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FACILITATION OF TRANSPORT AND TRADE IN LATIN AMERICA AND THE CARIBBEAN

Institutional framework, co-modality and sustainable transport services

Background

Transport services are a key element of economic development and competitiveness at the country level and, as such, are a major investment budget item. They also generate externalities for the population. Among these are environmental impacts, particularly if the main energy matrix is based on non-renewable fossil fuels. It is therefore crucial to have effective, high-quality transport policies which take proper account of this core issue and the complexities involved.

In practice, transport policy design and implementation in Latin America is far from achieving this. There are major obstacles which must be identified and analysed so that strategies can be designed to overcome them. The first is linked to the *nature* and *quality* of public policies designed to address the challenges of development. The second obstacle, which is closely linked to the first, is the *public institutional framework* and arrangements which countries establish to implement their policies. The third obstacle is the *social and political feasibility* of policies to be implemented in terms of how they affect different stakeholders. These three obstacles determine the level of success these policies will achieve. The objective of this study is to look at the issues relating to institutions and the challenge of designing and implementing systemic, integrated, sustainable transport policies in the current institutional framework in the countries of Latin America.

I. Public policy quality

Generally speaking, public policy is action taken by the State to address specific territorial or social issues by changing a situation which is considered a problem or by dealing with a challenge for the development of a region, community or country in order to achieve socially desirable or valued goals. Policy action seeks to alter, to a certain extent, the so-called *causal chain* behind the problem or challenge, by breaking down barriers or strengthening factors which help to solve the problem or making the

This issue of the *FAL bulletin* focuses on the problems which public institutions encounter when formulating transport policies and the challenge of designing and implementing systemic, integrated, sustainable transport policies in the current institutional framework in the countries of Latin America.

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most of opportunities opened by the challenge. It could therefore be said that a policy has the necessary *quality* if it correctly interprets (or explains) the situation; this depends on how close it comes to capturing the essence and systemic complexity of the causal chain behind the problem in need of intervention. If the interpretation is correct, intervention will target the areas which have the greatest impact on the situation and the policy will have a better chance of achieving its objectives.

Transport policymaking in Latin America is quite often fact-based rather than a systematic, consistent approach grounded in an understanding of the role that these services play in development. It therefore comes as no surprise that the expansion of infrastructure has been somewhat haphazard and strongly unimodal. Policies generally lack an integrated approach and tend to be implemented by a host of government agencies without even basic coordination among them.

Over the past few decades, the need to expand transport infrastructure and services at a pace that matches or even anticipates the needs of economic growth has, in the search for solutions, gradually pushed public policies away from a unimodal approach towards one that advocates multimodality and intermodality, particularly for the transport of goods or cargo. Both approaches are based on the idea of complementarity between modes of transport in order to reduce costs and the travel time between two points, thereby increasing competitiveness.

However, because the policies followed are still too heavily slanted towards a unimodal approach, public investment policies often contradict each other. For example, in some countries there are policies which promote the modernization of public transport while devoting vast government resources to subsidize urban motorways and thus, incongruously, encourage greater use of private cars. Other policies stimulate investment in rail transport and at the same time encourage road infrastructure expansion directly by the State or through concessions awarded to private investors, disregarding the fierce competition between these modes of transport, particularly in certain areas of a country or for certain types of cargo.[1] In short, investments which do not achieve the social optimum.

Privatization of State-owned companies and services in the region started in the 1980s, as did the granting of concessions to private investors for the construction of transport infrastructure. Perhaps this marked the beginning of a shift towards a transport infrastructure market paradigm, particularly for infrastructure concessions, as private investments could be recouped through fares reflecting, to a certain extent, their real price.[2] As a result, prices may internalize the externalities of infrastructure investment, including environmental impacts, making transport services sustainable.

II. Co-modality and its implications

Since the European Union coined the term "co-modality"[3] to describe the integrated design of public policies on transport in Europe, this new concept has been promoted in Latin America, particularly by ECLAC, as a way of fostering a new paradigm in the design of public policies on transport services, making them more sustainable and efficient and helping to make the countries of the region more competitive.

