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The 2012 Agreement on the Exploitation of Transboundary Hydrocarbon Resources in the Gulf of Mexico Confirmation of the Rule or Emergence of a New Practice?

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**THE 2012 AGREEMENT ON THE
EXPLOITATION OF TRANSBOUNDARY
HYDROCARBON RESOURCES IN THE GULF
OF MEXICO: CONFIRMATION OF THE RULE
OR EMERGENCE OF A NEW PRACTICE?**

Guillermo J. Garcia Sanchez & Richard J. McLaughlin***

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I. ABSTRACT

This Article explores the international law applicable to the exploitation of hydrocarbon resources that straddle the boundaries between States (transboundary fields) and its applicability to the U.S. and Mexico maritime boundary in the Gulf of Mexico. After a detailed examination of the different sources of international law including treaties, customary norms, judicial decisions, and bilateral practice, the Article concludes that the United States and Mexico have deviated in some regards from the standard international legal practices that other States have adopted to exploit transboundary hydrocarbon resources. The two most notable deviations are in allowing either nation to unilaterally exploit the shared resource, if no unitization agreement can be achieved, and the absence of an effective third party dispute settlement mechanism under some circumstances. Concretely, the Article analyzes how the latest instrument signed by these two nations for the exploitation of these resources, the 2012 Agreement on the Exploitation of Transboundary Hydrocarbon Resources, modifies international practice in several aspects and has the potential of complicating the efficient exploitation of the resources for the benefit of both nations. In reaching its conclusion the Article reviews the ratification processes of the agreement, the legal implications on the way both States perceive the use of these resources, and the effects that the 2014 reform in the energy sector in Mexico has on the binational treaty regime.¹

II. INTRODUCTION

The United States and Mexico have exploited hydrocarbon resources from their respective offshore areas of the Gulf of Mexico (GOM) for many decades. Nevertheless, this has been

1. This Article is the result of a research project directed by the authors in their position as Affiliated Scholars of the Center for U.S. and Mexican Law of University of Houston Law Center. The authors would like to thank the Center for its invaluable support. Stephen Small, Marcelo Martinez, Dyan Parada, and Barrett Schitka participated in the research and editing of the document. Finally we would like to thank Stephen Zamora, Jacqueline L. Weaver, and Josefina Cortés Campos for their comments.

done in a diametrically opposite way due to the legal frameworks surrounding the development of the hydrocarbons industry on both sides of the border. It would be difficult to find two bordering nations that have had such contrasting energy industries and regulatory cultures. Market diversity and global competition is the distinguishing feature of the U.S. model, while the Mexican model for more that seventy-six years rested on an opposing principle: the monopoly of the State-owned company *Petróleos Mexicanos* (PEMEX). These differences have generated dramatically different technical, commercial, and regulatory developments of each nation's energy sector, making bilateral cooperation in energy development difficult.

Today, with more than 3,500 currently existing structures and 33,000 miles of pipelines, the GOM is the world's most extensively developed offshore production area.² Until relatively recently, little discord existed between the two nations regarding the development of offshore hydrocarbon resources because all of the production areas were located in relatively shallow waters quite distant from the maritime boundaries in the remote deepwater areas of the GOM.³ Mexico's monopolistic legal framework made it almost impossible for its national company, PEMEX, to develop the appropriate technology to develop these unconventional fields. Nevertheless, with decreasing production from Mexico's easily accessible onshore and offshore hydrocarbon fields PEMEX has been forced to expand its exploration activities even if it lacks the technology necessary to exploit the deepwater fields. At the same time, growing demand in the United States for more drilling in the GOM and technological advances in exploration and exploitation have led to drilling further into the U.S. side of the GOM at depths of 1,000 feet or more below the

2. Mark J. Kaiser, *The Louisiana Artificial Reef Program*, 30 MARINE POL'Y 605, 605 (2006) (existing structures and pipeline data); ELLINA LEVINA ET AL., ORG. FOR ECON. CO-OPERATION & DEV., INT'L ENERGY AGENCY, POLICY FRAMEWORKS FOR ADAPTION TO CLIMATE CHANGE IN COASTAL ZONES: THE CASE OF THE GULF OF MEXICO 11 (2007).

3. Karla Urdaneta, *Transboundary Petroleum Reservoirs: A Recommended Approach for the United States and Mexico in the Deepwaters of the Gulf of Mexico*. 32 HOUS. J. INT'L L. 333, 334 (2010).

water's surface.⁴ In fact, of the more than 567 million barrels of oil produced in the U.S. GOM in 2009, deepwater wells provided more than 80%.⁵ Between three billion and fifteen billion barrels of oil may be recoverable in the deepwater area of the GOM that is open to U.S. exploitation, making it the biggest U.S. discovery since Prudhoe Bay in Alaska nearly forty years ago.⁶

Accelerating this process has been huge new discoveries of hydrocarbons in the deepest waters near the U.S./Mexico maritime boundary coupled with technological advances that allow for commercial production in waters of 9,000 feet or deeper.⁷ Much of the energy industry's interest in the deepwater areas of the GOM is focused on a series of recent discoveries in a large geologic structure known as the Lower Tertiary Wilcox Trend. This huge, 34,000 square mile structure lies across a large portion of the GOM offshore of the states of Texas and Louisiana and extends seaward beyond the maritime boundary between the United States and Mexico.⁸ A portion of the Lower Tertiary Wilcox Trend of special importance is the Perdido Fold Belt Region. PEMEX has estimated that the Perdido Fold Belt Region near the maritime boundary in the northwestern part of the GOM holds between 8 and 13 billion barrels of oil alone.⁹ In 2012 the Mexican government announced the discovery of several fields in this area, as shown in the following map.¹⁰

4. Rebecca K. Richards, *Deepwater Mobile Oil Rigs in the Exclusive Economic Zone and the Uncertainty of Coastal State Jurisdiction*, 10 J. INT'L BUS. & L. 387, 390–91, 401 (2011).

5. *Id.* at 391.

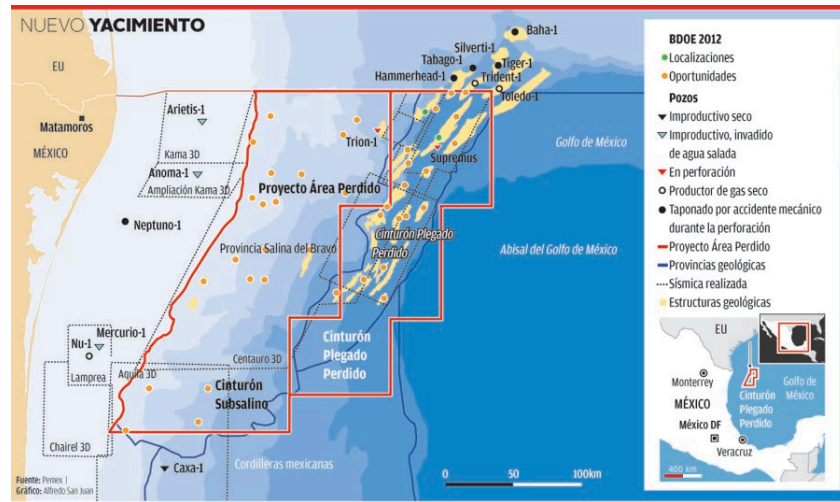
6. Steven Mufson, *U.S. Oil Reserves Get a Big Boost*, WASH. POST (Sept. 6, 2006), <http://www.washingtonpost.com/wp-dyn/content/article/2006/09/05/AR2006090500275.html>.

7. Richard J. McLaughlin, *Hydrocarbon Development in the Ultra-Deepwater Boundary Region of the Gulf of Mexico: Time to Reexamine a Comprehensive U.S.—Mexico Cooperation Agreement*, 39 OCEAN DEV. & INT'L L. 1, 1–5 (2008).

8. *Id.* at 2–3, 5 fig. 1.

9. Dale Quinn, *Mexico Opens Up Its Deepwater Oil Fields*, FINANCIALIST (Mar. 14, 2014), <http://www.thefinancialist.com/mexico-opens-up-its-deepwater-oil-fields>.

10. FABIO BARBOSA, OBSERVATORIO CIUDADANO DE LA ENERGÍA A.C., PONZO TRIÓN-1: PRIMER DESCUBRIMIENTO EN AGUAS MEXICANAS EN LA ZONA FRONTERIZA DEL GOLFO DE MÉXICO [TRION-1 WELL: FIRST DISCOVERY IN MEXICAN WATERS IN THE BORDER ZONE OF THE GULF OF MEXICO] 2 (2012), available at <http://www.energia.org.mx/wp-content/uploads/2012/09/PozoTrionPrimerDescubrimiento3.pdf>.



As the above map shows, this fold belt is a series of northeast-southwest trending anticlines that extend south more than 100 miles beyond the maritime boundary.¹¹ On the U.S. side of the boundary, international oil companies including Shell, BP, Chevron and Statoil are already producing large quantities of hydrocarbons and have plans to expand production in coming years.¹² According to PEMEX, two existing U.S. oil fields extend south across the boundary into Mexican waters.¹³ Although specific reservoirs that straddle the U.S./Mexico maritime boundary have not been formally identified, it is quite likely that such reservoirs exist and may be exploited in the future.

Any developments in deep and ultra-deep waters bear substantial risks and require extraordinary amounts of investments, sophisticated legal expertise, and considerable time to reach commercial scale, even when the project does not involve transboundary deposits.¹⁴ The possibility that

11. McLaughlin, *supra* note 7, at 6–7.

12. *Perdido Discoveries Could Double PEMEX Crude Oil Reserves*, 2B1ST CONSULTING (Nov. 7, 2012), <http://www.2b1stconsulting.com/perdido-discoveries-could-double-pemex-crude-oil-reserves>.

13. Urdaneta, *supra* note 3, at 350 (referring to the Hammerhead-Magnanimo and the Trident-Alaminos fields).

14. See DANIEL YERGIN, *THE QUEST: ENERGY, SECURITY, AND THE REMAKING OF*

transboundary hydrocarbon reservoirs will be exploited in the near future radically changes the legal landscape and forces the two nations to contemplate the international legal implications of exploiting shared natural resources. In fact, when hydrocarbon reservoirs straddle the boundary between two or more sovereign nations a series of potentially unsettled legal issues emerge.¹⁵ Transboundary oil and gas deposits “do not conform to property lines, licensing demarcations, or political boundaries.”¹⁶ In such circumstances, governing laws assume a seminal role. Only a clear, undisputed, and well-established legal framework will provide investors with the certainty required to undertake such costly and risky projects.

After seventy-six years of state control, in 2014, Mexico enacted the constitutional and legislative reforms necessary to open its vast oil and gas reserves to foreign investment.¹⁷ These remarkable changes were brought about after Mexico recognized that it needed additional investment and technology to fully exploit its domestic oil and gas production and to reverse its decade long decline in crude oil production.¹⁸ Of special interest to Mexico is technical assistance and foreign investment to develop the deepest and most remote offshore deposits in the GOM. A simple look at the current blocks that are being offered for the bidding process in the Mexican side of the GOM exemplifies how unexploited deepwater reservoirs are, as shown in the following map.¹⁹

THE MODERN WORLD 245–46 (2011) (discussing Shell’s Auger platform in the Gulf of Mexico, which towers 26 stories above the sea and from the time the leases were acquired, took nine years and approximately \$1.2 billion to complete).

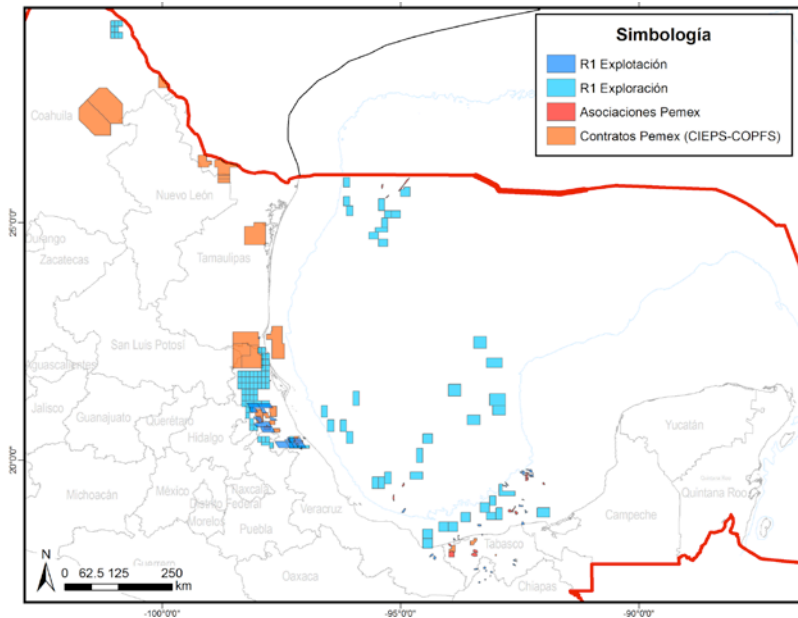
15. Ana E. Bastida et al., *Cross-Border Unitization and Joint Development Agreements: An International Law Perspective*, 29 HOUS. J. INT’L L. 355, 357 (2007).

16. Albert E. Utton & Paul D. McHugh, *On an Institutional Arrangement for Developing Oil and Gas in the Gulf of Mexico*, 26 NAT. RESOURCES J. 717, 722 (1986).

17. Diana Villiers Negroponte, *Mexico’s Energy Reforms Become Law*, BROOKINGS INST. (Aug. 14, 2014), <http://www.brookings.edu/research/articles/2014/08/14-mexico-energy-law-negroponte>.

18. See STAFF OF S. COMM. ON FOREIGN RELATIONS, 112TH CONG., REP. ON OIL, MEXICO, AND THE TRANSBOUNDARY AGREEMENT 3 (Comm. Print 2012) (discussing how Mexico’s oil production peaked in 2003 at about 3.4 million barrels per day (mbd) falling to 2.6 mbd in 2010 due primarily to an estimated 75% decline in production from the offshore Cantarell field from its peak).

19. SECRETARÍA DE ENERGÍA, SECRETARÍA DE HACIENDA Y CRÉDITO PÚBLICO,

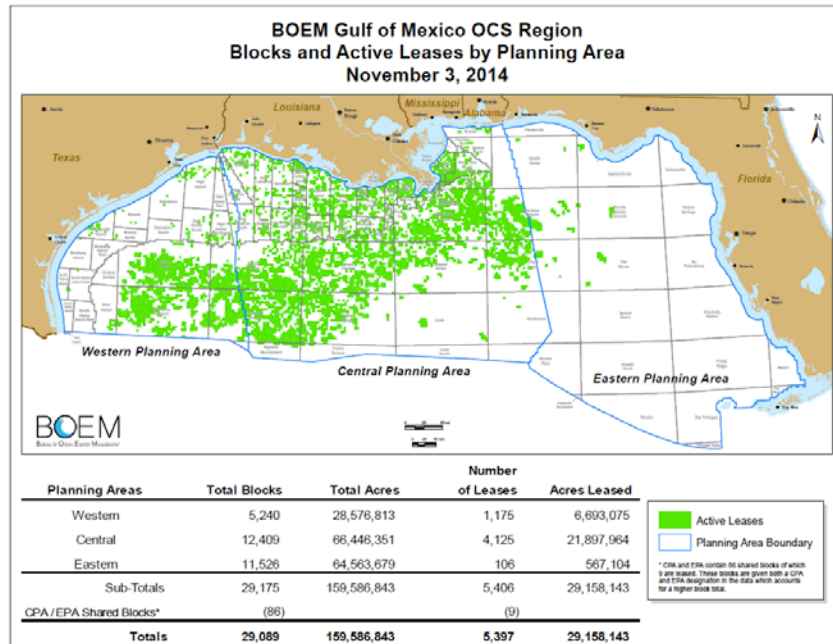


In contrast, significant quantities of hydrocarbons are being produced on the U.S. side of the maritime boundary in a number of widely dispersed deepwater plays.²⁰ For purposes of contrast, one only needs to see the current exploited blocks of the U.S. side, as shown in the following map.²¹

& COMISIÓN NACIONAL DE HIDROCARBUROS, REFORMA ENERGÉTICA: RONDA 1 [ENERGY REFORM: ROUND 1] 13, *available at* http://www.energia.gob.mx/webSener/rondauno/_doc/Reforma%20Energetica%20Ronda%201.pdf (showing the disparate amount of extraction (“extracción”) areas, which have been developed as compared to the exploration (“exploración”) areas, which have not been developed).

20. See generally David Brown, *Players Focus on Deepwater Alaminos Canyon*, EXPLORER (Oct. 2013), <http://www.aapg.org/Portals/0/docs/Explorer/2013/10oct/10explorer13.pdf> (detailing recent leases and exploration work being conducted in the deepwater zones of GOM).

21. BUREAU OF OCEAN ENERGY MGMT., BOEM GULF OF MEXICO OCS REGION BLOCKS AND ACTIVE LEASES BY PLANNING AREA (2014), *available at* <http://www.boem.gov/Gulf-of-Mexico-Region-Lease-Map> (comparing the offshore oil and gas production areas on the U.S. side of the maritime boundary to those on the Mexican side to show the great magnitude of development on the U.S. side, particularly in comparison to the Mexican side).



The Mexican and U.S. governments have expressed special concern over the potential production of oil and gas in the maritime boundary region. For quite some time, current and future commercial production in this region has caused unease, particularly in Mexico, because of the possible existence of hydrocarbon reservoirs that may straddle the existing maritime boundary between the two nations.²² The possibility that production on the U.S. side of the boundary may siphon oil from Mexico triggered a series of diplomatic negotiations beginning over ten years ago to address these concerns. As a result of these discussions, on February 20, 2012 the U.S. and Mexico took an important first step towards reaching a collaborative solution regarding shared hydrocarbon resources by signing the *Agreement Between the United States of America and the United Mexican States Concerning Transboundary Hydrocarbon Reservoirs in the*

22. Peter Millard, *Pemex Says Two U.S. Deepwater Fields May Leach Mexican Oil*, MARKETWATCH (Oct. 26, 2007, 5:02 AM), <http://www.marketwatch.com/story/pemex-says-two-us-deepwater-fields-may-leech-mexican-oil>.

Gulf of Mexico (hereinafter “2012 Transboundary Agreement”).²³ The 2012 Transboundary Agreement is aimed at establishing a collaborative relationship between the United States and Mexico concerning possibly existing transboundary oil and gas reservoirs in the Gulf. As a result of the application of the Transboundary Agreement and other energy reforms in Mexico, U.S.-Mexico interaction over the development of offshore resources in the Gulf will intensify. Because neither the U.S. nor Mexico has been party to an international agreement to jointly develop hydrocarbon resources that extend across international boundaries, it is likely that initial efforts to engage in collaborative development will encounter potentially significant legal, institutional and regulatory gaps, conflicts, as well as opportunities for cooperation.

This Article examines the international legal issues associated with developing transboundary hydrocarbon resources of the GOM. Part I explores the shifting contours of existing sources of international law governing offshore transboundary deposits, with a special emphasis on the obligations to cooperate. Part II examines U.S.-Mexico binational practices to manage transboundary resources. Part III describes and analyzes the landmark 2012 Transboundary Agreement and its likely impact moving forward. The Article concludes with an analysis of whether specific provisions within the Agreement, especially those that authorize the parties to proceed with unilateral exploitation of transboundary reservoirs in case a dispute arises, are in conformance with bilateral practice and in accordance with established international legal principles relating to the exploitation of transboundary hydrocarbon resources. The authors suggest that a series of complications that emerge out of the way the Agreement was adopted could create difficulties in the efficient exploitation of the fields for the benefit of both nations.

23. Agreement Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico, U.S.-Mex., Feb. 20, 2012, T.I.A.S. No. 14-718, available at <http://www.state.gov/documents/organization/231802.pdf>.

III. TRANSBOUNDARY HYDROCARBON DEVELOPMENT UNDER INTERNATIONAL LAW

The task of delimiting transboundary hydrocarbon deposits, as opposed to oil and gas reserves located within the territorial or maritime sovereignty of the nation, assumes great relevance, because they may trigger the application of two or more, sometimes differing, legal regimes.²⁴ As explained below in Subpart B, the exploration and exploitation of hydrocarbon reserves within the Exclusive Economic Zone (EEZ) is subject to exclusive appropriation by a coastal nation. Legally, sovereign rights extend to the resources of the seabed and subsoil under the continental shelf regime and the superjacent waters up to 200 nautical miles in the EEZ.²⁵ The development of transboundary hydrocarbon deposits, as this Article will explain, requires a different approach.

Hydrocarbon deposits often lie across international boundaries in such a manner that allows either portion to be exploited, wholly or in part, from either side of the line.²⁶ International transboundary hydrocarbon deposits have been defined as the hydrocarbons “located in an area through which a land or territorial, fluvial, lacustrine or maritime border runs, separating two sovereign States or a State and a marine zone which is beyond the limits of national jurisdiction, namely, either the high seas or the international seabed area.”²⁷ In other

24. When this study uses the term “reserves” it is referring to those amounts of oil or natural gas that have been discovered and defined, typically by drilling wells or other exploratory measures, and which can be economically recovered. In contrast, the term “deposits” is intended to refer to all of the oil or natural gas contained in a formation or basin without regard to technical or economic recoverability. See GENE WHITNEY ET AL., CONG. RESEARCH SERV., R40872, U.S. FOSSIL FUEL RESOURCES: TERMINOLOGY, REPORTING, AND SUMMARY, at Summary (2011) (discussing the difference between proved reserves and undiscovered resources).

25. United Nations Convention on the Law of the Sea arts. 55–57, Dec. 10, 1982, 1883 U.N.T.S. 31363 [hereinafter UNCLOS]; David M. Ong, *Joint Development of Common Offshore Oil and Gas Deposits: “Mere” State Practice or Customary International Law?*, 93 AM. J. INT’L L. 771, 777 (1999).

26. Rainer Lagoni, *Oil and Gas Deposits Across National Frontiers*, 73 AM. J. INT’L L. 215, 215–16 (1979).

27. Alberto Székely, *The International Law of Submarine Transboundary Hydrocarbon Resources: Legal Limits to Behavior and Experiences for the Gulf of Mexico*,

words, those resources that straddle the border between nations due to their physical or geological characteristics.

Due to the nature of deep drilling operations, in all circumstances for the efficient development of the hydrocarbon reserve the operators should preserve the “unity of the deposit.”²⁸ This means treating the field as a single unit for the purposes of its exploitation. The reasoning behind the unity of the deposit principle is that most of the time there are few efficient points of extraction in the field. Only by treating the reservoir as a unit can the operators find the most effective point for extraction. If the reservoir is exploited differently the risk of inefficient exploitation is very high. Hydrocarbons are usually trapped in geological formations characterized by equilibrium of rock, gas, and water pressure, “and extraction from one point unavoidably affects conditions in the whole deposit and may result in other sharing parties not being able to extract the resources from their part of the deposit.”²⁹ Protecting the unity of deposit through cooperative measures such as joint development or transboundary unitization agreements balances the sovereign rights of nations to exploit natural resources within their territory as they see fit with the ability to engage in the efficient extraction of hydrocarbon resources.³⁰

To understand the international legal implications associated with developing transboundary hydrocarbon resources in the maritime boundary region of the GOM, this Part will first focus on the relevant sources of international law. It will first review in Subparts B and C the international legal framework established by the United Nations Convention on the Law of the

26 NAT. RESOURCES J. 733, 736 (1986).

28. William T. Onorato, *Apportionment of an International Common Petroleum Deposit*, INT'L & COMP. L.Q. Apr. 1968, at 85, 86 n.2.

29. Richard J. McLaughlin, *Establishing Transboundary Marine Energy Security and Environmental Cooperation Areas as a Method of Resolving Longstanding Political Disagreements and Improving Transboundary Resource Management in the Gulf of Mexico*, 7 ISSUES IN LEGAL SCHOLARSHIP 1, 8 (2008).

30. See discussion *infra* Part III.F–I (discussing the need for a transboundary cooperation agreement in the GOM, to efficiently produce from deepwater formations and how similar cooperative agreements have been entered into by other nations to develop oil and gas reservoirs underlying joint national boundaries).

Sea (UNCLOS),³¹ followed in Subpart D by the decisions from relevant international tribunals and implications of international customary law on the governance of shared hydrocarbon reservoirs. Specifically, it will analyze whether international law imposes on sovereign States the duty to jointly develop hydrocarbon reserves straddling two or more national territories. This will be followed in Subpart G by a discussion of alternative approaches to developing transboundary hydrocarbon reserves, including the use of cross-border agreements that force the parties to treat the transboundary field as a unit and joint development agreements that have been employed in various parts of the world.³²

A. Sources of Law Governing Transboundary Deposits

In broad terms, the development of transboundary hydrocarbon reserves is submitted to a “multi-layered framework of law,”³³ comprised of:

- i) international law—treaties, conventions and international custom;
- ii) national laws and regulations of the host governments, and contracts between the host governments and the licensees, notably agreements authorizing development . . . ; and
- iii) private contracts among the licensees and interested third parties, such as operating agreements, farmout and acquisition agreements, and production sales contracts.³⁴

The international legal system can be described as horizontal: there is no supranational authority to adopt universally binding legislation or to make compulsory the jurisdiction of international

31. UNCLOS, *supra* note 25.

32. See *infra* Part II.E (examining how unitization and joint development agreements are the two most commonly used types of agreements when two nations seek to jointly develop transboundary hydrocarbon reservoir(s) or field(s)).

33. Jacqueline Lang Weaver & David F. Asmus, *Unitizing Oil and Gas Fields Around the World: A Comparative Analysis of National Laws and Private Contracts*, 28 HOUS. J. INT'L L. 3, 9 (2006).

34. *Id.*

courts and tribunals in the absence of national consent.³⁵ It is essentially a decentralized, nonhierarchical system, in which sovereign nations create the law under which they agree to bind themselves by international agreements (multilateral and bilateral treaties) and through the acceptance of customary international law and general principles of law that are universally recognized. Article 38(1) of the Statute of the International Court of Justice (ICJ) is often referred to for the sources of international law. These sources are:

- a) international conventions . . . ;
- b) international custom, as evidence of a general practice accepted as law;
- c) the general principles of law recognized by civilized nations;
- d) . . . judicial decisions and the teachings of the most highly qualified publicists of the various nations, as a subsidiary means for the determination of rules of law.³⁶

Thus, a company willing to invest in the exploration and exploitation of transboundary hydrocarbon reserve must analyze a complex body of treaties, rules, regulations, and contracts in order to assess the risks of each venture.

B. Third United Nations Convention on the Law of the Sea (UNCLOS) and the Obligation to Cooperate in Developing Transboundary Hydrocarbon Resources

A nation's territorial sovereignty is not restricted to its land mass and internal waters. It also includes the adjacent maritime area known as the territorial sea, and extends in a more limited form to the continental shelf.³⁷ UNCLOS is the most important multilateral treaty that recognizes and establishes the rights of sovereign nations to assert jurisdiction in maritime zones

35. CONWAY W. HENDERSON, UNDERSTANDING INTERNATIONAL LAW 57 (2010); PETER MALANCZUK, AKEHURST'S MODERN INTRODUCTION TO INTERNATIONAL LAW 35 (7th ed. 1997).

