THE JOINT DEVELOPMENT ZONE BETWEEN NIGERIA AND SAO TOME AND PRINCIPE:

A CASE OF PROVISIONAL ARRANGEMENT IN THE GULF OF GUINEA INTERNATIONAL LAW, STATE PRACTICE AND PROSPECTS FOR REGIONAL INTEGRATION

J. TANGA BIANG The United Nations – The Nippon Foundation of Japan Fellowship Programme 2009-2010



DIVISION FOR OCEAN AFFAIRS AND THE LAW OF THE SEA OFFICE OF LEGAL AFFAIRS, UNITED NATIONS NEW YORK, 2010

AUTHOR

TANGA BIANG J. Diplomat, Division of Legal Affairs and Treaties, Ministry of External Relations, Republic of Cameroon.

SUPERVISORS

Prof. Alain Piquemal

Professeur agrégé de droit public, Directeur du Centre d'Etudes et de Recherches sur le Droit des Activités Maritimes et de l'Environnement, Institut du Droit de la Paix et du Développement, **Université de Nice-Sophia Antipolis**

Dr. François Bailet

Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, **United Nations**

DISCLAIMER

The views expressed herein are those of the author and do not necessarily reflect the views of the Government of Cameroon, the United Nations, The Nippon Foundation of Japan, or the University of Nice-Sophia Antipolis (Centre d'Etudes et de Recherches sur le Droit des Activités Maritimes et de l'Environnement-Institut du Droit de la Paix et du Développement).

© 2010 Tanga Biang J. Tous droits réservés.

To Rr. Alain Didier Olinga,

From the

International Relations Institute of Cameroon

« Nous savions déjà, depuis Valery, que les civilisations étaient mortelles ; nous apprenons maintenant que l'espèce humaine, la vie et peut-être l'univers le sont aussi. Au monde-horloge, réglé par une mathesis universelle, modèle d'un ordre stable et parfait [...], succède maintenant un cosmos incertain, jailli du désordre et toujours menacé d'entropie ».

OST (F.), La nature hors la loi, L'écologie à l'épreuve du droit, Paris, Editions La Découverte, 2003, p. 243 ; quoted from Galax Yves Landry Etoga, La Gouvernance de la biodiversité marine et cotière dans leGolfe de Guinée, Research Paper, United Nations-Nippon Foundation Fellowship Programme, 2009,14.

ACKNOWLEGMENTS

My gratitude and my appreciation to the Nippon Foundation of Japan and the United Nations for granting me this Fellowship Award to conduct this research.

I would also like to thank the University of Nice-Sophia Antipolis, and especially the Institut du Droit de la Paix et du Développement (IDPD) created under the auspices of late Pr. René-Jean Dupuy for accepting my placement there.

I am profoundly grateful to Pr. Alain Piquemal, Director of the IDPD-University of Nice-Sophia Antipolis, who did far more than could have been expected from someone assuming such duties as his, in order not only to secure my placement at the Institute, but also to make sure that I had the best material and academic conditions for my research. I really enjoyed the opportunity he granted me to attend a full semester course with students of "Master 2 Droit et Pratique des Affaires Internationales (Parcours Professionel)".The interesting discussions held during the seminars there helped me to have a better understanding of commercial dispute settlement in relation with my thesis. I thank Mme Pascal Lesouin, Pr.Piquemal's Secretary, as well as Stephane from the IDPD for helping me in many ways. I remain grateful to Pr. Louis Balmond, and Pr. Philippe Saunier, respectively Dean and Deputy Dean of the IDPD, for their regardful concern as to my stay among them.

I extend my special feelings of gratefulness to Mr. Serguei Tarassenko, Director of DOALOS, not only for accepting to receive me in that prestigious Division, but also for his kindness. Through him, may all the personnel of Doalos find the expression of my gratitude to them, among which Charity, Olga, Nena, Maria, Vita, Cristina, Simone, Charlotte, Esperanza, Fiona, Nicola, Daisi, Lin, Valentina, Carlos, Shawn, Luigi and Michele. All of them had brought a lot of warmth to my stay in New York. I am grateful to Ms. Gabriele Goettsche-Wanli, DOAOLS Deputy Director for being so gracious to me, as well as Ms. Alice Hicuburundi, Mr. Andre Tahindro and Mr. Michael Shewchuk for the same reasons.

I am grateful to Oki, Leyla and Bob, un-nippon fellows, as well as Louise Hulander and Nkeiru Scotcher, on internship at the DOALOS, for their kindness and readiness in helping me.

My debt towards Dr. Francois Bailet, Supervisor of the Fellowship Program cannot be stated. He made impossible efforts to remain available and kind, despite my clumsiness and weaknesses, which are countless. I secured my placements only thanks to his personal involvement. Nothing would have been achieved without him.

I am thankful to the High Authorities of the Ministry of External Relations of Cameroon for accepting my participation to this Programme. I am particularly thankful to the Chief of the Division of Legal Affairs and Treaties, Mr. Ambassa Ntede R., for suggesting this Programme to me and for supporting my application.

Ultimately, I thank my sweetheart, Mua Nlima, who suffered so much from this eight-month separation, and who gave birth to our son, Biang Alexandre Shaka, in my absence.

ABSTRACT

Joint Development Zones have become one of the major trends of international law since the 1990s. As part of the State practice on provisional arrangements, joint development zones are governed under articles 74(3) and 83(3) of the 12 December 1982 United Nations Convention on the Law of the Sea. These provisions advise or oblige States to contemplate "provisional arrangements" of "a practical nature" when they face deadlocks in negotiations over maritime delimitation. This means that if States cannot agree on their maritime boundaries, they can or should instead consider cooperation on the disputed maritime areas, for a transitional period, while remaining under the duty of carrying negotiations on.

This is exactly what happened in the Gulf of Guinea around year 2000 between Nigeria and Sao Tome and Principe. While trying to achieve the delimitation of their respective economic exclusive zone, they soon faced a deadlock. Ultimately, both States, explicitly referring to the relevant provisions of the United Nations Convention on the Law of the Sea, decided to establish a JDZ off their coasts, which covers the whole area of their overlapping claims, that is a part of their potential respective economic exclusive zone. The Treaty was signed on 21 February 2001 and is the second one on the Atlantic shores of Africa. It entered into force in 2003.

The discussion reveals that this instrument is in compliance with international law. It is also an important contribution to the expression of *opinio juris* over the provisions of the United Nations Convention under consideration.

The current general concerns over global warming and ocean governance entails a prospective analysis of the issues at stake in that treaty, as it deals with potential exploitation of both hydrocarbons and fishery resources. The legal principles to be applied in matter of conservation and management of ocean resources make it a necessity for the parties to that agreement to broaden their views over cooperation and to consider instead a regional framework, rather than a bilateral one, in order to efficiently meet the economic and environmental set forth in their agreement. The newly created Gulf of Guinea Commission may serve as such a subregional framework for cooperation on maritime issues.

LIST OF ACRONYMS

CLCS	:	Commission on the Limits of the Continental Shelf
DOALOS	:	Division for Ocean Affairs and the Law of the Sea
EAF	:	Ecosystem Approach to Fisheries
EEZ	:	Exclusive Economic Zone
FAO	:	Food and Agriculture Organization
GEF	:	Global Environment Facility
JDZ	:	Joint Development Zone
JPDA	:	Joint Petroleum Development Area
LME	:	Large Marine Ecosystem
LOSC	:	United Nations Law of the Sea Convention
MSY	:	Maximum Sustainable Yield
OSY	:	Optimum Sustainable Yield
PACM	:	Precautionary Approach to Conservation and Management
TAC	:	Total Allowable Catch
UN	:	United Nations
WSSD	:	World Summit on Sustainable Development
GGC	:	Gulf of Guinea Commission
UN/OLA	:	UN Office of Legal Affairs
STP	:	Sao Tome and Principe
N/STP	:	Nigeria and Sao Tome and Principe
N/STP JDZ	:	Joint Development Zone between Nigeria and Sao Tome and Principe
I.C.J.	:	International Court of Justice

LIST OF MAPS

Maps:

- Map 1:

Cameroon's 1998 Equitable Line claim in the Gulf of Guinea

Map 2:

The N/STP JDZ in the Gulf of Guinea

- *Map3*:

Overlapping Maritime Claims: the JDZ and Cameroon's Equitable Line

- Map 4:

Annexe 8 of Cameroon's Preliminary Information Indicative of the outer limits of its Continental Shelf submitted before the CLCS on 11 Mai 2009 in accordance with document SPLOS/183

Appendices:

- Two claim lines materializing a possible JDZ between China and Japan in the East China Sea
- 2. Claims from Nigeria, Equatorial Guinea and Sao Tome and Principe and the disadvantageous median position of Cameroon.
- 3. The Bissau Guinea/Senegal JDZ.
- 4. The Japan-South Korea JDZ.
- 5. The Australia Indonesia Zone of Cooperation.
- 6. The Colombia-Jamaica JDA.
- 7. The Kuwait Saudi Arabia Neutral Zone
- 8. The Bahrain Saudi Arabia JDZ
- 9. The Sudan-Saudi Arabia Common Zone
- 10. The JDZ between France and Spain in the Bay of Biscay
- 11. The Argentina-United Kingdom Special Area

- 12. The Iceland-Norway Joint Development Area
- 13. The Libya-Tunisia Joint Exploration Zone
- 14. Abu Musa Island
- 15. The Malaysia- Thailand Joint Development Area and Malaysia-Vietnam Defined Area.
- 16. The Barbados-Guyana 2003 JDZ according to a map produced in 2005 by Barbados before an arbitral tribunal
- 17. The N/STP JDZ and Cameroon's EEZ and Extended Continental Shelf areas according to a map produced in 2005 by Barbados before an arbitral tribunal
- The blue area where Cameroon claims an Extended Continental Shelf in the Gulf of Guinea
- 19. Map showing the relative positions of the N/STP JDZ and the area where Cameroon claims an Extended Continental Shelf

OUTLINE

AUTHOR.		i
SUPERVIS	ORS	ii
ACKNOW	LEGMENTS	vi
ABSTRAC	Γ	viii
LIST OF A	CRONYMS	ix
LIST OF M	IAPS	xi
OUTLINE.		xiii
INTRODU	CTION	
PART I TH	IE JDZ BETWEEN NIGERIA AND SAO TOME AND PRINCIPE:	
COMPLIA	NCE WITH INTERNATIONAL LAW, ISSUES AND STATE PRAC	TICE 17
CHAPTER	I : THE JDZ TREATY: GENESIS, STRUCTURE, ORGANISATION	N AND
ISSUES		
SECTION	I: THE FEBRUARY 21 2001 TREATY: GENESIS AND STRUCTUR	Е 19
А.	The 2001 Treaty: genesis, context and negotiations	19
1.	Genesis and context	
2.	Negotiations	
В.	The 2001 Treaty: its organization	
C.	The main features of a complex Treaty	
1.	The Treaty and its divisions	
2.	The JDZ and its institutions: achieving cooperation and equity	
SECTION 1	II: THE JDZ: SOME LEGAL AND MANAGEMENT ISSUES	
А.	International practice and coastal State jurisdiction in the JDZ	
1.	The JDZ: a result of deadlocked boundary negotiations	
2.	The EEZ legal regime and the jurisdiction in the JDZ	
В.	Managing third States rights and interests	
1.	Respecting neighboring States boundary claims around the JDZ	
2.	Rights and freedoms of other States in the JDZ	
3.	Rights of Land-Locked and Geographically Disadvantaged States	
C.	Commitment to protect environment	50

CHAP	ГER	II: COMPARING THE 2001 JDZ WITH THE BROADER PRACTICE O	F
JOINT	DE	VELOPMENT	53
SECTI	ON I	I: COMPARING THE JDZ WITH EARLIER STATE PRACTICE	55
	A.	Comparing the 2001 N/STP JDZ to universal State practice of joint	
	deve	lopment	55
	1.	The 22 February 1958 Agreement between Bahrain and Saudi Arabia: the fir	rst
	JĽ	DZ in the Persian Gulf	56
	2.	The 7 July 1965 Agreement between Kuwait and Saudi Arabia	58
	3.	The Norway-Iceland Arrangement for Jan Mayen	60
	4.	The France-Spain Joint Development Zone of 29 January 1974	61
	5.	Japan-Korea Joint Development Zone	65
	6.	Argentina-Great Britain 1995 Joint Declaration	70
	7.	The 21 February 1979 Malaysia-Thailand MOU in the Gulf of Thailand	71
	8.	The 11 December 1993 Columbia-Jamaica Treaty establishing a JDZ	74
	B.	The African practice	77
	1.	Sudan - Saudi Arabia	77
SECTI	ON I	II- COMPARING THE JDZ WITH CURRENT STATE PRACTICE	82
	A.	The 18 June 2001 MOU between Cambodia and Vietnam	82
	1.	The MOU and the N/STP-JDZ: maritime cooperation in two gulfs	82
	B.	The Barbados-Guyana Arrangements on their EEZ	83
	1.	Sharing both living and non-living resources	84
	С.	The Timor Sea Treaty: a provisional arrangement in the Indian Ocean	887
	2.	General features: some likeness and differences	88
]	D.	The Tunisia-Algeria 2002 Arrangements: a provisional boundary as	
]	prov	isional arrangement	89
PART 1	II- T	THE JDZ AND OCEAN GOVERNANCE MATTERS: ENVIRONMENT,	
FISHE	RY,	HYDROCARBONS AND REGIONALISM	98
CHAP	ГER	III: THE JDZ AND FISHERY MATTERS	100
SECTI	ON I	I-THE LEGAL FRAMEWORK OF FISHING IN THE GULF OF GUINE	A 100
	A.	The International Legal Framework and Context of Ocean Management	100

1.	So-called developed States: lessons from Copenhagen. Irresponsible States and
Cri	iminal Economies
2.	<i>The LOSC</i>
3.	The other sources of ocean management law105
B. 1	Nigeria, Sao Tome and Principe and the International Legal Framework of
Ocea	n Management 107
3.	Nigeria and the International Legal Framework of Ocean Management
4.	Sao Tome and the International Legal Framework of Ocean Management in the
Gu	lf of Guinea
SECTION I	I- THE FISHERY ISSUE IN THE JDZ AND THE RELEVANCE OF THE
REGIONAL	CONTEXT FOR ENVIRONMENTAL PROTECTION 1088
A. <i>A</i>	Assessing seizure capacity and LLGDS interests in the JDZ: between political
will a	nd scientific requirement 10109
1.	Assessing hydrocarbons pollution hazards
CHAPTER I	IV: THE JDZ: REGIONAL RELEVANCE AND PROSPECTS OF
INTEGRAT	TON IN THE BLACK GULF 115
SECTION I	EXPANDING THE JDZ PERSPECTIVE IN THE FRAMEWORK OF THE
GGC: A HO	OLISTIC APPROACH TO SUBREGIONAL MARITIME DISPUTES 116
A. 7	THE GGC: A MULTIPURPOSE TOOL FOR SUBREGIONAL
COO	PERATION IN MARITIME AREAS116
1.	The Gulf of Guinea Commission: a new instrument with multidimensional
pot	ential
2.	The JDZ: A Partial Fulfillment of the GGC Objectives
З.	Legal, economic and geopolitical basis for regional cooperation in the Gulf of
Gu	inea
B. 7	THE JDZ IN THE FRAMEWORK OF THE GGC: PROSPECTS FOR
MAR	ITIME REGIONAL INTEGRATION 120
1.	JDZ and GGC provide together a framework for a possible multilateral and
hol	istic approach of maritime issues
3.	Cooperation may prevail for the delimitation of the extended shelf in the Gulf of
Gu	inea

SECTION II: REGIONAL COOPERATION AND LAW OF T	HE SEA
IMPLEMENTATION: PREPARING GULF OF GUINEA STA	TES FOR OLD AND NEW
CHALLENGES	
A. REGIONAL COOPERATION AS A NEED IN CO	OPING WITH
EMERGING CHALLENGES	
1. Tackling global warming: regional aspects and regional aspects aspects and regional aspects	onal action124
2. Addressing the marine renewable energies challenge	e to African States through
cooperation	
3. Addressing the deep seabed mining challenge to Afri	can countries through
cooperation	
B. IMPLEMENTING LAW OF THE SEA IN AFRICA	A NEEDS REGIONAL
APPROACH AND SIGNIFICATIVE ECONOMIC DEV	/ELOPMENT 128
1. The failure of the current cooperation provisions	
2. The need to curb neo-liberalism for the sake of devel	opment in Africa 129
C. THE LACK OF LONG TERM SOCIO-ECONOMI	C GOALS OR THE
SUSTAINABILITY ISSUE	
CONCLUSION	
REFERENCES	
APPENDIXES	

INTRODUCTION

The *Treaty between the Federal Republic of Nigeria and the Democratic Republic of Sao Tome and Principe on the Joint Development of petroleum and other resources, in respect of Areas of the Exclusive Economic Zone of the Two States* (hereafter the Treaty or the N/STP-JDZ Treaty)¹ was signed on February 21, 2001 in Abuja, the Nigerian capital. It entered into force on 16 January 2003².It was registered by the United Nations (hereafter UN) General-Secretary by 03 October 2003. It provides for the joint development of transboundary resources within a maritime zone where the two countries have overlapping claims in respect to their Economic Exclusive Zone (hereafter EEZ). It sets up a *Joint Development Zone* (here after JDZ) for the joint exploration and exploitation of petroleum and fishing resources in the disputed areas³.

Joint development of transboundary resources in maritime areas constitutes one of the recent major trends of international practice in the law of the sea⁴. It goes back to the 1950s, and as to date, besides an ever increasing number of unitization agreements, there are at least twenty cases of other well known joint development agreements around the world⁵. Twelve of them have been

¹ The text of this instrument is available on the website of the Division of Ocean Affairs and the Law of the Sea, Office of Legal Affairs, United Nations (hereafter DOALOS), at http://www.un.org/Depts/los/ Legislationandtreaties/Pdffiles/Treaties/Stp-Nga2001.Pdf; accessed on 24 March 2010.

² Gao Jianjun, "Joint Development in the East China Sea: Not an Easier Challenge than Delimitation", The International Journal of Marine and Coastal Law 23, n°1 (Leiden: March 2008), 55; see his footnote 63.

³ See *infra* Chapter I, Figure I: Map of the JDZ in the Gulf of Guinea.

⁴ After a review of the main developments in the law and practice of maritime boundary-making between 1990 and 2004, D. Anderson counts up eight "general tendencies or current trends" in that field: the "trend towards a consistent approach and methodology", the "trend towards single maritime boundaries", the "trend towards accurate application of the rules on baselines, islands, low-tide elevations, etc.", the "trend towards unification of customary and conventional law", the "trend towards harmonization between the different zones", the "growing interest in the continental shelf beyond 200 n. m.", the "trend towards making interim arrangements" and the "trend towards use of technical experts, geodesics and computing"; see David Colson, " Developments in Maritime Law and Practice", in David A Colson and Robert W. Smith, eds., International Maritime Boundaries, Vol. V (Leiden/Boston: Martinus Nijhoff Publishers), 3199-3222.

⁵ The most recent and accurate chronological list of these agreements is proposed by Gao Jianjun, with twelve agreements and bibliographical references as regards a category of joint development: joint development *pending maritime delimitation*; see his above mentioned article, at pages 43(in particular his footnote 18)and 59.Gao gives further information about two (or three) other categories of joint development agreements his paper doesn't take into account: joint development agreements that are part of a delimitation agreement, and joint development agreements established after delimitation "due to the existence of boundary-straddling deposits" he refers to as "transboundary unitization" (see pages 41-420 f his paper). The first category of agreements as defined by Gao is as follows: (1) Agreement between the State of Kuwait and the Kingdom of Saudi Arabia Relating to the Partition of the Neutral Zone, 1 July 1965;(2)Agreement between Sudan and Saudi Arabia Relating to the Joint Exploitation of the Natural Resources of the Sea-bed and Sub-soil of the Red Sea in the Common Zone, 16 May

concluded pending maritime delimitation as a way of provisional solution to boundary and resource sharing related issues. Another couple of such agreements have been achieved in maritime delimitation as part of the agreement. A last set of joint development agreements is related to mineral deposits straddling State maritime boundaries or any kind of border or limits between specific regions in the sea: they are properly referred to as *unitization agreements*.

The importance of that State practice is paramount in the delicate context of both maritime delimitation and maritime resource sharing between sovereign entities, with high risks for serious dispute. The importance of joint development and the role of strong political will in carrying it out are duely underlined by academic writing:

As it involves the sovereign rights, if not sovereignty, of the coastal countries concerned, the adjustment of overlapping claims to the continental shelf or the exclusive

The third list of joint development agreements that could be generated from Gao's article focuses on unitization agreements (see infra, note on unitization and Chapter II, Section I, 2.Saudi Arabia Kuwait agreement for a fourth list).

^{1974; (3)}Agreement between Japan and the Republic of Korea concerning Joint Development of the Southern Part of the Continental shelf Adjacent to the Two Countries, 30 January 1974; (4)Memorandum of Understanding between Malaysia and the Kingdom of Thailand on the Establishment of A Joint Authority for the Exploitation of the Resources in the Sea-bed in A Defined Area of the Continental Shelf of the Two Countries in the Gulf of Thailand, 21 February 1979;(5)Treaty between Australia and the Republic of Indonesia on the Zone of Cooperation in An Area between the Indonesian Province of East Timor and north Australia, 11 December 1989;(6)Memorandum of Understanding between Malaysia and the Socialist Republic of Vietnam for the Exploration and Exploitation of Petroleum in A Defined Area of the Continental Shelf involving the Two Countries, 5 June 1992;(7)Management and Cooperation agreement between the Government of the Republic of Senegal and the Government of the Republic of Guinea-Bissau, 14 October 1993; (8) Maritime Delimitation Treaty between Jamaica and the Republic of Colombia, 12 November 1993; (9)Treaty between the Federal Republic of Nigeria and the Democratic Republic of Sao Tome and Principe on the Joint Development of Petroleum and Other Resources, in respect of Areas of the Exclusive economic Zone of the Two States, 21 February 2001; (10)Memorandum of Understanding between the Royal Government of Cambodia and the Royal Thai Government regarding the Area of their Overlapping Maritime Claims to the Continental Shelf, 18 June 2001;(11)Exclusive Economic Zone Co-operation Treaty between the Republic of Guyana and the State of Barbados concerning the Exercise of Jurisdiction in their Exclusive Economic Zones in the Area of Bilateral Overlap within Each of their outer Limits and beyond the Outer Limits of the Exclusive Economic Zones of Other States, 2 December 2003; (12)Agreement between the government of China and the Government of North Korea on the Joint Development of Offshore Petroleum, 12 December 2005.

As for the second category of joint development agreements concluded as a part of a delimitation agreement, Gao just count up some of them, without any view as regards comprehensiveness: (1)Convention between the Government of the French Republic and the Government of the Spanish State on the Delimitation of the Continental Shelves of the Two States in the Bay of Biscay (Golfe de Gascoigne / Golfo de Vizcaya), 29 January 1974;(2) Agreement on the Continental Shelf between Iceland and Norway,22 October 1981;(3)Protocol in Implementation of article 6.2of the Treaty between the Federal Republic of Nigeria and the Republic of Equatorial Guinea concerning their Maritime Boundary, 2 April 2002. As a matter of fact, two more agreements can be added to this second list: the 1958 agreement between Bahrain and Saudi Arabia, and the July 2, 2000 Agreement between the Kingdom of Saudi Arabia and the State of Kuwait concerning the submerged area adjacent dividing the submerged areas and establishing common ownership over the resources of the said zone by both States (see the unique provision of Annex I of that treaty stating that "the two countries have agreed that the natural resources in the submerged area adjacent to the divided zone shall be owned in common"). This agreement bears on unitization and could as well be a component of the third category of joint development referred to above and below.

economic zone is so very difficult a matter that the delimitation of boundaries or division of overlapping claim areas can prove impossible in the immediate term. Nevertheless, if the interested countries have the will to set aside the formidable issue of delimitation for a while in favour of prospective economic profits to accrue from a provisional compromise settlement, they have a chance to devise a joint development scheme. It is also possible that they may defuse their tense relations by such a provisional measure for at least a certain period of time⁶.

It can be achieved through the setting up of JDZs, or through *unitization*⁷. Whereas unitization occurs in cases where there already exists a boundary or any other border or limit, a JDZ normally prevails where a maritime boundary is still to be fixed. Both solutions are meant to help coastal States to proceed to the exploitation of maritime resources that either straddle their

⁶ Masahiro Miyoshi, "The Joint Development of Offshore Oil and Gas in Relation to Maritime Boundary Delimitation", in International Boundaries Research Unit, Maritime Briefing, Vol.2,no.5(Durham: University of Durham, 1999) 41.

Unitization is a joint development practice or technique derived from onshore practice between companies involved in the exploitation of mineral resources straddling States boundary or administrative regions or units. In the maritime world, companies involved in unitization are oil concession holders to whom their former partner State ask to contract joint venture agreements to other oil concession holders partners with a neighboring State. In the context of State practice in maritime areas, unitization takes place when a single deposit of mineral straddles a boundary line dividing the continental shelves or EEZ of two coastal States. It entails the necessity for private partners of different States to come into joint ventures upon decision by the States to pool separated maritime areas in which they previously and separately enjoyed rights. One example of such unitization was set out in the 2 April 2002 Protocol between Nigeria and Equatorial Guinea. Most of this practice relates to fields in the North Sea. Cf. Jonathan I. Charney and others, eds., International Maritime Boundaries, Vol. V (Martinus Nijhoff Publishers: Leiden/Boston, 2005), 3624. Those authors appear to be right in asserting the following: "It should be noted that unitization agreements are fundamentally different from joint development zone (JDZ) agreements. Unitization generally takes place when hydrocarbon resources have been discovered in an area that already has a defined maritime boundary or other limit and one or more deposits straddle the boundary. The purpose of the unitization is to permit the efficient development of the entire field as a unity and avoid wasteful duplication of effort and competition on the two sides of the boundary, while also ensuring both parties the benefit of the reserves found on their respective sides of the boundary line." (see p.3625)

Therefore, it is difficult for unitization to occur in the other hypothesis, that is in the absence of a boundary, in areas where different States have overlapping claims. This seems nevertheless the case with the Agreement between the Government of Australia and the Government of the Democratic Republic of Timor-Leste relating to the Unitization of the Sunrise and Troubadour fields, signed in Dili on 6 March 2003. The logic that underlines the Agreement is related to the sharing of resource in an area of overlap between an established joint development zone and a near-by maritime area. Actually, unitization takes place in this Agreement due to the need to share straddling resources between the Joint Development Petroleum Area (JDPA) and the "Greater Sunrise" field (Sunrise and Troubadour fields considered together as a single piece or field). There is a separating line that operates as a "boundary" between the JDPA and the Greater Sunrise field. There are two sets of interests involved: on the one hand, the share interests of both Australia and Timor-Leste in the JDPA on the one hand, and Australia's exclusive interests in most of the Greater Sunrise field on the other. The overlapping area between the JDPA and Greater Sunrise eventually explains the need for unitization, and to this extent this case resorts to the common pattern or setting of unitization.

maritime boundary, or are subject to opposing claims when there is no boundary yet. By so doing, States avoid or quickly settle disputes arising upon those resources, thus allowing for their exploration or exploitation on better delays and conditions. Recourse to these means is tantamount to actually setting aside claims from both States, as it is described by Ibrahim F. Shihata and William T. Onorato:

The harder case, of course, is where no (...) boundary delineation agreement has been reached. Joint development is, in fact, a procedure under which boundary disputes are set aside, without prejudice to the validity of the conflicting claims, and the interested states agree, instead, to jointly explore and exploit and to share any hydrocarbons found in the area subject to overlapping claims.⁸

The end of this quotation might suggest that joint development deals with hydrocarbons only, which is not consistent with state practice. A similar suggestion is made in the following definition of unitization by Richard Meese, quoting from another source:

An arrangement between countries that authorizes the cooperative development of *petroleum resources*⁹ in a geographic area that has (or had) disputed sovereignty¹⁰.

If hydrocarbons are one of the major issues at stake in the practice of joint development, fishing resources also matter. At least, State practice suggests that living resources too can be subject to joint development.

Part of this State practice is based on multilateral treaty law, and educes the question of the legal status of *provisionary arrangements*. Paragraph 3 of LOSC¹¹ articles 74 and 83, which deals with

⁸ Ibrahim F. I. Shihata and William T. Onorato, "Joint Development of International Petroleum Resources in Undefined and Disputed Areas", in Boundaries and Energy: Problems and Prospects, eds. Gerald Blake and others (Boston /London/ The Hague: Kluwer Law International, 1998), 433.

⁹ Emphasis added.

¹⁰ Richard Meese, "L'Accord entre la France et le Canada sur l'exploration et l'exploitation des champs d'hydrocarbures transfrontaliers du 17 mai 2005", in Annuaire du droit de la mer, Vol. X, ed. INDEMER (Paris: Pedone, 2005), 295. The author quotes from AIPN study International Unitization of Oil and Gas Fields: the Legal Framework of International Law, National Laws, and Private Contracts Center for Energy, Petroleum, Mineral Law & Policy (Dundee: University of Dundee, 2005), 1.

¹¹ LOSC stands for United Nations Law of the Sea Convention. It refers to the United Nations Convention on the Law of the Sea (UNCLOS), signed on December 12, 1982 in Montego Bay, Jamaica. Some authors prefer this

negotiations between coastal States trying to achieve a delimitation of their EEZ or continental shelf and reads as follows:

Pending agreement as provided for in paragraph1¹², the States concerned, in a spirit of understanding and cooperation, shall make every effort to enter into *provisional arrangement* of a practical nature and, during this *transitional period*, not to jeopardize or hamper the reaching of the final agreement. Such arrangements shall be *without prejudice to the final delimitation*¹³.

It thus appears that the practice of provisional arrangements entails a *transitional process of maritime boundary delimitation*, especially as it is clearly so expressed by the parties in the agreement establishing it. Furthermore, most of provisional arrangements have a provision setting a deadline within which the parties either should have settled their boundary, or shall extend their agreement's validity period.

¹³ Emphasis added.

latter acronym to the former, but for practical reasons, it seems better to keep it for the *United Nations Conference on the Law of the Sea* which is also usually abbreviated as *UNCLOS*, *UNCLOS III* being the *Third United Nations Conference on the Law of the Sea* which lead to the adoption of *LOSC*, whereas *UNCLOS I* and *UNCLOS II* apply to previous United Nations negotiations rounds on the law of the sea. As at 01 March 2010, there were 160 States parties to the LOSC, Chad being the last State to have gained that status. See "Chronological lists of ratifications of, accessions and successions to the Convention and the related Agreements as at 01 March 2010", available at http://www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.htm. Accessed on 11 March 2010.

This instrument may be considered as the greatest achievement of multilateral diplomacy in the XX th century. It has been described as "possibly the most significant legal instrument of this century", to quote UN General Secretary after its signing in 1982. It is considered by Tommy Koh, the UNCLOS III President, as "a constitution for the Oceans". Some UN documents see in it "a marine revolution for mankind". Its negotiation took almost ten years, from 1973 to 1982.For all this information, see the website of the UN DOALOS at http://www.un.org/ Depts/los/convention_agreements/convention_historical_perspective.htm#Historical%20Perspective.

The LOSC entered into force on 16 November 1994 and has got 160 States Parties as at the date of 1 March 2010. It covers many issues, such as the major matter of maritime delimitation, and that of the large maritime area beyond State jurisdiction called *the Area*, which it established as the *common heritage of mankind*, following a United Nations General Assembly Resolution. That was UNGAR 2749(XXV) of 17 1970.LOSC article 136 states that "The Area and its resources are the common heritage of mankind". The following article 137 further states that "no State shall claim or exercise sovereignty or sovereign rights over any part of the Area or its resources, nor shall any State or natural or juridical person appropriate any part of thereof…" (paragraph1). It also holds that "all rights in the resources of the Area are vested in mankind as a whole…" (paragraph 2). The underlying political economy considerations reflect the weight of non-aligned States and offer in international trade, and a clear commitment towards the reduction of the development gap between the North and the South, as well as the will to develop fair trade in the interest of mankind as a whole.

¹² That paragraph1, which is identical in article 74 and article 83 reads as follows: "The delimitation of the exclusive economic zone/the continental shelf between States with opposite or adjacent coasts shall be effected by agreement on the basis of international law, as referred to in article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution".

The interest of this transitional process is to set a more peaceful context for negotiation, the constraint of time and the rush for resource appropriation and exploitation having been neutralized. This is the underground logic sustaining the achievement of joint development agreements, at least as long as reference thereto is made in the said agreements. In this limelight, it is possible to understand why provisionary agreements very often, if not always, cover period of time running over thirty years. JDZ, more likely than unitization, might be always related to provisional agreements. Indeed one cannot exclude the hypothesis of a JDZ being agreed in the presence of a permanent boundary. Joint development of maritime areas at first sight appears as solely concerned with the legal and management issue of sharing and exploiting shared resources. ¹⁴ Actually not all, neither most of joint development agreements are. As to what regards provisional arrangements, their establishment is generally and ultimately linked with maritime boundary delimitation issues. As Thomas A. Mensah has put it,

Joint development zones are established either because the parties find it difficult or impossible to agree on a single boundary between them or because the resources straddle the agreed boundary in such a way that it is not feasible for the resources to be exploited effectively and equitably by the individual States acting alone.

Accordingly, one should at least admit that they deal with those two issues: sharing and exploiting transboundary resources on the one hand, and settling or preventing a deadlock in maritime boundary delimitation negotiations through a provisionary agreement on the other hand. Very significantly, the most recent international practice¹⁵ advocates for that thesis, as it makes explicit reference to paragraphe3 of LOSC articles 74 and 83.And it is very likely that current maritime negotiations between China and Japan in the East China Sea are going to follow this pattern, as both countries have agreed to "conduct joint development in accordance with the

¹⁴ Thomas A. Mensah, "Joint Development Zones as an Alternative Dispute Settlement Approach in Maritime Boundary Delimitation", in Maritime Delimitation, ed. Rainer Lagoni and Daniel Vignes (Leiden/Boston: Martinus Nijhoff Publishers, 2006), 147

¹⁵ Not wanting to anticipate on our further analysis, we just would like to refer here to the May 20, 2002 Timor Sea Treaty between Timor Leste and Australia, as well as to the December 02, 2003 Exclusive Economic Zone Treaty between Barbados and Guyana, and to the February 11, 2002 Agreement for Provisional Arrangements between Algeria and Tunisia.

principle of mutual benefit as a temporary arrangement pending the completion of delimitation."¹⁶ This move is part of the commitment of both parties to enhance peace and cooperation in Asia and at the world scale¹⁷.

We agree with R.R. Churchill and A.V. Lowe saying that there are three forms of joint development, provided that their third category of joint development be associated with unitization. The second type can be either a case of unitization or a JDZ, or a less formal modality of joint development. Unitization agreements don't seem to be provisional as such, as they are supposed to come to an end with the depletion of the resource without further consideration, unless otherwise decided by the parties. Their duration is linked with the resource availability and not with the final delimitation properly. The first type is properly the common case of provisional arrangement. These three types are:

- joint development as an alternative to a boundary line,
- joint development as an additional element in a boundary settlement,
- joint regulation of the oil and gas fields lying across the boundary line. See R. R. Churchill & A.V. Lowe, The Law of the Sea 3rd ed. (Manchester: Juris Publishing, Manchester university Press, 1999), pp. 198-200, quoted by Gao Jianjun.

We also oppose Gao Jianjun and most authors as they tend to restrict joint development matter to oil and gas. Whereas this view could prevail as to continental shelf disputes, they might not appear accurate to some extent when EEZ are at stake, for here we have the water column and the resources therein which the parties would desire to share, even if this idea might reveal difficult to be achieved at the end of the day. Maybe that is going to be the case with the 2001 JDZ. But at least one cannot ignore that the Treaty covers living resources as well as oil, from the outset, as its title and provisions disclose. Other provisional arrangements aiming at sharing living resources in the EEZ are for instance the maritime delimitation treaty between Jamaica and the Republic of

¹⁶ Gao Jianjun, "Joint Development in the East China Sea: Not an Easier Challenge than Delimitation", The International Journal of Marine and Coastal Law 23, n°1 (March 2008): 40. The author refers to the China-Japan Joint Press Communiqué of 11 April 2007, paragraph 6(2) of which he quotes. This communiqué is available at http://www.fmprc.gov.cn/eng/wjdt/2649/t311005.htm; accessed March 13, 2010.

¹⁷ In the debate between commentators on the notions of joint development, provisional arrangements and unitization, we broadly share the views of Thomas A. Mensah and partially those of Gao Jianjun. However, we disagree to some extent with the latter when he apparently conceives in a footnote of his article which we have just quoted, that joint development as a whole is of a provisionary nature, defining it as "a cooperative arrangement of a provisionary nature (emphasis added) established in accordance with an agreement between the States concerned, pending maritime delimitation (emphasis added), with an aim at exploration and/or exploitation of offshore oil and gas which lie in the disputed areas." This definition would be more suitable for provisional arrangements, and still would need some correction. We would like to uphold the position that there are two forms of joint development, and that joint development is not properly a synonym of provisional or interim arrangement, which has to do with sharing resources pending maritime delimitation. Joint development deals firstly with sharing resources. It can be used when negotiations on a particular maritime boundary are deadlocked. It then occurs in an area of overlapping claims. But it also- and perhaps more usually- takes place on transboundary area for the purpose of sharing the resources that straddle an established boundary or whose exploitation could have an effect on the other side of an established boundary in the case of resources being liquid or part of a single deposit. Joint development is generally performed in those cases under the modality of unitization. In another part of his analysis, G. Jianjun himself seems ready to acknowledge that joint development agreements should be extended to cases where they face boundaries. The wording of that part of his writing suggests that *joint development* does take place also where a *boundary* already exists; thus joint development is clearly linked to settled boundaries here. While giving a characterization of the State practice in the North Sea, where they have been a number of joint development agreements over settled boundaries, the author accepts that "now the pattern that negotiations will commence between the governments on joint development of the resource and that this will result in the conclusion of an intergovernmental agreement has become the typical legal response by North Sea states when deposits are found to straddle international boundaries."(Emphasis added; see his footnote 99, p.63).Neither don't we agree with the assertion that joint development agreements are provisionary ones; there are some that may not be, as far as unitization agreements are considered.

Law case has started tackling the issue of the scope of obligations under articles 74(3) and 83 9(3) on provisional arrangements. The Award issued on 17 September 2007 by the Arbitral Tribunal in the case Guyana/Surinam constituted pursuant to Annex VII and under article 287 of the LOSC should represent a milestone in the implementation of these provisions. As it was one of the three reasons upon which Guyana instituted proceedings against Suriname on 24 February 2004, and as in the course of these proceedings both States accused each other of having violated *the obligation* materialized under those provisions, the *opinion juris* about them is being more and more evidenced as to their customary nature. Since the practice is already universal and may be called a general one, what matters more now is probably this *opinion juris*. Furthermore, the award, by giving its appreciation of the scope of this obligation, confirms its binding nature. It eventually appears from the tribunal's stand that under the LOSC, *there exists an obligation* for States parties to make "every effort to enter into provisional arrangements of a practical

nature" pending the conclusion of a maritime boundary agreement. According to the Tribunal, this obligation:

...is designed to promote interim regimes and practical measures that could pave the way for provisional utilization of disputed areas pending delimitation. In the view of the Tribunal, this obligation constitutes an implicit acknowledgment of the importance of avoiding the suspension of economic development in a disputed maritime area, as long as such activities do not affect the reaching of a final agreement¹⁸.

Thus for the Tribunal, the aim of provisional arrangements lies in achieving *provisional utilization* of resources lying in disputed areas. Writers like Yoshifumi Tanaka would easily abide by this view¹⁹. We won't, for two main reasons. Firstly, the provision under consideration

Colombia, of 12 November 1993, and the Barbados-Guyana 2003 Treaty. Art.3 of the former establishes "a zone of joint management, control, exploration and exploitation of *the living* (emphasis added) and non-living resources", while art. 1 of the latter creates a Co-operation Zone " for the exercise of joint jurisdiction, control, management, development, and exploration and exploitation of *living* (emphasis added) and non-living natural resources, as well as other rights and duties established by the Convention", that is the LOSC. It further states in art.5 that "the Parties shall exercise joint jurisdiction *over living natural resources* (emphasis added)".

¹⁸ We quote from Robin Churchill, "Dispute Settlement under the UN Convention on the Law of the Sea: Survey for 2007", The international Journal of Marine and Coastal Law 23, no. 23 (December 2008) 637. Also available at http://www.pca-cpa.org/upload/files/Guyana-Suriname% 20Award.pdf, accessed on 15 March 2010.

¹⁹ Seemingly generalizing his thought from the consideration of the Common Zone established by France and Spain in 1879 by dividing the Bay of Figuier, he holds that: "Strictly speaking, (...) the common-zone system is not a

is part of articles on delimitation of maritime spaces. Secondly, the resource sharing that it entails does not preclude from establishing maritime limits. It is a technique of easing tensions between States so as to allow for trustful relationship and a habit of negotiation and cooperation between them. The originality of the technique lies in that it is indirect: delimitation would be eventually achieved after, or in the course of common exploration and exploitation of the resources of the disputed area. It doesn't matter much whether it takes many years or States don't seem anymore interested in delimitation. It shall be difficult to deny that in the course of performing joint development, it is easier for them to conduct maritime delimitation.

Maybe the evolution of State practice following the depletion of the resources in some JDZs or other areas of joint development would help us discover in a near future if delimitation would follow joint development. We think that it would. If it does, then one would see that we were right. This leads us to the conclusion that provisional arrangements, as a type of joint development, are above all a transitional or indirect process towards maritime boundary delimitation, besides being also a mechanism for provisional utilization of maritime resources in disputed maritime areas²⁰. Their carrying out presumes that a maritime delimitation shall eventually prevail. They may be considered not only as a method in a general sense, but even as a politics of strategy of maritime delimitation involving four features, including sharing resources and final maritime delimitation:

- freezing claims and legal positions,
- setting aside direct delimitation
- delimitation of an area of overlapping claims or entitlements and subjecting it to a special regime of jurisdiction, and
- eventually drawing a permanent boundary.

delimitation technique, precisely because it does not delimit the area of overlap but simply designates it as common." Yoshifumi Tanaka, Predictability and Flexibility in the Law of Maritime Delimitation (Oregon: Oxford and Portland, 2006), 32. Indeed it is a technique, a diplomatic technique consisting precisely in putting aside the deadlocked delimitation process, so as to better achieve it after renewed negotiations between States, and after neutralizing the stressful effect of non estimated and unexploited resources over maritime delimitation negotiations.

²⁰ One may note that unitization is not transitional as such, for the aim is simply to exploit the resources, without any commitment related to the final delimitation of a boundary. That's why it should not be considered as a practice of provisional arrangement, but a mere joint development mechanism.

In the case of a provisionary boundary, the agreement provides for a direct delimitation of a provisional boundary, as well as for the process for the delimitation of a permanent one. Unitization may be considered as a form of joint development practice or not. In this research, it shall be viewed as part of the latter.

"Gulf of Guinea" is a geopolitical concept rather than a mere geographical point or region referring to a single and precise place. Thus, it might generally be not easy to know or fix its exact limits. These might vary according to authors and in the course of time. For instance, Maurice Kamga considers that Benin and Ghana are located in the Gulf of Guinea, whereas there exists a stricter conception restricting it to the geographical space comprising Nigeria southwards up to Angola. According to Kamga,

Les principaux champs pétrolifères offshore de la côte africaine sont concentrés dans le golfe de Guinée, notamment sur le plateau continental du Nigeria, du Gabon, de l'Angola, des deux Congo, du Benin et du Ghana²¹.