An internal working document produced by the Natural Resources and Infrastructure Division of ECLAC defines co-modality as: The use of one mode or an intermodal combination for a journey or a series of journeys of persons or merchandise, maximizing the efficiency of the overall journey. Co-modality therefore seeks to achieve integration and modal complementarity using efficient, competitive and sustainable standards and focusing on user needs rather than on the mode of transport used. As a result, co-modality is a central and indispensable part of a modal shift strategy within an integrated and sustainable logistics and mobility policy.

Co-modality therefore looks for a combined or integrated way to use different modes in a transport system, fostering optimal utilization of each mode or each combination of modes so that an overall journey is efficient and sustainable. It advocates a policy approach that is not only more integrated but also more proactive, so that stakeholders can act and make decisions in a particular way. This means that policy will have to do more than establish the regulatory framework which will guide decision-making by system stakeholders. What is more important, it will have to identify, define and try to align incentives that encourage transport stakeholders and users to choose the best possible combination of modes (obviously, when a combination of modes is available for the route in question).

[1] There are several examples in the region. In Santiago, a costly public transport modernization programme was launched in the 2000s while at the same time the construction of urban highways was being subsidized. In Caracas, considerable investments are being made in the metro system while a substantial fuel subsidy benefits motorists above all.

[2] Although there are sometimes tolls or service charges for using State infrastructure, they do not necessarily reflect the effective value of these investments. As a result, there is a certain level of implicit State subsidies for private transport operating on these roads, which are rarely factored in. The current infrastructure concession system also entails a State subsidy, but in this case it is explicit and part of the concession business model and linked to the level of real demand for these roads (in some models, the subsidy is triggered only if actual demand is lower than the estimated or reference demand in a given period). This means that the price or fare is stated in more real and explicit terms. Otherwise, the concession tendering process could fail or subsequently contribute to the judicialization of relations between the State and concession holders.

[3] European Union (2006), *Keep Europe moving: Sustainable mobility for our continent*, Brussels, June.

A. Towards the essence of co-modality: decision models for transport users

According to the co-modality approach, efficiency in the use of transport modes has a lot to do with their environmental sustainability. This means that transporting goods and passengers not only has a monetary cost, but also an environmental cost. The monetary cost comes under the economic rationale of decisions made in a competitive (market) environment. By contrast, the environmental cost falls within a global rationale (sustainability) and therefore is an externality of transport which is not necessarily taken into account by those who trigger it when making decisions relating to the way in which they travel or transport goods.

Inescapably, the two spheres must be linked by internalizing the environmental cost within the economic rationale governing transport choices, which falls within the requirements of competition. To put it another way, sustainability should be seen as an effective cost that, if not taken into account, affects product competitiveness (markets which have environmental footprint requirements are one example). Competitors should therefore add this cost to the others in their decision model.

As the 2011 review of the European Union's White Paper states, each mode of transport must bear the full cost of operation. This means not only the direct cost of using the mode (such as fuel, maintenance and replacements) but also the externalities of transport use, particularly environmental externalities. In the European Union, this has resulted in policy instruments such as revising taxes on transport services in order to replace annual road and registration taxes with variable ones on fuels (particularly fossil fuels) or implementing a general payment scheme for infrastructure use based on a complex formula for internalizing external costs.

Co-modality achieves efficiency when the users of a transport mode choose, for each journey, a balance between the economic rationale —production and transport service costs— and sustainability requirements for modes used to transport goods, which are also internalized as costs.

B. Co-modality in goods and passenger transport

The concept of co-modality focuses on the fact that combining modes of transport leads to the efficient and optimal movement of goods and passengers. Both terms assume that a rational decision on the part of the user is behind the choice of one mode of transport or another or a combination of modes. However, it can be argued that there are different decision paradigms for the transport of goods and the transport of passengers.

