbon transportation infrastructures”, *FAL Bulletin*, No. 286, Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2010.

<sup>28</sup> G. Pérez, “The need to establish comprehensive policies for infrastructure, transport and logistics”, *FAL Bulletin*, No. 263, Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2008; E. Leal and G. Pérez, “Logistic platforms: conceptual elements and the role of the public sector”, *FAL Bulletin*, No. 274, Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2009.

<sup>29</sup> E. Leal and G. Pérez, “Logistic platforms: conceptual elements and the role of the public sector”, *FAL Bulletin*, No. 274, Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2009.