



BULLETIN

FAL

FACILITATION OF TRANSPORT AND TRADE IN LATIN AMERICA AND THE CARIBBEAN

Logistics and mobility policies for sustainable development and regional integration: conceptual framework and regional experiences

Background

Logistics and mobility have a profound impact on the implementation of the structural changes needed to achieve sustainable and inclusive development in Latin America and the Caribbean. Recently, many governments have sought to develop national logistics and mobility plans that are linked to the need for these structural changes and that aim to improve the international competitiveness of their economies and, thus, citizens' quality of life. However, the fact that these instruments do not take into consideration other economic sectors has affected the impact of the proposed measures and led to less auspicious results than expected. The Natural Resources and Infrastructure Division (NRID) of the Economic Commission for Latin America and the Caribbean (ECLAC) has identified the acute need for institutionally-coordinated measures within the overall framework of a national logistics and mobility policy in order to pave the way for cross-cutting efficiency and productivity measures, while at the same time reducing negative externalities on the population and the environment.

This approach is based on the extensive work that ECLAC and NRID have undertaken to lay the foundations for this paradigm shift in both the national plans and regional physical integration initiatives. As part of this work, NRID has, to date, held 10 national workshops in Chile, Colombia, Costa Rica, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, Peru and Panama, on integrated and sustainable logistics and mobility policies, in order to create a space for training, discussion and national analysis to design, implement,

This *FAL Bulletin* summarizes the main findings and proposals contained in the document "Políticas de logística y movilidad para el desarrollo sostenible y la integración regional", recently published by the Natural Resources and Infrastructure Division (NRID), ECLAC. It contains a proposal for a paradigm shift in the formulation of national logistics and mobility policies, with common guidelines for Latin American and Caribbean countries.

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The views expressed in this document are those of the authors and do not necessarily reflect the views of the organization.



Background



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monitor and evaluate policies that promote national sustainable development, particularly in the areas of infrastructure, logistics and mobility. In addition, activities were also undertaken with the Community of Latin American and Caribbean States (CELAC), the Mesoamerica Project, the Permanent Secretariat of the General Treaty on Central American Economic Integration (SIECA) and the Union of South American Nations (UNASUR) to discuss these issues at the subregional level.

On the basis of the experience gained in these workshops and as a result of the research carried out in recent years, ECLAC recently published the study “Políticas de logística y movilidad para el desarrollo sostenible y la integración regional”,¹ which proposes a conceptual framework for national logistics and mobility policies aimed at producing the paradigm shift needed to ensure that the sector is committed to achieving sustainable development.

The purpose of this Bulletin is to disseminate, in a concise manner, the main elements of the ECLAC proposal on the conceptual framework for national logistics and mobility policies, as well as share the empirical results of the national workshops. To this end, section I of the Bulletin describes the context for the paradigm shift needed to achieve the Sustainable Development Goals. Sections II and III introduce the conceptual guidelines and institutional processes for drawing up national logistics and mobility policies. The fourth and final section examines the implications of this approach for regional integration processes and offers general concluding remarks.

I. Paradigm shift: from infrastructure and transport policies towards logistics and mobility policies

The current logistics systems and mobility services in the ECLAC region are highly divergent but, in general, all of them significantly affect the region’s competitiveness. Studies by ECLAC and other multinational agencies, as well as numerous national assessments, have identified a number of challenges that led to this situation. These include:

- a persistent lack of basic infrastructure in the face of growing demand for logistics and mobility services
- a failure to make the most of the competitive advantages of different modes of transport and of the opportunities offered by technology and innovation
- an increase in the negative externalities of transport services on the environment and the population

- greater insecurity in transport operations, particularly in land transport, leading to higher transport costs
- a lack of trade and transport facilitation (for both international trade and freight and migration flows within a country).

In addition to these challenges, current public policies also face a number of restrictions that directly affect their ability to resolve new or existing problems. These restrictions include the lack of an integrated, coordinated approach in the logistics and mobility sectors as a whole, the lack of funding for infrastructure services and the numerous institutional and regulatory problems.

