

Panamanian maritime sector management

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Received 7 July 2003; accepted 25 September 2003

Abstract

Countries with important maritime interests are especially careful when choosing the management systems which apply to them, because the permanent controversy about both the advantages and disadvantages of managing maritime competencies under a unique or several institutions is well known. Panama's tremendous maritime potential as a service country—namely, outstanding strategic and historical geographic position, Canal and ship register—and its scarce exploitation have both coincided. This paper analyses some of the results of the research we carried out in Panama, which concluded with proposals—already successfully implemented—of unifying maritime policies and of exploiting its geographic position. As the subject of a deeper study, the Canal management is not included within the present paper.

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Keywords: Maritime sector (MS); Geographic position; Panama

1. Introduction

Panama's geographic position, as a strategic point and crossroads of the most important maritime routes, bestows upon it remarkable features which have been shaping its nature as a country of national and international renown over the years. As a country with a service-oriented economy, the nation's activities included within the maritime sector (MS) have a major influence on the national economy, accounting for 20% of the national GDP in fiscal year 2002.

By the end of the 1980s, the idea of developing its MS originated in Panama, taking its geographic position as a basis, and placing particular emphasis on the co-ordination of actions related to the ship register, the port system, the fishing activities and the interoceanic canal itself, in order to lay the foundations for Panama's consolidation as an international maritime service centre. Strengthening of the MS should help to solve the situation arising from low economic profits and the generating of employment which maritime activities yielded, taking into account those comparative advantages as offered by the country, such as the scarce amount of service supplied to vessels transiting the Canal, calling at national ports, or operating under Panamanian Flag.

In the following, an analysis is made of some results of the research we carried out, after having experienced Panama's most recent events very closely. Indeed, it was one of the hardest moments in the country's history. We have taken somehow part in the country's commitment of becoming a major international maritime centre, as was the case centuries ago, taking advantage of its most valued natural resource: its geographic position [1]. A detailed historical review of studies on and discoveries in its maritime geography and of the role which its geographic position has played within the international maritime trade throughout the centuries is presented at the beginning of this paper, analysing both maritime spaces and the interoceanic waterway; subsequently, those sectors related to its geographic position are dealt with, being examined each of their components as well as their growth and economic impact; then, the management procedures of maritime affairs and their development are analysed, concluding with the specific proposals which are helping the country's consolidation as an international maritime service centre.

2. Panama's geographic position: historical references to its discovery

After the valuable contribution made by Christopher Columbus [2], the first written and cartographic

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testimonies¹ appeared during the 16th century, among which the reports by Fernández de Enciso, Pascual de Andagoya [3], Fray Bartolomé de las Casas and, perhaps Fernández de Oviedo [4] above all, stand out. All the information submitted to the ‘Consejo de Indias’ by the Terra Firma authorities is compiled and put together by the Head Cosmographer and Chronicler Juan López de Velasco in his marvellous work entitled *Geografía y Descripción General de las Indias* (1574), which while referring to the creation of the ‘Real Audiencia’ wisely states that its creation was due to the handling of the fleets rather than to other activities [5], given that the Real Audiencia’s territorial scope was the starting point for the boundaries of the future Republic of Panama.

Among the research done during the 17th century, the devoted work by Diego Ruiz de Campos must be highlighted. This pilot was the author of *Relación sobre la Costa Panameña en el Mar del Sur* (1631), wherein a vivid depiction of the islands and rivers along the Pacific coast is detailed. Likewise, it is essential to read the work by Juan Requejo Salcedo, *Relación Histórica y Geográfica de la Provincia de Panamá* (1640).

In the 18th century, a clear reference must be made to the essential contribution given by the Spanish Royal Navy’s commanders, Jorge Juan and Antonio de Ulloa [6], who described excellently and in great detail the features of the port accesses, the tides, the identification marks along the coast, issues concerning inland transportation, navigation problems, fishing and shipchandling within the area, which, in the case of navigation from Portobelo to Chagres, is of extraordinary accuracy. Alejandro Malaspina reaches the Panama Gulf in 1790, with the purpose of exploring the Panamanian Pacific coast, to provide a clear description of its geographical features, in the most genuine style of pilot charts which were used on board later on, in his work *Viaje Científico alrededor del Mundo* (1790).

The 19th century brought about important events in the life of the Isthmus. Thus, Panama’s independence from Spain and its subsequent annexation to Great Colombia [7,8] was proclaimed on 10th November 1821. Although it is known that King Charles I of Spain ordered the implementation of the first survey for the construction of a canal across the Isthmus of Panama in 1534, the first scientific approaches about the feasibility of that project were expressed in the document published by Napoleon Garella [9] in Paris in 1845, with the chapter on the geological composition of the area being of a particular interest. His plan provided for a set of 35 locks and a 5.3 km-long tunnel. Important

data on the Isthmus’ climatology and its influence on health, which so many lives it had been claiming, have come from the work by Griswold [10].

By 1850, the construction of the first transoceanic railway line in Panama began with the aim of carrying emigrants from the US Atlantic coast to California, where the major gold rush was beginning to emerge. It was finished 5 years later, but not without serious difficulties [11]. Not long after, Lucien Napoleon Bonaparte Wyse and Armand Reclus, wrote their magnificent works *El Canal de Panamá* (1886), and *Exploraciones de los Istmos de Panamá y Darién en 1876, 1877, y 1878* (1880). Halfway through this century, technology had improved tremendously, making topographic measurements and the calculation of sea-bed volumes to be possible.

In 1878, Wyse signed a contract with the Colombian government to construct the Canal. Later on, that concession was handed over to the ‘Compagnie Universelle du Canal Interoceanique’, chaired by the legendary ‘hero of Suez’, Ferdinand de Lesseps, who failed utterly in his Panamanian venture [12], with the necessary intervention of the French courts in face of the serious scandal arising from the company’s financial situation.

An historic achievement for both the country’s and the world’s geography was the beginning of the construction of the Canal,² and hereinafter more and more specialised studies were being carried out regarding the various disciplines related to it: geology, meteorology, ocean currents, engineering, etc. There can be no doubt, whatsoever, that all the various kinds of changes taking place during the construction would mark the Isthmus of Panama forever.