This is also the view taken by Etoga Galax, probably under the influence of the concept of large Marine Ecosystem. According to Etoga,, Benin for instance is part of the Gulf of Guinea²². Following the above stated considerations, it would be better to say, for the sake of precision that we share a similar conception. It's our view that this expression shall cover the part of the African Atlantic coast running north-south from the coast of Cote d'Ivoire to that of Angola. The bend that circumscribes the said Gulf seems to vanish at those coasts as its extreme points. At least this is the peculiar sense in which we are going to apprehend that concept through the present research paper.

²¹ The English translation would be: "The main offshore oil fields of the African Atlantic coast are concentrated in the Gulf of Guinea, namely in the continental shelf of Nigeria, Gabon, Angola, the two Congo, Benin and Ghana"; cf. M Maurice Kamga, Délimitation maritime sur la côte atlantique africaine (Bruxelles: Editions Bruylant/Editions de l'Université de Bruxelles, 2006), 18.See footnote 66.

²² Etoga Galax Landry, "La Gouvernance de la Biodiversité Marine et Côtière dans le Golfe de Guinée"(Thesis, the UN:The Nippon Foundation Fellowship Programme, United Nations, 2009),10.This author describes three Large Marine Ecosystems(LME) on the Atlantic shore of Africa, according to a previous work from J.Abe,J.Wellens-Mensah J.Diallo and C. Mbuyil Wa Mpoyi UNEP/Global International Waters Assessment, Guinea Current, GIWA Regional Assessment 42(Kalmar:University of Kalmar, 2004): the Canary Current LME which bears on the northern part of the African Atlantic coast, the Guinea Current in the centre and the Benguela Current LME He further suggests in a footnote on his page 8 that the Guinea Current LME covers Angola, Benin, Cameroun, Congo, Côte d'Ivoire, Gabon, Ghana, Guinea, Bissau-Guinea, Equatorial Guinea, Liberia, Nigeria, DRC Congo, Sao Tome and Principe, Sierra Leone and Togo).

The interest of studying provisional arrangement practice in the Gulf of Guinea lies in part in the consideration that it's a major trend of State practice²³, covering EEZ and continental shelf, which may be extended to the continental shelf beyond 200 nautical miles.

So to say that the practice sets a trend which is likely to gain more dynamism and generalization over time, especially when one considers that the Area itself is to be developed according to this principle. But there is no boundary to be settled in the Area, so it's mere joint development that is at stake there, and not provisionary arrangements.

JDZ as a specific practice of provisional arrangements can be opposed to *provisional boundaries*. Some authors such as Kamga would agree that these are broadly speaking the two kinds of provisional arrangements²⁴.Others like Gao Jianjun would add a third type of provisional arrangements to these, that is the case where countries decide to respect *de facto* boundaries²⁵. The Algeria –Tunisia Agreement on Provisional Arrangements of 2002 is the only case where a provisionary maritime boundary has been achieved, as far as the course of the present research paper suggest.. If they were to occur more often, provisional boundaries would be a rather interesting part of another category of provisional arrangement, besides JDZ. But for the time being, the latter is the most worldwide practiced form of provisional arrangements. The interest

²³ See our footnote supra, on the analysis by Colson and Smith of the 1990-2004 period State practice. This is an unquestionable matter in academic writings. See for instance Peter D. Cameron observing as follows: "From the Caribbean to West Africa and from the North Sea to Southeast Asia, the trend in State practice has become even clearer, if not without occasional exceptions. In the latter cases, the discovery of oil or gas has often hastened the parties in a long-standing boundary dispute to the negotiating table and, as a result, there are now at least 24 joint development agreements in force worldwide." Peter D. Cameron, "The Rules of Engagement: Developing Cross-Border Petroleum Deposits in the North Sea and the Caribbean", The International and Comparative Law Quarterly 55, issue 3 (Oxford: July 2006), 559.

²⁴ Kamga observes the following: "Pour simplifier, on peut dire que les Etats s'accordent généralement sur deux types d'arrangement temporaires, à savoir la détermination d'une ligne d'arrangement temporaire ou la création d'une zone de développement en commun". Maurice Kamga, *Délimitation maritime sur la côte atlantique africaine* (Bruxelles: Editions Bruylant/Editions de l'Université de Bruxelles, 2006), 58-59.

²⁵ Gao Jianjun notes this: "Besides joint development, which is by far the most widely used form in practice, the other forms of provisional arrangements pending delimitation are not based upon joint zones, but upon provisional lines or *de facto* boundary." The view of that author that joint development agreements are a form of provisional arrangements rather than the latter being a form of the former may be very contestable. See Gao Jianjun, "Joint Development in the East China Sea: Not an Easier Challenge than delimitation", The International Journal of Marine and Coastal Law 23, number 1(March 2008):40, see his footnote 8.

to study the 2001 JDZ in the Gulf of Guinea stems from there, besides some local geopolitical and legal considerations dealt with in Chapter I.

International law is a matter of general interest for the world as a single community, and a very serious one, as what is at stake is both the regulation of human activities on the one hand, and the peaceful settlement of disputes between States arising out of those activities, in the other hand. The law of the sea, which is a major branch of international public law, appears to be of prime interest, as oceans cover most area on the earth's surface and as the quality of our climate as well as our economies now depends on the ability of mankind as a whole to carry out their sustainable management.

In connection with those concerns, the theoretical focus of our research about the 2001 N/STP JDZ Treaty can be cast as follows: to what extent does it abide by international law and State practice in the matter of joint development over disputed maritime areas? Besides, as there appears to be a need for sub-regional cooperation with regard to the management of maritime areas, both on international legal ground and from the geopolitical prospects of the Gulf of Guinea, can this JDZ contribute in enhancing regional integration, and how could it do so?

This two-fold theoretical question is linked to two objectives and entails the division of the following discussion into two broad parts. One objective is to state the contribution of the N/STP JDZ Treaty to State practice in the matter of joint development. The issues in view of that objective shall be trying to analyze the way the issue of jurisdiction over the disputed maritime area is handled, as well as trying to grasp the institutional framework that the Treaty sets out.

Another objective is to carry out a prospective analysis of the forthcoming issues the N/STP JDZ should have to deal with in matter of sustainable development of oceans, as it goes operational and as it contemplates the exploitation of living resources in a part of EEZ in the Gulf of Guinea. Thus the matter under consideration shall be the legal principles for the conservation and management of fishery resources, and the emerging challenges new developments in the law of sea pose to developing countries and to African countries especially. The discussion shall seek to

establish that the N/STP JDZ is in full bear with international environmental law and ocean governance law.

In terms of results, this work analysis the N/ STP JDZ, comparing it with the whole State practice and finds that this is a feature of joint development that deserves to be qualified as "provisional agreement" under article 74(3) and 83(3) of the LOSC²⁶. The discussion helps to observe a debate between scholars as to the different relationships between the concepts of joint development, provisional arrangement, and unitization. But generally, there is an inappropriate use and conception of the expression "provisional arrangements". It is our view that this expression shall apply to what is termed as such under the LOSC, or similar to it. Due to that confusion, two debates overlap: the one on the customary nature of joint development, and the other one on the customary nature of provisional arrangement. These debates do so overlap especially as these concepts present by themselves a notional overlapping of their respective meanings. However these are two issues which can and should be dealt with separately.

Following this path, we reached the conclusion that the N/STP JDZ Treaty is a major contribution to the expression of *opinio juris* over provisional arrangements, contributing to the public acknowledgment by States that there exists an international conventional obligation under articles 74(3) and 83(3) of the LOSC - at least for Parties to this instrument - to conclude provisional agreements in case of deadlocked maritime delimitation negotiations. Considering the fact that the LOSC and its 160 parties represent most of the States, that there now exists significant State practice on that matter and that recent international law case has confirmed the mandatory nature of the LOSC provisions governing provisional arrangements, it may be possible to assert that the existence of that obligation is beyond doubt. The only issue likely to still be discussed is its customary nature, though we would sustain that it is already customary to our point our view.

²⁶ For a printed version of this important instrument, see United Nations/DOALOS/OLA, The Law of the Sea. Official texts of the United Nations Convention on the Law of the Sea and of the Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea with Index and excerpts from the Final Act of the Third United Nations Conference on the Law of the Sea, New York: United Nations, 2001.

On the other hand, the suggestion is made that a regional institution would be the best framework to cope with these issues, in agreement with international law. The GGC, created in 2001, may serve as the best framework where to contemplate strategies and undertake regional action for:

- maritime delimitation disputes that are still pending, as well as the management of existing JDZs as other JDZs that could be created besides the N/STP JDZ, or for any other provisional arrangement or resource sharing agreement between member States;
- issues in connection with the conservation and management of fishery resources in general, the implementation of the Ecosystem Approach to Fisheries(EAF) and the Precautionary Approach, the implementation of the Regional Sea and Regional Action Plan scheme advocated by the United Nations Environmental Programme (UNEP); marine pollution and environmental protection of ocean and maritime areas ;
- new challenges emerging out of new trends in the law of the sea, such as the delimitation of the continental shelf beyond 200 nautical miles, deep seabed mining in connection with activities in the Area, and marine energy utilization technologies.

This framework appears even more efficient as it could be at the same time an appropriate forum to consider the interests of LLGDS around the Gulf of Guinea, like Chad or the Central African Republic, in the EEZ of the coastal States, a problem that cannot be easily tackled in the JDZ since the rights of LLGDS under the specific legal regime of the EEZ appear to be dampened by the discretionary granted to the costal State in regard to these rights. Those rights and interests could be at stake in the duration of the JDZ agreements, which usually covers decades, and especially in the N/STP JDZ, which is to remain in force for forty-five years after its entry into force. Besides, the implementation of the right of access of LLS and the freedom of transit granted to them under Part X of the LOSC could be harmonized on a regional basis and likely be improved thanks to this harmonization.

The GGC is also relevant as Cameroon potentially enjoys the status of a GDS and has its faith in this respect linked both to the result of pending maritime delimitation between it and Equatorial Guinea, and the acknowledgment by other coastal States or international law that the Gulf of Guinea is an enclosed or semi-enclosed sea under Part VIII of the LOSC.

If the Gulf of Guinea could be granted the status of enclosed or semi-enclosed sea, the GGC could be the regional organization referred to by article 123 of the LOSC. This provision makes it a duty for States bordering an enclosed or semi-enclosed sea to cooperate "directly or through an appropriate regional organization" in order inter alia "to coordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment".

Accordingly, the discussion contemplates the hypothesis that the JDZ could be expanded to cover the whole Gulf of Guinea sub-region, in agreement with relevant principles of international environmental law in the field of ocean governance, and with respect to considerations pertaining to maritime delimitation and law of the sea as mentioned above.

As to the principles of international law applicable in the JDZ, in the GGC or whatever framework of cooperation or national jurisdiction feature that shall prevail in the EEZ of the coastal State bordering the Gulf of Guinea, our research discloses that the concept of Maximum Sustainable Yield (MSY) contemplated by the LOSC under articles 61 (3) of Part V on EEZ, and 119(3) of Part VII on the High Seas, is no more accurate enough to deal with the conservation and management of fisheries resources. A part of fisheries management science has been rejecting it since 1975 and it should be either discarded, or from now on interpreted in the light of its newer conceptions, and no more according to the connotations attached to it under the LOSC. These newer conceptions of the concept of MSY are enshrined for instance in the 1992 Agenda 21 and article 7.1 of the 1995 FAO Code of Conduct for Responsible Fisheries. As a matter of fact, these newer conceptions are an expression of the primacy of two new principles, more accurate, underlined by international law: the Precautionary Principle and the Eco-system Approach to Fisheries (EAF). Articles 7.5 of FAO Code for a broad application of the precautionary approach to fisheries conservation and management with regard to MSY. This means that this latter concept is still used, but in combination or in relation with the newer one. However, there are significant differences in the meaning of MSY under the LOSC and MSY under Agenda 21, such as the shift from "harvested species" (the LOSC) to "marine species" (Agenda 21) with regard to targets.

The discussion has two main parts:

- PART I: The JDZ between Nigeria and Sao Tome and Principe: Compliance with International Law, Issues and State Practice;
- PART II: The JDZ and Ocean Governance Matters: Environment, Fishery, Hydrocarbons and Regionalism.

PART I

THE JDZ BETWEEN NIGERIA AND SAO TOME AND PRINCIPE: COMPLIANCE WITH INTERNATIONAL LAW, ISSUES AND STATE PRACTICE

The main objective of our discussion at this stage shall focus on assessing to what extent the N/STP JDZ Treaty is in compliance with international law and State practice in the matter of joint development. This task can be undertaken by a prior analysis of the context and the contents of the Treaty. This analysis shall proceed by a more comparative move aimed at seizing the genuine contribution of the Treaty to State practice in the field of joint development, if there is to be any such contribution. It may seem appropriate to try to carry out the inaugural part of such an analysis under the following title: The JDZ between Nigeria: compliance with international law, issues and State practice (Chapter I). It shall logically be followed by a comparison between the N/STP JDZ and the broader practice of joint development(Chapter II).

CHAPTER I : THE JDZ TREATY: GENESIS, STRUCTURE, ORGANISATION AND ISSUES

The agreement creating the JDZ between Nigeria and Sao Tome and Principe has been achieved through a process and presents a genuine structure (SECTION I). Its contents appeals into question some legal and management issues (SECTION II).

SECTION I: THE FEBRUARY 21 2001 TREATY: GENESIS AND STRUCTURE

The Treaty entered into force on 16 January 2003, it has been stated. But on January 16, 2002, before that date, less than one year after its signature, the Joint Development Authority (JDA) had been inaugurated by the Heads of States of the two parties. This is an organ created by the virtue of the Treaty to, *inter alia*, conduct the management of the JDZ. Before considering the issues that it involves, it might be interesting to apprehend its main features (C) and its organization (B), as well as its genesis and the negotiations that lead to it (A).

A. The 2001 Treaty: genesis, context and negotiations

The genesis and the context (1) in which the negotiations leading to the Treaty took place (2) could prove useful in order to achieve a better understanding of the issues at stake.

1. Genesis and context

The Treaty seems to be the product of three or four converging factors: Nigerian traditional geopolitical stand as African regional power, the economic necessity for the Parties to secure their control over the natural resources off their coast, which is generally accentuated by pressure from oil firms; the Bakassi crisis that burst out in the region in 1994 when Nigeria sent troops in the Bakassi Peninsula, resulting in military clashes between the latter and Cameroon, and proceedings before the ICJ; and the subsequent move by Nigeria, trying to have its EEZ delineated.

The entire action of Nigeria in international relations may be viewed as an assertion and assumption of its role as an African regional power, and precisely as a mighty and wealthy Black State, able to face the geopolitical challenges emerging on the African scene. This State believes in its might and wealth, and on Africa, and shares the ideal or ideology of pan-africanism, and a broad concept of Africa that encompasses the continent and its diasporas around the world. The existence of a relatively strong attachment of what Luc Sindjoun terms as "African transnations" to the continent is a factor, along with African history, which partly explains Nigeria's efforts to assert itself on the international politics "as a power of the Black world"²⁷.

The way in which the Bakassi crisis with Cameroon referred to in the following lines is being eventually settled proves that Nigeria is, on the international stage at least and from a general point of view, that responsible power it tends to be. The peaceful settlement that has eventually prevailed between the disputants seems to be partly due to the commitment from both President Obansajo and his counterpart from Cameroon, President Paul Biya to recourse to diplomacy after ICJ ruling. This is more consistent with Nigeria' year-long costly commitment to peacekeeping missions and diplomacy in the framework of the Economic Community of West African States (ECOWAS)²⁸. That unfortunate crisis ascertains and contradicts at the same time the traditional political stand of Nigeria. It is an attempt to use its might against a neighbor, but which proves to be less responsible than peacekeeping missions.

As to what regards the economic necessity being one of the major factors to consider, and rather from far the ultimate one, it could be easily noticed that many countries in the Gulf of Guinea have been enjoying large financial resources from offshore oil exploitation since decades. This is especially the case with Nigeria and other surrounding states like Cameroon, Gabon and Congo. Equatorial Guinea and Sao Tome and Principe, which gained their independence more recently in 1968 and 1975 respectively, and were among the poorest in the

²⁷ Luc Sindjoun, Sociologie des relations internationales africaines (Paris : Karthala, 2002),11 : « A partir de l'idée de l'Afrique diasporique et de son rapport au continent, on comprend que l'Etat nigérian essaie constamment de se présenter comme une puissance du monde noir, que l'Association africaine de science politique considère comme politiste africain tout politiste ayant une ascendance africaine sans discrimination fondée sur le lieu de résidence. »On the same page, Pr. Sindjoun mentions, in his introduction to this important book on the sociology of African international relations, works from other eminent internationalists such as Arjun Appadurai. Those works ascertain the existence of African « transnations », allowing Pr Sindjoun to state the following : « Les « transnations » africaines des Caraïbes, d'Europe et d'Amérique ont été des sites sociopolitiques importants de l'éclosion du panafricanisme et sont des cadres d'expression de l'attachement multiforme de la diaspora au continent. »

²⁸ It is assumed that Nigeria lost hundreds of soldiers in year-lasting peace keeping missions in Liberia or Sierra Leone.

region, soon began to contract with international oil corporations, gaining fluent financial income. That was also the case with Angola, independent in 1975, which has just gone out of a fierce civil war and is now enjoying fluent oil income. This economic factor is recognized as such by the writings of commentators across the board. It's the case with Daniel Tim's article in the last issue of the classical *Maritime Boundaries*²⁹. Maurice Kamga shares this view in his book on African maritime delimitation, stressing that the rush towards maritime delimitation in the Gulf of Guinea is linked to the presence of, or prospect of oil and gas, and pressure put over States by oil companies:

La découverte du pétrole et la possibilité de l'exploiter ont fait de la question des délimitations maritimes une priorité dans la région (...) [L]a véritable pression est surtout d'ordre économique, dans la mesure où les compagnies pétrolières exercent une influence considérable sur les Etats côtiers afin qu'ils prennent le contrôle de ce qui est, pour de nombreux Etats, la promesse d'une richesse jusque la inespérée³⁰.

The earliest attempts to achieve maritime boundary delimitation in the Gulf of Guinea by newly independent States date back to 1970, when Cameroon and Nigeria started negotiations over their boundary. Until 1990, except the June 1, 1975 agreement between Cameroon and Nigeria, there were no maritime boundaries agreements in the Gulf of Guinea³¹. The situation will remain the same up to 1998. A turning point was reached in 1993 when Cameroon, Nigeria and Equatorial Guinea started on a bilateral ground, to look over the possibility of trilateral

²⁹ Daniel Tim, "African Maritime Boundaries", in International Maritime Boundaries, vol. V, ed. David A. Colson and Robert W. Smith (The Hague: Martinus Nijhoff Publishers, 2005), 3429. Explaining the fact that in recent years there has "been considerably more activity on the western side of the [African] continent than there has been to the east", the author concludes that "this has in great part been driven by offshore oil discoveries which have heightened interest in boundary determination for economic reasons."p.3429 Thus, reporting on EEZ negotiations between Nigeria and another neighbouring State not linked to the dispute in the Gulf of Guinea, that is Benin, he discloses that "this process is driven in part by Nigeria's desire to set the limits on its economic exclusive zone in the Gulf of Guinea, which contains one of the world's richest offshore hydrocarbon area." p.3432.

³⁰ Maurice Kamga, op. cit., pp18-19. Underlying the role of oil in maritime boundary disputes, Kamga argues that Africa simply follows a general move towards the appropriation of maritime areas which goes back to the United States 1945 Truman Declaration : « Les ressources en hydrocarbures, notamment le pétrole, ont été, sans aucun doute, la cause première vers l'appropriation d'espaces maritimes jusqu'alors régis par le principe sacro-saint de la liberté de la haute mer(...) L'Afrique n'a pas échappé a ce phénomène et l'on sait que le pétrole est, en général, à l'origine des différends de délimitation maritime » (pp.17-18).

³¹ Jonathan I. Charney and Louis M. Alexander, ed., International Maritime Boundaries Vol. III (Martinus Nijhoff Publishers: The Hague/London/New York), 2249.See also Bureau of Oceans and International Environmental and Scientific Affairs, United States Department of State, Limits in the Seas, no. 108, Maritime Boundaries of the World [book on-line] (Washington:1990, accessed 17 March 2010) 10-11; available from www.state.gov/documents/organisation/58379.pdf.

negotiation in order to achieve a tripoint. The negotiation process seemed in a success track, as Cameroon and Nigeria even started to work out the project of a sub-regional institutional framework to develop cooperation on maritime area among the States located on the Gulf of Guinea³². Then very unfortunately, the Bakassi crisis was triggered.

This crisis contributed indirectly in reinforcing the urge for maritime boundaries. According to Tim, besides commercial interest:

The other catalyst to such activity [of boundary delimitation in the Gulf of Guinea] was the commencement by Cameroon of proceedings against Nigeria before the International court of Justice in 1994 which included determination of the maritime boundary.³³

Some months after Nigerian troops had set foot on the Bakassi Peninsula which Cameroon claimed sovereignty upon, Cameroon instituted proceedings against Nigeria in front of the International Court of Justice (ICJ). The matter is now known by international law specialists as the *Land and Maritime Delimitation between Cameroon and Nigeria (Cameroon v. Nigeria; (Equatorial Guinea Intervening))* case.

It is in the course of those proceedings that Nigeria actively started looking for the delimitation of its EEZ. But it should be emphasized that it is still during the same period that Sao Tome and Principe issued its 1998 maritime law claiming archipelagic status³⁴ and confirming unilaterally drawn archipelagic baselines of 1978, which Nigeria opposed. In 1998, Nigeria contacted a private legal corporation to have its EEZ delineated. It is possible that Nigeria saw the

³² See Chapter III, *infra*.

³³ Tim Daniel, op.cit.,l.

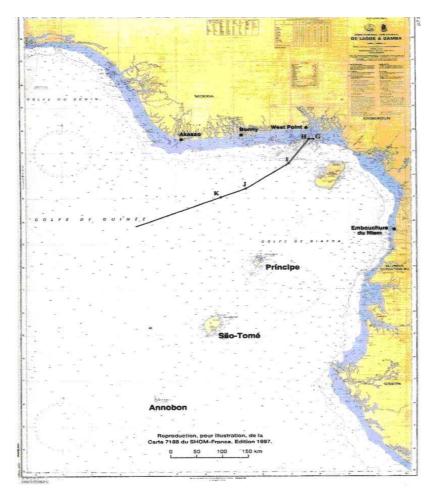
³⁴ Law n° 1/98 of 1998 revokes earlier maritime legislation of 1978 through which DRSTP claimed a territorial sea

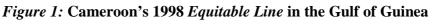
limited to12 nm, an EEZ limited to 200nm and delineated its archipelagic baselines; the coordinates of the latter were amended by Decree-Law n°48/82 of 1982. The 1998 Law reiterates former archipelagic baselines claims and recourse to the median line as the outer limit of the EEZ.Art.4 of this Law is written as follows: "In case of specific provisions set up in international treaties signed together with other States whose coasts are adjacent to the ones in the Democratic Republic of Sao Tome and Principe, the outer limit of the exclusive economic zone in the Democratic Republic of Sao Tome and Principe shall not be extended beyond the median line every point of which is equidistant to the other one". See Daniel J. Dzurek, "Gulf of Guinea Boundary Disputes" Boundary and Security Bulletin[book on-line](Spring 1999; accessed 20 March 2010):101; available from http://www.dur.ac.uk/resources/ibru/publications/full/bsb7-1_dzurek.pdf. The author rightly notices that the world "adjacent" in the latter art.4 presumably refers to "opposite", since DRSTP is an archipelagic State and cannot have adjacent coastal States as neighbours. According to Dzurek, "the US Department of State has analysed the archipelagic baseline claim and concluded that it accords with provisions of the 1982 UN Convention". Dzurek refers to n°98 of the US Department of State issue on "Archipelagic Straight Baselines: Sao Tome and Principe (New York: 1983), also available on-line, at http://www.state.gov/documents/ organization/58578.pdf. See also Law of the Sea Bulletins n°1 [book on-line](accessed 20 March 2010) http://www.un.org/Depts/los/doalos_publications/LOSBulletins/Bulletin_repertory.pdf

advantage brought about by Cameroonian claims in the course of the proceedings. Cameroon displayed in its Memory what it termed in French as "Ligne équitable", or "Equitable line"³⁵ that could be interpreted by both Equatorial Guinea and Sao Tome and Principe as an infringement on maritime areas upon which they claimed sovereignty or jurisdiction. The said line divided the Gulf of Guinea in two parts, the northern part and the southern one. In the southern part, Cameroon seems to have claimed sovereignty or jurisdiction over the whole maritime area situated on a westwards oriented projection of its coast, which covers almost the entire maritime area off the coast of Equatorial Guinea and Sao Tome and Principe. According to Nigeria in its Rejoinder, Cameroon sought no less than the "global apportionment of the Gulf of Guinea"³⁶. Nigeria seems to have believed there were serious chances the Court could accede to this peculiar request from Cameroon.

³⁵ See Appendix II: Map representing the Cameroonian claim of an Equitable line in the proceedings before the ICJ, and Appendix II: Map representing a construction by the author of the relative position of the N/STP-JDZ and the Cameroonian claim in the Gulf of Guinea, as expressed before the ICJ.

³⁶ Rejoinder of the Federal Republic of Nigeria, Land and Maritime Boundary Between Cameroon and Nigeria, January 2001





(Source: Tanga Biang, L'Intervention de la Guinee Equatoriale dans le differend frontalier camerouno-nigerian:fondements, effets et portee, DESS Thesis, IRIC, University of Yaounde II,

2007, map no. 5)

The year 1998 was crucial for Nigeria in the results of its action in front of the ICJ. That year, it became evident that its maritime boundary with Cameroon could be decided by the Court. The Court rejected seven out of eight preliminary objections raised by Nigeria. It is likely, as Cameroon would say later on, that it then tried to secure the delimitation of its maritime boundaries with the two other states whose interests could be affected by the ICJ decision. In doing that, it could have more obvious arguments to defend the position according to which Cameroons claims affected third party states interests. Presenting maps of agreed boundaries should have been an evident proof of clear overlapping between Cameroon's claims and those of third parties. This hypothesis, to our point of view, should be taken into consideration in

analyzing the outcome of negotiations between Nigeria and Equatorial Guinea, or Sao Tome and Principe, especially as to the speedy negotiation and implementation process set up by the Treaty. It is possible that those negotiations were facilitated by convergent interest in the concern that Cameroon claim about the Equitable Line had generated among the three neighboring states.

No surprise then, as what regards the move from Equatorial Guinea forwarding on 30 June 1999, an Application for Permission to intervene as a non-party in the case, in accordance with article 62 of the Court's Statute. In the terms of the Application:

It is the purpose of Equatorial Guinea's intervention to inform the Court of Equatorial Guinea's legal rights and interests so that they remain unaffected as the Court proceeds to address the question of the maritime boundary between Cameroon and Nigeria.³⁷

On 23 September 2000, Equatorial Guinea and Nigeria signed a treaty in view of a partial delimitation of their maritime boundary. Cameroon then articulated a formal contestation against the deal by a letter dated 5 December 2000 filed to the Registrar of the Court. Cameroon disclaimed that treaty as a move to put the Court in front of what it termed in French as "a fait accompli". It should be noticed that in the meantime, some months sooner, Cameroon had promulgated the 17 April 2000 law relating to its Maritime areas³⁸.Under this law, Cameroon claims not only an EEZ, but also a continental shelf, the seabed and ocean floor of "which go beyond the territorial sea, and cover all the natural extension of the land territory of the Republic of Cameroon *up to the farthest limit permitted by international laws*". Was Cameroon still referring to its claim in relation to the "Equitable Line? Anyway, it is just some months later on, after the 17 April 2000 maritime law and the 23 September 2000 Treaty that Nigeria and Sao Tome and Principe signed the agreement over the JDZ, on 21 February 2001.

2. Negotiations

Thus negotiations between Sao Tome and Principe and Nigeria which started around 1998 should have been influenced by this legal and geopolitical context. The hard bone of the negotiations soon appeared to be the effect to be given to the island of Principe, and proportionality as to the weight to be given to the coastal length of each party. Nigeria enjoys

³⁷ Application for Permission to Intervene of the Republic of Equatorial Guinea, *Land and Maritime Boundary Between Cameroon and Nigeria*, 30 June 1999, p. 6.

³⁸ See Law n°200-2 of 17 April 2000 relating to Maritime areas of the Republic of Cameroon, in Official gazette of the Republic of Cameroon, January 2000, pp 3-8.

quite an extensive coastal length, and seemingly, other geographical facts like its population and its terrestrial land mass, compared to those of Sao Tome and Principe, should have influenced the course of negotiations. But according to Nigeria itself, summing up of the negotiations, they did not; only the length and the partial effect were at stake in the discussions³⁹. The Heads of States of both countries then met in a two-day summit from 29-30 November 1999, giving instructions which resulted in a series of negotiations⁴⁰.

As once started negotiations soon seemed to have reached a stalemate, the Nigerian Head of State, M. Olusegun Obasanjo, made a visit to Sao Tome on 28 August 2000⁴¹ in order to discuss the matter with his counterpart⁴². They came out with a provisionary arrangement in the form of a JDZ. That JDZ was to be established in the briefest delays, it seems, as one takes into consideration the tight scheduling in the Treaty, and the legal and geopolitical context referred to here above.

³⁹ See Rejoinder of the Federal Republic of Nigeria, *Land and Maritime Boundary Between Cameroon and Nigeria*, par.10.42, where Nigeria explains: "In its Law n° 1/98 Sao Tomé e Principe unilaterally claimed an equidistance line boundary with Nigeria (...) In response, Nigeria noted that in its view, its much longer coastline warranted a substantial adjustment in its favor of the claimed media line. Nigeria took the position that it was not prepared to accept the 100 n. m. archipelagic baseline drawn between the islands of Sao Tome and Principe as if it were a coastal frontage. Sao tome, although anxious to reach an agreement, has not been prepared to accept Nigerian proposals for a specified boundary based on giving partial effect to its individual islands."

⁴⁰ Ibid., par.10.44

⁴¹ Idem.

⁴² Ibid., par.10.45 where the following is disclosed: "Following earlier discussions, the Presidents of the two States agreed on August 2000 that they should not be seeking to reach agreement on a definitive maritime boundary. Instead, in the interests of co-operation between the two States, and having regard to major unresolved differences in their positions, it was desirable to create a joint development zone (JDZ) in the area of overlapping claims. The two Presidents created a Joint Ministerial/Technical Committee to draw up details provisions for the JDZ."

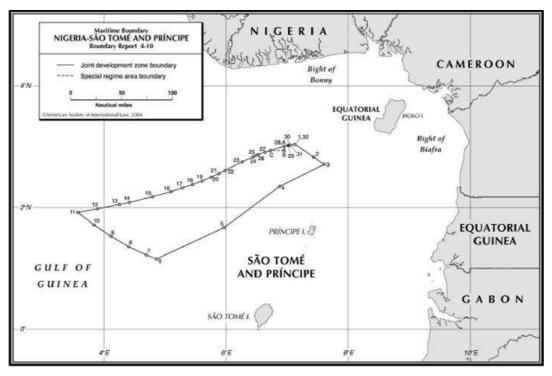


FIGURE 2: THE N/STP JDZ IN THE GULF OF GUINEA (Source: D.A. Colson and R.W. Smith, International Maritime Boundaries, Vol. V, p.3648)

However, it should be underlined that the pace of negotiation may be partially due to the absence of any serious apprehension concerning the resource potential in the area of overlap. In negotiations that lead to the Malaysia-Thailand February 1979 Memorandum of Understanding setting a JDZ in the Gulf of Thailand, "*apprehension concerning the natural gas potential in the area of overlap*" resulted in a delay running over five years. In this latter case, negotiations over the maritime boundary had started in 1972, and eventually the parties agreed to joint development of the non-living resources in an area where their continental shelf claims overlapped⁴³.

The Joint Technical Committee set up by the Heads of the two States held three rounds of non-ministerial negotiations and a joint ministerial meeting:

- 25-27 September 2000, Lagos, Inaugural Meeting of the Joint Technical Committee on the Establishment of the Joint Development Zone;

⁴³ David Ong, "South-East Asian State Practice on the Joint Development of Offshore Oil and Gas Deposits", in The Peaceful Management of Transboundary Resources, p. 79.

- 1-2 November 2000, Sao Tome, Second Meeting of the Joint Technical Committee on the Joint Development Zone;
- 16-18 November 2000, London, Joint Ministerial Committee on the Joint Development Zone⁴⁴.

Eventually, the Treaty was signed in Abuja on 21 February by the Ministers of Foreign Affairs of both countries.

The JDZ thus is a result of a practical compromise, as evidenced by its two major lines or limits. The northern line corresponds to the EEZ outer limit claimed by Sao Tome and Principe, that is in the case Principe island were to be given full effect, whereas the southern line represents the line or limit of the Nigerian maximalist claim giving no weight to Principe island in delimitating its EEZ⁴⁵.

B. The 2001 Treaty: its organization

The Treaty displays three main components: the Treaty itself, an Appendix and a Memorandum Of Understanding(MOU). The Treaties opens with a clear reference to paragraph 3 of UNCLOS article 74, stating that the Parties take "into account the United Nations Convention on the Law of the Sea(...), in particular, article 74(3) which requires States with opposite coasts, in a spirit of understanding and cooperation, to make every effort, pending agreement on delimitation, to enter into provisional arrangements of a practical nature which do not jeopardize or hamper the reaching of a final agreement on the delimitation of their exclusive economic zone". This reference to the UNCLOS is a part of the originality of provisional arrangements entered into after 2000, as to the contrary to earlier ones. It's the case with the 11 February 2002 Agreement on Provisional Arrangements for the Delimitation of the Maritime Boundaries between the Republic of Tunisia and the People's Democratic Republic of Algeria, which refers to paragraph 3 of both UNCLOS article 74 and article 83. This treaty draws up a provisionary maritime boundary between the two countries as suggested by its denomination, and probably runs through different maritime areas, thus referring to EEZ as well as to the continental shelf. The 21 February 2001 treaty refers solely to article 74, since it deals only with EEZ. So does the 2 December 2003 "Exclusive Economic Zone Co-operation Treaty between the State of

⁴⁴ Rejoinder of the Federal Republic of Nigeria.....p.

⁴⁵ See Appendix I: Map of the JDZ in the Gulf of Guinea.

Barbados and the Republic of Guyana concerning the Exercise of Jurisdiction in their Economic Exclusive Zones in the Area of Bilateral Overlap within each of their Outer Limits and beyond the Outer Limits of Other States" signed in London.

As to the Timor Sea Treaty of 20 May 2002, it refers to the same paragraph 3, but only to article 83, being related exclusively to the continental shelf of both parties. The Treaty also acknowledges in its Preamble, "the existence of an area of overlapping maritime claims as to the exclusive economic zones" of the Parties. It is divided into a Preamble, a Preliminary and twelve Parts displaying fifty-three articles.

The Treaty is followed by an Appendix which is part of it. This brief Appendix of three articles describes a *Special Regime Area* circumscribed by three points A, B and C on the seabed, subsoil and superjacent waters thereof, upon which Nigeria shall throughout the duration of the Agreement enjoy exclusive right to administer it. Nigeria should also "exercise jurisdiction over it, including the right to exploit and develop its resources for its own benefit". Article 3 of the Appendix announces the Memorandum of Understanding on the Special Regime Area (MOU). This MOU governs some development programs to be undertaken by Nigeria to the benefit of Sao Tome and Principe as a way of compensation.

This MOU is "an integral part" of the Treaty according to this article 3.It's made up of four short articles. In substance, it states Nigeria's commitment to "render economic assistance" to Sao Tome and Principe in the form of four projects enumerated under its article 4:

- Refinery and crude oil allocation
- Working interest in a block,
- Establishing a port/logistic facility
- Equipping and training of the Coast Guards of the Democratic Republic of Sao Tome and Principe.

C. The main features of a complex Treaty

The complexity of the Treaty is reflected in its numeral divisions (1) as well as in the JDZ institutions or organs (2).

1. The Treaty and its divisions

Setting aside its Appendix and the MOU, which are not very extended and cover three and four short articles respectively as already mentioned above, the Treaty itself runs over fifty-three articles. These articles display the substance of the Treaty and divide up into a Preliminary and twelve Parts which are:

- Part One: The Joint Development Zone;
- Part Two: The Joint Ministerial Council;
- Part Three: The Joint Authority;
- Part Four: Administrative Services;
- Part Five: Duties of Personnel;
- Part Six: Finance;
- Part Seven: The Zone Plan;
- Part Eight: Regime for Petroleum in the Zone;
- Part Nine: Other Resources of the Zone;
- Part Ten: Miscellaneous;
- Part Eleven: Resolution of Deadlocks and Settlement of Disputes;
- Part Twelve: Entry into Force and Other Matters.

The Preliminary is made up of a single article on *definitions*. It gives the meaning of some technical terms such as *contract area*, *contractor*, *development activity*, *development contract*, *exclusive maritime area*, *installation*, *operating agreement*, *operator*, or *Zone*. Some of the Treaty's divisions are related to the JDZ institutions and are described below. Part Five contains two articles on *Impartiality and conflicts of interests* (art.15), and on *Confidentiality* (art. 16). It provides inter alia for a Written Declaration to be made under oath by Executive Directors, officers and other members of the Authority before assuming their functions, the form of which should be approved by the Council. This document should detail "any direct or indirect interest which might reasonably be considered to amount to a financial interest as referred to in paragraph 2" (art. 15.3). Part I is the back bone of this instrument. It is made up of four articles. Article 2 on the "Establishment of joint development zone gives the list of the geodetic lines of the points by which the JDZ is bounded, using the WGS 84 Datum;

Article 3 deals with the "Principles of joint development". Article 3(1) sets out three principles being respectively the principle of joint control of both parties over the exploration

and exploitation of the resources in the JDZ, the principle of optimum commercial utilization of these resources, and the principle of 60/40 per cent split of benefits and obligations in favor of Nigeria. This major provision reads as follows:

Within the Zone, there shall be joint control by the States Parties of the exploration for and exploitation of resources, aimed at achieving optimum commercial utilization. The States Parties shall share, in the proportions Nigeria 60 per cent, Sao Tome and Principe 40 per cent, all benefits arising from development activities carried out in the Zone in accordance with this Treaty.

This provision sets out three other principles: the principle of due respect to the Treaty (articles 3.2 and 3.3), the principle of efficient exploitation of resources (article 3.3) and the principle of diligent implementation of the Treaty.

Article 4 sets forth the classical "no prejudice clause" which is found in almost all joint development and provisional arrangement agreements, under the formulation "No renunciation of claims to the Zone". Article 4.1 provides as follows:

Nothing contained in this Treaty shall be interpreted as a renunciation of any right or claim relating to the whole or any part of the Zone by either State Party or as recognition of the other State Party's position with regard to any right or claim to the Zone or any part thereof.

Article 4.2 adds that:

No act or activities taking place as a consequence of this Treaty or its operation, and no law operating in the Zone by virtue of this treaty, may be relied on as a basis for asserting, supporting or denying the position of either State Party with regard to rights or claims over the zone or any part thereof.

Article 5 on the "Special Regime Area" prevents the application of most of the provisions of the Treaty to that area, and provides for the exceptions to this rule.

Part Six on the important matter of finance has got only one article as many others, that is article 17 on *Budgets, accounts and audit*. It provides that *the Authority shall be financed from revenues collected as a result of its activities*. But for the beginning states shall advance to it funds necessary for those activities. The Authority manages the funds for the JDZ institutions

and staff and is subjected to an annual audit by external auditors approved by the Council. States parties share the burden of any shortfall that could affect the budget at any time in the proportion 60 per cent for Nigeria and 40 per cent for Sao Tome and Principe. The surpluses of revenues over expenditure and subject to established reserve funds shall be paid to national treasuries of the parties in the same proportions.

2. The JDZ and its institutions: achieving cooperation and equity

The Treaty establishes a Zone and some major institutions. The Zone covers an area of 34,540 square kilometers⁴⁶, which amounts to about 10,000 square nautical miles. Articles 74(1) and 83(1) of LOSC require neighbouring coastal States to settle their EEZ and continental shelf through agreement, and in accordance with international law⁴⁷. In the case of failure to reach such an agreement, and subject to recourse to procedures governed by Part XV on disputes settlement, the LOSC provides for provisional arrangements. The Treaty makes a noticeable effort in reflecting this in the institutions created in the framework of the JDZ.

As we know now the Treaty resulted from negotiations. Even if the JDZ in itself is not a boundary, it is worth noticing that it has been achieved through negotiations, apparently "in a spirit of understanding and cooperation", as required by the relevant provision of the LOSC, that is paragraph 3 of articles 74 and 83. The prescription to "make every effort to enter into provisional agreement of a practical nature" has been observed and went through. The Treaty and the JDZ are the result of such an effort.

Delineating the JDZ in provisional agreement itself remains a difficult task, and is properly a diplomatic and legal challenge. Writers such as Gao Jianjun have underlined this difficulty:

For a joint development arrangement to succeed, the participating states must tackle different kind of challenges, and the foremost of these is the delineation of a joint development zone (JDZ). Although there is no specific rule in international law addressing this issue, in practice, however (...), the location of the JDZ has a close link to the international rules on

⁴⁶ Gao Jianjun, "Joint Development …" IJMCL, March 2008,55.

⁴⁷ Paragraph 1 of articles 74 and 83 says that: The delimitation of the exclusive economic zone/continental shelf between States with opposite or adjacent coasts shall be effected by agreement on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution.

maritime delimitation. (...) Joint development is by no means an easier challenge to be tackled than maritime delimitation⁴⁸.

Indeed, there were many challenges involved in the delineation of the N/STP JDZ. For instance, it is a genuine merit to the parties for succeeding in solving the difficult problem of choosing the coasts relevant to the delimitation work. According to Laurent Lucchini, drawing a provisional line as a way of determination a boundary by adjudication is a "delicate issue" that could be addressed by taking into consideration only the coastal segments joining base points upon which the construction of the equidistance line between the two Parties shall rely⁴⁹. It seems that the States in the Gulf of Guinea by resorting to available techniques on the international arena among various cabinets of experts generally choose those points accurately.

The Treaty thus establishes, in the framework of a provisional arrangement, a Zone circumscribed by the "zone of overlapping claims"⁵⁰ of the Parties. In its Preamble the Treaty acknowledges "the existence of an area of overlapping maritime claims as to the exclusive economic zones lying between their respective territories" (referred to in the Preamble as the "Area).Nearly half of current joint development agreements similarly determined JDZs on the area of overlapping claims. Thailand and Malaysia followed the same scheme in their 1979 Memorandum of Understanding. Having failed to agree on the effect to be given to the Thai Ko Losin island on the delimitation of their maritime boundary, they eventually agreed to set out a Joint Authority to which they gave all rights and responsibilities for the exploration and exploitation on their behalf of the non-living natural resources of the seabed and its subsoil in the

⁴⁸ Gao Jianjun, "Joint Development", IJMCL (March 2008), 41.

⁴⁹ Laurent Lucchini, "La Délimitation des Frontières Maritimes dans la Jurisprudence Internationale", in Maritime Delimitation, Rainer Lagoni and Daniel Vignes, eds. (Martinus Nijhoff Publishers, Leiden/Boston,2006), 12.According to L. Lucchini, this issue is even more difficult for the international judge: "Il est vrai que le choix des côtes pertinentes est un problème difficile. Il est cependant mal résolu. La jurisprudence y apporte une attention parfois distraite; surtout, elle manque de constance dans les quelques indications qu'elle fournit. I l arrive même que l'identification des côtes pertinentes lui apparaisse impossible, comme cela s'est produit dans le différend opposant la Libye et Malte, où le juge est acculé à un constat d'impuissance".

⁵⁰ According to Gao Jianjun, there is a clear distinction to be made between the "area of overlapping entitlements" and the "area of overlapping claims" in the establishing of JDZs. The former "refers to the area bounded by the outer limit of maritime areas to which all of the states concerned have entitlements on the basis of international law", for instance an EEZ of 200 n.m. under the LOSC.p.44; the latter "refers to the area bounded by the delimitation lines claimed by the states concerned."p.52.Subsequenty, Gao develops a three-class typology of JDZs:

⁻ JDZ on areas of overlapping entitlements("utilizing the area of overlapping claims as the JDZ"; see p.44);

⁻ JDZ on areas of overlapping claims ("utilizing the area of overlapping claims as the JDZ; see p.52);

⁻ JDZ on other areas ("other JDZs"; p. 57).