Traditional methods of designing, implementing and regulating infrastructure policies and the services provided as a result are, thus, not enough to achieve the goals of sustainable development. What is needed is a paradigm shift in the way that policies are developed and implemented, which would establish a general framework that identifies and links a number of key concepts, such as development, production, infrastructure, transport, and more particularly logistics and mobility services.

The ECLAC study therefore identifies a series of conceptual prerequisites for the design and implementation of public policies that should be endorsed by all stakeholders, regardless of whether they are from the public or private sector, in order to ensure the long-term quality and sustainability of the policy. These prerequisites include the following elements.

- Firstly, it should be recognized that the fundamental objective of the infrastructure, logistics, mobility and transport policies is to contribute to the achievement of the Sustainable Development Goals.
- Secondly, modern definitions of logistics² and mobility³ should be part of the basic vocabulary of public policies. Thus, a logistics and mobility policy can address—in an integrated manner—all aspects of the movement of goods and people, the provision and regulation of public and private services, trade and transport facilitation, technical and financial regulations and many other aspects that regulate or influence the logistics and mobility sectors.
- Thirdly, public action and intervention in the logistics and mobility sector should be recognized as essential. Based on an analysis of the regional and international best practices, ECLAC has identified the crucial role

¹ Available free of charge from the website: <http://repositorio.cepal.org/handle/11362/39427>

² According to the ECLAC proposal, “logistics” refers to the integrated provision of infrastructure and production services, facilitating movement and the distribution of goods and the regulation of services and information, along the global chain.

³ “Mobility” refers to the provision of services that meet the various transport needs of different population groups efficiently and in a decent, timely, reliable, safe and sustainable manner.



that the State plays in the design and implementation of public policies. The available experience indicates that achieving a long-term vision, with comprehensive development plans and sufficient financing, independent of political shifts and economic cycles, has had a significant impact on not only the economy, but also territorial cohesion and connectivity.

- Fourthly, policies should be designed in an integrated and sustainable manner. An integrated approach implies that the objectives of different sectors must be aligned with a national and/or regional approach. The planning and execution of actions should also be coordinated between the public and private sectors. Sustainability refers to the four aspects of sustainable development – environmental, economic, social and institutional (governance). While these aspects may often appear to be incompatible or to not be in line with the interests of some corners of society, policies are the tools that should ensure that each aspect is taken into consideration and mediate any conflicts among them.
- Lastly, adopting a co-modality approach is indispensable in the design of public policies. This implies the optimal use of one mode of transport or a combination of different transport modes, to ensure that the entire journey is efficient and sustainable according to the particular needs of the end-user. Instead of thinking in terms of modes of transport, this approach seeks to design a co-modal network, where transport infrastructure combines and includes road, rail, river, air and sea infrastructure to improve individual's mobility and freight logistics.

Adopting these basic but fundamental concepts will not be enough to produce the necessary profound transformation of public policies. Therefore, ECLAC provides institutional guidelines to oversee the development of an integrated and sustainable national logistics and mobility policy.

II. New paradigm: guidelines for a national logistics and mobility policy

Without being restrictive, the ECLAC proposal offers general guidance on the key components of national policy, incorporating both the overarching goals and the main concerns in the area of logistics and mobility. The overall aim is to allow synergies to be created with other public policies and a long term vision to be achieved, something that programme- or project-based approaches do not facilitate. The creation of dialogue and policy follow-up mechanisms is also examined, as they enable

better governance of logistics and mobility services, as well as more sustainable development.

