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**LEGAL, TECHNICAL AND INSTITUTIONAL LIMITS AND
EXTRA COSTS OF THE LOGISTICS AND ARRANGEMENTS
OF THE CHAIN PROCESSES IN ARGENTINA ***

By

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Executive Summary

There are legal, technical and institutional limitations in the development of the logistic activity in Argentina. These imply extra costs, which in foreign trade artificially burden import prices and subtract competitively to exports.

The main economic variables that can identify the volume and tendencies of the logistic activity have been identified. Bearing this mind it can be observed that the transport activity represents 5% of the IPB. Also taking the percentage that exists in United States can be considered that the logistic activity represents 10% of the IBP. It is the experts' opinion that the real value in Argentina widely exceeds this parameter due to existing inefficiencies.

A price topographic survey of a standard import operation has been made, from the loading to the arrival of the cargo in the distribution center. At this stage, and in the first place all services and direct costs components have been stood out. It can be concluded that the valuation of the complete cost of the operation represents up to 74.8% to 80.5% of the FOB product price, for the cases of delivery in a distribution center in the Metropolitan or the Mendoza area respectively.

Secondly, each one of those components to estimate the impact of the extra costs have been stood out and quantified. In the analysis, the total of possible costs falls has been quantified. It can be concluded that in the case of reference there are U\$S 830 for direct and indirect extra costs operations, which represent a 7% of the FOB value for the studied case.

The impact of global inefficiency, this set exclusively bounds to the cargo in containers, considering a 60% remission of these export extra costs and limiting this analysis to the section: Outside Loading - point of distribution and Exporter's warehouse – Loading, all of which annually represents U\$S 393 millions.

In this survey, direct factors were summarized. They impact without intervention to the agent, as well as those who undermine competitiveness to one of the service providers.

Likewise, each one of the remedies that can be applied to minimize these extra costs has been announced. The objective is to have a wide range of problems together with a suggestion of solutions. The criterion here included is a survey of both the position of organizations as well as the technicians of the area.

1.0 Introduction

This work is meant to identify and quantify the legal, technical and institutional limitants and extra costs of the transport processes in the management of chain processes in Argentina. The analysis emphasized the port problems and the interrelation of this with the aquatic and terrestrial ways.

The current limits significantly put up the price of the product added value and subsequently, to the ultimate consumer's price. In many cases when a trader closes a deal, he does not have this limits identified and is very far from them. In others, it is a direct problem of his subcontractor or his freight forwarder, the maritime, railway or overland transporter, or the seaboard terminal. This work endeavors to clarify the most significant issues that put up the price of the logistic operation, in order to achieve awareness in the need for change and the user participation.

It is necessary to accurately identify each one of the limits, to achieve drops in the integrated costs of transport. Thus, greater benefits and drops in final prices will be obtained, which will be translated into increase in trader's and services loaner's sales. It is important to point out the importance that detection and correction of all these series of inefficiencies, which in one scenario of globalization and integration is without question the fall of the integrated costs of transport ¹.

Once identified the components capable of being modified, it is the purpose of this study to recommend the necessary actions in order to achieve the cost fall. However, the view must be integral, hence results are not possible to reach without the participation of all who intervene in the logistic operation: transporters, service lenders and users.

It is also important to consider that there is a trend in our market towards not bearing in mind the unimportant extra costs. It is usually said that represents "only a few bucks" per operation. However, this study shows that its combined effect is translated into a very considerable impact, which is 7% of the FOB price.

Even so, this result is very conservative, because it is based on prices obtained by a big customer. Prices in small and medium-sized companies and particular operations have higher values.

Finally, this analysis can be useful for ARLOG as preliminary survey. It can be a mold to be improved, and so to have a tool useful for recommendations for the authorities and chambers in order to achieve the application of the necessary measures to avoid these extra costs.

2.0 Logistic Management

A fine logistic management offers the traders more efficient solutions for their business strategy. This can be developed for the same traders or the outsourcing of logistic operators, freight forwarders and /or Non Vessel Operators (NVO).

These companies have a growing presence in our market. Unlike the 80's decade, in which the traffic and cargo flows were basically handled for managers with experience, but very often lacking from training; today's total handling of the chain of hiring makes the training indispensable. The companies used to hire in a separate way with every one of its transport and services supplier. Currently, the trend is to outsource the logistics; together with this, traders have suitable frames in hiring and control management of this service. Processes have been improved, attaining shipments in defined time, low transit-time and constant and reliable cargo flows.

The old selection process of suppliers has lately changed: new factors are considered, such as total quality, the customer guided management and the 'just in time' concept. Even so, there are several pending matters in Argentina.

Several companies that could be transformed into logistic services users do not jump over the barrier and resist change, keeping a high level of service internalization. The possibility of improving the logistic is very important in Argentina, and has recently started its exploitation.

2.1 Volume of activity.

In 1996 the transport sector GDP in Argentina climbed up to U\$15,2² billions. U\$11,4 billions of them corresponds to overland transport, U\$2,2 billions to air transport, U\$1 billion to maritime transport and U\$800 millions to related activities. This figure, which corresponds to 5% of the GDP, does not include the total amount of logistic activity and on the other hand includes passenger transport, which should not be included.

For a better illustration of the sub components that put together the estimate indicated above of the transport area GDP, a subdivision of them is indicated in figure number 1, in the table below:

Figure 1
Account Subdivision of the Transport Area in Argentina

Account Number	Overland Transport
71113	Back-up services
7112	Passenger transport by road
7113	Other passenger transport
71131	Taxis
7132	School Buses
71133	Other transport services
7114	Cargo transport by automobile
71141	Inter-city cargo
71142	Urban cargo
71143	Taxiflet and others
7115	Pipelines and gas pipelines
7116	Parking lots
Account Number	Transport by Water
712	Transport by water
7121	Oceanic transport
71211	ELMA
71212	Private transport
71211	Inland and maritime navigation (petroleum)
71214	Inland and private maritime navigation (petroleum)
7122	Internal Navigation
7123	Related services
71231	Loading and Unloading of ships
71232	General Port Administration
Account Number	Air Transport
713	Air transport
7131	Aerolíneas Argentinas
7132	Austral
7133	CATA
7134	LAPA
7135	ALPA
Account Number	Connected Services
719	Connected Services
7191	Travel Agencies
7192	Warehousing and Storage
71921	National Board of Grains
71922	Warehousing in general
71923	Cold Warehousing

The freight forwarders' and logistics operators' activity is not rightfully established nor included in this numbers. It is necessary to update the structure of them and to have in our country a survey that allows studying the volume and fluctuations of all the transport and logistics components.

