

BRAZILIAN CONTINENTAL SHELF EXPANSION: WIDENING THE OUTER EDGE OF THE BLUE AMAZON

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ABSTRACT: The present research follows the application of the Law of the Sea for the expansion of the continental shelf, which is becoming increasingly important as technological progress allows the exploration of natural resources in marine areas distant from the coast. By analysing the case of the Brazilian submission to the Commission on the Limits of the Continental Shelf it is possible to understand its function and to know the reasons that led the country to such a choice. The creation of the term “Blue Amazon” for the area which houses the Brazilian Exclusive Economic Zone and Continental Shelf demonstrates the country's intention to protect economical, environmental, scientific, and national security interests. The research ends by pointing to the progress of the Commission and the positive aspects of the Brazilian submission for the country and the international community.

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ABBREVIATIONS

CLCS	Commission on the Limits of the Continental Shelf
CS	Continental Shelf
EEZ	Exclusive Economic Zone
LEPLAC	Brazilian Continental Shelf Survey Plan (Plano de Levantamento da Plataforma Continental Brasileira)
NM	Nautical Mile
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea

1 INTRODUCTION

When speaking about Brazil in other countries in all parts of the world, what comes to the average citizen's mind relates to the environment, beautiful landscapes, the peaceful miscegenation of its people, and of course football. Without postulating a foolish patriotism or an ethnocentric nationalism, the author seeks to present some important points on the future building of the country.

From an academic viewpoint, the research explores the proposed expansion of Brazil's continental shelf in the light of the Law of the Sea and its impact on the consolidation of the Blue Amazon neologism. It is the second national state to submit such a petition to the Commission of the Continental Shelf of the United Nations, and the Brazilian interests behind the case send ripples across the economy, environment, science, and national security.

Being a relatively new procedure compared to other actions taken within the UN, the analysis of the proposals raises questions of both procedural and scientific nature. It is possible to analyse the specific case of Brazil due to wide publicity given by the committee to its actions and the availability of the meeting annals to the public.

When one expatiates on the Brazilian submission it is possible to understand the operation of the Law of the Sea and demonstrate the practical implications of each norm concerning the continental shelf. On the other hand, when introducing the concept of the Blue Amazon, it is possible to explain the reason for its creation and its legal usefulness not only for the country but for the entire international community.

2 THE BLUE AMAZON

This chapter begins with the concept of Blue Amazon, its historical origin, and its extension, and later addresses the features which compose it, namely economic, environmental, scientific, and national security features. This neologism is applied exclusively to Brazil, not finding any conceptual parallel in any other South American country.

2.1 Concept

Brazil is known globally for sheltering the largest portion of the largest natural reserve on the planet, the Amazon rainforest. With over 4 million km² in Brazilian territory¹, the Green Giant is also called the Lung of the World, because of its mega-biodiversity that absorbs great amounts of carbon dioxide and supplies the atmosphere with oxygen. It also houses one of the largest fresh water reserves and has in its underground a myriad of ores.

Its defence and preservation for the present and future generations are duties enshrined in the Brazilian Constitution², being classified as a national patrimony whose use assures the preservation of the environment and sustainable exploitation of natural resources. Its boundaries extend across seven Brazilian states and its international border limit is peaceful and consolidated because the dry borders of Brazil in South America were delimited a long time ago.

On the other hand, another natural reserve vaster than the Green Amazon and also with boundless wealth is unknown by the world and by Brazilians: the Blue Amazon. The term “Blue Amazon” was created by Admiral Roberto of Guimarães of

1 Bittencourt, A., *A Importância do Mar na História do Brasil* 11 (1st ed. 2006).

2 Art. 225 § 4, Constitution of the Federal Republic of Brazil, at http://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm (last visited on January 10th, 2010).

Carvalho³, Commander of the Brazilian Navy, who drew a parallel between the two mega-biodiversity reserves using “green” to refer to the forest and “blue” to refer to the sea.

The Brazilian coast is bathed by the Atlantic Ocean and has an extent of about⁴ 8.5 thousand km, with well-defined marine borders with Uruguay to the south and French Guiana to the north. The projection (EEZ and CS) of that immense coast according to the dictates of the UNCLOS gives Brazil a domain of about⁵ 4.5 million km² of marine economic goods (living and non-living), an extremely representative number if compared to the total of the Brazilian territory, which is approximately 8.5 million km².