In the case of goods, the rationale centres on the simple and direct economic or monetary cost and how it affects the competitiveness of the item to be transported (plus, perhaps, the opportunity cost of being, or not being, in a market at the right time, as is the case of prime cargo). This rationale is external to what is being carried (physical goods, which do not have feelings and cannot complain).

Cost is also a key element in passenger mobility. However, in this case, it is not just the cost of the fare, but rather a combination of variables which come together and interact in many ways, such as distance/time and quality (comfort and safety), which vary depending on the social group (economic, age, gender) or the activity carried out by the passengers. This also involves a rationale that is internal to what is being carried (passengers who have feelings, views and can complain, because it is a public service in which the State has significant responsibility).

In other words, decision trees could be useful for the co-modal transport of cargo because market competition affects all competitors in more or less the same way and the cost or price is similar for everyone (including the cost of time, except for prime goods).

However, in the case of passenger transport, there are different perceptions of cost that come under more than one decision rationale, where variable combinations of factors determine how and in what people decide to go from one point to another (for example, comfort, safety, travel time and predictability, and the cost of the fare are of key importance). In such cases, co-modality seems more like a problem and choosing it will almost certainly be in response to encouragement from the State rather than an individual decision.

Transport of goods and freight takes place mainly in inter-urban areas (only part of the journey is in urban areas), while transport of passengers is generally in urban areas and only part of it is in inter-urban areas. In each area there are certain factors which must be considered because the combination or integration of modes varies and users tend to base their decisions on different rationales.

A key element to these factors is competition. There are two types of competition between modes for inter-urban cargo transport. On the one hand, there is competition over how the goods or freight are shared out between the different modes, which is normally in line with the private economy rationale of price or fare, which determines the effectiveness of one mode or another and the possible combinations thereof. On the other hand, there is competition between lorries, buses and cars over inter-urban roads because as economic activity in a country rises and businesses and people become wealthier, the stock of

vehicles using the space also increases, as do congestion costs. This in turn affects travel time and, therefore, costs, and it has an environmental impact as well (because more fuel is used and more particles are generated due to frequent braking).

III. The sustainable transport policy we need

Co-modality, because of what it involves, puts considerable pressure on Latin America's traditional way of formulating transport policies, as well as on the structure and workings of the State apparatus in this area. A new paradigm for policymaking, like the one that co-modality entails, calls for profound changes in structures, management models and the way the State operates, not only at the sector level but at a more general one as well.

A. Constraints for integrated public policy posed by the structure of the State in Latin America

In Latin America there tends to be a wide range of policies and sectoral regulations which regulate and foster the use of different modes of transport. However, they do not share a system-wide and integrated approach which would make them consistent and allow for real regulation and enforcement. This has resulted in modal policies designed, above all, to resolve a particular problem which is associated with a mode of transport. However, attempting to maximize the gains of each transport mode individually is as impossible as it is absurd.[4]

This issue is, of course, related to the traditional structure of the State apparatus in Latin America, which grew and developed due to aggregation of functions and the requisite structures as the challenges of development became more complex and specialized. During the early stages of building the nation-State in these countries, there was virtually no need for transport infrastructure development policies. Although the world and the role of the State have changed considerably, until recently this paradigm had not.

Nor have most of the States of the region undergone sweeping reforms to adapt the government apparatus to the new role which development requires. State modernization has taken place in some countries, but only to a certain extent, and in many cases it has involved changing processes rather than frameworks. At the same time, there have not been many incentives designed to curb or bring order to the proliferation of structures where functions often overlap or are subdivided illogically. Doing so would improve the distribution and balance of political power, particularly when governments are formed through complex and often unstable political alliances.

In short, governments come up against political problems when carrying out major public administration reforms, facing the well-known dilemma of government: should I make inward instead of outward reforms, to the best of my ability and as promised, during my four, five or six years in office? Or should I stick to the agenda and do what I can to make outward reforms using the instruments available? The second option is the natural choice, particularly for governments with shorter presidential terms.