JDA they then created. So did Malaysia and Vietnam in their 1992 Memorandum of Understanding establishing a JDA. Similarly, Thailand and Cambodia could not agree on the effect to be given to the Thai island of Ko Kut. In 2001, they resorted to the division of their "Overlapping Claims Area" into two areas: an "Area to be Delimited" and a "Joint Development Area" (JDA).⁵¹ By way of contrast, the JDZ established in 1989 by Indonesia and Australia in the Zone of Co-operation sets out an "area of overlapping entitlements". The subsequent Zone A which Timor Leste and Australia have converted into a Joint Petroleum Development Area (JPDA) in The 2002 Timor Sea Treaty doesn't seem to cover the entire area of entitlements. The Barbados-Guyana 2003 Treat is similar to the Australia-Indonesia JDZ of 1989⁵².

Actually it not an easy task to delineate a JDZ. The long time taken by China and Japon since they made public their commitment to settle their maritime boundary through joint development is eloquent about how difficult it might to achieve joint development, especially delineating the relevant area⁵³. Considering the Sino-Japanese, Zou Keyuan states that "though both countries have pledged to solve their disputes in a peaceful manner by using joint development as interim measure prior to the dispute settlement, it is perceived that any concret

⁵¹ See Gao Jianjun,ibid., 53-54.

⁵² Gao Jianjun,ibid., 50-53.

⁵³ Gao Jianjun advocates for a tri-junction point in the northern part of the East sea between China, Japan and South Korea(see note1 of the same article, p.39). From 1996 to 2003, China and Japan, after ratifying the LOSC respectively on 7 and 20 June 1996, embarked on "Consultations on the Law of the Sea". In 2004, the latter were converted into "Consultations on the Issues of the East China Sea", maybe because the two Partners felt the need to take a new start for a more coherent cooperation after China disapproval of the 28 November 1998 Agreement on Fisheries between South Korea and Japan establishing a Joint Fishery Zone between them. Through a Press Conference of 21 January 1999, the spokesman of the Chinese Ministry of Foreign Affairs opposed that Agreement in order to preserve China's rights and interests in that part of its EEZ. That Agreement was to come into force the following day, on 22 January 1999, and so did it. China was obviously right to oppose that agreement as the Korean-Japan Joint Fishing Zone, according to Gao Jianjun, "partly overlaps with the Sino-Japanese "Provisional Measure Zone" established in accordance with the Fisheries Agreement of 1997" signed on 11 November 1997 by China and Japan. This latter entered into force on June 2000(see Gao's article, footnote 74, p.57).

In 2006, following a meeting between the Japanese Prime Minister and the Chinese President and Premier in Beijing, the two Parties started considering publicly that joint development would be the most likely way to solve their disputes in the East China Sea. In a Joint Press Statement issued "on 8 October 2006, the two countries confirmed that they would speed up talks on East china Sea-linked issues and reaffirmed a general direction towards toward joint development", says Gao (see same article, footnotes 4, 5, 6 and 7, p40). In a Joint Press Communiqué issued on 11 April 2007, the two countries agreed that they "will conduct joint development in accordance with the principal of mutual benefit as a temporary arrangement pending the completion of delimitation". But it seems that up to now, no tangible result has been secured.

arrangement for joint development will take a long time"⁵⁴. The Treaty also establishes a Joint Ministerial Council, a Joint Authority, a Board and a Secretariat made up of four Executive Directors.

SECTION II: THE JDZ: SOME LEGAL AND MANAGEMENT ISSUES

A. International practice and coastal State jurisdiction in the JDZ

1. The JDZ: a result of deadlocked boundary negotiations

Some commentators describe the Gulf of Guinea as a puzzle due to the complexity of maritime issues which it arbors. For sure the situation is a complex one, but is it as complex as the situation in the Gulf of Thailand, or in the Mediterranean Sea? If the number of disputes is to be reckoned with, there are just three or four major boundaries still to be decided upon in the Gulf of Guinea, whereas the Gulf of Thailand had fifteen or sixteen maritime boundaries to settle in 1997 at the time Thailand and Vietnam were agreeing on their maritime border⁵⁵. The situation has changed a great deal today, as Vietnam now has maritime delimitations with most of his neighbours. Malaysia, Thailand and the former have been trying to achieve a joint development agreement in the Gulf of Thailand since 1997.

Though the signature of the Treaty may be considered a true success, it does not preclude observing that the two parties actually had failed to reach an agreement on the delimitation of their EEZ before converting their discussions towards the JDZ as an intermediary solution. This means that the parties had reached a deadlock, as already asserted in Section I above. This could have been for Nigeria its first complete maritime boundary, and the second for Sao Tome and Principe⁵⁶. It could have been the first delimitation of EEZ between two countries in the Gulf of

⁵⁴ Zou Keyuan, "Cooperative Development for Oil and Gas", in Security and International Politics in the South China Sea: towards a cooperative management regime, eds. Sam Bateman and Ralph Emmers (Routlege: New York,2009), 89-90.

⁵⁵ Nguyen Hong Trao, "Vietnam's First Maritime Boundary Agreement", 1997, p. 78. The electronic version of this article is available on the web at http://www.dur.ac.uk/resources/ibru/publications/full/bsb5-3_thao.pdf accessed on March 7, 2010.

⁵⁶ At the time Nigeria had not yet secured any complete boundary with its neighbours. The 23 September 2000 Maritime Boundary Agreement settles only a part of the boundary between Nigeria and Equatorial Guinea, whereas the 10 October 2002 ICJ rule decided only a part of the requested maritime boundary between Nigeria and Cameroon. The situation remains the same as today's date. Sao Tome and Principe had already agreed with

Guinea, standing comparison with the 9 August 1997 Agreement between Thailand and Vietnam in a similarly complex region of the world, that is the Gulf of Thailand. This agreement establishes the first EEZ delimitation in that Gulf⁵⁷.

The emphasis on describing the Treaty as a result of deadlocked negotiations though it being at the same time a hallmark of active and successful bilateral diplomacy is not a move to depreciate its value. It's meant at showing that it is consistent with international practice that a joint development agreement occurs on maritime boundary negotiations when a deadlock looms out. From that point, one may note that agreements on joint development of resources resulting from such deadlocked negotiations can be considered as transitional boundary delimitation agreements in their spirit. In most cases of JDA, this has been the process. That's what provisional arrangements under LOSC articles 74 and 83 are, as already stated in our introduction. Thus the Treaty should be viewed not only as a resource sharing agreement, but also as a boundary delimitation transitional instrument, and rather a delimitation instrument than a resource sharing one, in its spirit at least. The emphasis on the failure helps to observe that the fundamental intention that led the parties to the Treaty was to delineate their EEZ, rather than trying to share its resources. That's what the Treaty's background shows. There is nothing especially innovative here, as to the law of the sea and international practice. There's just a confirmation of international practice on provisional arrangement in accordance with the law of the sea. Maybe some innovative move in the way the Treaty manages third States interests.

2. The EEZ legal regime and the jurisdiction in the JDZ

In respect of major considerations of the international legal order of the oceans, the JDZ is consistent with the LOSC. The Treaty tries to achieve delimitation through cooperation and equity, as just stated above in Section about the JDZ and its institutions. Furthermore, it manages to take into account article 55 of LOSC which sets out the *Special legal regime of the EEZ*. This article reads as follows:

The exclusive economic area is an area beyond and adjacent to the territorial sea, subject to the specific legal regime established in this Part, under which the rights and

Equatorial Guinea upon their maritime border on June 26, 1999, which is almost a complete and permanent one. Less than two months after the Treaty with Nigeria, it secured its maritime border with Gabon on April 26, 2001.

⁵⁷ The first EEZ delineated in the Gulf of Guinea was thus that between Sao Tome and Principe on the one hand, and Equatorial Guinea in the other hand.

jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of this Convention.

This provision is followed by article 56 which gives the details about the *rights, jurisdiction and duties of the coastal State in the exclusive economic zone.* Actually, this provision consists of an enumerative list of the *sovereign rights* of the coastal State and the disclosure of the extent of its *jurisdiction* in that area. This sovereign rights and jurisdiction build up the sort of *State sovereignty limitation regime* which prevails in the EEZ: there is no room for coastal State *sovereignty* in the EEZ, just sovereign rights, and jurisdiction. The international community as a whole has got rights in the same zone. These rights are not under any dependency upon the will or philanthropy of the coastal State, and these rights must be respected by the costal State⁵⁸.

As we see, establishing a JDZ in the EEZ is quite compatible with the EEZ international specific regime. The exploration and exploitation of the resources of the JDZ are part of the sovereign rights of both States Parties in the zone of overlapping claims on their respective EEZ. The JDZ and its institutions, as well as the activities they are meant for, thus appear to be in perfect agreement with the law of the sea, and particularly with the LOSC regime on the EEZ.

The Treaty establishes a kind of loose jurisdiction sharing regime for the parties in the JDZ, the substance of which appears to be homologous to the specific legal regime of the EEZ. This important matter is mainly governed by the provisions of Part Ten on Miscellaneous⁵⁹. Its article 42 makes reference to the EEZ and provides for civil and administrative jurisdiction which shall be proper to each State in the JDZ, both on activities and persons:

⁵⁸ Article 56(1) states that:

In the economic exclusive zone, the coastal State has:

a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and of its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, current and wind;

b) jurisdiction as provided for in the relevant provisions of this Convention with regard to:

⁽i) the establishment and use of artificial islands, installations and structures;

⁽ii) marine scientific research;

⁽iii) the protection and preservation of the marine environment;

c) other rights and duties provided for in this Convention.

⁵⁹ That Part covers the following matter: employment and training (art.35), health and safety (art.37), prevention of pollution and protection of the marine environment(art.38), applicable private law (article 39), criminal law and jurisdiction (article 40), compliance and enforcement (art.41), civil and administrative jurisdiction (art.42), security and policing in the Zone (art.43), review of applicable law and enforcement arrangements (art.44), rights of third States(art.45) and position of persons in relation to the Zone(art.46).

Unless otherwise provided in this Treaty, each of the States Parties may exercise civil or administrative jurisdiction in relation to development activities in the Zone, or persons present in the Zone for the purposes of those activities, to the same extent as they may do in relation to activities and persons in their own exclusive economic zone.

Thus there seems to be just parallel -and not joint nor international nor bilateral- civil and administrative jurisdiction in the JDZ. Each State implements its own national EEZ jurisdiction, that is the one provided for in the part of the EEZ which is not contested. Actually, the Authority appears to share a part of the civil and administrative jurisdiction in the JDZ. Article 9(2) discloses that

The Authority shall have juridical personality in international law and under the law of each of the States Parties and such legal capacities under the law of both States Parties as are necessary for the exercise of its powers and the performance of its functions. In particular, the Authority shall have the capacity to contract, to acquire and dispose of movable and immovable property and to institute and be party to legal proceedings.

Having this international personality, the Authority also has, *inter alia*, the following functions under article 9(6):

- (a) The division of the Zone into contract areas (...)
- (h) Controlling the movements into, within and out of the Zone of vessels, aircraft, structures, equipment and people;
- (i) The establishment of safety zones and restricted zones, consistent with international law, to ensure the safety of navigation, petroleum activities, fishing activities and other development activities and the effective management of the Zone;
- (j) Issuing regulations and giving directions on all matters related to the supervision and control of operations, including on health, safety and environmental issues;
- (k) The regulation of marine scientific research (...)
- (o) The preservation of the marine environment, having regard to the relevant rules of international law applicable to the Zone (...)
- (r) Requesting action by the appropriate authorities of the States Parties consistent with this Treaty, in respect of the following matters:
 - i) Search and rescue operations in the Zone

- ii) Deterrence or suppression of terrorist or other threats to vessels and structures engaged in development activities in the Zone; and
- iii) The prevention and remedying of pollution.

The nature and scope of such activities covering the division of the Zone, that is a part of the EEZ where other States have rights, the establishment of safety zones and restricted zones, suggest that the Authority enjoys civil and administrative jurisdiction in the JDZ. Especially when one has to consider that it has power for *issuing regulations and giving directions on all matters related to the supervision and control of operations, including on health, safety and environmental issues.* It might be said that the Treaty has granted the Authority with some sort of derived and parallel administrative jurisdiction. It seems there is a kind of derived joint-or international or bilateral- administrative jurisdiction besides the loose parallel civil and administrative jurisdiction exercised in the JDZ by both States Parties.

Article 40 which provides for criminal jurisdiction is more coherent on the exclusivity of parallel State jurisdiction system on the matter, since there is little interference here from the functions of the Authority. It states the following, in its paragraph 1:

Subject to paragraph 3 of this article, a national or permanent resident of a State Party shall be subject to the criminal law of that State Party in respect of acts or omissions occurring in the Zone provided that a permanent resident of a State Party who is a national of the other State shall be subject to the criminal law of the latter State Party.

This article even starts laying down jurisdiction over involvement of citizens from third States in the JDZ. It settles the important issue of the applicable law with respect to foreigner in its paragraph 2.⁶⁰ Paragraph 3 provides for assistance and cooperation between the States Parties. This cooperation may be done through different means:

...Including through agreements or arrangements as appropriate, for the purposes of enforcement of criminal law under this article, including the obtaining of evidence and information.

⁶⁰ This paragraph is written as follows: "A national of a third State, not being a permanent resident of either State Party, shall be subject to the criminal law of both States Parties in respect of acts or omissions occurring in the Zone. Such a person shall not be subject to criminal proceedings under the law of one State Party if he or she has already been tried and discharged or acquitted by a competent tribunal or already undergone punishment for the same act or omission under the law of the other State Part".

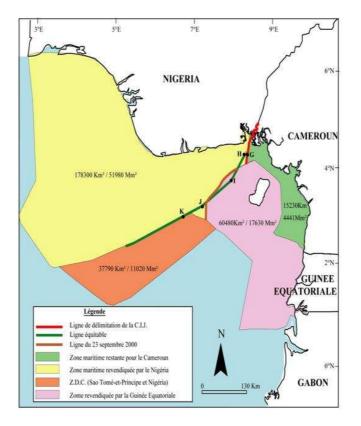
There is no contradiction between the loose and parallel jurisdiction set out in the provisions discussed above on the one hand, and the first principle of joint development disclosed in article 3⁶¹. While the parallel jurisdiction mechanism covers the whole zones and every activity, the principle of joint control comes into effect only in relation with the exploration and exploitation of resource, and not the usual course of activities in the JDZ. It is conceivable that activities related to exploration and exploitation of resources are more restricted or focused.

Anyway, all of these provisions of the Treaty which govern the States Parties sovereign rights and jurisdiction in the JDZ don't contradict the EEZ international legal regime. As we have been noticing, it shows true concern about the rights of third States in conformity with the legal regime of the EEZ.

B. Managing third States rights and interests

One of the main stakes in the establishment of international boundary instruments lies in trying to avoid infringement upon third States rights, which in the framework of an EEZ can be seen as a threefold one: respecting neighbouring States boundary claims (1), coping with the rights and freedoms of other States in the EEZ (2), including, and maybe especially, those of Land-Locked and Geographically Disadvantaged States (3).

⁶¹ Article 3 is bears the title Principles of joint development. Its paragraph 1 reads as follows: "Within the Zone, there shall be joint control (emphasis added) by the States Parties of the exploration for and exploitation of resources..."



1. Respecting neighboring States boundary claims around the JDZ

Map **3:** Overlapping maritime claims: Cameroon's Equitable Line and the N/STP JDZ (Source: Tanga Biang, L'Intervention de la Guinée Equatoriale dans le différend frontalier camerouno-nigerian: fondements, effets et portée, DESS Thesis, IRIC, University of Yaounde II 2007, map no. 12)

The 2001 JDZ could suffer some instability in future if Cameroon was to adopt a legal position consistent with its claim about the *Equitable Line*. One of the stakes about the current negotiations that might be going on between Equatorial Guinea would be resolving the issue of reducing the negative effect of the presence of Bioko Island in Cameroon's maritime zones⁶². Since the ICJ 2001 rule and up to now, this country has been very silent on its view about the

⁶² According to Prescott and Schofield, Cameroon is a shelf-locked country, that is a country "that can make only restricted claims to the continental shelf" or, in a broader conception, "to the seabed and seas". They make the following comment: "On the west coast of Africa Cameroon is a shelf-locked by Nigeria to the west and Equatorial Guinea to the south." Victor Prescott and Clive Schofield, ed., The Maritime Political Boundaries of the World, 2nd ed. (Martnus Nijhoff Publishers:Boston/Leiden, 2005) 51-52.

Treaty, and negotiations with Equatorial Guinea on their maritime boundary are currently going on. Even though some commentators believe that reaching an agreement on the tripoint between Nigeria, Cameroon and Equatorial Guinea is the ultimate solution that could apply here, it remains doubtful to some extent. The situation here is not as different as for the JDA in the Gulf of Thailand between Thailand and Malaysia where the established JDZ appears might have appeared stable at first, especially after the 9 August 1997 EEZ Agreement between Thailand and Vietnam. As a matter of fact, Thailand succeeded in convincing Vietnam to recognize the Defined Area northern border, thus preventing further contestation from that third party. According to the accurate remark of Nguyeng Hong Trao:

The Thai-Vietnamese agreement on maritime delimitation (...) contributes to the strength, security and stability of maritime activities in the Gulf of Thailand and to peace, prosperity and the furthering of mutual interests and development within ASEAN⁶³.

But Cambodia contested the JDZ Thai-Malaysia in 2000. Today, Malaysia, Thailand and Vietnam are involved in discussions to establish a JDZ. Will the outcome of such negotiations be strong enough to stand any contestation from Cambodia?

The N/STP JDZ is even more liable to suffer instability from Cameroon's maritime claims in the Gulf of Guinea as Cameroon is preparing for a submission before the Commission for the Limits of the Continental Shelf (CLCS). By 13 May 2009, Cameroon had filed its document on Preliminary Information Indicative of the Outer Limits of the Continental Shelf to the CLCS, in accordance with Document SPLOS/183, paragraph 1(a) of the CLCS released after the Eighteenth Meeting of the States Parties to the LOSC. This meeting was held in June 2008 in connection with the ten-year time period referred to in article 4 of Annex II to the LOSC⁶⁴. It is clear from the content of this document that there is a high potential for disputes involving the area covered by the N/STP JDZ. The whole JDZ lies within the area claimed by Cameroon as either its continental shelf or its EEZ, and may be overlapping with its continental shelf beyond 200 nautical miles. Though Cameroon itself recognizes that at the date, there is no actual dispute in the sense of the ICJ, it nevertheless accurately admits that they are certainly going to occur in connection to the delimitation of the continental shelf beyond 200 nautical miles. According to

⁶³ Nguyen Hong Trao, op. cit., p. 78 (p. 5 of the web version of the article).ASEAN stands for Association of East Asian Nations.

⁶⁴ See « Demande Préliminaire du Cameroun aux fins de l'extension des limites de son Plateau Continental », released by Cameroon's Ministry of External Relations, available on the website of the DOALOS.

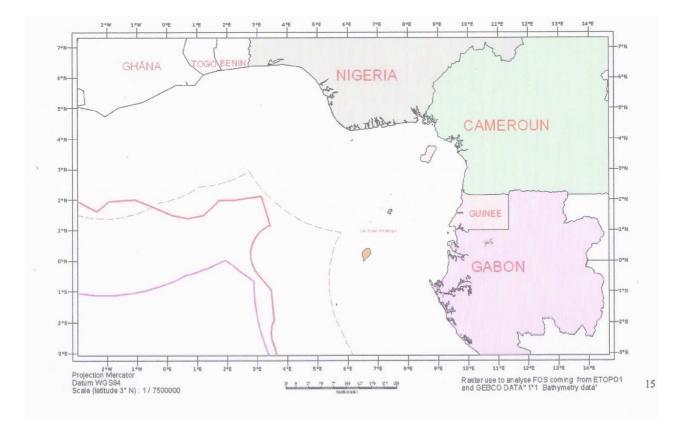
Cameroon, which avails itself of article 76 of the LOSC, Appendix 1 of the Rules of the CLCS and international jurisprudence from the ICJ, there is no actual dispute between it and its neighbors, since it has not yet officially expressed any claims:

Mais le Cameroun est évidemment conscient que sa demande ne peut que s'inscrire dans le cadre juridique de l'Annexe 1 au Règlement intérieur de la Commission des limites du plateau continental. Au regard de la configuration des côtes pertinentes comme de celles du sous sol des espaces marins adjacents, il est manifeste que des différends se cristalliseront immanquablement après la date du 13 mai 2009, sous l'effet de la concurrence potentielle des demandes dont la Commission ne manquera pas d'être saisie, et du fait des inévitables chevauchements de titre juridique à un plateau continental, en deçà des 200 milles marins, qui en résulteront dans la région du Golfe de Guinée⁶⁵.

Cameroon, whose continental shelf and EEZ are still to be fixed in connection with the final delimitation of maritime boundaries between it and Equatorial Guinea and may be Sao Tome and Principe, shows its readiness to contemplate the solution of joint Submission implying constructive negotiations with its neighbors in accordance with the Rules of the CLCS. The fact that Cameroon's claims in the Gulf of Guinea should affect the N/STP JDZ is evidenced by the different maps produced by Cameroon in its Preliminary Information⁶⁶.

⁶⁵ See Demande Préliminaire du Cameroun, op. cit.

⁶⁶ See Annexes 2 to 8, and especially annex 9, which display various geomorphologic lines used in determination of the outer limit of the continental shelf beyond 200 nautical miles. Among these are the Gardiner and the Hedberg formulae, as well as line of constraint.



Map 4: Annex 8 of the Preliminary Information Indicative of the Outer Lmits of Cameroon's Continental Shelf (Source: website of DOALOS)⁶⁷

Besides being more directly involved with the issue of the limits of the JDZ, neighboring countries are also interested in the general interest of third States in the JDZ, as part of the international community.

⁶⁷ In Cameroon' s view, the lines on the map represent different lines pertaining to the delimitation of the outer limit of the continental shelf beyond 200 nautical miles in the Gulf of Guinea, according to article 76 of the LOSC and to its interpretation by the CLCS. See also Appendices 17, 18 and 19 at the end of this research paper.

2. Rights and freedoms of other States in the JDZ

Once the JDZ or EEZ is settled with due regard to maritime claims from neighbouring States, the coastal State still has to pay attention to third States rights within the EEZ itself. Article 56 on the rights, jurisdiction and duties of the coastal state in the exclusive economic zone provides for the following in its paragraph 2:

In exercising its rights and performing its duties under this Convention in the exclusive economic zone, the coastal State shall have due regard to the rights and duties of other States and shall act in a manner compatible with the provisions of this Convention.

Those rights are described all along Part V on the EEZ, since the provisions of that Part govern the EEZ and those States have rights of their own in that zone. Especially, article 58 on the Rights and duties of other States in the exclusive economic zone states those rights. They are also rights for those States, set out along with those of the coastal State in articles 246 on marine scientific research in the EEZ. They don't have rights only, but also duties under articles 248 and 249.

3. Rights of Land-Locked and Geographically Disadvantaged States

There are two particular groups of States whose interests could be involved in the JDZ in a special manner: Land-Locked States (LLS) on the one hand and Geographically Disadvantaged States (GDS) on the other hand. They have been granted certain rights by LOSC in the EEZ of coastal States of the same region or sub-region to which they belong.

As stressed by Stephen C. Vasciannie, there is no difficulty in the definition of LLS:

In both law and geography, it connotes a state which has no sea-coast and which must, therefore, rely on one or more neighbouring countries for access to the sea.⁶⁸

⁶⁸ Stephen C. Vasciannie, Land-Locked and Geographically Disadvantaged States in the International Law of the Sea (New York: Oxford University Press, 1990), 4. According to this commentator, in 1990, there were thirty LLS in the world and Africa, with fourteen among them, had the bulk of those States. For Africa their number must now amount to fifteen, for it seems that Ethiopia became a LLS due to Eritrea successfully separating from it by gaining independence on May 24 1993. Thus African LLS at date should be: Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Ethiopia, Lesotho, Malawi, Mali, Niger, Rwanda, Swaziland, Uganda, Zambia and Zimbabwe. Asia had, or rather has five LLS: Afghanistan, Bouthan, Laos, Mongolia and Nepal, whereas South America had only two them: Bolivia and Paraguay. In Europe there were nine in 1990, but in the wake of the collapse of the Iron Curtain, there are more, among which Austria, Belarus, Czech Republic, Slovakia, Hungary, Liechtenstein, Luxembourg, San Marino, Switzerland, Vatican City, Moldova and Serbia.

Things are a bit different as what concerns the definition of GDS. According to the same author, there is *some tension between geographical and economic criteria*⁶⁹ in the definition proposed for GDS in LOSC article 70(2). In the opinion of that commentator, this provision gives a definition that is functional exclusively in relation to Part V of UNCLOS to which it is part, as it states:

For the purposes of this Part, "geographically disadvantaged States" means coastal States, including States bordering enclosed or semi-enclosed seas, whose geographical situation makes them dependent upon the exploitation of the living resources of the exclusive economic zones of other States in the sub-region or region for adequate supplies of fish for the nutritional purposes of their populations or parts thereof, and coastal States which can claim no economic exclusive zones of their one.

Definitely, one should admit that there is a fundamental definition problem with GDS which might explain why States would prefer not to claim that statute, as the issue would appear to be a tricky and slippery one. For besides definition, there are other problems linked to it, such as the will from coastal State to accede to claims from any GDS. Let just focus on LOSC definition: according to it, which State is entitled to consider itself a GGS? Which *geographical situation* can be considered to entail *dependence* on other countries' EEZ? Which mechanism comes into account to estimate the adequacy of food supplies? The distinction is not easy, and Vasciannie's remarks are right, and his following proposal of definition reasonable:

From the outset, it may be stated that this provision is unlikely to achieve the basic objective of distinguishing disadvantaged States from others...[I]t is not entirely clear which States may claim to be disadvantaged because they cannot satisfy the nutritional requirements of their populations. The better view seems to be that this category must be confined to States which, because of the limited resource potential of their coastal waters, established a pattern of fishing off the coasts of neighbouring States prior to the emergence of the EEZ as a legal concept⁷⁰.

Moldova is a newly born European country which gained its independence in 1991; Serbia became a LLS as a result of Montenegro accession to sovereignty on 3 June 2006; see the World Factbook-Moldova, Internet; available on https://www.cia.gov/library/publications/the-world-factbook/geos/md.html. 11 March 200

^{10.} Today, there should be about forty-four (44) LLS around the world.

⁶⁹ S. C. Vasciannie, Land-Locked States, 10.

⁷⁰ Ibid., 11.

Still, Vasciannie has proposed another practical definition "adopted only for reasons of convenience and brevity", just for writing and not for legal purpose, as he himself warns about it. That definition is simple and clear, and could be upheld here, as it refers to GDS as "the costal States that were members of the LLGDS group at the UNCLOS III" negotiations⁷¹. According to that criterion, Cameroon can pretend to be a GDS, as it "joined the LLGDS group at any stage of the UNCLOS III"⁷², which took place between 1973 and 1982⁷³. Cameroon would still qualify if the criterion could be one of those upheld by the said group itself during negotiations⁷⁴. It could still qualify if the Gulf of Guinea could be considered a closed or semi-enclosed sea. This latter concept too poses a problem of definition to commentators⁷⁵. That is an area where the delimitation of EEZ lives too little a part for a coastal State to have its proper EEZ .Having Cameroon qualifying as part of an enclosed or semi-enclosed sea would be tantamount to recognizing Cameroon's dependency on the EEZ of its neighbours, including the JDZ, for its needs in fish.

Along with Cameroon, the most steady African participant in those negotiations, the other African countries involved in the LLGDS group were Algeria, Ethiopia, which is no more a coastal State as stated above, Gambia, Jamaica, Sudan and Zaire (or RDC Congo)⁷⁶. This last country might be as interested as Cameroon in having GDS rights given more reality in EEZ in the Gulf of Guinea, the JDZ included. Just like Cameroon, RDC Congo is a member of the Gulf of Guinea Commission.⁷⁷ Pending the final delimitation of their respective maritime boundaries in the Gulf of Guinea, it is our view that those countries should have certain rights in the JDZ

⁷¹ Ibid., 16.

⁷² Ibid.; see footnote 44, where the author talks about a suggestion by Alexander and Hodgson that Cameroon, Ghana, Ivory Coast, Thailand and Japan would fall in the category of States that had fishing practice in the EEZ of neighbouring countries prior to the UNCLOS III and deserve being considered GDS for that reason; see L.M.Alexander and R.D.Hodson, "The Role of the Geographically Disadvantaged States in the Law of the Sea", San Diego Law Review, vol. 13(1976):558-567.

⁷³ Ibid., 9.According to Vasciannie, following proposals dated 8 April 1976 by LLGDS, "GDS would be coastal States (i) which cannot claim economic zones, (ii) whose zones are less than 30% of the areas they could have claimed if they were able to extend their zones to the maximum limits permitted by the Convention, or (iii) which, for geographic, biological, or ecological reasons of a natural character derive no substantial economic advantage from living resources in their zones and are adversely affected by the establishment of zones by other States." See his footnote 34.

⁷⁴ During the negotiations, the LLGDS group defined three criteria from which the LOSC' definition could get further clarification:

⁷⁵ See the next discussion "C.Commitment to protect environment" on the statute of the Gulf of Guinea

⁷⁶ Ibid., 8; see footnote 31.

⁷⁷ See Chapter III and IV below for the role that this institution could play as what regards the JDZ and maritime disputes settlement among its members.

which they should and could claim as GDS. Anyway, while admitting that a definition problem needs to be tackled, the fact remains that this category exists in the law of the sea, and one cannot once and for all draw a line upon those rights in the EEZ or the JDZ. As Vasciannie rightly explains:

It should be emphasized that the vagueness of the criterion does not deprive it of normative content; although the discretion granted to the parties is wide, this does not in itself mean that LLGDS have no rights to resources under the provisions of Articles 69 and 70. These articles actually incorporate the legal *rule* that distribution should be on an equitable basis: *this is the norm that governs the relationship between the parties* (emphasis added). In this regard, the provisions appear to be consistent with the general trend in the international law of resource allocation⁷⁸.

Coming back to LLS, apart from the right of transit or right of access to the sea through the territory of neighbouring coastal States, LLS have specific rights in JDZ. Those rights have specific importance in the context of developing regions. Although some LLS such as Chad in the Gulf of Guinea region actually enjoy their right of transit, there is some silence prevailing about these rights. It seems as if those countries are not enough aware of these rights. But this situation is about to change. The fact that some LLS such as Moldova have started to claim for their implementation paves the way for a more active stance from LLGDS towards these rights. On acceding to LOSC on 6 February 2007, this State made the following declaration:

As a country without seashore and geographically disadvantaged bordering a sea poor in living resources, Republic of Moldova affirms the necessity to develop international cooperation for the exploitation of the living resources of the economic zones, on the basis of just and equitable agreements that should ensure the access of the countries from this category to the fishing resources in the economic zones of other regions or sub regions.⁷⁹

One may further note that two African LLS, Lesotho and Chad, became parties to the LOSC⁸⁰.With more and more LLGDS becoming parties to the LOSC, we could soon have claims

⁷⁸ S. C. Vasciannie, Land-Locked States, 51.

⁷⁹ Available on DOALOS website at http://www.un.org/Depts/los/convention_agreements/convention_declarations. htm#Moldova; accessed on 16 March 2010.See also Robin Churchill, Robin Churchill, "Dispute Settlement under the UN Convention on the Law of the Sea: Survey for 2007", The international Journal of Marine and Coastal Law 23, no. 23 (December 2008) 602.

⁸⁰ Lesotho ratified the LOSC the same day as Morocco, on 31 May 2007.See http://www.un.org/Depts/los/ convention_agreements/convention_declarations.htm and Robin Churchill, Robin Churchill, "Dispute Settlement... 2007", The IJCML, 602.Chad became a party to LOSC on 14 August 2009 LOSC, bringing the

similar to those of Moldova from Africa and other parts of the world, for example from the East China Sea where there are prospects of joint development upon EEZ and continental shelf between China and Japan. According to Vascinnie:

In theory (...) up to 5 LLS, namely Mongolia, Afghanistan, Nepal, Bhutan, and Laos, may assert rights of access to the area which China may clam as its EEZ^{**81}.

Where the writing of the commentator says "rights of access", one could surely also hear "possible right to a share part of the living resources".

The right of transit is effective between Cameroon and its neighbours, even though things are not perfect. But is it enough? What about having access to the living resources Nigeria, Sao Tome-et-Principe, Equatorial Guinea, Gabon, are going to enjoying by exploiting EEZ or the JDZ?

Rights related to living resources in EEZ and JDZ will be dealt with properly in Chapter III. We can conclude this part by stating that according to the LOSC, LLS or GDS such as Cameroon, Chad, the Central African Republic and even the Democratic Republic of Congo might have some rights to claim in the JDZ as this area is part of the ZEE in the region or sub-region to which they belong.

Their legal position and claims might play a role in the future as to what concerns the importance of the JDZ to regional development and, why not, to the progress of the whole regime of the law of the see. For actually the LLGDS first claim at UNCLOS was the "equal access" to the sea, and not just "equitable access". They eventually accepted this restriction of their claim due to their weak number, and not by conviction, it seems. It is not sure whether a debate about the extension of the notion of "common heritage of humanity" to EEZ and even to certain maritime areas as the Arctic Ocean is not going to burst out. LLGDS would have good reasons to develop this kind of ideas. And they would be right, for, on what ground should coastal states appropriate what is not theirs, by the usual rule of property? Have they ever invested more than LLGDS in waters superjacent to the ocean floor or seabed? No, of course, should one answer. EEZ and JDZ they can bear could be subjected to the notion of "common propriety of humanity", and entail a sharing of those resource on an "equitable and equal access"

number of parties States to LOSC to 160, as it was until 01 March 2010. See "Chronological lists of ratifications of, accessions and successions to the Convention and the related Agreements as at 01 March 2010", available at http://www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.htm. Accessed on 11 March 2010.

⁸¹ S. C. Vasciannie, Land-Locked States, 51. See author's footnote no 111.

principle, even if there would be a subsequent need for all States of a region to share the expenses linked to the development of resources and to the protection of the nature. This would be true justice, equity and rightfulness, instead of the selfish confiscation of a common good.

C. Commitment to protect environment

There are provisions in the Treaty dedicated to the protection of the environment. They are not really developed ones, as they form part of the functions and powers of the Authority under article 9. However, one can discriminate between measures that the Authority is supposed to take in fighting pollution, and measures properly related to the management and protection of living resources in the JDZ. It is doubtful whether the Authority let alone would ever be able to implement those measures, without a view shifting towards a regional or sub-regional approach⁸². But at least they exist and contribute to evidence the concern of both parties to adhere to the international legal regime of the EEZ. Under article 9, the Authority is in charge of "the preservation of the marine environment, having regard to the relevant rules of international law applicable to the Zone", as well as "the prevention and remedying of pollution". Protecting living resources in the JDZ also involves an aspect of international law which has to do with the status of the Gulf of Guinea under certain considerations present in the LOSC.

Is the Gulf of Guinea a closed or semi-closed sea? The Parties commitment towards marine environment should also be appreciated in the light of the possibility for the sub-region being eligible to the statute of closed or semi-enclosed sea. Part IX of the LOSC is dedicated to enclosed or semi-enclosed seas. It's made up of two articles. Article 122 is about definition. It is not precise enough about the distinction between enclosed and semi-enclosed seas. It makes it however clear that a gulf "consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more States"⁸³ should be considered as an enclosed or semi-enclosed sea. This seems to be the situation in the Gulf of Guinea. Let us suppose it is so.

Article 123 appears important in relation between neighbouring coastal States and the JDZ, as it deals with "Cooperation of States bordering enclosed or semi-enclosed seas". It sets up an

⁸² See Part II, Chapter III and especially chapter IV.

⁸³ The complete definition reads as follows: "For the purposes of this Convention, "enclosed or semi-enclosed sea" means a gulf, basin or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal States".

obligation to collaborate between States bordering the enclosed or semi-enclosed sea. They have to do it directly or through an appropriate regional organization.

This obligation appears to entail that if the qualification is suitable for the Gulf of Guinea, Nigeria Sao Tome and Principe should notice that there is a need for them to be open to collaboration with neighbouring States in the framework of the whole ZEE in the Gulf of Guinea, which encompasses the JDZ.

A similar concern exists about the whole Artic ocean. While asserting that "the Arctic Ocean is a semi-enclosed sea", Tavis Potts and Clive Schofield seem to be acknowledging the opposite at the same time as they state that:

The question of whether the Arctic Ocean qualifies as a semi-enclosed sea within the meaning of Article 122 of the United Nations Convention on the Law of the Sea (LOSC) has been described as something of a "vexed question" in itself, not least because of the obligation for bordering states to cooperate under Article 123 of the same Treaty⁸⁴.

This remark suggests that there is a shared feeling among some scholars that in semienclosed seas, the protection of the marine environment could be better achieved through cooperation between coastal States, and that this cooperation is based on an international obligation. This obligation is above bilateral achievements, it recommends cooperation with almost all neighbouring States, if not all of them. In relation to the JDZ, it entails an obligation to cooperate beyond its boundaries for the sake of efficient environmental management, as well as compliance with the international law of the sea.

The discussions in this chapter have helped us to realize that the 2001 Treaty establishing a JDZ between Nigeria and Sao Tome and Principe in the Gulf of Guinea, is a provisional arrangement in accordance with article 74(3) of the LOSC to which it refers in its Preamble. The legal regime set out in the Treaty is homologous, in its broad lines, to the specific legal regime of the EEZ under Part V of the LOSC. There is however a major difference with the specific regime of the EEZ: the sovereign rights and jurisdiction in the JDZ are not exercised by a single coastal State, but rather by two States. The Treaty organizes a parallel system of jurisdiction in the JDZ according to which either State enjoys jurisdiction in the Zone. It seems that the Joint Authority

⁸⁴ Tavis Potts, Clive Schofield, "The Arctic Scramble? Opportunities and Threats in the (Formerly) Frozen North", The International Journal of Marine and Coastal Law, 23, no 1,(March 2008):151-52

too enjoys jurisdiction over the JDZ to some extent. But there is a real possibility that the JDZ could face some claim from Cameroon about its EEZ or continental shelf in the Gulf of Guinea. The Treaty is cautious about respecting third State rights and freedoms in the JDZ in general, but remains silent about the rights of LLGDS. Besides the explicit reference to paragraph 3 of article 74, there is no great innovation as against other cases of provisional joint development agreements. It would now be interesting to get involved into further comparison of the JDZ and the broader State practice.

CHAPTER II: COMPARING THE 2001 JDZ WITH THE BROADER PRACTICE OF JOINT DEVELOPMENT

A further comparison between the 2001 JDZ and the State Practice in other parts of the world would require selecting some features worth that comparison. But the carrying out of such comparison exercise cannot be done without choosing among a number of features in order to decide which ones are going to come into account⁸⁵. In the former Section, an emphasis has been laid in the interests and rights of third countries as to what regards the delimitation of the N/STP JDZ and its legal regime. As the complexity of the institutional frame set forth is, besides a larger area, what really distinguishes JDZs from unitization⁸⁶, one could easily agree to withhold that feature in order to compare the N/STP JDZ with other joint development agreements, including unitizations⁸⁷. Such a feature relates both to law and management.

⁸⁵ A quick overview of the State practice in this matter shows that such features could easily amount to twenty of them: 1. institutional framework and presence or not of a supervising body; 2.modality of the jurisdiction and its extent; 3.relation to the LOSC article 74(3) and 83(3); 4.non-renunciation clause; 5.dispute settlement mechanisms; 6.resource or zone sharing percentage and equity; 7.duration and entry into force; 8.petroleum mining code or legislation; 9. taxation code or legislation, royalties, fiscal and other financial matters;10.protection of private parties interests;11.area delimitation and apportionment, claims and related issues;12.unitization clause;13.pollution liability clause against private parties;14.specific cooperation features;15.health and safety for workers;16.law of the flag State;17.customs, quarantine and migration jurisdiction implimentation;18.immunity or customs duty-free legislation for goods and equipment entering the JFZ in relation to petroleum activities; 19.air traffic services;20.international legal status of the JDZ, its structures and the persons therein. There have been several attempts to classify these features, according to writers. Writers often focus on four or five broad features such as 1.sharing of resources, 2. management, 3.applicable law, 4.operator / position of contractors, 5.financial provisions and 6. dispute resolution. As a matter of fact this latter attempt has been proposed in Ana E. Bastida and others (2007), 411.

⁸⁶ See Jonathan and others, International Maritime Boundaries, Vol. V., 3625: "A JDZ normally covers a relatively large area, in contrast to unitization agreements, and requires the establishment of a complex legal regime for licensing, exploration and development." These authors help to see, as a way of contrast, what matters in comparing unitization agreements. They do so by identifying what in their view are the "five basic elements to a unitization agreement: 1.the definition of the field and/or Unit Area to which it will apply; 2.the determination of the applicable law; 3.the determination of the roles of the governments; 4.the determination of the amount of reserves in the unit and the way in which they and the costs associated with exploitation will be shared; and 5.the determination of the model for the commercial exploitation for the Unit Area."

⁸⁷ As the difference between unitization and joint development bears more on quantity rather than on quality terms, it may be considered a minor one. Thus unitization may be a component or category of joint development agreements. May be it would be more accurate to refer to unitizations in the latter case as *cross-border unitization*, for unitization agreements also appertains to the concept of provisional arrangements, as they sometimes occur even in the absence of boundaries, like in the 2003 unitization treaty over Greater Sunrise between Timor and Indonesia. An article released by some writers some years ago so suggests: Ana E. Bastida and others, "Cross-Border Unitization and Joint Development: An International Law Perspective", Houston Journal of International Law 29, no. 2 (2007), in HeinOnline [database on-line], UN Library, Electronic Resources; accessed April 08, 2010.It is somehow unfortunate that this article seems to assimilate unitization to

However, withholding their institutional framework in order to compare particular joint development agreements should not be viewed as any prevention from taking into consideration specific legal features like the relation with paragraph 3 of the LOSC articles 74 and 83, the non-renunciation clause, the resource or zone sharing percentage, the dispute settlement mechanism or the duration of the agreement. Our discussion has been trying to defend the position that broadly speaking, joint development consists of those-but not all- provisional arrangements taking the form of JDZs, and unitization agreements. For provisional arrangements are not necessarily JDZs. These are two different concepts with just some theoretical or notional overlapping, and confusing them would prevent from reaching any sound assessment of the State practice related to each of them. In the same vein, it may be accurate to notice that not all unitization agreements take place across established boundaries, even if the practice of cross-border unitizations is the most common one:

The concepts of joint development and unitization are not mutually exclusive, because a JDZ could be divided into separate contract areas so that deposits may occur across its internal boundaries. In addition, deposits may be found that cross the boundary of the JDZ into an area where one of the states exercises exclusive sovereign rights.⁸⁸

The 2001 N/STP JDZ is both a JDZ, that is a joint development agreement establishing joint jurisdiction in a maritime area, and a provisional arrangement as it has been reached pending maritime delimitation, under article 73(3) of the LOSC which provides for such situations.

When the JDZ was established in 2001, there had already been some provisional arrangements both at the regional and world scale, as well as many examples of JDZs. In order to have an acceptable assessment of the contribution or originality of the N/STP JDZ Treaty in respect to the State practice of joint development, a general survey of State practice may prove to be useful. Focusing on some particular legal and management issues, a few more considerations could be withheld as one compares the JDZ with earlier international practice (Section I), or with current State practice (Section II) of joint development agreements.

joint development and does not undertake to underline the specificity of provisional arrangements carried out under the LOSC relevant provisions. See infra, our conclusion.