The Blue Amazon⁶

3 Carvalho, R., *No Mar, Nossa Última Fronteira* in *O Mar no Espaço Geográfico Brasileiro* 255 (Chaves, P., 1st ed. 2005).

4 Bittencourt, *op. cit.*, 10.

5 See *id.*, 11.

6 Juaçaba, G., *Marinha do Brasil: visão global de sua atuação na Amazônia Azul e no Programa Antártico Brasileiro* at <http://www.senado.gov.br/frenteproantar/docs/Visão%20global%20de%20sua%20atuação%20na%20Amazônia%20Azul%20e%20no%20Programa%20Antártico%20Brasileiro.pps> (last visited on January 10th, 2010).

According to the 1988 Federal Constitution, the natural resources of CS and EEZ constitute the Union's goods⁷. Such a norm has been regulated by the Law 8.617/1993 and results from UNCLOS 1982, to which the country is a party.

The sovereignty rights⁸ exercised over the EEZ, within 200 nautical miles from shore, give the entitlement to the living and non-living natural resources to the coastal state, along with the exclusive right to allow scientific research – carried out by the state or by others – and to operate installations and artificial islands. On the other hand, there are some duties to the international community with respect to overflight, peaceful navigation, and laying cables and pipelines – whose route is determined in a reasonable manner by the coastal state.

On the Brazilian coast there are also islands and archipelagos that extend further than the EEZ⁹. For nearly half a century the Navy has occupied Trinidad Island, which is located at a distance of 540 nautical miles from the southeast coast, adding 450 thousand km² of EEZ. Since 1998 the Saint Peter and Saint Paul Archipelago has also been occupied on a permanent basis and added another 450 thousand km² of EEZ, which giving a total of 3,539,919 km².

In relation to the continental shelf the UNCLOS¹⁰ establishes that when it extends beyond the EEZ, the rights and obligations are similar to those of the EEZ, with a few variations¹¹: a) only living resources considered to be sedentary species are owned by the coastal state; b) after five years of exploitation of non-living marine natural resources a payment¹² to the Deep Seabed Authority of 1% of value or volume of

7 Art. 20, V, Constitution of the Federal Republic of Brazil, *op. cit.*

8 Art. 56, United Nations Convention on the Law of the Sea, Dec 10, 1982, at http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf (entered into force 16 Nov. 1994) [hereinafter, UNCLOS].

9 Bittencourt, *op. cit.*, 180.

10 Art. 77 – 81, UNCLOS.

11 Churchill, R. and Lowe, A., The law of the sea 156 (3rd ed. 1999).

12 Art. 82, UNCLOS.

production is required, and after twenty years, 7%, for priority distribution to developing countries and landlocked countries that are parts of the convention.

2.2 Features

The neologism Blue Amazon unfolds in four parts: economic, environmental, scientific, and national security. Despite the individual importance of each, the parts are interlaced and form the whole concept in a broad sense.

2.2.1 Economical

The immensity of the Brazilian coast means that the sea prevails in commercial transactions with the exterior. According to the Navy, more than 95% of imports and exports are transported by ship.

Fishing, historically, has less representativeness in the Brazilian export basket, with the trade balance having been negative until the beginning of the last decade. However, its socioeconomic importance is unquestionable because it uses labour-intensive work and employs about one million people divided among small-scale fishing (40%) and the fishing industry¹³ (60%).

In 2001 the first surplus of fish occurred, with exports exceeding imports. In the north-northeast of the Blue Amazon the fish catch comprises shrimp, lobster, crab, sea bream, and line fish, while in the southeast sardines, croaker, hake, and tuna stand out¹⁴.

With non-living marine resources already mapped, the Brazilian CS has the following surface non-metallic minerals: granules, such as quartz sand used in the construction industry and carbonate aggregates used in cement and lime production; heavy

13 Hazin, F., Perez, J. and Travassos, P., *Nossas Riquezas no Mar – Recursos Vivos in O Mar no Espaço Geográfico Brasileiro* 143 (Chaves, P., 1st ed. 2005).

14 McGinley, M., *North Brazil Shelf large marine ecosystem*. Encyclopedia of Earth (2008).

mineral-rich ilmenite, zircon, rutile, and monazite, used in titanium production; and phosphorite, which is very useful for northern and central-west Brazilian agriculture, where it is used to correct the acidic soil and make planting possible.