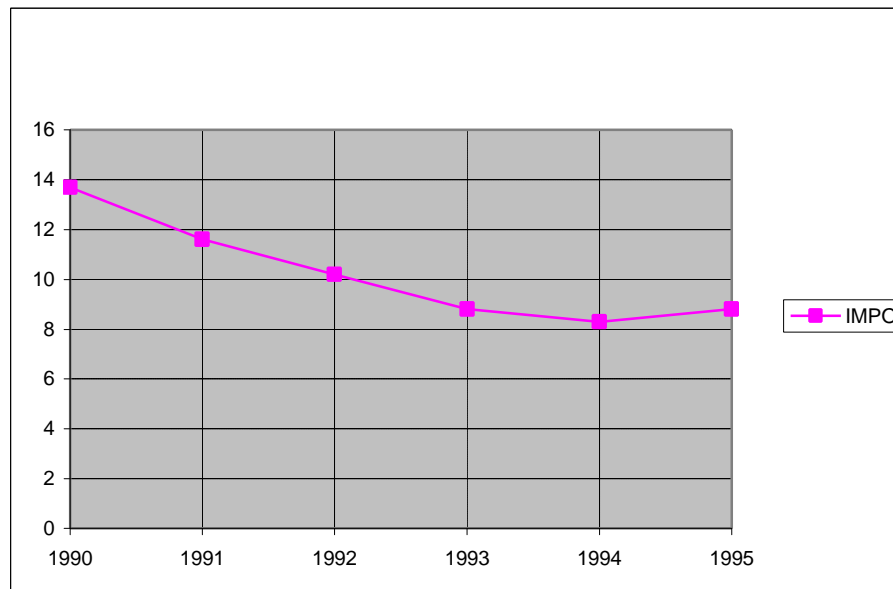
These companies, that approximately sum 200, are gradually acquiring a better share of the market. It needs to be highlighted that the take-off of the companies share happened in the 80's decade. Even though there were many companies up to that date, their duties (except in air transport^a) were carried out by customs clearers. Apart from their specific task in the custom area, they made the hiring in maritime and overland freights, the unloading coordination, etc.

Nonetheless, whether you consider that in the United States the expenses in logistics represent 10.8% of GDP^b, and in our country it is estimated that the percentage can be similar ^c, this activity would represent³ U\$34,7 billions per year. In the United States and due to deregulation and development of this activity, since 1980 the expenses in logistics have dropped from 17.2%⁴ to the current amount of 10.8% of the GDP. This has meant savings for over U\$60 billions annually.

2.2 Evolution of transport costs in relation to commodities costs.

Bearing in mind the information from ECLAC⁵, in figure number 2 is indicated that in Argentina in the last years (1990-1995) there has been an important percentage fall in transport expenses in relation to goods and services imports.

Figure 2
FOB value percentages of total goods and services imports



It is important to set bounds in this consideration to some references of international trends in this matter:

Firstly, there is an overall trend to a drop in the maritime transport component as a percentage of the import value. This has fallen up to 21% from 1980 to 1995 (6.64 to 5.27 %).

^a Los cuales se denominan Agentes de Cargas.

^b Dato de 1994

^c La presente es una visión conservadora. Muchas opiniones indican que este porcentaje es mayor en nuestro país por la ineficiencia del sistema.

Transport costs of the final product (for instance, a car from a country to another) have dropped, but the proportion of transport costs in the final product has increased. Nowadays, the consumer not only pays the freight of his car ‘made in Germany’ from Bremen to Buenos Aires, but also the transport of several auto parts ‘made in Mexico or made in Hong Kong’ which were previously transported to Germany and incorporated into the final product⁶.

3.1 Topographic Survey of prices, a case study.

Beyond the analysis of the evolution stated above, in order to understand where the key factors it is essential to study the costs of a standard operation to quantify the impact of several inefficiencies in integral costs of transport. In figure 3,⁷ this incidence can be seen, in its different components, in one import operation with the international transportation of a container.

Figure 3

**Percentages of direct costs applied to an import operation.
A case of semi-finished goods.**

ITEM	%	PRICE
FOB Price		100.00
Freight (%FOB Price)	7.00%	7.00
C&F Price		107.00
Insurance (%C&F Price)	1.00%	1.07
CIF Price		108.07
Import Duty (on CIF) (*)	14.00%	15.13
Statistics duties (on CIF)	0.25%	0.27
Tax base		123.47
VAT	21.00%	25.93
VAT deduction	9.00%	11.11
Retainer profit fee	3.00%	3.70
Port cost (% CIF)	1.30%	1.40
Freight Forwarder Cost (%CIF)	1.50%	1.62
Letter of credit (%CIF)	1.50%	1.62
Total		168.86

(*) Custom duties considered for goods that pay 14 %.

When a goods leave a terminal, the sum of these costs have an incidence of almost 69% over the FOB price of the product. If the product of a container has a FOB cost of U\$S12, 000^d, the charges for the services to be applied are the following:

Figure 4

Percentages and direct costs applied to an import operation in a case in which the FOB price represents U\$S12, 000.

^d Se ha adoptado este valor por ser promedio en las importaciones.

