CURRENT DEVELOPMENTS IN THE TRANSPORT SECTOR AND FUTURE PROSPECTS

MULTIMODAL TRANSPORT IN 1997: A YEAR OF CONSOLIDATION

Over the past three years, talks conducted at the subregional level have led to the signing of multimodal transport agreements, and these have been implemented by Mercosur and reviewed by the Andean Community; multimodal transport is only now starting to come into its own in South America but is already a common practice in the region covered by NAFTA. These trends continued in 1997, with consolidation being the dominant theme; on the one hand, consolidation occurred in business, with integrated services increasingly on offer, while on the other the authorities became aware of the need to promote linkages between different modes of transport. Highlights of 1998 may well include major plans for investments in intermodal infrastructure and greater interaction between users and service providers in both the public and private sectors, in order to develop regional intermodal transport systems.

Integrated transport services are a growing feature of intraregional trade flows, in terms of traffic both between the Mexico and the United States, and in South America itself. The road-rail mode of transport is not a new development in Mexico-U.S. traffic, but it continues to grow and is the reason behind the ever more extensive physical and operational facilities, such as the new San Luis de la Paz terminal, in Central America, where so-called consolidators -road haulers who make use of the sea/land mode- are increasingly present in the area's extraregional trade. In South America, the two macro transport systems (Southern Cone and Andean Community) continue to develop new logistical services with integrated networks of land and sea facilities.

This changing picture is notable for the impact produced by the privatization of port terminals, rail transport and road maintenance. As a result, businessmen from this sector have been drawn closer together, a trend which is evidenced in the three major areas of North, Central and South America, while containerized cargo is handled in a more integrated fashion and links between sea and land modes of transport are smoother. In addition, the region, and especially South America, is notable for the construction and operation of new inland terminals. Other noteworthy developments include the arrival of new players in the multimodal market, such as rail and road transport firms, and the increased business being picked up by regional cargo agents as importers and exporters make more use of their services.

Operators from outside the region are increasing their profile in Latin America and the Caribbean as a consequence of the numerous cooperation and representation agreements signed between international operators and cargo agents in Latin America and the Caribbean. The penetration of Latin America by large international operators has led, among other things, to increased use of computer systems to manage transport operations; computers are used in...
operations programming and management in interfaces such as ports and cargo terminals, and also to track cargo as it is moved by road or rail.

This positive trend in quantitative terms is not, however, matched by a corresponding improvement in the quality of services. The sector continues to be suffer from many deficiencies, compared to its counterparts in other markets around the world; these deficiencies exist in at least three areas of crucial importance to the future development of the industry: the legal and institutional framework, business management, and the equipment and infrastructure available in the region. Investment is less important in the first two of these areas than it is in the third, where the amount of investment required will depend largely on the volumes of cargo which it is hoped to transport.

In early 1998, ECLAC will publish a document entitled "Intermodal transport systems: an agenda for their development in Latin America", which examines these and other aspects of the issue and proposes guidelines for the management of such systems.

**RAIL TRANSPORT IN 1997: STATE OPERATORS WITHDRAW FROM THE MARKET**

**Latin America leads the world in privatizing its railways.** Latin America has embarked on the privatization of its railways with more enthusiasm than any other part of the world. By early 1997, management of the entire railway network in Bolivia had been transferred into private hands; the same was also true of large sections of the networks in Argentina, Brazil, Colombia and Chile. Over the course of the year, private operators assumed control of other railways. In Brazil, privatization of the services of the State railway company was completed. In Chile, Ferronor was privatized and private interests took over management of the domestic portion of the Arica-La Paz railway. In Mexico, privatization of two out of the three divisions of Ferrocarriles Mexicanos was finalized. Major progress was also recorded in other countries, such as Colombia, where railway privatization has been on the agenda for almost 10 years.

Peru laid the groundwork for the privatization of the Empresa Nacional de Ferrocarriles, while in Ecuador, a consultant's report concluded that the operation of daily tourist services and night-time container-carriers might well make privatization of the Empresa Nacional de Ferrocarriles a viable option. In Chile, however, any decision on whether to privatize either administration of the railway lines owned by Ferrocarriles del Estado or operation of inter-city passenger services was once again postponed. In Argentina, too, 1997 concluded with Ferrocarril Belgrano S.A. still in state hands.