Among the metallic minerals the existence of polymetallic nodules rich in iron oxide and manganese as well as iron-manganese crusts rich in cobalt and platinum can be highlighted. Around the Saint Peter and Saint Paul Archipelago, which is one of the areas where the CS extends beyond the boundary of the EEZ, scientists¹⁵ believe that hydrothermal deposits of polymetallic sulfides can also be explored.

In the subsoil there are also evaporites of considerable economic value, such as potassium chloride found on the Sergipe coast, where there is a large active mine operated at a depth of 460 m. Although technology is not available for current exploration, reserves of gas hydrates of considerable economic value have been found, because the volume of just two discoveries in the north and southeast exceeds the natural gas reserves 150 times.

The country also has the largest marine limestone platform on the planet, and other natural resources whose exploitation¹⁶ is economically feasible, including iron, nickel, coal, tin, gold, diamond, plowed, phosphorus, and copper, have already been mapped. However, the great economic value of the Blue Amazon lies in energy resources: oil and natural gas.

According to Gusmão¹⁷, "the great volume of natural gas discovered in the Santos basin and the coast of Espírito Santo, Southeast Region, enables the consolidation of the market, so far supplied by the reserves of Petrobras in Brazil and Bolivia".

15 Silva, C. and Mello, S., *Nossas Riquezas no Mar – Recursos Não-Vivos* in O Mar no Espaço Geográfico Brasileiro 174 (Chaves, P., 1st ed. 2005).

16 Costa, N., *Riquezas minerais da 'Amazônia Azul' devem ser exploradas* at <http://www.alerta.inf.br/Geral/1293.html> (last visited on January 10th, 2010).

17 Gusmão, L., *Nossas Riquezas no Mar – Recursos Energéticos* in O Mar no Espaço Geográfico Brasileiro 185 (Chaves, P., 1st ed. 2005).

About 90% of the petroleum produced in Brazil is offshore and the immense discoveries made in 2006 are in the pre-salt layer, at great depth and distance from the coast, bordering in some cases 200 miles. Hence extending the shelf is of vital importance, especially in the southeast where the elephant-camps are.

According to the state-owned company Petrobras¹⁸, which is most responsible for the discoveries, in 2020 Brazil will be able to reach a daily production of 3.9 million barrels and proven reserves could rise from 14.4 billion barrels to over 30 billion barrels. That would put the country on the level of well-known oil potencies such as Qatar, Nigeria, Kazakhstan, and Canada.

2.2.2 Environmental

The development and exploitation of marine resources should be conducted in a rational manner in order to preserve the Blue Amazon's biodiversity. Delimitation of the area which it covers beyond the current 200 nm represents the consolidation of the national efforts to give sustainability to the natural biomes, in line with the Convention on Biological Diversity (ECO-92).

According to Norse¹⁹, the biological diversity of resources from coastal and marine areas is important not only for food production but also for their genetic heritage in relation to biotechnological aims and their influence on climate. Brazil's position has been to create protected areas and conservation units, which as well as conserving the environment can serve as an aid in the recovery of fish stocks and as a tool for fisheries management in reef areas²⁰.

All biomes of Brazil have received their legal definitions, leaving only the Coastal and Marine Zone with disputes over its reach. This is because the request for

18 Forero, J., *Brazil girds for massive offshore oil extraction*, The Washington Post, 7 December 2009.

19 Norse, E., *apud* Prates, A., *Unidades de Conservação Costeiras e Marinhas* in *O Mar no Espaço Geográfico Brasileiro* 198 (Chaves, P., 1st ed. 2005).

20 Prates, A., *op. cit.* 198.

expansion of the CS will directly influence the scope of the Blue Amazon. On the other hand, the rainforest, because it is situated in a place where Brazil exercises its full sovereignty, was given its legal boundaries a long time ago. This allowed greater efficiency in its management, which despite being far from ideal represents a tremendous improvement compared to the history of quarrels between entities of the federation about ownership of the responsibility of care for environmental heritage.

Comparing the legal protection of the Blue Amazon with other Brazilian biomes, the former has only 0.4% of its total area categorized as areas of sustainable use or integral protection, and the latter has on average around 10%. Highlights among the maritime areas are the Biological Reserve of Rocas Atoll, the Abrolhos National Marine Park, and the Fernando de Noronha's National Marine Park.

The Brazilian environmental legislation imposes an obligation to obtain environmental licences to explore and exploit gas and oil offshore, demonstrating all positive and negative impacts caused by an activity and its suitability or not for the biome. Indiscriminate creation of these totally protected or economically limited areas of activity can make future enterprises impossible due to excessive restrictions, besides being an extra factor in the costs for E&P sectors.