The beginning of the 20th century brought a huge quantity of geographic information about the Canal, transmitted by Americans [13], along with an excessive amount of political activity. On 12th January 1903 the Herrán–Hay Treaty was signed in Washington, whereby the Colombian government was bound to transfer a 10-km-wide strip of land to the USA, over which the latter would exert control and exercise jurisdiction, in order to build, make use of and operate a canal across the Isthmus of Panama. The Colombian Senate rejected the Treaty on 12th August of the same year. On 3rd November, Panama declared its independence from Colombia.³ Fifteen days later, on 18th November, the Panamanian and American governments signed the Hay–Bunau Varilla Treaty, which allowed the USA to

¹ Although Rodrigo de Bastidas discovered the Panamanian Atlantic coast in 1501, just a slight reference of the fact remains. One year later, Christopher Columbus would give an account of his forth and last travel in his *Lettera Rarissima*.

² On 1st January 1880, Ferdinand de Lesseps threw the first symbolic shovelful at the mouth of Rio Grande facing the Bay of Panama, with which the construction of the Canal began.

³ As soon as Panama declared its independence, a Constitutional Convention was convened, being held in January 1904. On 13th February, the fundamental by-law was enacted, whose article 136 empowered the US military to intervene in the country.

build the Panama Canal and provided for life-long control over a zone 16 km wide, instead of the former 10. Perico, Naos and Flamenco Islands were also transferred to the USA. The Canal was inaugurated on 15th August 1914, with the crossing of steamship ‘Ancón’ [14].

In 10 years, the construction expenditures amounted to 352 million dollars, which included 10 million paid to Panama and 40 million paid to the French company, which added to the French’s costs came to a total amount of 639 million dollars as well as the loss of more than 25,000 human lives [12].

This historical route on the geographic surveys on the Isthmus of Panama cannot be concluded without a special mention and fair acknowledgement—agreeing with Omar Jaén—to Professor Angel Rubio’s fruitful labour, to whom we all are indebted. Coming from the Universities of Seville and Barcelona, he reached Panama in 1937, developing an immense researching and teaching activity, reflected in more than 119 publications and papers, among which it is necessary to read *Atlas elemental de Panamá* (1947), *Notas sobre geología de Panamá* (1950), *Las Plataformas Continentales como problema geopolítico* (1955), *Geografía Política de los Mares* (1959) and *El golfo de Panamá: Bahía histórica* (1959). Each of his studies helped to consolidate the excellent geographic data which Panama relies on, becoming progressively better over almost five centuries, during which eminent discoverers, marine officers, geographers and scientists had been studying the Isthmus.

2.1. Maritime spaces

The Republic of Panama’s territory, borders on the Caribbean Sea to the north, on the Pacific Ocean to the

south, on the Republic of Colombia to the east, and it is bounded by the Republic of Costa Rica to the west. The Panamanian continental area is some 77,082 km² (see Fig. 1).

The delimitation of the boundary with Colombia was established in execution of the 1924 Boundary Treaty between Panama and Colombia, based upon the same conditions as the Colombian Law of 9th June 1885. Extending between the Caribbean Sea and the Pacific Ocean, the border is demarcated by fourteen pillars, making up a large alignment of 215 km. It was a very difficult task to define the Panamanian border with Costa Rica, from the time Panama proclaimed its independence from Spain in 1821 to the signing of the 1941 Boundary Treaty between Panama and Costa Rica, which left 116 years of disputes and arbitration. This boundary is 245 km long.

Panama has a total of 1518 islands, islets and cays on its Continental Shelf, much wider in the Pacific Ocean than in the Caribbean Sea. The Caribbean coast is 1288 km long, and amongst its most relevant geographical features are: Almirante Bay, Chiriquí Lake, Valiente Peninsula, the Gulf of Los Mosquitos, Limón Bay, Portobelo Bay and the Gulf of San Blas. The most important are the Bocas delToro Archipelago, which is opposite Almirante Bay, and the De las Mulatas Archipelago, which is opposite the San Blas coastline, with the Colon, Popa and Bastimento Islands belonging to the former Archipelago, being quite relevant. The most important ports along this coast are: Cristóbal, the Canal North terminal, Las Minas Bay, the Chiriquí Grande oil terminal, Almirante, Bocas del Toro, Coco Solo and Porvenir. Along this coast, rivers are not very long, are fast-flowing, support high rainfall and are not navigable, with the rivers Chagres (125 km) and Changuinola (118 km) standing out [15].

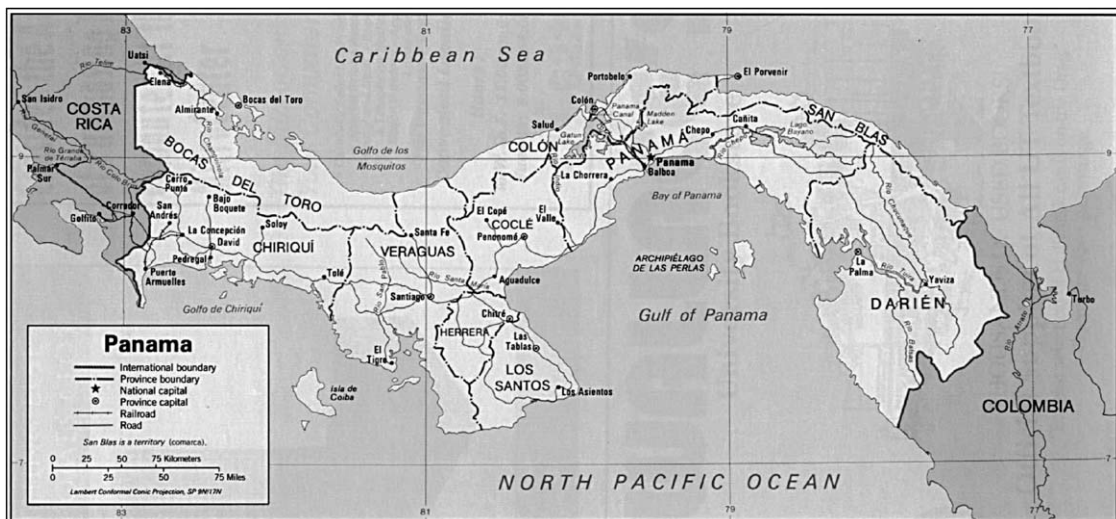


Fig. 1. Map of the Republic of Panama. Source: Fairplay World Shipping Encyclopaedia.