B. Institutional challenges for developing systemic, integrated transport policies

Designing integrated, systemic transport policies in keeping with the co-modality approach might not necessarily involve sweeping institutional reforms but could entail some changes in the way public institutions design their policies and manage implementation. While this might seem straightforward (and, strictly speaking, it is), there are challenges that virtually none of the countries of the region have overcome. At least eight of these challenges are decisive.

- One challenge is that transport policy tends more towards the factual than the explicitly designed. In other words, transport policy papers drafted and structured as such are few and far between in Latin America.[5] In some cases, presidential candidates put out platforms that include, at best, a section on "transport issues" with a list of things (usually, construction projects) that the candidate promises to do if elected. But these clearly are not policy papers per se. Besides, it is not unusual for these promises to be inconsistent with what the country has been doing or with other objectives in the same political platform.

- A second, widely-acknowledged challenge is the over-sectorialized and over-compartmentalized way in which public transport policy tends to be conceived and designed within each area ministry. As ECLAC has noted, in more than a few cases in Latin America, the ministry of infrastructure or public works responsible for infrastructure planning is completely separate from the transport ministry. There may also be a planning ministry responsible for studying territorial development and an agency fostering private investment. It is clear that when the bureaucracy is so complicated, the overall consistency of the policy area suffers and,

[4] See Cipoletta Tomassian, Georgina, Gabriel Pérez Salas and Ricardo J. Sánchez (2010), page 14.

[5] In Latin America there are no policy papers such as the white papers on transport produced by the European Commission, the United Kingdom and a number of European countries, which are systematically drafted on the basis of sound evaluations, are often harshly self-critical and contain well-grounded projections used to identify objectives and map out action plans and instruments with clear targets that are then implemented by means of regulatory and institutional mechanisms and, subsequently, evaluated.

above all, development issues may be pushed into the background and lost in the policy shuffle (Pérez Salas, 2008 and NRID/ECLAC/UNASUR, 2012).

- A third challenge is the endemic discontinuity of public policy in the region. Policy objectives and priorities don't change only when the administration does (even if the incoming one has the same political leanings as its predecessor) but also when there is a change in sectoral minister within the same administration. This makes ministry policy more of a personalized matter, lacking an overarching rationale based on a sound technical assessment of the issue to be addressed.

- A fourth challenge lies in the generally long lead time for infrastructure project implementation, while administrations tend to focus on obtaining short-term results during a presidential term in order to "have something to show" and ensure continued citizen political support for the rulers. This can lead to shying away from long-term policy challenges or to addressing an issue in the hopes that the administration taking the initiative can claim the achievement as its own, sometimes forcing the process to the point of creating disastrous situations that even run counter to policy.

- A fifth challenge (which also has to do with infrastructure projects often outlasting an administration's term of office) is that much of an incoming administration's ministerial project agenda is tied to budget commitments for ongoing projects launched by the outgoing administration. It is therefore common for a new administration to find that it cannot start on projects identified as priorities in its platform and programmes until its second year in office, at best. As a result, administrations often cannot complete landmark projects (which tend to be major ones) called for in their policies. This tends to put a damper on the political will needed to undertake sweeping transport policy measures.

- A sixth challenge is that it is very hard to put intersectoral priorities (like the need for systemic, integrated transport policy) above sectoral agenda priorities. Sector-oriented agendas usually win out because ministry authorities are politically accountable for how they advance a sectoral agenda but are not recognized for what they contribute to comprehensive, macro solutions for issues involving other institutions that would share the limelight.