In Central America, privatization is viewed as the only hope for railway systems which, if they remained under state ownership, would inevitably face closure. In 1997, bids were invited for the Atlantic section of the network owned by the Instituto Costarricense de Ferrocarriles, whose operations had been paralyzed for several years. Midway through 1997, the Rail Development Corporation (RDC) of the United States was awarded the concession to restart operations of the
Guatemalan railway network. The President of the RDC acknowledged the risks involved in his decision to get railway services going again in Guatemala, a small undulating country whose narrow-gauge railway has experienced significant physical deterioration.

The outlook for privatized railways. It is still too early to conclude whether railway privatization has been a success or not. In some cases, substantial increases in traffic and good profits have already been reported. The most noteworthy example of successful privatization is that of Bolivia’s Empresa Ferroviaria Oriental, which faces little competition from roadborne means of transport. In Argentina, railway privatization has met with mixed success, reflecting the fact that some operators have been faster than others to spot commercial opportunities. Operators such as FerroSur Roca and FerroExpreso Pampeano have seen continued growth in volumes of traffic, while others, most notably Ferrocarril Mesopotámico, remain in the doldrums, partly due to infrastructure deficiencies that have limited their ability to maintain operations. Argentina’s railway companies complain that they do not generate enough revenues as to be able to invest in infrastructure to the degree required to raise the quality of services to that offered by trucks.

In 1997, privatized companies showed greater dynamism on the commercial front, a state of affairs not always in evidence in the past. One case in point is FerroSur Roca, which five years ago was granted the concession to operate the broad-gauge network in southern Argentina. The firm which owns FerroSur Roca is involved primarily in the cement business and was quite slow to grasp the potential for transporting other products. It is now developing new markets, such as the transport of oil, fish, cider and fruit, which for many years had been served exclusively by trucks. Furthermore, companies such as FerroSur Roca in Argentina, and Ferrocarril del Pacífico and Ferronor in Chile, have devoted considerable energy to increasing international traffic, chiefly by rail (via Socompa) or in combination with trucks (Zapala-Victoria).

The El Niño weather system had an impact on some regional railways, such as Ferronor, which saw its area of operation around Vallenar-Socompa physically cut off from its workshop in Coquimbo, due to damages caused by rain. Rainfall once again cut the line to Cochabamba in Bolivia, and the Empresa Ferroviaria Andina does not consider repairing it to be justified. By year’s end, that line was still out of service, though Ferronor had already awarded a contract for repairing its network.

Disputes surfaced among railway companies, including one concerning pricing policy on the Chilean segment of the Arica-La Paz railway, which was tendered to a consortium dominated by Bolivian interests, and the Empresa Ferroviaria Andina, administered by a consortium controlled by Chilean interests associated with the Antofagasta (Chili) and Bolivia Railway.

Passenger trains. For quite some years now, there has been a trend for inter-city passenger trains to disappear from the Latin American scene, due to a combination of low population densities, an increasingly uneven topography and insufficient investment. This situation did not change markedly in 1997. In Argentina, service resumed between the Federal Capital and the cities of Rosario and Tucumán, but it is still not clear whether it can be kept going over the long run. In Chile, meanwhile, Ferrocarriles del Estado suspended passenger services south of Temuco, while in Ecuador non-tourist services were discontinued.

In 1998, the trend towards privatization will continue in countries like Brazil (in the State of São Paulo), Chile, Colombia and Peru. Governments face situations in which national social and
economic interests are not always compatible with the desire of private companies to maximize profits, and this creates the conditions for the introduction of innovative schemes of tax incentives and disincentives.

PORTS AND MARITIME TRANSPORT IN 1997: MODERNIZATION AND CONCENTRATION

For ports, 1997 was an important year in the region. It should be pointed out that in the 1990s investment in this sector has been four times higher, in quantitative terms, than it had been in the four previous decades. In qualitative terms, it is worth noting that today the private sector is responsible for the bulk of the investments, whereas in the past most investments came from the public sector.

After several years of frustrated efforts and a series of strikes, the largest port in the region, Santos, Brazil, embarked on the privatization of the TECON 1 Terminal. In Chile, following two years of debate in the Congress, the Port Modernization Act was passed; this provided for the decentralization of Empresa Portuaria de Chile (EMPORCHI), and also encouraged greater participation by the private sector. The private sector took on a more active role in ports in Colombia and Mexico. In Argentina, where numerous port privatizations had already taken place in previous years, strong competition was noted among the various terminals in both the Federal Capital and the province of Buenos Aires.

In the Caribbean, Point Lisas in Trinidad and Tobago maintained its position as the industrial port handling the greatest volumes of cargo. As regards trans-shipment traffic, traditional ports such as Kingston, in Jamaica, have had to face new entrants such as Manzanillo International Terminals, in Panama and Freeport, in the Bahamas. Evergreen transferred its trans-shipment traffic from Kingston to a new company-owned facility in Panama.