The Panamanian Pacific coastline is 1701 km long and it is more rugged than the Caribbean. Its most significant geographical features are: the Gulfs of Chiriquí, Montijo, Panama and San Miguel; the Charco Azul, Parita and Panama Bays; Burica, Las Palmas and Azuero Peninsulas. The Las Perlas Archipelago, the most important in the country, is located in the centre of the Gulf of Panama, with the Island of Contadora being very significant. Other islands are Coiba, the largest in the country, opposite Veraguas, and Taboga, which is opposite Panama Bay. The most important ports on this coast are Balboa, the Canal South terminal, The Charco Azul oil terminal, Aguadulce, Vacamonte, Puerto Armuelles, Pedregal, Caimito, La Palma and El Real. Along this coast, rivers are much longer and some of them are navigable for coasters, with Chucunaque (231 km), Tuirá (230 km), Bayano (206 km), Santa María (173 km) and Balsas (152 km), being the most outstanding [16,17].

The total area of the Panamanian waters is 319,824 km², more than four times its continental surface. Panama kept the breadth of its territorial sea in three nautical miles until Law 58/1958 came into force, whereby the Republic of Panama extended its territorial sea to a distance of twelve nautical miles: *beyond its land territory and internal waters to its bed and subsoil, as well as to the air space over it.*

The breadth of Panama's territorial sea was modified in 1967 in compliance with Law 31/1967, following the guidelines which Latin American countries had been unilaterally adopting as regards the Law of the Sea [18]. This fact was to bring about Panama's joining the principles and goals of the 'Declaration on the Maritime Zone', signed at Santiago de Chile, on 18th August 1952, by Chile, Ecuador and Peru,⁴ expanding its maritime sovereignty up to 200 nautical miles [19]. This act was based upon the need to conserve and protect its natural resources, to control the exploitation of these resources, and to emphasise Panama's need to count on territorial sea of such a breadth as to *guarantee the defence of its territory and the neutral operation of the interoceanic passage.* It is very difficult to support this theory, from our point of view, since by 1967, the year in which the law was passed, 'the Canal Zone' already existed; moreover, later on, as set forth in the Torrijos–Carter Treaties, the USA reserved the right to intervene with its military to protect and defend the Canal. Because the Treaties were still in force, the Panamanian Army was abolished, and hence its Navy, after the events of 20th December 1989, when Panama was invaded by American forces.⁵

Panama signed the 'Montevideo Declaration on the Law of the Sea' in 1970, in which six basic principles were adopted, emphasising the right of coastal States to avail themselves of the natural resources of the sea adjacent to their coasts; to establish the limits of their maritime sovereignty and jurisdiction, and to conserve and exploit their natural resources [18]. The years between 1973 and 1982, the Third United Nations Convention on the Law of the Sea took place. It had a special effect on the development of Panama's maritime affairs. Three agreements of special interest regarding the Law of the Sea were signed by Panama: concerning the maritime boundaries with Colombia [20] and Costa Rica [21], and the Panama Canal Treaty, with the USA [22].

Panama's point of view during the Third Convention was based on a series of relevant issues for the country, such as the Continental Shelf, the Territorial Sea and the Exclusive Economic Zone, historic bays and States in a disadvantaged geographic position. Indeed, the Panamanian attitude towards the specific subject of the 'Continental Shelf'⁶ coincided completely with the stand of the Conference, as well as with the concept of historic bay, which is applied to the Great Gulf of Panama [23].

During the Second Session of the Assembly, held in Caracas, Panama expressed its disadvantaged geographic position as a State, given that The Canal Zone prevented it from exercising its sovereignty over the Ports of Cristóbal and Balboa until 1st October 1979, date in which they reverted, in compliance with the Torrijos–Carter Treaties, signed in Washington, 1977. Needless to say, the 'Zone' was absolutely under American sovereignty until the reversion. Thus, Panama's most valued natural resource, namely, its geographic position [24], had been under control of a foreign power. On the one hand this situation, causing strong mass protests, established a political-jurisdictional enclave, and, on the other hand, a political-functional one, as the use and access to its most valued sea coast was restricted for Panama.

In accordance with the principle of equidistance agreed upon as an accepted method for the demarcation of marine limits, in compliance with the Articles 15 and 83.1 of the Convention on the Law of the Sea, marine boundaries between Panama and its neighbours, Colombia and Costa Rica, were demarcated (see Fig. 2). A total of thirteen co-ordinate points were agreed on with Colombia in the Caribbean Sea. These points made up a median line comprised of straight lines from the point at

(footnote continued)

Ministry of Government and Justice, being in charge of the control of territorial waters. By 2002 Salas–Baker Agreement, patrolling is carried out by both the Panamanian Maritime Police and the US Coast Guard.

⁶The United Nations Third Convention on the Law of the Sea, Article 76, Final Proceedings.

⁴Official documents from The United Nations Third Convention on the Law of the Sea, New York, Vol. II, Summarised Proceedings, p. 236.