36. Statute of the International Court of Justice art. 38, June 26, 1945, 33 U.N.T.S. 993.

37. ERNEST E. SMITH ET AL., INTERNATIONAL PETROLEUM TRANSACTIONS 105 (3d ed. 2010).

adjacent to their coasts, and thus is the guiding legal instrument for determining national authority at sea under international law.³⁸ It is a comprehensive collection of 320 articles and many annexes, codifying legal principles relating to navigation, marine research, the exploitation of living and non-living natural resources in the sea and underlying seabed, environmental protection and preservation, maritime boundary delimitation and jurisdiction, and maritime dispute resolution.³⁹

The international legal principle of sovereignty confers to nation States “jurisdiction, prima facie exclusive, over a territory and the permanent population living there” and “extends to the mineral resources in the soil and subsoil of their land territory and territorial sea to an unlimited depth.”⁴⁰ Historically, the territorial sea extended three miles from a nation’s shores.⁴¹ The prevailing principle underlying the three-mile territorial sea was the Freedom of the Seas doctrine, essentially limiting national rights and jurisdiction over the oceans to a narrow belt of sea surrounding a nation’s coastline. The remainder of the seas was proclaimed to be “free to all and belonging to none.”⁴²

In the middle part of the 20th century, a new legal doctrine—the Continental Shelf Doctrine—arose to address concerns over coastal fish stocks, the threat of pollution, and exploitation rights beyond the territorial sea. The doctrine was greatly influenced by U.S. President Harry Truman’s unilateral Proclamation of 1945, which stated that the United States regarded “the natural resources of the subsoil and the seabed of the continental shelf beneath the high seas but contiguous to the

38. Andrew J. Norris, *The “Other” Law of the Sea*, NAVAL WAR C. REV., Summer 2011, at 78, 78–79. See *infra* text accompanying note 65 (noting the number of accessions to UNCLOS). As discussed at notes 65–69 *infra*, while the United States has never become a States Party to UNCLOS, all of the principles of the Convention, with the exception of deep-seabed mining provisions, have generally been accepted by United States governmental authorities, and are considered by many to be evidence of rules of customary international law. See *infra* note 68.

39. SMITH, *supra* note 37, at 109 n.37.

40. Bastida et al., *supra* note 15, at 362–63.

41. SMITH, *supra* note 37, at 106.

42. *The United Nations Convention on the Law of the Sea: A Historical Perspective*, U.N. OCEANS & L. SEA, http://www.un.org/depts/los/convention_agreements/convention_historical_perspective.htm (last visited Nov. 7, 2014).

coasts of the United States as appertaining to the United States and subject to its jurisdiction and control.”⁴³ Soon after, many other nations laid claims to their adjacent continental shelves. This trend led to the international community to sign, in 1958, the Convention on the Continental Shelf that for the first time defined in an international agreement the concept of the continental shelf and the rights of the States to exploit it.⁴⁴ Nations that did not have extensive continental shelves began to make claims to protect resources in addition to seabed resources, with some of these claims extending as far out as 200 miles.⁴⁵ Two international conferences, known as UNCLOS I and UNCLOS II held during the late 1950s resolved many contentious ocean and coastal legal issues, but failed to establish a uniform set of rules relating to the growing trend of nations claiming larger and larger portions of the ocean for their exclusive use.⁴⁶ As tension among nations was increasing over the use and control of ocean space, the Third United Nations Conference on the Law of the Sea was convened in New York in 1973 to negotiate a comprehensive global treaty.⁴⁷ During the succeeding nine-year period, participants intensively discussed the issues, bargained and traded national rights and obligations and eventually adopted UNCLOS, which has come to be known as the “Constitution for the Sea.”⁴⁸

It is important to note that some sections of UNCLOS built on previous international agreements. Such is the case of the

43. Proclamation No. 2667, 10 Fed. Reg. 12303, 12303 (Oct. 1, 1945).

44. See *The United Nations Convention on the Law of the Sea: A Historical Perspective*, *supra* note 42 (offering a brief history of the term continental shelf).

45. See Rick Noack, *Denmark Stakes Its Claim in the War for the North Pole*, WASH. POST (Dec. 17, 2014), <http://www.washingtonpost.com/blogs/worldviews/wp/2014/12/17/denmark-stakes-its-claim-in-the-war-for-the-north-pole> (“International law establishes that all countries are allowed exclusive economic zones within 200 nautical miles from their coastlines. However, countries can also make additional claims for natural resources based on extended continental shelves.”).

46. Michael A. Becker, *Shifting Public Order of the Oceans: Freedom of Navigation and the Interdiction of Ships at Sea*, 46 HARV. INT’L L.J. 131, 132–33 (2007) (discussing the shortcomings of UNCLOS, including “excessive claims over the extent of the territorial sea or the continental shelf”).

47. *The United Nations Convention on the Law of the Sea: A Historical Perspective*, *supra* note 42.

48. *Id.*

continental shelf, where UNCLOS took as a baseline the previous definition of the 1958 Convention on the Continental Shelf, but limited the continental shelf to a distance of 200 nautical miles from the baseline of the territorial sea, and abandoned the rule that the continental shelf could be extended where the depth of the superjacent waters admits the exploitation of the natural resources.⁴⁹ This was an effort to ensure that the most advanced countries did not take advantage of the fact that they had better and advanced exploitation technologies. This is why the rule as it stands today is to define the scope of the continental shelf as one linked to distances and not to the exploration or exploitation capacities of the States.

UNCLOS establishes a series of maritime juridical zones that provide expansive legal authority to coastal nations in ocean areas near their coastlines and less legal authority as you move further away from the shore and into the deep ocean. Succinctly put, the Convention delineates four general overlapping maritime zones in which nations assert different degrees of jurisdiction, all of them departing from the baseline, defined in Article 5 of the Convention as the “low-water line along the coast.” The first maritime zone is the territorial sea,

49. *Compare* Convention on the Continental Shelf art. 1, Apr. 29, 1958, 499 U.N.T.S. 311 [hereinafter 1958 Convention on the Continental Shelf] (“For the purpose of these articles, the term ‘continental shelf’ is used as referring (a) to the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas; (b) to the seabed and subsoil of similar submarine areas adjacent to the coasts of islands.”), *with* UNCLOS, *supra* note 25, art. 76:

- 1) The continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance;
- 2) The continental shelf of a coastal State shall not extend beyond the limits provided for in paragraphs 4 to 6;
- 3) The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the seabed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof.

the twelve nautical-mile belt of sea along the coast outward from the baseline, in which States are entitled to exercise “complete” and exclusive sovereignty rights, extended to the air space over it as well as to its bed and subsoil.⁵⁰ It is subject to other nations’ right to exercise innocent passage of vessels, but in all other regards, coastal nations have complete authority over activities in this zone.⁵¹

The contiguous zone is the adjacent belt of sea of the same length seaward of the territorial sea.⁵² It is also subject to the right of innocent passage of vessels, and coastal nations may also enforce their fiscal, sanitation, customs, and immigration laws within the zone.⁵³ The difference between the territorial sea and the contiguous zone is largely immaterial to mineral exploitation.

In the Exclusive Economic Zone (EEZ), coastal nations have sovereign rights to exploit and develop, conserve and manage all natural resources, whether living or non-living, found in the waters, on the ocean floor and in the subsoil of an area extending 200 nautical miles from the low-water baseline.⁵⁴ In the waters of the EEZ and in the airspace above, ships and aircraft have the same rights of free navigation that they would have in and above the high seas.⁵⁵

Finally, the continental shelf comprises the seabed and its subsoil that extend beyond the limits of its territorial sea “throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 miles from the baselines from which the territorial sea is measured, where the outer edge of the continental margin does

50. UNCLOS, *supra* note 25, arts. 2–3.

51. *Id.* arts. 17, 19.

52. *Id.* art. 33.

53. *Id.* arts. 57, 87. Compare UNCLOS, *supra* note 25, art. 3 (“Every State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this Convention.”), with *id.* art. 33(2) (“The contiguous zone may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured.”).

54. *Id.* art. 57.

55. *Id.* arts. 58, 87.

not extend up to that distance.”⁵⁶ In cases where the continental margin extends further than 200 miles, nations may claim jurisdiction up to 350 miles from the baseline or 100 miles from the 2,500-metre isobaths,⁵⁷ depending on certain criteria such as the thickness of sedimentary deposits.⁵⁸ On the extended continental shelf, nations are entitled to exercise exclusive sovereign rights “for the purpose of exploring the shelf and exploiting its natural resources.”⁵⁹ Nations must contribute a percentage of the revenue derived from the exploitation of mineral resources beyond 200 miles (extended continental shelf) to the International Seabed Authority.⁶⁰ It should be noted that the three nations that surround the Gulf of Mexico have claimed areas as extended continental shelf and therefore will be subject to the extended continental shelf regime created by UNCLOS.⁶¹

The area beyond national jurisdiction is considered the high seas and its petroleum and mineral resources belong to the “common heritage of mankind.”⁶² In high seas areas beyond national jurisdiction, the principle of freedom of navigation applies.

The Convention has been widely accepted. As of January 2, 2015, 167 countries have ratified or acceded to UNCLOS.⁶³ The treaty represents a primary source of law for the States Parties, which are under the obligation to obey its provisions.⁶⁴ A few

56. *Id.* art. 76.

57. Isobath is a contour line indicating the exact depth of the ocean floor. NORMAN J. HYNÉ, *DICTIONARY OF PETROLEUM EXPLORATION, DRILLING, & PRODUCTION* 269 (1991).

58. UNCLOS, *supra* note 25, art. 76(4)–(5).

59. *Id.* art. 77.

60. *Id.* art. 82.

61. See McLaughlin, *supra* note 7, at 11–17 (describing the legal obstacles associated with claims to extended continental shelves, especially by nations like the United States that are not parties to UNCLOS).

62. UNCLOS, *supra* note 25, art. 136.

63. *Chronological Lists of Ratifications of, Accessions and Successions to the Convention and the Related Agreements as at 3 October 2014*, U.N. OCEANS & L. SEA, http://www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.htm (last updated Jan. 7, 2015) [hereinafter *Chronological Lists*].

64. Chukwuemeka Mike Okorie, *Have the Modern Approaches to Unit Development of Straddling Petroleum Resources Extinguished the Applicability of the Primordial Law of Capture?*, 18 *CURRENTS: INT'L TRADE L.J.* 41, 46 (2010).

nations, most notably, the United States, Colombia, Israel, and Venezuela are still not parties to the Convention.⁶⁵ Nevertheless, UNCLOS' terms regarding delimitation and other aspects of natural resource development, represents customary international law recognized by the United States,⁶⁶ thus most of its precepts can be considered binding on the United States.⁶⁷ Mexico has traditionally been a strong and active proponent of UNCLOS and was one of the first nations to ratify the treaty.⁶⁸ In the same vein, Mexico and the United States are parties to the 1958 Convention of the Continental Shelf, that, as described above, recognizes the rights of both countries to the exploitation of the resources contained in it, just as UNCLOS does but within different limits.⁶⁹

While UNCLOS does not explicitly regulate the regime of exploration and exploitation of transboundary hydrocarbon reserves, it does provide the legal basis for coastal nations to

65. *Chronological Lists*, *supra* note 63.

66. According to the *Restatement (Third) of Foreign Relations Law of the United States* ("Restatement (Third)"):

[T]he United States in effect agreed to accept the substantive provisions of the Convention, other than those dealing with deep-seabed mining, in relation to all states that do so with respect to the United States. Thus, by express or tacit agreement accompanied by consistent practice, the United States, and states generally, have accepted the substantive provisions of the Convention . . . as statements of customary international law binding upon them apart from the Convention.

RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW OF THE UNITED STATES, pt. 5, intro. note (1987) [hereinafter RESTATEMENT (THIRD)]. In a footnote the reporters note that there is disagreement concerning the customary nature of articles 64–67, article 82, articles 76 and 82 together, the deep seabed mining provisions of Part XI (since renegotiated), and the dispute settlement provisions of part XV. *Id.* intro. note n.6. *But see* W.T. Burke, *Customary Law of the Sea: Advocacy or Disinterested Scholarship?*, *YALE J. INT'L L.* 508, 510 (1989) (criticizing the *Restatement (Third)* for making no attempt to provide details of state practices to support its assertions).

67. *See id.*; *see also* Urdaneta, *supra* note 3, at 369–71 (describing how the United States has come to treat UNCLOS as reflecting customary international law).

68. *See* JORGE A. VARGAS, *MEXICO AND THE LAW OF THE SEA: CONTRIBUTIONS AND COMPROMISES* 44 (Vaughan Lowe & Robin Churchill eds., 2011) ("Mexico's fundamental purpose for enacting the FOA, as one of the first States to ratify the 1982 Law of the Sea Convention, was to put in symmetry that country's domestic legislation with the general rules, principles and institutions contained in the Convention.").

69. *See supra* note 50 and accompanying text (discussing limitation zones under UNCLOS).

assert claims over natural resources found in the seabed and subsoil of the continental shelf.⁷⁰ Article 77 of UNCLOS regulates the exercise of the sovereign rights by nations over their continental shelves, and establishes a general rule that nations have the exclusive jurisdiction to explore and exploit hydrocarbon reserves located within the boundaries of their continental shelves. The article reads as follows:

- 1) The coastal State exercises over the continental shelf sovereign rights for the purpose of exploring it and exploiting its natural resources.
- 2) The rights referred to in paragraph 1 are exclusive in the sense that if the coastal State does not explore the continental shelf or exploit its natural resources, no one may undertake these activities without the express consent of the coastal State.
- 3) The rights of the coastal State over the continental shelf do not depend on occupation, effective or notional, or on any express proclamation.
- 4) The natural resources referred to in this Part consist of the mineral and other non-living resources of the seabed and subsoil⁷¹

Although Article 77 does not deal specifically with transboundary hydrocarbon reserves, it can be read to establish a limit on the right of a nation to exploit transboundary reservoirs unilaterally, without the knowledge and consent of the adjacent or opposing nation. First, the neighboring nation also has the same exclusive right to exploit such a reservoir, for it straddles the maritime boundary and lies in part within that nation's sovereign territory. Second, due to the fugacious nature of petroleum, it is likely that a unilateral exploitation from one side of the border may drain the hydrocarbon resources from the other side. This could give rise to a conversion claim and, importantly for the purposes of the analysis, an inefficient exploitation of the fields affecting the rights of both nations to maximize the benefits that can be obtained from the development of the field.

70. See UNCLOS, *supra* note 25, art. 77 (noting that coastal States have control over the minerals and other nonliving resources of the seabed and subsoil).

71. *Id.*

Consequently, in the international arena, Article 77 of UNCLOS, which provides the exclusive sovereign right to explore and exploit natural resources of the continental shelf to each coastal nation, arguably represents a limitation on the so-called rule of capture, which would allow one nation to possibly drain hydrocarbons from beneath a neighboring nation's territory.⁷²

UNCLOS provides authority for the notion that neighboring coastal nations need to cooperate in delimiting their boundaries as well as managing their non-living resources, although no definitive ruling by a court or other interpretive body has ruled on the precise question. Article 77 interpreted together with Articles 76, which defines the continental shelf, and 83(1) provide the basis for the delimitation of continental shelf boundaries. Article 83(1) mandates that nations "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," in delimiting their continental shelf areas.⁷³ This has led to the emergence of such arrangements as unitization and joint development, as discussed below.⁷⁴

Several other articles in UNCLOS also support the notion that nations should refrain from unilaterally exploiting hydrocarbon resources without regard to the rights of neighboring

72. Under the rule of capture, which was once applied in the United States and some other nations, ownership of natural resources coming from a common source of supply is recognized once it has been reduced to a party's dominion and control. This right of ownership is absolute for resources like oil and gas even when the resource is captured after migrating across an established private or international boundary. The waste and unfairness associated with the rule of capture has long been recognized and it has generally been replaced by conservation regulations that protect the correlative rights of the joint owners of a common resource. See Richard J. McLaughlin, *Foreign Access to Shared Marine Genetic Materials: Management Options for a Quasi-Fugacious Resource*, 34 OCEAN DEV. & INT'L L. 297, 319–20 (2003). For support for the assertion that the rule of capture should not be applied to offshore transboundary hydrocarbon resources, see Onorato, *supra* note 28, at 101 ("At very least [an international tribunal] could quite justly decide that in no case could any party in interest proceed unilaterally with exploitation procedures based on unrestricted capture to the prejudice of all other interest-holders involved."). See also *infra* Part III.D (discussing alternatives to the rule of capture).

73. UNCLOS, *supra* note 25, art. 83(1).

74. See *infra*, Part III.E (explaining unitization and joint development agreements).

States. For example, Article 81 provides each coastal State with the exclusive right to authorize and regulate drilling on the continental shelf for all purposes.⁷⁵ This exclusive authority prevents a State from relinquishing its rights simply because it fails to expeditiously explore or exploit the minerals on its continental shelf or remains inactive after a neighboring State requests that it cooperate in determining the scope or contents of the shared deposit.⁷⁶ Articles 78 and 56 (dealing respectively with the continental shelf and exclusive economic zone) further require that coastal nations exercise due regard to rights and duties of other nations and act in a manner compatible with the provisions of the Convention.⁷⁷ Moreover, Article 300 requires that “States Parties shall fulfill in good faith the obligations assumed under this Convention and shall exercise the rights, jurisdiction and freedoms recognized in this Convention in a manner which would not constitute an abuse of right.”⁷⁸ While the interpretation of this language is open to conjecture, one may assert that nations must refrain from the unnecessary and arbitrary exercise of rights, jurisdiction, and freedoms, as well as, the misuse of powers.⁷⁹

Because the GOM qualifies as a semi-enclosed sea under UNCLOS Article 122,⁸⁰ UNCLOS imposes additional cooperative

75. UNCLOS, *supra* note 25, art. 81.

76. See McLaughlin, *supra* note 7, at 10 (referring to the power granted to coastal States by UNCLOS article 81).

77. *Id.*

78. See UNCLOS, *supra* note 25, art. 300.

79. See SHABTAI ROSENNE, DEVELOPMENTS IN THE LAW OF TREATIES 1945–1986, at 136 (1989) (proposing that the concept of good faith was incorporated and codified in the law of treaties); see also Richard J. McLaughlin, *Settling Trade-Related Disputes Over the Protection of Marine Living Resources: UNCLOS or the WTO?*, 10 GEO. INT’L ENVTL. L. REV. 29, 63, 66 (1997) (noting that although it is unclear how good faith will be interpreted in the context of UNCLOS, the principles of good faith and abuse of right are well established in international law and have the respective meanings of remaining faithful to the intentions of the parties and misusing power such that a party evades its contractual obligations); Richard J. McLaughlin, *UNCLOS and the Demise of the United States’ Use of Trade Sanctions to Protect Dolphins, Sea Turtles, Whales, and Other International Marine Living Resources*, ECOLOGY L.Q., no. 1, 1994, at 1, 57 (noting that it is unclear how UNCLOS article 300, dealing with good faith, and article 301, dealing with peacefulness of the seas, will be interpreted).

80. UNCLOS, *supra* note 25, art. 122 (defining “enclosed or semi-enclosed sea” to

measures on bordering states. Article 123 provides that “States bordering an enclosed or semi-enclosed sea should co-operate with each other in the exercise of their rights and in the performance of their duties.”⁸¹ This Article refers specifically to an obligation to cooperate in the conservation of marine living resources, protection of the marine environment, and coordination of marine scientific research and does not make specific reference to development of hydrocarbons.⁸² However, some experts have interpreted Article 123 as requiring nations sharing a semi-enclosed sea with an interest in common resources, including hydrocarbons, to negotiate in good faith with a view to concluding an agreement when their interests collide.⁸³ Finally, Articles 74(3) and 83(3), dealing respectively with exclusive economic zone and continental shelf delimitations, call on coastal nations to act “in a spirit of understanding and cooperation” and to make every effort to enter into provisional arrangements “of a practical nature” prior to reaching formal delimitation agreements.⁸⁴ Because Articles 74 and 83 only apply when a boundary has not yet been delimited, these provisions have limited application to the transboundary resources straddling the treaty-based maritime boundaries between the United States and Mexico in the GOM. Nevertheless, all of the described provisions taken together clearly show that the spirit and purposes of UNCLOS are enhanced by encouraging cooperation in the development of straddling deposits.

mean[s] 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 or exclusive economic zones of two or more coastal States”).

81. *Id.* art. 123.

82. *Id.*

83. See, e.g., Rainer Lagoni, Commentary, *The Baltic Sea*, in LAW OF THE SEA IN THE 1980S: PROCEEDINGS 517, 519 (Choon-ho Park ed., 1983).

84. UNCLOS, *supra* note 25, arts. 74(3), 83(3). The complete text of article 83(3) is the following:

Pending agreement as provided for in paragraph 1, the States concerned, in a spirit of understanding and cooperation, 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. Such arrangements shall be without prejudice to the final delimitation.

UNCLOS clearly establishes an obligation to cooperate in reaching agreement on the exploration and exploitation of transboundary deposits pending delimitation of the maritime boundary between the adjacent or opposing States.⁸⁵ However, it is less clear whether UNCLOS requires nations to cooperate in the exploration or exploitation of a transboundary hydrocarbon reserve where there is already a delimited maritime boundary established between them, as is the case involving United States and Mexican rights in the Gulf of Mexico. In other words, whether States are required to unitize or jointly develop such reservoirs. To answer this question it is imperative to analyze secondary sources of international law, to which we now turn.

C. International Customary Law, Judicial Decisions and Expert Opinions

International Customary Law is a secondary source of international law, which can be briefly defined as a general practice accepted as law.⁸⁶ It derives its force from two essential elements: the concurrence of uniform State practice and a “psychological” belief that adherence to these rules is obligatory and made with “a sense of legal obligation” (*opinio juris*).⁸⁷ Evidence of the subjective element, *opinio juris*, can be found in the enactment of domestic legislation; the declarations of official State representatives; the principles agreed by states in their conduct of their international relations; and in the writings of learned international lawyers and in judicial decisions of national and international courts; and in the adoption of resolutions of the United Nations General Assembly (UNGA) that reflect the views of the majority of member States.⁸⁸

85. See Ong, *supra* note 25, at 802 (noting that the obligation to cooperate in reaching agreement on the exploration and exploitation of common deposits is a cardinal rule of customary international law).

86. See HENDERSON, *supra* note 35, at 58 (explaining that although customary laws are not written rules like treaties, States tend to accept the customs developed in international law).

87. See MARK W. JANIS, AN INTRODUCTION TO INTERNATIONAL LAW 46 (4th ed. 2003) (explaining the elements necessary for the formation of customary international law).

88. Bastida et al., *supra* note 15, at 361–62.

The ICJ in the *Asylum* Case recognized that in some circumstances a customary norm may arise between certain States in a particular geographical area or region without necessarily being accepted by the rest of the world as such.⁸⁹ According to some commentators, a regional customary norm must meet two special requirements before becoming recognized as international customary law:

- (i) it has to be tacitly accepted by all the parties concerned (thereby boiling down to a sort of tacit agreement, as has been rightly noted by some commentators); [and] (ii) its existence must be proved by the State that invokes it, with the consequence that if this State fails to discharge its burden of proof, the claim based on the alleged customary rule is rejected.⁹⁰

In the *Right of Passage over Indian Territory*, the World Court recognized that a local custom may arise and be binding only upon two States. In the words of the Court:

It is difficult to see why the number of States between which a local custom may be established on the basis of long practice must necessarily be larger than two. The Court sees no reason why long continued practice between two States accepted by them as regulating their relations should not form the basis of mutual rights and obligations between the two States.⁹¹

Whether there is an international legal obligation to cooperate in the development of transboundary hydrocarbon resources when there is an established maritime boundary is an unsettled question. For example, the International Law Commission decided to include the topic “Shared natural resources” in its program of work to address transboundary oil and natural gas, based on the general principle of cooperation

89. See *Asylum (Colom. v. Peru)*, 1950 I.C.J. 266, 276 (Nov. 20) (“The Party which relies on a custom of this kind must prove that this custom [regional] is established in such a manner that it has become binding on the other Party. The Colombian Government must prove that the rule invoked by it is in accordance with a constant and uniform usage practised by the States in question, and that this usage is the expression of a right appertaining to the State granting asylum and a duty incumbent on the territorial State.”).

90. ANTONIO CASSESE, *INTERNATIONAL LAW* 164 (2d ed. 2005).

91. *Right of Passage over Indian Territory (Port. v. India)*, 1960 I.C.J. 6, 39 (Apr. 12).

(on the basis of equality of right, equity, and mutual benefit in the exploitation of “common resources”).⁹² However, the majority of member States expressed the view that the Commission should not develop the subject further, for the issue involved the “essential bilateral interests” of the States and any attempt to codify general rules would not be “appropriate or necessary.”⁹³ These States felt that any attempt to develop general principles that may affect the sovereign prerogatives and large economic interests associated with transboundary offshore hydrocarbons would generate intense controversy. Thus, the Commission decided that the topic of oil and gas would not be pursued at that time.⁹⁴

Despite this note of reluctance by members of the International Law Commission, many scholars accept the trend that international customary law requires nations to consult and to work towards some sort of cooperative arrangement to develop transboundary hydrocarbon resources.⁹⁵ While the precise parameters of that cooperation are still not settled, there is unanimity among commentators that customary law prohibits one sharing nation from unilaterally exploiting a shared resource to the detriment of the co-owning nation.⁹⁶ This obligation has

92. Rep. of the Int'l Law Comm'n, 62d Sess., U.N. Int'l Law Comm'n, 62d Sess., May 3–June 4, July 6–Aug. 6, 2010, ch. XII pt. A, U.N. Doc. A/65/10 (2010).

93. U.N. Int'l Law Comm'n, 62d Sess., May 3–June 4 & July 6–Aug. 6, 2010, § 2, U.N. Doc. A/CN.4/621 (2010).

94. See Rep. of U.N. Int'l Law Comm'n, *supra* note 92 (citing the opposing views of States as a reason for not considering oil and gas at that time).

95. McLaughlin, *supra* note 72, at 320–21 (explaining why some form of joint exploitation of transboundary hydrocarbon deposits is progressively moving toward customary legal status); Ong, *supra* note 25, at 792 (“[A] rule of customary international law requiring cooperation specifically with the view toward joint development or transboundary unitization of a common hydrocarbon deposit has not yet crystallized.”); William T. Onorato, *Apportionment of an International Common Petroleum Deposit*, INT'L & COMP. L.Q., Apr. 1977, at 324, 333 (recommending unitization as “clearly the best and, accordingly, the prime objective to aim for”); see also Masahiro Miyoshi, *The Joint Development of Offshore Oil and Gas in Relation to Maritime Boundary Delimitation*, MAR. BRIEFING, no. 5, 199, at 1, 7–37 (providing more than a dozen examples of nations that co-own transboundary hydrocarbon resources developing joint development or unitization agreements).