However, keeping the Blue Amazon in a legal limbo concerning its preservation areas is certainly not the best choice for Brazilian society and the international community. Not only oceanic islands but also the biome as a whole should be regulated after the decision on the limits of the CS, accommodating the economic and environmental interests.

2.2.3 Scientific

To give support to other aspects of the Blue Amazon, the Brazilian government is promoting a series of scientific programmes. First of all, the programme to survey the CS stands out, in which scientific knowledge is developed and human resources are

trained in different areas of knowledge to produce geophysical data supporting the submission to the CLCS.

Specific programs have also been created²¹ to identify and evaluate natural resources, such as evaluating the mineral potential of the CS and the sustainable exploitation potential of living resources in the EEZ. The first aims to produce geological data that appraise the economic activity of seabed mining. The second seeks to estimate the living marine resources and determine the level of sustainable fisheries.

As defined by the UNCLOS, the Party State shall use its living resources in a sustainable manner in their EEZ, under penalty of being obliged to allow fishing and capture by other countries. Thus, Brazil also created a monitoring programme of catch quotas in the EEZ.

As reported previously, Brazil has occupied the Saint Peter and Saint Paul Archipelago on a permanent basis since 1998, ensuring its dominion over the islands and their surroundings. This gives the country a substantial expansion of its EEZ by approximately²² 450 km², since the area is about 530 miles distant from the northeast coast.

The best means found by the government to fulfill the requirement imposed by the UNCLOS for a continuous and permanent occupation of the islands was the creation of another scientific project. A team of scientists conducts researches about natural resources existent there and fish migratory routes that pass by, and above all demonstrates that Brazilian citizens inhabit the islands. Every fifteen days the team of four members who dwell in the research station is changed.

In parallel with these projects, spread throughout the vast Blue Amazon are data collection buoys for the global ocean observing system. According to the Brazilian

21 Decree 5.377/2005, Feb 23, 2005 (entered into force 24 Feb. 2005)

22 Brazilian Navy - Centre of Social Communication, *op. cit.*

Navy²³ such information enables reliable predictions of atmospheric and oceanic conditions to be made, which are useful for farming, navigation management, and research on climate change and global warming.

2.2.4 National Security

The position of the Brazilian governmental defence agencies on the Blue Amazon is not different from the position concerning the Green Amazon: they are two cases of national security, both in terms of the wealth that they offer and as a vulnerability because they expose the country due to their vastness and lack of population.

The rainforest has accommodated various military bases on its borders throughout history as well as a sophisticated surveillance system that monitors the airspace. These seek to act as a deterrent to protect the territory from virtual external enemies and to curb trafficking of drug, arms, people and, in addition, biopiracy of plants, animals and human genes.

In relation to the sea, beyond the concerns, very little has actually been done so far for the security of the region. It is not possible to exercise full sovereignty like that exercised in the forest beyond the 12 nautical miles that compose the territorial sea; however, jurisdiction and sovereign rights are exercisable.

A first step was made with the creation of the Naval Patrol in 2004. It has responsibility²⁴ for overseeing the compliance with laws and regulations in Brazilian waters, CS, and the high-sea, complying with the treaties, conventions, and international acts.

²³ *Id.*

²⁴ Art. 1 – Decree 5.129/2004, Jul 6, 2004 (entered into force 7 Jul. 2004).

According to the Navy²⁵ the most common illicit activities in the Blue Amazon are piracy, smuggling, illegal dumping of polluting material, and illegal exploitation of wildlife, in an area of approximate 4.5 million km². Covering such an amplitude requires a herculean effort; however, it is essential for the country especially after the discovery of mega oil reservoirs in the pre-salt layer, which generate international greed even in times of peace. Any impediment to the free flow of shipping or the extraction of oil would lead the economy to collapse.

25 Brazilian Navy - Centre of Social Communication, *op. cit.*

3 BRAZILIAN CLAIM

The CS does not always fall within the limits of the EEZ; in other words, it extends beyond 200 nautical miles from the baseline from which the breadth of the territorial sea is measured. However, for the coastal state to exercise its sovereign rights over the area it is necessary to postulate with the CLCS a recognition of the outer limits in accordance with Article 76 of UNCLOS.