⁵Panama has a National Maritime Service dependent on the

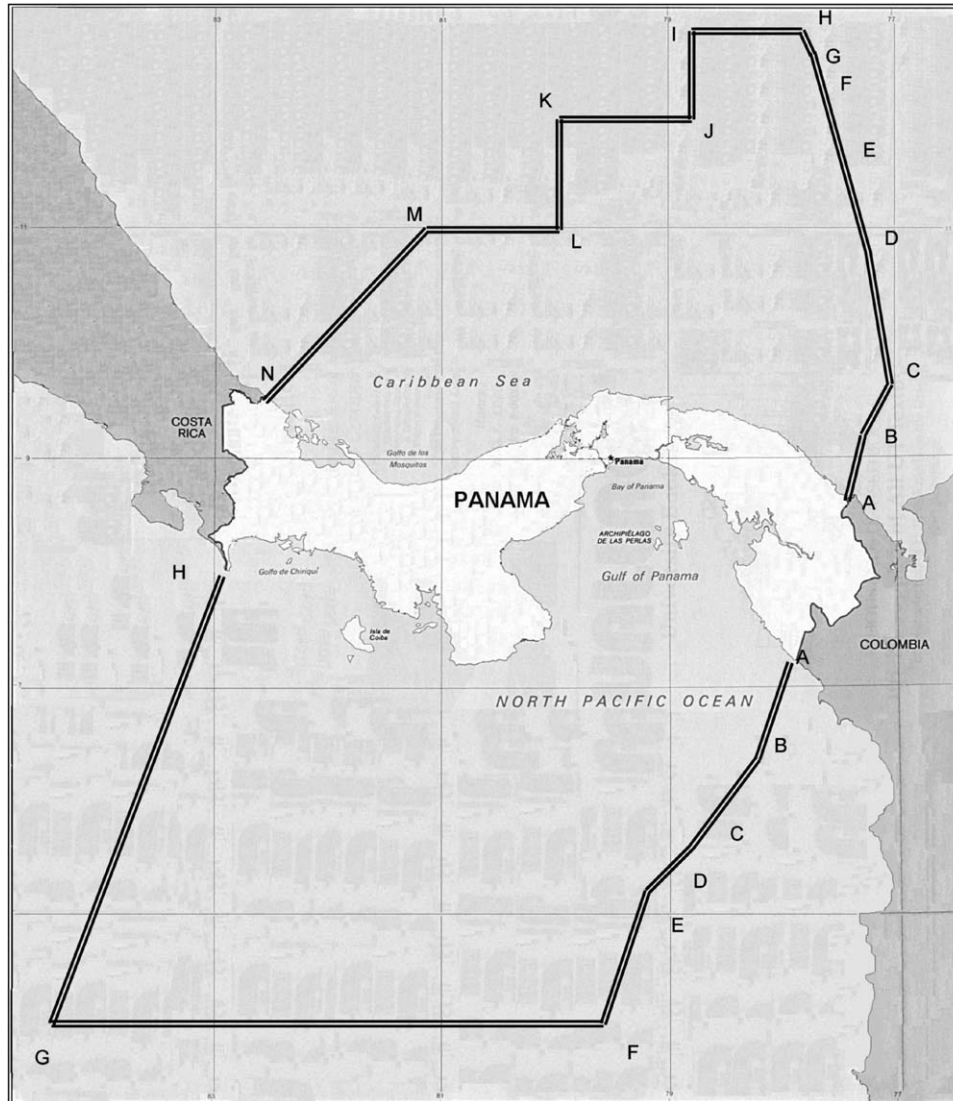


Fig. 2. Panamanian waters and maritime boundaries. Source: Author, adapted from Panamanian Laws 18/1977 and 5/1981.

which the international land boundary touches the sea at Cabo Tiburón, at $8^{\circ}41'07''$ north latitude and $77^{\circ}21'50''$ west longitude. From point “M”, the demarcation line goes on at a 225° azimuth to the point where it touches Costa Rica. In the Pacific Ocean, six co-ordinate points were specified, forming a median line comprised of straight lines from the point where the international land boundary touches the sea, at $7^{\circ}12'39''$ north latitude and $77^{\circ}53'20''$ west longitude, up to point “F”, at $5^{\circ}00'00''$ north latitude parallel—where the demarcation reaches Costa Rica—which has been the boundary ever since.

The demarcation with Costa Rica in the Caribbean was made from the land boundary end between both countries at the mouth of the river Sixaola, until intersecting the aforementioned point “M”; in the Pacific Ocean, from Punta Burica until the intersection of point $5^{\circ}00'00''$ north and $84^{\circ}19'00''$ west longitude. In

both Treaties, the signatories expressly acknowledged the Great Gulf of Panama as a historic bay.

The crossing of foreign vessels through the territorial sea is controlled by Panama, in accordance with Law 42/1979. Taken into account are those regulations of mandatory compliance on the passage of these ships, either war or merchant, the right of innocent passage, as well as the regulation of prohibited areas and the sanction procedures, complying with the Convention (Part II, Section 3, Articles 17–32).

By the end of the 1980s, the situation of the Montego Bay Convention aroused great interest in both diplomatic and political circles, given that Panama signed it but they did not ratify it. On account of this, and at the request of the country’s maritime authorities, the International Seminar ‘Advantages and Disadvantages of the Ratification of the United Nations Convention on the Law of the Sea’ [25] was held in October 1989,

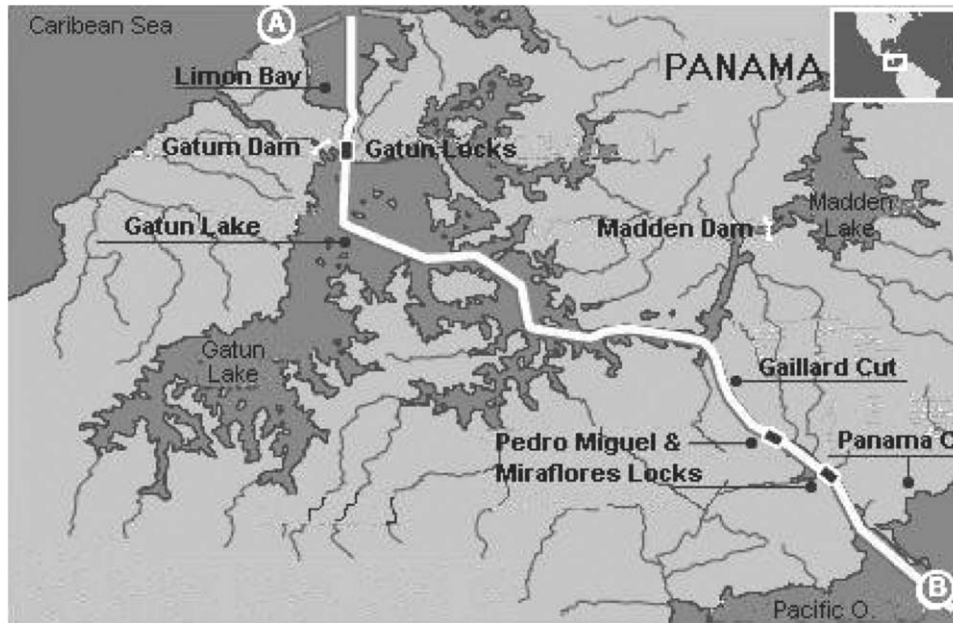


Fig. 3. The Panama Canal Transit. Source: BBC, www.bbc.co.uk.

sponsored by the United Nations Development Programme (UNDP) and the International Maritime Organization (IMO). More than 40 experts came together, such as ambassadors participating in the Conference sessions, representatives from the Ministry of Foreign Affairs, maritime authorities, the Canal Commission authorities, professors and international experts of the United Nations. They all came to the conclusion that, once ratified, the Convention would present many more advantages than disadvantages. The coherence and quality of the studies made by the various Panamanian representatives before the Third Conference, as well as regarding the boundary treaties signed with Colombia and Costa Rica, were pointed out. The conclusions of the International Seminar were submitted to the 'United Nations Office for Ocean Affairs and the Law of the Sea' in New York; the Panamanian Minister of Foreign Affairs was requested to consider these with a view to taking a future official stand before the Convention.