In response to the challenges and constraints of current policies outlined above, the ECLAC proposal is composed of the following fundamental elements:

- Adopting the principles of integrality and sustainability as the fundamental underlying principles of the policy, regulating the entire policy, from its most general aspects, such as objectives, strategic planning and institutional mechanisms, to its most specific components, such as programmes, plans and projects.
- Formulating policy objectives in the light of and based on the national development strategy and according to the country's development model. The importance of this step cannot be stressed enough; without it, it would be impossible to achieve the necessary linkages and coordination with other public policies. It is also at this stage that the three substantive dimensions of the Sustainable Development Goals (economic, social and environmental) are considered, analysed and reconciled, as are the sometimes competing needs of the logistics and mobility sectors with their various subsectors, and the fourth dimension, namely the institutional mechanisms, is addressed in order to give all State policies an element of continuity.
- Defining the policy's basic institutional framework and strategic planning requirements. A (State) policy's quality and durability depends on a solid and participatory institutional framework, as well as on reaching a general consensus on the use that can and should be made of the main public policy tools, such as investment, regulation and facilitation of procedures.
- Incorporating plans, programmes and projects as a necessary, but not the only, component of policies. There is often confusion in the region between logistics policies and national logistics plans. It is therefore essential to define clearly the inclusion of these sectoral plans in the general policy framework, by ensuring that they are aligned with the overall goals of the policy and that plans and policies are coordinated and cohesive.

The proposed approach is outlined in diagram 1, where one aspect of the policy forms the basis for and determines the following elements, so there is a logical sequencing order between the different elements that requires them to be completely coherent.

The order of priority is therefore the main feature of the proposal, as it demands coherence between each of the steps in the national logistics and mobility policy, from its key principles to each of the programmes, plans or projects.



**Diagram 1
NATIONAL LOGISTICS AND MOBILITY
POLICY GUIDELINES**



Source: Jaimurzina, Pérez-Salas and Sánchez, 2015.

III. The institutional process to establish a national logistics and mobility policy

This section clarifies each component of the national logistics and mobility policy in accordance with the aforementioned sequencing order.

(a) The principles of the national logistics and mobility policy

The process of policy elaboration starts with the adoption of core principles that should be shared by the majority of, if not all, stakeholders in logistics and mobility sectors. These principles should address the fundamental issues inherent to the logistics and mobility sector but should also be linked to the broader area of public policy. It became clear from the discussions during the national policy workshops held by ECLAC that many, if not all, such issues are generally related to the need for an integrated approach (aligning sector objectives with a national and regional approach that covers infrastructure and transport sector services and examines all modes of transport in one evaluation) and with sustainability issues (balanced consideration of the four pillars of sustainable development – economic, environmental, social and institutional).

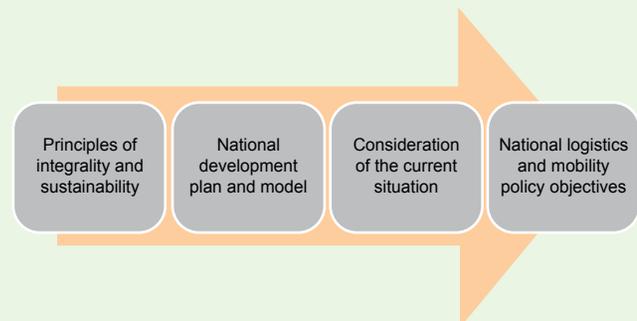
Discussion related to the need for an integrated approach usually touches upon the need to ensure integration among multiple logistics and mobility sectors, components and stakeholders; while the question of sustainability covers various aspects that can change the current paradigm and the balanced approach to all aspects of the policy, such as economic and financial sustainability, environmental sustainability, social sustainability and institutional sustainability.

(b) National logistics and mobility policy objectives

The next policy development step is defining the policy's overall objectives, ensuring that they are aligned with the objectives of the national development plan, expected scenarios and assessments of the current national and regional situations. The principles of integrality and sustainability demand a thorough analysis of the proposed objectives to ensure that all issues concerning national sustainable development are covered and sectoral objectives avoided.

Transport policy objectives are often based on the need for an immediate response to existing problems and issues, making it difficult to develop a long-term plan and to analyse all of the medium- and long-term implications of quick fixes. The proposal stresses the importance of basing discussions on the national development plan, then analysing the current situation in order to determine the policy's objectives, before reaching a technical solution (see diagram 2).

**Diagram 2
SETTING NATIONAL LOGISTICS AND MOBILITY
POLICY OBJECTIVES**



Source: Jaimurzina, Pérez-Salas and Sánchez, 2015.