Panama played host to the Universal Congress on the Panama Canal, an event which generated a variety of press reports, conferences and consultants' reports. Successful port privatization, and the institutional and economic reforms carried out, raise hopes that Panama can take greater advantage of potential synergies between the Canal and other maritime port sectors, bearing in mind that the United States will transfer exclusive responsibility for the administration, operation and security of the Canal to Panama on 31 December 1999. One area of potential lies in the fact that the world's largest terminal operator, Hutchison Port Holdings, will administer two ports, one on either side of the Panama Canal, in combination with the Canal and privatized railway between the Caribbean and the Pacific.

Venezuela came in for media attention as a result of the running aground of four oil tankers and the subsequent controversy this generated. One of the incidents caused the worst oil spill in Venezuela's history.

Competition and consolidation in the shipping industry. The global shipping industry has been undergoing a great deal of consolidation. New alliances have been formed and merger and acquisition activity has increased. A number of Post-Pamanax container ships with hitherto
unmatched capacities entered into service. The largest of these, the Sovereign Maersk, is estimated to have a capacity of approximately 8,000 twenty equivalent units (TEU). These trends also had an influence on the shipping companies that operate in Latin America and the Caribbean, with one consequence being an upsurge in competitive pressures from companies and global alliances to fill these ships.

Strong economic growth in Latin America and the Caribbean coupled with positive expectations has led to particularly robust competition in liner services that ply the South American Atlantic Coast, which now boasts more shipping services competing for each container originating in the United States and Europe than any other route in the world. While in the area of South America bordering the Pacific, efforts have been made to promote hub ports (Mejillones in Chile, Callao in Peru) in order to move goods between South America and Asia, Maersk followed the example of Chile’s Compañía Sudamericana de Vapores (CSAV) and others by inaugurating a direct service between the Atlantic Coast (Brazil and Argentina), South Africa and Asia. On the Atlantic Coast, various shipping lines began using ships with capacity of up to 2,700 TEU for trade between Europe and the United States (Maersk plans to introduce containerships of up to 4,500 TEU by late 1998). In the Pacific, meanwhile, ships still have a maximum capacity of less than 2,000 TEU.

After CSAV entered into talks to acquire Alianza, a Brazilian firm, Alianza finally chose to remain independent, and CSAV bought Brastrams instead. Sales of vessels were made by Lloyd Brasileiro (Brazil), Elma (Argentina) and others. The Libra Group of Brazil entered an expansionary phase, ordering a number of new container ships. CCNI of Chile also expanded. Buquebus of Argentina continued to grow, buying the fastest ferry in the world. Buquebus of Argentina continued to grow, buying the fastest ferry in the world. Buquebus of Argentina continued to grow, buying the fastest ferry in the world. TMM of Mexico and FMG of Colombia merged to form a new firm, Transportación Marímati Grancolombiana (TMG), with TMM the majority shareholder. TMM and CSAV have now become the largest shipping lines in Latin America and the Caribbean, though neither is yet among the top twenty largest shipping firms in the world.

Port privatizations aside, Brazil took various steps to reduce the costs of transport services. On a number of occasions, Brazilian shipping companies were authorized to purchase new ships from foreign dockyards. Also, a second shipping register was set up to prevent a growing number of shipping companies from using other registers. This development led to a dispute with the United States Government over what it maintained was unfair competition from Brazilian subsidies. In addition, dredging programmes for river transportation were implemented.

Strong competition in the shipping industry, combined with the modernization and deregulation of the port sector, resulted in record low freight charges, a development which has boosted trade in Latin America and the Caribbean.

Investments are projected to continue in 1998, and private port operations are expected to grow, especially in Brazil, Chile and Peru. The Caribbean will increasingly play host to more trans-shipment traffic, while along the Atlantic Coast also, a hub port may be built in the Santos-Rio de Janeiro area. Given the on-going pressure of competition, there is not expected to be any increases in freight rates.

ROAD MAINTENANCE IN 1997: THE REFORM PROCESS CONTINUES APACE
Significant progress was made in 1997 as regards the setting-up of road maintenance funds in Latin America and the Caribbean. In Guatemala, the Road Conservation Privatization Fund (special account) was set up, under the authority of the Ministry of Communications, Public Works, Transport and Housing. The Fund receives a portion of the fuel tax, which is earmarked for a specific purpose, amounting to 0.5 quetzales per gallon, equivalent to 2.2 cents per litre, deposited monthly. Fuel prices rose by approximately 5%. The same law stipulated that the resources earmarked for the Fund would be doubled from 1998 onwards. The original idea had been to set up an independent fund financed not out of taxes, but rather road user charges, but that was not feasible owing to the absence of a qualified majority in the Congress.