ITEM	%	PRICE
FOB Price		12,000.00
Freight (%FOB Price)	7%	840.00
C&F		12,840.00
Insurance (%C&F Price)	1.00%	128.40
CIF Price		12,968.40
Import duty (on CIF)	14%	1,815.58
Statistics duties (on CIF)	0.25%	32.42
Tax Base		14,816.40
VAT	21%	3,111.44
VAT deduction	9%	1,333.48
Retainer profit fee	3.00%	444.49
Port cost (% CIF)	1.3%	168.59
Freight Forwarder Cost (%CIF)	1.50%	194.53
Letter of credit (%CIF)	1.5%	194.53
Total		20,263.45

The products that are more relevant to this analysis are the following:

ITEM	PRICE
Port Cost	169.59
Freight Forwarder Cost	194.53
Subtotal	363.12

The port cost is applied as long as the goods are taken delivery within the first five days. If the Freight Forwarder is delayed in the processing (which means that the goods are going to be taken within the five to the fifteen day period) the price can be doubled. Beyond this amounts, other charges are applied, such as: the THC (terminal handling charge) that is applied for shipowners and approximately represents U\$120; other additional charges are U\$ 35 for issuing the bill of lading and U\$ 30 for the shipowner to recoup the ship canal toll. The THC value is negotiable, while the other two are not. The THC can be paid with the bill of lading^e or in the port terminal. In order to avoid the double payment this has not been included again since the amount is part of the port cost. Based on this, you have:

ITEM	PRICE (in US\$)
Subtotal	363.12
Issue of Bill of lading	35.00
Toll	30.00
Total of port departure	428.12

^e It is paid with the maritime freight.

After paying these charges, the goods are at the port gate. The following is what is left to consideration:

- In the first place, it is the overland transport. Two hypotheses have been elaborated: one considers the delivery in the metropolitan area, and the other in the Province of Mendoza.

For the case of the metropolitan area, an average freight is U\$S240 (the amount includes the return of the container). The task of the container deconsolidation is U\$S150 (this average amount is estimated considering a cost of U\$S100 with his own labor force and U\$S 200 if outsourced). The security cost in transport is estimated in U\$S170, which means:

ITEM	PRICE
Port exit Subtotal	428.12
Overland freight	240.00
Security	170.00
Deconsolidation	150.00
Subtotal of deconsolidated goods in warehouse	988.12

Beyond these charges, there has to be consideration for the financial cost of the delay on good delivery, due to custom bureaucracy. An average of two days per unnecessary stay in port⁸ and six hours per delay in removing the goods is estimated.

Since the operation adds up to U\$S20, 888.445, with a rate of capital cost of 10%, and 2.25 days of delay, the impact represents U\$S 12.88. In addition, it has to be added the transfer of the custom verifier, even in the port terminal or in the importer's warehouse. The checking is produced in 20% of the cases, with an average cost of U\$S 350 (transfer of verifiers, opening, unstuffing, etc. Based on the estimated percentage, an average incidence of U\$S70 is considered.

Bearing in mind this, you have:

ITEM	PRICE (in US\$)
Subtotal of deconsolidated goods in warehouse	988.12
Verification charges	70.00
Financial costs	12.77
TOTAL	1,070.99

In synthesis, the total cost of spending and services adds up to US\$ 1,070.99, which represents 8.92% of the FOB price. The total amount of the operation is US\$ 20,971.33, i.e. 174.8 % of the FOB price.

- In a transport by rail to Mendoza the following additional costs must be considered:

ITEM	PRICE (in US\$)
Transfer from port to railroad station Buenos Aires	90.00
Buenos Aires-Mendoza Transport by rail	600.00
TOTAL *	690.00

*The amount of overland transfer to the broker agent's warehouse is not considered because is incorporated in the previous costing.

On the basis of this, the total cost of spending and services is US\$ 1,760.99, which is equivalent to 14.7% of the FOB price. The total cost of the operation represents 180.5% of the FOB price, with a final amount of US\$21,661.33. In annex I, a table with the discriminated incidences is attached.

These are the prices of a problem-free operation, since any inconvenience in the documents or a mistake can cause multiple extra charges.

As follows, all the alternatives in which you can get a drop in the expenses indicated below will be analysed, dealing with the factors that can improve each item. Most of these concepts are indirect, which means that they affect one of the providers.

3.2 Port Costs

3.2.1 AGP Rates.

The port of Buenos Aires has excessive taxes applied to goods. This statement is made having regard that the total invoiced for the Buenos Aires Port Administration exceeds a reasonable budget for its management. This port administration is over dimensioned: there are 400 employees to supervise the activity the terminals develop, which in total they have 2000 workers. The rate applied to import goods (in the calculus, it is part of port costs) could be reduced. The criterion of doing a 50% remission is adopted.

In this item, which is estimated in U\$\$ 168.59, the AGP rate of goods is U\$\$ 3 per ton in the port of Buenos Aires (Puerto Nuevo) and U\$\$ 4 in Exolgán (Puerto Dock Sud). Taking an average amount of U\$\$ 3.33 per ton (and estimating that goods from a container weight 12 t) a 50% drop might cause a reduction of U\$\$ 19.98.

3.2.2 Lack of dredging.

Since the port of Buenos Aires has reached neither 32 feet of depth nor 120m of width in its access channel, shipowners cannot operate with better capacity of cargo and subsequently with greater economy on scale. This means loss of income.

The in-depth analysis of this point deserves a particular study. Nonetheless, it has been estimated that from 1684 ships, which operated in this port during 1997, 60% were full containerships and that half of them had had limitations in their draft. This shows that 505 ships could have operated with extra loading. If the fact that having 2 feet less than the suitable measure of 30 feet and that every inch of draft allows to load 80 tons is considered, it arises that every ship loses to operate 1920 tons of cargo at the entrance and a similar amount at the exit. When considering an average of 12 tons per container, it turns out that the ship ceases to operate 160 containers.

Taking in consideration that in these ship (it corresponds to the sample of those with greater capacity) the amount of movements is 1,000 per scale, the shipowner ceases to turn over U\$\$ 160,000 per scale (estimating U\$\$ 1,000 of freight per container).

In these analyses this amount is not accurate, because in the maritime business there are strong seasonal differences in supply and demand. These cause the non-full capacity operation of the cargo units. Therefore, in only 50% of the scales the units could be with 32 feet and a U\$\$ 80,000 impact among the 1,000 transported units could be prorated. Then, the extra cost represents U\$\$ 80 per container.

In this analysis, the multiplier effect that produces to increase the access depth is not considered, hence an increase on transport demand plus economy of scale and lower costs.

3.2.3 Lack of land accessibility

The lack of overland connectiveness of the Buenos Aires port, produces in the overland carrier a loss of at least one hour in every port operation, which cost is estimated in U\$\$ 10.

The lack of rail connectiveness of the Buenos Aires port for operations creates a U\$\$ 45 extra cost: as there is no modern yard of modal interchange, the price is U\$\$90; if there were one, it would only cost U\$\$45.