Policy objectives could be established by discussing the Sustainable Development Goals and the possible contribution of the logistics and mobility policies to reaching these Goals.

(c) Institutional mechanisms and strategic planning

The principles and objectives of a national logistics and mobility policy can be well-designed but yet totally

ineffective if the policy does not include an institutional and strategic framework that ensures its institutional sustainability, strategic planning and management.

It is therefore essential that, after setting the policy objectives, a national consensus is obtained on the institutional framework needed to implement the policy and to define its main focus in terms of the main tools available to the State, such as regulation, investment and facilitation of procedures.

In terms of institutional mechanisms, discussion of and studies on the quality of current policies have identified several issues related to institutional sustainability, including failures caused by a lack of political will to effectively implement strategic planning; a lack of policy continuity; a lack of measurable indicators to monitor and evaluate actions; political pressure and lobbying; pressure from sectoral labour associations; multiple, uncoordinated and overlapping jurisdictions; inadequate training for technical staff responsible for implementing sectoral policies; and other institutional weaknesses. Such limitations can be found in various guises and degrees in Latin America and represent major potential obstacles to the development and implementation of transport and infrastructure policies. That is why it is essential to take them into account and to address them in a positive manner.

Cases where the logistics industry has been successfully transformed show that an appropriate institutional framework was crucial to the success of these policies. Analysis of international experience s identify a number of key elements with regard to the institutional mechanisms of policies, highlighting the importance of clear leadership and effective national dialogue mechanisms that favour a long-term approach, followed by legal or institutional agreements that render them sustainable over time, and, lastly, planning and follow-up tools so that policies can be monitored and adapted to new scenarios (see diagram 3).

Diagram 3
INSTITUTIONAL PILLARS OF A LOGISTICS AND MOBILITY POLICY

Leadership and dialogue mechanism	Legal or institutional framework	Planning and follow-up tools
<ul style="list-style-type: none"> • Who should take the lead on the policy? • What forums for national dialogue exist for the formulation and validation of the policy? 	<ul style="list-style-type: none"> • What legal, regulatory or institutional changes are needed to formulate and implement an integrated and sustainable logistics and mobility policy ? 	<ul style="list-style-type: none"> • What indicators should be used to monitor the policy's implementation and its results?

Source: Jaimurzina, Pérez-Salas and Sánchez, 2015.

It should be noted that logistics and mobility reforms are an ongoing improvement process and require constant monitoring, so that any necessary changes can be made in a timely manner in order to achieve the given objectives

in full. The policy should therefore have a set of sectoral indicators that monitor progress in the implementation of the policy and its various components, generate information for technical and political decision-making and, more importantly, enable the evaluation of results and commitments made.

The effectiveness of infrastructure planning and service regulations is very sensitive to the geographical and institutional environment, national or regional. National infrastructure development policies should recognize that investment has been and remains indispensable to the development of infrastructure. Financing needs, together with the limited resources available to governments in the region, mean that public policies for the planning, implementation and management of infrastructure projects must be improved. Investments in infrastructure must therefore be the result of a strategic planning process based on a co-modal evaluation of infrastructure projects, analysing the genuine demands for mobility and logistics, and duly considering the merits of all projects and/or various feasible combinations thereof.

Secondly, the State's active role in formulating systematic, flexible and comprehensive service regulations, together with the tools and capacities to enforce it, is vital for compliance with the policy's regulatory framework; this could also change how stakeholders make decisions, thus contributing to a more sustainable development.

In short, the regulatory framework should include technical and economic regulations that encourage a modal shift through legislation that internalizes externalities in prices and provides complementary infrastructure among modes of transport, among other measures. The regulations are therefore an essential instrument for sustainability and policies.

(d) Sectoral policy guidelines

Based on the policy principles and objectives and the established pillars of its institutional mechanisms and strategic planning, broad sectoral policy guidelines (sea, air, road, rail, inland waterways, pipelines) can be established, by initiating a discussion at the modal level and identifying the problems and opportunities, existing or potential, of each mode of transport, without losing sight of the overall vision. The guidelines' main objective is to identify how the sectoral policy can help to achieve the policy goals, in order to then identify specific actions and goals under the plans, programmes and projects.