Based upon the conclusions, the Ministry of Foreign Affairs set up a new department in 1990—The Maritime Boundaries Directorate—to manage those issues related to the Law of the Sea. Subsequently, the agreement was ratified by virtue of Law 38/1996 [26].

2.2. The interoceanic waterway

The Panama Canal, which is 82.4 km long and has a total area of 1432 km², was built through one of the lowest but rugged saddles of the mountain range known as the Continental Divide. The original elevation was 100 m above sea level. The canal runs from northwest to southeast, with the Atlantic entrance being 54 km north

and 43 west of the Pacific gate. A vessel that crosses the Canal from the Atlantic⁷ first enters the Cristóbal Port breakwater, passing through Limón Bay, covering about 5.4 nautical miles, and a width of 152.40 m. The ship has to go up some 26 m in a flight of three steps, the three sets of twin locks at Gatún Lake. Each lock chamber is 304.80 m long and 33.52 m wide, with an allowed maximum depth of 12.20 m (see Fig. 3). Gatún Lake, one of the largest artificial bodies of water in the world, covers an area of 425 km². It was formed by the construction of an earthen dam across the River Chagres, adjacent to the Gatún Locks. The two wings of the dam and the spillway are 2400 m long. A vessel covers 23.8 nautical miles through Gatún Lake until it reaches the northern end of Culebra Cut. The latter has a length of 7.8 nautical miles and was carved out of rock for most of the distance, causing devastating landslides, not only during construction, but also soon after the Canal was opened. On account of this, crossings were forbidden from 18th September 1915 to 15th April 1916 [12]. Culebra Cut, also known as Gaillard Cut, after Col. David DuBose Gaillard—the engineer who was in charge of it—was widened three times, between 1930–1940, 1957–1971 and 1991–2001, until reaching a width of 222 m and a depth of 13.7 m.⁸

⁷ Until the transfer, regulations on ship transit, inspection, tonnage and pilotage, were integrated in the 'Panama Canal Regulations', Chapter I, Subchapter C 'Shipping and Navigation', 'Code of Federal Regulations', Title 35. Later on, it was included within Chapter IV, Article 57, Law 19/1997 by the ACP.

⁸ The Canal Commission Board of Directors, passed the long-awaited plan on Gaillard Cut's widening, in order to allow unrestricted two-way traffic of PANAMAX-size vessels (the largest vessels the waterway can accommodate). The widening was finished in November

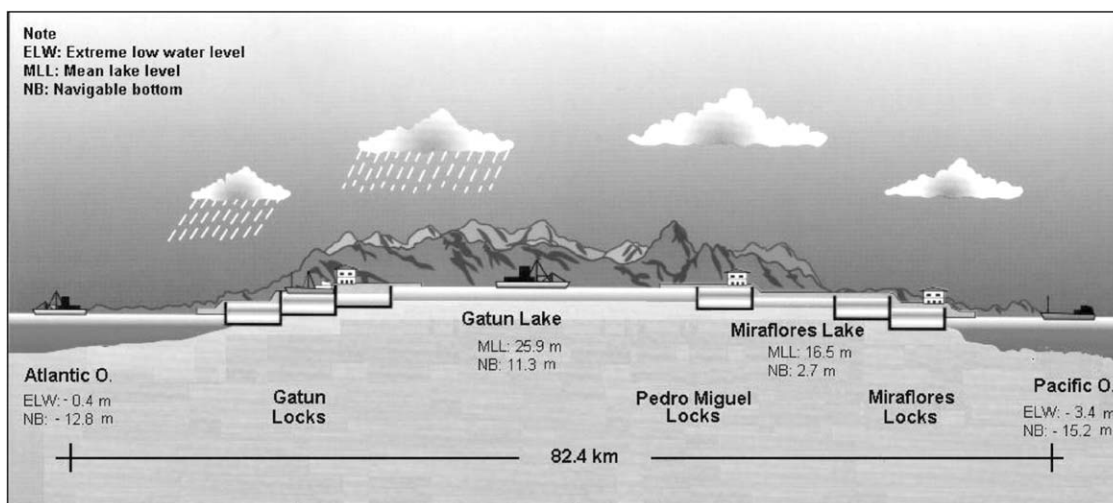


Fig. 4. The Panama Canal Profile. Source: PCC and [11].

The Pedro Miguel Locks are located next, which are as long as the others, where a ship is lowered 8 m in one step to the Miraflores Lake. Finally, the two sets of Miraflores Locks will allow the ship to reach the Pacific Ocean, where it is lowered according to tidal variation [27] (see Fig. 4).

3. Geographic position and economy

Since the Isthmus was discovered, Panama's economy has been fundamentally dependent upon foreign trade. Its geographic position has bestowed upon it a unique place within world trade. In fact, Panama developed as a maritime country, establishing itself as a source of commercial exchange between Spain and America. It focused its economic structures on commercial specialisation and services, a fact which made it the epicentre of world trade at that time [28]. Both its terminal ports became key trade centres in the West Indies [29], providing a distributing route for European manufactured goods—Spain shipped goods to American territories via the Isthmus—as well as for goods and treasures which were shipped to Europe. As previously stated, Panama played the role of a trading country during the colonial period, as shown by the celebration of fairs such as Nombre de Dios and Portobelo, with the latter being the city where the last fair, in 1726, took place.

As stated by Castellero, it was fairs, fleet traffic, and goods and treasure trade what made Panama an attractive location for Europe's economic interests. This link was to lead to Panama's specialising in the

service sector, with a particular focus being paid to the maritime activities.

Panama's economy abruptly slowed down from midway through the 18th century until the end of 1840, when it improved due to the influx of people to California when the gold rush began. The process of independence, the construction of the Canal and the setting up of the open register were to influence the social and political changes which marked the rest of the century and the beginning of the next one.

The absence of a formal institution of monetary authority is a characteristic of Panama's economy. This system is characterised by a complete dollarisation. The dollar circulates freely as legal tender. The national currency is the Balboa, equivalent to one US Dollar. Since Panama does not issue paper money, the Panamanian authorities have seen tax policy as a means of implementing their economic policy. Currently, the service sector accounts for 76% of the GDP, and the MS in particular for almost 20%. The rest of the sectors do not represent outstanding values. These data are especially significant when compared to Panama's Latin American neighbours,⁹ who present much lower percentages.

3.1. The basic features of Panama's economy linked to its geographic position

The following are cornerstones of Panama's service sector: Colon Free Zone (CFZ), the International Banking Centre (IBC) and the MS.