96. See Lagoni, *supra* note 26, at 235 (explaining that although there is no conventional obligation in place, customary law prohibits states from exploiting shared resources); see also Miyoshi, *supra* note 95, at 5 (noting that joint development schemes

even been interpreted by some commentators as prohibiting any form of unilateral exploitation if an offer for joint development or unitization is refused by the sharing State.⁹⁷ However, the notion that one nation may possess virtual veto authority over the exploitation of natural resources within the sovereign territory of another nation is unrealistic and runs counter to the well-established right to territorial integrity.⁹⁸ Instead, a more realistic and reasonable approach has been advocated by University of Dundee Professor Peter Cameron, which would allow one party to go ahead and commence development in response to protracted difficulties in negotiations with a sharing nation as long as it fully incorporates the principle of unity of deposit and good petroleum industry practice.⁹⁹ According to Cameron, this option would include the following four elements:

- a) The potential interests of the other State could be taken into account by making a preliminary estimate of the percentage of the field that may extend into the

arise in situations where states cannot agree on boundaries or where boundaries are delimited, followed by several examples of differing joint development schemes); Onorato, *supra* note 28, at 101 (noting that although there is no developed international law, custom and practice indicate that there are rules that require cooperative development of international petroleum deposits and prohibit unilateral exploitation).

97. See Onorato, *supra* note 28, at 329 (“Accordingly, it has been concluded that a State or States interested in an international common petroleum deposit may not exploit such a deposit over the seasonable objection of another such State or States and, therefore, such unlawful action, if taken, would be enjoined and/or answerable in damages.”). However, this would not preclude the nations from explicitly agreeing to a different arrangement regarding the exploitation of the resources. See *infra* Part III (discussing the U.S.-Mexico Transboundary Hydrocarbon Agreement which prohibits unilateral abuse of resources).

98. See Urdaneta, *supra* note 3, at 377 (rejecting the “exercise of mutual restraint” argument which claims that one state has veto power over another and arguing instead that each state’s sovereignty and right to territorial integrity will preclude one state from imposing unilateral restrictions over another); Peter D. Cameron, *The Rules of Engagement: Developing Cross-Border Petroleum Deposits in the North Sea and the Caribbean*, INT’L & COMP. L.Q., July 2006, at 559, 562 (noting that because the principle of sovereignty does not easily co-exist with the duty to cooperate and jointly manage resources, there are limitations placed on the duty to cooperate).

99. Cameron, *supra* note 98, at 583. Cameron’s proposed option leaves unanswered the issue of how one nation can place wells in the optimal position to maximize the ultimate recovery of production if only one nation is producing. Although his approach does address the issue of equity, depending on the circumstances, it may not represent the most efficient method of well spacing, which may hurt both nations.

other State's territory and establishing an escrow account to deposit a portion of net revenues for the other State's benefit . . . ;

- b) the initiating State should continue in good faith and with diligence to inform and consult with the other State with respect to its petroleum operations and with a view to reaching agreement as required under the delimitation agreement;
- c) the initiating State would maintain and make available to the other State for inspection complete and accurate records of all costs and revenues pertaining to the field's development and production; and
- d) once a preliminary agreement is reached, activities and apportionment of costs should be adjusted accordingly; the funds in the escrow account could be released to the other State¹⁰⁰

We endorse the approach taken by Professor Cameron. Moving forward in this reasonable and responsible manner should satisfy existing international legal norms by rejecting a rule of capture approach and instead applying, in good faith, the principle of the unity of deposit in line with sound international petroleum industry practices.¹⁰¹ Furthermore, by using the best practices available to the industry and treating the field as a unit the unilateral exploitation could achieve high levels of efficiency, as long as the operator can prove that its drilling site is located in the most effective point of the reservoir.

The approach advocated by Professor Cameron, however, may not be unanimously accepted. It is still too early in the progressive development of international customary law on this topic to definitively assert that there is or is not an affirmative duty to jointly develop transboundary hydrocarbon reservoirs. Furthermore, without having access to both sides of the borderline it is hard to determine where the most effective drilling point of the field is located, opening the possibility that the exploitation may be carried out in an inefficient way that

100. *Id.*

101. *Id.* at 583–85; *see also* Miyoshi, *supra* note 95, at 5 (describing how setting up an escrow account to compensate a co-owning nation may be a possible approach).

unnecessarily depletes natural resources. Nevertheless, the possibility of a binational practice that can become a customary norm between two States is always possible, especially when it comes to treating similar resources in a joint way respecting both side's rights and seeking to exploit them in the most efficient manner.

The progressive development of customary law calling on nations to jointly develop shared natural resources is further supported by many United Nations General Assembly Resolutions. For instance, Resolution 3129 on "co-operation in the field of the environment concerning natural resources shared by two or more States," supported by Article 3 of the 1974 Charter of Economic Rights and Duties of States, calls for "adequate international standards for the conservation and harmonious exploitation of natural resources common to two or more states," with such cooperation being developed "on the basis of a system of information and prior consultation."¹⁰² In addition, general principles of international law such as the principle of good neighborliness enshrined in Article 74 of the Charter of the United Nations, which places an obligation on States to refrain from activities that potentially could cause damage to the legitimate rights and interests of other States,¹⁰³ supports the principle to cooperate in the development of transboundary reservoirs.¹⁰⁴ Finally, the United Nations Environmental Program (UNEP) stresses in its principles of conduct the need for cooperation in the conservation and harmonious utilization of natural resources shared by two or more States.¹⁰⁵

102. Charter of Economic Rights and Duties of States, G.A. Res. 3281 (XXIX), art. 3, U.N. Doc. A/Res/29/3281 (Dec. 12, 1974).

103. U.N. Charter art. 74 (defining the concept of good-neighborliness as each nation taking account for the interests and well-being of the rest of the world, in social, economic, and commercial matters).

104. See Gao Zhiguo, *Legal Aspects of Joint Development in International Law*, in SUSTAINABLE DEVELOPMENT AND PRESERVATION OF THE OCEANS: THE CHALLENGES OF UNCLOS AND AGENDA 21, at 634 (Mochtar Kusuma-Atmadja et al. eds., 1995) (listing customary international law, along with the principles of good neighborliness and cooperation as strong support for joint exploitation).

105. See McLaughlin, *supra* note 72, at 313 (noting that UNEP developed a set of fifteen draft principles, the first of which calling for cooperation among states). These UNEP draft principles are intended to guide not just hydrocarbon development, but

The ICJ has also placed an emphasis on collaborative processes by consistently pointing out principles of cooperation and consultation in deciding delimitation of continental shelf cases. These principles can be summarized as follows: first, unilateral exploitation of the deposit in disputed areas is prohibited; second, methods of efficient exploitation and apportionment of such a deposit must be agreed between the parties involved; and third, all parties concerned are required to negotiate in good faith in order to arrive at a provisional arrangement.¹⁰⁶ The Court in the *North Sea Continental Shelf* Case recognized the importance of the unity of the resources and of their efficient exploitation:

Another factor to be taken into consideration in the delimitation of areas of continental shelf as between adjacent States is the unity of any deposits. The natural resources of the subsoil of the sea in those parts which consist of continental shelf are the very object of the legal régime established subsequent to the Truman Proclamation. Yet it frequently occurs that the same deposit lies on both sides of the line dividing a continental shelf between two States, and since it is possible to exploit such a deposit from either side, a problem immediately arises on account of the risk of prejudicial or wasteful exploitation by one or other of the States concerned. To look no farther than the North Sea, the practice of States shows how this problem has been dealt with, and all that is needed is to refer to the undertakings entered into by the coastal States of that sea with a view to ensuring the most efficient exploitation or the apportionment of the products extracted The Court does not consider that unity of deposit constitutes anything more than a factual element which it is reasonable to take into consideration in the course of the negotiations for a delimitation.¹⁰⁷

exploitation of other natural resources shared by two or more nations. The U.N. General Assembly failed to adopt the UNEP-created principles due to objections by some States that the proposed principles encroached upon their sovereignty to manage natural resources under their control. *Id.*

106. Onorato, *supra* note 28, at 89–92.

107. *N. Sea Continental Shelf* (F.R.G./Den; F.R.G./Neth.), 1969 I.C.J. 3, ¶ 97 (Feb. 20).

From the above statement of the ICJ we can conclude that the World Court recognized some of the principles that have been analyzed by this study as guiding the exploitation of transboundary resources. First, the ICJ is recognizing that the unitization of the transboundary fields helps to ensure that the exploitation of those resources is done in an efficient way without placing in danger the rights of each State; second, it recognized that it is an international practice of the States to include such a principle of unitization in their treaties dealing with such resources; thirdly, although it does not recognize that unitization or the creation of a joint exploitation zone is an international customary norm, it does recognize that it is a pragmatic solution to solve delimitation problems, something that is precisely contemplated in Article 83(3) of UNCLOS.

Importantly, the ICJ emphasized that the customary norm in play when the boundary line is in dispute is to negotiate in good faith respecting the principles of proportionality and equity, but once the borderline is found and negotiated, the Court does recognize that if there are resources in the area that need to be preserved as a unit for their development then a joint exploitation regime is the most appropriate:

In a sea with the particular configuration of the North Sea, and in view of the particular geographical situation of the Parties' coastlines upon that sea, the methods chosen by them for the purpose of fixing the delimitation of their respective areas may happen in certain localities to lead to an overlapping of the areas appertaining to them. The Court considers that such a situation must be accepted as a given fact and resolved either by an agreed, or failing that by an equal division of the overlapping areas, or by agreements for joint exploitation, the latter solution appearing particularly appropriate when it is a question of preserving the unity of a deposit.¹⁰⁸

The above statement by the Court respects the nature of hydrocarbon deposits, since the drilling on a particular area of the field might be insufficient for the exploitation of the reservoir. The fact that the field is treated as a unit for the sake of its exploitation is the only way to ensure that it is being

108. *Id.* ¶ 99.

exploited efficiently. A boundary line that cuts across the field, might be a source to determine the jurisdiction and the percentage belonging to each State, but the most efficient point for drilling is not determined by a fictitious line but by natural characteristics of the reservoir. Consequently, the only way in which the rights of both States and where both can maximize the benefit of the field, is to treat it as a unit and exploit it jointly with the most efficient contractual framework available to the States. Some members of the Court recognized that the delimitation of the border had deeper implications when hydrocarbons were involved due the equity and proportionality principles. In fact, Judge Philip Jessup even argued in the *North Sea Case* that what was behind the litigation, was not the definition of the boundary itself, but the existence of hydrocarbon resources in the areas and that the States in their memorial were trying to find the most “appropriate” method of exploitation “in order to avoid wasteful or harmful methods of extraction which would lead to despoliation.”¹⁰⁹ He pointed out the following:

It is apparent from the above extracts that the problem of the exploitation of the oil and gas resources of the continental shelf of the North Sea was in the front of the minds of the Parties but that none of them was prepared to base its case squarely on consideration of this factor, preferring to argue on other legal principles which are sometimes advanced with almost academic detachment from realities.¹¹⁰

. . . .

. . . Therefore, while, as the Court States, the principle of joint exploitation is particularly appropriate in cases involving the principle of the unity of a deposit, it may have a wider application in agreements reached by the Parties concerning the still undelimited but potentially overlapping areas of the continental shelf which have been in dispute.

Nor is it irrelevant to recall that the principle of international cooperation in the exploitation of a

109. *Id.* at 68 (Jessup, J., concurring).

110. *Id.* at 72.

natural resource is well established in other international practice. The Federal Republic invoked the Helsinki Rules of the International Law Association concerning the sharing of the waters of a river basin traversing or bordering more than one State. Whether or not those Rules are the most accurate statement of the existing international law, as to which I express no opinion, there are numerous examples of co-operative use and of sharing of fluvial resources.

. . . .

Clearly, the principle of co-operation applied to the stage of exploration as well as to that of exploitation, and there is nothing to prevent the Parties in their negotiations, pending final delimitations, from agreeing upon, for example, joint licensing of a consortium which, under appropriate safeguards concerning future exploitation, might undertake the requisite wildcat operations.¹¹¹

111. *Id.* at 82–83. Judge Jessup even gave a broad description of all the joint exploitation agreements, both of delimited and of disputes borderlines, as a sign of international practice on the matter:

Of the existing North Sea agreements relating to joint exploitation and mentioned in paragraph 97 of the Judgment of the Court, that between the Netherlands and the Federal Republic applying to the Ems Estuary is, as already noted, the most complete example of full cooperation in both exploitation and profit-sharing. The Agreement of 6 October 1965 between the Netherlands and the United Kingdom calls for consultation on the most effective exploitation of overlapping deposits and on “the manner in which the costs and proceeds relating thereto shall be apportioned”. If the two Governments fail to reach agreement, the matter is to be referred, at the request of either one, to an arbitrator whose decision is binding. If licensees are involved, their proposals are to be considered by the Governments. The other agreements in general call for consultation with a view to agreement; in the United Kingdom-Norway Agreement of 10 March 1965 there is again provision for consulting any licensees.

Outside the North Sea, the problem of a deposit extending across a boundary line is dealt with in a similar manner in the Agreement between Italy and Yugoslavia of 8 January 1968 concerning the delimitation of their respective areas of the intervening continental shelf in the Adriatic. In the Persian Gulf, there are examples of agreements for shared exploitation and shared profits at least in the Kuwait-Saudi Arabia Agreement of 7 July 1965, and the Bahrein-Saudi Arabia Agreement of 22 February 1958. An equal division of recoverable oil seems to have been provided for in a recently initialed agreement between Iran and Saudi Arabia which was mentioned by

In sum, Judge Jessup was more explicit than the majority opinion in the case, and analyzed an existing practice of negotiating agreements when the existence of shared resources was present, and in such a practice joint exploitation was a corollary of the principles of cooperation and respect of each others right in trying to achieve an effective exploitation. Judge Bustamante of the ICJ in the *North Sea Case* concurred with this view and argued that one of the emerging principles regarding the exploitation of resources in the continental shelf is that:

The exploitation of a deposit extending across the boundary line of a continental shelf shall be settled by the adjacent States in accordance with the principles of equity and, preferably, by means of the system of joint exploitation or some other system which does not reduce the efficiency of working or the quantities obtained.¹¹²

In the opinion of Judge Jessup, the efficient exploitation of these types of resources emerges as a guiding principle behind the regime. Years later another judge of the World Court reaffirmed Judge Jessup's views in a case involving Libya and Tunisia.¹¹³ In his dissenting opinion in the *Continental Shelf (Tunisia/Libyan Arab Jamahiriya)* Case, Judge Jens Evensen, an expert in maritime law and a former member of the Jan Mayen commission that delimited the continental shelf of Iceland and Norway in 1981,¹¹⁴ stated:

both sides in the oral proceedings.

Most of the North Sea agreements, and the agreement in the Adriatic, specifically relate to a deposit which extends across a boundary line, but the German-Dutch Agreement on the Ems Estuary and agreements in the Persian Gulf provide for joint exploitation or profit-sharing in areas of considerable extent where the national boundaries are undetermined or had been recently agreed upon subject to the provision for joint interests, as particularly in the case of the Partition of the Neutral Zone.

Id. at 81–82.

112. N. Sea Continental Shelf, 1969 I.C.J. at 61 (Rivero, J., concurring).

113. Continental Shelf (Tunis./Libyan Arab Jamahiriya) 1982 I.C.J. 18, 278 (Feb. 24) (Evensen, J., dissenting) [hereinafter *Libya/Tunisia Continental Shelf*].

114. Conciliation Commission on the Continental Shelf Area between Iceland and Jan Mayen, (Ice.-Nor.), June 1981, 27 R.I.A.A. 1.

A more serious question to me, however, is to what extent economic considerations should lead to the acceptance of *faits accomplis*; that is to say: should the dividing line be drawn in such a manner as to recognize unilaterally granted concessions by one of the Parties to the detriment of the other? Or wells drilled by either Party in an area in dispute? Such an approach would possibly be contrary to international law as well as to equity. The delimitation of the continental shelf between adjacent (and opposite) States is, in principle, to be determined by agreement between the Parties, which is just the opposite of unilateral action either in the form of unilateral legislative actions, the unilateral granting of concessions in a disputed area, or, more serious still, by drilling wells and starting up petroleum production in disputed areas. Any acceptance by the Court that the drilling of oil-wells, in an area which was disputed, should have any relevance for the delimitation, would really be an invitation to Parties to violate certain basic trends laid down in the Fourth Geneva Convention of 1958 and the draft convention of 1981 [UNCLOS], and might invite aggressive attitudes, through the staking out of claims, instead of conciliatory approaches.¹¹⁵

....

. . . There may be other elements in the delimitation process and in the delimitation results than the bare drawing of lines: elements that may make a line or a system of delimitation more just and equitable than otherwise might have been the case.

In the present case, the underlying immediate concerns are first and foremost petroleum exploitation. But it is a well-known fact that petroleum exploitation is a mixture of know-how and luck. The drawing of a line of delimitation between States may, as far as oil potentials are concerned, be a pure gamble, an accidental fact which may leave rich structures on one side of the line and barrenness on the other.

115. Continental Shelf, 1982 I.C.J. at 318 (Evensen, J., dissenting).

An arrangement for joint exploration, user or even joint jurisdiction over restricted overlapping areas may be a corollary to other equity considerations.¹¹⁶

....

In addition, the following system of joint exploitation of petroleum resources may be indicated. On both sides of the straightened line a line veering some 10°–15° from the delimitation line should be drawn. The areas thus indicated should be of approximately the same size. The two areas thus indicated should constitute a joint exploitation zone.

For this joint exploitation zone, the Parties should establish a joint policy of exploration and exploitation.¹¹⁷

....

Each Party should have the possibility to participate in the petroleum activities in the restricted area of the other Party as defined above, *with 50 per cent participation* either directly or through concessionaires. The national Party should have the right to be the operator unless otherwise agreed.

Each Party would have to pay the costs involved in the exploration and exploitation in accordance with the percentage of his participation.

The Parties should establish a permanent consultative committee for activities in the joint exploitation areas.

In case disagreements should arise out of activities in the aforementioned areas which the Parties were not able to solve by agreement, conciliation procedures and arbitration procedures should be provided for.

Likewise, unitization procedures should be provided in order to regulate the exploitation and the shared ownership where a petroleum deposit either straddles the line of delimitation or the outer lines restricting the zones of joint exploration.¹¹⁸

....

116. *Id.* at 320.

117. *Id.* at 321.

118. *Id.*

In his interesting separate opinion, Judge Jessup dwells on the questions of co-operation and unitization in some detail. I respectfully share his views that: even if the principle of co-operation “is not considered to reveal an emerging rule of international law, (it) may at least be regarded as an elaboration of the factors to be taken into account in the negotiations now to be undertaken by the Parties”.

There are a number of examples where the question of unitization has been dealt with expressly in agreements on the delimitation of the continental shelf.¹¹⁹

. . . .

It seems advisable that the Parties in the present case in the agreement referred to in Article 2 of the Special Agreement should include provisions on unitization in cases where a petroleum field is situated on both sides of the dividing line or the dividing line for the above proposed zone of joint exploitation.¹²⁰

In the case of the Evensen opinion, as the above paragraphs show, the judge even went into detail and proposed the terms of the possible agreement between the Parties. It is noteworthy that after the litigation the two States reached a joint exploitation agreement in the area under dispute in the case, the Gulf of Gabes, using Evensen’s recommendations even though it was provided in a dissenting opinion.

From the above discussion from the World Court on State practice and the principles enshrined in international law it is clear that the principle of joint development is further supported by economic and technical factors¹²¹—it avoids or reduces wasteful exploitation and economic cost of repeated construction of drilling facilities and allows for sharing of infrastructure; it maximizes the ultimate recovery of petroleum from the reservoir by the employment of the best scientifically and technically enhanced methods; it protects correlative rights in the common reservoir; it minimizes the use of seabed and damage by

119. Continental Shelf, 1982 I.C.J. at 322 (Evensen, J., dissenting).

120. *Id.* at 323.

121. See Weaver & Asmus, *supra* note 33, at 11–12 (listing these factors).

avoiding unnecessary drilling; and it promotes international cooperation and peaceful co-existence¹²²

Finally, offshore safety may be enhanced through coordinated search and rescue operations, and cooperative pollution cleanup response.¹²³ From all of these sources taken together, UNCLOS and the progressive development of international customary law has crystallized three primary guiding principles for transboundary resource development: Coastal States must: (1) exercise mutual restraint from undertaking activities within its jurisdiction that would cause damage to the natural resources or environment of the neighboring State; (2) consult and negotiate with neighboring States; and (3) negotiate in good faith with neighboring States.¹²⁴

Existing international law, therefore, prescribes only general rules requiring the parties to cooperate, and does not specify what agreement needs to be reached. International law provides only “rules of engagement,”¹²⁵ although some experts, as seen in ICJ separate opinions cited above, contend that joint exploitation and unitization are the corollaries to the principles of equity and cooperation. This approach is also consistent with the fact that in most of the treaties dealing with transboundary resources, States have emphasized the need to exploit them in the most “efficient” way, and treating the reservoir as a unit achieves that goal. Nevertheless, the only element that is settled is that international law cannot compel a nation to accept the idea of combining or unitizing the production from a transboundary hydrocarbon reservoir with another nation if it is not willing to do so. It therefore remains the prerogative of each nation to choose whether to consent to a transboundary petroleum development agreement.¹²⁶ Moreover, neither UNCLOS nor international customary law addresses the issue whether there is any remedy available to a nation that has unsuccessfully engaged in getting its neighbor to cooperatively exploit.

122. *Id.* at 12.

123. Betsy Baker, *Filling an Arctic Gap: Legal and Regulatory Possibilities for Canadian-U.S. Cooperation in the Beaufort Sea*, 34 VT. L. REV. 57, 72–73 (2009).

124. Cameron, *supra* note 98, at 565–67.

125. *Id.* at 561.

126. *Id.*

Consequently it is important to review how the States have engaged in other cases dealing with shared resources in order to conclude how they conceive the substance of the above-recognized principles of international law. The bilateral practice in this sense, and even the bilateral custom if it can be proved, is essential for the analysis of the case at hand.

D. State Practice: Agreements Used to Coordinate Development of Transboundary Reservoirs

Once nations agree to jointly develop the transboundary hydrocarbon reservoir(s) or field(s) they can enter into a variety of agreements. The two most commonly used forms of agreements are cross-border unitization agreements and joint development agreements.

1. Cross-Border Unitization

Cross-border unitization is the joint and coordinated exploitation of a transboundary hydrocarbon reservoir by the interested nations so that the reservoir is developed as if it were owned and controlled by a single unit.¹²⁷ Cross-border unitization requires an established boundary agreement between the affected governments.¹²⁸ Professor Jacqueline Weaver describes the following typical attributes of cross-border unitization:

- Cross-border unitization is only required once a discovery is made.
- The area covered by the unitization agreement is defined by the extent of the individual reservoir or field.
- The two countries collaborate (through a treaty or other international agreement) on issues related to optimum field development (including, for example, safety), but maintain their sovereign rights on each side of the border.

127. See Székely, *supra* note 27, at 766 (discussing the different States that have these types of arrangements and the emerging principles of conventional law that have resulted from them).

128. Patson W. Arinaitwe, *Exploitation of Offshore Transboundary Oil and Gas Reservoirs; An International Law Perspective*, SOC. SCI. RES. NETWORK (Aug. 25, 2014), <http://ssrn.com/abstract=2486488>.

- The groups of licensees prepare a single development plan and a unit operating agreement, which are then subject to the approval of both countries.
- Each license group's share of production and costs is based on the proportionate share (called the participation factor) of the field's oil and gas in place underlying its license, regardless of the physical location of the production facilities. Each licensee pays its taxes and royalties in accord with the terms of its own contract as if its unit share of production had been produced from its own contract area.
- The legal framework maintains two separate sets of regulations and fiscal terms.¹²⁹

In general terms, a transboundary unitization treaty addresses production allocations and costs among tracts; regulation; the cooperative work plan for the field agreed upon by the operating investors; and a dispute-resolution plan.¹³⁰ Unitization also requires the licensees on each side of the boundary to enter into a unit operating agreement. This agreement will govern the rights and obligations between the licensees and the selected unit operator, who manages the day-to-day operations of the unit. Both governments must approve these agreements in order to assure that they are consistent with the terms of the treaty.¹³¹

2. Joint Development Agreements

Another way to develop transboundary hydrocarbon reservoirs is to establish a joint development zone, within which cooperative development of petroleum occurs despite disputes over sovereignty and the delimitation of the boundary between two or more nations. Joint Development Agreements authorize the cooperative development of petroleum resources in a geographic area that has disputed sovereignty, despite the

129. Weaver & Asmus, *supra* note 33, at 14–15.

130. Jose Antonio Prado & Alejandro Landa Thierry, *United States: U.S.-Mexico Agreement Update on the Transboundary Hydrocarbon Reservoirs*, MONDAQ (July 30, 2014), <http://www.mondaq.com/unitedstates/x/331284>.

131. *Id.*

delimitation of the boundary between two or more sovereigns.¹³² Although existing agreements vary in structure, key issues in joint development agreements can be identified as being particularly important, as described by Ana E. Bastida:

- 1) Sharing resources: contractual provisions establish the basis for sharing production. There is overwhelming support for the principle of equal sharing, but there are exceptions.¹³³
- 2) Management of joint development: three categories of management structures have been identified—single State model; two States/joint venture model, and joint authority model.
- 3) Applicable law: this provision is necessary to clarify which legal regime will apply in the joint development zone. It should include the petroleum licensing regime, laws governing civil and criminal jurisdiction over individuals in the zone, and rules and regulations governing health, safety and environmental issues.
- 4) Operator and position of contractors: provisions that point out who has the authority to develop rules for selecting contractors to undertake petroleum exploration and exploitation activities on behalf of the two States.
- 5) Financial provisions: it establishes the taxation regime applied to contractors in the joint develop zone.
- 6) Dispute resolution: normally, it provides for some sort of internal mechanism of conflict resolution prior to resorting to third party resolution, such as consultation, negotiation, conciliation, and binding commercial arbitration.¹³⁴

There are areas in the Gulf of Mexico where a Joint Development Agreement may be warranted in the future, such as in the portion of the Eastern GOM where maritime boundaries between the United States, Mexico, and Cuba have not been

132. Weaver & Asmus, *supra* note 33, at 15.

133. For example, the Senegal-Guinea-Bissau agreement of 1993 calls for an 85:15 split in favor of Senegal for petroleum resources, but 50:50 for fishing rights. Bastida et al., *supra* note 15, at 415–16.

134. *Id.* at 415–19.

formally delimited.¹³⁵ However, the U.S. and Mexico have already agreed to a framework agreement to jointly develop hydrocarbons along most of the maritime boundary between the United States and Mexico in the GOM.¹³⁶ This framework agreement, described in the next sections, establishes the procedures to move forward on transboundary unitization in the event that a shared reservoir is discovered.