⁸⁸ Ibid.,359. This is the case in the Timor Sea in the JPDA between Timor and Australia, where the two contracting parties have decided the unitization of Greater Sunrise field in 2003.

SECTION I: COMPARING THE JDZ WITH EARLIER STATE PRACTICE

As a matter of fact, there are many forms of joint development agreements. It could arguably be said that there are two extreme divisions or classes for joint development agreements: joint development over no-boundary areas, to which some provisional arrangements are part, and joint development with transboundary delimitation. Unitizations may be part of either form of joint development, or occur themselves as joint development agreements. Our study might nonetheless lay more emphasis on provisional arrangements, as they involve State practice based on multilateral treaty law, at least for States Parties to the LOSC. While the comparison should bear on all the regions of the world, like the Nord Sea, the Persian Gulf, the Gulf of Thailand or the East China Sea, it might be preferable to put more attention on one or two joint development agreements for each region. For some agreements can be viewed as major achievements in terms of joint development in these regions, which happen thus to deserve special merit in this regard.

The discussions about comparing the JDZ with earlier State practice can be carried out starting by some comparison of the JDZ to the universal State practice (A) on the one hand, and to the African regional State practice (B) on the other.

A. Comparing the 2001 N/STP JDZ to universal State practice of joint development

It may be interesting to compare the JDZ with the earliest practice of joint development, which started in the Persian Gulf between Bahrain and Saudi Arabia in 1958(1), then the latter and Kuwait 1965(2). Then one could turn to the 1974 France-Spain Bay of Biscay Agreement(3) in the north Atlantic Ocean, and the 1974 Japan-Korea agreement (4) in the East China Sea, which followed that prime practice, before considering the more recent 1981 Norway-Iceland Arrangement for Jan Mayen (5) still in the north Atlantic region. Although no joint development as such has actually been reached yet over the maritime area around the Falklands/Malvinas, it is our view that one should pay heed to the 1995 Joint Declaration achieved by Argentina and Great Britain in the South Atlantic (6). Lastly some attention ought to be given to the 1979 MOU between Malaysia and Thailand (7) in the Gulf of Thailand, as well as to the 1993 agreement setting a JDZ between Columbia and Jamaica(8).

1. The 22 February 1958 Agreement between Bahrain and Saudi Arabia: the first JDZ in the Persian Gulf

The Persian Gulf and Saudi Arabia must be famous for being associated with the two worldwide earliest cases of joint development as State practice after the Post War era⁸⁹. As far as academic commentary come across in the course of this dissertation is concerned, the first agreement related to joint development in the post-war era is the bilateral Bahrain-Saudi Arabia Agreement of 22 February 1958. The Persian Gulf is a semi-enclosed sea bordered by eight States⁹⁰. Being a Gulf surrounded by more than two States and connected to the Indian Ocean by a narrow outlet, it is indeed a semi-enclosed sea, according to LOSC article 123. The Strait of Hormuz, to which it is connected, gives into the Indian Ocean through the Gulf of Oman. Furthermore, it seems to be "consisting entirely or primarily of the territorial seas or exclusive economic zones" of its riparian States. It would thus be a semi-enclosed sea from a double point of view. Since it is our position that the Gulf of Guinea too can be considered as a semi-enclosed sea on the ground of the same LOSC provision, there is a reason to compare State practice between those regions.

According to Patrick Armstrong and Viv Forbes:

The Bahrain-Saudi Arabia Agreement has established a hexagonal area wherein Saudi Arabia is free to exploit hydrocarbon resources on condition that it grants to Bahrain 50 percent of the net income from the development of the zone⁹¹.

⁸⁹ There might be cases of earlier joint development in the world. For instance, the 1879 Treaty between France and Spain occurred sooner. Yoshifumi Tanaka reports that it "divides the Bay of Figuier into three distinct, equal zones, one reserved for France, one for Spain, and a third for common use(Article I).According to this system, where there are overlapping territorial seas, the latter are common to both States." This writer gives the names of two law commentators, J. Bluntschli and A. Rivier who "promoted this common zone approach, which transforms an overlapping area into a kind of *condominium*, thus avoiding the delimitation problem." Yoshifumi Tanaka, Predictibility...(2006), 31-32

⁹⁰ Lewis M. Alexander, "Region VII. Persian Gulf Maritime Boundaries', in International Maritime Boundaries, Vol. I, eds. Jonathan I. Charney and Alexander Lewis (Dordrecht/Boston/London: Martinus Nijhoff Publishers, 1993), 315.

⁹¹ Patrick Armstrong and Viv Forbes, "Calming the Ripples: The Cooperative Management of Ocean Resources – The Falkland Islands Example and Some Southeast Asian Comparisons", Boundaries and Energy: Problems and Prospects, eds. Gerald Blake and others (London: Kluwer Law International, 1998), 353.The text of the agreement is reproduced in Jonathan I. Charney and Alexander Lewis, eds., International Maritime Boundaries, Vol. II, (Dordrecht/Boston/London: Martinus Nijhoff Publishers, 1993), 1495-1497; also available at http://untreaty.un.org/unts/120001_144071/16/2/00012848.pdf. (accessed 27 March 2010).The agreement was registered by Saudi Arabia by the UN on 9 September 1993.It entered into force on 22 February 1958.According to an administrative document from the United States the Treaty entered into force rather on 26 February 1958,

This is stated in article 2 of the Agreement⁹² which had been negotiated in order to establish a boundary between the "submarine areas" of the Parties. The said hexagon is referred to in that provision as an area bounded by six lines, lying north eastwards of the Saudi Arabian part of the boundary. Article one says that the boundary is based on a median line, which appears to be the actual accurate maritime delimitation method, as validated by the international jurisprudence since 1999, though after some previous hesitations⁹³.

The Agreement is certainly very innovative, if not revolutionary. One should recall that the UNCLOS I began just two days after the adoption of this Agreement⁹⁴. It should be taken notice that at that time, States like Saudi Arabia and Bahrain where newly born or independent,

upon exchange of *ratifications* (p.2), whereas the Treaty itself contemplated entering into force through mere *signature* by both Parties, as set forth in its article 6.See The Geographer, Limits in the Seas, continental Shelf Bahrain-Saudi Arabia, number 12, March 10 [book on line](Washington: Department of State, 1970, accessed 27 March 2010); available from http://www.state.gov/documents/organization/62003.pdf. This document seems somewhat lacking precision, if not accuracy.

⁹² That provision reads in its ending part as follows: "The said area, as delimited above, is the sector belonging to the Kingdom of Saudi Arabia. In accordance with the desire of His Highness the Ruler of Bahrain and with agreement of His Majesty the King of Saudi Arabia, oil resources there shall be exploited in the manner chosen by His Majesty, on the understanding that the Government of Bahrain shall be accorded one half of the net revenues accruing to the Government of Saudi Arabia as a result of such exploitation. This shall be without prejudice to the right of sovereignty and administration of the Government of Saudi Arabia over the area stipulated above."

⁹³ There seems to be three seminal cases in this respect: the Eritrea/Yemen case decided by the December 17, 1999 Award of the Arbitral Tribunal in the Second Stage of the Proceedings(Delimitation), the Maritime Delimitation and Territorial Questions Between Qatar and Bahrain(Qatar v. Bahrain) and the Land and Maritime Boundary between Cameroon and Nigeria (Cameroon v. Nigeria: Equatorial Guinea intervening) cases over which the ICJ ruled respectively in 2001 and 2002. See Laurent Lucchini, "La Délimitation des frontières Maritimes dans la Jurisprudence Internationale: Vue d'ensemble", in Maritime Delimitation, eds. Rainer Lagoni and Daniel Vignes (Leiden/Boston: Martinus Nijhoff Publishers, 2006), 1-18; see also Maurice Kamga, Délimitation maritime sur la côte atlantique africaine (Bruxelles: Editions Bruylant/Editions de l'Université de Bruxelles, 2006), and Robert Volterra: "Recent Developments in Maritime Boundaries Delimitation. Brief Reflections on Certain Aspects of Two UNCLOS Cases (Eritrea /Yemen and Qatar v. Bahrain)", available from http://www.gmat.unsw.edu.au/ablos/ABLOS01Folder/VOLTERRA.PDF. Accessed 27 march 2010; (accessed 27 March 2010).

⁹⁴ The UNCLOS I negotiations lead to the adoption on 25 April 1958 of the four Geneva Conventions and were held from February 24, 1958, to April 27. They served as a codification forum for customary principles of the law of the sea: "On 29 April 1958, as recorded in the Final Act (A/CONF.13/L.58, 1958, UNCLOS, Off. Rec. vol. 2, 146), the United Nations Conference on the Law of the Sea opened for signature four conventions and an optional protocol: the Convention on the Territorial Sea and the Contiguous Zone (CTS); the Convention on the High Seas (CHS); the Convention on Fishing and Conservation of the Living Resources of the High Seas (CFCLR); the Convention on the Continental Shelf (CCS); and the Optional Protocol of Signature concerning the Compulsory Settlement of Disputes (OPSD). The CTS entered into force on 10 September 1964; the CHS on 30 September 1962; the CFCLR on 20 March 1966; the CCS on 10 June 1964; and the OPSD on 30 September 1962. States bound by the Conventions and the Protocol, are, as at 23 July 2008, respectively: for the CTS, 52; for the CHS, CCS, 58; 63: for the CFCLR, 38: for the and for the OPSD. 38"; see http://untreaty.un.org/cod/avl/ha/gclos/gclos.html. (accessed 27 March 2009). Those four instruments were going to bear seminal influence on the evolution of the law of the sea, especially in the field of maritime delimitation.

and that there was no such clearly known international law rule promoting joint development as article 74(3) and 83(3) of the LOSC.

The Preamble suggests that the Agreement resulted out of a diplomatic framework of friendly relationship between both States and good will from their leaders⁹⁵. It also involves, under its article 2, a "no prejudice clause" which has been part of virtually all joint development agreements since then. To that extent, the 2001 JDZ between Nigeria and Sao Tome and Principe is akin to it, although in the latter agreement the negotiating parties failed in their attempt to delimit their boundary. It brings confirmation to academic commentary position that holds that good relationship is essential in achieve joint development agreements. The most important comparison feature is the agreement on joint development of sea-bed oil resources arrived at. In the contrast, it does not create any JDZ or any infrastructure similar to it. Nor is it any kind of provisional arrangement either. The exploitation and the sharing systems are light compare to any JDZ structure. Saudi Arabia as so to say is the unique operator, who is in charge of the exploitation of the zone to the mutual benefit of both partners. Bahrain just has to wait and receive its share of revenues generated by the exploitation of the Area. But this process raises the question of the denomination or qualification of such a deal. Is it really joint development? It might be more appropriate to use apply the expression "joint sharing" or simply "sharing", rather joint development or even joint exploitation.

2. The 7 July 1965 Agreement between Kuwait and Saudi Arabia

In 1922, the Al Uqair Protocol establishing a "Neutral Zone" was signed between Kuwait and Saudi Arabia⁹⁶. This Neutral Zone was a part of land upon which both States could not agree on a land boundary. Its apportionment eventually occurred latter on and gave way to the second joint development agreement signed by Saudi Arabia, to the extent that it is assumed that the previous one signed with Bahrain in 1958 can be considered as such. An Agreement created a JDZ in the maritime area between these States. In his article, Gao presents a shorter list of eleven joint development agreements, excluding the 7 July 1965 Agreement between the Kingdom of Saudi Arabia and the State of Kuwait relating to Partition of the Neutral Zone from his list, on

⁹⁵"In view of the spirit of mutual amity and friendship, and given the *desire* of his Majesty the King of Saudi Arabia to *offer all possible assistance* to the Government of Bahrain..." (emphasis added).

⁹⁶ Gao Jianjun, "Joint Development", IJMCL (March 2008),57.

the ground that it involves a disputed land territory, what his study doesn't deal with. He also mentions that this agreement has been followed by a newer one, that is the July 2, 2000 Agreement between the Kingdom of Saudi Arabia and the State of Kuwait concerning the submerged area adjacent to the divided zone, which entered into force on 31 January 2001⁹⁷.

This agreement might be a distant factor in the process that lead to the above mentioned 1958 Bahrain-Saudi Arabia Agreement setting forth the first joint development agreement of the Postwar period. As the apportionment of the Neutral Zone is based on Islamic culture, one might interestingly contemplate that Islamic culture contributed indirectly to the peaceful settlement of maritime disputes-be they related to boundary or to resources exploitation- in the current era. Indeed, it should further so be considered, as Saudi Arabia appears to have taken early lead in post-war era joint development practice. Since Saudi Arabia is one of the most important spiritual and political centers of the Islamic and Arabic world, and having due regard to the three or so joint development agreements in which it got involved between 1958 and 1974⁹⁸, it seems as if these diplomatic and legal achievements are part of an international Saudi Arabian politics of influence in its neighborhood, just as the N/STP-JDZ expresses to some extent the will of Nigeria to weight on the continental or sub-regional international politics.

Ibid., 57-58;see his footnote 77. Thus according to him, this agreement adds to the list of joint development agreements he sets aside, just as the 18 November 1971 Memorandum of Understanding between Iran and Sharjah, on the basis that they are not relevant for the study of the dispute in the East China Sea. Having already disqualified two categories of joint development agreements related respectively to joint development as part of a boundary delimitation agreement, and unitization agreements related to "boundary-straddling deposits", he discloses that "the practice concerning co-operative exploitation of marine resources surrounding the continental or insular land territory over which there exists a sovereignty dispute will not be included either, because the delimitation of co-operative areas in such situations has closer links to territorial title rules than to maritime delimitation rules" (see pages 42-43). This in fact could be seen as a fourth category of joint agreements underlined in Gao's paper, to be added to the three ones referred to in our note on the numerical importance of joint development practice in the world (see our Introduction). This can't help being the case as he qualifies these agreements as a "practice concerning co-operative exploitation of marine resources" and as he gives other examples of such agreements. According to the information he releases, that fourth category of joint development agreements shall include : (1) the 1 July 1965 agreement between Saudi Arabia and Kuwait which Gao eventually sets aside after having counted it, reducing his list of joint development agreements pending maritime delimitation from twelve to eleven(compare enumeration on page with twelve agreements, and page 43 with eleven agreements); (2) the 18 November MOU between Iran and Sharjah; (3)the 27 September 1995 Joint Declaration of Argentina and the United Kingdom on Co-operation over Offshore Activities in the South West Atlantic.

⁹⁸ Infra, B- The African Practice: the 1974 Sudan/Saudi-Arabia Agreement.

3. The Norway-Iceland Arrangement for Jan Mayen

By an Agreement of 22 October 1981, Iceland and⁹⁹ Norway established a JDZ in the Denmark Strait in a maritime area lying between Iceland and the Norwegian inhabited volcanic Island of Jan Mayen, in the course of a decision by an international Conciliation Commission. The Commission had been set out according to provisions of the 28 May 1980 Agreement on fishery and continental shelf questions between the two countries which allowed for it. The Parties referred the matter of the delimitation of their continental shelf between Jan Mayen and Iceland to the Commission which instead asked the Parties to adopt "a joint development agreement covering substantially all of the area offering any significant prospect of hydrocarbon production"¹⁰⁰. The recommendations of the Commission had to be unanimous and non binding. The Commission was to "take into account Iceland's strong economic interests [in this region of the continental shelf,] existing geographical and geological factors and [any] other special circumstances"¹⁰¹.

The Iceland-Norway JDZ is a rectangular area which straddle a partially fixed maritime boundary encompassed by four points characterized as A, B, C, and D. This maritime boundary which coincides with the delimitation line for the economic zones of the two countries is closer to Jan Mayen than to Island, whereas most of the JDZ lies within the Norwegian side of this boundary. The Northern sector of the JDZ covers an area of approximately 32,750 km² as against 12,720 km² for its southern part. It is the view of Masahiro Miyoshi that Iceland enjoys an "advantageous position" in this arrangement and that this must be related not only to the "special considerations" underlined by the Conciliation Commission, but also to some "essentially extraneous …political relationships between the two countries"¹⁰². It is noteworthy that "the

⁹⁹ Masahiro Miyoshi, op. cit., p.34. See also our Appendix 12.

¹⁰⁰ Report and Recommendations to the Governments of Iceland and Norway of the Conciliation Commission on the Continental Shelf Area between Iceland and Jan Mayen, June, 1981, International Legal Materials, vol. 20 (1981): 826-826, cited by Masahiro Miyoshi, Maritime Briefing, idem.

¹⁰¹ Ana E. Bastida, Adaeze Ifezi-Okoye, Salim Mahmud, James Ross, and Thomas Wâlde, "Cross-Border Unitization and Joint Development Agreements: An International Law Perspective", Houston Journal of International Law, 2006-2007, p.385.

¹⁰² Masahiro Miyoshi, idem., p. 35. Thus to our view, the Agreement is a quite balanced one, considering for instance the proportion between the area covered by Island and that of Jan Mayen. If the boundary lies totally north of the equidistant line in favor of Iceland, Norway enjoys other advantages. For instance, article 8 of the 22 October 1981 Agreement on the Continental shelf, the following is provided, according to Miyoshi himself on p. 35:"If a hydrocarbon deposit lies across the boundary line or lies in its entirety *south* (emphasis added) of the line but extends beyond the joint development zone, the solution provided is to apply the usual unitization principles for the

agreement left open the Issue concerning Iceland's claim to an economic zone on the continental shelf extending beyond the 200 nautical mile limit in the area near Jan Mayen Island", whereas Norway never claimed a 200 nautical mile EEZ around Jan Mayen Island, upon which it had title by act thanks to a 1929 Act of Parliament¹⁰³. This JDZ by recourse to a conciliation Commission, displays a pattern of joint development which bears close likeness with the JDZ established between France and Spain.

4. The France-Spain Joint Development Zone of 29 January 1974

The first difference between the French and Spanish JDZ established in 1974¹⁰⁴ in the Bay of Biscay on the one hand, and the N/STP JDZ on the other hand is that the former is not a provisional arrangement pending maritime delimitation. Actually, it represents a form of joint development which is not common, since it is part of a maritime delimitation agreement. It defines the category of JDZ consolidating a boundary agreement to which it's a part. Another example of such a JDZ is the Kuwait-Saudi Arabia JDZ.

The area corresponding to the JDZ is set out in article 3 of the Convention between the Government of the French Republic and the Government of the Spanish State on the delimitation of the continental shelves of the two States in the Bay of Biscay, done at Paris on January 29, 1974. The regime of the JDZ is set forth in Annex II of the Convention and is dedicated to the procedures for the awarding of rights to prospect for and exploit the resources of the area. This Convention refers to another Convention signed the same day between the same parties: the

distribution and exploitation of the deposit. If a hydrocarbon deposit lies in its entirety *north* (emphasis added) of the boundary line, but extends beyond the joint development zone, the deposit is to be considered to lie in its entirety within the zone."This last sentence of the quotation seems to be a considerable concession made to Jan Mayen by Iceland.

¹⁰³ Ana E. Bastida, Adaeze Ifezi-Okoye, Salim Mahmud, James Ross, and Thomas Wâlde, op. cit., p.385.

¹⁰⁴ This agreement entered into force on 5 April 1975 by the exchange of the instruments of ratification, which took place at Madrid, in accordance with article 5.Its text is available on the web site of the UN/DOALOS, but there is http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/FRAno map, at ESP1974VZ.PDF. See as well for the same text, still without а map, at http://untreaty.un.org/unts/1_60000/28/7/00054344.pdf. For an electronic version with a color copy of the Map, see the United States State Department, Limits in the Sea, no. 83 [book on-line] (Washington, DC: The Geographer, February 1979. accessed 6 April 2010); available from http://www.state.gov/documents/organization/59579.pdf.

Convention between France and Spain on delimitation of the territorial sea and contiguous zone in the Bay of Biscay¹⁰⁵.

There is a second major difference between the two JDZs: the JDZ in the Bay of Biscay does not provide for any bilateral supervising body such as the Authority of the N/STP JDZ. This remark also applies to the Kuwait-Saudi Arabia JDZ.

A third major difference is about the pattern according to which joint jurisdiction is exercised in the JDZ. The French-Spain JDZ is particular for lying across the continental shelf delimitation line, in such a way that it is divided into two apparently even parts¹⁰⁶.Each State Party has jurisdiction on the part of the JDZ situated on its side. One might describe this as a kind of *strict disjoint* jurisdiction over a zone of joint development, combining a system of equal rights for exploration and exploitation of resources. Article 1 of Annex II provides for the following: "The Contracting Parties encourage exploitation of the zone conducive to equal distribution of its resources". The agreement reflects some protectionist concern. Only companies having the nationality of either State may be granted rights to prospect or exploit the JDZ resources¹⁰⁷.By 1989, there was not yet any development activity in the zone¹⁰⁸.

In contrast to some particular viewpoints on joint development such as that of Masahiro Miroshi, this agreement can and should be listed with State practice on joint development. This author understands joint development as:

An inter-governmental arrangement of a provisional nature, designed for functional purposes of joint exploration for and/or exploitation of hydrocarbon resources of the seabed beyond the territorial sea¹⁰⁹.

The author acknowledges that his definition might be narrow, but still appropriate for those *past joint development agreements* that he wants to consider. He excludes from the scope of that concept joint ventures between a government and a private oil company, as well as a

¹⁰⁵ The texts of both Conventions, with a Map and Annex II are also available in Jonathan I. Charney and Lewis M. Alexander, (eds.), International Maritime Boundaries, Vol. II (Dordrecht/Boston/London: 1993), 1719-1734

¹⁰⁶ See Appendix no....Map of the French-Spain JDZ in the Bay of Biscay.

¹⁰⁷ Art. 2 of Annex II states that: "Consistent with [the principle of equal distribution of the resources of the JDZ], each Contracting Party, acting in accordance with its mining regulations, undertakes to encourage agreements between companies applying for prospecting rights in the zone in order to permit companies having the nationality of the other party to participate in such prospecting on an equal partnership basis, with financing of operations proportional to each company's interest."

¹⁰⁸ Charney, Alexander, International Maritime Boundaries, Vol. II (1993), 1721.

¹⁰⁹ Masahiro Miyoshi, "The Joint Development of Offshore Oil and Gas in Relation to Maritime Boundary Delimitation", Maritime Briefing 2, no.5 (Durham: International Boundary Research Unit, 1999), 3.

consortium of private companies.¹¹⁰ So do joint development agreements endorsing a maritime boundary between States. Stating that the 30 January 1974 Japan-South Korea JDZ was the first ever joint development agreement, he disqualifies the 29 January 1974 France-Spain/JDZ. About the former, as he compares it to the latter, he argues that:

It is worth to recall that this agreement took place just one day after the France-Spain agreement, but the latter differed significantly from the Japan-South Korea accord in that its common zone for joint development lies across the agreed boundary line¹¹¹.

In fact, this agreement fits with his definition as given above. But some time before that definition, the same commentator had disclosed a stricter conception of joint development, linking it with the default of successful maritime delimitation¹¹². Thus, there is joint development only where States have failed to carry out a maritime delimitation. One may ask whether to what extent it is legitimate to exclude a part of the phenomena to be submitted to a study without considering its different manifestations, namely some resource sharing agreements between States. Is the writer the one to say what State practice is, rather than State practice being observed and registered by the commentator? Many other authors list this agreement among joint development agreements, as is the case with Ibrahim F. I. Shihata and William T. Onorato¹¹³. If such resource sharing agreements are not joint development ones, how to designate them? What are they? How to qualify this France-Spain Agreement which is not a unitization agreement? Maybe should one abide by this suggestion of the latter writers, about joint development as State practice:

¹¹⁰ Ibid.

¹¹¹ Masahiro Miyoshi, "The Joint Development of Offshore Oil and Gas in Relation to Maritime Boundary Delimitation", in Maritime Briefing 2, no 5 (Durham: University of Durham, 1999), 2.

¹¹² See our following discussion on the Japan/Korea JDZ, right after this one.

¹¹³ Ibrahim F. I. Shihamoto and William T. Onorato, "Joint Development of International Petroleum Resources in Undefined and Disputed Areas", in Boundaries and Energy :Problems and Prospects, eds. Gerald Blake and others (London/The Hague/Boston: Kluwer Law International, 1998), 442.After giving examples of joint development regimes such as the Kuwait/Saudi Arabia Neutral Zone, the Japan/South-Korea Joint Development Arrangement, the Malaysia-Thailand Joint Development Area and the Australia-Indonesia Joint Development Zone for the Timor Gap, the authors give a list of six other joint development agreements , including " the 1974 agreement between France and Spain related to the Bay of Biscay, which provided for equal sharing of natural resources in a special zone by means of partnership agreements between licensees on either side of the national offshore boundary".

It may not be advisable to devise a rigid "model agreement", nor indeed, any at all, for joint development ventures in disputed areas. Each situation has its characteristics which require particular attention. It is useful nevertheless to benefit from state practice which, in spite of some differences in details, seems to have followed common patterns in the legal format for the joint development of international hydrocarbon reserves¹¹⁴.

But it may be stressed that the resources involved in joint development agreements are not only hydrocarbons. States have a more general standpoint, as they often talk about resources, or natural resources, rather than hydrocarbons¹¹⁵. This emphasis on hydrocarbons from must authors as a kind of compelling necessity is a bit odd and difficult to understand. For instance, the latter authors, before their reflection quoted below, had just mentioned at least one joint development agreement dealing with other resources than hydrocarbons¹¹⁶. It seems that for the States, the possibility of exploiting in a near future other resources than hydrocarbons in the same areas where there are setting up JDZs is a real one.

One specific feature with this agreement is that it provides for compensation in the situation of depleted resource in a transboundary areas subjected to joint development. Article 4 (2) is a kind of prototype to the now classical unitization clause in maritime boundary agreements. It provides that in case of a deposit lying across the boundary, the parties shall seek to reach an agreement, together with private interests, as to the efficient and equitable management of the resources. Then it is disclosed under paragraph 2 that:

¹¹⁴ Ibid..

¹¹⁵ The Preamble and key provisions of many joint development agreements don't refer directly or simply to hydrocarbons, unless they are about unitization. They instead refer to "resources" or "natural resources" (art. 1 of Annex II and art.3 and 7 of the 1974 France/Spain Convention delimiting continental shelf in the Bay of Biscay), to "living resources" and "non-living resources" (Preamble and art.3 of the Maritime Delimitation Treaty between Jamaica and the Republic of Colombia of 12 November 1993), to "petroleum and other resources" (Preamble of the N/STP JDZ Treaty), to "living and non-living resources" (Preamble and art. 1 of the 2003 Barbados-Guyana EEZ Co-operation Treaty). Maybe only the 2002 Timor Sea Treaty is openly, solely and directly about "petroleum resources" (Preamble), as well as the 2003 Greater Sunrise Unitization Treaty, which deals with "petroleum deposits" (Preamble).

¹¹⁶ Shihamoto and Onorato, "Joint Development ...in Disputed Areas", in Boundaries and Energy, 1998, 442. They mention the France/Spain 1974 agreement refers to "resources", and particularly the "1974 agreement between Saudi Arabia and Sudan concerning the natural resources (heavy metals and hot brines) of the seabed and subsoil of the Red Sea".

In the event that the natural resources of a deposit lying across the dividing line have already been exploited, the Contracting Parties, acting in conjunction with the holders of exploitation rights, if such exist, shall seek an agreement on appropriate compensation."

Such a provisional should be part of joint development agreement or provisional arrangements, as they act as further guarantee for parties' interest. They can be an incitement for State to engage in joint development. In the situation between Nigeria and Sao Tome and Principe, may be the fact that oil exploitation is almost a new activity could make the recourse to such a clause useless.

5. Japan-Korea Joint Development Zone

The Agreement between Japan and the Republic of Korea Concerning Joint Development of the Southern Part of the Continental Shelf Adjacent to the Two Countries was signed on 30 January 1974 and entered into force on 22 June 1978, together with the Agreement between Japan and the Republic of Korea Concerning the Establishment of Boundary in the Northern Part of the Continental Shelf Adjacent to the Two Countries¹¹⁷. It covers an area of 24,092 square nautical miles¹¹⁸. As a whole maritime boundary legal and diplomatic feature, they provide for partial maritime delimitation and cooperation between both countries in the East China Sea, south of the Yellow Sea and south west of the Sea of Japan, in the Pacific Ocean.¹¹⁹ The partial continental shelf boundary runs along the Korea or Tsushima Strait between the two States. It's a result of deadlocked negotiations on the delimitation of the continental between those countries in the East China Sea. Both countries had differences of opinions over the role of a geographical feature of the seabed, namely the Okinawa Through. Actually, the bone of contention was the delimitation method to be applied, as Korea insisted on natural prolongation of States land territory being taken into consideration, and Japan on equidistance. The Okinawa Through which

¹¹⁷ Charney,...IMB, II, 1057.

¹¹⁸ Ibid., 1070-1072. The initial coverage area was 24,101 square n.m., but after the extension by Japan substituted a 12-nautical-mile territorial sea legislation to its former three-nautical-mile one. This legal move occurred after the Agreement creating the JDZ and was accepted by South Korea. Subsequently, the area of one of the divisions of the JDZ, subzone VII, was cut off of an area of 8.5 square n.m., thus being reduced from 11,770 initial square n.m. area to 11,761 square n.m.. The JDZ itself was thus reduced from 24,101 square n.m. to 24,092 square n.m.

¹¹⁹ See Appendix ... Map of the 1974 Japan-Korea JDZ and continental shelf boundary.

lies in the East China Sea, is 630 miles long, 100 miles wide and over 2000 meters deep¹²⁰. Yoshifumi Tanaka reports as follows:

Based on the theory of natural prolongation, South Korea insisted that the Japanese continental shelf terminated on the eastern edge of the Okinawa Through. Japan proposed a solution based on an equidistance line on the grounds that South Korea and Japan faced one and the same continental shelf."¹²¹

Japan and Korea resorted eventually to the establishment of a joint development area, which has since been contested by China. Some time before, Taiwan which had been involved in the same negotiations with Japan and Korea withdraw over Chinese pressure.

This agreement is quite interesting as by contrast to the N/STP JDZ, and like the Saudi Arabia-Sudan JDZ, it was established at the beginning of the UNCLOS III negotiations. Some writers like Masahiro Miyoshi¹²² consider that this was the first joint development zone as such. In a piece of research released in 1999, he presents a brief history of joint development which links this practice to the North Sea Continental Shelf cases of 1969.¹²³ The paper recalls that the extensive discussion undertaken by Judge Jessup in his separate opinion in those cases was based "on the pioneering work on the subject by William T. Onorato in 1968"¹²⁴. He traces the practice of joint development back to the 1960s and 1950s with " some cases of joint development of coal, natural gas and petroleum across international boundaries on the European continent", and further back to 1930s " when studies and judicial cases on joint petroleum development can be found in the United States"¹²⁵.After that brief inquiry in the past practice of joint development, he turns to what followed the year 1969.Focusing on the Japan-south Korea Joint development Agreement, while disqualifying the France-Spain and the earlier cases in the Persian Gulf, he observes that:

¹²⁰ Yoshifumi Tanaka, Predictability and Flexibility in the Law of Maritime Delimitation (Oregon: Oxford and Portland: 2006), 236.

¹²¹ Ibid..

¹²² Masahiro Miyoshi, "The Joint Development of Offshore Oil and Gas in Relation to Maritime Boundary Delimitation", Maritime Briefing 2, no.5 (Durham: International Boundary Research Unit, 1999), 1.This author is subsequently doubtful about the relation of the Saudi Arabia-Kuwait relationship to joint development, unlike our viewing it as the first post-war period joint development agreement. See *supra*, "1.The Persian Gulf and the two earliest joint development agreements".According to him,

¹²³ Ibid.. Masahiro quotes from *ICJ Reports 1969*:53, para. 101(C) (2) in which the Court refers to the possibility for the parties to decide "a regime of joint jurisdiction, use, or exploitation for the zones of overlap or any part of them."

¹²⁴Ibid..

¹²⁵ Ibid..

For all such earlier precedents and studies, a turning point appears to have come with the conclusion of the Japan-South Korea Joint Development Agreement in January 1974. This represented the first application of the idea of joint development of offshore oil where the parties failed to agree on boundary delimitation, as indicated in the ICJ judgment of 1969¹²⁶.

This research cannot abide to that view, for some reasons. The first is that a single case of jurisprudence can't easily prevail on commentary, State practice and conventional law. A unique case law doesn't make law, at least right away, especially on a matter which is subsidiary to the said case. For a judiciary decision to have determining influence beyond the case for which it was delivered, there needs to be some specific legal context for that. Besides, there doesn't seem to be any reference to this passage of the ICJ 1969 judgment in the agreements, unlike articles 74 (3) and 83(3) of the LOSC.

For what regards joint development as State practice, it doesn't bear only in cases where delimitation is pending. Masahiro discloses a quite restrictive notion of joint development which precludes unitizations on transboundary resources from being part of joint development. This seems to be against the view of most writers. In so doing, he seems to be willing to confer some kind of moral or symbolic gain for Japan and South Korea over Saudi Arabia, Kuwait, Bahrain, France and Spain.

One should note further that he shares two conceptions of joint development that might be inappropriate with regards to State practice. Firstly, joint development is not only upon offshore petroleum, as it seems to be overwhelmingly upheld by writers. Some fishing areas could be an object of joint development. Even if this mechanism is more appropriate and more used for continental shelf and hydrocarbons sharing, there are joint developments agreements over EEZ, and thus living resources. Secondly, there could be some contradictions Masahiro conception of joint development and provisional arrangements under the LOSC. The definition he gives of joint development matches the definition of provisional arrangements. More precisely, it matches the definition of provisional arrangements on overlapping continental shelves, or seabed, since it deals only with offshore oil.

Moreover, he seems to have a more open conception of joint development- thus appearing more contradictory however- at the beginning of his reflection in his article under

¹²⁶ Ibid..

consideration here. After having linked "the current idea of joint development of offshore oil and gas" to the 1969 ICJ Judgment in the *North Sea Continental Shelf* cases, he discloses the following:

However, the original idea of joint development seems to date further back to the 1930s when studies and judicial cases on joint petroleum development can be found in the United States. Some cases of joint development of coal, natural gas and petroleum *across international boundaries* (emphasis added) on the European continent were also evident during the 1950s and 1960s¹²⁷.

Thus according to Masahiro's proper words, joint development started by occurring across international maritime boundaries. So if this early practice of joint development is accepted as such, despite it being carried out across boundaries, why shouldn't it be the same for more the more recent practice? Besides, the earlier practice of joint development in the United States the author refers to was as a matter of fact mostly unitization, which dealt with the exploitation of mineral resources straddling boundaries between States into the Union, as well as borders between federal territory and inner States territory¹²⁸.

This author appears even more contradictory as he proposes in the same document a twofold typology of joint development agreements involving in the one hand "Joint Development Agreements in the Absence of Boundaries", and in the other "Joint Development Agreements Where Boundaries Are Delimitated"¹²⁹. There we clearly find other indications that the author considers the agreements he tries to disqualifies at the beginning of his article as full joint development agreements¹³⁰.

¹²⁷Ibid..

¹²⁸ Jean Pierre Bouvet, L'unité de gisement, L'Harmattan, Paris, Budapest, Torino. ; especially the introduction and pp. 417, 418,421 and 422.

¹²⁹ Under the latter category he mentions the Bahrain-Saudi Arabia Agreement of 22 February 1958, the France-Spain Agreement of 29 January 1974 with a figure of the France-Spain 'Zone Speciale', the Saudi Arabia-Agreement of 16 May 1974 with a map of the Saudi Arabia-Sudan Common Zone, the Iceland-Norway Agreement of 22 October 1981 with a map of the Iceland-Norway Joint Development Area, the Libya-Tunisia Agreement of 8 August 1988 with a map of the Libya-Tunisia Joint Exploration Zone, and the Guinea-Senegal Agreement of 14 October 1993 with a map of the Guinea-Bissau/Senegal Joint Zone. Under the former category

¹³⁰ For instance, he holds that :"in the Agreement concerning the delimitation of the Continental Shelf of 22 February 1958, the first boundary agreement to be concluded in the Arabian Gulf, Bahrain and Saudi Arabia devised a kind of joint development area for equal revenue sharing, in addition to boundary delimitation." See Masahiro Miyoshi, Joint Development (1989), 29.

Charney I. and Alexander Lewis give a more consensual appreciation of the Japan-Korea JDZ as to its innovative contribution in joint development practice. Although there is some ambiguity as to whether it was the first ever achieved joint development agreement, their position can be interpreted as saying that the J/K JDZ was not the first JDZ as such, but the first in its kind, the first to adopt the most common legal form of JDZ as disclosed by current practice: "The Japan/South Korea Joint Development Zone is the first of its kind to be negotiated."¹³¹

Another definition from the British Institute for Comparative international Law similarly lacks generality by assuming that joint development can take place only between two States, and is concerned solely with oil resources.

A better definition of joint development, which may appear more inclusive and consistent with the State practice, can be worked out from the following remarks by Zou Keyuan:

A joint development is a most feasible mechanism to shelve disputes and pave the way for cooperation pending settlement of territorial and/or maritime disputes over a certain sea area due to overlapping claims¹³².

It's a provisional arrangement on continental shelf delimitation, which supplements a permanent continental shelf delimitation agreement. The J/K JDZ lies south of point 1, which is the southern ending point of the partial continental shelf boundary line running north-southwestwards from point 35, near the disputed Dokto (in Korean) or Takeshima¹³³ (in Japanese) island. This island is 71.3 nautical miles north east of point 35, the northern terminus of the partial continental shelf boundary. The maritime dispute between Japan and South Korea dates back to 1952 when both countries disclosed claims to sovereignty over this island¹³⁴. No reference to direct reference to environment Charney, 1059.

¹³¹ Charney, IMB II, 1070.

¹³² Zou Keyuan, "A New Model of Joint Development for the South China Sea", in Recent Developments in the Law of the Sea and China, eds. Myron H. Nordquist and others (Leiden/Boston: Martinus Nijhoff Publishers, 2006), 157.

¹³³ This island is also referred to as Liancourt rocks, and it seems that besides Dokto, the Korean translation is also referred to as Dokdo or Tokto.

¹³⁴ Charney, IMB, II, 1057.

As the N/STP, the J/K could suffer some instability following the evolution of a third State legal position towards it. China has opposed it¹³⁵, whereas Cameroon has not yet done so as to the latter JDZ in the Gulf of Guinea.

6. Argentina-Great Britain 1995 Joint Declaration

Great progress towards cooperation in South America was achieved through the signing on 27 September 1995 of the Joint Declaration on Co-operation over Offshore Activities between Argentina and the United Kingdom in the South West Atlantic¹³⁶. This achievement can be seen as a provisional settlement of the maritime and territorial dispute over the Falkland/Malvinas Islands which reached its peak in 1982. As a matter of fact, the Parties have kept their respective claims over the disputed territory. But thanks to the legal mechanism of the "without prejudice clause", which is part of virtually all joint development agreements, the Parties concluded a first agreement on 28 November 1990: the Joint Statement on the Conservation of Fisheries. This latter agreement came into being for the sake of conservation of fish stocks in an area of the South Atlantic situated between 45°S and 60°S.Masahiro notices the following:

The cautiously drafted Joint Statement notes that nothing in the conduct or content of any meetings between the two countries must be interpreted to mean a change in the position of either country with regard to "the sovereignty or territorial or maritime jurisdiction over the Falkland Islands, South Georgia, the South Sandwich Islands and the surrounding maritime areas"¹³⁷.

The success of this first step of co-operation certainly helped to secure the Joint Declaration five years later, with the same mechanism of the "without prejudice clause" being incorporated in the agreement. The Parties should have felt the need to shift from co-operation over fishery conservation to co-operation over exploration and exploitation of hydro-carbons, although in a narrower area divided into six tranches. The Joint Declaration provides for joint development in a"Special Area" and a "Joint Commission", as well as a Sub-Committee. Its paragraph 2 states that:

¹³⁵ Ibid., 1058: "As one of the three coastal states in the area, China has firmly refused to recognize the jurisdiction of Japan and South Korea over the joint development area. It has not responded to requests of the parties to negotiate a three-party boundary delimitation; this refusal is partly related to its political relations with North Korea."

¹³⁶ Gao Jianjun, "Joint Development..." IJMCL (March 2008),42-43;see footnote 16.

¹³⁷ Masahiro Miyoshi, Joint Development...,op. cit., p. 27.

The two Governments agree to co-operate in order to encourage offshore activities in the South West Atlantic in accordance with the provisions contained herein. Exploration for and exploitation of hydrocarbons by the offshore oil and gas industry will be carried out in accordance with sound commercial principles and good oil practice, drawing upon Governments' experience both in the South West Atlantic and in the North Sea. Co-operation will be furthered:

- (a) by means of the establishment of a Joint Commission, composed of delegations from both sides;
- (b) by means of coordinated activities in up to 6 tranches, each of about 3,500 km², the first ones to be situated within the sedimentary structure as identified in the Annex¹³⁸.

The Joint Commission and the Sub-committee assume almost the same responsibilities entrusted on the Joint Authority in the N/STP 2001 Treaty. But the agreement lacks any provision for its duration, just as the Colombia-Jamaica Treaty of 12 November 1993 considered below.it also lacks "any provision on criminal jurisdiction over exploration or exploitation activities in the Special Area"¹³⁹.

Joint development agreements were also carried out in other regions of the world such as the Gulf of Thailand.

7. The 21 February 1979 Malaysia-Thailand MOU in the Gulf of Thailand

The first JDZ in the Gulf of Thailand, and the second in Asia, was established on 21 February 1979 by Malaysia and Thailand, as they signed a Memorandum of Understanding for the provisional settlement of their maritime boundary dispute over a part of their continental shelf¹⁴⁰. According to Masahiro Miyoshi, as "the two countries failed to agree on continental shelf boundary delimitation beyond a point approximately 39nm offshore", they put the dispute

 ¹³⁸ Masahiro Miyoshi, Joint Development and Maritime Boundary Delimitation..., 1999, p. 28.
 ¹³⁹ Masahiro Miyoshi, ibid., p. 29.
 ¹⁴⁰ See Appendix 15.

aside" for a period of fifty years during which they agreed to pursue joint development" of the contested area¹⁴¹ by contrast with the N/STP 2001 Treaty.

This agreement sets up a JDZ with a joint body with rather strong powers: the Joint Authority. This was the first time this expression was used, and the joint body given such extensive powers. Thus it is possible to assert that the 1979 MOU between Malaysia and Thailand should have served as a model for the 1989 Timor Gap Treaty, the 1993 Senegal/Bissau Guinea, the N/STP 2001 Treaty and the Timor Sea Treaty which refer to the joint body as "the Joint Authority", giving it the same large attributions. This is a kind of category of JDZ's of its own, as it can be opposed to another category of JDZ agreements setting forth a "Joint Commission" or a "Joint Commission or a Joint Committee" rather than a Joint Authority. The joint body in the agreements establishing a Joint Commission or a Joint Committee provided for in the 7 July 1965 Agreement creating a JDZ between Kuwait and Saudi Arabia. This Committee made up of an equal number of representatives of the two parties was given a consultative status. The 30 January 1974 agreement between Japan and South Korea also created a consultative body of four members: the Joint Commission¹⁴².

This kind of joint body displays the weakest level of institutionalization. There are examples of JDZ without a joint body as such. The Bahrain-Saudi Arabia JDZ is based on mere revenue or income sharing system whereby Saudi Arabia is to exploit the resources of the JDZ, situated wholly on its side of the boundary, and remit fifty percent of the income to Bahrain. There was no serious need for a joint body to oversee the implementation of the agreement. The Iran-Sharjah Memorandum of Understanding of 29 November 1971 setting forth the sharing of the resources in the territorial sea of the disputed Abu Musa Island doesn't provide for any such joint body¹⁴³. Masahiro Miyoshi comments as follows about it:

[This is] a revenue sharing arrangement with a single oil company designated to conduct exploitation on behalf of the two governments¹⁴⁴.