Such a request must be grounded in technical information which demonstrates that the relief of the ocean floor is in accordance with the desired length. Either way, the limit of the CS shall not exceed 350 nm from the baseline from which the breadth of the territorial sea is measured or shall not exceed 100 nm from the line connecting the depth of 2,500 m.

3.1 Survey Plan

To meet the technical requirements for submission of the CS expansion application to the CLCS, the Brazilian government created the Survey Plan of the Brazilian Continental Shelf (LEPLAC) in September 1989 by Decree 98145/89²⁶.

Annex III of the Decree determined the execution of works in the following order: determining the baselines, determining the foot of the slope and isobath of 2,500 m; determining the thickness of sedimentary rocks in order to correlate them with their distances to the foot of continental slope; processing and interpreting bathymetric and geophysical data (seismic, gravity, and magnetometry) obtained; and developing cartographic and scientific information and technical support.

According to Souza, the research conducted by LEPLAC was "carried out jointly by the Navy and Petrobras, supported by researchers of the Program for Marine Geology

26 Decree 98.145/1989, Sep 15, 1989 (entered into force 18 Sep. 1989).

27 Souza, J., *The Continental Shelf of Brazil: Going Beyond the 200 Nautical Miles* at <http://www.info.lncc.br/brshelf.html> (last visited on January 10th, 2010).

and Geophysics (PGGM) and the National Department of Mineral Production (DNPM), under the direction and guidelines of the Inter-Ministerial Commission for Sea Resources (CIRM)".

In spite of the environmental, scientific, and national security importance, the participation of the state-owned oil company also points to the economic interest in extending the limits of the CS, as the company is a world leader in deep and ultra-deep E&P.

3.2 First Submission

Knowing the importance that the expansion of the CS has to the country, LEPLAC demonstrated²⁷ the possibility of an increase in the Brazilian maritime domain by 953,525 km².

In December 2001, Russia presented the first proposal to extend its CS to the CLCS. In March 2004, Brazil was the second country to put its proposal²⁸ to the Secretary-General of the United Nations, following the dictates of Article 76, paragraph 8, of the UNCLOS.

The Secretary-General then circulated the communication²⁹ to all UN members, including the signatories of the UNCLOS, to publicize the petition and open the opportunity for other states to give consideration to the Brazilian proposal.

27 Torres, L. and Ferreira, H. *Amazônia Azul: a última fronteira brasileira no mar* in Passadiço CAAML, Vol. 2005. p. 5

28 *Addendum to the Executive Summary dated 17 May 2004*, The Brazilian submission to the Commission on the Limits of the Continental Shelf pursuant to article 76 of the United Nations Convention on the Law of the Sea, CLCS-UN 1 Feb. (2006).

29 CLCS. 02.2004. LOS (Continental Shelf Notification) 21 May 2004. at http://www.un.org/Depts/los/cles_new/commission_documents.htm (last visited on January 10th, 2010).

The US, through its diplomatic mission, sent to the UN a communication³⁰ stating that the letter "highlights the issues of sediment thickness and the Victoria-Trindade feature". First of all it compared the data submitted by Brazil with existing scientific data and because of the discrepancy in the thickness of sedimentary rocks called for a closer look at the CLCS, while acknowledging that the data produced by the Brazilian experts would be more accurate.

It also suggested caution by the Commission in the analysis to the Victoria-Trindade ridge due to not having found in the submission "what data and analysis were used and how Brazil applied relevant provision of Article 76 to support its conclusion, in the area of this feature, that its continental margin extends beyond 200 nautical miles from the baseline from which the territorial sea is measured"³¹.

According to Macnab and Parson³², "The submission attracted only one response, from the United States of America, which was dismissed by the CLCS on the grounds that it did not originate from a party that was currently involved in a boundary dispute with Brazil (paragraph 17)".

The US ambassador to the UN then made a reconsideration request³³ on the decision of the CLCS, understanding that even if no border dispute with Brazil exists, when facing the intention of a state to expand its CS all members of the international community have a legitimate interest in the subject and may raise issues of submission disregarded by the CLCS. The US request has not been successful.

30 CLCS.02.2004 LOS/USA 9 September 2004. at http://www.un.org/Depts/los/clcs_new/commission_documents.htm (last visited on January 10th, 2010).

31 Op. cit. 33

32 Continental Shelf Submissions: The Record to Date, in 21 Int'l J. Marine & Coastal L. 309 2006 p. 314

33 CLCS. *The Deputy Representative of The United States of America to The United Nations*, 25 Oct. 2004. at http://www.un.org/Depts/los/clcs_new/commission_documents.htm (last visited on January 10th, 2010).