3. *Examples of Transboundary Agreements that Protect the Efficient Exploitation of the Resource*

One of the most used models for joint exploitation agreements was the one celebrated by the United Kingdom and Norway in 1965, where the basic principle of joint exploitation was enshrined in Article 4:

If any single geological petroleum structure or petroleum field, or any single geological structure or field of any other mineral deposit, including sand or gravel, extends across the dividing line and the part of such structure or field which is situated on one side of the dividing line is exploitable, wholly or in part, from the other side of the dividing line, the Contracting Parties shall, in consultation with the licensees, if any, seek to reach agreement as to the manner in which the structure or field shall be most effectively exploited and the manner in which the proceeds deriving therefrom shall be apportioned.¹³⁷

135. See Harriet L. Nash & Richard J. McLaughlin, *A Policy Approach to Establish an International Network of Marine Protected Areas in the Gulf of Mexico Region*, 6 AUSTL. J. MAR. & OCEAN AFF., 1, 13 (2014) (describing the legal status of this portion of the Gulf of Mexico).

136. See H.R. REP. NO. 113-101, at 1 (2013) (amending the outer continental shelf lands act, and approving the transboundary hydrocarbon agreement). The term "Agreement" rather than "Treaty" is used because the Obama Administration decided to transmit the instrument to Congress as an executive agreement rather than a formal treaty. *Id.* at 4.

137. Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway relating to the Delimitation of the Continental Shelf between the Two Countries, U.K.-Nor., art. 4, Mar. 10, 1965, available at <http://www.un.org/depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/GBR-NOR1965CS.PDF>.

The same type of provision was contained in the delimitation of the continental shelf agreement between Sweden and Norway in 1968 and between the United Kingdom and Norway of 1965. It is important to note that the latter even made it mandatory to sign a unitization agreement (“shall be concluded”) between the licensees on both sides of the border upon the request of the States.¹³⁸ Similar clauses and principles were proposed by the Jan Mayen Conciliation Commission between Iceland and Norway, where the commission suggested the adoption of a joint development zone and the unitization of deposits for the overlapping areas of the continental shelf that cross the boundary.¹³⁹ Iceland and Norway took the recommendations and in 1981 adopted the Agreement on the Continental Shelf Between Iceland and Jan Mayen.¹⁴⁰

In the Asian continent, similar provisions have been found regarding the sharing of transboundary resources where the principle of joint development and of agreeing on the most effective method of exploitation is present. For example the 1974 Japan and South Korea Agreement provides in Article XXIII:

If any single geological structure or field of natural resources extends across any of the lines specified in paragraph 1 of article II and the part of such structure or field which is situated on one side of such lines is exploitable, wholly or in part, from the other side of such lines, concessionaires and other persons authorized by either Party to exploit such structure or field (hereinafter referred to as “concessionaires and other persons”) shall, through consultations, seek to reach agreement as to the most effective method of exploiting such structure or field.¹⁴¹

138. Bastida et al., *supra* note 15, at 391–93.

139. Conciliation Commission on the Continental Shelf Area between Iceland and Jan Mayen, *supra* note 114, at 3.

140. Agreement on Continental Shelf Between Iceland and Jan Mayen, Ice.-Nor., Oct. 22, 1981, available at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/ISL-NOR1981CS.PDF>.

141. Agreement Concerning Joint Development of the Southern Part of the Continental Shelf Adjacent to the Two Countries, Japan-S. Kor., art. XXIII, Jan. 30, 1974, 1225 U.N.T. S. 1977 [hereinafter Japan-Korea Treaty].

A similar article is found in the Australia-Indonesia Agreement of 1989:

If any single accumulation of petroleum extends across any of the boundary lines of Area A of the Zone of Cooperation as designated and described in Article 1 and Annex A of this Treaty, and the part of such accumulation that is situated on one side of a line is exploitable, wholly or in part, from the other side of the line, the Contracting States shall seek to reach agreement on the manner in which the accumulation shall be most effectively exploited and on the equitable sharing of the benefits arising from such exploitation.¹⁴²

And then in more detail in the Annex A of the Agreement it states that unitization shall be the rule for this type of resources:

Where a petroleum pool is partly within a contract area and partly within another contract area, but wholly within Area A, the Joint Authority shall require the contractors to enter into a unitization agreement with each other within a reasonable time, as determined by the Joint Authority, for the purpose of securing the more effective and optimized production of petroleum from the pool. If no agreement has been reached within such reasonable time, the Joint Authority shall decide on the unitization agreement. Without limiting the matters to be dealt with, the unitization agreement shall define or contain the approach to define the amount of petroleum in each contract area, the method of producing the petroleum, and shall appoint the contract operator responsible for production of the petroleum covered by the unitization agreement. The Joint Authority shall approve the unitization agreement before approvals under Article 17 of this Petroleum Mining Code are given. Any changes to the unitization agreement shall be subject to approval by the Joint Authority.¹⁴³

142. Treaty on the Zone of Cooperation in an Area Between the Indonesian Province of East Timor and Northern Australia, Austl.-Indon., art. 20, Dec. 11, 1989, 1991 Austl. Treaty Series 9 [hereinafter Timor Gap Treaty].

143. *Id.* art. 21.

The sources of international law presented in this Part show a clear trend on what the State obligations are when they face the natural phenomenon of transboundary resources: they must cooperate to find a method of exploitation where the resources are exploited in an efficient way benefiting and respecting the rights of both States. Exploiting a resource unilaterally without respecting and recognizing the rights of the other parties to the hydrocarbons contained in the field is clearly contrary to the international law sources described in this Part. In following this obligation, most States have chosen to respect the principle of unitization as the most appropriate one for achieving this. Although the general rule is clear, the way States in their bilateral relations have been able to accomplish a joint exploitation of the resource is an important part of the way the norm has developed. As such, the following Part will undertake a detailed analysis of the binational practice between the United States and Mexico in handling transboundary resources in other areas, such as rivers, in order to identify particular ways in which these two nations have dealt with similar issues. Particular attention will be given to the treatment of rivers along the U.S.-Mexico border. Part VI will also have a detailed examination of the substantive provisions and international legal implications of the landmark 2012 Transboundary Agreement. One the key characteristics of this agreement, unlike other existing international cross-boundary hydrocarbon treaties, is that the 2012 Transboundary Agreement allows the parties to exploit transboundary reservoirs unilaterally in the absence of an approved unitization agreement. The final portion of the study examines whether these provisions are compatible with the described existing principles of international law.¹⁴⁴

IV. U.S. AND MEXICO BILATERAL PRACTICE ON TRANSBOUNDARY RESOURCES

Under international law, bilateral practice can eventually generate a bilateral customary norm that governs the relations between the States in particular matters if the requirements of

144. See *infra* Part VII.A.

state practice and *opinion juris* are met.¹⁴⁵ Mexico and the United States have faced before the challenge of managing transboundary resources. An important example involves the use and distribution of the water contained in several rivers that cross the border. Just as is the case with oil and gas contained in reservoirs, the water in international rivers is the property of both nations. How the water is distributed varies depending on the particular physical elements of the river. Some of these rivers have their origin in Mexican territory and flow to the United States, others have origins in the United States and flow south. Hence the possibility of both nations unilaterally abusing the resources is present. To avoid such a practice, both States decided to rely on established international practice and to create a binational commission that would administer the exploitation of water resources, invest where needed, and decide technical matters.¹⁴⁶ An important aspect of the commission's decisions is that they are final and binding upon both parties. This has been the practice since 1848 and is reflected in several treaties that deal with inland border issues.¹⁴⁷ Some commentators have argued that these binational regimes were "a dramatic turning point in the legal stance of the United States on its sovereign rights concerning water resources. Until that date the U.S. side maintained that it had absolute right to use the water resources in its territory as it wished."¹⁴⁸

For example the 1906 Treaty for the Rio Bravo, stated explicitly that the neighboring States should share in an equitable way the distribution of the waters contained in the border.¹⁴⁹

145. See *supra* Part III.C.

146. Treaty on the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, U.S.-Mex., art. 2, Feb. 3, 1944, 59 Stat. 1219 [hereinafter 1944 U.S. Mexico Rivers Treaty].

147. See *History of the International Boundary and Water Commission*, INT'L BOUNDARY & WATER COMMISSION, http://www.ibwc.gov/About_Us/history.html (last visited Feb. 16, 2015) ("The IBWC traces its roots to the 1848 Treaty of Guadalupe Hidalgo and the Gadsden Treaty of 1853, which established temporary joint commissions to survey, map, and demarcate with ground landmarks the new U.S.-Mexico boundary.").

148. 10 RONGXING GUO, CROSS-BORDER RESOURCE MANAGEMENT 291 (S.V. Krupa ed., 2d ed. 2012).

149. Convention on the Equitable Distribution of the Waters of the Rio Grande, U.S.-Mex., Proclamation, arts. 1-2, May 21, 1906, 34 Stat. 2953.

The same principle was adopted in the 1944 U.S. and Mexico Rivers Treaty, where the International Boundary and Water Commission (IBWC) was created and according to Article 2 “shall in all respects have the status of an international body.”¹⁵⁰ Furthermore, the Commission was entrusted to regulate and exercise the rights that both States have over the resources:

The application of the present Treaty, the regulation and exercise of the rights and obligations which the two Governments assume thereunder, and the settlement of all disputes to which its observance and execution may give rise are hereby entrusted to the International Boundary and Water Commission.¹⁵¹

In other words, the creation of this supranational international body, would exercise the rights and duties of both parties on those resources, resolve all the disputes arising out of their exploitation, and have the final word on their administration. An important aspect of the operation of the IBWC is that its officers and employees are given special diplomatic status to visit both sides of the border freely.¹⁵² In the same vein, the expenses incurred “as agreed upon by the Commission, shall be born equally by the two Governments.”¹⁵³ The type of economic interests that this joint exploitation regime touches are very diverse, and the Treaty even includes an order of preferences for the Commission to consider.¹⁵⁴ The IBWC has been empowered to construct, operate and maintain storage dams and reservoirs, the first one being the Rio Grande Rectification project in 1933. Regarding the qualification of the

150. 1944 U.S. Mexico Rivers Treaty, *supra* note 146, art. 2.

151. *Id.*

152. *Id.* (“The Commissioner, two principal engineers, a legal adviser, and a secretary, designated by each Government as members of its Section of the Commission, shall be entitled in the territory of the other country to the privileges and immunities appertaining to diplomatic officers. The Commission and its personnel may freely carry out their observations, studies and field work in the territory of either country.”).

153. *Id.*

154. *Id.* art. 3 (“In matters in which the Commission may be called upon to make provision for the joint use of international waters, the following order of preferences shall serve as a guide: 1. Domestic and municipal uses. 2. Agriculture and stock-raising. 3. Electric power. 4. Other industrial uses. 5. Navigation. 6. Fishing and hunting. 7. Any other beneficial uses which may be determined by the Commission.”).

head of each section, Article 2 states that it “shall be an Engineer Commissioner;” as a way to ensuring that the IBWC will function in a technical capacity to guarantee the efficient exploitation and distribution of the joint resource, rather than as a political or diplomatic body where other interests might overshadow the efficiency of the regime.¹⁵⁵

Most scholars agree that the IBWC has been effective in achieving the basic goals prescribed by the treaty regime: avoid conflicts between the States and foster cooperation of the efficient management of the resources.¹⁵⁶ Nevertheless, they also

155. *Id.* art. 2; see INT’L BOUNDARY & WATER COMM’N, STRATEGIC PLAN FY 2011–FY 2016, at 21 (2011) (ensuring “the allocation of Rio Grande and Colorado River waters, including the accurate measurement and accounting of these waters, in accordance with the 1906 Convention and the 1944 Treaty”).

156. Although most literature agree that the IBWC has been efficient in achieving high levels of cooperation between the United States and Mexico, a number of commentators argue that some changes must be made to the Treaty in order to prevent particular issues such as unexpected droughts or extreme climate change conditions. Stephen P. Mumme, *Managing Acute Water Scarcity on the U.S.-Mexico Border: Institutional Issues Raised by the 1990’s Drought*, 39 NAT. RESOURCES J. 149, 166 (1999) [hereinafter Mumme, *Managing*] (“The impact of the 1990’s drought (dare we say *extraordinary* impact?) certainly draws attention to the limitations of the current international drought management system along the U.S.-Mexico border. While it is commendable that the IBWC, with the cooperation of Texas state officials, struck a temporary agreement (Minute 293) to provide water relief to Mexico, this review shows that the Minute 293 solution falls well short of addressing a range of important drought management questions affecting U.S.-Mexican relations.”); see also Stephen Mumme, *Innovation and Reform in Transboundary Resource Management: A Critical Look at the International Boundary and Water Commission, United States and Mexico*, 33 NAT. RESOURCES J. 93, 93 (1993) [hereinafter Mumme, *Innovation*] (“The International Boundary and Water Commission (IBWC) may well represent the finest example of functional cooperation in transboundary resources management between highly dissimilar countries anywhere on the globe.”). See Jurgen Schmandt, *Bi-National Water Issues in the Rio Grande/Rio Bravo Basin*, 4 WATER POL’Y 137, 152 (2002) (“What has been discussed so far are partial reform: more is needed. The time is ripe to upgrade the existing structure for bi-national water managements. The 1944 Treaty between Mexico and the United States provides a foundation on which the two countries can build.”), for a discussion on the quality of the water and droughts. See Melissa Lopez, *Border Tensions and the Need for Water: An Application of Equitable Principles to Determine Water Allocation from the Rio Grande to the United States and Mexico*, 9 GEO. INT’L ENVTL. L. REV. 489, 489 (1997) (“As co-riparians along the Rio Grande, the United States and Mexico have historically had to deal with border conflicts regarding water rights. Throughout the twentieth century, the two countries have entered into various agreements to resolve the conflicts. For the most part, the countries have cooperated successfully to ensure that their respective water needs have been met.”), for a discussion

agree there have been some areas where the regime and the Commission could improve their work, such as the quality of the water and facing the challenges of droughts with the expansion of the cities along the border.¹⁵⁷ It may be expected that a treaty that was created in an era where climate change challenges, aggressive industrialization and excessive urbanization in the border were unconceivable, has particular challenges facing these phenomena. But regardless of its flaws, there is a consensus that the basis of the treaty regime can be considered as a successful exercise and a step forward in U.S. and Mexico relations. In fact, the States considered that the IBWC was so effective in achieving its tasks, that in 1970 it was even empowered by both States to establish the international maritime boundary of Mexico and the United States in the first twelve nautical miles.¹⁵⁸ In the words of Professor Jorge Vargas, a former Legal Advisor of the Office of Boundaries and International Waters of the Ministry of Foreign Affairs of Mexico:

[M]any coastal states in the international community started to advance maritime claims over contiguous marine areas, such as was the case of Mexico enlarging its territory in 1969, both the United States and Mexico agreed that since the IBWC was already engaged in establishing a more practical and convenient river boundary along certain segments of the international line, it was only proper to ask that Commission to also address the question of establishing the new international maritime boundary of a twelve-nautical-

proposing changes to the legal framework in which the Commission operates.

157. See Mumme, *Managing*, *supra* note 156, at 166 (“As seen above, there is, in fact, a good deal that can be done to better manage protracted droughts along the border short of attempting to renegotiate the water treaties allocating water along the major international rivers.”); see Mumme, *Innovation*, *supra* note 156 (stating “additional development is possible in several areas, to include sanitation and water quality, instream flow, and creative approaches to project financing”); see Schmandt, *supra* note 156, at 152; Lopez, *supra* note 156, at 508 (“The current legal regime governing water allocation between the United States and Mexico must be re-evaluated to cope more effectively with these changes and respond to and prevent emergencies such as the northern Mexican drought.”).

158. Jorge A. Vargas, *The 2012 U.S.-Mexico Agreement on Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico: A Blueprint for Progress or a Recipe for Conflict?*, 14 SAN DIEGO INT’L L.J. 3, 15–16 (2012).

mile territorial sea in the Gulf of Mexico (starting at the center of the mouth of the Rio Grande), and the same maritime boundary in the Pacific Ocean (beginning at the western most point of the mainland boundary).¹⁵⁹

The United States and Mexico also agreed to face jointly the challenges concerning environmental protection in their border areas with joint commissions. In 1993 they signed an Agreement that gave birth to the Border Environmental Cooperation Commission (BECC) and the North American Development Bank.¹⁶⁰ The purpose of both institutions is to create the necessary infrastructure to address the environmental consequences of NAFTA by sharing the costs and creating the necessary incentives to attract private parties to join the effort.¹⁶¹ In its preamble, the Agreement affirmed that both States recognized:

the bilateral nature of many transboundary environmental issues, and that such issues can be most effectively addressed jointly . . . [and] that there is a need to establish a new organization to strengthen cooperation among interested parties and to facilitate the financing, construction, operation and maintenance of environmental infrastructure projects in the border region.¹⁶²

One of the interesting aspects of the BECC is that it certifies private parties in order to receive financial aid from the Bank to achieve the goals of the Agreement, and in the process receive observations from NGOs or other private parties interested.

It is also important to note that Mexico and the United States have also signed other bilateral treaties recognizing the joint responsibility and the rights of both States to exploit other resources, such as migrant species and the use of radio frequencies. The United States has also agreed with other nations to manage and exploit resources in a binational or

159. *Id.* at 17–18.

160. Agreement Concerning the Establishment of a Border Environmental Cooperation Commission and a North American Development Bank, U.S.-Mex., Intro. Notice, Nov. 16, 1993, 32 I.L.M. 1545.

161. *Id.* pmbl.

162. *Id.*

multinational way. An example of such U.S. practice is the 1957 Convention between the United States, Canada, Japan and the former Soviet Union concerning fur seals of the North Pacific Oceans, where the Americans and the Soviets agreed to harvest the living resources and share the products with the other two nations.¹⁶³ This treaty even contained in its amended version of 1962 a principle of effectiveness in the “management and the rational utilization” of the resources.¹⁶⁴

Notwithstanding, the trend of both nations to deal with transboundary resources issues through bilateral commissions, there are a few examples of shared resources that have not been exploited or managed in a binational way. One such example involves possible transboundary gas and oil reservoirs in the Texas and Tamaulipas inland border area. On both sides of the U.S.-Mexico border there are wells already extracting gas from this shared reservoir, 174 wells in Texas and 9 in Tamaulipas, but neither Mexico nor the United States has chosen to address the issue officially.¹⁶⁵ Professor Vargas concludes that “Mexico has not taken any diplomatic steps to bring to the attention of the United States this apparent disproportionate utilization of the natural gas coming from this ‘transboundary reservoir,’ that seems to run contrary to the international law principles that advocates ‘the efficient and *equitable* exploitation’ of the resources contained in any kind of these reservoirs.”¹⁶⁶ But regardless of these exceptions, the evidence suggests that in general U.S. and Mexico bilateral practice, when the States have faced the exploitation of transboundary resources in the past, they have

163. Convention of Conservation of North Pacific Fur Seals, art. IX, Feb. 9, 1957, 314 U.N.T.S. 4546.

164. Protocol Amending the Interim Convention on Conservation of North Pacific Fur Seals, Oct. 8, 1963, T.I.A.S. 5558. The major changes to the treaty are reflected in Article II of this act:

1. In Article II, paragraph 2 of the Convention, “and” at the end of sub-paragraph (f) shall be deleted and “(g)” shall be replaced by “(i)”.
2. After Article II, paragraph 2(f) of the Convention, the following shall be inserted: “(g) effectiveness of each method of sealing from the viewpoint of management and rational utilization of fur seal resources for conservation purposes.”

165. Vargas, *supra* note 158, at 39.

166. *Id.*

built a joint administration and exploitation regime, where the mechanisms chosen include the creation of technical bilateral commissions with enough authority to decide the future of these resources. The fact that this practice began with the management of rivers is consistent with the international practice recognized in some of the ICJ opinions mentioned above.¹⁶⁷

After analyzing all of the different sources of international law that deal with transboundary resources, it is safe to conclude that the obligation to cooperate that arises under the international norms described in Part III is consistent with the binational practice of the United States and Mexico described in the above paragraphs. Both nations have recognized the rights to exploit these resources on both sides of the border, but at the same time have constrained the exercise of these rights by creating binational bodies that seek to manage the resource in the most efficient way for the benefit of both parties. The next Parts of this Article will analyze if this binational practice that enshrines the international norm is followed by both States when it comes to hydrocarbon resources in the GOM. It will begin in Part V with a review of the international treaties that deal with the maritime boundary in the GOM and how these constantly faced the issue of transboundary resources without being able to solve it directly in the treaties. Part VI will analyze the 2012 Transboundary Agreement as the most important effort to deal with the transboundary phenomenon and will highlight the provisions of the Agreement that deviate from international practice and that could generate cooperation problems in the future. Finally, after taking into consideration all these aspects, Part VII will answer the initial question of this Article: Is the treaty consistent with existing principles of international law?

167. See, e.g., *N. Sea Continental Shelf*, 1969 I.C.J. at 74 (Jessup, J., concurring) (examining agreement between Iran and Saudi Arabia concerning a disputed offshore area).

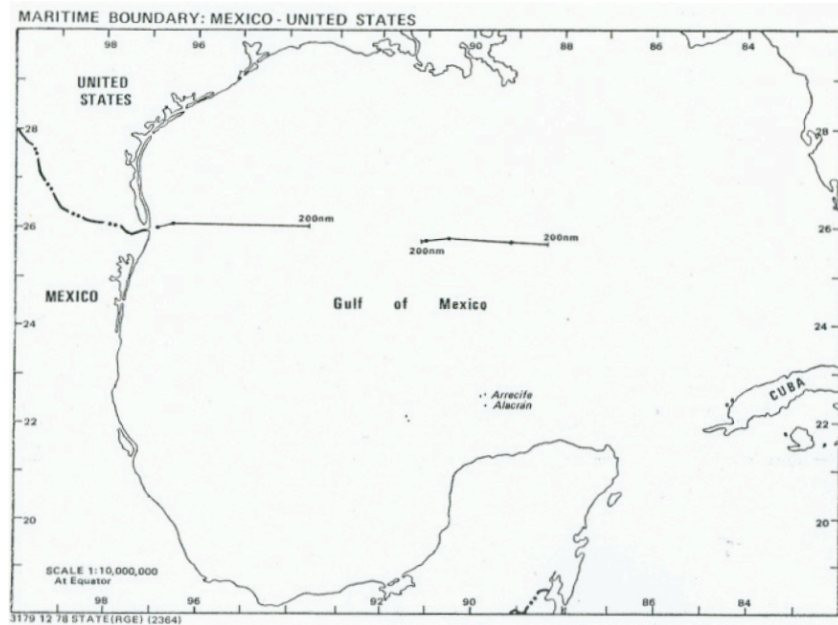
V. DEVELOPMENT OF BOUNDARY TREATIES
 IN THE GULF OF MEXICO

A. *The Treaty of 1978*

The first effort of both States to regulate the maritime border areas of the GOM and their continental platforms was the Treaty on Maritime Boundaries between the United Mexican States and the United States of America of 1978.¹⁶⁸ In it, Mexico and the United States treated differently the maritime boundaries of the GOM and the Pacific due to the different geographical realities that the continental platform presented in each: basically because the GOM is a semi-enclosed sea. To delineate the border, the States agreed to employ the equidistance method from twelve nautical miles, the territorial sea, out to 200 nautical miles. The method employed resulted in the existence of two polygons or “gaps” in the Gulf to which the maritime rights of both States overlapped, since they were beyond the 200 nautical miles established in the Convention (the western gap is shared by Mexico and the United States, while the eastern gap is shared also with Cuba), as shown in the following map that was annexed to the 1978 Treaty.¹⁶⁹

168. Treaty on Maritime Boundaries, U.S.-Mex., arts. I, III, May 4, 1978, 2143 U.N.T.S. 405 [hereinafter 1978 Treaty].

169. *Id.* at 3.



Mexico and the United States decided to leave the two polygons outside of the treaty and subject to future negotiations.

The starting points for the equidistance method were the Isles Dernieres from the U.S. side, and the Alacranes Islands north of the Yucatán Peninsula. Years later, Mexican congressmen complained that the negotiators did not consider the sudden disappearance of an island further to the north of the Alacranes Islands, the Bermeja. This island could have given around 15% of additional offshore territory to Mexico.¹⁷⁰ The Bermeja Island appeared in several nautical maps since 1669, it

170. Mexican Senate Information Requirement to the Mexican Executive on the Disappearance of the Bermejo Island 1 (Oct. 21, 2008) (Mex.), *available at* http://sil.gobnacion.gob.mx/Archivos/Documentos/2008/10/asun_2486656_20081021_1224603811.pdf (urging the executive to submit a comprehensive report concerning the disappearance of the Bermeja Mexican territory located in the Gulf of Mexico). See generally ELÍAS CÁRDENAS, ¿DÓNDE ESTÁ LA ISLA BERMEJA?: ESTUDIO MULTIDISCIPLINARIO SOBRE LA POSIBLE EXISTENCIA Y DESTINO DE LA ISLA BERMEJA: ANÁLISIS OCEANOGRÁFICO, AÉREO Y GEOHISTÓRICO-CARTOGRÁFICO [Where is the Island?: Bermeja Multidisciplinary Study on the Possibility and Destination of Bermeja Island: Oceanographical Analysis, Air and Geohistorical Mapping] (2010).

was included in the maps of the independence of Mexico up to the middle of the 20th century. Nevertheless, when the delimitation of the maritime boundary was being negotiated in 1978 the experts determined that the island had submerged 40 meters below the surface to a point that it could not be considered anymore an island.¹⁷¹ As of today, the sudden disappearance of Bermeja and what caused it is still a mystery.

The Treaty of 1978 was completely silent regarding the existence of shared transboundary resources. This omission was odd because the practice at the international level by other States already showed that as a preventive measure, especially in areas rich in hydrocarbon deposits like the Gulf, States would include in their treaties a clause like the one contained in the UK-Norway 1965 treaty recognizing the need to reach an agreement to exploit the resource in the most effective way. In fact, the 1978 Treaty was explicit in only mentioning the maritime boundary and excluding the concept of a continental shelf. In the single paragraph where the 1978 Treaty mentioned the existence of the seabed and subsoil, it only stated that neither side shall “claim or exercise for any purpose sovereign rights or jurisdiction over the waters or seabed and subsoil” on the other country’s side of the boundary,¹⁷² consequently excluding any possibility of exploiting a transboundary hydrocarbon deposit by either side.¹⁷³ Professor Jorge Vargas has argued that the purpose of the wording of the article was precisely the exclusion of any type of exploitation without the consent of the other party:

When this treaty was being negotiated (first in 1976 and later in 1978) there was no certainty at that time, based on geological and other scientific data, of the existence of such a transboundary reservoir either in the Gulf of

171. See *Mexico’s Missing Island*, BBC, http://www.bbc.co.uk/worldservice/documentaries/2009/09/090910_world_stories_mexico_missing_island.shtml (last updated Sept. 10, 2009, 6:38 PM) (“Bermeja Island was clearly visible on national and international maps until the middle of the 20th century.”).