The CFZ, created by virtue of Law 18/1948, and subsequently amended, is located at the Atlantic gateway to the Panama Canal on the Caribbean side. It

(footnote continued)

2001, costs amounted to 1000 million dollars. On 3rd May 1999, two Panamax vessels passed each other on the Cut for the first time.

⁹ According to 'CEPAL reports on Latin America and Caribbean economy', 2001.

increased its area up to three times the original size, due to the reverted areas, in compliance with the Torrijos–Carter Treaties. Its organisation chart comprises a Board of Directors, in which several ministries take an active part; an Executive Committee and a General Management Office. Those companies operating within the Zone are given both fiscal incentives and benefits. The services offered are the following: users may lease warehouse space and premises; they may also lease land to construct premises; they may carry out operations by means of representatives through the use of already existing companies, or through Public Deposit.

The already existing companies may re-export the imported goods within the Zone to foreign countries; this merchandise may be sold to other companies within the Zone, which will in turn re-export them; they may sell them to Panama, as long as taxes are paid, and they may sell them to the buyer directly, the merchandise being sold through the Zone, although the goods do not physically pass through it [30].

The IBC, regulated by Decree 238/1970 [31] until its derogation by Law 9/1998, thrived in Panama largely due to the use of the US dollar as its legal tender, the free flow of capital to and from Panama, no currency exchange controls, fiscal benefits, and highly favourable incorporation laws. It is also important to take into account that the Panamanian tax laws are based on the principle of ‘territoriality’.¹⁰ Since its creation, and until 1982, it thrived, growing from 1000 million dollars in assets to 50,000, offering investors a total of 120 banks operating in the country. In 1986, for the sake of transparency, procedures were established to remove banking secrecy laws due to accusations related to drug trafficking. The Mutual Legal Assistance Treaty is still in force, and allows the US to identify accounts and their contents [32].

As MS, a wide range of activities should be included—either public or privately operated—related to waters, coastlines and the interoceanic passageway; transiting vessels; the merchant fleet and open register; national ports, and vessels and cargo movement; marine resources; and, finally, employment and maritime ancillary services related to the sector’s components, with the ones lent to vessels while transiting the Canal, operating in national ports or using the register standing out.

3.2. *The 1989 crisis and its impact on Panama’s economy*

After the economic growth between 1985 and 1987, the US decision to freeze the Panamanian public funds and to ban American nationals and companies from sending capital to or paying taxes in Panama, brought about a deep crisis. This situation led to an imbalance of

funds in the public sector and the weakening of the IBC, as shown by a flight of capital amounting to 8000 million dollars, in the second half of the year 1987—according to the National Banking Commission—yielding an alarming low liquidity [33].

Meanwhile, the political situation, which was especially difficult from June 1987,¹¹ worsened when in February 1998, President Delvalle ordered General Noriega’s dismissal as Commander of the Defence Forces. Immediately, the General Staff forced the Legislative Assembly to dismiss Delvalle and appoint a pro-Noriega man as acting president. On 2nd March, the US froze both the Panamanian accounts deposited in the Federal Reserve Bank of New York and the Canal payments. One day later, the closure of the Bank System came into effect, until May of the same year.¹² The political crisis became very serious when, on 7th May 1989, elections were cancelled¹³ and a provisional government was set up.

This tragic economic, social and political situation reached its crucial point on 20th December 1989, when 25,000 US troops seized control of Panama City, using sophisticated military equipment, which destroyed part of the city and caused hundreds of victims, according to government sources [34]. A strong spate of looting by the civilian population followed, which nearly destroyed 40% of companies and virtually all the shops in the town centre, according to the Chamber of Commerce and Industry of Panama. The effects on the MS were devastating: a decrease in the number of vessels crossing the Canal, representing a reduction of 10 million dollars on tolls; the neglect of 9 million GRT of ship registry, and a virtual non-existent activity in the national ports, with an income fall of 50% in the Port of Balboa [22].

When it came into power, the new government had to face an economy in chaos. The GDP had fallen by 16%, 1778 million dollars, and it was not until 1990 that it recovered by 3.3%, with a high growth of the investment of the private sector and the reestablishment of credit transactions of banks set up within the country. Despite the above-mentioned figures, the unemployment rates rose to 19% [35]. Panama’s exports grew by 321.2 million dollars in 1990, increasing by 8% in comparison to the same period the previous year. The

¹¹Strong accusations by colonel Diaz Herrera, publicised that Noriega was involved in murder and corruption; such accusations led to popular uprising resulting in strikes and demonstrations.

¹²The National Banking Commission Agreements 2/88 and 21/88 regulated the closing and staggered opening of banks, releasing fixed term accounts in June 1990, by National Agreement 6/90.

¹³Although many prestigious observers from all over the world—headed by ex-president Carter and UN, OAS, EC, Human Rights, etc. representatives—came together, general Noriega ordered their cancellation, as results showed the victory of the opposite list of three candidates, in a proportion of 3 to 1.

¹⁰This principle defines that, under this system, only net income generated within the geographic territory of Panama is taxable.

exportation of bananas was remarkable (89.4 million dollars), with the main importers being the USA and Germany. Imports grew by 1489 million dollars in 1990, accounting for 54% in comparison with the previous year, with crude products (229 million dollars) being significant [36].

In January 1990 the ‘National Strategy for Development and Modernisation of the Economy’ was aimed at the political, economic and social stabilisation, both near and long term, and to the punctual payment of the foreign debt amounting to 610 million dollars [37]. It committed itself to the implementation of an ambitious plan of modernisation, in order to regain its reputation as a reliable nation. Among the plan’s implemented actions it is relevant to emphasise the following: the liberalisation of the economy, based on the reduction of taxes and the elimination of tariff barriers; a labour reform was introduced which, we consider, was vital to maritime employment; and among the cases of privatisation of public services, it is worth mentioning the National Port Authority and the modernisation of the MS [38]. The effects of the crisis are shown in Table 1, referring to the income in CFZ and IBC for the years 1989, 1990, and also including those values referring to 2002.

The contributions of the MS to the national economy did well during those years, as shown in Table 2. Indirect income produced by maritime activities concerning the setting up of companies, legal representation, ship inspection, service on vessels while transiting the Canal, etc., which, according to 1990 estimates, reached up to 200 million dollars, is not included [39].