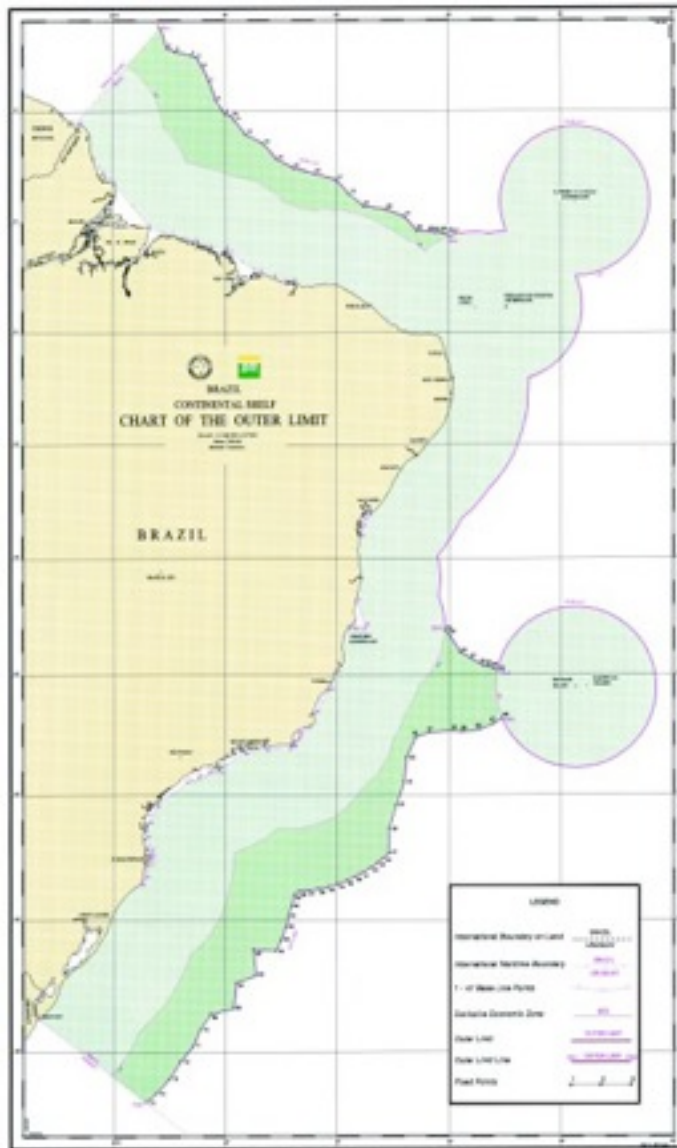


Chart of the Outer Limit (EEZ/Blue and CS/Green)³⁴

The annals³⁵ of the 14th session of the CLCS, held on 3 September 2004, show that the presentation of the submission was made by Vice-Admiral Lucio Franco de Sá Fernandes, who was accompanied by a delegation of Brazilian experts.

Questioned by the Chairman about the situation of maritime borders, Fernandes stated that the country had concluded delimitation agreements with both neighbours, French Guiana in the north and Uruguay in the south, in the absence of any dispute over the area.

³⁴ CLCS. *Brazilian Continental Shelf Survey Project*, 25 Oct. 2004. at http://www.un.org/Depts/los/clcs_new/submissions_files/bra04/bra_exec_sum.pdf (last visited on January 10th, 2010)

³⁵ CLCS/42, *Statement by the Chairman of the Commission on the Limits of the Continental Shelf on the progress of work in the Commission* in 14th Session. p. 2 at http://www.un.org/Depts/los/clcs_new/commission_documents.htm (last visited on January 10th, 2010).

3.3 CLCS Recommendations

During the 15th meeting of the CLCS, the Chairman of the Subcommittee which was reviewing the submission said that he had received supplemental materials from Brazil during the work of the team. The new material presented has created doubts about whether or not it is possible to submit new data throughout the process.