172. 1978 Treaty, *supra* note 168, art. II.

173. This statement did not exclude the possibility that the State could exploit the resources that are not considered as transboundary from their side of the border. Nevertheless, the question remained on what would happen if the resources that were being exploited happened to be or migrated to the other side.

Mexico or in the Pacific. To avoid any possibility that Mexico, or more likely the United States (given its technological advancement in the exploration and exploitation of submarine reservoirs in ultra-deep waters), would make any attempt to extract oil or natural gas from the other side of the maritime boundary, both parties explicitly added this language to Article II of this treaty to avoid or reject such claims, or the possible exercise of sovereignty rights over natural resources in that submarine area.¹⁷⁴

The 1978 Treaty was ratified by the Mexican Senate the same year it was signed, but the U.S. Senate took more than twenty years to ratify it under pressure from the industry that by then had developed enough technology to do deepwater drilling and was interested in the areas surrounding the pending borderline.¹⁷⁵ In fact, the United States was already auctioning submarine tracts in the Western Gulf of Mexico in 1997 regardless of the fact that the Treaty had not been ratified. Mexico in the same year sent several diplomatic letters to the U.S. Department of State expressing that the actions taken by the Department of the Interior “would be in violation of international law and this would run contrary to resolving the matter in a just and equitable manner.”¹⁷⁶ In a subsequent diplomatic note, Mexico took the following position:

pursuant to conventional and customary international law, States are under the obligation of delimiting the continental shelf through a [bilateral] agreement and, therefore, if no [maritime delimitation] is agreed bilaterally, Mexico would object [to] any attempt by the United States of acquiring any submarine areas by unilateral possession (*reivindicación*); the adjudication

174. Vargas, *supra* note 158, at 23–24.

175. Treaty on Maritime Boundaries, U.S.-Mex., Oct. 22, 1997, S. Exec. D. 105-4. (Comment by the U.S. Senate Foreign Relations Committee) (“[T]he untapped reserves of crude oil and natural gas in the Gulf of Mexico along the 200 nautical mile boundary and the technological advances that have made it more likely that U.S. companies will recover these oil and gas deposits. The Department of the Interior was already receiving bids for exploration in this area Several new drilling vessels capable of operating in water depths of up to 10,000 feet were already under construction.”).

176. Vargas, *supra* note 158, at 33 (diplomatic note from the Secretaría de Relaciones Exteriores, May 21, 1997).

of licenses for the exploration and exploitation of hydrocarbons; or the possible acquisition of rights by U.S. private companies in the [submarine] areas not yet delimited.¹⁷⁷

This declaration triggered the oil companies' lobbyists in Washington to pressure the Senate to ratify the Treaty.¹⁷⁸ In an industry where the sunken costs and the risks associated with the exploitation are enormously high, legal uncertainty regarding the enforcement of property rights scares away any type of investment. Even though the 1978 Treaty left questions such as transboundary resources unanswered, it removed the uncertainty over maritime boundaries that allowed the oil and gas industry to support the Treaty.

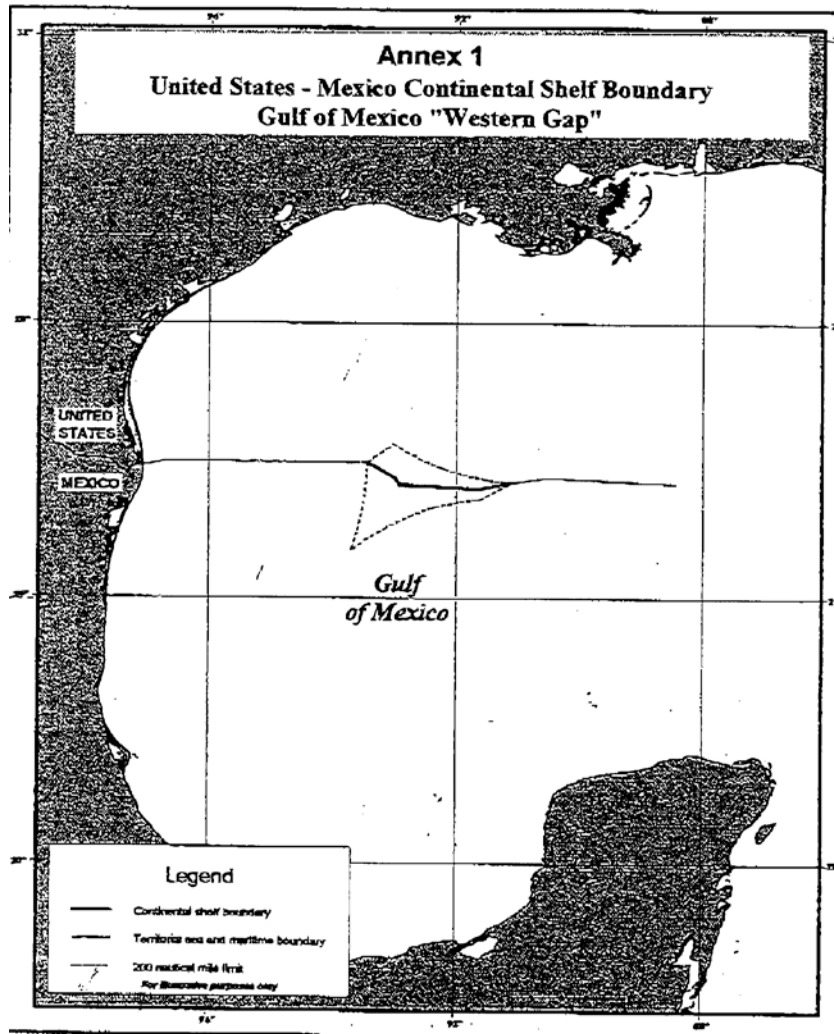
B. The 2000 Treaty

Negotiations began in 1997 to delineate the Western Gap of the Gulf of Mexico, as shown in the map of Annex 1 of the 2000 Treaty.¹⁷⁹

177. *Id.* (diplomatic note from the Secretaría de Relaciones Exteriores, July 25, 1997).

178. *Id.* at 33.

179. Treaty on Delimitation of Continental Shelf, Annex 1, U.S.-Mex., June 9, 2000, S. Exec. Doc. 106-39 (2000) [hereinafter 2000 Treaty].



During the negotiation process Mexico continuously declared the importance of preserving and ensuring the efficient exploitation of possible resources contained in the Gap, respecting the international law principles of equity and reciprocity. Due to the fact that there were reports regarding the existence of transboundary resources, Mexico and the United States decided to appoint a binational commission of experts to conduct research

on the area.¹⁸⁰ The results showed the existence of a uniform distribution of shared resources in the Gap and consequently the existence of transboundary resources. As such, the Treaty negotiators decided to draft adequate provisions in the agreement to leave no doubt on how the issue was to be handled.¹⁸¹ The negotiations led to the signing of the Treaty between the Government of the United States of America and the Government of the United Mexican States on the Delimitation of the Continental Shelf in the Western Gulf of Mexico beyond 200 Nautical Miles, where both States decided to recognize the mutual right to exploit the resources but left unanswered the way these would be exploited.¹⁸² In fact, the Treaty established a moratorium for the exploitation of the resources located with a 2.8 nautical mile wide buffer zone along the boundary line of the Gap for ten years.¹⁸³ According to Article I of the Treaty the method employed to divide the gap between both nations was equidistance, a continuation of what was employed in the 1978 Treaty. As a result of this approach, Mexico obtained 61.78% of the Gap and the United States the remaining 38.12%, as shown in Annex 2 of the 2000 Treaty.¹⁸⁴

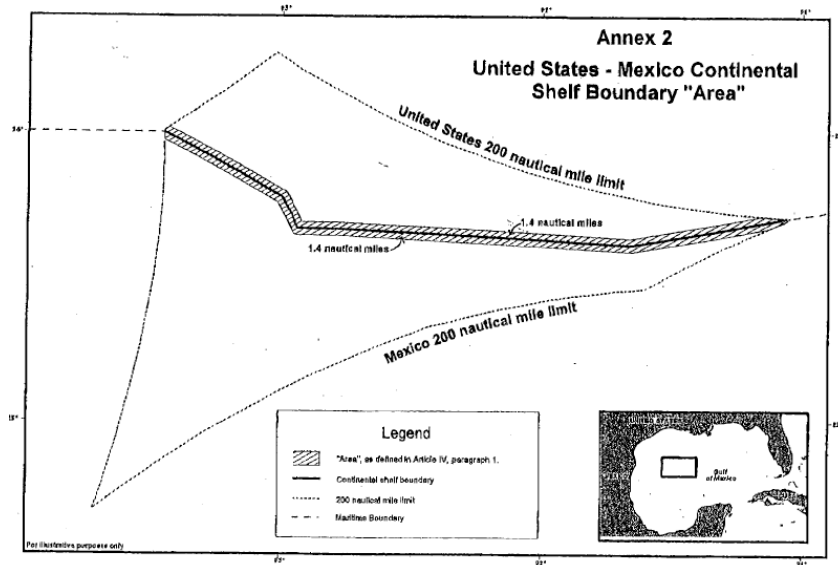
180. Vargas, *supra* note 158, at 32.

181. *Id.* at 34–37 (discussing the operative provisions of the 2000 U.S.-Mexico delimitation treaty that resolved the issues found by the binational commission of experts that conducted research in the area and more specifically referring to “the recognition of the ‘possible existence of [oil and gas] transboundary reservoirs’ and the obligation by either party to ‘notify’ the existence of said reservoirs to the other party”).

182. 2000 Treaty, *supra* note 179, at III.

183. *Id.* at VII.

184. *See id.* at 2 (providing the coordinates used in the calculation of percentages of the territory each country obtained); *see also id.* annex 2 (displaying a map of the divided territory).



It is noteworthy that, even though the exploitation of the resources was not addressed in the Treaty, the fact that the United States agreed to recognize the rights of both States over these resources and a moratorium for their exploitation, was a positive step in abandoning the possibility of unilateral exploitation from the U.S. side of the boundary.

Another important operative aspect of the 2000 Treaty is the fact that both States committed themselves in Article IV to share the geological and geophysical information of the Western Gap on a regular basis. With such an intention the Parties agreed to meet periodically and exchange reports and to "seek to reach agreement for the efficient and equitable exploitation of such transboundary reservoirs."¹⁸⁵

In sum, the 2000 Treaty regulated a 2.6 km² area in the Western Gap of the Gulf of Mexico maritime boundary region; it established a moratorium of ten years for the exploitation of the transboundary resources located in them; and most importantly, it recognized the willingness of the parties to exploit transboundary resources in an efficient, equitable and bilateral

185. *Id.* at VII.

manner. In this way it temporarily excluded the possibility of any unilateral exploitation until a future agreement was signed or the ten years period had passed.

Due to the importance of this Treaty as a precedent for the 2012 Transboundary Agreement, it is important to identify the intentions of the Parties regarding the question of transboundary resources in comparison to the 1978 Agreement. As mentioned in previous Parts of this study, the declarations of the State representatives are important in the formation of international law because they reflect the expectations of the State in terms of what the content of the international norms are.¹⁸⁶ This is particularly important when it comes to rules of customary international law where *opinio juris* can be identified by analyzing the representative's views at the time of the negotiation process. Accordingly, the Mexican delegation during the negotiation process of 2000 declared to the Mexican Congress that they were aware that there was an obligation, according to what they considered to be the international norm at the time, to exploit the resources in the form of a joint development zone or through unitization, but that due to the fact that the Mexican Constitution at the time prohibited any type of private participation in the sector and that only PEMEX as a representative of the Mexican State could exploit "national" resources, the delegation was unable to include in the Treaty any mention of unitization or joint development. In the words of Lourdes Melgar, the representative negotiator of the Ministry of Energy of Mexico at the time:

Mexico, by arguing that its Constitution does not allow it to engage in joint exploration and exploitation activities with other companies, is contradicting international law and the best international practices in the sector . . . this is a fundamental point to keep in mind because we have to prepare the appropriate negotiations that allow us to establish joint exploitation and unitization agreements regarding transboundary resources. And to establish a regulatory agency to

186. See *supra* Part III.C.

supervise such an exploration and exploitation of the transboundary resources.¹⁸⁷

The same point was emphasized by the head of the Legal Council Office of the Ministry of Foreign Affairs of Mexico, Ambassador Miguel Ángel González Felix, in the same Congressional hearing:

When the Western Gap Treaty was being negotiated . . . the problem of transboundary resources was constantly coming up in the discussions Once these type of resources are confirmed to trespass the boundary into the other State, there are two phenomenon present that have been emphasized again and again in this hearing: the phenomena of the migration of the resource, in other words, once one of the parties tries to exploit the fields, the resource might migrate to the other side of the border; secondly, in addition to migrating, the fact that the field is not exploited in a bilateral way, may affect the pressure of the field and even make the reservoir collapse.¹⁸⁸

When asked by Congress how the situation had to be resolved by Mexico and what were the international obligations involved, Ambassador González Felix was clear in stating that Mexico had a practice, even recognized constitutionally, to work with its neighbors to make the best out of the resources in a bilateral way:

[W]hen we analyze our Constitution, we find that in the sections where it makes reference to borderlines, either in the airspace or the sea, the constitution gives deference to international law. That is why, just as Ambassador Iruegas stated earlier, we have fifteen treaties that have as a subject shared resources. We have joint airspace with the U.S.; treaties that have to deal with borderlines and water inland; the treaty that gives life to the IBWC to manage the water in the rivers; a treaty that deals with the modulated radio

187. Octavo Foro Reforma Energética [Eighth Energy Reform Forum] 8 (June 5, 2008), available at <http://www3.diputados.gob.mx/camara/content/download/194900/468076/file/VE-20080605.pdf> (quoting Lourdes Melgar). The versions presented in this study are translations by the authors of this study.

188. *Id.* at 6 (quoting Ambassador Miguel Ángel González Felix).

frequency at the border. In other words, there are multiple examples, that the regime to deal with these issues is an international regime. In conclusion: there is nothing in our constitution that forbids us to negotiate an international treaty and the Constitution itself forces us to rely on international law; it forces us to look at the international practice . . . and when we looked at it, we realized that there are only two options, either we reach an agreement to be able to exploit and explore the resources in a joint way, or we accept an unrestricted principle such as the rule of capture . . . Mexico cannot accept the rule of capture. In the same vein, it has always been more beneficial for Mexico in its international relations to regulate such phenomenon in a bilateral way than accept the existence of unilateral acts that could affect us.¹⁸⁹

The above statements, from the highest Mexican officials negotiating the 2000 Treaty, proves one important aspect of what Mexico thought the appropriate rule of international law to deal with transboundary resources is: the joint exploitation of the resources. This is not only due to what they considered to be the international practice at that time, but because to them, the Mexican Constitution could be interpreted as requiring Mexico to comply with international law when it comes to resolving issues involving its maritime borders. As such, they felt that the international norm to deal with transboundary resources was a joint exploitation regime. Then why did they not include such a norm in the treaty? The answer was provided by the negotiators in the hearing: “among the diplomatic delegation, there were some doubts that it could eventually face a constitutional challenge.”¹⁹⁰ During the time of negotiation of the Treaty of 2000, the Mexican Constitution forbade any type of association with private parties. The only authorized company to exploit hydrocarbons was PEMEX. More details regarding the reform of the constitutional framework in Mexico will be provided in Part VI.A, but suffice it to say now that even if at the time there were doubts regarding the possible interpretation of the

189. *Id.* at 7–9 (quoting Ambassador Miguel Ángel González Felix).

190. *Id.* at 2 (quoting Ambassador Miguel Ángel González Felix).

constitution in the face of a joint exploitation agreement, from the international law perspective the Mexican negotiating delegation had no doubt that the international rule to follow was a joint exploitation agreement. If an international tribunal were interpreting the case, all these declarations could serve as a basis to prove the *opinio juris* of the State regarding what the customary norm was at the time.

Finally, it is important to note that the 2000 Treaty did not address the existence of shared reservoirs along the rest of the 1978 maritime boundary. The status of the transboundary fields located outside the Western Gap was left unresolved. The only applicable rule was that the States could not claim or exercise for any purpose sovereign rights or jurisdiction over the seabed and subsoil.¹⁹¹ None of the clear and straightforward rules of the Western Gap, such as that there shall be no exploitation or exploration in the area for ten years, and that the States would seek to reach an agreement consistent with principles that seek an efficient and equitable exploration, were applicable to maritime boundaries outside the Western Gap. Nevertheless, the fact that the States were willing to apply the latter principles to one portion of the GOM reflected a change of policy and of what the international norm was at the time in both States.

VI. 2012 TRANSBOUNDARY AGREEMENT AND ITS IMPLICATIONS UNDER INTERNATIONAL LAW

Since the Treaty of 2000 delineating the area beyond national jurisdiction in the GOM and especially after mild energy reforms in Mexico were adopted in 2008, pressure began to build from academic and industry circles in both nations to address the possibility of transboundary reservoirs along the maritime boundary in the GOM.¹⁹² At the end of the decade, Mexico and

191. See *supra* Part V.A (discussing the legal status of the reservoirs in the border side of the Gulf of Mexico under the 1978 Treaty).

192. The 2008 energy reform was more modest than the one presented and approved in 2013. In fact, the 2008 bill presented by then President Felipe Calderón did not include a constitutional amendment nor the possibility of private companies participating directly on the exploitation of the oil fields. It mainly contemplated a new regulatory regime that would allow better conditions for PEMEX to contract services from private parties; it would allow private contracting of refining; give PEMEX a

the United States engaged in the most intensive negotiations to date on this issue. These negotiations culminated on February 20, 2012, when the United States and Mexico signed a bilateral agreement concerning the joint exploration and exploitation of transboundary hydrocarbon structures and reservoirs in the GOM that straddle the maritime boundary between the two nations.¹⁹³ Made up of seven chapters and twenty-five articles, the Agreement seeks to encourage the establishment of cooperative arrangements based primarily on the principles of unitization, and leaves open the possibility for the development of cooperative agreements outside the framework established in the document.¹⁹⁴ The application of the 2012 Agreement is limited in scope to those transboundary reservoirs that traverse the maritime boundary of the two nations and which are entirely located beyond nine nautical miles of the coastline of any party thereby excluding reservoirs located within the jurisdiction of the State of Texas.¹⁹⁵ Article 2 defines “Transboundary Reservoir” to mean any reservoir which extends across the delimitation line that is “exploitable in whole or in part from both sides of the delimitation line.”¹⁹⁶ The Agreement specifies that if any of its provisions require the modification of a U.S. License existing before notification of the Agreement’s ratification, then those

greater budgetary autonomy; modify the regulatory apparatus to create new federal agencies in both the power and hydrocarbon sectors; and finally, adopt federal provisions that would allow for the negotiation of transboundary resources agreements with other nations. See CENTRO DE ESTUDIOS SOCIALES Y DE OPINIÓN PÚBLICA, INICIATIVAS DE REFORMA EN MATERIA ENERGÉTICA [ENERGY REFORM INITIATIVES] (2008), available at http://www3.diputados.gob.mx/camara/content/download/184628/441162/file/Iniciativas_reforma_materia_energetica.pdf.

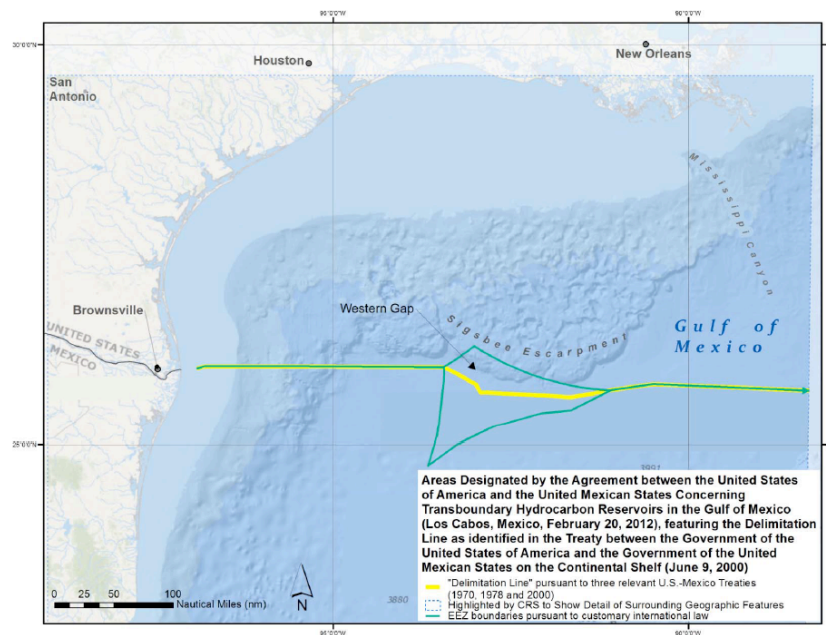
193. Agreement Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico, U.S.-Mex., pmbl, Feb. 20, 2012, available at <http://www.state.gov/documents/organization/185467.pdf> [hereinafter 2012 Transboundary Agreement]. Portions of section I are adapted from Miriam Grunstein, Richard McLaughlin, & Luis Anastacio Gutiérrez, *Gulf of Mexico Offshore Transboundary Hydrocarbon Development: Legal Issues Between Mexico and the U.S.*, HOUS. LAW., Nov./Dec. 2012, at 22, 22–26.

194. 2012 Transboundary Agreement, *supra* note 193.

195. *Id.* art. 1. Most U.S. coastal states have been awarded ownership over submerged lands extending 3 nautical miles from the coastline. Two exceptions are Texas and Florida’s Gulf of Mexico coast, which successfully claimed ownership over nine nautical miles.

196. *Id.* art. 2.

provisions of the Agreement will not apply to that License.¹⁹⁷ Below is a map prepared by the U.S. Congressional Research Service in its report of the 2012 Treaty.¹⁹⁸ It shows the boundary line as agreed in the 2012 Agreement, and consistent with the 2000 and 1978 Treaties; furthermore, it shows the gap of the nine miles of the Texas border and geological features of the seabed.



A. Ratification Process

The ratification processes on each side of the border show a stark contrast in what the State authorities were expecting about the treaty regime as well as which national interests were in play. The level of debate that was undertaken by each congress with regard to the 2012 Transboundary Agreement is illustrative of these contrasting visions. The Mexican Senate spent only a few days debating its general terms, without discussing particular provisions and avoiding the criticism of the opposition party

197. *Id.* art. 1.

198. CURRY L. HAGERTY & JAMES C. UZEL, CONG. RESEARCH SERV., R43204, PROPOSED U.S.-MEXICO TRANSBOUNDARY HYDROCARBONS AGREEMENT: BACKGROUND AND ISSUES FOR CONGRESS 12 (2013).

(Party of the Democratic Revolution, PRD), and the debate was heavily dominated by praises by the Ministry of Foreign Affairs, which professed that the Agreement would secure Mexico's natural resources from being extracted by the foreign companies on the other side of the border.¹⁹⁹ On the U.S. side, it took almost two years for the 2012 Agreement to be ratified. Debate in the United States was focused on the suspected inability of Mexico to engage in efficient exploitation practices, the problem with the Mexican State-centered regulatory regime, the concerns over the ability of PEMEX to be a good partner, and the comments from experts on the benefits of the Agreement in case energy reform in Mexico was implemented.²⁰⁰ In other words, while in Mexico the Agreement was seen as a victory over the abusive northern neighbor and the negative aspects of the regime were left aside, in the United States there were serious doubts that the Agreement could be implemented correctly due to the inefficiency of the state oriented policies of Mexico. The debate was such in the United States that the Agreement was not ratified until Fall of 2013, just days after the Energy Reform in Mexico that allows foreign investment in the sector had already been approved at the constitutional level.²⁰¹

Debate in the Mexican Senate was cursory with just a few noteworthy exceptions. For example, Mexican Senator Pablo Gómez (PRD) questioned why the minority report that was voted

199. Secretaría de Relaciones Exteriores [Ministry of Foreign Affairs], *Acuerdo Entre los Estados Unidos Mexicanos y los Estados Unidos de América Relativo a los Yacimientos Transfronterizos de Hidrocarburos en el Golfo de México* [Agreement Between the United States Mexicans and the United States of America Concerning the Transboundary Hydrocarbon Reservoirs in Gulf of Mexico] app. 4, available at <http://www.sre.gob.mx/images/stories/doctransparencia/rdc/7lby.pdf>.

200. *Hearing to Consider the Transboundary Hydrocarbon Agreement: Hearing on S. 812 Before the S. Comm. on Energy & Natural Res.*, 113th Cong. (2013) [hereinafter U.S. Senate Hearing 2012 Treaty].

201. CLARE RIBANDO SEELKE, CONG. RESEARCH SERV., R42917, MEXICO: BACKGROUND AND U.S. RELATIONS 11 (2014). Also delaying the ratification process was a dispute involving provisions to exempt actions taken by public companies in accordance with the transboundary hydrocarbon agreement from requirements under Section 1504 of the Dodd-Frank Act and the Securities and Exchange Commission's Natural Resource Extraction Disclosure Rule. CURRY L. HAGERTY, CONG. RESEARCH SERV., R43610, LEGISLATION TO APPROVE THE U.S.-MEXICO TRANSBOUNDARY HYDROCARBONS AGREEMENT 2 n.9 (2014).

on by the Mexican Senate Committee on Foreign Affairs was never presented to the Committee on Energy. He also wondered why there was no discussion concerning which authority would be assigned as the Executive Authority representing Mexico, the National Hydrocarbons Commission (referred to as CNH, the Spanish acronym of the autonomous regulatory agency that regulates upstream oil and gas operations in Mexico), or more directly by the executive branch through the Ministry of Energy.²⁰² He also asked what would be the compensation owed to Mexico for the fields that are already being exploited that could contain transboundary resources or that the 2012 Agreement leaves space for unilateral exploitation if the licensees and the Parties cannot reach an agreement.²⁰³

202. Secretaría de Relaciones Exteriores, *supra* note 199, at 181 (“The document that is in the hand of the chair [the Treaty and its legislative report], and that has not been read publicly, was never presented in the Senate Committee on Energy. The Senate Committee on Energy met and approved the content of the Treaty signed in Los Cabos by the Ministry of Foreign Affairs and the Department of State of the U.S., without even having a legislative report on the matter, without having the Senate Committee that first received the Treaty for a resolution present at the hearing, that is the Committee on Foreign Affairs and North America. A Committee that approves a report that has not even been presented is tremendously irregular in our parliamentary practice Mr. President of the Chair. How can we approve a report in a session, in a Committee session, if the report is not even been written yet? Why is the report so important? Because it contains the assessment on the value of the content and substance of the Treaty signed by the two governments and that it has been presented for the consent of both Congresses. The report must be accompanied by a list of Mexican legislative acts that touch on the substance of the Treaty in case its comes into live, because if that happens, Mexico must amend its legislative framework to make sure that the Treaty can be enforced here. I ask you for example, What would be the role played by the National Commission on Hydrocarbons created by the Congress? The PRI approved yesterday a parliamentary note asking the Executive to give money to the Commission so that it can start functioning. But the Congress is the only one that can give concrete and specific powers and tasks to the Commission so that it can administer the Treaty and the transboundary fields found in there.”).