3.2.4 Lack of security in overland transport.

It is estimated that 60% of transport companies hire security. Custody in transfer in the metropolitan area goes up to U\$\$170.

3.3 Customs.

The management of verification has a doubled price. On one hand, verifications are made in origin through 6 private companies, that even though they are paid by customs, they represent expenditure. Although these figures do not get transferred to the user, they are an extra cost at national level, which is finally paid for the users in its entirety. The amount is 0.8% of the FOB price, with a minimum of U\$\$ 250.

In the case of reference, the sum amounts to U\$\$ 96, but the amount U\$\$250 is in use. Here its elimination should be considered.

In relation of the other items that represent extra costs due to the inefficiency in the customs management and in the first place, the high percentage of verifications made has to be pointed out. Given the previous example, the cost on verifications and the financial charges of the delays represent U\$\$ 82.77.

Taking current standards of developed countries, it is not believable that a customs office verifies such high percentages of goods. In these countries it is not common to look for verifiers. With an efficient management of customs these costs should diminish.

Another element for the port operator is the cost for delay due to custom bureaucracy that acts on 2.25 days per operation. Beyond the fact that it is a financial cost for the user, it is a cost for the port terminal. Its impact is weighted in U\$\$22.50, estimating U\$\$ 10 per day and per warehouse of the container.

A 6 hour delay in the delivery tremendously affects the carrier: it is calculated in U\$\$ 50, considering U\$\$10 per hour of delay, and that the reasonable time to withdraw a container is one hour.

The fact that customs charges for customs qualifications constitutes an extra cost for port terminals. They should pay the custom management of inspecting after business hours. Based on the made consultation, it has been estimated that distributing proportionally the annual costs per customs qualification, the cost per container is U\$\$ 6. To this, the additional administrative cost that is carried out by terminals in order to bear

with the bureaucratic cost in relation to customs has to be added. This has been estimated in U\$S2 per container.

3.4 Navigation

3.4.1 Ship watchmen

The regulations in use that demand the presence of ship watchmen, duty that in a port with terminals is not longer necessary, and implies a cost of U\$S800 per stay. For the shipowner means U\$S0.80 per container if a 1,000 movements per stay are considered.

3.4.2 Delays in incoming handling.

The regulations in force, that allow neither the beginning of operations nor the preparation of the operation until formalities of entrance for the ship are final, produces an average 30 minutes delay. If considered an average daily cost of a ship in U\$S24,000, the cost per container will be U\$S 0.50.

3.4.3 Transfer of goods to a fiscal warehouse.

The alternative to transfer the goods with a TLAT (procedure denomination) to a fiscal warehouse without the importer's approval has big implications on costs in some operations. It turns out that tariffs applied in these places are over those applied in port (which already have maximum prices).

In the LCL cargo or luggage cases, these rates are extremely high. The decision for the transfer of cargo is in the maritime agent's, the liner shipowner's or the importer's hands.

The impact of these costs is not included in the calculus.

3.4.4 Temporary import of empty container

In Argentina, the container is considered goods^f. This means the liner shipowner has to make a temporary import of the box and have a bank guarantee or a bailbond policy and be in charge of the cargo in this stage. It is estimated that the cost of every temporary import represents US\$ 40^g.

It is important to point out that containers are not produced in our country and that the hypothesis that some of those can remain within customs territory has no fiscal consequence, just like packing and barrels. That is why is highly recommendable the total deregulation of this regulation.

The sum of inefficiencies have a huge incidence, which is classified on one hand for port extra costs and ship, and on the other by customs costs.

^f Es importante aclarar que en esta materia ha existido un retroceso en la década del 80, por cuanto ya a fines de la década del 60 se había normado en forma clara en este asunto.

^g Costo mínimo de la emisión de la póliza de caución mas la tramitación administrativa.

3.4.5 Stock costs.

Existing delays in this market, the congestion in the means of transport, the lack of programming in ship itineraries^h and the lack of use in computer systems when coordinating logistics and transport produce a stock overrating in our country. In the analysis this impact has not been estimated.

4.0 Appraisal of Total extra costs.

Figure 5
Estimated extra costs in a disembarking operation
through the distribution point.
Port, transport and ship extra costs.

Extra cost	AMOUNT
Port rates	19.98
Truck security	170.00
Lack of dredging	80.00
Delay in overland transport	30.00
Lack of rail links.	45.00
Ship watchmen	0.80
Delays	0.50
Subtotal	346.28

Customs Extra costs

EXTRA COSTS	AMOUNT
Pre inspection	250.00
Verification	70.00
Financial cost of delay	13.38
Delay in terminal 2.25 days	22.50
Delay of transporter 6 hours	50.00
Qualifications + bureaucracy	8.00
Temporary Import of container	40.00
Other expenses	30.00
Subtotal	483.88
General Total	830.16

In the example, this amount indicates that detected extra costs are almost 7% of the FOB price.

To sum up, these extra costs have an extremely high total value when they are considered as a whole. If an impact of 100% on imports and 40% on exports is considered, and based on the projection of containers to be moved in the Buenos Aires

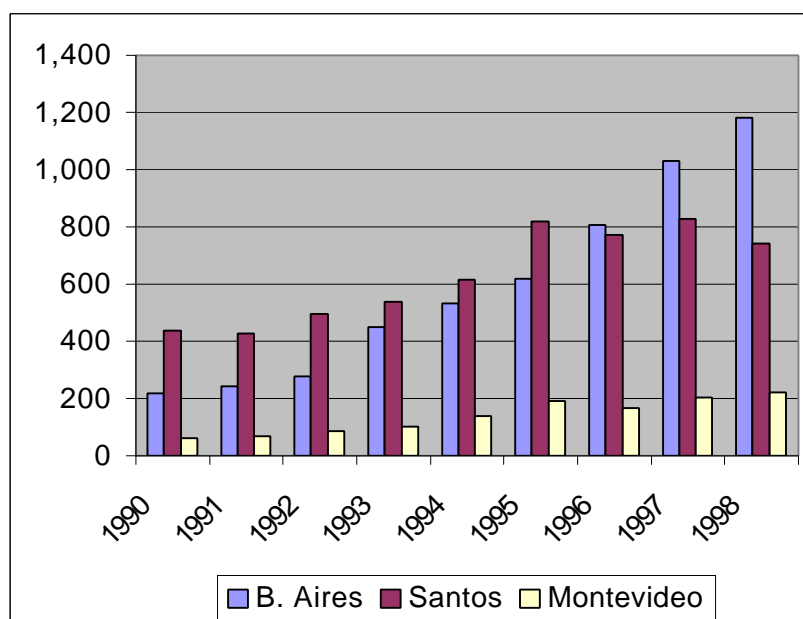
^h Este aspecto presenta una mejoría notable en el último año.

and Dock Sud port during 1998, the following impact on foreign trade can be seen; a movement of 370,000⁹ of import cases and 260.000 export cases is estimated.