¹⁴¹Masahiro, op. cit., p. 14.Also, Ana E. Bastida, Adaeze I9fezi-Okoye, Salim Mahmud, James Ross, and Thomas Wâlde, "Cross-Border Unitization and Joint Development agreements: An international Law Perspective", Houston Journal of International Law, .2006-2007, vol. 29, n° 2, p 402.

¹⁴² See previous paragraphs of the current Section.

¹⁴³ See Appendix 14 : Abu Musa Island.

¹⁴⁴ Masahiro Miyoshi, Joint Development, op. cit., p.12.

There seems to be no provision establishing any joint body in the 29 January 1981 France-Spain agreement. The same remark applies for the 22 October 1981 Iceland-Norway Agreement. The Libya-Tunisia Joint Development Agreements of 8 August 1988 to be discussed hereafter don't deal with any joint political body. Instead, they set up a Joint Libyan and Tunisian exploration company based in Tunisia.

By contrast, the Joint Commissions set up under the 16 May 1974 Agreement between Sudan and Saudi Arabia and the 12 November 1993 Treaty considered below enjoy "fairly strong powers"¹⁴⁵. To that extent, they are different from the other joint commissions just listed above. They could have been referred to more appropriately as "Joint Authority".

A striking feature of the 1979 Malaysia-Thailand MOU is, as Masahiro terms it, "a powerful Joint Authority" composed of two Cochairmen and an equal number of members. According to article 3 of the Agreement, its attributions amount to assuming, as what regards the JDZ, the following duties:

All rights and responsibilities on behalf of both Parties for the exploration and exploitation of the non-living resources of the sea-bed and subsoil, [for the] development, control and administration of the joint development area.

It is also noteworthy that the Joint Authority exercises "on behalf of both Parties all the powers necessary for, incidental to or connected with the discharge of its functions relating to the exploration and exploitation"¹⁴⁶.

The JDZ was divided in two parts by a line delineating the criminal jurisdiction of each State Party. But due to some problems related to some attributions to be granted to the Joint Authority or the nature of the resources sharing system (system of production sharing or income tax?), the Parties felt the need for a supplementary agreement. These needs gave way to the 30 May 1990 Agreement on the Constitution and Other Matters Relating to the Establishment of the Malaysia-Thailand Joint Authority which, inter alia, grants a juristic personality to the Joint Authority. Under article 7 of this Agreement, the Joint Authority is

to decide on the plan of operation and the working programme; to permit operations and conclude transactions or contracts; to approve and extend the

¹⁴⁵ Ibid., pp. 26 and 32.
¹⁴⁶ Masahiro, op. cit., p. 16.

period of exploration and exploitation; to approve the work programmes and budgets of the contractor; to approve the production programmes of the contractor, including the production costs, conditions and schedules of the production; to inspect and audit the operator's books and accounts; to approve and award tenders and contracts¹⁴⁷.

8. The 11 December 1993 Columbia-Jamaica Treaty establishing a JDZ

On 12 November 1993, Colombia and Jamaica signed an agreement¹⁴⁸ which deals with the partial delimitation of their maritime boundary while establishing a JDZ in the western Caribbean sea at the same time¹⁴⁹. From the outset this agreement is somewhat special for the law of the sea, as it involves Jamaica and as it took place just one year before the LOSC entering into force on 16 November 1994. The LOSC was signed in Montego bay, a Jamaican town, and Jamaica is the host country of the International Seabed Authority (ISBA), an international organization which symbolizes, maybe at its highest point, the spirit of the UNCLOS III.

For Jamaica as a matter of fact, this 12 November 1993 Treaty represents its first-ever maritime boundary delimitation agreement¹⁵⁰. It sets up a Joint Regime Area (JRA) of about 4,500 nm², which is a kind of JDZ.¹⁵¹The Treaty covers two sectors: one is a "boundary line proceeding eastwards in the direction of the Colombia-Haiti boundary line until it is intercepted by the future Jamaica-Haiti boundary line"¹⁵². Article 2 of the Treaty provides for the following:

Where hydrocarbon or natural gas deposits, or fields are found on both sides of the delimitation line established in article 1, they shall be exploited in such a manner that the distribution of the volumes of the resource extracted from said deposits or fields is proportional to the volume of the same which is correspondingly found on each side of the line.

¹⁴⁷ Ibid., p. 17.

¹⁴⁸ The article "Cross-border Unitization and Joint Development Agreements: An International Perspective" published by Thomas Wâlde, Ana Bastida... in the Houston Journal of International Law, 2006-2007 doesn't mention this agreement. ¹⁴⁹ See Appendix 6 : The Colombia-Jamaica Joint Development Area.

¹⁵⁰ Masahiro Miyoshi, The Joint Development of Offshore Oil and Gas in Relation to Maritime Delimitation, 1999, p.22. ¹⁵¹ Ibid., p. 24. ¹⁵² Ibid., p. 23.

The second sector is situated in the western part of the treaty area. The JRA created there is, in the terms of article 3(1), a "zone of joint management, control, exploration and exploitation of the living and non-living resources", "[p]ending the determination of the jurisdictional limits of each Party"¹⁵³. As to what concerns the activities to be carried out in the JRA, article 3(2) further states as follows:

- (a) Exploration and exploitation of the natural resources, whether living or non living, of the waters superjacent to the seabed and the seabed and its subsoil and other activities for the economic exploitation and exploration of the Joint Regime Area;
- (b) The establishment and use of artificial islands, installations and structures;
- (c) Marine scientific research;
- (d) The protection and preservation of the marine environment;
- (e) The conservation of living resources;
- (f) Such measures as are authorized by this Treaty, or as the Parties may otherwise agree for ensuring compliance with and enforcement of the regime established by this Treaty.

This last provision helps to see some common features between the Colombia-Jamaica JRA and the N/STP JDZ. Both bear on the exploration for, and exploitation of living and non-living resources. The former seems to be concerned with the EEZ too, though it is not easy to be ascertained from our research material.

As to the differences, the Colombia-Jamaica Treaty establishes a Joint Commission which could be less complex than the Joint Authority supervising the JDZ in the Gulf of

Guinea. This Joint Commission made up of only two representatives, one for each Party, shall "elaborate the modalities for the implementation and the carrying out of the activities set out in paragraph 2 of article 3 (...) and carry out any other functions which may be assigned to it by the Parties for the purpose of implementing the provisions of this Treaty". But as it appears that the Parties could take any measure to ensure compliance and enforcement of the regime set forth in the Treaty, the Joint Commission could eventually assume responsibilities almost as large as those of the Joint Authority of the N/STP JDZ, provided that the Parties agreed. Especially, as article 3 provides that the activities listed under articles 3.2 (a), 3.2 (c) and 3.2(d), shall be dealt with on a

¹⁵³ Idem.

"joint basis" agreed by the Parties, the formulation of this "joint basis" could be carried out by the Joint Commission. The Joint Commission would then have to handle matters related not only to the exploration and exploitation of living and non-living resources, but also to marine scientific research and the protection and preservation of the marine environment. Indeed one may wonder why this "joint basis" should not apply to article 2 (e) dealing with the conservation of living resources. Can this be properly done on the basis of a single State undertaking?

A more outstanding feature that differs in the two JDZs is the issue of third States interests and rights in the JDZ. Article 3 (4) of the 1993 Colombia-Jamaica Treaty discloses a quite obvious denial of third States interests and rights in the JRA:

The Parties shall not authorize third States and international organizations or vessels of such States and organizations to carry out any of the activities referred to in paragraph 2. This does not preclude a Party from entering into, or authorizing arrangements for leases, licenses, joint ventures and technical assistance programmes in order to facilitate the exercise of rights pursuant to article paragraph 2, in accordance with the procedures established in article 4.

This seems to be a clear violation of the interests and rights of third States as set forth in various provisions of the LOSC such as article 238 granting to any State the right to marine scientific research. Masahiro wrongly assumes the situation of the Parties towards the LOSC. For that commentator, article 3(4) of the 12 November 1993 Treaty

appears to be a total exclusion of third States from the EEZ of the signatories, and

can be interpreted as being contrary to the provisions of the UN Convention on the

Law of the Sea, which both signatories have ratified¹⁵⁴.

According to him, the provision violates article 62(2) of the LOSC granting other States access to the catchable surplus of the EEZ. The provision could be seen as a violation of the LOSC articles 58, 69 and 70 too, which give third States the right of navigation, overflight and laying of submarine cables and pipelines in the EEZ, as well rights to explore and catch fish in the EEZ under certain conditions. This applies specially for developing GDLLS.

As a matter of fact, Colombia and Jamaica signed the LOSC on the day of its adoption. But the former never ratified it, by contrast to Jamaica which did so on 21 March 1983.¹⁵⁵Nigeria

¹⁵⁴ Masahiro Miyoshi, op. cit., p. 25.

and Sao Tome and Principe were already Parties to the LOSC. It seems quite reasonable for them to adhere to its principles than Colombia. It is fair to contemplate that article 3(4) is a result of the Colombian position during the negotiations that lead to the 1993 Treaty.

Noteworthy with regards to the Colombia-Jamaica 1993 Treaty is the high potential to face contention from neighboring countries such as Honduras or Nicaragua¹⁵⁶. With two possible disputes, the situation of the 1993 Treaty is trickier than the situation in the Gulf of Guinea where only Cameroon could contest the JDZ off its coastline.

A last difference may be underlined: the 1993 treaty between Colombia and Jamaica doesn't provide for any duration.

After this tour of the earlier practice of JDZ around the world, it may be more interesting to focus our attention on the same practice as it went on off the shores of Africa.

B. The African practice

African States too went early into the path of joint development agreements. Sudan was the first African State to engage in such kinds of deals with Saudi Arabia in the Red Sea (1), whereas Libya and Tunisia made some effort in the same direction starting from 1988(2). Two years after that, Guinea Bissau and Senegal decided to get involved in a broad cooperation scheme by creating the first JDZ on the Atlantic coast of Africa (3).

1. Sudan - Saudi Arabia

The first joint development agreement performed by an African State is related to Asia also. It would be fair to say that it's not purely African, but Afro-Asian, as it was signed between Sudan and Saudi Arabia. For the latter, it was its third experience of the same nature, in the same field. Thus this agreement too can be viewed as resulting from Saudi Arabia international politics of gaining influence on, and friendship with its Islamic and Arabic neighbours.

On 16 May 1974, Sudan and Saudi Arabia signed an Agreement Relating to the Joint Exploitation of the Natural Resources of the Seabed and Subsoil of the Red Sea in the Common

¹⁵⁵ See the DOALOS website at

http://www.un.org/Depts/los/convention_agreements/convention_overview_convention.htm.

¹⁵⁶ Masahiro Miyoshi, op. cit;, p. 23.

Zone. This Agreement provides for the delimitation of the sea-bed boundaries and creates a Common Zone¹⁵⁷ to be run by a Joint Commission. This Common Zone, which is a JDZ, presents "some unique features"¹⁵⁸.

There is only one joint administrative structure, as against two in the N/STP-JDZ. This structure has extensive powers. There are the usual attributions entrusted by the parties to the institution in charge of the exploitation of the JDZ. In this regards, the Joint commission is in charge of preparing the estimates for all the expenses necessary for its activities¹⁵⁹.But beside these ordinary functions, the Joint Commission enjoys full competence upon matters that usually would fall within the purview of the Council in the N/STP JDZ. These powers are the epitome of the mutual trust and friendly relationship existing between the Parties, as they cover delicate areas such as managing rights previously attributed by States to individual corporations. In a way, it succeeds to States in contracts. Considering some of those powers, Masahiro Miyoshi reports that the Joint commission is

...authorized to decide on the question of the Sudanese concession of exploitation rights granted to the Sudanese Mineral Limited and the West German Company of Preussag by virtue of an agreement of 15 May 1973, in such a manner as to preserve the right of the Sudanese government and in the context of the regime of the Common Zone, despite Sudan's legal obligations based on the agreement (Article 13)¹⁶⁰.

Another highly sensitive area of joint development entrusted by the parties on the Joint Commission is the handling of prospects of boundary straddling resources. The Agreement provides for the Joint Commission sole decision on the whole matter of the exploitation of any accumulation or deposit, provided an equitable share of the proceeds being guaranteed for each government¹⁶¹.

¹⁵⁷Ibid., p. 30:"The Common Zone is such an area of the sea-bed as is left in the middle of the Red Sea after each country's exclusive sovereign rights over the bed-sea are reserved up to a line where the depth of the superadjacent waters is under 1,000 meters (Article 3-5)."

¹⁵⁸Ibid.

¹⁵⁹ Ibid.32

¹⁶⁰ Ibid.

¹⁶¹ Ibid., 32 : "The Joint Commission is further empowered to determine the manner in which any accumulation or deposit of a natural resource found to extend across the boundary of the exclusive sovereign rights of either Government and the Common Zone is to be exploited. But any decision of the Joint Commission in this regard must guarantee for the government involved an equitable share in the proceeds of the exploitation (Article 14)".

The lesson to be drawn out of this is that the option for a single administrative structure entails a further degree of trust between parties, and this brings about the gain of institutional simplicity. The Joint Ministerial council overseeing the Joint Authority's activities in the N/STP-JDZ may be interpreted as expressing some lack of trust in the Authority and subsequently in the other partner. By contrast, the existence of a unique JDZ managing structure amounts to trusting the other party. But the complexity of the matter could also be a justification to multiple structures, and not necessarily a lack of trust between the partners. So it depends on concrete situations.

The financing mechanism displays the good will, or rather the financial power of one of the partner, Saudi Arabia. This State alone undertakes to provide funds for the work of the Joint Commission, which it shall recover "from the returns of the production of the Common Zone and in a manner to be agreed upon between the two governments (Article 12)"¹⁶².

2-The Tunisia-Libyan practice

As a result of their proceedings before the ICJ and the judgments of 1982 and 1985 in their Continental Shelf case, Libya and Tunisia achieved a JDZ in the Mediterranean Sea¹⁶³. The JDZ lies astride the maritime boundary separating their respective continental shelves, northwestwards of the equidistant line. Both the maritime boundary and the equidistant line were drawn according to an agreement based on the 1982 ICJ judgment, and run from a point called Ras Aidir.¹⁶⁴Masahiro Miyoshi states that the JDZ thus created is divided in two parts: the northwest part appertaining to Tunisian continental shelf where a joint Libyan-Tunisian exploration company was to be set up in Tunisia with a special status as an offshore enterprise to explore it as a gas field, and the south-east part where by a separate agreement Tunisia was "to receive 10% of the income from future in the oil fields on the Libyan continental shelf¹⁶⁵. Masahiro contemplates that this joint development scheme would have been suggested by a dissenting opinion from Judge ad hoc Evensen in his dissenting opinion attached to the 1982 ICJ Judgment:

¹⁶²Ibid., 32.

¹⁶³ See Masahiro Miyoshi, op. cit., pp. 36-40, for all information used in this part of the current analysis, as the said information appears still scarce and not publicly available.

¹⁶⁴ See Appendix 13.
¹⁶⁵ Masahiro Miyoshi, op. cit., p. 36.

Judge Evensen, based on the understanding that joint development is a corollary to other equity consideration (*ICJ Reports 1982: 320-321*), proposed a joint scheme for consideration by the parties¹⁶⁶.

3- The Senegal-Bissau Guinea JDZ

Senegal and Bissau Guinea carried out the first JDZ on the Atlantic coast of Africa thanks to an agreement signed on 14 October 1993: the Management and Cooperation Agreement, which was later supplemented by a Protocol Relating to the Organization and Operation of the Agency for Management and Cooperation signed on 12 June 1995. These agreements provide for an Authority consisting of the Heads of State or of Government or of persons delegated by them, an International Agency, an Enterprise and a Board of Directors, just as is the case with the 21 February 2001 Treaty creating the N/STP JDZ, though with some noticeable differences in the composition and attributions of these organs.

This JDZ is linked to the maritime boundary decided on 26 April 1960 by an Exchange of Notes between the two respective former colonial powers, France and Portugal. This maritime boundary consists of a straight line running seawards at 240° from Cape Roxo, a point situated at the intersection of the extension of the land boundary and the low-water mark and establishes the territorial sea, the contiguous zone and the continental shelf, between the two countries, but not their EEZ. Starting from the 1980's, Bissau Guinea unsuccessfully challenged this boundary in an arbitral case and before the ICJ. By its November 1991 judgment, the ICJ, by holding that the Award issued on 23 August 1989 by the arbitral tribunal was valid and binding, whereas it had been contested by Bissau Guinea, indirectly confirmed the boundary line of 26 April 1960.For the Award stated that the 1960 French-Portuguese Exchange of Notes had the force of law as between the parties in respect of the three specified maritime areas. The ICJ Judgment also rejected the submission by Bissau Guinea on March 1991 asking for the delimitation of all the maritime zones, including the EEZ. In the course of these proceedings however, the parties went on with negotiations, leading to the above mentioned agreements. The result of these proceedings and negotiations in 1993 was not yet satisfying, thus compelling them to work out a

¹⁶⁶ Ibid.

genuine solution to settle the EEZ issue¹⁶⁷. The process leading to this great diplomatic achievement is summed up by Masahiro Miyoshi as follows:

What lay before the parties (...) was the line of 240° as the effective delimitation line for the territorial sea, the contiguous zone and the continental shelf. This was not open for renegotiation. The parties were free to choose either the same delimitation line or another line for the EEZ. But they agreed instead on a zone straddling the boundary line for the purpose of joint development of EEZ resources (...).¹⁶⁸

The JDZ between Senegal and Bissau-Guinea straddles the 240° boundary line and can be geographically characterized by its coordinates, as maps are not available:

between the 268° and 220° azimuths drawn from Cape Roxo, with the respective territorial seas of the parties excluded from it (...). Thus the zone lies across the 240° line as delimited by the 1960 agreement, consisting of an arc of 48° of a circle with a radius of 200 nm centred on cape Roxo¹⁶⁹.

The Senegal/Guinea Bissau JDZ shows other points of resemblance with the JDZ in the Gulf of Guinea, besides their common institutional or organic framework: It provides not only for mineral resources sharing, but also for living resources, what the commentator Masahiro considers as "a striking feature"¹⁷⁰, for most of the previous agreement bear only on mineral resources.

The applicable law is also genuinely dealt with. Two sets of law prevail, a Senegalese one and a Guinean one: with regard to mineral or oil resource prospecting, exploration and exploitation, monitoring and scientific research in the mining and petroleum domain, it is the Senegalese law, modified according to the terms of the 1995 agreement that prevails; in matter of fishery resources, it is the law of Guinea-Bissau that prevails.

Like in the other cases, the 1993 and 1995 agreements set forth a percentage of the resources to be granted to each party: the proportion here is 85% for Senegal and 15% for Bissau-Guinea for the resources of the continental shelf, whereas the products derived from the

¹⁶⁷ See Appendix 3, the Bissau Guinea/Senegal JDZ.

¹⁶⁸ Masahiro miyoshi, op. cit., p. 38.

 ¹⁶⁹ Idem. The author, Masahiro, however suggests that the distance of 200 nm might just be an assumption.
 ¹⁷⁰ Idem.

exploitation of fishery resources is to be shared equally between the parties¹⁷¹. The rationale underlying these proportions explains why they can be modified. These agreements were signed for a period of twenty years. They could then be modified in 2015.

SECTION II- COMPARING THE JDZ WITH CURRENT STATE PRACTICE

State practice has recently achieved some important deals which highlights the role of joint development in the settlement of maritime disputes all around the world, and its status as one of the recent and major tendencies in the law of the sea. These achievements include, inter alia, the 2001MOU between Cambodia and Thailand(A), the most recent 2003 Barbados-Guyana Arrangements on their EEZ (B), the 2002 Timor Sea Treaty(C), and the 2002 Provisional Arrangements between Algeria and Tunisia(D).

A. The 18 June 2001 MOU between Cambodia and Vietnam

The Gulf of Thailand shares many geopolitical features with the Gulf of Guinea. The riparian States in both regions are all developing States, for instance. More interesting, both regions are gulfs with high dispute potential but where cooperation is taking the lead over escalating tensions (1).Besides, both are developing States (2).

1. The MOU and the N/STP-JDZ: maritime cooperation in two gulfs

The Memorandum of Understanding between the Government of Cambodia and the Royal Thai Government regarding the Area of their Overlapping Maritime Claims to the Continental Shelf (hereafter Cambodian-Thai 2001 MOU) was signed on 18 June 2001 and entered into force upon signature¹⁷².

¹⁷¹ According to Masahiro in an analysis in his footnote n° 113, p. 38, "this unequal division seems to be based on existing and proved reserves of gas that have been developed by Senegal and an Irish oil company. There seems to have been no reports of oil or gas discoveries on the Guinea-Bissau side of the 1960 boundary".

 ¹⁷² Gao Jianjun, "Joint Development..." IJMCL (March 2008), 54; see the ending of his footnote 58.See also David A. Colson, IMB, V., 3743-3744.

2. Developing Coastal States fostering cooperation in their neighborhood

This MOU is the third in the Gulf of Thailand, after the 21 February 1979 MOU between Malaysia and Thailand, and the MOU of 5 June 1992 between Malaysia and Vietnam which also created a JDZ. This multiplication of JDZs in the Gulf of Thailand obviously contributed to some acceleration in diplomatic negotiation and co-operation in the Gulf of Thailand, so as the N/STP JDZ did or could do as regards the Gulf of Guinea.

B. The Barbados-Guyana Arrangements on their EEZ

On 2 December 2003, Barbados and Guyana concluded an Exclusive Economic Zone Treaty concerning the Exercise of Jurisdiction in Their Exclusive Economic Zones in the Area of Bilateral Overlap Within Each of Their Outer Limits and Beyond the Outer of the Exclusive Economic Zones of Other States which could be a milestone in the practice of provisional arrangements under article 74 (3) of the LOSC, just as the 21 February 2001 Treaty between Nigeria and Sao tome and Principe¹⁷³. One of the common features from a legal point of view between these agreements is their explicit reference to paragraph 3 of article 74 of the LOSC dealing with the delimitation of the EEZ. This reference is what makes them different from the 1995 Agreement between Senegal and Bissau Guinea, even though the latter also deals with EEZ. By contrast to the former, the Senegal-Bissau Guinea JDZ should have been based on mere practice like the Timor Gap Treaty, or under the influence of the Tunisian-Libyan JDZ in the Mediterranean Sea.

In the Preamble and referring to the LOSC, the Parties recognize, inter alia,

the relevance and applicability of paragraph 3 of Article 74 of the Convention, which establishes that pending [delimitation according to international law and while trying to achieve an equitable solution], States in a spirit of understanding and co-operation, shall make every effort to enter into provisional arrangements of a practical nature and, during this transitional period, not to jeopardize or hamper the reaching of the final agreement.

It's worth noticing that this Preamble considers the "universal and unified character" of the LOSC and "its fundamental importance for the maintenance and strengthening of

¹⁷³ See Appendix 16 at the end of this research paper

international peace and security, as well as for the sustainable development of the oceans and seas".

1. Sharing both living and non-living resources

Just as the Treaty instituting a provisional arrangement between Nigeria and Sao Tome and Principe, the 2 December 2003 Treaty between Barbados and Guyana deals with the EEZ and living resources, besides mineral resources. To that extent, it is similar as just mentioned to the 1995 Agreement between Senegal and Bissau Guinea. This "striking feature" about the presence of fishery issues in a joint development agreement that Masahiro Miyoshi as a commentator considered in the latter Agreement is not surprising as such, since the agreements he considered were not particularly concerned with the issue of the EEZ as is the case in these three agreements. These are developing States, and it is quite normal that they find more interest in fishing matters than the Northern countries riparian to the North Sea or industrialized countries like Australia or Japan. If JDZs concluded by the latter States deal exclusively with mineral resources, this is thanks to the fact that the fishing issue is not socially critical for them as it is in most coastal developing States.

This Treaty is very light in comparison to the N/STP JDZ Treaty. It has 12 articles. It creates a "Co-operation Zone" and two different mechanisms to exercise civil and administrative joint jurisdiction over the living and non-living resources of this Zone. The said jurisdiction is to be exercised "in accordance with generally accepted principles of international law and the Convention", that is the LOSC. According to article 5 which deals with jurisdiction over living resources, this jurisdiction in the Co-operation Zone by the Parties "in any particular instance shall be governed by a Joint Fisheries Licensing Agreement and evidenced by their agreement in writing, including by way of an exchange of diplomatic notes as provided for in article 3". But paragraph 4 of this article allows each State to enforce the provisions of this Joint Fishery Licensing Agreement by applying its national law "against any person". The objective of joint jurisdiction through this Licensing Agreement is the achievement of "environmentally responsible management" of the Co-operation Zone and ensuring "sustainable development" in it. This aim is evidenced by the inclusion of the 1995 Agreement for the Implementation of the Provisions of the Convention relating to the Conservation and Management of Straddling Fish

Stocks and highly Migratory Fish Stocks as one of the principle of the international law to be observed by the Parties.

A Joint Non-Living resources Commission is provided for under article 6, to be set up when the parties so decide. Paragraph 2 of this article states the following:

The exercise of joint jurisdiction over non-living resources by the Parties in any particular instance shall be managed by a Joint Non-Living Resources Commission and evidenced by their agreement in writing, including by way of an exchange of diplomatic notes as provided in article 3.

Only the sharing of the non-living resources is clearly set forth in the Treaty: the parties equally share the non-living resources lying wholly in the Co-operation Zone, or recourse to unitization, when the resources straddle the Co-operation Zone.¹⁷⁴

2. A light and reasonable institutional framework

This Treaty sets up just one institution, which is the Joint Non-Living Resources Commission. One may reasonably contemplate that a Commission, whatsoever the further development the parties would give to it, is a lighter mechanism in comparison to the Authority, at least the one in view in the N/STP JDZ. The principles according to which joint jurisdiction is achieved are co-ordination and consultation in the one hand, and "written agreement" about any particular matter, as stipulated in articles 5 and 6 on the other hand, besides generally admitted principles of international law. Articles 5(5) and 6(4) have a common content emphasizing this principle of written agreement.¹⁷⁵ Article 5(6) insists on co-ordination over the management of the living resources in the Co-operation Zone with regards to other agreements entered into by

¹⁷⁴ See paragraphs 5 and 7 of article 6. Paragraph 6 reads as follows: "Any single geological structure or field of non-living natural resources that lies wholly within the Co-operation Zone shall be shared equally between the Parties." Paragraph 7 reads as follows: "Any single geological structure or field of natural non-living resources that straddles the outer limit of the Co-operation Zone from the exclusive economic zone of either Party shall be apportioned between them based on unitization agreements, as specifically provided for by the Joint Non-Living Resources Commission".

¹⁷⁵ Each of this provision reads as follows: "For further clarity, the failure of the Parties to reach agreement on writing in relation to the exercise of their joint jurisdiction over living resources /non-living resources in the Co-operation Zone in any particular instance means that neither Party can exercise its jurisdiction in that instance".

the Parties¹⁷⁶.More strikingly, article 6(8) prevents any scientific research or activity linked to a resource lying wholly within the Co-operation Zone¹⁷⁷.

This principle of written agreements extends to other important matters such as security about which the Parties shall work out a security agreement in relation to the activities to be undertaken in the Co-operation Zone. Security domains involve the enforcement of regulations over natural resources, terrorism, piracy, smuggling, etc.

The principle of co-ordination and consultation applies to the protection of the marine environment. Article 8 dedicated to that matter discloses what follows under paragraph 1:

The Parties shall, consistent with their international obligations, endeavour to coordinate their activities so as to adopt all measures necessary for the preservation and protection of the marine environment in the Co-operation Zone.

Paragraph 2 enjoins the Parties to exchange as soon as possible information on actual or potential threats to the marine environment in the Co-operation Zone.

The principle of co-ordination and consultation also applies in matter communications. Under article 9 dealing with consultations and communications, Ministers of Foreign Affairs have the specific duty of handling communications between the Parties.

Furthermore, the "without prejudice clause" is a supplementary guaranty in safeguarding each party's interests as it is stipulated under paragraphs 2 and 3 of article 1 as follows:

2. This Treaty and the Co-operation Zone established thereunder are without prejudice to the eventual delimitation of the Parties' respective maritime zones in accordance with generally accepted principles of international law and the Convention.

3. The Parties agree that nothing contained in the Treaty nor any act done by either Party under the provisions of the Treaty will represent a derogation from or diminution or renunciation of the rights of either Party within the Co-operation Zone or throughout the full breadth of their respective exclusive economic zone.

¹⁷⁶ It states: "The Parties shall take steps to co-ordinate between them the management of the living natural resources within the Co-operation Zone subject to their obligations under any relevant agreement to which they are both parties".

parties". ¹⁷⁷ This is the whole provision: "Marine scientific research, exploration and exploitation or development of nonliving natural resources that lie wholly within the Co-operation Zone shall only take place with the agreement of both Parties as provided in Article 3.If no such agreement is reached, no scientific research, exploration, exploitation or development can take place."

The dispute resolution mechanism established under this Treaty is quite simple. Article 10 on dispute resolution states in paragraph 1 that the normal means to settle disputes on the interpretation or application of the provisions of the Treaty shall be "direct diplomatic negotiations between the Parties". Should this fail, each Party may have recourse to "the dispute resolution provisions contemplated under the convention", which is the LOSC.

The treaty enjoys unlimited period of validity. It "shall remain in force until an international maritime delimitation agreement is concluded between the Parties".

In the whole, the light institutional framework set up by this Treaty appears more manageable than the heavy institutional network provided for in the 21 February 2001 Treaty or the Timor Sea Treaty.

C. The Timor Sea Treaty: a provisional arrangement in the Indian Ocean

The Timor Sea Treaty between the Government of Australia and the Government of East Timor (hereafter TST) was signed on 20 May 2002 in Dili, the capital of East Timor, the very day this State acceded to independence after Portuguese colonization and annexation from Indonesia. It entered into force on 2 April 2003¹⁷⁸. This agreement should not be taken as an evolution of the famous 1989 Timor Gap Treaty. Indeed it must have inherited some notoriety from the Treaty between Australia and the Republic of Indonesia on the Zone of Cooperation in an Area between the Indonesian Province of East Timor and Northern Australia signed on 11 December 1989 and entered into force on 9 February 1991¹⁷⁹, otherwise known as the "Timor Gap Treaty". There is a link between that treaty and the TST, even though Timor did not recognize its validity¹⁸⁰. Thus, by concluding the Timor Sea Treaty, Timor does not succeed to

¹⁷⁸ Gao Jianjun, "Joint development...IJLCML (March 2007), 51; see his footnote 46.The Treaty is available at http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/AUS-TLS2002TST.PDF ; accessed 29 March 2010.

[;] accessed 29 March 2010. ¹⁷⁹ Jonathan I. Charney and Lewis M. Alexander, International Maritime Boundaries, eds., Vol. II (Dordrecht/London/Boston: Martinus Nijhoff Publishers, 1993), 1245.

¹⁸⁰ Goa Jianjun, Joint Development...IJMCL,(March 2008), 51, footnote 47, referring to para.8 of the Exchange of Notes Constituting an Agreement between the Government of Australia and the Government the democratic republic of Timor-Leste concerning Arrangements for Exploration and Exploitation of Petroleum in an Area of the Timor Sea between Australia, signed in Dili on 20 May 2002, which reads as follows: "In agreeing to continue the arrangements in place on 19 May 2002, pending the entry into force of the Treaty, the Government of the Democratic Republic of East Timor does not thereby recognize the validity of the Treaty between Australia

Indonesia in an agreement, namely the Treaty Gap Treaty in the case in hand. The latter should then be considered now as extinguished. The Timor Sea Treaty is a brand new agreement that should therefore not be confused with it famous and late ancestor. Interestingly, it was signed on the 20 May 2002, the very day Timor Leste acceded to independence. Comparing the 2001 Treaty creating the N/STP-JDZ with the Timor Sea Treaty which creates a Zone of Co.

1. General features: some likenesses and differences

From the outset, it can be argued that there are no major differences between these joint development agreements. The most important difference might be that the 2001 JDZ Treaty bears on an EEZ area, whereas the TST is concerned with "an area of seabed between Australia and East Timor", as it is termed in its Preamble. This area is seemingly a part of the continental shelf between the two Parties. The reference made in the same Preamble to article 83 of the LOSC which provides for the delimitation of the continental shelf between States with opposite or adjacent coasts so suggests. Another difference that could be worth noticing is that the TST is not only upon joint development. It achieves partial boundary delimitation by dividing two out of the three continental shelf parts of the former Timor Gap Treaty between the Parties. Part B goes to Australia and Part C to East Timor. The remaining Part A is the Area dedicated to the JDZ established by the TST. The fact that the TST is agreed upon between one developing country and an industrialized one, with the express target of the economic development of the latter enshrined in the second line of the Preamble, may also be noted, as it might help to understand the general spirit of the agreement.

These are the differences. Besides them, many points in common can be found between the agreements, the least is not the explicit reference made in the Preamble to paragraph 3 of article 74 and 83of the LOSC.

and the Republic of Indonesia on the Zone of Cooperation in Area between the Indonesian Province of East Timor and Northern Australia (the "Timor Gap Treaty") or the validity of the "integration" of east Timor into Indonesia." This instrument is available at http://www.unclef.com/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/AUS-TLS2002EX.PDF.

2. The common explicit reference to the LOSC provision on provisional arrangements as an obligation: setting forth an *opinio juris*

Both the 2002 TST and the 2001 N/STP Treaty set forth in their respective Preambles the LOSC provision on provisional arrangement. While the N/STP does so in the frame of article 74 on the EEZ, the TST refers to the contents of paragraph 3 of article 83, just after considering its paragraph 1.Let us quote that important passage, as it seems to be a clear expression of an *opinio juris* attesting for a customary international law under the process of crystallization:

Taking into account the United Nations Convention on the Law of the Sea done at Montego Bay on 10 December 1982, which provides in article 83 that the delimitation of the continental shelf between States with opposite or adjacent coasts shall be effected by agreement on the basis of international law in order to achieve an equitable solution,

Taking further into account, in the absence of delimitation, *the further obligation* (emphasis added) for States to make every effort, in a spirit of understanding and cooperation, to enter into provisional arrangements of a practical nature which do not prejudice a final determination of the seabed delimitation...¹⁸¹

From a theoretical point of view, this could be the most interesting fact about the present comparing effort, as far as the law of the sea as well as international peace and cooperation are concerned. It should be noted that the two agreements occurred within two years, and that in the same time frame, another boundary related agreement making reference to the said provision on provisional arrangements was concluded between Algeria and Tunisia on the African shores, on 11 February 2002. In 2003, the year following the TST, Barbados and Guyana on the Atlantic shores of South America signed another agreement with identical reference to the LOSC provision on provisional arrangement. It is likely that the Agreement between the Government of

¹⁸¹ The Preamble of the N/STP-JDZ acknowledges the same obligation by considering article 74 (3) of the LOSC "which requires States with opposite coasts…".The Timor Gap Treaty's preamble starts as follows: "Australia and the Republic of Indonesia, taking into consideration the United Nations Convention on the Sea done at Montego Bay at 10 December 1982 and, in particular, Article 83 which requires States with opposite coasts, in a spirit of understanding and cooperation, to make every effort to enter into provisional arrangements of a practical nature…". A copy of this agreement is available from Jonathan I. Charney and Lewis M. Alexander, International Maritime Boundaries, eds., Vol. II (Dordrecht/London/Boston: Martinus Nijhoff Publishers, 1993), 1256-1328. The vocabulary shift from the verb "require" to the world "obligation" can me the sign of a will of clarity on the legal position of the States Parties. Let us recall that 160 out of around 180 States in the world are Parties to the LOSC. So almost every single State as part of the world community is aware of this requirement or obligation that it supposedly endorsed purposely when signing, ratifying or acceding to the LOSC.

China and the Government of North Korea on the Joint Development of Offshore Petroleum, signed on 12 December 2005, would establish a JDZ with reference to that provision¹⁸². And there seem to be high probability for a JDZ in the same region between China and Japan¹⁸³.Such an agreement carried out while waiting for maritime delimitation should take into consideration the LOSC provision on provisional arrangement, and would be a milestone in the practice. It would sharply alleviate tensions in the region, where they have been extremely high since decades due to the area being rated among the most oil and gas rich regions in the world¹⁸⁴.

This accelerating practice is substantially different from the earlier one on the ground of this emphasis on the LOSC provision on provisional arrangement, underlining a shift from mere State practice to some *opinio juris*. For this repetition at the world scale, in agreements preambles, of the same legal feature, already set forth in an international instrument almost thirty years ago, should be viewed as an obvious acknowledgement by States that there exists an international obligation to enter into provisional arrangement agreements when they can't agree on their maritime delimitation disputes¹⁸⁵. It should be emphasized that for parties to the LOSC, this reference to a provision which itself is part of the LOSC amounts to a mere re-statement of their commitment to respect an obligation already accepted as such.

One can observe that there is at the same time more and more commentators writing on the subject, and the case law has given in 2007 its first position on the LOSC provision on

¹⁸² It is still difficult to find any copy of the said Agreement, which Gao Jianjun mentions in his article, Joint Development in East Asia..., IJMCL (March 2007), 44; see the end of his footnote 18

¹⁸³ See Appendix 4, Map of interlapping EEZ claims of China and Japan in the East China Sea. The area circumscribed by the two EEZ lines is a potential JDZ.

¹⁸⁴ Zhao Li Guo, "Seabed Petroleum in the East China Sea :Geological Prospects and the Search for Cooperation" [article on-line], available at http://www.eia.doe.gov/emeu/cabs/East_China_Sea/Full.html, accessed on 29 March 2010.According to this document, the high oil potential of the region is known since 1969 thanks to the report of the Committee for the Coordination of Joint Prospecting for Mineral Resources in Asia offshore Areas. This Committee was set up in 1966 by the United Nations Economic Commission of Asia and Far East. According to Zhao Li Guo, the report by the Committee "indicated that the continental shelves between Taiwan and Japan are probably one of the most prospective oil and gas reserve areas in the world."

¹⁸⁵ The international weight of the LOSC, to which all of the States Parties referred to above are parties, could be enough to affirm the existence of an international obligation. It may be recalled that the LOSC now has 160 members, as already noted in this paper while discussing the LLS issue in relation to the JDZ jurisdiction in the first chapter. But for some commentators, obviously the mere existence of a provision in an international binding instrument, be it the LOSC with its current 160 members, is not enough to conclude that there exists an *opinio juris* on some particular matter. Maybe they are right, but not necessarily. Thus up to the period around 2003, there was a need for further and explicit instruments performing clearer will and legal position from State on the existence of an international obligation for provisional arrangements. The current practice of JDZs and provisional maritime boundaries brings about some satisfaction to this need, by reaffirming the obligatory nature of the LOSC article 74(3) and 83(3). So does the

provisional arrangements. It is however important to notice that whereas the *opinio juris* sustained by State practice does not apply to joint development agreements across the board, including unitization agreements. The LOSC provision as international obligation and the recent case law refer only to provisional arrangements and to unitizations to the extent that they are provided for in provisional arrangements¹⁸⁶.

Some writers such as Cameron would not share our view about provisional arrangements as an international obligation, as he was still arguing in 2006 that even about provisional arrangements, there was no evidence showing that States considered them as an obligation. After the Award of September 2007, maybe it would appear more acceptable to him that there is an evident opinio juris about the matter, and not mere practice. Should he go on holding, while interpreting paragraph 3 of articles 74 and 83, that "this is probably a precaution against the discovery of common mineral or hydrocarbon prior to the conclusion of the final delimitation agreement"187, one may reply that this view is not so much consistent with practice. For if for instance one considers the 2002 Arrangements between Algeria and Tunisia, which refers to that paragraph to draw a provisional boundary, it is not only shared resources that is involved in this provision. That agreement doesn't share any resources directly. Its first interest lies in drawing a provisional boundary as a practical provisional arrangement pending permanent boundary delimitation. Besides, States could also contemplate cooperation over security or maritime transport, or environment issues under this practical provisional arrangements provision of the LOSC. Cameron's doctrinal interpretation thus appears in a way to be a rather restrictive one. But Cameron might be right for the remnant State practice over joint development, that is, broadly speaking, joint development where a boundary is already settled or is settled at the same time. But this is mere State practice, with no customary law, nor even any international conventional legal obligation arising out of it. This is the case with unitization agreements.

A final key consideration about the recent State practice concerns the customary status of the LOSC as a whole. As the recent State practice expresses some *opinio juris*, this is a further pace towards ascertaining the customary status of the LOSC, which is still a matter under discussion among law commentators.

¹⁸⁶ They are provisions for such unitization agreements in the N/STP JDZ(art. 31), the Timor Gap Treaty(art.20) and the TST (art 9 and Annex E under art.9/b).

¹⁸⁷ Peter D. Cameron, "The Rules of Engagement: Developing Cross-Border Petroleum Deposits in the North Sea and the Caribbean", The International and Comparative Law Quarterly 55, Issue 3, (Oxford: July 2006) 563.

3. A similar degree of complexity

Both the TST and the N/STP-JDZ are complex instruments, maybe more than the Malaysian-Thailand JDZ. They cover respectively 19 and 21pages in the standardized format of copies adopted by the DOALOS website displaying copies of treaties registered by the UN-General Secretary. The former has got twenty articles and seven Annexes, whereas the latter presents fifty-three articles divided into twelve Parts, and includes an Appendix and a Memorandum of Understanding.

4. Similar jurisdiction sharing and management schemes in the JDZs

The TST set out a regime of joint jurisdiction similar to the one instituted by the N/STP JDZ. This regime is established under article 3 bearing on "Joint Petroleum Development Area. Whereas paragraph (1) establishes the "Joint Development Area (Area)", paragraph (2) gives precisions on the jurisdiction in the JPDA in these terms:

Australia and East Timor shall jointly control, manage and facilitate the exploration, development and exploitation of the petroleum resources of the JPDA for the benefit of the peoples of Australia and East Timor.

There is no significant difference in the system of joint jurisdiction, as long as the comparison bears only on the JPDA and the JDZ, though it should be noticed that the balance of power in the supervising body between parties is different. Under the TST, besides the revenue – split of 90/10 in its favour, East Timor enjoys "a prominent role in the three-tiered management structure"¹⁸⁸. For instance, after the three-year long transitional period upon entry into force of the TST, the Designated Authority shall be the Timorese Ministry in charge of petroleum activities or the statutory body it shall design¹⁸⁹. Furthermore, it shall have one more appointee in

¹⁸⁸ Nuno Marques Antunes, Towards the Conceptualisation of Maritime Delimitation. Legal and Technical Aspects of a Political Process (Leiden/Boston: Martinus Nijhoff Publishers, 2003), 363.

¹⁸⁹ See article 6(b) (ii) of the TST. Under article 6(b) (iv), the Designated Authority is in charge of the day-to-day running of the JDZ and its activities, while under article 6(c) (i), "the Joint Commission is the organ competent for establishing the policies and regulations relating to petroleum activities in the JPDA, which is empowered also to oversee the work of the Designated Authority. It must be noted, nevertheless, that the Commissioners have an individual competence to refer directly issues to the Ministerial Council(subparagraph iii). With this, Australian Commissioners may refer to the Council majority decisions taken by the three East Timorese commissioners." See Nuno Marques's footnote (421) on the same page referred to in its book mentioned in our footnote just above.

the Joint Commission than Australia, even if this measure is of restricted scope due to the possibility given to either Commissioner at any time to "refer a matter to the Ministerial Council for resolution"¹⁹⁰. But the Commissioner won't be able to use that power in opposing decisions from the Joint Commission over the construction of pipelines in certain conditions, for the "Ministerial Council may not review or change any such decision"¹⁹¹.

The writer Nuno Antunes discusses these issues from the stand that "under the Timor Sea Treaty the revenue-split is 90/10, favoring East Timor. This appears as a first sign of East Timor's 'better title over the area"¹⁹². By so doing he takes a position in the debate over equity, fairness and entitlement over the JPDA.

The criminal law is part of the jurisdiction.

One key consideration as to dispute settlement is the fact that the most powerful partner in each case has recently modified its relation to ICJ jurisdiction. Yet, Nigeria and Sao Tome and Principe could be complimented for choosing settlement under UNCTRAL rules and seat in Abuja. Arbitration appears to be the preferred dispute settlement method for Australia.