Table 1
CFZ and IBC Operation values in million of US dollars

CFZ/IBC	1989	1990	% 1989–1990	2002
CFZ				
Import	2288	2700	+ 18	4206
Export	2366	3100	+ 31	4969
IBC				
Assets	15,395	18,384	+ 20	26,200
Credits	6110	6993	+ 14	7517
Deposits	11,527	15,072	+ 31	24,076

Source: [35–37,51,52].

Table 2
MS contribution to the national economy in million of US dollars

MS	1989	1990	% 1989–1990	2002
Register	39	45.4	+ 16	55
Ports	45.1	57.5	+ 27	280
Fisheries	78	74.7	– 4	243
Canal	327.9	353.7	+ 8	579.5

Source: [32,38,51,52].

4. Panama’s maritime affairs management

From an economic, social and political point of view, some governments consider maritime affairs and the implementation of their competencies to be of such importance that these receive high preferential treatment. ‘Maritime competencies’ could be defined as *a State’s duties and responsibilities regarding its maritime affairs, either of a physical, administrative, economic or legal nature*. Exercising their rights, governments assign those competencies to a given amount of administrative institutions, of a higher or lower hierarchical level, according to their administrative system. However, it seems to be suitable to distribute maritime competencies in five large groups: maritime spaces, ports, shipping and maritime transport, marine resources and human resources [40].

The traditional management systems are in two groups: dispersed or unified. Regardless of which of them is applied, maritime activities management is going to demand both a central administrative structure and a peripheral one, the latter in charge of keeping direct contact with the core elements of the sector: ship, port, cargo, seafarers and customers.

When at the end of the 1980s we began to analyse the Panamanian MS, competencies were completely dispersed. Hence, each MS component was managed by a different institution, lacking co-ordination. In the following, these are analysed.

The Directorate General of Consular and Shipping Affairs, created by virtue of Law 2/1980, and dependent upon the Ministry of Treasury, was in charge of the merchant marine. This gives us an idea about the collecting nature of that institution, where flagging out income, through its consular system, was given the highest priority. Maritime safety issues were not given priority, and there were very few specialised officials in this matter. International Conventions, such as STCW’78, had not been ratified. The examination and certification systems were inadequate, and, in some cases, fraudulent. The number of ship detentions, according to PSC, was really high in Europe and the USA [25].

Ports were under the National Port Authority management, an institution with autonomy and assets within its internal regulations, set up by virtue of Law 42/1974. It was an organisation dependent on the Ministry of Commerce and Industry, in order to manage the national ports system, to which the Ports of Balboa, Cristóbal and Coco Solo Norte reverted in concordance with the Torrijos–Carter Treaties, between 1979 and 1981 [41]. These ports were a heavy burden for the State, and they proved to be excessively expensive, inefficient, and were becoming less and less visited, therefore resulting in losses. All their personnel, from managers to stevedores, were made up of civil servants.

Fishing matters were managed by the Directorate General of Marine Resources, dependent on the Ministry of Commerce and Industry, in compliance with Law 2/1982. Its responsibilities focused on the administration of its fishing grounds and fishing fleet based in national ports. The latter was made up of around 2700 small boats and 300 shrimpers, the largest of 233 GRT. Even so, fishing exports ranked the second highest in the country.

Maritime education and the Nautical School of Panama, traditionally regarded as providing excellent training, were dependent on the Ministry of Education, by Decree 755/1971. The participation of nationals in the register fleet was very low. Out of a total of 74,581 officers, just 534—0.8%—were Panamanian. The Canal, which offered very high salaries, was the main opening for graduates.

Maritime labour was a competency of the Ministry of Labour, which managed it from a lower rank department. Maritime security and police, after the 1989 invasion, was the responsibility of the National Maritime Service of the Ministry of Government and Justice. Maritime boundaries, which have already been analysed within the present paper, were regulated by the Ministry of Foreign Affairs. The Panama Canal, under US control at that time, was managed by a Federal Agency, the Panama Canal Commission (PCC), in accordance with Article III, Numeral 3 of the Torrijos–Carter Treaties [42], thus replacing the former Panama Canal Company.

The implemented system, except for PCC, presented the classic problems of disperse management, namely the doubling of duties, high expenditures, inefficiency, high bureaucracy, and a great instability of government employees' jobs.

Lawyer firms, shipping agents, supplying and bunkering services, and minor repairs within the private sector, were at the disposal of the register, ports and Canal users. Except for the case of the first, these did not exploit the comparative advantages which the MS offered.

In view of the previous information, we carried out a simulation exercise. Firstly, we prepared a matrix for each MS component to be exercised, indicating the following data: institution, legislative framework, duties, human resources, economic resources and infrastructure of each one. Secondly, we selected all those duties ran by more than one institution, regrouping or removing them, depending on the case, so that the basis for the design of an ideal management model could be set up. All institutions, both public and private, were included in the matrix we created. The latter showed an attitude of distrust, as a result of the chaotic political situation experienced. Competencies linked to maritime spaces, marine resources and ports presented serious problems, being the result of a dispersed and unco-

ordinated management, in which up to five different institutions took part. The service they provided was quite poor, given its inadequate operation and scarce productivity.

The ship register—the second in the world regarding tonnage at the time—kept a high casualty rate, worsened by the absence of procedures for the investigation of casualties (a total amount of 140 casualties had neither been investigated nor reported to IMO), and the alarming situation related to Port State Control (PSC), according to Paris MOU and US Coast Guard statistics. This situation was the result of the poor existing infrastructure, both regarding skilled human resources and means provided by the administration. There was more interest in income collecting from ship registration than in safety. In this sense, fleet safety was left in the hands of recognised organisations and classification societies of dubious reputation most of the time. The annual safety programme to survey the Panamanian fleet (ASI) only allowed a slight control over registered ships, which was annually decreasing until surveying only 10% of the ships. Moreover, the situation worsened as a result of the low level of implementation of international conventions, given that UNCLOS, STCW'78, TONNAGE'69, FAL'65, FUND'71 and SAR'78 had not been ratified—even the ones being ratified were not always implemented. PSC was not exercised over foreign ships calling at Panamanian ports, which were only inspected by PCC surveyors while transiting the Canal.

The most important problem to be found was the seafarers' examination and certification system, in which more than 60% of the officer licences issued were deficient. This was a really serious matter. Despite Panama's relevant maritime spaces, there existed no contingency plans against pollution, and, on the whole, the absence of national maritime experts was alarming [25]. The previous situation demanded from us the bringing about of urgent correction steps, namely: new rules and procedures, convention compliance and ratification, recognised organisations suspension, the training of personnel and a new seafarers' certification system.