203. *Id.* at 187 (“In the document that we have just heard about, a number of elements of the Treaty are ignored; this Treaty, depends too much on the agreement of the licensees, as the Treaty states, the ones assigned by each of the governments and on the operator chosen by each one of the licensees. If between them there is no agreement, the options for exiting are very few and there is a possibility that a unitization agreement will not take place. This means that this Treaty is unique if compared to other treaties, because it does not have objective basis, objective legal basis, that necessarily conduct the parties to a unitization agreement, this is an important problem, because one of the parties could decide to have a policy of not reaching or eluding the unitization practice,

On the other side of the political spectrum Senators Rosario Green (a former Secretary of Foreign Affairs), Rubén Camarillo and Francisco Labastida (the PRI candidate who lost the 2000 presidential election) defended the Agreement and avoided answering Senator Gómez's questioning. They argued that the Agreement was in full conformity with international practice by adopting the unitization procedures as the general rule and that it was of the highest importance that it be adopted and implemented before the moratorium of the 2000 Treaty expired in order to avoid exploitation from private companies on the U.S. side.²⁰⁴ At the end of the discussion only six Senators commented on the Agreement.²⁰⁵ There was no expert present in the hearing, and it was ratified by 60 votes in favor, 21 against, and only one abstention.²⁰⁶ It was also noteworthy that the Ministry of Foreign Affairs in its Description of the Agreement prepared in lieu of the Senate debate mentioned that the Mexican State considered unitization the most efficient method to exploit the resources and that this complied with international law:

Adhering to the international practice in those cases when there are transborder hydrocarbon reservoirs between two or more States, the governments of Mexico and the United States decided to adopt the method of "unification of reservoirs" (*unificación de yacimientos*) as the proper mechanism for the exploration and exploitation of the transborder reservoirs existing between both countries, because this mechanism offers the best utilization and efficiency of the transborder reservoir.²⁰⁷

and, consequently, to avoid the joint exploitation of transboundary fields.").

204. *Id.* 187–89.

205. Secretaría de Relaciones Exteriores, *supra* note 199, at 180–96.

206. *Id.* at 196–98.

207. Dictamen de las Comisiones de Relaciones Exteriores, América del Norte y de Energía respecto del Acuerdo entre los Estados Unidos Mexicanos y los Estados Unidos de América relativo a los Yacimientos Transfronterizos de Hidrocarburos en el Golfo de México [Opinion of the Committees on Foreign Relations, North America, and Energy Regarding the Agreement Between Mexico and the United States of America Regarding Transboundary Reservoirs of Hydrocarbons in the Gulf of Mexico], GACETA DEL SENADO, Apr. 12, 2012, *translated in* Vargas, *supra* note 158, at 67.

The ratification process on the U.S. side was not as smooth as the one in Mexico City. It was highly politicized, and it faced difficult negotiations between government branches. The mere fact that the Mexican Senate took only three months to ratify the 2012 Agreement after its signing, and the U.S. Senate took until October 2013 to discuss it and the House took until late December 2013 to adopt federal legislation implementing it, shows a stark contrast of the two ratification processes. The congressional debate in the United States was mainly focused on the inability of Mexico to be an efficient party of the regime, but domestic political factors also affected the discussion. One hurdle involved a question of transparency in the reporting of oil production revenues. Before the Senate had taken up consideration of the Agreement, the U.S. House of Representatives in April 2013 approved a bill (H.R. 1613) that would implement the Agreement as federal law, but would exclude the obligation under the Dodd-Frank Act that requires companies to notify and make public all payments made to foreign governments.²⁰⁸ The White House rejected publicly this proposal and threatened to veto the bill, since it would undermine transparency and accountability in international energy operations.²⁰⁹

208. H.R. 1613, 113th Cong. (2013) (enacted). This House Resolution amended Section 32(d) of the Outer Continental Shelf Lands Act with the following language, “(d) Exemption From Resources Extraction Reporting Requirement.—Actions taken by a public company in accordance with any transboundary hydrocarbon agreement shall not constitute the commercial development of oil, natural gas, or minerals for purposes of section 13(q) of the Securities Exchange Act of 1934 (157 U.S.C. 78m(q)).” *Id.*

209. Executive Office of the President’s Statement of Administration Policy on H.R. 1613—Outer Continental Shelf Transboundary Hydrocarbon Agreements Authorization Act (June 25, 2013). In this response, the Executive commented on why they could not support this bill by stating that:

[T]he Administration cannot support H.R. 1613, as reported by the House Committee on Natural Resources, because of other unnecessary, extraneous provisions that seriously detract from the bill. Most significantly, the Administration strongly objects to exempting actions taken by public companies in accordance with transboundary hydrocarbon agreements from requirements under section 1504 of the Dodd-Frank Act and the Securities and Exchange Commission’s Natural Resource Extraction Disclosure Rule. As a practical matter, this provision would waive the requirement for the disclosure of any payments made by resource extraction companies to the United States or foreign governments in accordance with a transboundary hydrocarbon agreement. The provision directly and negatively impacts U.S.

After months of legislative inaction, in October 2013, the Energy Committee of the House of Representatives held a hearing on the Agreement and on the discussions in Mexico regarding its Energy Reform.²¹⁰ In the hearing, several experts presented encouraging opinions on possible energy reforms in Mexico under consideration by President Enrique Peña Nieto, and contended that the reforms would ensure the supply of energy in North America, would make PEMEX a more reliable partner, and would facilitate the implementation of the Agreement. Finally, in December 2013, a couple of days after major energy reforms were adopted at the constitutional level in Mexico, the U.S. Congress and Senate approved the 2012 Agreement as part of the Bipartisan Budget Act of 2013.²¹¹ The threat of presidential veto was removed, because the final version of the bill did not contain any disclosure exceptions to the Dodd-Frank Act.

B. Preamble and the Guiding Principles of the 2012 Transboundary Agreement

An important aspect of the 2012 Agreement is the recognition of some of the principles discussed in previous Parts of the study that reflect international practice and the possible existence of a binational customary norm between the United States and Mexico. The preamble of the Agreement states that the intention of the parties during the negotiation of the treaty, including the 2000 Treaty, was to establish a “legal framework to achieve safe, efficient, equitable and environmentally responsible exploitation of transboundary hydrocarbon reservoirs that may exist along the maritime boundaries.”²¹² In the same vein, they affirmed that by signing the Agreement the parties

efforts to increase transparency and accountability, particularly in the oil, gas, and minerals sectors.

Id.

210. U.S. Senate Hearing 2012 Treaty, *supra* note 200.

211. *Bipartisan Budget Act of 2013*, Pub. L. No. 113-67, 127 Stat. 1165 (providing in div. A, title III, section 303, that “The Agreement between the United States of America and the United Mexican States Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico, signed at Los Cabos, February 20, 2012, is hereby approved”); *see also* 43 U.S.C. § 1356b (2012).

212. 2012 Transboundary Agreement, *supra* note 193.

are recognizing the “principles that promote equitable and reasonable utilization of transboundary resources, and desiring to maximize the long term benefits from their exploitation, as well as to protect the resources of both Parties.”²¹³ The recognition that these are the guiding principles of the Agreement has particular legal effects for its interpretation because they reflect the object and purpose of the Agreement. As noted in the Vienna Convention on Treaties, the parties, the institutions created by the Agreement and any future tribunals are bound to interpret it in light of these principles.²¹⁴ In practice, this can have important effects for the negotiation of particular contracts between the licensees or the States: any legal agreement, be that a licensee from a government to exploit a field or a joint venture between companies, that deals with the way a transboundary field is to be exploited must try to maximize the exploitation of the resources in a safe, equitable and environmentally responsible way. How do you identify the most efficient method for exploiting the resources? How do you measure efficiency, or an environmentally responsible method? Would efficiency be related in terms of the best interest of the State or in terms of the best commercial interest of the licensees? What would happen if a method of exploitation is efficient in economic terms, but it is less environmentally responsible or if its safety protocols are dubious? How would a tribunal or the institutions created by the Agreement answer these questions? These questions are not resolved by the text of the Agreement. It is important to note that in the offshore energy industry what might be considered efficient to the State might not be considered as such by an international consortium of oil companies, as exemplified by the words of Judge Jessup in the *North Sea Case*:

213. *Id.*

214. Vienna Convention on the Law of Treaties art. 31(1), May 23, 1969, 1155 U.N.T.S. 336 [hereinafter Vienna Convention of 1969] (“A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.”). Consequently, the preamble of the Transboundary Agreement explaining the object of the treaty and the goals that the Parties tried to achieve when they signed it is the guiding principle of interpretation. *See id.*

It has been stated that “the oil industry is strictly international” and in many of the explorations in the continental shelf in the North Sea the interests of one petroleum company are not confined to a single national sector and are frequently blended in a group or consortium which may contain as many as a dozen separate companies. The same drilling rigs, barges or platforms are chartered to operate first in one national sector and then in another.

. . . .

However, the interests of the petroleum companies are, of course, not identical with those of the Governments of the several States. The latter are concerned with the national revenue to be derived from fees, taxes, royalties or profit-sharing, with increases in national productivity, and also with the impact on the national balance of payments if imports of fuels to meet domestic needs are eliminated or reduced by the production of natural gas in the State’s portion of the continental shelf.²¹⁵

The parties to the 2012 Agreement, by not providing a specific definition of the terms listed in the preamble—efficient, equitable, environmentally responsible—have left the terms open to interpretation, and consequently leave open the possibility that the regime could develop in an unexpected way that affects the interests of one or both States. This is important to note particularly considering that Mexico and the United States have different understandings of the nature of these resources: for Mexico these are property of the State and they should be exploited in a way that maximizes the profit for the government; in the United States they are resources that should be exploited by private parties in the most efficient way that benefits the citizens of the United States and ensures the efficient supply of energy to the United States under a national security paradigm.²¹⁶

215. *N. Sea Continental Shelf*, 1969 I.C.J. at 79 (Jessup, J., concurring).

216. *Outer Continental Shelf Lands Act*, 43 U.S.C. § 1332 (2006) (describing the broad range of environmental, safety, economic, and national security goals of the statute).

Despite these potentially destabilizing features, the 2012 Agreement provides a valuable framework for the two nations to move forward when transboundary hydrocarbons are located. As mentioned in Part V that described the 1978 and 2000 Treaties, it took more than thirty-four years for the United States and Mexico to come to terms in the way both nations were to going to handle the issue of transboundary resources in the Gulf of Mexico. All this despite the fact that they had already a well-settled binational practice that dealt with water resources along the terrestrial border. For this reason, even with the described ambiguities and difficulties that will be explained below, the 2012 Agreement is a step forward in U.S.-Mexico relations.

C. Reporting Requirements and Information Sharing

Article 4 of the 2012 Transboundary Agreement sets up several reporting requirements for activities conducted near the maritime boundary. Generally, written notice must be provided if either party is aware of the existence of a transboundary reservoir or if a licensee has submitted an exploration plan within three nautical miles of the boundary.²¹⁷ If a licensee has submitted a plan for “Development” or “Production” of an area within three miles of the boundary, parties must go beyond just a written notice and must provide the plan to the other party.²¹⁸

D. Determining the Existence and Allocation of a Transboundary Reservoir

Article 5 sets up the framework for determining whether a transboundary reservoir exists. The Agreement requires the parties to consult each other in order to determine the existence of a transboundary reservoir and to share geological information provided for by their licensees which may be relevant to the determination of whether a transboundary reservoir exists.²¹⁹ In case the parties fail to reach an agreement on the existence of a transboundary reservoir, this Article, in conjunction with others,

217. 2012 Transboundary Agreement, *supra* note 193, art. 4(2).

218. *Id.* art. 4(2)(f).

219. *Id.* arts. 4(2)(a), (d), 5(1).

sets up the framework in which the determination may be made by a Joint Commission²²⁰ or Expert Determination.²²¹

E. Unitization

Chapter 2 deals with the exploration and exploitation of a transboundary reservoir or unit and it is here that the Agreement's emphasis on the principle of unitization is explained. Article 6 requires that any joint exploration or exploitation of a transboundary reservoir pursuant to a unitization agreement must be approved by both the United States and Mexico, with the possibilities that one or both governments make recommendations to the agreements before they are approved. The designated agencies of the States must develop one or more unitization agreement models that can be used by the licensees in their negotiation.²²² In both the models and the approved agreements, the executive agencies will have to compare the guiding principles of the agreement with the substantive rights contained in the particular agreements. In the event that the executive agencies cannot reach a consensus for the approval of the agreements after a particular period of time, the agreements are to be considered as rejected by the States.²²³ In addition, the executive agencies are required to make a joint determination estimating the amount of recoverable hydrocarbons in the transboundary reservoir and the allocation on either side of the maritime boundary.²²⁴ Along with this estimate the parties will have to jointly determine the associated allocation of production²²⁵ and in the event the executive agencies are unable to reach this

220. *Id.* art. 5(2).

221. *Id.* art. 14(6).

222. *Id.* art. 6(1) ("The Executive Agencies should develop one or more model unitization agreements for use under this Agreement.").

223. 2012 Transboundary Agreement, *supra* note 193, art. 6(4) ("Each Executive Agency shall approve, approve with modifications or reject the proposed unitization agreement within 120 days of its receipt. Either Executive Agency may extend this period, provided that the total additional period for consideration shall not exceed 120 days. If after the end of the latest period applicable for consideration by an Executive Agency either Executive Agency has not approved, approved with modifications, or rejected the proposal, the unitization agreement shall be deemed to be rejected.").

224. *Id.* art. 7(2)(b).

225. *Id.*

determination, the question will be submitted to expert determination.²²⁶

Although it highly encourages unitization, it is possible under the Agreement for a licensee to proceed with exploitation of a transboundary reservoir without having to unitize. If either of the parties does not approve a licensee's unitization proposal or if any licensee fails to sign a unitization agreement after it has been approved, then either nation may authorize its licensee to proceed with the exploitation of the reservoir.²²⁷ The non-unitizing licensee however, will, among other things, still be subject to the determination of allocation of production mentioned above and required to share production data on a monthly basis.²²⁸ Regardless of this requirement, there is no explicit obligation in the Agreement to share the profits of the exploited resources in case the licensee proceeds unilaterally with the exploitation of the reservoir. The same situation is present for those fields that were already licensed before the Agreement was ratified. In case the existent licensee determines that the fields that it had been exploiting for the period prior to the Agreement contains transboundary resources, there is no obligation to compensate the State or the other licensee for the already exploited resources. The inclusion of a compensation clause in this type of agreements is not rare, for example the Agreement Between the Netherlands and Germany of 1971 states in the section related to transboundary resources that "[i]f any mineral resources have previously been extracted from the deposit extending across the boundary, the regulations shall also include provisions for appropriate compensation."²²⁹ Nevertheless, the 2012 Agreement is silent on this.

Redetermination of the allocation of production on a fair and equitable basis is provided pursuant to an approved unitization agreement or by separate agreement, if no unitization agreement

226. *Id.* art. 7(3).

227. *Id.* art. 7(5).

228. 2012 Transboundary Agreement, *supra* note 193, art. 7(5).

229. Treaty Concerning the Delimitation of the Continental Shelf under the North Sea, Neth.-Ger., art. 2(2), Jan. 28, 1971, 857 U.N.T.S. 12296 [hereinafter Netherlands-Germany Treaty].

has been approved.²³⁰ Consequently, each State must include in their license agreements a chapter related to unitization. The way the licenses are assigned on each side of the border, particularly the fiscal regime applicable to it, will have an impact in the negotiation of the unitization agreements. If, for example, on one side of the border the royalties to be paid to the government X are fixed regardless of sudden increases on the price of oil, but on the other side of the border the potential unitization partner has a royalty rate that can be increased yearly depending on the price of oil, the business model, return rate and production plans of each company can be diametrically different. Consequently, it will affect the way they negotiate the unitization agreement.

In this regard, it is important to note some aspects that the 2013 energy reform in Mexico bring to the negotiation table of the licensees that face a transboundary resource and potential unitization negotiation. According to the 2013 reform private companies can only exploit deepwater fields in Mexican territory by signing four types of contracts with the government: joint production, profit sharing, license and service contracts.²³¹ In each of these contracts the royalties, taxes, bonuses, national content and exploration fees are different.²³² It is up to the Ministry of Energy to determine in each field, which type of contract will be the most appropriate one in terms of the benefit that it will yield to the State.²³³ Furthermore, the rate of the royalty depends on the price of barrel, it is determined on a yearly basis, and there is an adjustment mechanism in case there is extraordinary profitability of a particular field.²³⁴ All these factors are determined and controlled by another governmental entity,

230. 2012 Transboundary Agreement, *supra* note 193, arts. 7(5), 9.

231. See *Energy Reform Could Increase Mexico's Long-Term Oil Production by 75%*, U.S. ENERGY INFO. ADMIN. (Aug. 25, 2014), <http://www.eia.gov/todayinenergy/detail.cfm?id=17691>.

232. See MAYER BROWN, ANALYSIS OF MEXICO'S NEW HYDROCARBONS LEGAL REGIME 3, 5–6 (2014), available at <http://www.mayerbrown.com/files/Publication/69fe7acd-ca5b-4d1c-a172-31678b13ec06/Presentation/PublicationAttachment/75b0fe83-d4a2-4523-b8e2-3f7ae78102a7/UPDATE-Analysis-of-Mexicos-New-Hydrocarbons-Legal-Regime.pdf>.

233. Ley de Hidrocarburos [Law of Oil], *as amended*, Diario Oficial de la Federación, [DO], 11 agosto de 2014, section II, art. 16 [hereinafter National Hydrocarbons Law].

234. Negroponete, *supra* note 17.

the Ministry of Finance.²³⁵ Finally, the reform forces the Ministry of Energy to impose a minimum of 20% of participation of PEMEX in any project that has the potential of having a transboundary field or that ends up having one.²³⁶ Consequently, at least on the Mexican side of the border, the private licensee must also negotiate with PEMEX and then engage with the licensee on the U.S. side. Unitization agreements are complex on their own and the regulatory framework, at least from the Mexican side, does not make them any easier.

F. Fiscal Regime

The Agreement states that each licensee will pay the corresponding amount of taxes as determined by the State that authorized the exploitation of the fields. In other words, the percentage of royalties and other taxes paid by the Mexican or the American licensed company will be determined by the license agreement that each one has from their governments. Consequently, the profits of a particular field could be different depending on the fiscal regime that each company is subject to. As mentioned above using the example of the Mexican energy reform, this will impact the negotiation of the unitization agreement drastically. A company with a higher royalty by one of the sides will have a more delicate business plan and less space to negotiate a unitization agreement with the other company. This affects directly the incentives from each side to negotiate an agreement. The fiscal regime of each licensee will have to consider this fact in order to attract particular investments in the deepwater fields of the borderline.

G. Cooperation and Facilitating Access to Facilities

The 2012 Transboundary Agreement calls for parties to facilitate cooperation between the licensees in carrying out the exploration and exploitation of a Transboundary Unit,²³⁷ which

235. National Hydrocarbons Law, *supra* note 233, art. 30.

236. *Id.* art 17.

237. 2012 Transboundary Agreement, *supra* note 193, art. 12(1)–(2). The definitional section in Article 2 states that “Transboundary Unit” means “a single geological Hydrocarbon structure or Reservoir which extends across the Delimitation Line the

includes facilitating access to pipelines and facilities near the maritime boundary for those workers participating in activities related to the Transboundary Unit.²³⁸ Provisions facilitating cooperation near the delimitation line significantly enhance opportunities for U.S. and Mexican business collaboration far beyond the six statutory miles on either side of the maritime boundary that defines a “Transboundary Reservoir.” In fact, the Agreement requires the two nations, in the area extending fifteen statute miles on either side of the boundary, to use “best efforts” to facilitate cooperation and “not impede such cooperation by unreasonably withholding necessary Permits.”²³⁹ Article 12 is an especially important incentive for cooperation for a couple of reasons. First, the obligation of the governments to use “best efforts” to facilitate cooperation has specific legal meaning that requires the obligation to be completed in a diligent manner that is stronger than a mere “good faith” obligation.²⁴⁰ This means that businesses operating within fifteen miles of either side of the boundary that are incidental to a “Transboundary Unit” will be provided with preferences in governmental assistance and permitting. Second, these governmental preferences should provide an incentive to actually engage in exploration and exploitation of transboundary reservoirs pursuant to a unitization agreement as opposed to developing reservoirs in other deepwater areas located outside of the three-mile boundary zone subject to the Transboundary Agreement.²⁴¹ Importantly, in the case of

entirely of which is located beyond 9 nautical miles from the coastline, approved by the Executive Agencies for joint Exploration and/or Exploitation pursuant to the terms of a unitization agreement.” *Id.* art. 2 “Transboundary Unit”.

238. *Id.*

239. *Id.*

240. José Luis Herrera Vaca, *The New Legal Framework for Oil and Gas Activities Near the Maritime Boundaries Between Mexico and the U.S.: Comments on the Agreement Between the United Mexican States and the United States of America Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico*, 5 J. WORLD ENERGY L. & BUS. 235, 243 (2012) (explaining the value of Article 12 in enhancing cooperation between Mexico and the United States and “serving as a model for cooperation in other parts of the world”).

241. 2012 Transboundary Agreement, *supra* note 193, art. 12(1) (providing that the parties use “best efforts to facilitate cooperation between Licensees in activities related to the Exploration and Exploitation of a Transboundary Unit”). The language used implies that the preferences will only be granted to those facilities that are specifically

Mexico, the new energy reform created an agency, the Energy Regulatory Commission, that, among other powers related to hydrocarbon, has the duty to regulate the use of the existing pipelines for the benefit of the private companies. Currently this agency is not the executive agency designated by Mexico and leaves open the possibility of an inter agency dispute on how to enforce this particular section of the agreement without contradicting domestic legislation.

H. Dispute Resolution

The Agreement also establishes mechanisms for resolving disputes, more specifically a Joint Commission, arbitration and expert determinations. The Agreement establishes the Joint Commission as the competent body that will examine any dispute or matter referred to it by the executive agencies relating to the interpretation and implementation of the Agreement.²⁴² The Joint Commission is a permanent body composed of one representative and one alternate representative from the United States and Mexico.²⁴³ It is important to note that the composition of the Joint Commission prevents it from being an autonomous, impartial or, as in the case of the IWBC inland, a commission with the nature of a bilateral international organization. Each party not only designates one representative, without stating particular qualifications of the members, but the Agreement also states that each party has to cover the expenses of their respective representative. Hence, the Commission, in principle, depends completely on the executive authorities to operate and the impartiality of its members is not secured. This is an important aspect to note, since it is the Joint Commission that is the designated authority to interpret and implement the Agreement provisions.²⁴⁴ It is somewhat surprising that the

engaged in assisting the Transboundary Units located within three statute miles of the border. By implication, facilities that are operating within fifteen miles that are not specifically related to the Transboundary Units will not receive the preferences.

242. *Id.* art. 14(5).

243. *Id.* art. 14(2).

244. *Id.* art. 14(5) (“The Joint Commission shall be the competent body to examine any dispute or other matter referred to it by either Executive Agency relating to the interpretation and implementation of this Agreement, or any unforeseen issues arising

parties did not create a body with an independent nature, or even one where a final decision could be secured, since by designating only one member from each side, in case of an impasse there is no other mechanism in the Commission to come up with a final decision on the correct interpretation of the Agreement. The likely reason to adopt this approach to dispute settlement is that it allows the two nations to retain political control over the exploitation of resources within their sovereign territory. In fact, it may have been felt that relinquishing government control to a less biased dispute settlement body would have made domestic political approval of the 2012 Agreement impossible to achieve. Regardless of the reasons behind the makeup of the Joint Commission, in a sector where large transnational companies are politically influential in both States, a commission with this type of composition and characteristics is problematic in ensuring that the Agreement will be implemented and interpreted effectively.

In addition to the Joint Commission, the Agreement encourages consultations between the two parties, and allows for nonbinding mediation. If disputes are not resolved through consultations or mediations and are not resolvable through expert determinations pursuant to the Agreement, either party may choose to refer the dispute to arbitration pursuant to Article 17.²⁴⁵

The details of arbitration are left to the Joint Commission to decide.²⁴⁶ The fact that the rules for determining the arbitration procedure are left unresolved, that it does not mention the number of arbitrators, and more importantly that the parties did not give their express consent to arbitrate and that the decision is to be considered as final, is a noteworthy fact due to its atypical nature in comparison with international practice. For example, the Agreement states that “either Party may submit the dispute to arbitration” (“*cualquiera de las partes podrá someter la controversia a arbitraje*” in the Spanish version),²⁴⁷

under this Agreement.”).

245. *Id.* art. 15(2).

246. *Id.* art. 17.

247. 2012 Transboundary Agreement, *supra* note 193, art. 17.

instead of using the traditional wording of other treaties, “shall be submitted” (Iceland-Norway Treaty and Timor Gap Treaty) that leave no doubt on the binding character of an arbitration proceeding.²⁴⁸ In the same vein, the international practice is to state that the award will be final and binding on the parties (“*An award shall be final and binding on Australia and Timor-Leste*”)²⁴⁹ (“*The decision of the tribunal shall be binding*”) (Timor Gap Treaty)²⁵⁰ (Iceland-Norway Treaty) (Netherlands-Germany Treaty) (“*The Parties shall abide by any award made by the arbitration board under this article*”) (Japan-Korea Treaty).²⁵¹ Regarding the selection of arbitrators and the procedure, other agreements, such as the UK-Norway Agreement are very detailed:

If any such dispute cannot be resolved in this manner or by any other procedure agreed to by the two Governments, the dispute shall be submitted, at the request of either Government, to an Arbitral Tribunal composed as follows:

Each Government shall designate one arbitrator, and the two arbitrators so designated shall elect a third, who shall be the Chairman and who shall not be a national of or habitually reside in the United Kingdom or in the Kingdom of Norway. If either Government fails to designate an arbitrator within three months of a request to do so, either Government may request the President of the International Court of Justice to appoint an arbitrator. The same procedure shall apply

248. Compare *id.*, with Timor Gap Treaty, *supra* note 142, art. 30, and Agreement Concerning Transboundary Hydrocarbon Deposits, Nor.-Ice., art. 5, Nov. 3, 2008, U.N.T.S. No. 50378, available at <https://treaties.un.org/doc/Publication/UNTS/No%20Volume/50378/Part/I-50378-0800000280321996.pdf> [hereinafter Iceland-Norway Treaty].

249. 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, Austl.-Timor-Leste, Annex IV, Mar. 6, 2003.

250. Timor Gap Treaty, *supra* note 142, annex C § 12.5 (“The decision of a majority of the arbitrators shall be final and binding.”).