Traffic	Estimate 1998 (in units)	Unitarian extra cost (in US\$)	Extra cost per traffic (in US\$)
Imports	370,000	830.16	307,159,200
Exports	260,000	332.04	86,336,640
TOTAL	630,000		393,495,840

Data on the containers amount stated above are calculated with a projection of growth in traffic of 14.8% for the ports of Buenos Aires¹⁰ and Dock Sud in 1998. Percentages of filled containers are 59% and 41% for imports and exports respectively. An important data is the increase on container traffic in this port, of which evolution in the last years and its projections for 1998 (in teuⁱ) is the one stated in figure 6, and in relation to the competitor ports in the region.

Figure 6
**Traffic evolution of containers in Buenos Aires,
Montevideo and Santos¹¹ (in teu)**



From the economic point of view, these parameters justify the user's and the State's application of efforts and resources in order to minimize extra costs.

It is habitual to listen that these extra costs do not unfavorably affect commerce in an isolate way. This statement is not valid: a unitary reduction of logistic costs has an effect on the profitability of the company, which is proportionally higher than a similar raise in sales¹².

ⁱ Twenty feet equivalent units, medida que identifica a un container de 20 piés.

This has mayor consequences in our country and in the region, where the logistic costs of manufactured products have an incidence of 30 and 40 %¹³ of the product final price.

It is also stated that a 10% reduction on logistic costs may imply an improvement of 7% in the operational margin of the company¹⁴.

Finally, it is cleared up that this analysis only comprises the logistic section between the loading abroad and the arrival in a main center of distribution. It remains to be considered other extra costs from this point on.

5.0 Actions for efficiency in logistics.

Starting on the made survey, the most negative factors undoubtedly are excessive bureaucratic formalities in procedures, mainly due to obsolesce in regulatory schemes and lack of modernization in institutions.

It is necessary to reflect upon transport policies and then make a specific reference of every one of its components.

5.1 Policies on transport in Argentina

As of deregulation and decentralization processes in the transport sector, the policies in use in the Transport Secretariat sphere¹⁵ aim to consolidate this line of action. Among the objectives, it can be found:

- To achieve an improvement in the efficiency of the transport system
- To increase supply within a competition setting.
- To increase productivity.
- To reduce prices.
- To boost the State 's planning and control functions.

The transformation made in the transport area logically promoted changes in the physical distribution and the freight forwarder's activity. Beyond the change of same rules, which are still in the implementation stage, there has been a sensible modification of the scenery, with two very determinant factors:

- Privatizations.
- Investment increase in transport infrastructure.

These two elements have generated a considerable change and many positive results are at sight. However, they have also changed the nature of the limits to foreign trade growth, in relation to transport.

Even though it is moving forward in the improving of legal technical and institutional frameworks, these still include guidelines that affect trade and processes do not always have the necessary dynamism.

It also happens that the transport authority does not attempt to achieve coordination between the different nodes and means of transport, and to analyze the management of logistics, which is the role par excellence of an authority in the federal scope.

It is fundamental to complete actions of simplifications and modernization of the regulation in use. In this region, there is a generalized delay for governments to carry on with actions. These have administrated and exploited the infrastructure for many years with undersatisfactory results. They acted correctly when transferring responsibilities to private capital, but they are delayed in the fulfilling of a series of non – privatized responsibilities, such as control, good administration and the passing of laws. Solely in this way benefits on integration, intensification and price cutting of commercial trade for regional products export, a drop on integrated transport costs for imports, the improvement of inland transport and physical distribution can be obtained.

It is fundamental that governments include the concept of efficiency in their structures. The standards achieved in many productive and service projects have the same characteristics, and in some cases, they are transcended, by similar enterprises in developed countries. Efficiency is the concept that has to be adopted by transport, port, customs, and maritime application authorities. These must take guidelines of action common to private companies, and to apply them to the general interest, reaching or going beyond efficiency standards of developed countries.

5.2 Self-propelled transport

With the passing of the Public Law 23,696 on State Reform in 1989, the concession process in transport infrastructure of private initiative has produced important investments in roads. However, problems such as practice piracy, lack of limitation in insurance, congestion and bureaucracy in borders among many, have to be solved.

Argentina is a market with a great growth potential. Great companies and foreign operators, who see that the renewal process on transport is indispensable for the changes that occur and the aged self-propelled park, glimpse this. That is why important cargo transport firms arrive to the country with the purpose of sharing the local market.

In Argentina, unlike liability limitations present in transport by water and by air and based on regulations present in the Public Law on Overland Transport, there are not limitations for risks to lose goods produced in rail and self-propelled transport, in ports, airports and inland cargo terminals.

Therefore, the overland carrier protects himself with a civil liability and in some circumstances; he also takes a loss policy of goods up to a certain amount. When the transport is contracted, the carrier require from the shipper either the necessary amount to cover the insurance policy for the same amount of the cargo or, as an alternative, a certificate in order to set responsibilities.

In the region, there has been progress on the subject. There is a project of common legislation on transport for the MERCOSUR, and in more than one country there are already laws that regulate the subject. The main hindrance to invigorate multimode

transport is the diversity of responsibility limits basically applied to transport by water, by land, warehouses and ports.

Even though it is not in force, the common regulation for the MERCOSUR establishes a remission to legislation in every country. This leads that when a contract on transport is signed with a previously agreed insurance, the insurer makes the granting of the policy conditional to the verification upon the firms that intervene in the inland transport, in which ports and/ or terminals the operation is going to take place. This administrative delay has its cost, but as there are no responsibility boundaries in overland sections, ports and warehouses, unlike maritime sections, insurance policies have their costs artificially increased.