Not losing sight of the idea of making Panama an international maritime centre, we analysed those advantages which it could provide—as was the case in its time as regards the banking and insurance sectors—which were the result of a modern legislation and active participation of the private sector, allowing the generating of 17,000 new jobs within those sectors. We considered that, before defining a management system, it was essential to clarify the 'concept' to be managed, so as to get—bearing in mind our original idea—the maximum profit out of the MS and geographic location, being understood that the private sector should play an important role taking advantage of the existing social

and economic factors referred to in the present paper. Advantages related to Panama were the following: the established financial and insurance centre with modern laws and regulations; no incomes from international business activities; no restriction on the transfer of money, as Panama's currency is at par with US dollar, and no exchange control; reasonable wages and operation costs; a modern worldwide telecommunication system; a bilingual labour pool; and finally, a good living environment and geographic location. All these factors should be consolidated with the new situation of political stability after the serious problems experienced. Obviously, the international scope of MS would demand not only government support but also the establishment of a managing body of a higher status than the preceding ones, with a view to co-ordinating actions and creating unified maritime policies. The broad fieldwork carried out showed that, once the aforesaid problems were overcome, there was a serious potential for the consolidation of the sector and the development of services such as shipchandling, bunkering, crewing, marine repairs and maintenance, ship tank cleaning, steamship commercial operations, and container and multimodal trade in an efficient private port system, all of them scarcely exploited at the time [38].

As a result of our work, the National Council for the Development of the Maritime Sector (CONDESMAR) was created by Decree 43/1992, as a government's co-ordinating, consultative and advisory body for the formulation of policies and recommendations aimed at the reorganisation of the national maritime strategy and other issues related to the unification and implementation of maritime competencies. All public and private bodies interested in this issue were included within this organisation, with their first task aimed at suggesting actions for *Panama's unique geographic position's complete exploitation as a world maritime strategic point, as well as for the country's development as an international shipping centre*. This Council was replaced by the National Maritime Commission (COMAR), a similar body, in 1994. Both of them drew up a 'national maritime strategy', defined as a set of policies, plans, programmes and guidelines aimed at the development of the MS [43].

The creation of the Panama Maritime Authority (AMP), by virtue of Law 7/1998, was the result of the joint work with both private and public international and national institutions. The AMP is an autonomous State agency, being in fact a ministry for maritime affairs, in which the merchant marine, ports and maritime ancillary industries, coastal and marine resources, seafarers, and maritime education competencies, as well as a Panamanian Maritime Research Institute, were integrated [44].

Although the AMP is the State agency in charge of the country's maritime affairs, the Canal's management

and operation were conferred to the new Panama Canal Authority (ACP), whose creation meant an amendment to the National Constitution, by the inclusion of Title 14. In 1997, Law 19/1997 of 11th June on the ACP's organisation was enacted. The highly controversial decision about separating both organisations was based mainly on political criteria, since the development of a national maritime strategy cannot be understood without taking the interoceanic waterway into account as an essential element of it. For this purpose, Law 7/1998 of the AMP's creation lays down co-ordination procedures, through specific agreements, with the ACP and the National Maritime Service.

5. Conclusions

From the 16th century and up to the present day, events of major international significance have been witnessed in Panama: the discovery of the Pacific Ocean, the transoceanic railway, the construction of the Canal, the shaping of the open register, or its strategy about maritime spaces and boundaries. All these facts have proved its maritime condition and the very close relationship between geographic position and maritime affairs. Nevertheless, Panama has traditionally obtained less profit than what would have been expected, as compared with other countries, which have taken advantage of that situation. The crisis of the end of the 1980s, which led to a critical situation in the country, helped to revive the national maritime spirit, with the support of the IMO.

The design and development of a maritime strategy, together with an ambitious programme for the training of human resources [25], allowed the fulfilment of a plan aimed at unifying competencies and the re-launching of port and maritime operations. The dynamic participation of the private sector, regarding port management and services, started in 1992, when the process of port privatisation began with the construction of Manzanillo International Terminal (MIT); 3 years later, Evergreen constructed the Colon Container Terminal (CCT). This fact was followed by the transfer of the Canal from USA to Panama, in compliance with the Torrijos–Carter Treaties. All these actions taken together have meant an encouraging takeoff, which is clearly shown by the country's economic recovery [45], that could be analysed as follows:

- the consolidation of Panama's register as the world's top register as regards tonnage and flagged ships [46]; a higher compliance with international conventions, together with a slight improvement in fleet safety standards [47],
- a spectacular port development regarding container trade [48],

- the efficient operation of the transoceanic waterway, managed by Panamanians [49],
- its active role in international maritime fora, being included as a member of group A of the IMO Council [50], and
- in 2001, MS-related business produced a direct impact on Panama's economy, accounting for about 1971 million US dollars and MS employment grew to 28,875 workers.

These results have been possible due to the work of two powerful State agencies, the AMP and the ACP, supported by a highly specialised and active private sector [51,52]. Furthermore, national human resources are playing an important role through their participation in high positions, thanks to the wide choice of specialised postgraduate maritime studies available in various national universities since 1992 [53].

The data referring to 2002, as shown in Tables 1–3, prove our hypothesis about the exploitation of Panama's geographic position and the implementation of co-ordinated maritime policies as having contributed to Panama's consolidation as a maritime country, after having applied those designed guidelines implemented through the international projects developed for that purpose.

Anyway, the complexity of the Panamanian MS calls for permanent attention to be paid to the ship register management, currently the first in the world regarding tonnage and ships. This must be operated under professional but not political criteria, and it demands

an important investment in infrastructure and resources to improve maritime safety, in order to control the work being done by recognised organisations, flag surveyors and the seafarers' certification system, in compliance with the current international regulations.

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Table 3
Evolution of MS elements, 1988–2002

MS elements	1988	1992	2002
<i>Register</i>			
Million GT	44.6	49.6	126.6
% World	11.1	11.2	21.7
% Total losses			
World average	0.39	0.75	0.14
% Panama	0.21	0.27	0.11
% Excess of average, MOU Detentions	+1.86	+1.79	+1.45
<i>Ports</i>			
Million tons	2.6	3.3	21.5
<i>Fisheries</i>			
Tons catches	101,000	108,300	93,744
<i>Canal</i>			
Ships	12,234	12,454	13,183
Million tons	154	156.7	190.8
Panamanian labour force			
Executives	46.5%	58%	100%
Workers	85%	88%	100%

Source: [38,46–48,51,53].

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