In addition to Fund resources, a similar amount was allocated in the national budget; that has made it possible to implement a major road conservation programme, and as a result the state of the roads has been substantially upgraded. Maintenance contracts have been awarded for the entire main road network, covering a total of 2,900 kilometres of paved roads and 1,900 kilometres of unpaved roads; a further 600 kilometres of roads are being rehabilitated, using budget contributions and loans.

The Fund is presided over by a consultative council, made up of six members (the Vice Ministers of Transport and Public Finances, the Director-General of Roads, and representatives of freight forwarders, farmers and subcontractors). Its functions are to propose policies for national road network conservation and provide advice on all matters relating to the operation of the Fund.

Though Guatemala was the only country to establish a fund in 1997, the issue is being discussed publicly in a number of other countries. Draft laws were submitted to the legislatures of Costa Rica and Haiti for consideration. In Bolivia, Colombia and Nicaragua, draft legislation was prepared and a debate got under way on the advisability of setting up road maintenance funds. In the Brazilian Congress, unsuccessful efforts were made to obtain the qualified majority required to ratify a constitutional amendment that would enable a share of fuel taxes to be earmarked for road maintenance.

Proposals formulated in Colombia and Nicaragua are based on similar innovative precepts, and may lead to the creation of funds that are both efficient and sustainable over the long term:

(a) the fund is to be financed out of charges -and not earmarked taxes- collected on the sale of fuels;

(b) the fund is to be managed by a council, most of whose members are direct or indirect road users; and

(c) the fund is to be managed using the business principles of efficiency and efficacy.

Results-based road maintenance contracts: 1997 saw a dramatic increase in the number of road maintenance contracts that were awarded on the basis of standards, levels of service and results. Under the terms of such a contract, the contractor is required to maintain the roads in good condition, as defined by a number of criteria, whose admissible limits cannot be exceeded. The contractor is responsible for formulating and carrying out all necessary work. Payments to the
contractor should preferably be specified as a fixed sum, irrespective of the amount of work actually undertaken in the period. These are the typical features of a services contract.

The advantage of this type of contract is that the three interested parties - namely, the road agency, the contractor and the users - know what to expect as regards the state of the roads, since explicit targets are set out. That acts as an incentive for essentially preventative work to be carried out, thus leading to improved performance and greater efficiency. Major reductions in maintenance costs can thus be expected in the future (and the state of the road will be the same).

As of last December, eight countries in the Latin American and Caribbean region (Argentina, Brazil, Chile, Colombia, Guatemala, Paraguay, Peru and Uruguay) either had results-based maintenance contracts in effect or had invited bids for them; the number of contracts in question came to 320, covering a total of 19,000 kilometres. As these contracts are a recent innovation, with the earliest dating from mid-1996, and most coming into force in 1997, they are often experimental in nature and vary widely in terms of modalities and scope. Many of the contracts provide only for routine maintenance of all or parts of the road network, though some involve periodic maintenance (two contracts covering some 500 kilometres) and even resurfacing payable on a unit price basis; many contracts were awarded to microenterprises (270 contracts covering 14,000 kilometres), while others went to construction firms. Contracts may encompass anywhere from 40 to 400 kilometres, and may be short-term (1 year) or medium-term (with some open-ended). Almost all the contracts awarded are for intercity roads with various levels of traffic, though one contract involved an urban road in Montevideo.

The wide range of contracts in operation means that it will soon be possible to reach some conclusions and to study improvements to the systems used, with a view to increasing the effectiveness of maintenance activity as well as putting into practice the concept of "road service in good condition".

URBAN TRANSPORT IN 1997: A YEAR WHEN CONGESTION INCREASED
WHilst INITIATIVES TO COMBAT THE PROBLEM FAILED TO KEEP PACE

Privatization of urban rail systems: Four years ago, private operators were awarded concessions to run underground and suburban train services in Buenos Aires. This highly innovative experiment has worked quite well; the total number of passengers has risen, while the number of passengers travelling without a valid ticket has declined. The interest this generated in other countries has now started to bear fruit.