The Commission decided to consult the Legal Counsel, seeking to solve the following question about the rules of procedure in the CLCS and the Subcommittee:

"Is it permissible, under the United Nations Convention on the Law of the Sea and the rules of procedure of the Commission, for a coastal State, which has made a submission to the Commission in accordance with article 76 of the Convention, to provide to the Commission in the course of the examination by it of the submission, additional material and information relating to the limits of its continental shelf or substantial part thereof, which constitute a significant departure from the original limits and formulae lines that were given due publicity by the Secretary-General of the United Nations in accordance with rule 50 of the rules of procedure of the Commission?"³⁶

In response to the consultation, the Legal Counsel said there is no restriction in UNCLOS on submission of data during the course of a coastal state's submission, if its order to review data is presented in good faith and when the need for adjustments to the proposal has been verified because of the discovery of errors that need correction.

It was also advised that the State, acting in good faith, can submit new specific limits or substantial portions of the CS if during the process it obtains new technical-scientific data.

"Consequently, in the cases described above it is permissible for a coastal State which has made a submission to the Commission in accordance with article 76 of the Convention to provide to the Commission, in the course of the examination by it of the

³⁶ CLCS/44, *Statement by the Chairman of the Commission on the Limits of the Continental Shelf on the progress of work in the Commission* in 15th Session, p. 3. at http://www.un.org/Depts/los/clcs_new/commission_documents.htm (last visited on January 10th, 2010).

submission, additional material and information relating to the limits of its continental shelf or substantial part thereof, which constitute a significant departure from the original limits and formulae lines that were given due publicity by the Secretary-General of the United Nations in accordance with rule 50 of the rules of procedure of the Commission.³⁷

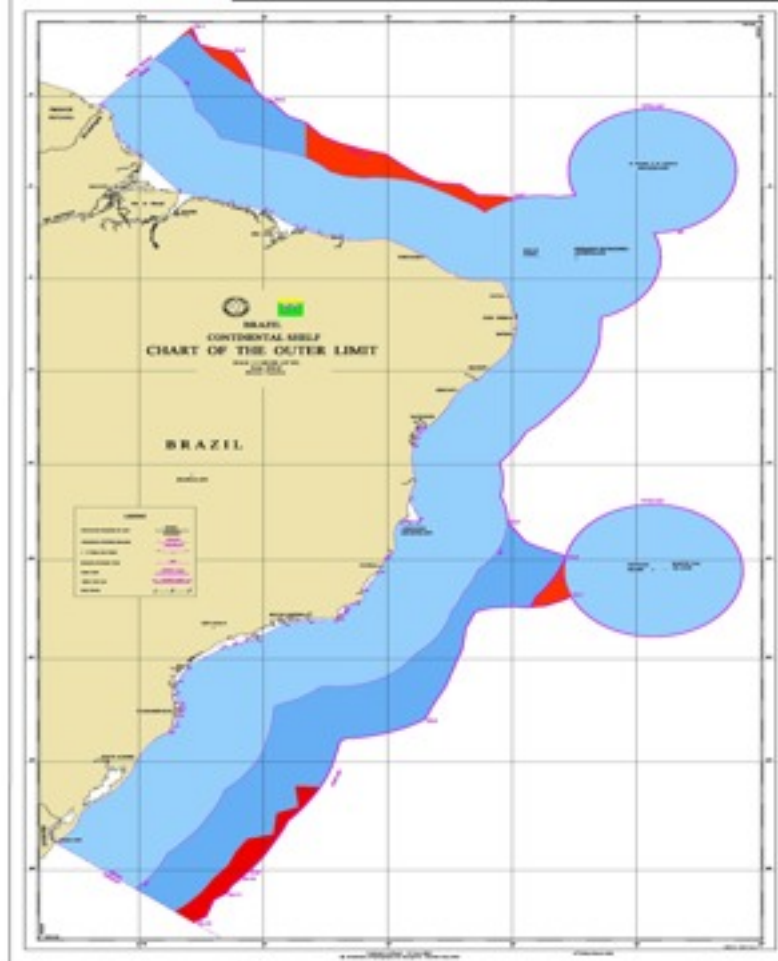
On 1 February 2006, Brazil submitted to the CLCS, through the Secretary-General, an addendum³⁸ of the executive summary submitted on 17 May 2004. This document has provided new data that expanded the originally proposed limits by 5.5%.

According to the rules and procedures the act was publicized again among members of the United Nations by circulating the new data with further specifications not covered previously.

Another important point discussed since the first submission regards the confidentiality of the information. Because it is owned by the Brazilian government, the technical details of the material presented shall be in the custody of the Commission, with access restricted to members and members appointed by the Secretary-General. After the completion of the work of the Commission, it should return to Brazil and then the government will give it full publicity among the scientific community.