D. The Tunisia-Algeria 2002 Arrangements: a provisional boundary as provisional arrangement

On 11 February 2002 was signed an Agreement on Provisional Arrangements for the delimitation of the Maritime Boundaries between the Republic of Tunisia and the People's Democratic Republic of Algeria. This treaty from many points of view is very innovative and could later appear to be another landmark in the practice of provisional arrangements under articles 74 and 83 of the LOSC.

1. Drawing a provisional boundary under articles 74 and 83 of the LOSC

¹⁹⁰ See articles 6(c) (i) and 6(c) (iii) of the TST. The latter states that "except as provided for in article 8(c), the commissioners of either Australia or East Timor may at any time refer a matter to the Ministerial Council for resolution".

¹⁹¹ That provision is article 8(c) which reads as follows: "In the event a pipeline is constructed from the JPDA to the territory of either Australia or East Timor, the country where the pipeline lands may not object to or impede decisions of the Joint Commission regarding a pipeline to the other country. Notwithstanding article 6 (C) (iii), the Ministerial Council may not review or change such a decision."

¹⁹² Nuno Marques, Towards the Conceptualisation...(2003), 363.

One of the innovative feature attached to this treaty is the method it applies to resolve maritime delimitation. Instead of creating a JDZ across a boundary line as what prevailed between Tunisia and Libya following the ICJ 1985 Judgment, or creating a JDZ over the disputed area as is the case between Nigeria and Sao Tome and Principe in the Gulf of Guinea, the Parties decided to recourse to a provisional boundary.

It is also innovative by its unquestionable reference to the LOSC. The Preamble takes into consideration, *inter alia*,

"the provisions of the United Nations Convention on the Law of the Sea, adopted at Montego Bay on 10 December 1982 and ratified by the two Parties, and particularly article 74, paragraph 3, and article 83, paragraph 3, thereof concerning provisional arrangements...

It seems that this is the first time ever such a solution prevails not only under the LOSC's provisions, but also in the whole field of maritime delimitation throughout the world.

The Treaty establishes a boundary consisting of two segments and four points. Article 9 says that its validity will go through a period of six years starting from the exchange of their respective instruments of ratification between the Parties. But this period is subject to be extended or revised under article 10.

2. A case of multi-purpose delimitation

This treaty refers both to article 74 on EEZ and article 83 on continental shelf due to the nature of the so established boundary line: it creates a multi-purpose maritime boundary dividing not only the respective EEZ of the Parties, but also their respective continental shelves. It is more general than the 2001 N/STP Treaty and the 2003 Barbados-Guyana Arrangements on their EEZ to the extent that it also covers the respective continental shelves of the Parties.

3. An Intermediary solution in matter of provisional arrangements

This agreement is essential to the practice of provisional arrangements, as it appear to give an example of something even simpler than the light institutional framework displayed in the 02 December 2003 Treaty between Barbados and Guyana Arrangements on their EEZ.

It offers a second or third type of provisional arrangements. In the former case of provisional arrangements, and in most cases, parties usually delimit a common zone upon which they exercise joint jurisdiction, with or without the establishment of a joint authority. In the case of a provisional boundary, there is no need to have any common zone, joint jurisdiction or joint authority.

The Arrangements give enough guaranties to the parties in matter of the protection of their rights and interests, as a *non-prejudice clause* is incorporated in the agreement. This clause is displayed by article 4, which considers as follows:

The details of the provisional described in article 1 of this Agreement shall be without prejudice to the final delimitation of the maritime boundaries between the two countries¹⁹³.

Article 6 of the Treaty helps to deal with usual matters at issue in maritime areas by the means of mere cooperation and coordination between the Parties, without contemplating any particular institution. Such matters include the conservation of natural resources, the application of conventional rules, the prevention of threats and illegal activities, etc.

The dispute resolution mechanism too is a simple one as stated in the single sentence article 7 is made up of:

Any dispute concerning the application or interpretation of this Agreement shall be settled by consultation or by any other means agreed between the Parties.

This Treaty is also essential in the sense that it helps to show that the concepts of *joint development* on the one hand and *provisional arrangement* on the other hand are different ones, as provisional arrangements don't necessarily involve joint development. There can be provisional arrangement without any sharing of resources. Article 5 simply tries to anticipate the event of resource sharing, but the validity of the agreement is not linked to it¹⁹⁴. Although it concerns EEZ, it doesn't deal with the sharing of living resource like the February 2001

¹⁹³ Article 1 just gives the coordinates of points P1, P2, P3 and P4 that encompass the two segments making the boundary. Article 3 states that "The republic of Tunisia and the People's Democratic Republic of Algeria shall exercise their sovereignty, their sovereign rights and their jurisdiction east and west, respectively, of this line". ¹⁹⁴ Article 5 reads as follows: "In the event of the discovery of deposits of mineral resources that cross the

provisional line, the two Parties shall consult each other with a view to reaching agreement on arrangements for the equitable exploitation of such resources."

N/STP Treaty or the December 2003 Arrangements on EEZ between Barbados and Guyana. The prime aim of provisional arrangements thus appears to be maritime delimitation and not sharing resources as such. In the example between Tunisia and Algeria, joint development, be it undertook as JDZ or unitization may occur or not, this is not the issue at stake for the Parties.

Serious academic consideration on the customary status of joint development began in the early seventies, with efforts from some writers asserting the existence of a customary obligation. In the seventies, Rainer Lagoni and Onorato William T. triggered that discussion¹⁹⁵. But that discussion as a whole focused on transboundary resources. Two workshops organized by the East-West Center even took place at the beginning of the eighties. The proceedings of those workshops and their contributors share a restrictive view about joint development, which they generally consider different from unitization and based on transboundary resources. They follow an orientation set out since the seventies in the earlier legal literature on the matter.

This orientation, maybe under the influence of legal literature on the near concept of unitization that was developed prior to it up to the sixties, fails to take into consideration a key issue: joint development is about exercising joint jurisdiction over maritime areas, and not just sharing resources. Our main argument here is that even without any resource being at stake, States would still have disputes over overlapping maritime areas. Those areas remain important for matters related to territory and security, maritime transportation, right of over flight, etc. Even if States might not be aware enough of that fact, the issues at stake here concern State jurisdiction first. It is because this jurisdiction extends to marine resources falling under it that they become so important to States, as they are viewed as national source of wealth or income. As long as provisional arrangements are a category of joint development practice, they evidence the fact that some part of that practice does not relate to joint development of resources. The provisional boundary drawn by Algeria and Tunisia is an illustration of this. This agreement could be a precedent setting a new development in the practice of provisional arrangements. This could be evidence for sustaining the view that fundamentally, it is State jurisdiction, and the sovereign rights attached to it, that are at issue in provisional arrangements. They are some

¹⁹⁵ Yoshifumi Tanaka, Predictabilitty and Flexibility....

outstanding underlying issues when one considers maritime delimitation disputes. These are for instance fishery matters, environment and the role of regionalism in helping to shape a coherent worldwide ocean policy and governance.

PART II- THE JDZ AND OCEAN GOVERNANCE MATTERS: ENVIRONMENT, FISHERY, HYDROCARBONS AND REGIONALISM

Maritime areas have bearing on many challenges the JDZ will have to face, as it goes more and more operational. The N/STP 2001 Treaty creating this JDZ is already almost ten years old, and while oil prospecting is still going on, the exploration and exploitation of non-living resources, which this instrument provided for as well, doesn't seem to be high on the agenda yet. It may be time to start a prospective analysis of other problems that are going to need a response from the parties, in relation with both kinds of resources that are a stake in it. The new focus of our research entails taking into account the broader context of regional development. This broader context underlines the fact that maritime delimitation and marine resources exploitation, as any major ocean related question, are actually issues in full bearing with problems of general interest for the mankind as a whole: the conservation and sustainable use of marine diversity in the one hand, and the more compelling problem of global climatic disruption¹⁹⁶, commonly referred to as *global warming*, on the other hand. Upgrading the discussion from a bilateral maritime delimitation concerns to this level, as it pertains to mankind concerns, may lead to a research scope which is more general too, involving world geopolitics, political economy as well as ocean science management, and not only mere law. For it is our view that the underlying development issue, which doesn't concern only developing countries, but also the so-called developed countries, calls about new patterns of development and more cooperation, including regional cooperation and integration.

There are current and forthcoming tremendous challenges for developing coastal States to face, such as the delimitation of the outer continental shelf, their participation in the development of the mineral resources of the Area, ensuring security in maritime areas, the port State control

¹⁹⁶ This expression has been very recently proposed by John P. Holdren against the latter, on the ground of its inappropriate connotations: "The popular term global warming is a misnomer. It implies something uniform, gradual, mainly about temperature, and quite possible benign. What is happening to global climate is none of those. It is occurring with uneven effects across geographic, economic and social divisions". See John P. Holdren, "Introduction", in Climate Change Science and Policy, eds. Stephen H. Schneider and others (Washington / Covelo / London: Island Press, 2010), 2.

scheme, natural resources assessment in their EEZ, or the protection of maritime areas beyond State jurisdiction. As far as the N/STP JDZ is concerned, those major issues appear to be linked to the management of living and non-living resources, but also to regional cooperation as a better framework to deal with them. Chapter III shall deal with the JDZ and the management of the non-leaving resources, whereas Chapter IV shall focus on the regional relevance of the JDZ and the prospects for regional integration it may sustain.

CHAPTER III: THE JDZ AND FISHERY MATTERS

There is a fishery issue at stake for third parties in the N/STP JDZ in the Gulf of Guinea, albeit this seems a secondary issue as evidenced by the current state of the agreement implementation. This issue has already been discussed in the first Part of our analysis, but some considerations could still be held in relation to the general interest of the parties themselves, of neighboring States, of LLSGDS in the region, and the international community. This general interest is related to several problems, among which environmental risks, including of pollution, the problem of fishing resources assessment in the EEZ of developing countries in view of the share to be potentially granted to LLGDS, to sustainability and environment protection. They are concerned with the international legal framework under the LOSC and other international instruments related to fishery matters and environment, which appears to be the ultimate challenge for mankind as a whole, and where there should be no excuse for failing to act. As the JDZ is under the same legal regime of EEZ, and covers most of the maritime area between the contracting parties, besides their respective territorial sea, prospective thought and action really needs to be taken upon the management of that area in relation to these issues. To assess the latter, a review of the legal framework of fishing in the Gulf of Guinea (Section I) could be useful, in order to deal more properly with fishery issues in the JDZ (Section II).

SECTION I-THE LEGAL FRAMEWORK OF FISHING IN THE GULF OF GUINEA

A. The International Legal Framework and Context of Ocean Management

Indeed it is not easy to find one's bearings in the complex and multifaceted international law that pertains to oceans management. However, as far as this research paper is concerned, it is possible to consider the LOSC as the main legally binding instrument relevant to this field (2) before considering other sources of international law (3). As international law cannot be properly developed nor implemented independently of the will from major actors shaping international relations, it may appear important to have an overview of the relation of this actors to the general concerns over oceans and environment as contemplated in this discussion. This overview tends to present western States and corporations as irresponsible and criminal (1), especially following

the poor outcome of the last December 2010 Copenhagen Summit dedicated to international anti global warming strategy.

1. So-called developed States: lessons from Copenhagen. Irresponsible States and Criminal Economies

The poor and disappointing outcome of the last December 2009 Copenhagen Summit on which the world civil society and peoples throughout the world relied for strong coordinated action in view of starting to curb global warming has confirmed the irresponsible attitude and the criminal economic foundation that has characterized European States for five hundred years. After having built America on the destruction of Native American, and developed that massive land with cheap Black African labor through centuries of Trans-Atlantic slavery trade, after failed attempts to seize whole continents while disregarding their peoples under the twocenturies long colonial move, not counting the two world wars, we are experiencing the most outstanding display of irresponsible management of the threat of global warming. Whereas small island countries like the Maldives have been supplicating for a 1.5 heat percentage elevation maxima¹⁹⁷ before and during the summit, above which they and other countries in the world could disappear, Western countries, that pretend to be developed, say they can't undertake to slow the pace of their expanding economies, which tend to product more than their own national needs! One possible interpretation of the outcome of the Summit is that these States would prefer many peoples around the world loosing the land on which they have been living for millenaries, rather than their economies loosing 1 or 2 points in their growth rate! World climate disruption causing natural catastrophes and inflicting distress and hunger to peoples throughout the world are far better a feature than lowering the living standards in Western countries! Are they so poor they can't do so, while pretending to be developed and industrialized.

The issue cannot be China, for if Western countries really want China to abide by, they would succeed, being the major economic and financial partner of this country, and considering

¹⁹⁷ Global warming not to be reached is generally appreciated in terms of 2 to 3 °C temperature elevation as compared to the planet's mean temperature at the beginning of the industrial era, around 1750. Ideally, it could be better to go back to this pre-industrial period climate, and it may seem that the goal for mankind would be to go back as far and fast as possible to 1°C difference between that period and the current period of climax in the effects of anthropogenic activities on the earth's weather. It is alleged that with a warming going beyond 1.5 percent elevation, many island countries will disappear.

the connections between their respective economies. For that, there is a need for themselves to undertake courageous measures. As they don't want to, they may lack any argument against China, which has been producing for the whole world now, and polluting in a way accepted by all of it.

And it cannot be Africa nor other developing countries neither. As concerns Africa, the political mess and the poor shape of its economy are certainly linked to its relation to western economies over the last five centuries. Up to this date, every major orientation of African economies has been linked to the world economic system. If tropical rain forests are being depleted since decades, this is the achievement of western corporations. The same applies to ocean resources off African coasts.

All of this should not prevent African States to strive to contribute in solving this global threat of atmospheric warming, as it is their responsibility to build a more respectful relationship with other States, be they African or non African.

It may seem inaccurate to accuse Western economies of criminality. But what is true is that as leading economies since centuries, they lead the pace. Comparing armies' figures and the financial package to alleviate global warming is enough to show that they care more about their armies while the planet would be sinking, and this should be called irresponsibility, if not a suicidal move!

The outcome of the Copenhagen seems to show that they don't care too much about time as a parameter in the equation to resolve global warming. Furthermore, their economies and their armies are more important than the fate of the planet and of millions of peoples! It has been the same stuff since centuries. For instance, America's stand against global warming but for oil industry has been illustrated in the days just after the Copenhagen Summit in a clear move. Having secured the endorsement by the US Parliament of his universal health care insurance and Student support files, President Obama turned towards the oil industry, as in the fulfilling a part of an agreement. Was there a deal between him and oil business milieu: "I shall give you the green light for more offshore oil exploitation, subject you helping me secure the bill!" A post-Copenhagen report by a famous NGO, Greenpeace, has recently denounced President Obama's decision to allow for oil exploitation in maritime areas where it had been banned before.¹⁹⁸

¹⁹⁸According to a blog displaid on the website of Greenpeace, "On the heels of his victory on healthcare and student aid reform, President Obama announced today that he would kowtow to the oil industry and allow exploration

Furthermore, Obama's proposal at the Copenhagen Summit is 30 billions. The US army budget is more than that. It is the case with other Western countries, with Asian countries, and African countries. Who really matters about global warming?

The bitter remark recently made by David Freestone, an eminent specialist of ocean management issues, is not going to be altered before soon:

In all areas of the oceans problems of pollution, ecosystem destruction and overfishing persist and indeed, despite international actions, seem to be increasing¹⁹⁹.

Is it not naive to expect a different result? And the crimes - many organized by Western and Japanese entities and corporations - are gaining ground towards the high seas, as Freestone further discloses:

As we begin to appreciate more fully the rich biodiversity of areas beyond national zones and the important role this plays in the global in the global system, including helping to regulate its climate, these areas particularly face new risks. IUU²⁰⁰ fishing for deep ocean species, uncontrolled bottom trawling over seamounts, exploration of thermal vents as proposals for geoengineering activities such as iron fertilization, are just some of the activities which reveal the

and drilling in 167 million acres of coastal waters that have been protected for decades. Obama's proposal would allow oil and gas exploration in the coastal waters of the southern Atlantic states and the eastern Gulf of Mexico, threatening fishing and tourism industries in those regions. Incredibly, despite dire warnings from the scientific community that we are approaching a tipping point in Earth's climate system, Mr. Obama has set us on a course toward more dependence on fossil fuels. In his announcement, Obama insisted that this move will decrease our dependence on foreign oil and create jobs. But these claims don't hold up to scrutiny. Investing in conservation and renewable energy would go much farther on both fronts. The United States consumes 25 percent of the world's oil, but has only three percent of the world's reserves. In fact, the total oil reserves along our coast represent just a fraction of current U. S. demand, meaning we'll still have to import plenty of oil from overseas.

Meanwhile, the National Renewable Energy Laboratory estimates that onshore U.S. wind resources could generate nearly 37 million gigawatt-hours (GWH) of clean energy every year. That's more than nine times the amount of energy Americans consume annually and would simultaneously reduce our dependence on fossil fuels and cut our emissions of global warming pollution in the process. Investment in renewable energy and energy efficiency has the potential to create 14.5 million more jobs by 2050 versus continued reliance on fossil fuels, and would simultaneously reduce our dependence on fossil fuels and cut our emissions of global warming pollution on the process. China and Germany are winning the clean energy race, while Obama has just staked our future and our economy on an outdated fossil fuel that will take years to extract and will cause far more harm than good". See http://members.greenpeace.org/blog/greenpeaceusa_blog/2010/03/31/is_this_obama_s_clean_energy_plan_or_pal

¹⁹⁹ David Freestone, "Editorial. Principles Applicable to Modern Oceans Governance", the International Journal of Marine and Coastal Law 23, special Issue : "international Governance in the 21st Century: perspectives from the UICN Commission on Environmental Law's Specialist Group on Oceans, Coasts and Coral Reefs, David L. Vander Zwaag and Nulifer Oral, eds. (September 2008),385

²⁰⁰ *IUU fishing* stands for Unregulated and Unreported fishing.

lack of an holistic system of governance for these areas, based on established and agreed basic principles²⁰¹.

But most lawyers are idealists who believe like the German great thinker Georg Friedrich von Hegel that ideas rule the world. They certainly might do so, subject to this condition: you need to fight for them. States may every day accept signing different kinds of agreements, they're under influence from interests groups within and outside their boundaries. This is especially the case with African countries adhering to many international instruments.

The current international legal framework should be analysed under this background, bearing in mind that the same countries which undertake the agreements are likely to violate them in their spirit at least, both at home and abroad. There must be some lack of seriousness in the pledging States undertake under international law. This could explain why there so many instruments regulating oceans, for each time there is the idea that States need to be brought to negotiation over this issue or that other one they don't want to consider. The LOSC being referred to as the constitution of oceans, we start our discussion with it. The provisions of the LOSC under scrutiny in this part of our discussion cover the EEZ, thus the N/STP JDZ, as well as the high seas²⁰².

2. The LOSC and fishery management: MSY and OSY

One concept through which it could be advisable to undertake to grasp the bulk of the international framework of fisheries is that of *Maximum Sustainable Yield (MSY)*, which is developed in the LOSC in order to ensure optimum utilization of fish stocks²⁰³.MSY is as a matter of fact the same thing as *Optimum Sustainable Yield (OSY)*.It's just that MSY is used in consideration to economic, social or ecological values²⁰⁴. The meaning of this concept at the time

²⁰¹ Ibid.

²⁰² Under the 1958 Convention on high seas, the high seas are maritime areas beyond national jurisdiction, which are beyond the territorial sea. Under the LOSC, it still the same, the high seas refer to marine space beyond State jurisdiction that is beyond the territorial sea and the EEZ. Article 86 of the LOSC on the Application of Part VII quite incidentally suggests that definition of the high seas must be as follows: "[A]ll parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State, or in the archipelagic waters of an archipelagic State."

²⁰³ Gail Lugten and Neil Andrew, "Maximum Sustainable Yield of Marine Capture Fisheries in Developing Archipelagic States-Balancing Law, Science, Politics and practice", The International Journal of Marine and Coastal Law 23, n°1(March 2008),1.

²⁰⁴ Ibid.,4.The authors mention on page 3 that "the scientific foundations of MSY emerged in the early 20th century(...) in response to over-harvesting in the great fisheries of Northern Europe" and report to scientific

when it was being included in the international legal fishery regime in the 1950s reflects the state of theory at the time:

According to theory, there is a maximum level of depletion of stocks beyond which stocks will decline. In the 1950s (when the international legal regime first examined the concept of MSY) a common formulation held this maximum to be half the carrying capacity of the population in the absence of fishing. Accordingly, management targeted this level for fishing quotas²⁰⁵.

The LOSC represents a significant shift in world marine resources as it departs from the consideration that oceans are a mere source of food or hydrocarbons. The most important consideration here has to do with the obligation, prior to any exploitation, set out by the LOSC.

3. The other sources of ocean management law

Subsequent to the LOSC, the concept of MSY has been contemplated throughout the 1990's in many negotiations, according to Gail Lugten and Neil Andrew²⁰⁶. This resulted in the following instruments of both hard and soft law:

-Agenda 21: the United Nations Programme of Action adopted by the United Nations Conference on Environment and Development (hereafter Agenda 21) (1992),

- FAO Code of Conduct for Responsible Fisheries (hereafter Code of Conduct) (1995),

- Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (hereafter Fish Stocks Agreement) (1995) and its Plan,

²⁰⁵ Ibid..

writing on the matter as early as 1914. They state that it was not till the 1950s that its inclusion in instruments of international fisheries management occurred, noting the following: "The concept of MSY was considered at both the 1955 Rome Technical Conference on Fisheries, and at the 1958 first United Nations Conference on the Law of the Sea (UNCLOS I). The term "optimum sustainable yield" (OSY) was eventually included in the 1958 convention on Fishing and the conservation of the Living Resources of the Sea. The term OSY would eventually come to mean MSY modified by economic, social or ecological values. However, in 1958 at the time of the UN Convention, the terms OSY and MSY were not clearly defined or distinct. Certainly neither term took into account environmental factors, the economies of fish trade, or the special needs of developing States. As [noted by some authors], the earliest legal references to MSY and OSY were "directed solely at maximizing the supply of food and other marine production to all States."

²⁰⁶ Gail Lugten and Neil Andrew...IJMCL(March 2008),

- Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem (hereafter Reykjavik Declaration) (2001) including the FAO Technical Guidelines for the Implementation of an Ecosystem Approach to Fisheries (hereafter FAO TGI-EAF) (2003), and

- World Summit on Sustainable Development Plan of implementation (hereafter WSSD Plan) (2002)²⁰⁷.

Let us consider the first of this instrument, Agenda 21. A UN General-Secretary's report shows that UNEP's Regional Seas Programme, adopted in 1974, actually provides the implementation framework for Agenda 21, and particularly to its Chapter 17 on oceans²⁰⁸. The latter itself is part of the Plan of Implementation of the WSSD Plan as just stated above. The 2002 World Summit on Sustainable Development (hereafter WSSD) is particularly interesting as it promotes another important concept in the field of global ocean governance, that is to say *Sustainable Development of the Oceans* (hereafter SOD):

The Regional Seas Conventions and Action Plans provide a platform for the implementation of this concept. The UNEP's Regional Seas Programme is based on regional Action Plans, related to a common body of water, which is usually adopted by high-level intergovernmental meetings and implemented, in most cases, in the framework of a legally binding Regional Seas Convention and its specific protocols, under the authority of the respective Contracting Parties or Intergovernmental Meetings²⁰⁹.

Thus the concepts of *MSY* (*Maximum Sustainable Yield*) and *SOD* (*Sustainable Development of the Oceans*) are one to another correlated. But it seems beyond discussion that the latter is the largest of those concepts which it includes, thus the former is just a way to implement it.SMY is entailed by SOD which is more comprehensive and vast, and one can say

²⁰⁷ Ibid. 2(Geil). This list as proposed by the authors can be enlarged to take into consideration "UNEP's Regional Seas Programme, which is based on regional Action Plans, related to a common body of water"; see "2003 Secretary-General's Report on Oceans and the Law of the Sea. Input from the United Nations Environmental Programme (UNEP)" [book on-line] (UN web site, 2003; accessed 17 April 2010); available from http://www.un.org/Depts/los/general_assembly/contributions2004/UNEP_RS2004.pdf; Internet.

²⁰⁸ See previous footnote here above.

²⁰⁹ See previous footnote here above. The Secretary-General's Report, which was released the year following the 2002 WSSD, further states that "UNEP's Regional Seas Programme, initiated in 1974, provides a legal, administrative, substantive and financial framework for the implementation of Agenda 21, and its chapter 17 on oceans in particular. The Plan of Implementation of the World Summit on Sustainable Development (WSSD, Johannesburg 9/2002) also focuses on the issue of oceans, seas, islands and coastal areas as critical elements for global food security and for sustaining economic prosperity".

more important as the whole deserves more consideration than a part of it, and collectivity more than mere individuals it is made up of.

One may choose just both the UNEP's Regional Seas Programme and the FAO Code which are enough important by themselves to ensure sound ocean policies on common seas in order to assess what States have done so far in these domains. Too much instruments may prevent efficient action. An effort to identify the most important agreements could be considered in order to avoid what some authors terms as "instrument implementation fatigue" ²¹⁰What has been achieved in relation to the Gulf of Guinea as a region, especially by the Parties to the N/STP JDZ? How do they manage with both concepts of MSY and SOD? This is a suggestion to go back to the relation between the parties to the N/STP JDZ Treaty and international law.

B. Nigeria, Sao Tome and Principe and the International Legal Framework of Ocean Management

It is possible to address the position of both parties to the N/STP JDZ Treaty by considering each country as a single case and try to assess its relationship with the instruments on SOD or SOM. Let us then consider first Nigeria in its relation to the international legal framework of ocean management (1), and then Sao Tome and in the same relation to the international legal framework of ocean management (2).

E. Nigeria and the International Legal Framework of Ocean Management

Being party to certain international instruments can help in assessing the commitment of a particular State to some promoted values. In relation to ocean management, such instruments are, for instance:

- The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters, signed on 13 November 1972;

- The Convention on International Trade of Endangered Species and Wild fauna and Flora, signed on 3 March 1973;

²¹⁰ K. Cochrane and D. Doulman, "The rising tide of fisheries instruments and the struggle to keep afloat", in Fisheries: a future(Theme Issue of Philosophical Transactions of the Royal Society B:Biological Sciences,2005),80;cited in Geil...IJMCL(March 2008),3, especially footnote 2.

- The Protocol Concerning Regional Co-operation in Combating Pollution by Oil and Other Harmful Substances in Cases of Emergency, 14 February 1982,

- Vienna Convention on the Protection of the Ozone Layer, signed on 22 march 1985,

- The Montreal Protocol on Substances that deplete the Ozone Layer, signed on 17 September 87,

- The United Nations Convention on Environmental Impact Assessment in a Transboundary Context, signed on 24 April 1991,

- And the Convention on the Conservation and Management of Fishery Resources in the South-East Atlantic Ocean, signed on 23 June 2001.

F. Sao Tome and the International Legal Framework of Ocean Management in the Gulf of Guinea

Sao Tome and Principe, just as Nigeria, has ratified many instruments, but the problem of implementation remains.

SECTION II- THE FISHERY ISSUE IN THE JDZ AND THE RELEVANCE OF THE REGIONAL CONTEXT FOR ENVIRONMENTAL PROTECTION

The concepts dealt with in the last section, such as sustainable ocean development, ocean management, global warming which entails ozone layer depletion, bring into play two branches of international law that are very close, if not identical: environmental law and sustainable development law. Under this Section, we shall consider the issue of LLGDS rights in the JDZ, in connection with the technical and political question of resources assessing capacity of coastal States (A).Interests relating to living resources may be affected by pollution from hydrocarbons as soon as the exploitation of the latter goes operational. It is then advisable to be aware of the necessity for assessing hydrocarbons pollution hazards too (B).

A. Assessing seizure capacity and LLGDS interests in the JDZ: between political will and scientific requirement

For practical reasons linked to the need to achieve an acceptable balance in the material distribution of discussion topics in the course of this research paper, it had not yet been possible to properly deal with LLGDS rights in the JDZ. Under Part v of LOSC on EEZ, articles 69 and 70 seem at first sight to grant LLGDS substantive rights which unfortunately are dampened by a kind of discretionary power given to coastal States. This discretionary power is governed under articles 61, 62 and specially article 71 which is in full bearing with the "non-applicability of articles 69 and 70".

Articles 69 and 70 are almost homologous. The former discloses the rights of LLS, the latter those of GDS. They have identical paragraph contents. Paragraph1 sets forth those sets of rights and reads as follows:

Land-locked /Geographically Disadvantaged States shall have the right to participate, on an equitable basis, in the exploitation of an appropriate part of the surplus of the living resources of the exclusive economic zones of coastal States of the same sub-region or region, taking into account the relevant economic and geographical circumstances of all the States concerned and in conformity with the provisions of this article and of articles 61 and 62.

The wording of this provision and the complexity of such an undertaking suggests that the coastal State and the LLGDS shall reach an agreement on what is an "equitable basis" by weighing "the relevant economic and geographical circumstances of all the States concerned". This operation might be a very complex one, especially as the parties negotiating such an agreement or arrangement shall bring their mind to bear on articles 61 and 62²¹¹.Paragraph 2 and 3 under article 69 –respectively 3 and 4 under article 70 due to the fact that its paragraph 2 is

²¹¹ Article 61 deals with the "conservation of the living resources". It states *inter alia* that "the coastal State shall determine the allowable catch of the living resources in its exclusive economic zone". It shall take measures to avoid over-exploitation of the resources, using scientific evidence to take necessary measures to maintain or restore "the maximum sustainable yield". Article 62 is on the "utilization of the living resources" discloses that: "1.The coastal State shall promote the objective of optimum utilization of the living resources in the exclusive economic zone without prejudice to article 61."Its paragraph 2 adds that: "The coastal State shall determine its capacity to harvest the living resources of the exclusive economic zone. Where the coastal State does not have the capacity to harvest the entire allowable catch, it shall, through agreements or other arrangements and pursuant to the terms, conditions, laws and regulations referred to in paragraph 4, give other States access to the surplus of the allowable catch, having particular regard to the provisions of articles 69 and 70, especially in relation to the developing States mentioned therein. "Paragraph 4gives an indicative of conditions and requirements that might need to be observed by nationals from other states in the EEZ of a coastal State.

dedicated to the definition of GDS- thus contemplate bilateral, sub-regional or regional agreements as well as "equitable arrangements" to be entered into between the coastal State and the LLS. The latter case of equitable arrangements shall occur "when the harvesting capacity of a coastal State approaches a point which would enable it to harvest the entire allowable catch of the living resources in its exclusive economic zone". This provision under paragraph 3 is to benefit developing countries solely.

Thus, considering the prospects for the JDZ, there is a necessity for both States to the N/STP JDZ Treaty to proceed to inquiries prior to any activity, even from their nationals, in the JDZ...

enhancing LLGDS participation as a duty of regional solidarity

- regional cooperation as an obligation: semi enclosed sea, GDS, LLS

The discussion about the management of living resources in the Gulf of Guinea and in the area to be covered by the JDZ can be extended to the hypothesis of offshore oil exploitation, and even beyond, to land, since it is asserted that the overwhelming majority of ocean pollution comes from the land.

a. Assessing hydrocarbons pollution hazards

There seems to be no policy and ill practices as regard hydrocarbons pollution in the Gulf of Guinea. There are reasons to worry about ocean management worldwide, and especially in the region where the N/STP JDZ is located: the Gulf of Guinea. This has been clearly stated in a recent paper by Carlos J. Moreno. Having noticed that all countries in the Gulf of Guinea are either currently producing offshore oil or are exploring for it, he states the following:

However, the region currently lacks a comprehensive environmental protection plan to address offshore oil and gas exploration and production.²¹²

This area is under geopolitical scrutiny from US and China, and their green record or SOD can be foreseen in the light of what is going around in the vicinity, that is the Niger Delta oil rich region and Central African rain forests. What goes on the shore is instrumental for fisheries, as scholars recognize that most part of ocean pollution is generated from land-based pollution and activities:

²¹² Carlos J. Moreno, "Oil and Gas Exploration in the Gulf of Guinea: Can the New Gulf Be Green?" Houston Journal of International Law 31,no2, 2008-2009, 422.

Land-based pollution and activities continue to be major threats to marine ecosystems. Some 80 per cent of pollution entering the oceans comes from land²¹³.

Current oil exploitation or transportation activities in maritime areas and forest areas in the region around the JDZ bear evidences of poor management of oil pollution and illegal exploitation of timber. There are reports from the civil society about poor management of oil pollution in the area around the Gulf of Guinea and in the Gulf itself.

This poor management of oil pollution in the Gulf of Guinea would make it become a "Black Gulf²¹⁴" in a negative sense, rather than a green one.

Nigeria faces a huge national political challenge, which of putting in place good statesmanship able to curb the rampant pollution. The situation in the Niger Delta is far from being reassuring as what concerns policy in the JDZ.

Exactly a decade ago, Nigeria went under the spotlight of the international news and sustained criticism after the shameful, cruel and inhumane assassination of Ken Saro-Wiwa, a Goldman Environmental Prize laureate. This assassination took the form of what is widely believed to have been a fake criminal trial. Fighting oil pollution in Ogoniland, in the Niger Delta caused that environment activist to be judged before a military tribunal and subsequently hanged in 1995 under the rule of General President Sani Abacha. Ken Saro-Wiwa had been defending the right of his people to live in a healthy and secure environment, while petroleum industry, particularly Shell, seemed not to care very much about it. For decades, Ogoniland and maybe other regions in the Niger Delta had been suffering from environment damage caused by petroleum waste dumping. On the wake of this cold murderer of the environment activist, Nigeria was suspended from the Commonwealth for three years. It seems that so remains the situation in the whole Niger Delta region, where there is news report of local population's youth taping directly the pipes to get their share of the black gold in rather dramatic circumstances, aggravating environmental damage.

²¹³ David L. Vander Zwaag, "The Protection of the Marine Environment from Land-Based Pollution and Activities: Gauging the Tides of Global and Regional Governance", The International Journal of Marine and Coastal 23(2008), 423-424

²¹⁴ As this area is situated on the shore of Africa with countries with Black population, it is unique in the world in that sense and could be rightly referred to as "the Black Gulf". Its oil potential adds to the relevance of this reference to blackness. Thus the Gulf of Guinea may be called the Black Gulf, rather than the New Gulf, which is being proposed by American analysts and which is less accurate, suggesting a newly born geographic area. See the article "can the New Gulf become a green gulf?"

There is a matter of great concerns for the JDZ, as it appears that people can loose their lives while claiming for environmentally sound oil exploitation policy. It is even more dangerous as it is clear that not only there are connections between political leadership and western corporations operating in Gulf of Guinea oil rich countries, but western governments have been "blind" to these connections. Those high-tech countries, self pretending liberal and honest, cannot seriously pretend to be unaware of the criminal way through which their corporations capture that oil they need and use every day, doing as if this was the problem of African corrupt leadership only. To some extent, they are the one who are corrupt, organizing corruption and cheap control and seizure of the wealth of African peoples through their lawless, merciless, irresponsible and immoral corporations.

Besides the Niger Delta problem which is of worldwide concern now, the very negotiator of the N/STP JDZ Treaty, former President Olusegun Obasanjo, is said to have been involved in corruption practices. A recent paper reporting this fact leaves room to some hope however, as it mentions that some influent politicians in Nigeria like Lieutenant-General Aliyu Mohammed have been opposing certain corruption practices²¹⁵. Maybe the international nature of the deal will prevent corruption and poor management in the JDZ. But it remains to be evidenced that peoples from these countries, and not mere individuals, would enjoy the financial outcome of oil exploitation in the JDZ, if it eventually appears to be any.

The events reported by news from Nigeria's neighbor, Cameroon, are no more reassuring either, as overexploitation of timber from Central African rain forest has been going on²¹⁶. The case in Cameroon presents links with Chad, a landlocked State whose pipeline passes through Cameroon to access Atlantic Ocean. There were reports of oil leak from this pipeline off Cameroonian coast in 2008.

²¹⁵ The article reports that Lieutenant-General Aliyu, an influent founding father of the ruling People's Democratic Party(PDC) had fight to save former President Obansajo under the rule of former President Sani Abacha, worldwide known for the cruel assassination of the minority Ogoni people's rights defender, late poet Ken Saro-Wiwa.General Aliyu then organized General's Obansajo election as President. Before leaving the power over to President Umaru Yar'Adua after the election of 21 April 2007, General Obansajo had unsuccessefully tried to secure the PDP's candidacy for the elections for Lieutnant-General Aliyu.The paper notices that once President, "Obansajo, however, bitterly resented the fact that Aliyu Mohammed was resolutely unwilling to enter the pattern of corruption which Obansajo soon embraced in the Presidency". See anonymous, "Change in Nigeria Before the End of 2009?" Defense and Foreign Affairs Strategic Policy 37, (Alexandria:2009), 17, in ProQuest[database on-line], UN Library, Electronic resources; accessed April 17, 2010.

Western and national corporations are involved in oil pollution and illegal trade of timber in Cameroon, according by reports from Greenpeace and other NGOs²¹⁷. These reports help to see the irresponsible behavior of western corporations in Africa and in the Black Gulf. The criminal nature of western economies is well exemplified through such behavior, where one can see that though western States and their corporations have been pretending favoring environment protection, they do little to control economic activities linked to sensible areas as oil pollution in ocean and timber illegal exportation²¹⁸.

What we have been trying to carry out throughout this part of our analysis is to demonstrate that the current poor situation of ocean governance in the Gulf of Guinea makes it doubtful that the parties to the N/STP JDZ Treaty may be able to achieve the environmental protection goals set out in it, in the case exploitation went effective. There is a link between world energy economy and geopolitics and coastal States environmental protection records in the Gulf of Guinea. This is due not only to the lack of a clear will both from industrialized States and their corporations to comply with international environmental and sustainable law, but also to the absence of any adaptation targets and schedules at world scale. To some extent, the lack of a comprehensive environmental plan in the Gulf of Guinea is a reflection of the lack of what is termed as "*mainstreaming*"²¹⁹.

This concept is linked to two other concepts used by Ian Burton in order to give more precision to global climate change issues: *adaptation* and *mitigation*. Whereas both concepts help to acknowledge that there is an impact of anthropogenic action on climate, the latter seems to refer more to measures and strategies undertaken by mankind in order to cope with the consequences of the global climate disruption and reduce its harmfulness²²⁰. The former would be concerned with measures and strategies in connection with the *long term process of adapting our technology and economy to our environment*. One could accordingly characterize mitigation

²¹⁷ It is the case with the European corporation FIPCAM, according to a Report by the civil society groups "Amis de la Terre" and Greenpeace, which allegedly sells illegally acquired timber in European markets.see their web site.

²¹⁸ The Us corporation Halliburton would have been involved in bribing practice to gain contracts in the Niger Delta region, according to the US paper dayly Independent of 15 or 16 April 2010; see AllAfrica, on-line magazine, at http://allafrica.com/stories/201004190070.html.

²¹⁹ E. Lisa F. Schipper and Ian Burton (eds.), The Earthscan Reader on Adaptation to Climate Change (London/ Sterling: Earthscan, 2009), 94.

²²⁰ Ibid . : « We are concerned with adaptation to a climate which is changing at a fast rate due to anthropogenic interference". Adaptation thus reveals the need to integrate environmental concern in the whole process of social life and organization including our technological achievements, on a daily basis.

as concern for solving actual and current environment hazards, while adaptation would be concern about the prevention of such hazards through sound economy, management and technology. For instance, measures agreed upon in 1992 in the framework of the Kyoto Protocol for emission reductions of gas contributing to the depletion of the ozone layer solely relate to mitigation, and not to adaptation:

There are agreed targets and schedules for emission reductions. There are no targets and schedules for adaptation (...) Mitigation has a legal regime in the form of the Kyoto Protocol which clearly establishes a mitigation regime and points the way forward. We are far from having a clear adaptation regime.²²¹

Mainstreaming to its part appears to be the current expression of adaptation in our consciousness as mankind. It would be a poor perception of what adaptation is, which still need some precision:

Perhaps that the need that is most recognized now is captured in the word "mainstreaming". This means that ways must be found to integrate climate change risks into development activities. National governments, planning and development agencies, ministries charged with managements tasks in agriculture, water, forests, environment ,physical planning, coastal development, health and others, should begin to consider how climate change risks will affect their policies, plans, projects and programmes."²²²

The view of this research, which is consistent with international law, is that the regional level is more accurate as the relevant geopolitical scale to deal with the challenges arising out of the need to protect environment and develop fishery in any region of the Gulf of Guinea, including in the N/STP JDZ.

²²¹ Ibid.. The author however sooner gives at page 90 a list of some achievements in terms of adaptation efforts, in the form of some particular funds: "A number of funds which can be used to support adaptation have been established including the Least developed Countries fund (LDCF), the Special Climate Change Fund(SCCF), and the Adaptation Fund established under the Kyoto Protocol. The Global Environment Facility(GEF) is now proposing a Strategic Programme on Adaptation (SPA) that will be a pilot exercise in the implementation of adaptation. The Strategic Priority was adopted by the GEF Council Meeting in November 2003, as part of the2005-207 GEF Business Plan, which allocates US \$ million to it."

²²² Ibid.

CHAPTER IV: THE JDZ: REGIONAL RELEVANCE AND PROSPECTS OF INTEGRATION IN THE BLACK GULF

There is at least a lesson to be drawn out of the issues at stake around the JDZ in the Gulf of Guinea, as they were progressively reveled in the course of our discussion. The prospective stance adopted in regard to the forthcoming problems to be faced in connection with the exploitation of hydrocarbons-in the event the current on-going exploration activities are successful- or in connection just with the exploitation of natural resources, or in connection with both, has led to a shift from the legal context of maritime delimitation to that of sustainable development. This shift is brought about by the general concern about environment and global warming, which makes any issue concerning ocean a matter of general interest. This lesson is that the issue of maritime delimitation and resources exploitation in the Gulf of Guinea is a regional one, and beyond the regional scale, a universal one, involving the interest of the whole mankind. Thus the legal regime set out in the N/STP JDZ Treaty and its potential implementation is not, and should not be, considered as affecting only the rights and interest of the two parties. This is true under the LOSC, and even truer under what has begun being called "sustainable development law"²²³. The last part of this discussion shall further evidence that lesson as it meets the view that the most accurate geopolitical and economic analysis of development requirements for most State in the Gulf of Guinea sub-region must put the idea of regional integration forward. Such geopolitics and economics suggest contemplating the hypothesis of expanding the JDZ in the framework of the GGC (Section I). They also accordingly suggest that regional cooperation is more likely to help riparian States in the Gulf of Guinea in implementing law of the sea in a more efficient way. This discussion shall then come to its final stage by trying to further assess the connection between regional cooperation and law of the sea implementation as this connection may help African States, including those around the JDZ, to face old and looming challenges related to the law of the sea (section II).

²²³ This concept and peculiar legal considerations attached to it are sustained by some authors like judge Christopher G. Weeramantry, who wrote the foreword of a book released by Marie-Claire Cordonier Segger and Ashfaq khalfan, then Directors at the Centre for International Sustainable Development Law; see Marie-Claire Cordonier and Ashfaq Khalfan, Sustainable Development Law. Principles, Practices & Prospects (New York: Oxford University Press, 2004).

SECTION I: EXPANDING THE JDZ PERSPECTIVE IN THE FRAMEWORK OF THE GGC: A HOOLISTIC APPROACH TO SUBREGIONAL MARITIME DISPUTES

Under this section our discussion shall contemplate one of the greatest achievements of subregional diplomacy in the Gulf of Guinea: the Gulf of Guinea Commission. It is the view in our discussion, that the GGC could be used by coastal State and LLS around them as a multipurpose tool for subregional cooperation in maritime areas (A). It would be highly beneficial to experiment other JDZs in the subregion in case of deadlocked negotiations on maritime delimitation. Furthermore, the States bordering the Gulf of Guinea could-despite their egoistic and suicidal attachment to an outdated, irrelevant and inoperative notion of State sovereignty- contemplate to manage the looming issues of the N/STP JDZ in the framework of the GGC, and set themselves into a genuine process of integration. As they may be by contrast very defiant one to another, especially Cameroon vis-à-vis Nigeria, the hypothesis of managing the JDZ in the framework of the GGC can only be analyzed in terms of prospects for maritime subregional integration (B).