Up until 1997, no other city in Latin America had followed Buenos Aires down the privatization path. However, in that year, the operation of the Rio de Janeiro metro was contracted out, and in other cities a cautious shift in favour of privatization could be detected. For example, in Medellín, Colombia, bids were invited for the operation and maintenance of the existing metro system, and in Lima, Peru, Line 1, which is not yet up and running on a commercial basis, is expected to operate under a concession scheme. Concessions were also awarded for various transport-related activities, such as the sale of tickets on the third metro line (Line 5) in Santiago, Chile, and the spinning-off as separate companies of specific operations which can be later privatized; that course of action had been taken in the case of the Regional Metro of Valparaíso, previously part of
Chilean State Railways (EFE).

In Buenos Aires, the possibility of renegotiating the concessions was raised in 1997; an extension of the concession, which was originally set at just 10 years, was offered, in return for more capital expenditure by concessionaires.

**New projects.** In 1997, metro and other transport networks underwent expansion in a number of cities, such as Buenos Aires (extension of Line D of the metro), Porto Alegre, Brazil (extension of Trensurb), and Santiago (inauguration of the first section of Line 5); construction works went ahead in Rio de Janeiro, São Paulo and Santiago. In Lima, construction continued at a moderate pace, partly for budgetary reasons and partly due to a re-evaluation of alternative routes for extending the section already completed (El Salvador-Atacongo) into the city centre.

Plans and projects were formulated in respect of a variety of cities, such as Santiago (Central Station to the suburbs of Maipú and Talagante), Buenos Aires (Line H, between the Retiro area and Nueva Pompeya) and Caracas (a fourth line). In Colombia, the chances increased that not only Medellín but also Cali as well would get metro systems before the bigger, more congested Bogotá, the country's capital.

Generally speaking, where the existing system is being extended, the idea is to let the current operator (normally State-owned) run operations; in cases where the extension is a stand-alone project, a private concession is the preferred arrangement.

**Buses.** In 1997, the last services operated by the old, highly inefficient public enterprise Ruta 100 in Mexico City were transferred to private hands. The only recent example of an increased role for the State in Latin America is provided by Quito, Ecuador, where the new trolleybus service is operated by a municipal enterprise. Quito is going against the tide, by leaving the municipality operate the service and by opting for trolleybuses, the use of which is, at best, levelling off in other cities. It should be mentioned, however, that in 1997 São Paulo began a programme to renovate its fleet of trolleybuses, already operated by the private sector.

On the regulatory front, in a number of Brazilian cities, the formal sector got involved in running minibuses, which had previously circulated illegally. In Lima, there was growing interest in regulating the number of public buses, already in excess of 50,000, in a way which both guarantees a high degree of competition and ensures a decent income for the families of workers obliged to quit the industry.

Up until now, basic public transport in the cities of Latin America has been relatively rudimentary, but efforts are currently under way to make it more attractive to users. In just one example, in 1997 the first low-floor buses joined the fleet in Buenos Aires. Also in the Argentine capital, trains with air-conditioned coaches started running out to the new residential and commercial area of Puerto Madero.

**Congestion.** The greatest threat to the efficient functioning of urban transport systems comes from the increased use of private cars. São Paulo Transportes, the firm that oversees public transport in Brazil's biggest city, reckons that 25% of the cost of urban bus fares is due to traffic congestion, caused primarily by private motorists.
The urban authorities in Latin America made virtually no progress in 1997 in limiting the use of motor vehicles. One interesting case in point is Chile, where in 1991 the Ministry of Transport and Telecommunications submitted to Congress a bill providing for charges for the use of congested streets in Santiago. In 1997, the bill was withdrawn, since it was in the process of final rejection by the commission for transport in the Senate. It was also becoming increasingly clear just how difficult it would be to build new roads in Santiago, with land set aside for decades in zoning plans. It is becoming ever clearer that the methods available for controlling congestion are few indeed.

Bogotá is another, possibly even more serious, example of the growing paralysis of city streets. The only tangible response of Bogotá’s authorities has been to introduce a very modest surcharge on the price of gasoline. A metro system would at least offer residents an alternative to congested streets, but successive mayors have put off making a decision on the issue, due to a national law which stipulates that any city undertaking such a project must finance 30% of the cost.

In recent years, the focus of Latin America's urban transport problems has shifted from public transport per se to traffic congestion. ECLAC is also taking heed of recent developments and, with the financial support of the German Government, has embarked on a project designed to alleviate traffic jams in Latin America’s cities; however, there is no short-term solution to this serious problem. The prospects for 1998 are for even worse traffic congestion.

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