251. See Iceland-Norway Treaty, *supra* note 248 (“The decisions of the tribunal shall be binding upon the Parties.”); Netherlands-Germany Treaty, *supra* note 229, art. 5(6) (“The decision [of the tribunal] shall be binding.”); Japan-Korea Treaty, *supra* note 141, art. 26 (“The Parties shall abide by any award made by the arbitration board under this article.”).

if, within one month of the designation or appointment of the second arbitrator, the third arbitrator has not been elected. The Tribunal shall determine its own procedure, save that all decisions shall be taken, in the absence of unanimity, by a majority vote of the members of the Tribunal. The decisions of the Tribunal shall be binding upon the two Governments and shall, for the purposes of this Agreement, be regarded as agreements between the two Governments.²⁵²

252. Agreement Relating to the Exploitation of the Frigg Field Reservoir and the Transmission of Gas Therefrom to the United Kingdom, art. 28(2), U.K.-Nor., May 10, 1976, 1098 U.N.T.S. 16878 [hereinafter UK-Norway Agreement]. The same type of provision was included in article 5 of the Netherlands-Germany Agreement of 1971:

- (1) Disputes between the Contracting Parties concerning the interpretation or application of this Treaty or any regulations adopted pursuant to article 2, paragraph (2), shall so far as possible be settled by negotiation.
- (2) Any dispute which is not settled in this manner within a reasonable time shall, at the request of either Contracting Party, be referred to an arbitral tribunal for decision.
- (3) The arbitral tribunal shall be constituted on an *ad hoc* basis. Save where the Contracting Parties, in accordance with a simplified procedure, appoint by mutual agreement a single arbitrator to resolve the dispute, an arbitral tribunal composed of the three members shall be constituted in the following manner:

Each Contracting Party shall appoint a member, and the two members shall agree on a national of a third State, who shall be appointed chairman by the two Contracting Parties.

The members must be appointed within two months, and the chairman within a further two months after either Party has requested that the dispute should be resolved by an arbitral tribunal.

- (4) If the time-limits referred to in paragraph (3) above are not met, either Contracting Party may request the President of the International Court of Justice to make the necessary appointments. If the President is a national of one of the Contracting Parties or is incapacitated for any other reason, the appointments shall be made by the Vice-President. If the Vice-President also is a national of one of the Contracting Parties or is incapacitated, the appointments shall be made by the next most senior member of the Court who is not a national of one of the Contracting States and is not incapacitated.
- (5) The arbitral tribunal shall take its decisions by majority vote. Each Contracting Party shall bear the costs of its member and of its representation in the arbitral proceedings; the cost of the chairman and the remaining costs shall be borne by the Parties equally.
- (6) The arbitral tribunal or the single arbitrator shall reach a decision on the basis of the international law applicable between the Contracting Parties.

In contrast with these international practices, the 2012 Agreement is silent regarding the condition of the arbitral award, the procedure to initiate the arbitration and the consent of the States to arbitrate the dispute. As stated above, the only mention to the arbitration proceeding is located in the section of the powers of the Joint Commission and leaves to it the obligation to adopt the rules for the initiation of an arbitration proceeding.²⁵³ This weakens the implementation of the Agreement. Even if the Joint Commission is successful in designing adequate rules for the arbitration proceeding, a hard task in itself considering its institutional weaknesses mentioned above, the award could be subject to a legal challenge in both jurisdictions. The legislative bodies that ratified the Agreement did not approve a particular arbitral system, nor did they accept that the award will be binding on the States. This is an important issue, particularly with respect to the United States since, according to the U.S. Supreme Court, decisions from international judicial bodies that emanate from binding international treaties can be an international law obligation, but they do not “automatically constitute binding federal law enforceable in United States courts.”²⁵⁴ Federal legislation giving the judicial

The decision shall be binding.

- (7) The arbitral tribunal or the single arbitrator shall determine its or his own procedure, save as otherwise provided in this Treaty or by the Contracting Parties at the time of constitution of the arbitral tribunal or appointment of the single arbitrator.

Netherlands-Germany Treaty, *supra* note 229, art. 5; *see also* Japan-Korea Treaty, *supra* note 141, art. XXVI (providing other rules for arbitration).

253. 2012 Transboundary Agreement, *supra* note 193, art. 17 (“The Joint Commission shall, within 180 days of the adoption of its rules of procedure, establish an arbitration mechanism for the implementation of this Article.”).

254. *See* *Medellín v. Texas*, 552 U.S. 491, 504 (2008) (“*Medellín* first contends that the ICJ’s judgment in *Avena* constitutes a ‘binding’ obligation on the state and federal courts of the United States No one disputes that the *Avena* decision—a decision that flows from the treaties through which the United States submitted to ICJ jurisdiction with respect to Vienna Convention disputes—constitutes an *international law* obligation on the part of the United States. But not all international law obligations automatically constitute binding federal law enforceable in United States courts. The question we confront is whether the *Avena* judgment has automatic *domestic* legal effect such that the judgment of its own force applies in state and federal courts Because none of these treaty sources [the Treaty, the Optional Protocol, the UN Charter and the ICJ Statute] created binding federal law in the absence of implementing legislation, and

decision direct domestic legal effect would be necessary so that “the judgment of its own force applies in state and federal courts.”²⁵⁵ Consequently, in a controversial case there is always the chance that a U.S. licensee could argue that the domestic institutions, like the U.S. Department of Interior, are not subject to implement an award from a tribunal constituted under the 2012 Treaty, regardless of its international effects, and that a legislative action would be needed in order for the award to be binding domestically.²⁵⁶

In the same spirit of contradicting international practice the agreement suggests that any arbitration decision will not be final and binding since, “The Joint Commission will have 30 days in which to consider the final recommendation in any arbitration instituted pursuant to Article 17. If the Joint Commission is unable to resolve any remaining differences within that time, the dispute will be returned to the parties.”²⁵⁷ The possibility of stalemate was clearly envisioned by the parties given the makeup of the Commission with one representative from each nation and no opportunity for a tie-breaking vote.

As is customary in oil and gas contracts, the Agreement calls for expert determinations in settling certain disputes. It leaves to the Joint Commission many of the details regarding how these determinations will work in actual practice. However, it does set up a temporary mechanism for expert determinations and describes what issues may be submitted to such determination.²⁵⁸ One of the most interesting aspects concerning expert determinations is that unlike arbitration, they shall be considered final and binding on the parties.²⁵⁹ The likely reason

because it is uncontested that no such legislation exists, we conclude that the *Avena* judgment is not automatically binding domestic law.”) (emphasis in original).

255. *Id.*

256. See generally Jordan J. Paust, Medellín, *Avena*, *the Supremacy of Treaties, and Relevant Executive Authority*, 31 SUFFOLK TRANSNAT'L L. REV. 301, 301–02 (2008) (discussing the relevance of *Medellín* for the supremacy of international treaties in the United States); Margaret McGuinness, *Three Narratives of Medellín v. Texas*, 31 SUFFOLK TRANSNAT'L L. REV. 227, 230–31 (2008) (discussing the relevance of *Medellín* from various perspectives).

257. 2012 Transboundary Agreement, *supra* note 193, art. 14(7).

258. *Id.* art. 16.

259. *Id.* art. 16(9).

for this is that the binding expert determination is limited to narrowly focused technical issues such as determining whether a transboundary reservoir exists²⁶⁰ and what the allocation of production should be for each party.²⁶¹ Decisions relating to whether production should or should not occur and broader more discretionary aspects of the unitization process are left to the Joint Commission or non-binding arbitration.

I. Texas Border

As mentioned above, the Transboundary Agreement does not apply to areas within the first nine nautical miles of the coastline.²⁶² It is noteworthy that according to U.S. legislation these miles are precisely the ones belonging to the States of the union, and not the Federal Government.²⁶³ Hence, the resources located there, if they happen to be transboundary, are property of the state of Texas and it is up to this authority to decide how to negotiate their exploitation with the Mexican State. An interesting phenomenon arises, what would be the legal status of this type of agreement according to international law or domestic law? The Vienna Convention of 1969 is clear in stating that a treaty means “an agreement concluded between States in

260. *Id.* art. 14(6).

261. *Id.* art. 7(3).

262. 2012 Transboundary Agreement, *supra* note 193, art. 1 (“This Agreement shall apply to cooperation between the Parties with regard to the joint Exploration and Exploitation of geological Hydrocarbon structures and Reservoirs that extend across the Delimitation Line, the entirety of which are located beyond 9 nautical miles from the coastline.”).

263. *See* Submerged Lands Act, 43 U.S.C. § 1301(b) (2012):

The term “boundaries” includes the seaward boundaries of a State or its boundaries in the Gulf of Mexico or any of the Great Lakes as they existed at the time such State became a member of the Union, or as heretofore approved by the Congress, or as extended or confirmed pursuant to section 1312 of this title but in no event shall the term “boundaries” or the term “lands beneath navigable waters” be interpreted as extending from the coast line more than three geographical miles into the Atlantic Ocean or the Pacific Ocean, or more than three marine leagues into the Gulf of Mexico, except that any boundary between a State and the United States under this subchapter or subchapter II of this chapter which has been or is hereafter fixed by coordinates under a final decree of the United States Supreme Court shall remain immobilized at the coordinates provided under such decree and shall not be ambulatory.

written form and governed by international law” and that a nation “may not invoke the provisions of its internal law as justification for its failure to perform a treaty.”²⁶⁴ Would Texas be representing the United States in such an Agreement? If so a constitutional question would arise under U.S. law since, only the President can sign treaties with the consent and approval of the Senate.²⁶⁵ In fact the U.S. Supreme Court has recognized that the treaty making powers of the President extend to all proper subjects of negotiation with foreign governments.²⁶⁶ The legal status of the Mexico-Texas Treaty would be dubious and subject to legal challenge domestically. On the other hand, if Texas by signing the Treaty is not representing the United States, then what would be the status of an agreement signed between a U.S. state and another sovereign nation if Article 1, section 10, clause 1 of the U.S. Constitution states that “No State shall enter into any Treaty, Alliance, or Confederation”? According to the Supreme Court, the term “treaty” must be construed in its broadest terms, meaning that the desire of the framers was that “there would be no occasion for negotiation or intercourse between the state authorities and a foreign government.”²⁶⁷ But, some commentators suggest that an

264. Vienna Convention of 1969, *supra* note 214, arts. 2(1)(a), 27.

265. U.S. CONST. art. II, § 2, cl. 2 (“[The President] shall have Power, by and with the Advice and Consent of the Senate, to make Treaties.”). The U.S. Supreme Court has ruled several times that the treaty making powers of the President are not limited in subject matter by the Constitution. *See, e.g., Santovincenzo v. Egan*, 284 U.S. 30, 40 (1931) (“The treaty-making power is broad enough to cover all subjects that properly pertain to our foreign relations.”). In the same vein, the *Restatement (Third)* states that “[c]ontrary to what was once suggested, the Constitution does not require that an international agreement deal only with ‘matters of international concern.’ . . . The United States may make an agreement on any subject suggested by its national interests in relations with other nations.” RESTATEMENT (THIRD), *supra* note 66, § 302, cmt c.

266. *Asakura v. City of Seattle*, 265 U.S. 332, 341 (1924).

267. *Holmes v. Jennison*, 39 U.S. (14 Pet.) 540, 575–76 (1840) (“Every part of [the Constitution] shows, that our whole foreign intercourse was intended to be committed to the hands of the general government It was one of the main objects of the Constitution to make us, so far as regarded our foreign relations, one people, and one nation; and to cut off all communications between foreign governments, and the several state authorities.”); *see also* Edward T. Swaine, *Does Federalism Constrain the Treaty Power?*, 103 COLUM. L. REV. 403, 506–07 (2003) (“[B]eginning with Chief Justice Taney’s tour de force in *Holmes v. Jennison*, the Supreme Court has read the Constitution as proscribing such negotiations in the absence of national supervision—even though

agreement between a state and a sovereign nation would be valid constitutionally if it had the approval of Congress.²⁶⁸ On the other hand, according to the Restatement (Third) of the Foreign Relations Law “[w]hat distinguishes a treaty, which a State cannot make at all, from an agreement or compact, which it can make with Congressional consent, has not been determined. That would probably be deemed a political decision.”²⁶⁹ The issue seems to be unresolved in U.S. law. It is not clear yet that there are transboundary units in that section of the border, but the possibility is latent and the 2012 Agreement did not solve the situation, rather leaving it open to future action.

J. Inspections

The Agreement allows for inspections by both parties of their respective offshore facilities.²⁷⁰ The details of when these inspections may take place, under what circumstances, and what procedures are to be used are not specified in the Agreement, and further regulation and bilateral negotiations in this matter will be necessary for adequate implementation. The agreement does, however, set up a unique procedure in which inspectors from one country can request that the other party cease activities in case of emergencies where there is a risk of loss to life, serious bodily injury or damage to the environment.²⁷¹ As far as the authors are aware, this is the only instance globally in which the inspectors from one nation can temporarily

precedent suggest that there is no such bar in pursuing interstate compacts. Second, in contracts to the case-by-case approach followed with respect to interstate compacts, foreign compacts appear always to pose a sufficient risk to federal supremacy to warrant congressional consent. That position has not always been respected, but the deviations have enjoyed no constitutional sanction.”).

268. See Swaine, *supra* note 267, at 507–08 (“These reins [prohibition to celebrate foreign compacts] upon the states, however, are once again entrusted to the national political branches. As with interstate compacts, Congress appears to exercise unreviewable discretion over the approval of their foreign brethren. As an empirical matter, Professor Henkin has observed, ‘[n]o agreement between a state and a foreign power has been successfully challenged on the ground that it is a treaty which the state was forbidden to make.’”).

269. RESTATEMENT (THIRD), *supra* note 66, § 302, cmt. f.

270. 2012 Transboundary Agreement, *supra* note 193, art. 18(1).

271. *Id.* art. 18(5).

halt operations taking place in the sovereign territory of another nation. This provision was undoubtedly driven in response to events associated with the Macondo oil spill that occurred in the Gulf of Mexico shortly before the negotiations began on the 2012 Transboundary Agreement.

K. Safety and Environmental Protection

Article 19 of the Agreement contains rather broad language concerning safety and environmental protection. It is somewhat insufficient as it does not establish any specific environmental or safety regulations and instead provides general language about adopting common standards “where appropriate” and requirements whose adequacy and compatibility are yet to be determined.²⁷² As is recurrent in this Agreement, it leaves specific procedures for the implementation of common standards of safety and environmental protection for later development by both nations’ respective lawmakers or administrative agencies.²⁷³ Regardless of the aspirational rather than binding quality of these provisions, the Agreement does call on the two nations to adopt “common safety and environmental standards,” which may serve as the foundation for broader cooperation in the GOM and other ocean areas.²⁷⁴ This section of the Agreement did not contemplate any contingency fund in case an oil spill happens. In the past, both nations have faced this type of challenge before, most notably the Ixtoc spill by PEMEX on the Mexican side and the Deepwater Horizon oil spill by British Petroleum on the U.S. side.²⁷⁵ A stable and efficient regime

272. *Id.* art. 19(1).

273. *Id.* art. 19(2).

274. *Id.* art. 19(1).

275. See generally James M. West, Comment, *The Ixtoc I Oil Spill Litigation: Jurisdictional Disputes at the Threshold of Transnational Pollution Responsibility*, 16 TEX. INT’L L.J. 475 (1981) (discussing the Ixtoc I oil spill and resulting international legal disputes); Jacqueline L. Weaver, *Offshore Safety in the Wake of the Macondo Disaster: Business as Usual or Sea Change?*, 36 HOUS. J. INT’L L. 147, 153 (2014) (discussing U.S. changes in offshore drilling in response to the British Petroleum oil spill). It should be noted that in the aftermath of the Deepwater Horizon oil spill, the U.S. government and the offshore hydrocarbon industry have made a number of significant changes to its regulations and practices in an attempt to prevent future spills. See Caroline Haquet, *Macondo: The Disaster That Changed the Rules*, TECHNICAL NEWSL. (SCOR Global P&C,

regarding safety and environmental protections should include a contingency plan in case something unexpected happens in the joint exploitation fields. It should be remembered in this regard that Principle 21 of the Stockholm Declaration states:

States have, in accordance with the Charter of the United Nations and the principles of international law, their sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.²⁷⁶

This principle has been recognized in 1996 by the ICJ in the Advisory Opinion of the Legality of the Threat of Use of Nuclear Weapons as a customary norm of international law, hence it is binding both on Mexico and the United States in their relations concerning the exploitation of shared resources.²⁷⁷

L. Termination

The Agreement sets forth that it can be terminated either by mutual agreement or by either country at any time via written notice within a specified time period.²⁷⁸ Highlighting the importance that both nations place on managing transboundary hydrocarbon resources, the Agreement provides that in the event of termination the two nations must begin consultations to develop a new agreement addressing transboundary reservoirs.²⁷⁹

Paris, France), Apr. 2014, for a summary of these changes.

276. U.N. Conf. on the Human Env't, June 5–16, 1972, Principle 21, U.N. Doc. A/CONF.48/14Rev.1 [hereinafter Stockholm Declaration].

277. Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, ¶ 29 (July 8) (“The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment.”).

278. 2012 Transboundary Agreement, *supra* note 193, art. 23(1).

279. *Id.* art. 23(3).

VII. IMPLICATIONS OF INTERNATIONAL LAW ON THE
IMPLEMENTATION OF THE 2012 TRANSBOUNDARY
AGREEMENT

The signing of the 2012 Transboundary Agreement was the result of a decades long series of diplomatic efforts by the two nations, including three bilateral treaties that delineated the maritime boundary in the Gulf of Mexico.²⁸⁰ U.S. Secretary of State Hillary R. Clinton summarized the key objectives of the 2012 Transboundary Agreement at the signing ceremony, in which she reaffirmed the guiding principles of the regime:

[T]oday we are . . . following through on the commitment that Presidents Calderon and Obama made in 2010 to improve energy security for both countries and to ensure a safe, efficient, responsible exploration of the oil and gas reservoirs in the Gulf of Mexico These [transboundary] reservoirs could hold considerable reserves that would benefit the United States and Mexico alike. But they don't necessarily stop neatly at either of our maritime boundaries, which could lead to disputes that would then interfere with our countries and companies doing the hard work of discovering what is available to us. If a reservoir straddles the boundary, then there would be disputes over who should do the extraction and how much they should extract. The agreement we sign today helps prevent such disputes. It also helps promote the safe, efficient, and equitable exploration and production of cross-boundary reservoirs. Each country maintains its own right to develop its own resources.²⁸¹

Thus, the Agreement was clearly intended to establish a legal regime that balances bilateral and international concerns over the safe, efficient, and equitable development of transboundary resources while maintaining each nation's

280. See *supra* Part V (discussing the 1978 and 2000 Treaties); see also Treaty to Resolve Pending Boundary Differences and Maintain the Rio Grande and Colorado River as the International Boundary, U.S.-Mex., art. V, Nov. 23, 1970, 23 U.S.T. 371 (establishing the maritime boundaries in the Gulf of Mexico).

281. Hillary Rodham Clinton, U.S. Sec'y of State, Remarks at the Signing of the U.S.-Mexico Transboundary Agreement (Feb. 20, 2012); see also *supra* Part VI.B (discussing the guiding principles of the 2012 Transboundary Agreement).

sovereign right to develop its own natural resources as each sees fit. In light of the fact that the resources in question are shared and transboundary, some practices that are taken pursuant to the Agreement may give rise to concerns as to whether it fully complies with principles of international law. In the absence of compliance, it will be difficult to predict whether it constitutes a valid and solid legal framework, which potentially provides certainty and stability for the development of transboundary hydrocarbon reservoirs in the Gulf of Mexico.

The following Subparts analyze the 2012 Transboundary Agreement in the context of the international principles applied to shared natural resources. First, it summarizes how the Agreement leads the parties to potentially reach a unitization agreement; second, it examines how the Agreement allows the parties to exploit the transboundary reservoir if a unitization agreement cannot be reached; and last, it assesses whether the Agreement complies with international law.

A. *The 2012 Transboundary Agreement Unitization Process*

The 2012 Transboundary Agreement commits the Parties to develop their shared natural resources in a safe, efficient, equitable and environmentally responsible manner, based primarily on principles of unitization to protect the resources of both parties and to maximize the long term benefits from their exploitation.²⁸² Therefore, the conduct of the Parties and the interpretation and implementation of the 2012 Agreement should be inferred in light of these principles.

Bearing these principles in mind, the first relevant provision set forth in the 2012 Agreement is the right/duty to consult on exploration and exploitation activities carried out within three statute miles of the delimitation line,²⁸³ including the exchange of all relevant and available geological information, as well the duty to notify.²⁸⁴ In addition to formal actions relating to agency

282. 2012 Transboundary Agreement, *supra* note 193.

283. *Id.* art. 4(1).

284. *Id.* art. 4(2). The duty to notify is triggered if either Party is aware of the likely existence of a transboundary reservoir or hydrocarbon occurrence near the delimitation line; it has approved, or its Licensee has submitted for approval, a plan for the collection of seismic data or an exploration plan; either party is aware of a

approval or permitting, the right/duty to consult extends whenever “either Party is aware of a Hydrocarbon Occurrence at or near the Delimitation Line.”²⁸⁵ Hydrocarbon Occurrence at or near the Delimitation Line is defined as “a detection of Hydrocarbons during drilling operations within 3 statute miles on either side of the Delimitation Line.”²⁸⁶ Any triggering event requires the Parties²⁸⁷ to consult to determine whether a transboundary reservoir exists.²⁸⁸ If a determination cannot be reached, the issue may be submitted to the Joint Commission.²⁸⁹

The determination whether a transboundary reservoir exists is a critical issue in the sense that it will determine which nation, or both, has the right to explore and exploit the resource. In other words, it will determine whether the development of that particular reservoir will be submitted to the legal regime of the 2012 Agreement (if it is transboundary in nature) or developed exclusively by the nation in which sovereign territory it is located (if it is not transboundary).

The process of consultation to determine whether a transboundary reservoir exists shall be initiated within thirty days of the receipt of a communication of the occurrence of any relevant event.²⁹⁰ However, the parties may not have enough data to make an informed decision at this point. In fact, it may take years until a determination can be made. Before a determination is made, the licensees are not obligated to enter into any type of unitization agreement. Because both nations are parties to the 2012 Agreement, during any interim period prior to a determination of the existence of a transboundary reservoir, the basic principle regarding the observance of international

“Hydrocarbon Occurrence”; either party’s Licensee has submitted a plan to drill a well; and/or any Licensee has submitted a plan for the development or production. Each occurrence has a different timeframe in which the party shall notify the other. *Id.*

285. *Id.* 4(2)(d).

286. *Id.* art. 2, “Hydrocarbon Occurrence near the Delimitation Line.”

287. 2012 Transboundary Agreement, *supra* note 193, art. 5(1) (requiring that the parties consult through their Executive Agencies within thirty days following receipt of communication noting a triggering event).

288. *Id.*

289. 2012 Transboundary Agreement, *supra* note 193, art. 5(2).

290. *Id.* art. 5(1).

agreements *pacta sunt servanda* applies.²⁹¹ This establishes an obligation to act in good faith and to not engage in conduct with a view to undermining a party's duties under the treaty. Accordingly, neither nation should move forward to develop the resource until a good faith determination is made.

On the other hand, once it is determined that a transboundary reservoir exists, the parties shall endeavor to take all efforts to reach an agreement on the joint development of a transboundary reservoir or Unit Area,²⁹² primarily through unitization.²⁹³ Alternatively, the parties may agree on another kind of cooperative arrangement also based on efficient, equitable, and environmentally responsible principles.²⁹⁴ Each party shall take steps to facilitate exploitation of the transboundary reservoir as a transboundary unit.²⁹⁵ Neither party may commence production until all attempts to negotiate a unitization agreement put forward in the Agreement are exhausted.²⁹⁶

It is suggested that the parties develop one or more model unitization agreements in accord with the terms of the 2012 Agreement to be used as a template by its licensees.²⁹⁷ In any event, the terms of the unitization agreement shall be negotiated and proposed by the licensees and approved by the parties within 120 days of its receipt, extendable only once for the same period. The parties may refer any issue regarding the unitization

291. See JANIS, *supra* note 87, at 27 (explaining how *pacta sunt servanda* developed and is applied under international law). The term *pacta sunt servanda* is an accepted principle of customary international law and also finds its place in article 26 of the Vienna Convention on Treaties where it is defined as "every treaty in force is binding upon the parties to it and must be performed by them in good faith." *Id.*

292. "Unit Area' means the geographical area described in a Transboundary Unit, as set out in the unitization agreement." 2012 Transboundary Agreement, *supra* note 193, art. 2.

293. *Id.* art. 7(1). "Unitization" refers to a process in which separate interest owners in a common oil and gas reservoir pool such interest to form a single unit under the sole operation of a single operator who conducts unit operations for all so that maximum efficient recovery is accomplished and production and/or revenues there may be shared out in accordance with the agreed basis established in the unit plan. Onorato, *supra* note 28, at 332–33.

294. 2012 Transboundary Agreement, *supra* note 193.

295. *Id.* art. 7(1).

296. *Id.*

297. *Id.* art. 6(1).

agreement to the Joint Commission, as needed, for the remaining period.²⁹⁸ More generally, should a unitization agreement be proposed, the parties shall require the licensees to enter into a unit operating agreement.²⁹⁹ The parties shall require their licensees to submit an executed unit operating agreement prior to the approval of the unitization agreement.³⁰⁰ A key provision that shall be included in the unitization agreement is the methodology used to calculate the allocation of production.³⁰¹ The parties shall require the unit operator to initiate consultations on the allocation of production to each side of the delimitation line.³⁰² In case an agreement cannot be reached, the matter shall be referred to expert determination or submitted to the Joint Commission depending on the circumstances.³⁰³

Two potentially contentious issues relating to domestic legislation on each side of the border emerge out of this treaty provision that need further clarification. The one related to the U.S. side was recently raised by energy consultant George Baker. He points out that under U.S. law, a licensed block for purposes of hydrocarbon production is defined in two dimensions. In a particular square or rectangular block, the lease owner has commercial mineral rights for deposits at any depth. Consequently, the lease block owner has mineral rights to one reservoir which may be located in a geologic formation 10,000 feet below the seabed as well as another that is located in

298. *Id.* art. 6(4).

299. 2012 Transboundary Agreement, *supra* note 193, art. 11(1) (“Each Executive Agency shall require its Licensees to enter into a Unit Operating Agreement . . . in accordance with this Agreement.”); *see also id.* arts. 7(4)–(5) (setting forth procedures of when no unitization agreement has been approved at the end of the required period or if any party or licensee fails to sign a unitization agreement); *id.* art. 2 (defining “unit operating agreement” as “an agreement made between the Licensees and the unit operator that, among other things, establishes the rights and obligations of the Licensees and the unit operator including, but not limited to, the allocation costs and liabilities incurred in and benefits derived from operations in the Unit Area”). Unit operating agreements are signed only by the licensees to govern the actual operation of the unit. Weaver & Asmus, *supra* note 33, at 17.

300. 2012 Transboundary Agreement, *supra* note 193, art. 11(2).

301. *Id.* art. 6(2)(c).