It is advisable to deepen the analysis on the subject and to favor the approval of the communitarian legislation. Thus, two of the three existing problems would be solved: the consecration of a document and a responsible figure. Once this is solved, there would have to be encouragement towards the establishment of a communitarian regulation on the responsibility limitation subject in multimode transport.

5.3 Railroads.

The cargo railroad network is almost entirely given in concession to private capital or to different provincial governments, with the sole exception of General Belgrano Railway. This line was administrated by the National Government and through a competitive bidding on July 1997, the Unión Ferroviaria, an Argentinean union, was granted the exploitation for Decree number 605/97.

The license holder groups of cargo use the metropolitan railroads of passengers in order to accede cargo terminals to the port of Buenos Aires. They achieved a meaningful traffic recovery, with important increases on mobilized volume^j and the quality of provided services.

Unlike the previous scenario, the new one has gained credibility. Nevertheless, there are non-existent facilities properly specialized in loading and unloading operations for containers. This deficit exists in ports as well as in inland cargo terminals. The exception is present in the farming in bulk cargo sector.

On the other hand, the licence holders of cargo railroads are promoting a greater integration with the other means of transport. This has allowed them to attract goods in origin and to participate more often in their transfer through the multimode transport to the different points of sale, which are often located in other countries.

5.4 Domestic traffic and maritime transport.

With the passing of the above mentioned Public Law number 23,696 in 1989 and the Public Law number 23,697 on Economic Emergency, Argentina has made its way towards the deregulation of all economic activities, and gradually leaving the State its participation in each one of them. The policies of the Argentinean government for the

^j Transportando en 1996 un volumen de 15,4 millones de toneladas, que significó un aumento de 2,5 veces el transportado en 1992.

maritime transport sector has followed the policies stated for the country's general economy.

The international maritime traffic of Argentina is almost open to foreign operators. The changes that happened in the sector began in the early nineties, with the elimination of promotions and grants, the privatization of national companies and the elimination of all existing mechanisms that shaped and sustained cargo restriction.

With the passing of the Decree –Law number 817 (May 26, 1992), all administrative provisions related to the tariff homologation or any other type of retribution on domestic traffic, such as cargo, passenger, regional and international traffic, fluvial or maritime transport, with the sole exception of liner conferences were revoked.

Nonetheless, Argentina has signed bilateral agreements on maritime transport with Brazil, Peru, Mexico, Cuba, the Soviet Union and China, stipulating that the transported cargo between the signatory countries should only be in ship of their respective flags. However, Peru has unilaterally given notice of termination of this treaty and the Soviet Union no longer exists. The only agreement that is practically active is the one signed with Brazil.

This restriction on the offer is nowadays almost concentrated in traffics with Brazil. Based on this agreement, there are restrictions with regard to the participation of third party flags in the traffic between the two countries. In practice, the restrictions are solved through the granting of waivers, which imply an additional cost and burden transport in an artificial way. This factor and the inefficiency of Brazilian ports are translated into the price increases of transport. Likewise, restrictions to the participation of third party flags in domestic traffic also produces price increases between national ports.

In spite of what was stated above, in the meetings of the subgroup number 5, there is still a tendency towards the inclusion of limitations for accessing the region in the interregional traffic of foreign flags^k. This contradicts the agreements to proceed towards a progressive elimination of the existing restrictions declared by the subgroup.

The users' and service providers' s position on this subject can be summarized in the following principles:

5.5 Policies for the MERCOSUR.

Ship Registry Office in the MERCOSUR

- It is convenient to have a Registry Office, of optional connotation, with benefits of fiscal order, which can be used as incentive for allowing the installation of shipowner companies in the region.
- The MERCOSUR Registry Office does not have to be a toll for the application of cargo preferences in the region.

Agreement on Transport by water.

^k En la última reunion desarrollada en Buenos Aires existió una clara tendencia al respecto.

- Freedom on ship hiring of any flag to carry on with the transport between countries must not be restricted.

Bilateral Agreements in transport by water.

- There must be a progressive conduct towards the elimination of bilateral agreements on transport by water that limit the participation of third flag parties.

Cargo Preferences

- There must be a progressive conduct towards the elimination of cargo preferences regimes of international transport by water existing in State Members.

Domestic Traffic

- There must be a progressive conduct towards the elimination of restrictions in the participation of State Members flags and any other flag in the internal transport by water of those States.

In order to promote trade and transport competitiveness, governments should discontinue all national, bilateral or regional regulatory mechanism that restricts freedom of hiring the transport by water. This concept includes the reserve of freights, bilateral agreements between countries and domestic traffic. It would also be convenient to establish a multilateral agreement in the MERCOSUR that might limit the extra regional flag access. Apart from being necessary in the MERCOSUR, this principle of liberalization must be a toll to be used by governments in international negotiations with other blocs, in order to prevent the application of limits to the access of our ship in foreign regions. It is recommendable to expressly consider the principle of reciprocity, reaching the point of restricting in the region the ship carrying flags from economic blocs that have discriminatory regulations against MERCOSUR shipowners.

5.6 Air Transport

There is a gradual process towards the air transport deregulation. This is still partial in Argentina, and within the MERCOSUR framework there has not been significant progress. The total liberalization of the skies may be estimated as favorable.

The transport of passengers is the most relevant one amongst the services provided for the air transport, even though the cargo shows a constant growth, with a trend towards the concrete demand in productive processes that require goods mobilization in small volume.

5.7 Airports.

The privatization process in airports has been recently concluded. Loading and unloading services are given in concession to a firm of national level. Users pretend the establishment of an alternative regimen, based on which there is competence in the provision of services.

Due to the given changes, if entering with cargo to the port of Buenos Aires and the service received in some terminal is not satisfactory, it is possible to transfer the goods to a fiscal warehouse, or to operate in some other terminal or port. However, there is no such possibility if the cargo arrives by air to Ezeiza International Airport. As a product of competition and the liberalization a 5% cost reduction on freights has been achieved in traffics that go through ports, whilst in airports storage charges have almost constantly increased.

Having a sole provider there is no chance whatsoever to compare, neither in quality nor in service costs. The relevant issue is that companies that effectively compete with each other should provide services.