During the national workshops, the first step in the ECLAC working method was to identify existing challenges in order to determine the national policy priorities. This discussion took place among various sectors and disciplines, not only to ensure a definitive diagnosis, but also to allow

each sector to have as comprehensive an understanding as possible of the logistics and mobility sector, helping them to see how their actions affect (positively or negatively) the rest of society. Grouping challenges together on the basis of the solution, rather than the sector or mode of transport concerned, and defining whether it was an infrastructure, regulatory or public-private cooperation issue, helped in the search for comprehensive solutions to cross-cutting issues, which in turn made public policy proposals more coherent. This process also provided a balanced analysis of the challenges and possible responses, without leaning towards one type of solution (only investment or regulation), suggesting that the facilitation approach could be part of the answer.

The main guidelines for the sectoral policies can and should concur with the central concepts, allowing for better coordination and linkages. Without providing an exhaustive list, sectoral guidelines might include the following aims:

- To achieve a sustainable modal split. To build a competitive and sustainable society, the prevailing modal distribution in the region must be changed, for both freight logistics and urban mobility. For this reason, all sectoral actions must assess and implement an integrated and sustainable transport system, based on the technological options available within objective parameters such as level of investment required, operating and maintenance costs, and emissions generated per ton or passenger transported per kilometre.
- To improve the availability and quality of infrastructure. The connectivity deficits in rural areas, the lack physical and technological infrastructure at border crossings, and the lack of fluidity in overland links with major centres, are all still areas of particular concern and significantly affect logistical costs and travel times, as a result of network economy losses and poor quality transport services both for people and freight.
- To encourage more competition among logistics and mobility services, thus improving performance and quality, addressing operational inefficiencies in transport services, such as inadequate modal choice, the atomization of carriers or the increasing number of informal ones, the lack of professional structures with modern, comprehensive management, the costs of bureaucracy, discriminatory behaviour, and national and regional delays.
- To eliminate insecurity in transport operations, in both logistics chains and passenger transport.
- To reduce environmental and social externalities, such as energy consumption, pollution and road accidents.
- To promote the adoption and use of information and communication technology (ICT) tools by governments

and businesses, particularly small- and medium-sized enterprises (SMEs), for more competitive logistics and better quality mobility operations.

- To ensure the availability of human resources in the public and private sector in order to improve and maintain the quality and planning of services provided.

Based on these broad sectoral guidelines, the plans, projects and programmes can be defined in accordance with the policy principles, objectives and guidelines, thus completing the policy framework.

(e) Programmes, plans and projects

In the region, a national plan (for example, on transport and logistics) and a national logistics policy are often confused, as if they were equivalent and it was merely a name change. The proposed approach allows for the timeframe and function of the sectoral plans to be clearly defined, thus ensuring that they are in line with the policy's general aims and that sectors coordinate and cooperate among themselves, by highlighting the order of priority of the principles, objectives and other stages the national logistics and mobility policy over the programmes, plans and projects. In other words, there must be complete coherence among each of the policy elements.

Given the particularities of each country, ECLAC does not specify which programmes, plans or projects should be implemented, as these depend on the particular national context and are a matter of national sovereignty. The plans, programmes and projects must be based on detailed sectoral analysis, in accordance with government priorities and private sector needs. While ECLAC as a United Nations body can offer technical assistance to countries for the formulation of programmes, plans and projects, this should not be decided without having first carried out a comprehensive national analysis. Similarly, coordination of these actions with multilateral banks allows problems to be detected and efficient solutions financed with a systematic approach that supports countries' logistics and mobility development.

Nevertheless, as the main aim of the countries of the region is sustainable development, these programmes, plans and projects must seek to foster complementarities and innovative financing mechanisms that promote modality and service provision in a broader subregional market. Such issues cannot be resolved in just one area, but the interdisciplinary and multisectoral nature of sustainability means that the task must be addressed in a comprehensive and holistic manner.