A. THE GGC: A MULTIPURPOSE TOOL FOR SUBREGIONAL COOPERATION IN MARITIME AREAS

In the course of this part of our discussion, we shall consider the Gulf of Guinea Commission in relation to its potential(1), then the JDZ as a partial fulfillment of the GGC objectives (2). After that, attention will be given to the legal, economic and geopolitical basis of co-operation in the Gulf of Guinea (3).

1. The Gulf of Guinea Commission: a new instrument with multidimensional potential

Since 3 July 2001, a new regional institution is to be reckoned with in the Gulf of Guinea and in the west and central regions of Africa: the *GGC* or the *Commission*²²⁴. That day the treaty creating the GGC was signed in Libreville, in Gabon. The Commission went functional after its

²²⁴ GGC stands for Gulf of Guinea Commission, as already stated at the beginning of our discussion;see chapter I. For practical reasons, we shall also refer to it as the *Commission* in the course of the present research paper.

Summit of Heads of States and Governments held in the same town, on 25 August 2006²²⁵. This important summit helped to choose the Commission's headquarters, which was set in Luanda, the Angolan capital. It also appointed the Commission's ever first Executive Secretary, for a three-year long mandate.

This achievement is to be welcome, for there is no institution of the same potential on the African coast, whereas other regions of the world already enjoy such regional integration framework. There is for instance the Gulf Cooperation Council between riparian States around the Persian Gulf. In the Caribbean, things are more institutionalized as the common regional integration as it exists everywhere on each continent is associated with the fact that most countries in that case are coastal ones.

2. The JDZ: A Partial Fulfillment of the GGC Objectives

The historical background of the Commission shows that the project dates back to 1993 at least, and was meant at enhancing co-operation in a multilateral framework. In this light, the JDZ appears to be a partial fulfillment of the goals of the Commission which were three from the outset. The Joint Communiqué issued by Cameroon and Nigeria in 1993 after negotiations over the overall question of their boundaries states the following:

« Les deux délégations ont réaffirmé leur détermination à œuvrer pour la création de la Commission du Golfe de Guinée dont l'objectif fondamental est la prévention et la résolution des problèmes liés à l'environnement, à l'exploitation des ressources transfrontalières, et au renforcement de la coopération entre les Etats du Golfe de Guinée ²²⁶». There are however more large legal and geopolitical considerations underlying the idea of sub-regional co-operation in the present discussion.

 ²²⁵ See Emmanuel Kendemeh, "Central Africa: Gulf of Guinea Commission Goes Functional", Cameroon Tribune,
 28 August 2006[article on-line], available at <u>http://www.afrika.no/Detailed/12644.html</u>; accessed April 20, 2010.

²²⁶ See Tanga Biang Justin, L'intervention de la Guinée Equatoriale dans le différend frontalier camerounonigerian : fondements, effets et portée, Mémoire de DESS, IRIC, Université de YaoundéII-Soa, Juillet 2007, Annexe 2 « Communiqué Conjoint du 13 août 1993 de la troisième Session de la Réunion Conjointe Cameroun-Nigeria sur les questions de frontières ».

3. Legal, economic and geopolitical basis for regional cooperation in the Gulf of Guinea.

Since the wave of accessions to independences that shook Africa as a whole at the beginning of the 1960s, the idea that only cooperation would help Africa to enjoy full social and economic development is a major feature of African economic and political thought. But attempts to bring it into reality have been up to now rather disappointing. Some co-operation endeavors such as the Treaty establishing the African Economic Community (AEC) were achieved under Organization for the African Unity (OAU). Whereas the AEC Treaty doesn't deal directly with co-operation on ocean and marine matters, some undertakings followed that were dedicated to ocean affairs.

One can list the OAU Resolution on Problems of the Seabed of 1971, the 1974 Declaration of the Organization of African Unity on the Issues of the Law of the Sea, and the First Meeting of the Group of Experts on the Law of the Sea of the States Members of the Zone of Peace and Co-operation of the South Atlantic held in 1990²²⁷. The African Union has replaced the organization of African Union around 2001 in order to make the idea a reality. But it seems that at the national level, there is no real will. African countries are still caught in the illusive idea of State sovereignty and to the geopolitical paradigm of competition between States for power.

While analyzing the field of co-operation for the sustainable development of natural resources in Africa , some commentators have at least partially attributed the absence of any actual co-operation between African States to the "political non-existence of common goals"²²⁸, which could be seen as an effect of the absence of political will.

²²⁷ Edwin Egede, African states pa rticipation, op. cit., pp.698-699.

²²⁸ Edwin Egede, African States and Participation in Deep Seabed Mining: Problems and Prospects, The International Journal of Marine and Coastal Law 24 (2009), 702.See also p. 706 where this author mentions this political will and p. where he notes this as a "lack of interest on the part of African states". Besides, the author refers to P.A. Traore, another commentator who wrote the article "The Challenge of Building an Effective Cooperation for the Sustainable Development of Natural resources in Africa", a presentation at the Alliance for Earth Sciences, Engineering and development in Africa (AESEDA), Penn State University Symposium on Georesources Management :Human Capacity Development and Sustainable Livelihoods, 13-14 October 2003. He also refers to P.S. Mistry, "Africa's Record of Regional Co-operation and Integration", (2000) 99 African Affairs 553-573 at 556-570.

There are as wrong as western countries still seeing in China a challenger rather than a partner. As a matter of fact, since the Stockholm Conference in 1972, the idea of sustainable development has lead to realize the importance of coordinating strategy or management in relation to environment and development concern. Authors have proposed several concepts to explain the obligation to cooperate and the values that came about with the concept of sustainable development. Judge Weeramantry argues that the ideas of community, socially oriented international law underline a shift from individualism and sovereignty to community and co operation:

Ozone depletion, global climate change, loss of biodiversity and advancing deserts bring possible damage not merely to individual States, but to the world at large. Such damage does not respect national boundaries. Pollution does not recognize the doctrine of State sovereignty and end at the boundaries of a nation state. If we are to fight pollution, this must be done as a global community.

I believe that we have passed out the era of co-existence, into the era of cooperation, but rather, active cooperation. If we are to save our global inheritance, we must do so actively. We need for this purpose, to be willing to surrender some part of sovereignty to the rest of the world, accepting common guidance by the global community.

Similarly, our vision must not only extend in space, to States beyond national frontier, but also in time, beyond generational frontiers²²⁹.

However, as much convincing as they may appear to be, the values of cooperation and community are not sufficiently precise enough with regard to the methodology to apply in order to achieve efficiency in this cooperative approach. The "principle of integration" reveals really instrumental in that field. It has been put forward by some writers who are of the view that this is the key word for sustainable development. This view matches with that of Nicolaas J. Schrijver, Duncan French and Ximena Fuentes who state that *sustainable development is identical to an enhanced form of integration*, as they discuss as follows:

It is a truism to note that sustainable development will only be realized when the principle of integration is properly- and fully implemented. As one commentator has said, '[t]o operationalize sustainable development, we need to recognize that one principleintegrated decision making- holds the other principles together'. Others have made a

²²⁹ See Judge Weeramantry, "Foreword", in Sustainable Development Law (2004), xi.

similar point that sustainable development is unattainable without understanding the central role that the principle of integration plays in the broader endeavour. Moreover, one might go even further and argue that if sustainable development is actually about process rather than substance, sustainable development is not only achievable through *via* integration but that sustainable development *is* no more than simply the *mot juste* for a new enlightened form of integration"²³⁰.

B. THE JDZ IN THE FRAMEWORK OF THE GGC: PROSPECTS FOR MARITIME REGIONAL INTEGRATION

1- JDZ and GGC provide together a framework for a possible multilateral and holistic approach of maritime issues

It is possible to contemplate carrying out the JDZ in the framework of the GGC, as the former is just a partial fulfillment of the original project of the latter. This multilateral framework matches well with the holistic approach needed in the management of maritime areas. States could consider any one of the major issues, such as maritime delimitation, resource sharing, but also security and concern with pollution.

The dispute between Equatorial Guinea and Gabon over Mbanie Island is still pending, as negotiations on the delimitation of their maritime areas are going on between Equatorial Guinea and Cameroon. And if any delimitation issue remained unsolved, a new JDZ could still apply. In the event of lasting failure to secure a tangible result after a significant lapse of time, each of these cases may eventually be settled by establishing two other JDZs in the Gulf of Guinea. But establishing such provisional arrangements on a bilateral basis is subject to the difficulties to implement the deal. For instance, to ensure security, the Joint authority as instituted by the N/STP JDZ would need its law enforcement forces, making it a kind of State of its own.

²³⁰ Nicolaas J. Schrijver, Duncan French, Ximena Fuentes, "International Law on Sustainable Development ", in The International Law Association, Report of the Seventy-Second Conference held in Toronto(London:2006), 468. The author these writers refer to in a footnote is J. Dernbach, "Achieving sustainable Development: The Centrality and Multiple facets of Integrated Decision Making", Indiana Journal of Global Legal Studies 10(2003), 248. They further refer in the following lines to P. Sands, Principles of international Environmental Law (Cambridge University Press, 2nd ed., 2003), 263, whose consideration that the principle of integration is the most important one for sustainable development they resume in the form of a question: "how could genuine sustainable development be achieved save for the proper integration f economic, environmental and social considerations?".

By contrast, in the case of JDZ being operated in the framework of the Commission, this institution could have a police force of its own and troops contributed from all member States, as it is classical in regional integration bodies.

It would be more appropriate and efficient to think about a regional institutionalized body ensuring jurisdiction on tax, police, quarantine, visa delivering, and coastal surveillance from the high seas up to the coast. In such a multilateral framework, the organs of the institution could be considered as third party and their adjudication on dispute s accepted as such. For instance the Executive Secretary of the Commission could play the key role of mediator between the parties in case the Joint Council failed to settle any matter, before the parties consider litigation.

The most important thing would be that a JDZ operating within the regional framework off the GGC could be more stable.

2- A possible framework for regional cooperation: extending a unique JDZ to the whole GG?

But the most efficient way to manage disputes arising out of maritime delimitation or resources sharing would consist in pooling all the JDZs into a single one if there are many of them, or all the maritime areas under jurisdiction such as to have a unique and common EEZ, a unique and common continental shelf, and a unique and common outer continental shelf in the Gulf of Guinea. However, such an extension or adaptation of the concept of JDZ shall not include territorial seas, which is part of the territory of each State, as contrary to the other areas, despite States tending to behave with full sovereignty over those areas.

3- Cooperation may prevail for the delimitation of the extended shelf in the Gulf of Guinea

Applications for the delimitation of the extended continental shelf have been multiplying before the Commission for the Delimitation of the Continental Shelf (hereafter CLCS), making of this process, besides the delimitation of other maritime areas, a bone of contention between States. More and more disputes are directly or indirectly arising out of this process, and States in the Gulf of Guinea are likely to experience such disputes²³¹. By 7 May 2009, ahead of the deadline of 12 May 2009 previously set for submissions before the CLCS, Nigeria filed its submissions to it^{232} .

In South America and especially in the maritime areas off Venezuela, Surinam, Guyana and the States of Barbados and Trinidad and Tobago, recent awards from arbitral tribunals have incidentally dealt with that issue.

Recent legislative and diplomatic events between France and Canada have educed a potential dispute arising out of France's move about filing a request before the CLCS²³³ to benefit Saint-Pierre- et- Miquelon:

La délimitation des ZEE française et canadienne résultant de l'arbitrage a fait l'objet d'une modification unilatérale regrettable de la part du Canada en 1996²³⁴.

But what is most important in relation to our discussion is that French deputies have envisaged the possibility of joint exploitation of resources in an area of the continental shelf beyond 200 nautical miles as means to settle a delimitation dispute which apparently has never occurred yet. This is to say that they would advocate for the possibility of provisional

²³¹ For an interesting and recent accurate overview of this issue through the situation as it has been going on between Venezuela and other countries in the northeastern part of South America facing the Atlantic Ocean, see generally Raul Curiel, *Overlapping Claims for an Extended Continental Shelf in the Northeastern Part of South America Facing the Atlantic Ocean*, (Research Paper, United Nations-Nippon Foundation Fellowship Programme, 2009).

²³² See item "Commission on the Limits of Continental Shelf (CLCS)", "Admissions", in the web site of DOALOS at <u>http://www.un.org/Depts/los/clcs_new/clcs_home.htm</u>. The 12 May 2009 deadline had been set by the Eleventh Meeting of States Parties at the LOSC, which took place between the 14 and 18 May 2001.for more details, see Raul Curiel, Research Paper (2009), 3.

²³³ The Commission on the Limits of the Continental Shelf beyond 200 hundred nautical miles, hereafter the CLCS.

²³⁴ Rapport fait au nom de la Commission des Affaires Etrangères sur le Projet de loi, adopté par le Senat, autorisant l'approbation de l'accord entre le Gouvernement de la République française et le Gouvernement du Canada sur l'exploration et l'exploitation des champs d'hydrocarbures transfrontaliers par M. Gérard Voisin, député, enregistré à la présidence de l'Assemblée nationale le 19 septembre 2007, I- Les relations maritimes au cœur de la relation franco-canadienne, [document on-line] available from <u>http://www.assembleenationale.fr/13/rapports/r0173.asp</u>; Internet; accessed March 08, 2010.

This document further states that France has applied for a continental shelf beyond 200 nautical miles before the CLCS : Saint-Pierre-et-Miquelon figure sur la liste préparatoire en vue de la présentation d'une demande d'extension du plateau continental. L'archipel est inscrit dans les campagnes de recherche « IFREMER 2008 » (relevés hydrographiques et topographiques nécessaires à la constitution d'un dossier auprès de la CLPC), and that the contestation of the unilateral modification conducted by Canada should be done jointly with the filing of a file requesting for a continental shelf beyond 200 nautical miles : la contestation de la modification unilatérale opérée par le Canada ⁽⁵⁾ devrait aller de pair avec la demande d'extension du plateau continental. It gives the view of Mme Annick Girardin, French Deputy, that the filing by France of a file requesting for a continental shelf beyond 200 nautical for redynamising Saint-Pierre-et-Miquelon's economy, which collapsed following the 10 June 1992 arbitration Award : Le dépôt par la France d'un dossier visant à l'extension de sa zone économique exclusive est un facteur essentiel de revitalisation de l'économie de Saint-Pierre-et-Miquelon, qui s'est effondrée suite à l'arbitrage du 10 juin 1992, défavorable aux intérêts français.

arrangement in the overlapping extended continental shelf of Canada and France, if one such possibility was ever to be given some chance to become reality:

Il ne s'agit pas de revenir sur la sentence arbitrale de 1992 mais de proposer une cogestion avec les Canadiens de ce qui serait la zone conjointe entre leur ZEE et notre plateau continental étendu²³⁵.

The idea that is suggested is then the following: if other countries can think about joint development over extended shelf overlapping areas, why not among the riparian States in the Gulf of Guinea? The GGC offers a good framework for such cooperation.

SECTION II: REGIONAL COOPERATION AND LAW OF THE SEA IMPLEMENTATION: PREPARING GULF OF GUINEA STATES FOR OLD AND NEW CHALLENGES

Regional or rather sub-regional cooperation is a general geostrategic matter for the development of the continent, as it could be really be helpful in allowing Africa to properly manage new challenges emerging from ocean management and exploitation worldwide (A), for the implementation of international law in the field of ocean management (B), as well as the lack of long term goals in the management of State affairs in Africa (C).

A. REGIONAL COOPERATION AS A NEED IN COOPING WITH EMERGING CHALLENGES

Issues related to the delimitation of maritime areas are not the only that require attention, as cooperation comes into account. By contemplating the future of the N/STP JDZ, one can argue that this future is linked to some developing issues and that all of these issues can be solved in a

²³⁵ Rapport d'information n0 1312,déposé par la Commission des Affaires Etrangères sur " la délimitation des frontières maritimes entre la France et le Canada", présenté par Mme Annick Girardin et M. Louis Guedon, enregistré à la Présidence de l'Assemblée Nationale le 10 décembre 2010,[document on-line, accessed March 08, 2010] available from http://www.assemblee-nationale.fr/13/rap-info/i1312.asp#P202_34829; Internet. The details of a looming dispute, a new phase actually, of the Saint-Pierre –et –miquelon case are already there, as this latter document displays another legal position from Canada, evidenced by its verbal Note from 3 November to the French Embassy in Ottawa: Le Ministère désire rappeler que le Canada ne reconnaît à la France aucune zone maritime, incluant le plateau continental, dans l'Atlantique Nord-Ouest au-delà de celle comprise dans la zone délimitée par la sentence arbitrale de 1992.

single institutional regional framework. The cooperative and inclusive regional approach for ocean matters had been adopted by African just at the beginning of the UNCLOS III²³⁶. As Edwin Egede notices, such strategic alliances and co-operative efforts are contemplated by the LOSC, which has extensive provisions encouraging international co-operation in respect of marine issues generally, and deep seabed mining in general²³⁷.

A coherent and efficient carrying out of the provisions of the N/STP JDZ Treaty should be set into this regional co-operative framework where the GGC appears as one of the most relevant institutional cooperative framework, where the issue of classical maritime delimitation of areas under national jurisdiction and the delimitation of the extended continental shelf, as well as the exploitation of its resources, can be apprehended together. This co-operative scheme can still be better achieved by considering together as a whole African or regional efforts against global warming (1), the development by African States of marine renewable energy programmes (2), and the participation of African States in deep seabed mining (3), which are new challenges for all countries in the Gulf of Guinea, including Nigeria and Sao tome and Principe. All of these questions, together with the latter ones, can be considered in the same regional or sub-regional institution.

1. Tackling global warming: regional aspects and regional action

We cannot wait for China and the Western world to tell us what to do, despite their importance in the final faith of this challenge to mankind, as discussed in the latter chapter. We have to play our part by responsibly assuming our share of the environmental burden. This means trying to address many issues like marine resources overexploitation or marine pollution in the most appropriate manner.

²³⁶ Edwin Egede, op. cit., 697, footnote 67: the General Report of the African States Regional Seminar on the Law of the Sea, held in Yaoundé from 20 to 30 June 1972, states that "The exploitation of the living resources within the economic zone should be open to all African states both land-locked and near land-locked, provided that the enterprises of these states desiring to exploit these resources are effectively controlled by African capital and personnel.".The author refers to p. 12 of the ILM 210(1973). ²³⁷ Ibid., p. 698.This commentator refers to LOSC art. 100, 118, 143(3), 144(2), 150,, to arts. 197-201,242-244 and

^{270-274.}

2. Addressing the marine renewable energies challenge to African States through cooperation

Renewable energies are gaining more and more attention from the scientific community and from governments worldwide, except in Africa maybe. Besides being a source of great hope as another factor to be reckoned with in the fight against global warming and ozone layer depletion, they could bring about new economic opportunities. This also apply to marine renewable energies. Using tidal strength or warmth could eventually display many advantages in matters of financing energy supply for the world. This is a new challenge for African countries which are lagging well behind the wave of current experiences that are being carried around the world in that field.

3. Addressing the deep seabed mining challenge to African countries through cooperation.

For African countries, the regional framework could appear to be the most efficient geopolitical institutional scale to tackle the looming issue of deep seabed mining in the Area. With regards to countries from the Gulf of Guinea, they could decide to choose one of the existing sub-regional institutional framework, among which the South East Atlantic Maritime Organization or the Gulf of Guinea Commission.

Indeed, mining activities in the deep seabed beyond national jurisdiction defined under the LOSC as *the Area* and *common heritage of mankind* might result for the States and non-State entities involved in it in an utter failure, as it is still doubtful they could yield any benefit eventually. Therefore, there is no surprise if some scholars or commentators contemplate that these entities could have got involved in such a non-profit activity on symbolic ground, for prestige. This latter view could appear rather awkward. We would like to hold that economic motivation underline this involvement rather than prestige. Africa's absence from such activities is more problematic when considered from that perspective. And the main remark to be cast in connection with Africa's participation in deep sea mining activities in the Area has been framed in a recent article by Edwin Egede:

The twin requirements of adequate finance and sophisticated technology imposed by the LOSC, the 1994 Implementation Agreement (AI) and the Mining Code, essential conditions for participation in deep seabed mining in the area, constitutes a major constraint on actual, direct and effective participation by African States, their entities and nationals 238 .

Whereas other continents and especially Asian States like China, India and South Korea enjoy a marine policy involving long-term areas as deep seabed mining, this is not the case with African States. The former are among pioneer States for deep seabed mining under the LOSC. Even if African States would be willing to consider North-South co-operation as India and South Korea did in their respective strategy in acquiring deep sea-bed mining technology, they wouldn't be able to go through easily, due to the lack of basic technology and industrialization. At the scale of the continent, only some countries from the Maghreb, Nigeria and South Africa could usefully engage themselves in such a move.

Anyway, economic considerations are not the only reason to justify involvement in deep seabed mining, there are also strategic factors at stake in it, as observed by the same commentator:

Such participation in deep seabed mining cannot be based solely on the prospects of immediate monetary returns. Other strategic policy considerations have propelled certain developing states to get involved in deep seabed mining. For States like China, India and Korea, such considerations include the possibility of long-term procurement of strategic metals as an alternative to land-based minerals and the possibility of utilizing R&D in deep seabed mining technology to enhance their marine science and technology capabilities and to expand their capacity to use and exploit the oceans.²³⁹

But the most important reason for African states' interest in getting involved in deep seabed mining in connection with the future of the N/STP JDZ is linked to the fact that JDZ could also be developed in extended continental shelf areas. Especially, the delimitation of both classical areas under national jurisdiction and continental extended shelf could be considered in the sub-regional framework of the Gulf of Guinea Commission. Therefore, involvement in deep

²³⁸ Edwin Egede, op. cit., 684. This authors notes the following, which he closes with a question: "At best, states investing in seabed mining are engaged in long-term investment with no certainty of when or whether it would yield profitable returns. At worst, such states are engaged in such mining not really for commercial gain, but rather for the prestige of being acclaimed as a seabed mining state, "symbolic of the maturation" of their scientific, technological and industrial capabilities" (684). ²³⁹ Ibid., p. 688.

sea mining appears important as it can help to acquire the technology for the exploitation of the resources found in the extended shelf areas. Erwin Egede argues as follows on this matter:

This would be (...) useful to African states with continental shelves beyond 200 nautical miles to enable them to acquire the technology that would empower them to exploit the natural resources located in the extended continental shelf^{,240}.

Nigeria, Sao Tome and Principe, Cameroon and Equatorial Guinea have

The possibility of resorting to transnational corporations has permitted two developing States, namely the Republic of Nauru and the Kingdom of Tonga to file applications for approval of a work plan for exploration for polymetallic nodules in the Area before the ISA on 21 April 2008²⁴¹. Article 4(3) of LOSC Annex III as well as regulations 10(3) and 11 of the Mining Code provide for this possibility: a member State may sponsor a natural or juridical person of its nationality wishing to apply for a plan of work before the ISA. But this allows just for a nominal in respect of the involvement of such a sponsoring State, to the extent that one may wonder whether this is the approach to be adopted by African States in order to participate in deep seabed mining. Edwin Egede rightly gives a negative answer to this question that he raises himself. Two or three reasons can be derived from his argumentation. The main one being that nominal participation would prevent the attainment of the goals underlying this participation, as set in the LOSC:

Nominal participation by African states in deep seabed mining through TNCs would defeat the spirit and intention of the provisions of the LOSC, which is to encourage the promotion of effective and direct participation of developing states in activities in the Area.²⁴² The other remaining reasons can be derived from the latter one: nominal participation through TNCs doesn't enhance technology transfer as direct participation would. According to Edwin Egede, the examples of China, Korea and India show that "some level of participation in [deep seabed mining] would be useful in promoting general marine expertise and technology in

 ²⁴⁰ Ibid., pp. 688-689.
 ²⁴¹ Ibid., p. 695-696. This was done thanks to two locally incorporated subsidiaries of Nautilus Minerals Inc., a transnational corporation .These subsidiaries are respectively Nauru Ocean Resources Inc. and Tongan Offshore Mining Limited.²⁴² Ibid., p. 697.

Africa²⁴³.Besides, nominal participation raises the issue of State responsibility and liability in case of damage due to the State sponsored entity.²⁴⁴

The most effective way for African States to contemplate any significant participation in those activities seems to require a collective solution, that is sub-regional or regional bodies dedicated to this task, as suggested by Edwin Egede.

C. IMPLEMENTING LAW OF THE SEA IN AFRICA NEEDS REGIONAL APPROACH AND SIGNIFICATIVE ECONOMIC DEVELOPMENT

1- The failure of the current cooperation provisions

Why developing countries should not rely on "aid" or foreign investments: instability and dependency against planning and growth

There is no possibility to implement international law, even if there were a strong political will, at the national level, as long as African states and environment protection are concerned. If it were, part XI of LOSC wouldn't have been rearranged after the collapse of the Berlin wall, in the wake of triumphant liberalism culminating with the 1994 Marrakech Agreement .The July 1994 Agreement is a clear reversal of the *more rational world economy management conception* forced upon industrialized nations during UNCLOS negotiations. This view relied on the hypothesis that a balanced and equitable world economic order was needed and possible, that would be based on the principles of international cooperation, equity, solidarity and complementarity, rather than mere market competition. This new conception would mix market with planification and redistribution or fair adjustment.

Whereas the Treaty seems to be an ad hoc copy of LOSC Part XI, it does not uphold any significant socio-economic orientation dealing with sustainable development.

²⁴³ Ibid., p. 698.

²⁴⁴ Edwin Egede argues as follows/" A failure by a sponsored entity to carry out its activities in conformity with with the LOSC, the IA and ISA regulations and leading to damage would result in liability on the part of the sponsoring state, unless such a state could show that it had taken all necessary and appropriate measures to secure effective compliance. Tacking necessary and appropriate measures in a sophisticated and intricate industry, such as the deep seabed mining industry, including putting in place the necessary legislative framework to ensure effective domestic compliance by the applicant entity with the rules and regulations of the regime, would constitute a major challenge for most African states with any design to sponsor an entity for deep seabed mining."(see p. 697).

2- The need to curb neo-liberalism for the sake of development in Africa

African States need a balanced political economy with the possibility being given to state intervention in every sector where private investments are insufficient or inactive. This is the case with naval construction industry and maritime transportation in Africa. How many African States have succeeded in attracting private investments in those sectors? Not many, probably. Since the collapse privatization move launched in the middle of the eighties under pressure from Bretton Woods institutions, some countries should have endured the collapse of maritime Stateowned transportation corporations.

C. THE LACK OF LONG TERM SOCIO-ECONOMIC GOALS OR THE SUSTAINABILITY ISSUE.

The consideration that fishery matters in the JDZ could involve third States interests and concerns over management of hydrocarbons in it, subject to confirmation after exploratory phase, led us to consider sustainable law and environmental law that could apply to the area. Moreover the regional record in the field of environmental protection seems gloomy, with a conjunction of interests between western corporations involved in hydrocarbons and timber exploitation, western States and local African governments, amidst general allegations of corruption from the civil society. One could even hold that eventually those western States are the active agents of corruption and environmental damage in Africa. They may always appear to be indirectly in connection with the evil deeds from their corporations. But it can be argued that the corporations are simply the intermediaries in the secret trading of the national wealth and well-being of African populations between western countries and African governments. Besides, the GGC seems to be an interesting framework within which a holistic or integrative approach of all ocean related issues could be contemplated. But can the governments see the interest of a real cooperation? This would need to follow the path of sound management practices (2) that could help to improve national well-being, without which it would be otherwise be very difficult to implement to any significant extent international law in the region, including in the JDZ. Thus, there is a need to be aware of the fact that poverty is an obstacle to the implementation of international law in the Gulf of Guinea (1). And there is no alternative to this, such as international "aid", as it is our view that those western States are the very one at the heart of poverty process in Africa. Any way, it is clear that this aid would probably remain symbolic and for ever insufficient, due to the prevalent geopolitical conception of international relations as an arena of competition rather than cooperation and solidarity; even worst, it is possible that this aid is always meant to develop dependency and foreign grip on national politics and economies.

A. Poverty against international law implementation in the Gulf of Guinea

There is no possible comparison between means at the disposal of developed countries to tackle environmental problems and what might be available at the level of developing counties, especially Sub-Saharan countries. Scant financial or material resources and environmental protection don't go along well. This is clear if a comparison is drawn between countries in the gulf of Guinea and other parts of the world such as the Gulf of Mexico or the North Sea. ²⁴⁵Carlos J. Moreno notes that I those countries have set up "extensive regulatory frameworks" in order to mitigate the effect of hydrocarbons exploration and exploitation of hydrocarbons. By contrast, this writer explains that the countries of the Gulf of Guinea "have major challenges in regards to government, peace, wealth distribution, economy, health and security, such that environmental protection associated with offshore development may be only an afterthought".

International cooperation is useful, but can it really cope with the issue? The events that conducted to the adoption of the New York Agreement and the subsequent modification of Part XI of the LLOSC lives no doubt as to the stand of Western countries. They are not ready to accept to go through the radical measures that are necessary for a global management of environmental and development issue, and prefer to keep an international order marked by deepening inequalities in the world economy, whatever they may pretend, do or try to achieve in terms of international cooperation at the advantage of developing countries the international cooperation they like to term as "aid". The prevalent geopolitical scheme in international relations remains that of multidimensional rivalry, unfortunately. Thus, African countries and other developing countries cannot and should not rely on this as a way to handle key sociopolitical, economic, or cultural problems. One can be hopeful that the current deadlock in the Doha round of the round could be a sign that developing countries and especially African

²⁴⁵ Carlos J. Moreno, "Oil and Gas Exploration and Production in the Gulf of Guinea: Can the New Gulf Be Green?", Houston Journal of International Law 31, no.1(Fall 2008):424, in HeinOnline [Journal on-line], UN LIBRARY, Electronic Resources; accessed April 13, 2010.

countries are no more going to let other decide what the rules of international economy have to be.

In the current context of scarce means, it thus seems impossible for African countries such of the Gulf of Guinea to really tackle environment al problems and other challenges like their participation in the activities regarding the Area. They are only truly efficient solution to their poverty being the pooling of their resource, be they their jurisdiction over maritime areas, to gain some strength financial and geopolitical strength. The JDZ is really an interesting experience, as well as the unitization agreement in the Ekanga field area. This agreement has to be praised for the highly conciliatory spirit that sustains it. But it can also be criticized for the secrecy practice it confirms, in relation with the four commercial agreements linked to it but the provisions of which are secret. Those are ill practices developed in the world of oil trade which could entail corruption and prevent efficient management of socio-economic issues²⁴⁶. In the hypothesis that the civil society is an important actor in development, how can it be involved in drawing sound managerial schemes in relation to public resources policy assessment or management practices and to transparent procedures from private and public actors in order to support regional cooperation, development and environment protection.

1. Sound management practices and transparent procedures from private and public actors

Nigeria has signed the Extractive Mineral Transparency Initiative some years ago. This is a positive move towards sound management practices.

But sound management practices alone can be enough to entail wealth and development in the current world economic system. Regional cooperation can really be helpful to enhance regional cooperation through the GGC. The defiance against that project, from some countries, such as Cameroon, may cause the Commission to reach a good speed in its activities before a long time. But this should not be an excuse for Nigeria not to contemplate the most inclusive formula for the exploitation of the resources of the JDZ with regards to the interests of

²⁴⁶ This is not a prevention against confidentiality, which is a fair practice aimed at protecting "industrial secret or proprietary data" as is the case with article 16 of the N/STP JDZ Treaty on "confidentiality". This deals with industrial and intellectual propriety.

neighboring States, be they geographically disadvantaged-as Cameroon would be- or landlocked, like Chad or the Central African Republic. The JDZ could serve as a starting point for a highly fruitful regional cooperation. As in the case of the Protocol to the implementation of article 6.2 of the 23 September 2000 boundary treaty, this would confirm the ability for Nigeria and its neighbors to initiate creative ways of cooperation through negotiation.

CONCLUSION

The N/STP JDZ Treaty is an important contribution to State practice in the expression of *opinio juris* as regards articles 74(3) and 83(3) of the LOSC. These provisions make it an obligation for States, "in a spirit of understanding and cooperation", to "make every effort to enter into provisional arrangements of a practical nature and, during this transitional period, not to jeopardize or hamper the conclusion of the final agreement" for the delimitation of disputed maritime areas. They further state that "such arrangements shall be without prejudice to the final delimitation". With similar provisional arrangements carried out around year 2000 in other parts of the world, along with the P.C.A. Award of September 17, 2007 in the case between Guyana and Surinam, this Treaty represents a decisive achievement sustaining an emerging customary international law on provisional arrangements under the LOSC. The crystallization of such an obligation would be a new layer in the foundation of a peaceful political world system, as it shall bring further weight to the existing international peace building mechanisms in maritime areas and international relations in general.

This legal statute of provisional arrangement doesn't apply to joint development agreements across the board, however. We have sustained the view through this discussion, that it may be helpful to consider provisional arrangements and joint development agreements as two different concepts, with different contents each. For instance, provisionary boundaries are clearly a kind of provisional arrangement which could develop further, but there is no joint development at issue here. *Opinio juris* as regards the practice of joint development, despite repeating and constant State practice, could be more problematic to ascertain than in the case of provisional arrangements, in the absence of any significant relevant international jurisprudence which could be helpful in the matter. The reason for that being that here, we don't have an obligation clearly enshrined in any multilateral treaty law such as the LOSC. They may do so either through a provisional boundary, or more usually a JDZ, or even a unitization agreement. The N/STP JDZ is part of State practice on provisional arrangement.

Failing to perceive the significant legal difference between provisional arrangements and the remaining practice of joint development, almost all commentators are to some extent unable to acknowledge the obligatory nature of provisional arrangements. Thus, some of them consider that articles 74(3) and 83(3) of the LOSC are mandatory only in the sense that they sustain an

obligation to cooperate. Observing that many UNGA resolutions achieved in the 1970s "stress cooperation" over natural resources but fail to create any "obligations of a legal character" due to "their very nature", they proceed in holding the following, referring to article 74(3) and 83(3) of the LOSC: "This general obligation to cooperate is stressed in the 1982 UNCLOS"²⁴⁷. Indeed it is an obligation to cooperate that is underlined, but in a precise way: *through provisional arrangements of a practical nature, during a transitional period, pending maritime delimitation*. Attorney Justin Ryan Marlles is another writer who fails to pay attention to the notional difference between provisional arrangements and joint development. Still, this author might be more accurate than the latter on his assessment of the mandatory nature of provisional arrangements under international law, as he holds as follows, while commenting the September 17 Award on the case between Guyana and Surinam:

Finally, the PCA held that the parties had "violated their obligations under Articles 74(3) and 83(3) of [UNCLOS] to make every effort to enter into *provisional arrangements* (emphasis

²⁴⁷ Ana E. Bastida and others (2007), 376.See supra, note ...(first page chapII).That consideration is followed by this passage, which shows that the authors don't heed enough to the different connotations attached to the concepts of joint development and provisional arrangements and use them as substitutes one to another: "In a reference to joint development within the continental shelf and EEZs, the Convention sets forth 'the States concerned, in a spirit of understanding and co-operation shall make every effort to enter into provisional arrangements of a practical nature and, during this transitional period not to jeopardize ... of the final delimitation." UNCLOS provides for the possibility of a provisional arrangement relating to an undelimited area prior to the conclusion of final delimitation; however, the courts have interpreted 'every effort' to mean that attempts at negotiation should have taken place, but stressed that this did not imply a successful negotiation. This indicates that this provision, though strongly commending (emphasis added) provisional arrangements such as JDZs, cannot serve as a source of legal obligation on states to develop jointly". (pp. 376-377) Many remarks may be made concerning that extract. The first is that the concepts of provisional arrangement and joint development don't have the same notional or theoretical scope as it might be suggested by the wording of the passage. Secondly, it seems obvious that this article fails to take into consideration the September 17, 2007 Award of the P.C.A., as the writer published it in the winter 2007 issue of the Houston journal of International Law; probably the article had been under printing when the Award was delivered. The latter Award gives a view different to the ICJ Judgment in the Land and Maritime Boundary Between Cameroon and Nigeria which the authors refer to, though the given references don't appear accurate (the 10 October 2001 Judgment in that case concludes with paragraph 325 displaying the operative part of the decision, whereas the article from these authors seem to refer to paragraph 424 which doesn't exist neither on the even shorter 11 June Judgment on the preliminary objections by Nigeria; the operative part of the decision on the latter judgment is by paragraph 118. Under their footnote no.124, on page 377, the authors give the following reference: "Land and Maritime Boundary Between Cameroon and Nigeria, 2002 I.C.J. at 424(citing preliminary judgment of June 11, 1998, 1998 I.C.J. Reports 321, 322)." There doesn't seem to be any reference to identical paragraph 3 of the LOSC 74 and 83 articles. Only identical paragraph 1 and 2 of the same provisions are at issue in the Court's 11 June rule on preliminary objections. The relevant LOSC articles by strongly recommending States to reach agreement on provisional arrangement, as the authors acknowledge, set forth an obligation. The article doesn't seem neither to be aware of the 11 February 2002 Provisional arrangements agreement between Algeria and Tunisia setting a provisional maritime boundary between the two countries by making explicit reference to the relevant provisions of the LOSC on provisional arrangement. Such a reference clearly suggests that the concepts of provisional arrangements and joint development are not co-extensive one to another, since they can be provisional arrangement without joint development, as in the case of a provisional boundary.

added) of a practical nature and to make every effort not to jeopardize or hamper the reaching of a final delimitation agreement". The latter determination of the PCA bolsters the developing rule of customary international law obligating states to reach *temporary joint development agreements* (emphasis added) for resource exploitation in contested sea zones²⁴⁸.

The latter author and his citation ending would have been more accurate by talking about provisional arrangements, which are inherently provisional starting from their denomination, instead of temporary joint developments. This may entertain confusion as some writers hold that the whole practice of joint development is provisional. Some writers do share our view on the relationship between joint development and provisional arrangements. For instance, Gao Jianjun in a more recent article discloses what follows:

Besides joint development, which is far the most widely used form in practice, the other forms of provisional arrangements pending delimitation are not based upon joint zones, but upon provisional lines or upon the de facto boundaries.²⁴⁹

Nevertheless, this citation may suggest that joint development agreements are part or a component of provisional arrangements, making the latter the gender or broader category of which the former is a sub-category, branch, class or specie. This doesn't seem accurate, neither the opposite view that provisional arrangements are a sub-category, part or a component of joint development agreements. It is not sure whether some joint development agreements, like transboundary unitizations, can easily be seen as provisional. They aim at exploiting a common petroleum deposit in a transboundary area and once this deposit is depleted, there is no specific goal to be achieved after that time. In the case of provisional arrangement, the issue of maritime delimitation remains to be fixed. That's why agreements in the framework of this practice are said to be provisional ones. Thus it can and should be upheld that joint development and provisional arrangement are two different concepts, with just intertwined notional fields. Albeit their overlapping, they are neither co-extensive one to another, nor inclusive in the same manner.

²⁴⁸ Justin Ryan Marlles, International Maritime Boundary Delimitation and Energy Resource Development: Resolution of the Guyana –Suriname and Nicaragua-Honduras Maritime Boundary Cases Requires a New Look at offshore Activities in Disputed Waters" (October 31, 2007)[book on-line],4, available on <u>http://www.vinsonelkins.com/uploadedFiles/VEsite/Resources/WhitePaper-Loftis-IntlMaritimeBoundaryDeliminationAndEnergyResourceDevelopment.pdf</u>, accessed April 9, 2010.

²⁴⁹ Gao Jianjun, "Joint development..."IJMCL(December 2009), 40;see his footnote 8.

Coming back to the September 17, 2007 Award, its importance should be underscored, for the reason that one of the claims under which the proceedings were instituted was Guyana's "allegation that Surinam had breached the provisions of the LOSC concerning the obligation to make every effort to enter into provisional arrangements pending agreement on a maritime boundary"²⁵⁰. Surinam in the course of the same proceedings also acknowledged this legal statute as a writer reports that "correspondingly, Surinam alleged that Guyana had broken the same obligation by authorizing exploratory drilling in the disputed area"²⁵¹. Thus both parties to the dispute clearly expressed the view that the provisions under consideration were an international obligation.

This Award should also be underscored as it represents the first outstanding position of the international jurisprudence on the legal nature and scope of the LOSC articles 74(3) and 83(3) on provisional arrangements. These arrangements are obviously an obligation under international conventional law. But they are also as from now more likely to being considered as a customary international obligation because of the role of the LOSC with its membership of one hundred and sixty States. This membership represents nearly eighty per cent of the total number of States in the world.

Another reason to engage into provisional arrangement in disputed waters in the Gulf of Guinea and elsewhere in the world would be that, according to the Tribunal opinion in the 17 September 2007 Award in the case Guyana/Surinam, they are the one of the two hypothesis under which international law can allow exploitation of natural resources such as oil and gas pending delimitation ("In the context of activities surrounding hydrocarbon exploration and exploitation, two classes of activities in disputed waters are therefore permissible. The first comprises activities undertaken pursuant to provisional arrangements of a practical nature. The second class is composed of acts which, although unilateral, would not have the effect of jeopardizing or hampering the reaching of a final agreement on the delimitation of a maritime boundary." P.C.A., Award of Sep. 17,2007, para. 466)

²⁵⁰ Robin Churchill, "Dispute Settlement ...", IJMCL(December 2008) 627.

²⁵¹ Ibid., 636.

That's the international legal framework within which the N/STP JDZ Treaty is being operated, as a joint development agreement setting up a JDZ as a matter of provisional arrangement.

Joint development agreements in general, which could and should include unitizations, are indeed a major trend in current State practice dating back to the 1950s. Their legal statute and scope as to whether they represent an international customary obligation has been at issue since the seventies in commentators writings. But State practice in matter of *opinio juris* is not yet precise enough, it seems, to support the position that there exists such an international customary obligation. May be some jurisprudence is yet to be produced to help in solving this legal question. This paper has been concerned with sustaining the stand that however, *a part of the practice* of joint development-and only that part- as to date can be considered as an international obligation, that is the part carried out in the form of *provisional arrangements settling both maritime delimitation and maritime transboundary resource management issues for a transitional period*.

The main research goal of this discussion having been reached by stating the relationship between the N/STP JDZ on the one side and international law and State practice in the other hand, it would still appear useful to take note of subsidiary issues come across in its course. One of these issues which has not been properly highlighted or dealt with is that of the efficiency of the N/STP JDZ, due to the complex issue of shared jurisdiction. It seems that reaching a provisional boundary agreement like what was secured on 11 February 2002 by Algeria and Tunisia through their Agreement on Provisional Arrangements would have been far a more efficient solution.

The parties could as well had contemplated instead the solution that prevailed between Saudi Arabia and Bahrain in 1958 by setting out exclusive jurisdiction in favor of one of the party in the JDZ, the other party being just given an agreed share of the resources extracted from the exploitation of the resources therein found. A similar but quite different solution has been reached on 3 April 2003 between Nigeria and Equatorial Guinea through the Protocol in Implementation of Article 6.2 Concerning their Maritime Boundary. Article 2 of the 23 September 2000 partial maritime boundary agreement left Ekanga "cut- out" in the Nigerian side of the boundary line and under Nigerian jurisdiction. But the 2003 Protocol, which as a matter of

fact, is a unitization agreement, set out Equatorial Guinea jurisdiction on the Unit Area created over Ekanga²⁵²This particular jurisdiction setting was carried out for the sake of efficiency.²⁵³

A third solution could have consisted in dividing the disputed area according to the agreed percentage of 60 percent in favor of Nigeria and 40 percent for Sao Tome and Principe. Each State could then have jurisdiction under the waters granted to it on one side of a dividing line running across the Zone. This solution is similar to the solution reached between France and Spain in 1974 in the Bay of Biscay²⁵⁴. So to say, there are many modalities for jurisdiction in joint development zones, and States could contemplate any of them in future worldwide practice, including in the Gulf of Guinea.