5.8 Ports

The port legislation has been integrally reformed, with the passing of Public Law 24,093. In reference to infrastructure, it has suffered a substantial change. There are two well-defined developments in this field:

- Private ports (that are built in private land)
- Terminals that have been given in concession in autonomous or provincial ports.

From the seventies and after several decades in which the inconvenience of private capital in the port industry has been founded on when inefficiency of national ports almost obstructed the economy, there was a very important increase in the participation of private capital in the Argentinean ports.

Nowadays, these factors have sensitively changed. As the problems stated above are solved, there are enquires about others, such as the lack of computerization in customs procedures, the modernization of customs legislation, the improvement in rail connections, the overland and nautical accesses, the deepening of the channels and delays in privatization processes concerning the Dirección Nacional de Construcciones Portuarias (National Management of Port Constructions).

The ports of the country, especially Buenos Aires, should implement improvements in order to facilitate intermodal traffic. Here, some political issues (relationship of the port with municipal and national governments), the development of entrance roads by rail and road to perfectionate the connections with the region and the relationship of the port with the city arise.

5.9 Customs

5.9.1 Necessity of reform in legislation

Due to the evolution of the technology in transport and the changes caused by the reform of the State, the Argentinean Customs Code is obsolete, even though is in force since 1982. This regulation has high incompatibility to provide a framework towards the modernization of this activity. It makes difficult the implementation of computerized processes, adds excessive bureaucracy to the control has mechanisms that lead to corruption and in general is insufficient to achieve the tolls that may facilitate with the proper management and budget, the achievement of these three goals:

- An adequate control.
- Increase in trade between countries.
- Fall of costs in transport.

Since the modernization of the port legislation, this legal framework, which has a strong cultural origin in colonial times¹⁶, has come to be the main obstacle to development and the drop in integrated costs of transport. Consequently, trade¹⁷ and regional integration are affected. In the development of these important integration processes, it is unthinkable that countries make important infrastructure expenditures without previous (or simultaneously) achieving full modernization of these frames. It is not just a matter of homogenization on existing regulations, but to innovate with a legal framework compared to the European or the American one.

Customs obsolesce, which can be observed in our country is almost generalized in the region. The management of Customs control obstructs the port efficiency; besides, they establish limitations in time and charge the operational schedules applied to 24 daily hours. It is essential to face a joint reform of customs regulations and also to modernize customs institutions. It is not important to try the homogenization of legal frameworks, but to make a deep renovation. In these changes, efficiency in customs control management has to be taken into account, through computerized means, the establishment of hierarchies in customs personnel and especially considering productiveness and port costs.

A reengineering process of the Administración General de Aduanas (General Administration of Customs) should take place, by means of specialists coming from countries leaders on the subject, in order to analyze and restructure existing regulations with the purpose of updating them to the needs of foreign trade.

There are successful experiences on the subject that differ from the models used in our country¹. There is the Mexican experience, in which savings of U\$S 2,03 annual billions in the logistic subject have been obtained (almost 1% of the GDP) with a simultaneous increase in the income of 12 to 15%¹⁸.

¹ En la Argentina se han adoptado criterios informáticos de Francia y en materia de procedimientos, prácticas de Bolivia y Ecuador.

The institutional Chilean reform is another example: the time of delivery was reduced from 13 hours to 15 minutes¹⁹.

5.9.2 Computerization of Customs procedure. Updating of informatic systems

The need to conclude with the computerization in all custom offices of the country is imperative. There are other systems such as EDI (fully used in USA, Germany, the United Kingdom, among other countries), which as it is an open system allows the connection with customs of origin permits the liberalization of goods before their arrival to the country^m.

Since the beginning of this decade, Argentina has this process of computerization. However, there has been no luck in the extraction of the documentation of the operation. In ports, huge amounts of documents are processed and are transferred hand by hand with constant demand. As a result, there is a considerable extra cost in the integrated transport extra cost that is not charged, since every agent of foreign trade and the physical chain has these variables included in these costs.

Even though the implementation of the Computerized System “María” (which is an adapted version of the French one) meant a positive tendency, it has had serious problems in its implementation.

The principal lesson of this experience in the Argentinean Custom indicates that a partialized computerization is highly convenient.

The fact that in the interior of the country practically does not exist this system caused serious inconveniences, because the traffic originated in Buenos Aires, with a destination set in a province or in a frontier area, could not be controlled.

It is convenient to ask for customs collaboration of the country leaders on the subject in order to incorporate their expertise, to facilitate the transference of technology with the subsequent training of human recourses to operate it.

5.9.3 Costs of Customs services.

Given the high burden of bureaucratic work of custom officers, the cost of custom management turns out to be disproportionate in terms international comparisons. The cost of this management is in average U\$200 (import – export average). The amount is sensibly superior to the average value in port services applied to a container (U\$160). In one operation of overland transport with a intra MERCOSUR traffic, for example, Mendoza-Río de Janeiro, over a total cost of U\$4,200, the customs agent’s services represent 9.5% of the total. In another case, a Mendoza-Sao Paulo freight (in total U\$2,600) the customs cost is 15.3% of the total operation.

^m En la Conferencia de ALACAT se expresó que en 1996 en EE.UU. se consiguió gracias al EDI un nivel de eficiencia del 97% en el control de fraudes.

It is unacceptable that an international transport operation of import with destination the interior of Argentina (including the container reposition) involves 13 documental procedures filled by hand.

Another example of this is the operation of custom procedures in any port. Even though Customs grants green light or does not require documental or physical verification of the goods (in the case of a manual procedure) the presence in two times of the forwarder in the corresponding office is essential. This implies an unnecessary extra cost in an operation that should be solved by the sole presentation of a transport conductor of equipment in the terminal.

5.9.4 Pre-boarding Control

November 29, 1997. This is the date in which this inspection process became operational, of mandatory character and performed by 6 companies especially designated.

The minimum services include price, quantity, quality and customs item verification and clamping of containers.

The physical inspection takes place in the production centers, warehousing or loading, taking into account the type of product and operation conditions. The inspecting company delivers a Notice of Agreement as requested by the exporter, and the main document to the importer, which is not another thing but the Certificate of Inspection. This has a status of complementary documentation to the import declaration and its mandatory presentation in order to initiate the liberalization procedure for the goods to the market.