Given that infrastructure largely determines its users' consumption patterns, the choice of infrastructure and how it is designed, operated and regulated will affect the

quality of the services provided significantly, as well as their implications in terms of energy consumption, carbon emissions or negative externalities on the population over the infrastructure's lifetime. If initial decisions are incorrect, negative externalities on the population and the environment will increase and the effort and cost needed to reduce this later will be much greater.

IV. Conclusion - National logistics and mobility policy for sustainable development and regional integration

A new policy paradigm is needed to address the major constraints that sectoral public policies in Latin America and the Caribbean face in meeting the current demands for freight logistics and passenger mobility. The lack of a comprehensive vision for infrastructure, logistics, mobility and transport policies, as well as the lack of sustainability criteria in the design and implementation of the policies, means that the potential that logistics and mobility have to offer in achieving socially inclusive economic growth is wasted.

This profusion of challenges, many of which are closely interlinked, demands an integrated and effective response from all stakeholders involved in the logistics and mobility sector under the leadership of the national government, as a misstep by one stakeholder could affect the overall performance and compromise the development goals.

Therefore, this *FAL Bulletin* contains guidelines to oversee and manage the process of building an integrated and sustainable national logistics and mobility policy. This is necessary given the constraints on the ability of national (and regional) policies to achieve the Sustainable Development Goals and the challenges, traditional and emerging, that countries in the region face with regard to logistics and mobility.

Creating a successful national logistics and mobility policy despite the multiple challenges, restrictions and particularities that each country faces in the area of logistics and mobility, requires an approach like the one proposed below. It is a continuous, two-way process where the order of priority between each component descends but the coordination required among them increases. Each component is developed on the basis of the participation of and dialogue with all stakeholders and interested parties, including representatives from the institutions tasked with overseeing these policies.

This approach can and should be extended to the regional level, as it represents an excellent opportunity to improve the logistics and mobility of each participating country in terms of efficiency and connectivity at a lower cost than if they had done it alone. The proposal to integrate national logistics and mobility policies at the regional level is a long-term process that, under the aegis of the right regional institutions, would enable supranational institutional structures to be created and common policies to be harmonized among countries (see diagram 4).

Diagram 4
REGIONAL LOGISTICS AND MOBILITY POLICY GUIDELINES



Source: Jaimurzina, Pérez Salas and Sánchez, 2015.

The first step towards achieving full regional integration and, thus, coordinated common policies, on logistics and mobility for example, is building the necessary confidence, both political and institutional, that will reassure governments and their citizens that the integration process can improve the quality of life in and the development of each country more than if countries worked alone. Physical integration, such as interconnected economic infrastructure (transport, energy, telecommunications, water and sanitation), is also needed and will facilitate the integration of the economic and territorial systems at the subregional level (or regional, as appropriate).

Once this physical connection is well under way, connectivity must be strengthened and supplemented by trade and transport facilitation efforts (trade deals and agreements between countries, free trade areas, customs unions, common market or economic and monetary union).

Alongside these facilitation efforts, adequate subregional regulatory institutions must be created that, ultimately, enable political integration, where building mutual trust will be vital to managing asymmetries, harmonizing government activities and ceding national sovereignty over some issues in favour of supranational institutions. For this integration process to work each country must

adopt an integrationist stance that is not time-bound and an institutional framework that promotes dialogue and public-private partnerships at all levels.

As is the case with national policies, creating a regional logistics and mobility policy is a process of continuous improvement that moves steadily forward by means of consensus, addressing new challenges and concerns that affect the regional development and integration strategy. It is a process that requires respect for institutional timeframes, that recognises and values different development models and that has a structure that can anticipate major changes in order to make timely decisions. The elements of a regional logistics and mobility policy are the same as those of a national logistics and mobility policy, although the specifics will depend on the agreement of all the countries.

Without setting out guidelines that are too restrictive, the approach presented in this document seeks to provide a tool for strengthening States' institutions and regional integration initiatives. It provides guidance on how to address and resolve structural asymmetries within and between countries, to progress towards harmonizing common policy criteria, in order to arrive, in the medium-term, at regional logistics and mobility policies, thereby taking advantage of all the benefits of full and sustainable integration.

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