These three possibilities help to see that jurisdiction over a JDZ between neighboring States can be established through two main patterns: either a unique and complex system of joint jurisdiction covering the whole JDZ, or a system of separate jurisdiction upon two or more parts of a divided JDZ over each of which each State has exclusive jurisdiction. In the framework of this work, we would advocate for this latter system of jurisdiction. To sum up, the current maritime delimitation disputes (or sovereignty disputes over some islands) in that sub-region of Africa could be properly handled in the case of deadlocked negotiations by resorting to JDZs or any other provisional arrangement.

Another important problem highlighted through this discussion pertains to the delimitation of maritime areas between Cameroon and its neighbours. As it appears that Cameroon have some interests in the N/STP JDZ, it would be fair to contemplate its inclusion in the 2001 Treaty establishing the JDZ between Nigeria and Sao Tome and Principe. In the meanwhile, it would be advisable for it to claim those interests and protect them by rejecting the 2001 Treaty. For that purpose, it could claim a corridor running westwards from its coast, ,

²⁵² Derek C. Smith, « Equatorial Guinea-Nigeria. Report Number 4-9(2) », in International Maritime Boundaries, vol V.,(Leiden/Boston: Martinus Nijhoff Publishers, 2005), 3625-26.The author gives a good summary of the applicable law as concerns the Unit Area: "The protocol establishes a unique arrangement with regard to the legal regime of the unitization. Although operations take place in Nigerian waters, Equatorial Guinea law alone applies to the activities of the oil company acting as operator in the Unit Area, including employment, customs, tax, environment and other laws. This arrangement permits the unit operator (being the concession holder on the Equatorial Guinea side and the unit operator in the Ekanga "cut-out" on the Nigerian side) to work under a single legal regime and to avoid the difficulties and potential contradictions of having two sets of laws apply to a single operation." (p.3625).

²⁵³In the Preamble to the protocol, the Parties consider that "the area described in Article 6.2 of the Treaty [of 23 September 2000] can be developed more efficiently if developed together with a contiguous area lying to the northwest, as a single unit"; this contiguous area lies within waters under Equatorial Guinea jurisdiction according to the 23 September Treaty. ²⁵⁴ See our List of Appendices

passing slightly in the north of Bioko island and joining its coastline to the current N/STP JDZ. Such a corridor was drawn in the case decided by an arbitral tribunal in the Saint Pierre -et - Miquelon case between France and Canada at the beginning of the nineties. Indeed, this solution could be achieved through negotiations with Cameroon's neighbours. But the sub-regional framework of the Gulf of Guinea Commission would seem more appropriate, to our point of view. But success on this ground requires good relations between members of this geopolitical entity.

The main reason to defend the idea of this sub-regional institution is that it is in accordance with ancient and more recent developments of ocean governance law which has produced new concepts like Large Marine Ecosystems (LME) or regional seas. A regional approach is even more important as it is contemplated in some provisions of the LOSC that deal with the rights of developing Landlocked and Geographically Disadvantaged LGDS(LLGDS) in the EEZ of States of the same region. Furthermore, it offers the possibility to contemplate in a more efficient and coherent manner, a wide range of issues, including the looming challenges of coastal management and especially those in connection with the delimitation of the extended continental shelf in the Gulf of Guinea in the one hand, and African States participation in deepsea mining in the Area under the International Sea-bed Authority (ISA) control in the other hand. Three problems that are difficult to deal with in relation to the N/STP JDZ were also discussed. Their solution relies on further developments of international, as they somehow lack precision: the rights and interests of LLGDS such as Chad or Central African Republic, Cameroon; or the status of the Gulf of Guinea as an enclosed or semi-enclosed sea and accordingly, Cameroon's status as a Geographically Disadvantaged State (GDS).

As a matter of conclusion, it is opined that though JDZ could be usefully and efficiently applied in many maritime delimitation disputes in the Gulf of Guinea sub-region, the best way to deal with these issues would be to consider them in a sub-regional institutional framework such as the GGC, rather than on a bilateral ground. States in the Gulf of Guinea sub-region could and should move from the bilateral solution based on JDZs or any other bilateral solution to a regional co-operation scheme within the GGC. This shift from a bilateral level to a multilateral one would allow to extend the issues of delimitation of maritime areas within national jurisdiction and the exploitation of the resources contained within them, to new challenges such as the delimitation of the extended continental shelf, co-operation for the exploitation of the resources of the extended continental shelf, co-operation over the exploration of the Area, the development of renewable marine energies, or even CO^2 sequestration, a technique contemplated as being able to provide permanent isolation of CO^2 from atmosphere by keeping it under the ground.

It is suggested that the GGC can be helpful in pooling the resources of those oil-rich countries such as Nigeria, Angola, Equatorial Guinea and their neighbors to acquire the technology they need for their development. The shift from a bilateral scheme of co-operation to a sub-regional one is as a matter of fact induced by the necessity to give away a narrow-sighted security strategy and concerns for commercial profitability of the exploitation of natural resources, to a broad strategic consideration for the industrialization of the sub-region. In this move, Nigeria must be at the centre of any such a strategy, as the only State in the region being able to offer the basic scientific and technological requirements. This has been evidenced since the launching of its first orbital satellite on 27 September 2003, though according to a North-South co-operation pattern. To achieve a strategic undertaking like that one, Nigeria needs to be more coherent in its moves on the sub-regional international arena, keep on with efforts to enhanced regional peace, and its neighbor, especially Cameroon, should change the perception of Nigeria as the natural enemy, as it seems to be. This move should open the way for membership from LLS in the sub-region such as Chad and the Central African Republic. Furthermore, to be really strategic and to develop dissuasive capacity to prevent or lessen foreign powers influence, a military co-operation level should be added to the areas of co-operation contemplated under the treaty creating the GGC. Those States cannot contemplate such a strategic endeavor if they go on perceiving each other as a rival rather than a strategic partner: a strategic partnership to replace strategic rivalry can be developed by extending the Nigerian-Sao Tomean strategic partnership scheme to other neighbors or by reorganizing it in the framework of the Gulf of Guinea Commission. Lastly, international law and ocean governance sciences have established the relevance of the sub-regional or regional level of co-operation in dealing with ocean related issues, particularly in relation with the the stake of global warming. This issue requires that African States should share their part of the burden in taking hard measures to fight ozone layer depletion and protect ocean biodiversity and life on earth in general.

In our era where the effect of anthropogenic activities on the global weather have reached a dangerous climax, it would seem from now on irresponsible on moral grounds and theoretically inaccurate to deal with such kind of issues in total disconnection with this worldwide context. Let us hope political leadership, businessmen and theorists from African countries as well as those from the so-called developed or industrialized countries are going to adopt a more coherent approach to ocean issues, not to consider them first as sovereignty issues or bearing on commercial immediate profitability.

Anyway, it is the wish of the writer, as for many other commentators referred to in the course of this closing discussion, that the different issues raised by our research in connection with the prospects linked to the 2001 Treaty creating the first JDZ in the Gulf of Guinea, will help to yield more awareness on the relevance not only of JDZs but also of the sub-regional framework of the Gulf of Guinea Commission for the settlement of maritime delimitation issues in the Gulf of Guinea. It has been the concern of the writer to suggest that the settlement of delimitation issues should be considered together with the issue of exploitation of marine natural resources, as well as the following ocean related challenges: ocean environment and biodiversity protection, delimitation of the Area and deep seabed mining, research in and exploitation of marine renewable energies, or CO² sequestration. The CGC is cost effective, can help to spare energy, time, and financial means, even in the case of the North-South co-operation. Instead of contemplating bilateral c-operation with Northern countries²⁵⁵, riparian States of the Gulf of

²⁵⁵ This is what Sao Tome and Principe achieved thanks to co-operation with Norway: "In accordance with paragraph 19 of resolution A/RES/63/111 of the United Nations General Assembly, the Government of Norway has provided assistance and advice in the preparation of the present submission. Both the Royal Norwegian Ministry of Foreign Affairs and the Norwegian Petroleum Directorate have been involved in the preparation"; see the document "Preliminary Information Indicative of the outer limits of the continental And Description of the status of preparation of making a submission to the Commission on the Limits of the Continental Shelf for the Democratic Republic of Sao tome and Principe", available on the website of the DOALOS.

India also secured such help in the field of deep seabed mining from the same Norway and Finland through companies of their respective nationality.

It is our opinion that this help from Norway could be centralized at a sub-regional institutional level like the GGC. For instance, GGC member States could collectively ask Norway to help them in gathering scientific information on the continental shelf of the whole sub-region and to collectively summit the outer limits of their respective continental shelves before the CLCS. They could then file a single Submission to the CLCS, instead of individual ones.

Such a kind of co-operation in the framework of a sub-regional organization has been going on since the nineties between some countries, including African ones, and India in the Indian Ocean: members of the Organization for Indian Ocean Marine Affairs Co-operation (IOMAC) and India, which is not a member of that institution have been co-operating in matter of marine science, ocean services,

Guinea could consider co-operation with their industrialized partner as a block of States, a more efficient and economical solution, though maybe just a bit harder to achieve. South-South co-operation is also possible according to that scheme with China, India and South Korea, thanks to for a like the Beijing Declaration and Programme for China –Africa Co-operation in Economic and Social Development (Beijing Programme) through the China Ocean Mineral Resources Research and Development Association (COMRA), or the Korea-Africa Forum. Anyway, due to the dearth on human resources, expertise, infrastructures, financial means, bilateral solution such as the JDZ are notable co-operative achievements, but in order to achieve their set goals, they should be up-graded or converted into sub-regional co-operation schemes by pooling their resources together.

marine technology and non-living resources. Erwin Egede thinks that this co-operation may be extended to deep seabed mining in the Area; see his article quoted in the present work.

REFERENCES

Books

Bouvet, Jean Pierre, L'unité de Gisement, Paris, Budapest, Torino, L'Harmattan, 2004. Charney, Jonathan I. and Alexander Lewis, ed. International Maritime Boundaries Vol. I. & II. Dordrecht/Boston/London: Martinus Nijhoff Publishers, 1993.

Charney, Jonathan I. and Louis M. Alexander, ed. International Maritime Boundaries Vol. III. Martinus Nijhoff Publishers: The Hague/London/New York, 1998.

Churchill, Robin R. and A.V. Lowe, The Law of the Sea 3rd ed. Manchester: Juris Publishing, Manchester University Press, 1999.

Colson, David A. and Robert W. Smith, eds. International Maritime Boundaries, Vol. V Leiden/Boston: Martinus Nijhoff Publishers, 2005.

The Geographer, Limits in the Seas, no. 12 [book on line]. Washington: U S Department of State, 1970; available from http://www.state.gov/documents/organization/62003.pdf; Internet; accessed 27 March 2010.

The Geographer, Limits in the Seas, no. 108, [book on-line] Washington: U S Department of State 1990; available from http://www.state.gov/documents/organisation/58379.pdf; Internet; accessed 17 March 2010.

Lagoni, Rainer and Daniel Vignes eds. Maritime Delimitation. Leiden/Boston: Martinus Nijhoff Publishers, 2006.

Miyoshi, Masahiro, Maritime Briefing, Vol.2, no.5.Durham: University of Durham, 1999.

Schneider, Stephen H., Armyn Rosencranz, Michael D. Mastrandra, and Kristin Kuntz-Duriseti eds. Climate Change Science and Policy. Washington / Covelo / London: Island Press, 2010.

Sindjoun, Luc, Sociologie des relations internationales africaines. Paris : Karthala, 2002.

Prescott, Victor and Clive Schofield, ed. The Maritime Political Boundaries of the World, 2nd ed. Boston/Leiden: Martinus Nijhoff Publishers, 2005.

Tanaka, Yoshifumi, Predictability and Flexibility in the Law of Maritime Delimitation. Oregon: Oxford and Portland, 2006.

United Nations/DOALOS/OLA, The Law of the Sea. Official texts of the United Nations Convention on the Law of the Sea and of the Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea with Index and excerpts from the Final Act of the Third United Nations Conference on the Law of the Sea, New York: United Nations, 2001.

Vasciannie, Stephen C., Land-Locked and Geographically Disadvantaged States in the International Law of the Sea. New York: Oxford University Press, 1990.

Thesis

Akohou, Rodrigue. Exploitation Pétrolière en Mer et Droit International : Aspects Juridiques et Environnementaux pour les Etats du Golfe de Guinée. The United Nations/The Nippon Foundation of Japan Scholarship Programme's Thesis, UN/DOALOS, 2008. Bitse Ekomo,Christophe Lambert. La Côte Atlantique du Cameroun et les Etats sans Littoral d'Afrique Centrale :Evolution et Défis de la Question d'Accès à la Mer. The United Nations/The Nippon Foundation of Japan Scholarship Programme's Thesis, UN/DOALOS, 2008. Curiel, Raoul. Overlapping Claims for an Extended Continental Shelf in the Northeastern Part of South America Facing the Atlantic Ocean. The United Nations/The Nippon Foundation of Japan Scholarship Programme's Thesis, UN/DOALOS, 2010 Etoga, Galax Yves Landry. La Gouvernance de la Biodiversité Marine et Côtière dans le Golfe de Guinée. The United Nations/The Nippon Foundation of Japan Scholarship Programme's Thesis, UN/DOALOS, 2009.

Tanga Biang, Justin, L'Intervention de la Guinée Equatoriale dans le Différend Frontalier Camerouno-nigerian: Fondement, Effets et Portée. Mémoire de DESS, Université de Yaoundé II-Soa,2007.

Articles

Alexander, L.M. and R.D. Hodson, "The Role of the Geographically Disadvantaged States in the Law of the Sea", San Diego Law Review, vol. 13(1976):558-582. Electronic Journals and Books of the United Nations Dag Hammarskjold Library. Database on-line. HeinOnline Law Journals Library; available from http://www.heinonline.org/HOL/PDF?handle=hein.journals/sanlr13&collection=journals&id=57

http://www.heinonline.org/HOL/PDF?handle=hein.journals/sanlr13&collection=journals&id=57 0&print=25§ioncount=1&ext=.pdf; Internet; accessed 22 April 2010.

Andrew, Neil and Gail Lugten. "Maximum Sustainable Yield of Marine Capture Fisheries in Developing Archipelagic States - Balancing Law, Science, Politics and Practice". The International Journal of Marine and Coastal Law 23, no.1 (March 2008):1-37.

Armstrong, Patrick and Viv Forbes. "Calming the Ripples: The Cooperative Management of Ocean Resources – The Falkland Islands Example and Some Southeast Asian Comparisons". Boundaries and Energy: Problems and Prospects, eds. Gerald Blake and others (London: Kluwer Law International, 1998)

Bastida, Ana E., Adaeze Ifezi-Okoye, Salim Mahmud, James Ross and Thomas Walde, "Cross-Border Unitization and Joint Development: An International Law Perspective", Houston Journal of International Law 29, no. 2 (2007), 355-422.Electronic Journals and Books of the United Nations Dag Hammarskjold Library. Database on-line. HeinOnline Law Journals Library; available from http://www.heinonline.org/HOL/PDF?handle=hein.journals/hujil29&collection=journals&id=36 1&print=68§ioncount=1&ext=.pdf; accessed April 08, 2010.

Cameron, Peter D., "The Rules of Engagement: Developing Cross-Border Petroleum Deposits in the North Sea and the Caribbean". The International and Comparative Law Quarterly 55, issue 3 (Oxford: July 2006), 559-586.

Churchill, Robin, "Dispute Settlement under the UN Convention on the Law of the Sea: Survey for 2007". The international Journal of Marine and Coastal Law 23, no. 23 (December 2008).

Egede, Edwin, "African States and Participation in Deep Seabed Mining: Problems and Prospects". The International Journal of Marine and Coastal Law 24,(2009):683-712.

Holdren, John P., "Introduction". In Climate Change Science and Policy, eds. Stephen H. Schneider, Armyn Rosencranz, Michael D. Mastrandra, and Kristin Kuntz-Duriseti.Washington / Covelo / London: Island Press, 2010.

Kamga, Maurice, Délimitation maritime sur la côte atlantique africaine. Bruxelles: Editions Bruylant/Editions de l'Université de Bruxelles, 2006.

Jianjun, Gao. "Joint Development in the East China Sea: Not an Easier Challenge than Delimitation". The International Journal of Marine and Coastal Law 23, no.1 (March 2008):39-75.

Keyuan, Zou, "Cooperative Development for Oil and Gas". In Security and International Politics in the South China Sea: towards a cooperative management regime, eds. Sam Bateman and Ralph Emmers. Routlege: New York, 2009. Lucchini, Laurent " La Délimitation des Frontières Maritimes dans la Jurisprudence Internationale: Vue d'ensemble". In Maritime Delimitation, eds. Rainer Lagoni and Daniel Vignes. Leiden/Boston: Martinus Nijhoff Publishers, 2006.

Meese, Richard, "L'Accord entre la France et le Canada sur l'exploration et l'exploitation des champs d'hydrocarbures transfrontaliers du 17 mai 2005".In Annuaire du droit de la mer, Vol. X, ed. INDEMER. Paris: Pedone, 2005.

Mensah, Thomas A., "Joint Development Zones as an Alternative Dispute Settlement Approach in Maritime Boundary Delimitation". In Maritime Delimitation, ed. Rainer Lagoni and Daniel Vignes. Leiden/Boston: Martinus Nijhoff Publishers, 2006.

Mistry, P. S., "Africa's Record of Regional Co-operation and Integration". African Affairs 99 (2000): 553-570.

Nguyen Hong Trao. "Vietnam's First Maritime Boundary Agreement", 1997, [book on-line], accessed 7 March 2010; available from http://www.dur.ac.uk/resources/ibru/publications/full/bsb5-3 thao.pdf; Internet.

Potts, Tavis and Clive Schofield. "The Arctic Scramble? Opportunities and Threats in the (Formerly) Frozen North". The International Journal of Marine and Coastal Law, 23, no 1, (March 2008):151-176.

Shihata, Ibrahim F. I., and William T. Onorato. "Joint Development of International Petroleum Resources in Undefined and Disputed Areas". In Boundaries and Energy: Problems and Prospects, eds. Gerald Blake, Martin Pratt, Clive Schofield and Janet Allison Brown. Boston /London/ The Hague: Kluwer Law International, 1998.

Tim, Daniel, "African Maritime Boundaries". In International Maritime Boundaries, vol. V, ed. David A. Colson and Robert W. Smith. The Hague: Martinus Nijhoff Publishers, 2005.

Traoré, P.A., The Challenge of Building an effective Co-operation for the Sustainable Development of Natural Resources in Africa", presentation at the Alliance for Earth Sciences, Engineering and Development in Africa (AESEDA), Penn State University Symposium on Georesources Management: Human apacity Development and Sustainable Livelyhoods, 13-14 October 2003, available at: http://www.africaalliance.psu.edu/symposium/2_PLENARY_PRESENTATION/KEYNOTE_SE

SSION/Adama_Traore.pdf.

Treaties and International Conventions

Treaties

- Agreement between the Government of China and the Government of North Korea on the Joint Development of Offshore Petroleum, 12 December 2005.
- Agreement between the Government of Australia and the Government of the Democratic Republic of Timor-Leste relating to the Unitization of the Sunrise and Troubadour fields, signed in Dili on 6 March 2003.
- Exclusive Economic Zone Co-operation Treaty between the Republic of Guyana and the State of Barbados concerning the Exercise of Jurisdiction in their Exclusive Economic Zones in the Area of Bilateral Overlap within Each of their outer Limits and beyond the Outer Limits of the Exclusive Economic Zones of Other States, 2 December 2003.
- Agreement for Provisional Arrangements between Algeria and Tunisia, signed on February 11, 2002.
- Protocol in Implementation of Article 6.2 of the Treaty between the Federal Republic of Nigeria and the Republic of Equatorial Guinea Concerning their Maritime Boundary, signed on 3 April 2002.

Timor Sea Treaty between Timor Leste and Australia, signed on May 20, 2002.

- Treaty between Nigeria and Sao Tome and Principe on the joint Development of Petroleum and other Resources, in respect of Areas of the Exclusive Economic Zones of the Two States, signed on 21 February 2001.
- Memorandum of Understanding between the Royal Government of Cambodia and the Royal Thai Government regarding the Area of their Overlapping Maritime Claims to the Continental Shelf, 18 June 2001.
- Treaty between the Federal Republic of Nigeria and the Republic of Equatorial Guinea Concerning Their Maritime Boundary, signed on 23 September 2000.
- Management and Cooperation agreement between the Government of the Republic of Senegal and the Government of the Republic of Guinea-Bissau, 14 October 1993.
- Maritime Delimitation Treaty between Jamaica and the Republic of Colombia, 12 November 1993.
- Memorandum of Understanding between Malaysia and the Socialist Republic of Vietnam for the Exploration and Exploitation of Petroleum in A Defined Area of the Continental Shelf involving the Two Countries, 5 June 1992.
- Treaty between Australia and the Republic of Indonesia on the Zone of Co-operation in An Area between the Indonesian Province of East Timor and North Australia, 11 December 1989.
- Memorandum of Understanding between Malaysia and the Kingdom of Thailand on the Establishment of A Joint Authority for the Exploitation of the Resources in the Sea-bed in A Defined Area of the Continental Shelf of the Two Countries in the Gulf of Thailand, 21 February 1979.
- Agreement between Japan and the Republic of Korea concerning Joint Development of the Southern Part of the Continental shelf Adjacent to the Two Countries, 30 January 1974.
- Agreement between Sudan and Saudi Arabia Relating to the Joint Exploitation of the Natural Resources of the Sea-bed and Sub-soil of the Red Sea in the Common Zone, 16 May 1974.
- Agreement between the State of Kuwait and the Kingdom of Saudi Arabia Relating to the Partition of the Neutral Zone, 1 July 1965.

International Conventions

FAO Technical Guidelines for the Implementation of an Ecosystem Approach to Fisheries, signed in 2003.

World Summit on Sustainable Development Plan of Implementation, signed in 2002. Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem, signed in 2001. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, signed in 1995. United Nations Programme of Action (Agenda 21), signed in 1992. United Nations Convention on the Law of the Sea, signed in 1982.

Case Law

I.C.J. Decisions

- Land and Maritime Boundary between Cameroun and Nigeria (Cameroon v. Nigeria: Equatorial Guinea intervening), Judgment, I.C.J. Reports 2002, p.303.
- Arbitral Award of 31 July 1989, Judgment, I.C.J. Reports 1991, p.53.
- Continental Shelf (Tunisia/Libyan Arab Jamahiriya), Judgment, I.C.J. Reports 1982, p. 18.
- North Sea Continental Shelf, Judgment, I.C.J. Reports 1969, p.3.

Arbitral Awards

- Guyana/Surinam Case, Award of the Arbitral Tribunal- September 17, 2007.
- Barbados/Trinidad and Tobago Case, Award of the Arbitral Tribunal- April 11, 2006.
- Eritrea/Yemen Case, Award of the Arbitral tribunal in the Second Stage- Maritime Delimitation- December 17, 1999.

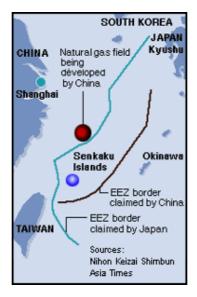
UN Resolutions and others

UNGAR 2749(XXV) of 17 1970.

Websites

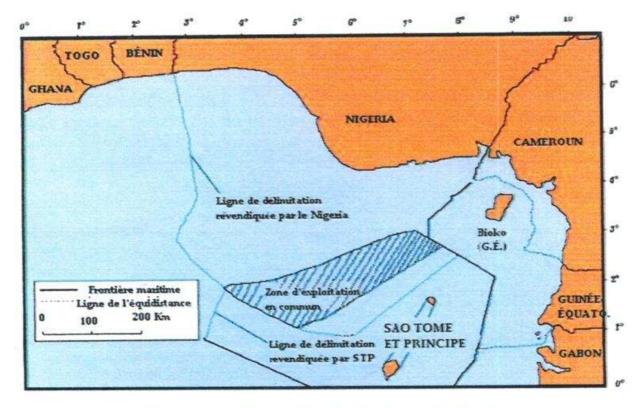
DOALOS: http://www.un.org/Depts/los/doalos_activities/about_doalos.htm. International Court of Justice (ICJ): http://www.icj-cij.org/homepage/index.php. Permanent Court of Arbitration (PCA): http://www.pca-cpa.org/ United Nations: http://untreaty.un.org/ US Central Intelligence Agency: https://www.cia.gov/library/publications/the-world-factbook/. US State Department: http://www.state.gov/

APPENDIXES



Appendix 1: Two claim lines materializing a possible JDZ between China and Japan in the East China Sea (Source: Energy Analysis Administration, "East China Sea Energy Data, Statistics and Analysis-

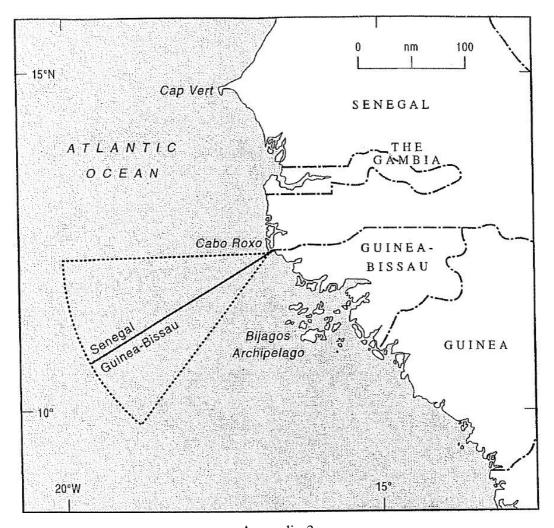
Oil, Gas, Electricity, Coal", [book on-line], accessed 23 April 2010;.available from http://www.eia.doe.gov/emeu/cabs/East_China_Sea/Full.html.)



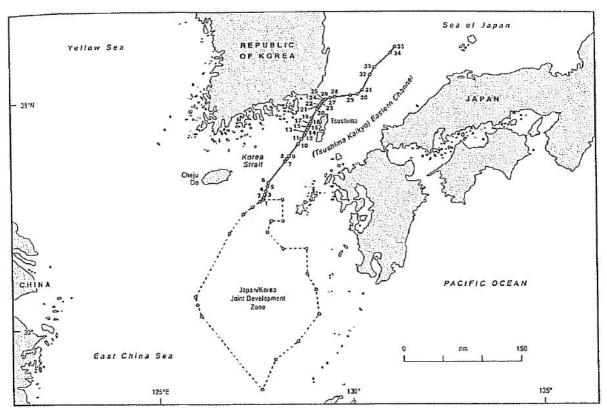
Carte 15. – Zones d'exploitation en commun entre le Nigeria et Sao Tomé et Principe

Appendix 2

Claims from Nigeria, Equatorial Guinea and Sao Tome and Principe and the tricky Cameroonian position (Source: Maurice Kamga, Délimitation Maritime sur la Côte Atlantique Africaine, Bruxelles: Bruylant, 2006, Annexes)

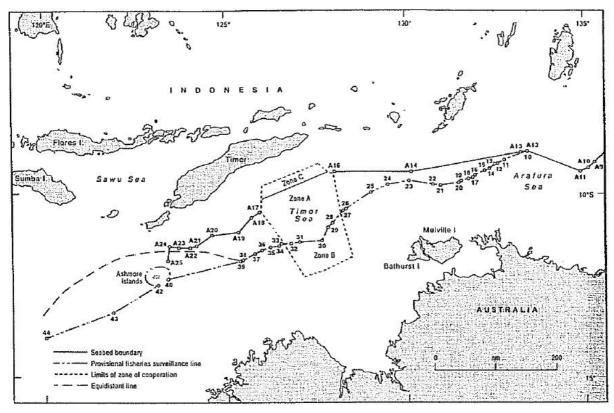


Appendix 3 The Guinea-Bissau/Senegal Joint Zone established in 1993 (Source: Masahiro Miyoshi, p.39)



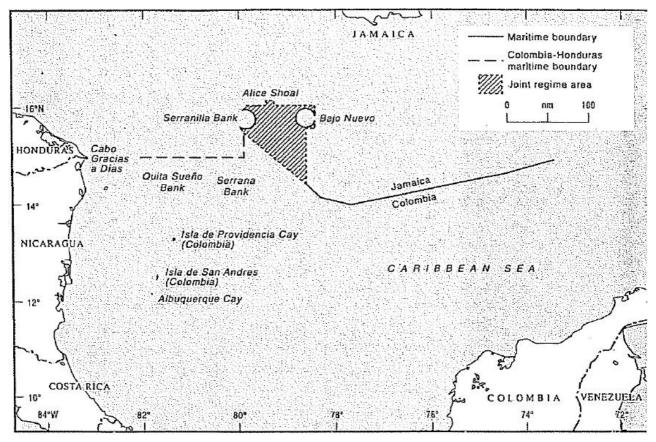
Appendix 4

The Japan –South Korea Joint Development Zone, established in 1974 (Source: Masahiro Miyoshi, op. cit., 13.)

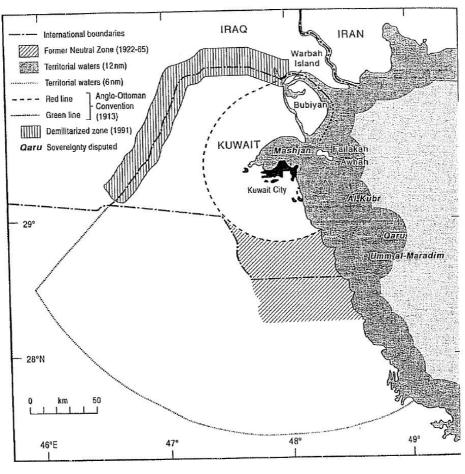


Appendix 5

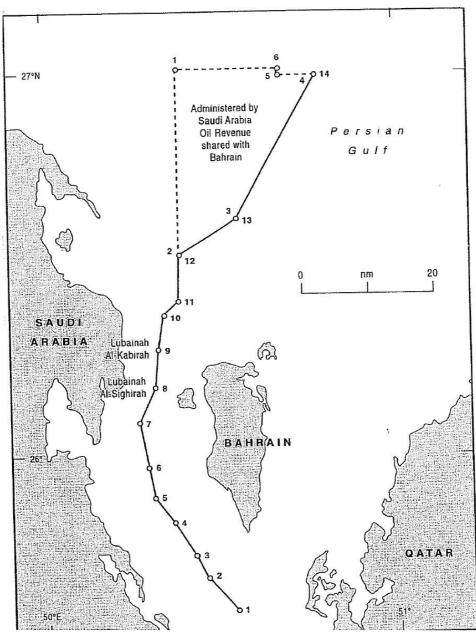
The Australia-Indonesia Zone of Cooperation, established in 1989 (Source: Masahiro Miyoshi, op. cit., 19)



Appendix 6 The Colombia-Jamaica Joint Development Area, established in 1993 (Source: Masahiro Miyoshi, op. cit., 24)

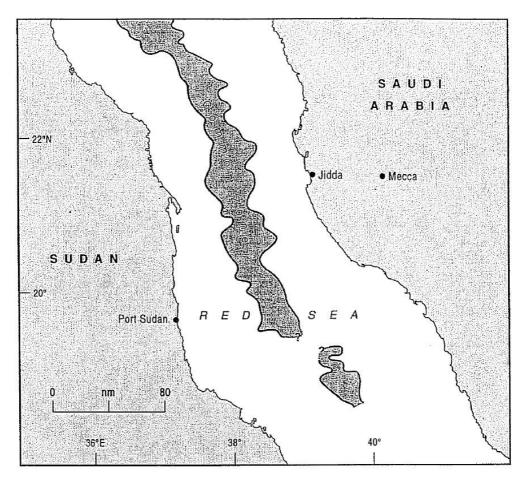


Appendix 7 The Kuwait –Saudi Arabia Neutral Zone, established in 1965 (Source: Masahiro Miyoshi, op. cit., 8.)

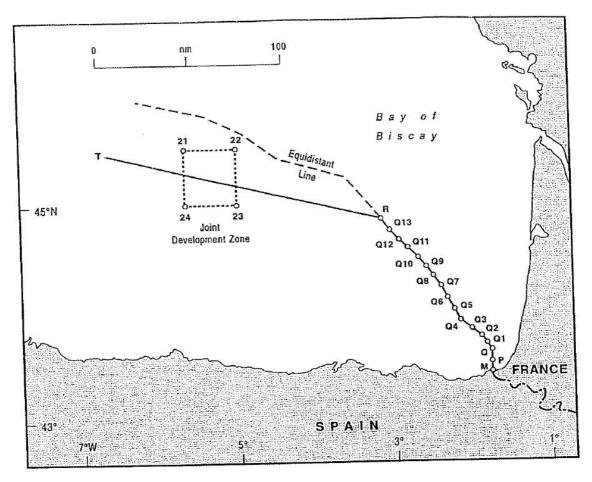


Appendix 8

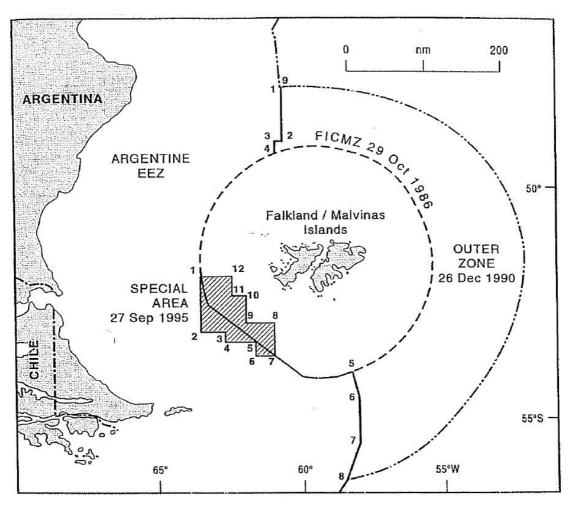
The Bahrain-Saudi Arabia Joint Development Zone, established in 1958 (Source: Masahiro Miyoshi, op. cit., 30.)



Appendix 9 The Sudan Saudi-Arabia Common Zone, established in 1974 (Source: Masahiro Miyoshi, op. cit., 33.)

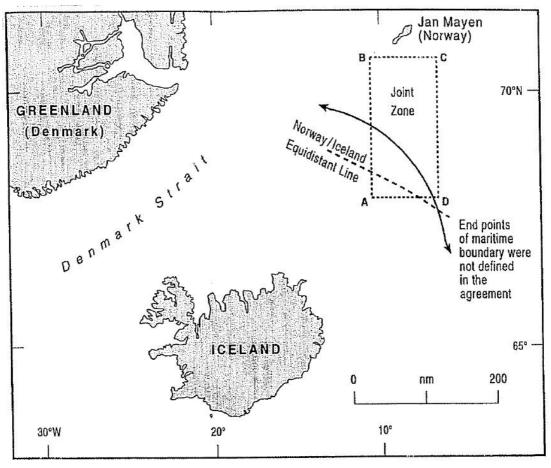


Appendix 10 The Joint Development Zone between France and Spain, established in 1974. (Source: Masahiro Miyoshi, op. cit., 31.)



Appendix 11

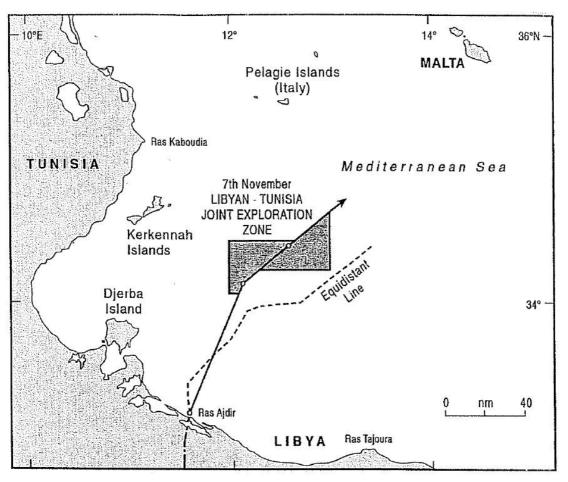
The Argentina-United Kingdom Special Area, established in 1995 (Source: Masahiro Miyoshi, op. cit., 27)



Appendix 12

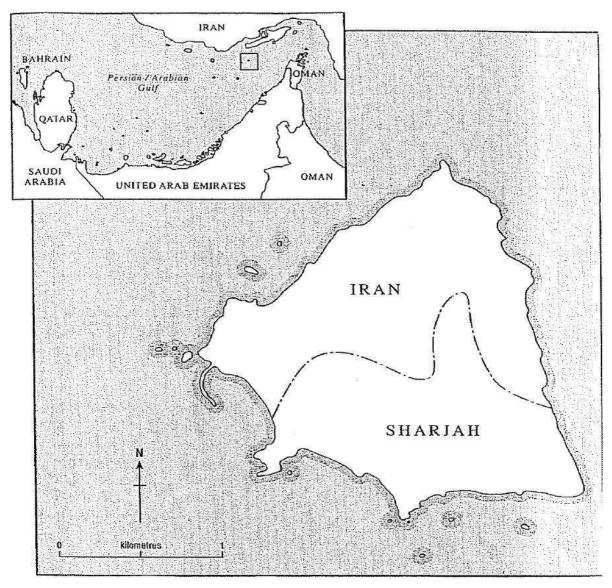
The Iceland-Norway Joint Development Area, established in 1981.

(Source: Masahiro Miyoshi, op. cit., 35.)

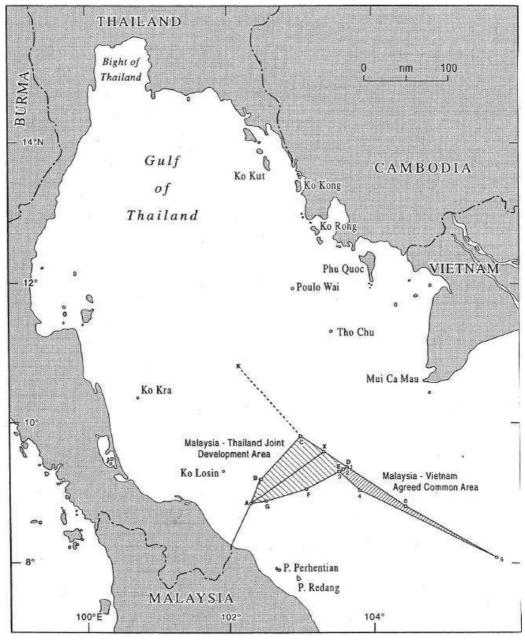


Appendix 13

The Libya-Tunisia Joint Exploration Zone, established in 1988 (Source: Masahiro Miyoshi, op. cit., 36.)

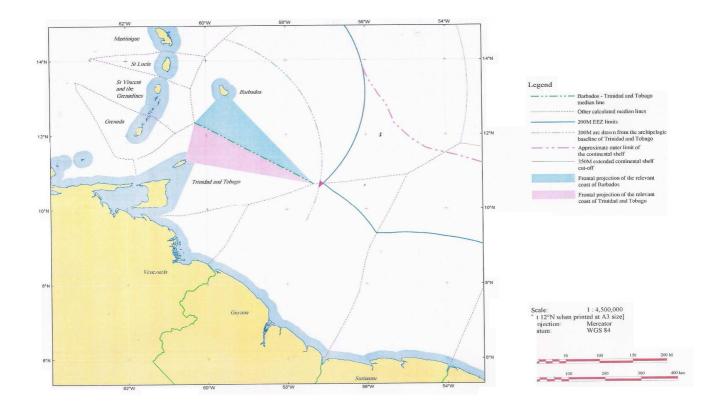


Appendix 14 Abu Musa Island (Source: Masahiro Miyoshi, op. cit., 11.)



Appendix 15

The Malaysia – Thailand Joint Development Area and Malaysia – Vietnam Defined Area (Source: Masahiro Miyoshi, op. cit., 15.)



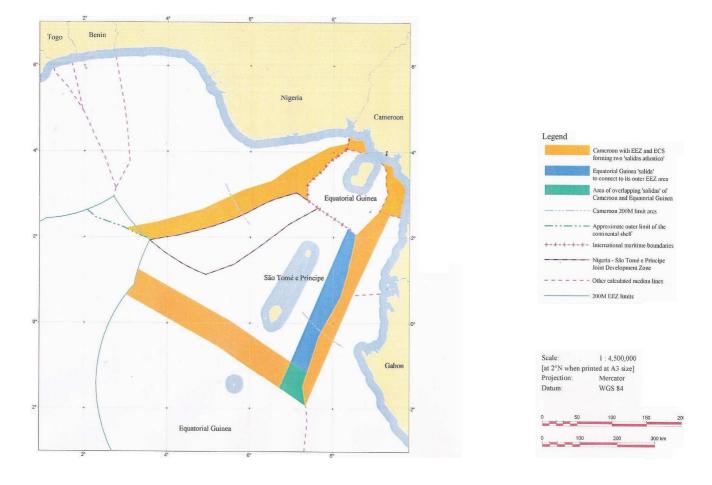
Appendix 16

The Barbados-Guyana 2003 JDZ according to a map produced in 2005 by Barbados before an arbitral tribunal

(Source: Map 12 of Barbados' 9 June 2005 reply before an arbitral tribunal;

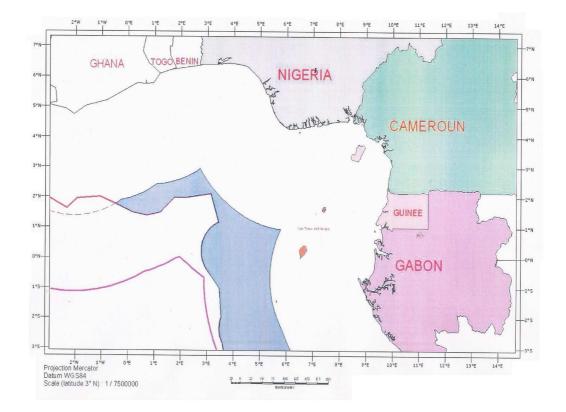
available on the website of the Permanent Court of Arbitration at:

http://www.pca.cpa.org/upload/files/Reply%Map%201-11.pdf)



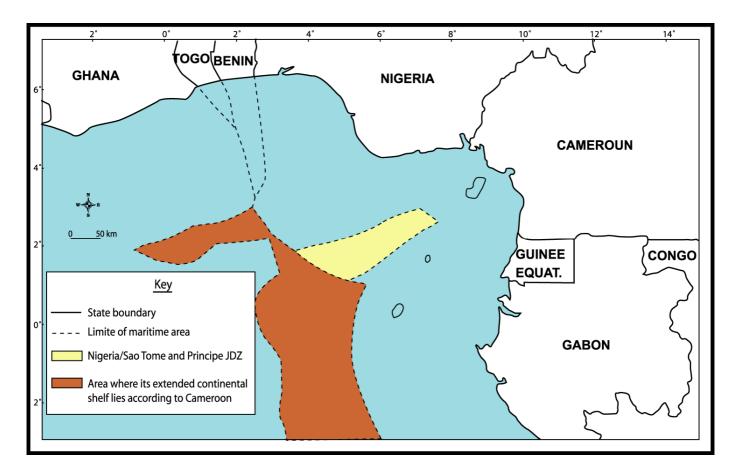


The N/STP JDZ and Cameroonian EEZ and Extended Continental Shelf areas according to a map produced in 2005 by Barbados before an arbitral tribunal (Source: Map 18 of Barbados' 9 June 2005 reply before an arbitral tribunal; available on the website of the Permanent Court of Arbitration at:





The blue area where Cameroon claims an Extended Continental Shelf in the Gulf of Guinea Source: Cameroon's Preliminary Information Indicative of the outer Limits of its Continental Shelf, Annex 9, available on the website of DOALOS



Appendix 19: Map showing the relative positions of the N/STP JDZ and the area where Cameroon claims an Extended Continental Shelf (Source: made by the author from previous documents, using geomatics)