37 CLCS/46, Letter dated 25 August 2005 from the Legal Counsel, Under-Secretary-General of the United Nations for Legal Affairs, addressed to the Chairman of the Commission on the Limits of the Continental Shelf, in 16th Session, p.13 at http://www.un.org/Depts/los/clcs_new/commission_documents.htm (last visited on January 10th, 2010).

38 CLCS Addendum to the Executive Summary dated 17 May 2004. at http://www.un.org/Depts/los/clcs_new/commission_documents.htm (last visited on January 10th, 2010).



Recommended Limits (763,000 km²)³⁹

After almost three years since the submission during the 19th session of the CLCS, held between 5 March and 3 April 2007, recommendations regarding Brazil were voted on. They were adopted by 15 votes to 2, with no abstentions⁴⁰.

The areas not accepted are situated⁴¹ in: the northern and Amazonas fan region; the northern Brazilian and Fernando de Noronha ridge; Vitória-Trindade ridge; and São Paulo plateau and southern regions. They represent⁴² approximately 4.2% of the Blue Amazon and 19% of the initial submission, as the rest was accepted.

3.4 Second Forwarded Proposal

³⁹ CLCS. *Brazilian Continental Shelf Survey Project*, 25 Oct. 2004. at http://www.un.org/Depts/los/clcs_new/submissions_files/bra04/bra_exec_sum.pdf (last visited on January 10th, 2010)

⁴⁰ CLCS/54 *Statement by the Chairman of the Commission on the Limits of the Continental Shelf on the progress of work in the Commission* in 19th Session, p. 06 at http://www.un.org/Depts/los/clcs_new/commission_documents.htm (last visited on January 10th, 2010).

⁴¹ *Id.* p. 4

⁴² SERRA, C., *Plano de Levantamento da Plataforma Continental Brasileira*. at <https://www.mar.mil.br/secirm/leplac.htm> (last visited on January 10th, 2010).

In 2008, more precisely on 24 July, the Permanent Mission of Brazil to the United Nations requested from the CLCS, through a verbal note⁴³, some clarifications about recommendations voted on in the 19th Session. It made an attempt to elucidate all the flaws pointed out and thus to endorse the Brazilian government's decision on acceptance or not of the establishment of limits.

At its next meeting⁴⁴, the Commission replied to the Brazilian government, which decided to elaborate a new proposal for the outer limit of the CS in order to reclaim the remaining 190 km².

Then Brazil hired the GardLine Marine Science company, which announces itself in its portfolio⁴⁵ as "the world's largest independently owned survey group providing geophysical, hydrographic, environmental, oceanographic survey and geotechnical packages", and operates the ship Sea Survivor in the data collection. According to the Member of Parliament Rodrigo Rollemberg⁴⁶, the work began in the south and was scheduled to be completed in January 2010 when it reached the Amazonas Fan.

The completion of the new study is awaiting the submission of the second proposal, in order to have a definitive limit of the CS. This represents another step towards the consolidation of the Blue Amazon.

43 CLCS/60 *Statement by the Chairman of the Commission on the Limits of the Continental Shelf on the progress of work in the Commission* in 22nd Session, p. 11. at http://www.un.org/Depts/los/clcs_new/commission_documents.htm (last visited on January 10th, 2010).

44 CLCS/62 *Statement by the Chairman of the Commission on the Limits of the Continental Shelf on the progress of work in the Commission* in 23rd Session, p. 16. at http://www.un.org/Depts/los/clcs_new/commission_documents.htm (last visited on January 10th, 2010).

45 Gardline Marine Sciences, *About Us* at <http://www.gardlinemarinesciences.com/page/about-us/> (last visited on January 10th, 2010).

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4 CONCLUSION

From the information gathered during this research, there is no doubt about the importance to Brazil of the recognition of its CS extension.

Internally the expansion represents the consolidation of the Blue Amazon, a reserve of mega-biodiversity and a wealth of economic goods, which is set in the strategic planning of national development.

Externally the widening shows to the international community respect for international law and the importance of ratification of the UNCLOS by all states, as this represents a qualitative leap forward from the territorial approach that countries faced regarding the ocean waters in the recent past.

Because of the complexity of the studies required and because of the number of states that have submitted claims for extension of their continental shelves, it would be worthwhile for more human resources be allocated to the CLCS.

Finally, the data collection from a few explored areas resolves maritime border conflicts and helps environmental conservation, but also produces information relevant to fishing, mining, and petroleum E&P.

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