This procedure represents a very significant indirect cost. Since it does not supplant the other verification costs, the entrance to the custom terrain can be discontinuous. The verification and the valuation management in Argentina need improvement, concentrating in the consignees' warehouses and not at the entrance in order to avoid extra costs²⁰.

Furthermore, the customs has to increase the data crossing with other customs and its investigative activity in order to detect illicit activities in a modern way.

5.10 Navigation police, regulations to navigation and ports.

In the opinions given by users and transporters by water, concepts regarding legal frameworks and navigation procedures were deepened. Through several documents, the managerial organ of fluvial shipowners as a group, the CPTCP²¹ have systematically manifested that there has been a backward movement in this field, due to the application of more bureaucratic regulations, that limit the evolution of the sector. Some of the concepts consist of the maximum size of convoys, loadline marks, pilotage, consular rights, the obligation of making graving dock, crew nationality, etc.

Most of them have a problem in procedure. It has been observed that local norms have been homogenized by last regulations. In work meetings, every national institution responsible for this activity tries to achieve significance for its mechanisms, regulations, usage and customs. This means, that homogenization is emphasized when deregulation and simplicity is required.

It is evident that there is an excessive bureaucratic burden that produces a highly considerable extra cost in transporters and port services providers. Legislations in every country are highly complicated and bureaucratic, and under this frame, exception mechanisms are the rule to operate.

In order to achieve a suitable regulatory frame, it is imperative to modernize regulations with extraregional technical assistance, which gradually allows gaining an international standard, just as the European rivers.²² However, the efforts already made to homogenize the rules must not be forgotten, and applications of the same ones must be made, plus detecting their inconveniences for ulterior perfection.

Beyond rules, it is necessary to take initiative for the strengthening and modernization of navigation security policies, with a high level of training that takes the components to exercise the control management within a modern frame. The aim must be the decrease in transport costs in order to facilitate foreign trade, protecting the nautical safety, and goods and people, with modern mechanisms of control in navigation and electronic trade of data, that allows to diminish the bureaucratic burden of the sector.

ANNEX I

Detail of logistic costs in one import operation from loading to arrival at the distribution center in Mendoza

value (US\$)	12,000
cases	1
weight (metric t)	12

<i>item</i>	<i>Base</i>	<i>cost</i>	<i>value</i>	<i>Accumulat ed value</i>	<i>% fob value</i>	<i>% final value</i>
fob price	fob price		12,000.00	12,000	100.00%	55.40%
freight	% fob	7.00%	840.00	12,840	107.00%	59.28%
insurance	% c&f	1.00%	128.40	12,968	108.07%	59.87%
Import right	% cif	14.00%	1,815.58	14,784	123.20%	68.25%
Statistics right	% cif	0.25%	32.42	14,816	123.47%	68.40%
VAT	% taxable base	21.00%	3,111.44	17,928	149.40%	82.76%
VAT deduction	% taxable base	9.00%	1,333.48	19,261	160.51%	88.92%
Retainer profit fee	% taxable base	3.00%	444.49	19,706	164.22%	90.97%
Port cost	per case	168.59	168.59	19,874	165.62%	91.75%
Freight forwarder Cost	per case	194.53	194.53	20,069	167.24%	92.65%
Letter of credit	% cif	1.50%	194.53	20,263	168.86%	93.55%
Emission of bill of lading	per case	35.00	35.00	20,298	169.15%	93.71%
toll	per case	30.00	30.00	20,328	169.40%	93.85%
Overland transport	per case	240.00	240.00	20,568	171.40%	94.95%
Security	per case	170.00	170.00	20,738	172.82%	95.74%
Deconsolidation	per case	150.00	150.00	20,888	174.07%	96.43%
Financial cost	Subtotal	0.0625%	13.06	20,902	174.18%	96.49%
Verification	per case	70.00	70.00	20,972	174.76%	96.81%
Transfer etc	per case	690.00	690.00	21,662	180.51%	100.00%
Final Value				21,662	180.51%	100.00%

¹ *The Journal of Commerce*, 15 April 1997.

² Ministerio de Economía y Obras y Servicios Públicos 1996.

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- ³ Se consideró un PBI de US\$ 321.384 Fuente Ministerio de Economía y Obras y Servicios Públicos, 1998.
- ⁴ US Department of Commerce. Survey of Current Business.
- ⁵ Anuario Estadístico 1995, CEPAL
- ⁶ CEPAL, Concentration in Shipping, Jan Hoffmann 1998.
- ⁷ Se ha tomado como base la información disponible del US Dep of Commerce. Luego en base a consultas se han efectuado ajustes.
- ⁸ Datos consultados a despachantes de aduanas.
- ⁹ Estimación elaborada en base a la proyección de los datos de 1996 de fuente AGP y Dirección Provincial de Puertos de Buenos Aires.
- ¹⁰ Fuente Administración del Puerto de Buenos Aires.
- ¹¹ Elaboración propia en base a fuentes de AGP, Centro de navegación (ROU) y Compañía Docas de Santos.
- ¹² Hans Peters, Facing the challenge of Trade and Industry Logistics Management,1997
- ¹³ Costa Rica Logística de Comercio e Infraestructura, Universidad de Costa Rica, San José Costa Rica 1997.
- ¹⁴ Council of Logistics Management The Impact of Logistics on Business Performance.
- ¹⁵ Fuente Exposición del Secretario de Transportes en el BID, Octubre 1997.
- ¹⁶ Unión Industrial Argentina, Jornadas de Costos Portuarios y del Transporte F. Romero Carranza, Buenos Aires, noviembre 1995.
- ¹⁷ Hans Peters, Facing the challenge of Trade and Industry Logistics Management,1997 pag 17
- ¹⁸ Customs Reforms Mexico's Success in Braking a Major Trade Barrier, World Bank.
- ¹⁹ La Modernización Tecnológica del Estado Chileno
- ²⁰ UNCTAD, Boletín Portuario Nro 16, Noviembre 1996.
- ²¹ Comisión Permanente de Transporte de la Cuenca del Plata
- ²² Council Directive of 4 October 1982 laying down technical requirements for inland waterway vessels” Comunidad Europea