- The seventh challenge is that transport issues tend to be the "poor relative" of infrastructure and public works and are often dealt with separately from them. Public works are traditionally viewed as more valuable than sound transport policy or regulations because their higher profile enables them to move more resources. This seems to have to do with the way that nation-States were shaped in Latin America: the process was closely tied to transport infrastructure development (above all, roads and ports) and a longstanding neglect of territorial planning and development and of connectivity and mobility issues. Population growth and increasing and more complex land occupation, growing and more complicated needs and rapid environmental degradation have made it necessary to take a more careful look at, among other things, how we are using resources, how we are impacting them in order to maintain a certain lifestyle, and how we are to ensure that more human beings have equitable access to the fruits of development.

- Challenge number eight is the fact that behind each transport mode is a lobby that exerts strong influence over decision-making or can help block change. In Latin America, it is common for private operators to bring cargo or passenger transport to a standstill when a government tries to make major changes to the status quo. What is more, there has historically tended to be a political-client relationship between these stakeholders and politicians that can turn election-period promises into situations that public policy aimed at substantial modernization can be hard put to change.

Taking into account the components that make up the situation in the region, the major shortcomings in the area of transport policy come as no surprise. The above-mentioned challenges call for a new look at the State and at the quality of governance and even of policy. There is a need to advocate a new paradigm that changes the way public transport policy is made in the region.

IV. Co-modality, integrated and sustainable transport policies, and institutional framework

The proposed co-modal approach has major implications in two essential respects: one as a new conceptual paradigm for the development of public policy on transport, and another that has to do with the institutional framework needed to overcome the limitations and inertia of existing institutions in order to put policy measures into practice.

A. A new paradigm for developing integrated transport policies

Co-modality entails a new paradigm for designing transport policy with implications for the sector itself and for matters closely tied to transport and transport services in market economies.

1. The transport policy approach

From an area perspective, transport policy is systemic and comprehensive when it takes into account the logistics chain of which transport services and infrastructure are a part.

It has been suggested that transport, infrastructure and logistics form a systemic trilogy requiring improving infrastructure investment planning and decision-making and the way that transport service operations are regulated, in order to ensure effective resolution of complex issues affecting these sectors —which usually call for integrated, multisector solutions.[6]

The concept of co-modality is grounded in the need for efficient and optimal use of mobility resources in terms of combination, integration, and modal complementarity, as seen in "efficient, competitive and sustainable standards" across the logistics chain. It is understood that optimal use consists of carrying cargo from point to point, seeking the most sustainable modal combinations, the lowest cost and the shortest time, with the highest possible level of cargo security, traceability and delivery predictability.

2. Univocal design at the core of systemic transport policy

Consistent, effective and sustainable policy (for transport or any other sphere) must start with an integrated, systemic concept (theory). This requires an integrated, systemic approach to the issue or situation in need of intervention, identifying its component parts, relative causal relevance and interlinkages. The policy focus then becomes the set of components that seems to have the

on technical teams from all of them or at least brings in specialists in each area. There must also be generalists who contribute a systemic, overarching take on the issue that ensures progress by combining different viewpoints and overcoming silos and turf wars among institutions at the sectoral level.

3. Conceptual implications of co-modality for policy instruments under a systemic policy design approach

The idea of co-modality brings in an element that is different from the older concepts of multimodality and intermodality. It is the idea of "optimal complementarity", which advocates the use of different modes of transport to move goods or passengers from one point to another in an efficient and sustainable way. This means that a certain combination of modes will best serve the interests of users while meeting the requirements of efficiency, spurring growth that is more competitive and less harmful to the environment. Co-modality centres on the mode or combination of modes to maximize trip efficiency, understanding that the optimum route is the one that strikes a balance, not only with regard to the rate/time/distance equation but also in relation to the requirements of environmental sustainability.

The challenge lies in how to define "optimal complementarity" and what the underlying "virtuous equation" is, how to achieve that equation and who makes this possible, maximizing efficiency and sustainability. These issues are shaped by the institutional framework, that is, the regulatory and organizational architecture that makes it possible to put any given public policy into practice.

Previously, it was argued that, since the dominant model of development in Latin America is the market economy model, the way to advance co-modality might not be so much through rigorous planning at the State level (although the State must obviously play an active role