302. *Id.* art. 8(1) (requiring this consultation to be initiated at least 60 days prior to the commencement of production).

303. *Id.* art. 7(6).

a different portion of the lease block that may be located at 20,000 feet depth.³⁰⁴ However, according to the definitional terms of the 2012 Transboundary Agreement, for purposes of unitization, each cross-border “reservoir” should be the object of a separate unitization agreement.³⁰⁵ It is currently unclear how this definitional discrepancy will be addressed. We can only speculate whether this issue could present practical problems in crafting future unitization instruments or instead is of primarily theoretical concern. Much will depend on how strictly the parties or third party dispute settlement bodies interpret the requirement for a separate unitization agreement for each reservoir.³⁰⁶ There is no explicit language in the Agreement requiring separate unitization agreements for each reservoir, as opposed to a broader multi-reservoir agreement, nor is there language explaining the specific rights a leaseholder may be entitled to exercise. These ambiguities will need to be examined and addressed as part of any proposed implementing regulations.

The second issue arises on the Mexican side. As mentioned above in Part VI.A above according to the Mexican energy reform legislation and its secondary regulations, the role of the government in administrating the exploitation of hydrocarbons fields is divided between different agencies. On the one hand, the Ministry of Energy is the entity designated to identify the blocks that are to be open for private participation and those that should remain under the control of PEMEX;³⁰⁷ to prepare

304. George Baker, *Panel Presentation on the US-Mexico Transborder Hydrocarbon Agreement*, U.S. ASS'N FOR ENERGY ECON., <http://dialogue.usaee.org/index.php/volume-21-number-1-2013/28-panel-presentation-on-the-us-mexico-transborder-hydrocarbon-agreement> (last visited Feb. 10, 2015).

305. 2012 Transboundary Agreement, *supra* note 193, art. 2 (defining “reservoir” as “a single continuous deposit of Hydrocarbons in a porous and permeable medium, trapped by a structural or stratigraphic feature”). The 2012 Transboundary Agreement also defines a “transboundary unit” as “a single geological Hydrocarbon Structure or Reservoir which extends across the Delimitation Line.” *Id.*

306. This issue is not unique to the 2012 Agreement. One study of eleven sample unitization agreements from different parts of the world found seven were limited to specified reservoirs or depths, two had no depth limitations, and two could not be categorized due to insufficient information. Weaver & Asmus, *supra* note 33, at 75.

307. Ley de Hidrocarburos [Law of Oil], *as amended* Diario Oficial de la Federación, [DO], 11 agosto de 2014 (Mex.), art. 6, *translated in Hydrocarbons Law*, MAYER BROWN, <http://www.mayerbrown.com/files/uploads/Documents/PDFs/2015/January/UPDATE->

the draft contracts that will be assigned to each block (they can be production sharing, profit sharing, licensees or service contracts),³⁰⁸ and to require unitization agreements when the licensees or PEMEX face straddling fields.³⁰⁹ On the other hand it is the National Hydrocarbons Commission that is in charge of preparing the report on the capacities of PEMEX to develop the fields;³¹⁰ on establishing the existence of straddling reservoirs;³¹¹ on designing and executing the bidding process for the blocks;³¹² and most importantly, on signing the contracts with private parties to develop the fields.³¹³ An additional complexity is added by the fact that the Ministry of Finance participates in the determination of the royalties, taxes and other fiscal responsibilities that are to be included in the contracts.³¹⁴ Hence, the complexity of coordination between the three agencies is key in the development of the model contracts that have to be drafted and the contracts that will be approved by the State Agencies according to the 2012 Transboundary Agreement. The position taken by the Mexican State regarding the negotiation of these unitization agreements will depend on the interaction of the three State entities. One cannot make decisions without the other intervening at some stage.

Finally, the National Hydrocarbons Law includes an article on transboundary resources that forces the licensee, once there is a report from the National Hydrocarbons Commission confirming its existence, to “migrate” the contract into an association with PEMEX, where the latter must have at least 20% participation.³¹⁵ This article creates a very complex relationship, because under the 2012 Agreement the company

HydrocarbonsLaw_Translation.pdf (last visited Feb. 22, 2015) [hereinafter National Hydrocarbons Law].

308. *Id.* art. 18.

309. *Id.* art. 42.

310. *Id.* arts. 12, 23.

311. *Id.* art. 17 (stating that the National Hydrocarbons Commissions gives technical assistance to the Ministry of Energy in determining possible cross-border deposits).

312. National Hydrocarbons Law, *supra* note 307, arts. 15, 23.

313. *Id.*

314. *Id.* arts. 13, 24, 29, 30.

315. *Id.* art. 17.

licensed by the Mexican government has then two obligations at hand: under the Agreement it must engage in unitization negotiations with the U.S. licensee on the other side of the border, and at the same time according to Mexican legislation it must sign an association agreement with PEMEX giving at least 20% of participation to the state-owned company. To complicate matters even further, at the same time it must receive the approval from both governments in the terms of the contract, with the risk that if the negotiation fails or if the State representatives reject the unitization agreement, the U.S. party could start operations in the field.

B. When a Unitization Agreement Cannot Be Reached Does International Law Restrict the Ability of the Parties to Still Exploit the Transboundary Resource?

If the States do not approve, approve with modification or reject a proposal for unitization of a specific field, the unitization agreement shall be deemed to be rejected.³¹⁶ The same procedure applies to any amendment to an approved unitization agreement.³¹⁷ Importantly, as previously explained, in the case where a transboundary reservoir exists but a unitization agreement has not been approved, the Agreement stipulates that the parties shall refrain from commencing production during the period in which they are attempting to reach a unitization agreement.³¹⁸

In this circumstance, the parties shall take steps to pursue an agreement requiring its licensee to submit a proposed unitization agreement and associated unit operating agreement.³¹⁹ Moreover the parties shall jointly determine an estimate of the recoverable hydrocarbons in the transboundary reservoir on each side of the delimitation line and jointly determine the allocation of production.³²⁰ If the parties cannot agree on an allocation of

316. 2012 Transboundary Agreement, *supra* note 193, art. 6(4).

317. *Id.* art. 6(5).

318. *Id.* art. 7(1).

319. *Id.* art. 7(2)(a).

320. *Id.* art. 7(2)(b).

recoverable hydrocarbons, the matter shall be referred to binding expert determination.³²¹

The parties have 90 days to approve one of the proposed unitization agreements or an alternate unitization agreement and unit operating agreement.³²² If an agreement cannot be reached by the end of the period, the issue shall be referred to the Joint Commission for its consideration.³²³

In the end, there is no requirement that the parties approve the unitization agreement or unit operating agreement. The 2012 Transboundary Agreement contains a multitude of procedures intended to foster compromise and consensus between the parties. However, it is still possible that an agreement may not be reached. In such a case, the 2012 Transboundary Agreement allows the parties to authorize their licensees to proceed with exploitation of the relevant transboundary reservoir.³²⁴ The authority to exploit is conditioned on the existing determination of the recoverable hydrocarbons, the application any existing plan for joint management of the transboundary reservoir, and the exchange of production data on a monthly basis.³²⁵ Even considering these conditions, the provision allowing either nation to exploit the resource in the absence of a mutually accepted unitization agreement is unique and unlike other transboundary hydrocarbon agreements in effect globally. By contrast, similar treaties governing the development of offshore transboundary reservoirs establish the duty to mutually refrain from exploitation activities until the unitization agreement is executed.

Examples include the recent *Treaty Between the Kingdom of Norway and the Russian Federation Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean*.³²⁶ Under the terms of this agreement, if the parties fail

321. *Id.* arts. 7(3), 16(9).

322. 2012 Transboundary Agreement, *supra* note 193, art. 7(4).

323. *Id.*

324. *Id.* art. 7(5).

325. *Id.*

326. Treaty Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean, Nor.-Russ., Annex II, art. 1(8), Sept.15, 2010, 50 I.L.M. 1113 (stating that parties have an obligation to refrain from permitting production without a

to approve a unitization agreement, they have six months to negotiate a settlement.³²⁷ If the disagreement is not settled within six months either party is entitled to submit the dispute to an ad hoc Arbitral Tribunal whose decision shall be binding on the parties.³²⁸

Another example is Article 21 of annex B of 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*, which requires approval by the Joint Authority before production may begin. The relevant provision reads as follows:

Where a petroleum pool is partly within a contract area and partly within another contract area, but wholly within Area A, the Joint Authority shall require the contractors to enter into a unitization agreement with each other within a reasonable time, as determined by the Joint Authority, for the purpose of securing the more effective and optimized production of petroleum from the pool. If no agreement has been reached within such reasonable time, the Joint Authority shall decide on the unitization agreement. Without limiting the matters to be dealt with, the unitization agreement shall define or contain the approach to define the amount of petroleum in each contract area, the method of producing the petroleum, and shall appoint the contract operator responsible for production of the petroleum covered by the unitization agreement. The Joint Authority shall approve the unitization agreement before approvals under Article 17 of this Petroleum Mining Code are given. Any changes to the unitization agreement shall be subject to approval by the Joint Authority.³²⁹

An additional example is presented in Articles 14 and 15 of the *Agreement Between the Government of the Democratic Republic of the Sudan and the Government of the Kingdom of Saudi Arabia Relating to the Joint Exploitation of the Natural*

jointly-approved unitization agreement).

327. *Id.* art. 3(1).

328. *Id.*

329. Timor Gap Treaty, *supra* note 142, art. 21.

Resources of the Seabed and Subsoil of the Red Sea in the Common Zone, which provides the following:

In the event that any accumulation or deposit of a natural resource extends across the boundary of the exclusive sovereign rights area of either Government and the Common Zone, the Joint Commission shall determine the manner in which it is to be exploited provided that any decision taken shall guarantee for the Government involved an equitable share in the proceeds of the exploitation of such accumulation or deposit.

If a dispute arises respecting the interpretation or implementation of this Agreement or the rights and obligations it creates, the two Governments shall seek to settle such dispute by amicable means. If the settlement of the dispute through amicable means fails, the dispute shall be submitted to the International Court of Justice. The Parties accept the compulsory jurisdiction of the International Court of Justice in this respect. If one of the two Governments takes a measure which is objected to by the other, the objecting Government may ask the International Court of Justice to indicate interim measures to be taken to stop the measure objected to or to allow its continuance pending the final decision.³³⁰

A final illustration is presented in the transboundary unitization agreement between Norway and the United Kingdom in the Frigg Field Reservoir.³³¹ Article 2(3) addresses the issue of what should occur if the field is ready for production but the two national parties have not yet agreed on apportionment or other factors. Rather than delay the flow of revenues, pending agreement, production is to proceed on the provisional basis of the licensees' proposal on apportionment or on the basis of equal shares.³³² If the Governments fail to agree then the matter is referred to the dispute settlement procedures, which include a

330. Agreement Relating to the Joint Exploitation of the Natural Resources of the Sea-Bed and Subsoil of the Red Sea in the Common Zone, Saudi Arabia-Sudan, arts. XIV, XVI, May 16, 1974, 952 U.N.T.S. 197.

331. UK-Norway Agreement, *supra* note 252, art. 2(3).

332. *Id.*

Conciliation Board whose decisions are binding on the parties.³³³ Under these provisions, while production can move forward even without agreement on apportionment or other matters, it must be done pursuant to provisional shared production and compulsory third party dispute settlement.

None of these selected treaties authorizes the parties to proceed with unilateral exploitation of transboundary reservoirs in case a dispute arises. In all of the examples, if a unitization agreement cannot be agreed upon, the parties submit the dispute to some form of compulsory third party dispute settlement body for final decision. In light of these illustrations of existing State practice and given the unique features of the 2012 Transboundary Agreement regarding the possible unilateral exploitation of a shared transboundary resource, we now turn to consider whether the 2012 Transboundary Agreement could give rise to practices that are inconsistent with international law.

C. Is the 2012 Transboundary Agreement Inconsistency with International Law?

The process of negotiating and signing an international agreement encompasses an intricate balancing of legal, technical, diplomatic, strategic and political considerations. Some combination of these factors caused the United States and Mexico to include paragraph 5 of Article 7 in the Agreement, which allows either nation to proceed with exploitation activities in case a unitization agreement cannot be reached.

It is well established in international customary law that nations have an obligation to prevent activities that may cause damage to the legitimate rights and interests of other States.³³⁴ Thus, as previously discussed, in the international arena the so-called rule of capture has been rejected as both wasteful and inequitable.³³⁵ Instead, international law recognizes that neighboring States sharing transboundary hydrocarbon resources

333. *Id.* art. 28(2).

334. Zhiguo, *supra* note 104; *see also* Stockholm Declaration, *supra* note 276, Principle 7 (indicating that States “shall take all possible steps to prevent pollution of the seas” that interferes with other legitimate uses of the sea).

335. *See supra* Part III.B (discussing the rule of capture); *see also* McLaughlin, *supra* note 7, at 9 (explaining why international law has rejected the rule of capture).

have the duty to negotiate in good faith to attempt to adopt certain cooperative mechanisms to jointly develop such reservoirs.³³⁶ In the absence of such an agreement, there is a generally recognized obligation to exercise mutual restraint with respect to the unilateral exploitation of the resources³³⁷ in order to preserve the unity of the deposit and ensure its efficient exploitation.³³⁸

In summary, the principles of international law concerning the exploration and exploitation of transboundary hydrocarbon reservoirs, as applicable to the 2012 Transboundary Agreement, can be summarized as: 1) the parties have the duty to notify, inform and consult regarding any activities in the delimitation area; 2) the parties have the duty to negotiate in good faith some sort of joint mechanism to develop the reservoir, preserving the unity of the deposit; and 3) in case a unitization agreement or other acceptable method cannot be reached, the parties have the duty to refrain from unilaterally exploiting the transboundary reservoir to the detriment of the sharing party.³³⁹

While the 2012 Transboundary Agreement seems clearly to conform with the first two principles of international law stated above, the specific provision that allows the parties to authorize its licensees to proceed with unilateral exploitation of a transboundary reservoir if a unitization agreement cannot be reached goes beyond what is traditionally observed in international treaties and requires careful analysis.

It is well established that nations such as the United States and Mexico may supersede an international customary rule through an inconsistent bilateral agreement such as the 2012

336. *See supra* Part III.D (discussing how international law is moving toward recognizing a duty of States to cooperate in the development of shared natural resources).

337. Ong, *supra* note 25, at 802.

338. *See supra* Part III (describing the intricate balance of the physical and geological characteristics of a reservoir, which determines the development plan for the optimal recovery of hydrocarbons); *see also* N. Sea Continental Shelf, 1969 I.C.J. at 81 (Jessup, J., concurring).

339. *See supra* Part III.D (discussing that the established international norm does not limit parties that share a transboundary hydrocarbon reservoir to engage in only certain types of joint exploitation, such as unitization, but rather they must elect a method which cannot be done to the detriment of the sharing party).

Transboundary Agreement.³⁴⁰ Because the agreement to exploit a transboundary reservoir in the absence of an approved joint unitization agreement is bilateral and will not damage a third party nation, Mexico and the United States should be entitled to override the customary rule and exploit the resource as each nation sees fit.³⁴¹ However, this finding assumes that each nation as well as their respective licensees are fully satisfied with how the neighboring nation interprets and implements the 2012 Agreement. If the neighboring nation objects to unilateral exploitation of a transboundary field, could that nation rely on international customary law to challenge the implementation of the 2012 Agreement?³⁴²

The starting point for determining the precise parameters of an international agreement's obligation is the exact wording of the agreement.³⁴³ The 2012 Transboundary Agreement contains a complex series of procedures intended to encourage bilateral consensus and compromise. Of special importance is the provision that provides authority for either party to proceed with exploitation in the absence of a unitization agreement. Article 7 (5) reads:

Should any party or licensee fail to sign a unitization agreement or unit operating agreement, as applicable, approved by the executive agencies or the joint commission within 60 days of its approval, or should the executive agencies or the joint commission fail to approve a unitization agreement and an associated unit

340. RESTATEMENT (THIRD), *supra* note 66, § 102 cmt. j (“Unless the parties evince a contrary intention, a rule established by agreement supersedes for them a prior inconsistent rule of customary international law.”).

341. Vienna Convention of 1969, *supra* note 214, art. 34 (“A treaty does not create either obligations or rights for a third state without its consent.”).

342. The issue may also be relevant if the transboundary field is located along the maritime boundary in the Western Gap region beyond national jurisdiction. Unlike Mexico, because the United States is not a party to UNCLOS and has not submitted its extended continental shelf claim to the Commission on the Limits of the Continental Shelf for review, it will not gain the sanctity and legitimization yielded by a positive recommendation by this body. The full legal ramifications of this scenario are unclear, but it is likely that the U.S. and Mexican governments, along with any associated private sector lessees, are subject to a less stable and riskier legal environment in the Western Gap, than elsewhere in the GOM.

343. Vienna Convention of 1969, *supra* note 214, art. 31.

operating agreement, each party may authorize its licensee to proceed with exploitation of the relevant transboundary reservoir subject to the determination of the recoverable hydrocarbons pursuant to paragraph 2 subparagraph b or paragraph 3 of this article and any plan for joint management of the transboundary reservoir, including any provisions agreed governing redetermination and metering, as may be agreed between the parties. Such plan may contain provisions for the resolution of disputes pursuant to article 16. In the event of such exploitation, parties will exchange production data on a monthly basis.³⁴⁴

In short, pursuant to this provision, if a unitization agreement cannot be reached, but there is a determination that a transboundary reservoir exists, each party *may* authorize: a) its licensee to proceed with exploitation subject to the previously agreed upon allocation of production *and*; b) any plan for joint management of the transboundary reservoir.

It is particularly relevant here to interpret the wording of Article 7 (5) to grasp the full extent and legal effects of this provision. It is significant to note that it uses the modal verb “may.” As a result, the parties may authorize their licensees to proceed with exploitation or they may not choose to do so. It may seem obvious, but it emphasizes that it is a discretionary power of the parties to authorize exploitation.

It is also important to recollect that the parties are bound by two sets of international legal frameworks: the first set is comprised of established norms of public international law, and the second by the terms of the 2012 Transboundary Agreement itself. In this context, the Agreement must be interpreted in line with, and supplemented by, recognized international principles applied to the exploration and exploitation of transboundary hydrocarbon reservoirs.³⁴⁵

344. 2012 Transboundary Agreement, *supra* note 193, art. 7(5).

345. RESTATEMENT (THIRD), *supra* note 66, § 102 n.4 (“A subsequent agreement will prevail over prior custom, except where the principle of customary law has the character of *jus cogens*, *but an agreement is ordinarily presumed to supplement rather than to replace a customary rule.*”) (emphasis added).

Consequently, Article 7 (5) of the 2012 Agreement should be interpreted as it was written: the parties have the discretionary power to authorize exploitation, even if a unitization agreement cannot be reached, inasmuch as they deem appropriate and if the result of such activity will not “cause damage to the legitimate rights and interests” of other sovereign nations, otherwise it would seem that the 2012 Agreement endorses the rule of capture, prohibited by international law.³⁴⁶

Another significant point concerning the wording of Article 7 (5) is the fact that, by using the connective “and” (“each Party may authorize its Licensee to proceed with Exploitation . . . and any plan for joint management of the Transboundary Reservoir”)³⁴⁷ it conditioned the authorization to proceed with exploitation on the approval of a joint management plan. It is not authorizing one exploitation or the other plan. Instead, if the party authorizes the exploitation, it must authorize the joint management plan as well. This interpretation is in line with the plain meaning and principles governing the 2012 Transboundary Agreement, safe, efficient, and equitable exploitation of transboundary maritime reservoirs. Moreover, such a plan shall be subsumed to the determination made by the parties or by the binding determination by an expert on the estimate of the recoverable hydrocarbons in the transboundary reservoir on each side of the delimitation line and the allocation of production.³⁴⁸

346. UNCLOS, *supra* note 25, arts. 77(1)–(2) (rejecting the rule of capture, signatories agreed not to allow exploitation of the natural resources in a coastal state’s continental shelf zone without the state’s permission, even if the state itself does not explore for or produce the recoverable resources).

347. 2012 Transboundary Agreement, *supra* note 193, art. 7(5).

348. If a unitization agreement has not been approved, the 2012 Transboundary Agreement article 7, paragraphs 2 and 3 provide the following:

- [2]a. Each Party shall require its Licensee, within 60 days, to submit a proposed unitization agreement and associated Unit Operating Agreement to each Executive Agency; and
 - [2]b. The Executive Agencies shall, within 30 days, jointly determine an estimate of the recoverable Hydrocarbons in the Transboundary Reservoir, under the original conditions of such Reservoir, on each side of the Delimitation Line, and jointly determine the associated allocation of production.
3. If the Executive Agencies are unable to reach the determination set out in paragraph 2 subparagraph b of this Article, such determination shall be

In light of these conditions, the right of each party to authorize exploitation of a transboundary reservoir must be interpreted and exercised preserving the rights and interests of the other nation in such a manner as to protect the resources of both parties, to maximize the long-term benefits from their exploitation, and to allocate production accordingly. In practical terms, a party may not authorize its licensees to proceed with exploitation of a transboundary reservoir if both parties or a binding third-party expert determination has not approved a detailed development plan for the exploration and exploitation of the unit area, including the estimated number and timing of wells and a mechanism for delivery and approval of subsequent changes to such plan.³⁴⁹ This plan, based on technical criteria, determines the optimal strategy to develop the shared reservoir. If it is decided unilaterally, the other party could allege the neighboring nation damaged the unity of the deposit, thereby violating established international legal principles.

Lastly, Article 7 (5) establishes the duty to exchange production data on a monthly basis. By no means do the terms of the Agreement support the rule of capture. Rather, they establish a comprehensive process in which the parties may proceed to reach an agreement regarding unitization. In case an agreement is not reached and exploitation is authorized, the Agreement must be interpreted in line with international principles mandating production in a safe, efficient, equitable and environmentally responsible manner. The provisions allowing each nation to authorize its licensees to proceed with exploitation in the absence of a unitization agreement were undoubtedly intended to accommodate domestic political interests in each nation. However, in reality, the parties will still need to cooperate and abide by the determinations of jointly selected

referred to Expert Determination.

2012 Transboundary Agreement, *supra* note 193, art. 7(2)–(3). In addition, article 16, paragraph 9 states that this determination “shall be final and binding on the parties.” *Id.* art. 16(9).

349. *See id.* art. 6(2) (listing these and other details that must be included in the licensee’s proposed unitization agreements and allocation of production plans submitted to the executive agencies or subject to binding Expert Determination under article 7, paras. 2–3).

experts on technical issues if either seeks to produce hydrocarbons from a transboundary reservoir in the delimitation area. Consequently, the Agreement seems to be in conformance with established international legal principles relating to the exploitation of transboundary hydrocarbon resources.

VIII. CONCLUSION

This Article has examined the large and varied sources of international law including UNCLOS,³⁵⁰ customary international law,³⁵¹ the decisions of international tribunals,³⁵² existing joint exploitation agreements,³⁵³ and U.S./Mexico bilateral practice on transboundary resources³⁵⁴ to better understand the international legal implications associated with developing hydrocarbon resources in the maritime boundary region of the GOM. From all of these sources taken together, it can be inferred that the progressive development of international customary law establishes an obligation to cooperate in reaching agreement on the exploration and exploitation of transboundary deposits pending delimitation of the maritime boundary between adjacent or opposing States, but is less clear where there is a delimited maritime boundary. In situations, such as those that exist along the established maritime boundary between the United States and Mexico in the GOM, the parties have a duty to negotiate in good faith to attempt to adopt certain cooperative mechanisms to jointly develop shared reservoirs and an obligation to exercise mutual restraint with respect to the unilateral exploitation of the resources in order to preserve the unity of deposit.³⁵⁵ Existing international law also emphasizes the need to exploit shared resources in the most “efficient” way, and treating the reservoir as one unit achieves that goal. Furthermore, bilateral practice of these two nations has shown that in order to achieve the above-mentioned principles when facing common pool resources, they

350. *See supra* Part III.B.

351. *See supra* Part III.D.

352. *Id.*

353. *See supra* Part III.E.

354. *See supra* Part IV.

355. *See supra* Part III.D.

have relied on the creation of binational commissions. These commissions tend to include technical experts, with a level of independence, and with enough powers to determine the most effective way for developing the resources. The most pertinent example of such a commission is the International Waters and Boundaries Commission that has operated since 1944 with high levels of effectiveness considering the disparity of influence and power between both nations. When this commission was created, Mexico and the United States were innovating and setting a new standard in international practice; in the case of the relatively weak commission created by the 2012 Transboundary Agreement one can only conclude that it is the opposite.

We have also examined the landmark 2012 Transboundary Hydrocarbon Agreement between the United States and Mexico and whether the provisions in the Agreement that allow the parties to unilaterally exploit transboundary reservoirs in the absence of an approved unitization agreement are compatible with existing principles of international law. A provision allowing unilateral exploitation of transboundary reserves and without referral to an authoritative dispute settlement mechanism diverges from international practice as guided by international law; every international transboundary hydrocarbon agreement that we have studied requires the parties to submit the dispute to some form of compulsory third party dispute settlement body for final determination. After analyzing the relevant provisions in detail, including the preambular language of the Agreement, we conclude that a party may not authorize its licensees to proceed with exploitation of a transboundary reservoir in the absence of a detailed development plan that has been approved by both parties. This plan is based on technical criteria and determines the optimal strategy to develop the shared reservoir. If it is decided unilaterally, the other party could allege the neighboring nation damaged the unity of the deposit, thereby violating established international legal principles. The requirement that a joint development plan be in place before unilateral exploitation is allowed, coupled with mandatory exchange of production data on a monthly basis, signifies that the parties intended that the process fall in line with established international principles mandating production in a safe, efficient, equitable, and environmentally responsible manner.

Article 7 (5), which allows each nation to proceed with unilateral exploitation in the absence of a unitization agreement was undoubtedly influenced by perceived negative domestic political considerations attached to any international legal document that would allow another nation or third-party arbitrator to decide when and how resources would be exploited within each nation's territory. These considerations, while understandable, do not obviate the need of both nations to cooperate and implement the 2012 Transboundary Agreement so that it conforms with established international legal principles. There is every reason to believe that whether a particular transboundary reservoir is developed through an approved unitization agreement or in the absence of one, that all work will comply with internationally accepted norms.

All of the above elements might also be a consequence of the negotiating realities that the diplomats at the time faced. It seems that the negotiating parties were working under the assumption that the Mexican legal regime that maintained a monopoly on PEMEX in exploiting hydrocarbons in the Mexican side of the GOM at the time would not be changing in the short run. Therefore, the parties were reluctant to establish a provision that would halt production until a final unitization agreement would have been reached (as the international practice requires), forcing foreign companies to sign an agreement with what was presumed to be an inadequate partner at that time, PEMEX. It is important to remember that the negotiations of the Agreement began in 2000 and ended in 2012. During that period, the Mexican legal regime and the political atmosphere in Mexico gave no impression of a broad opening in the years to come. Nevertheless, Mexico's energy reforms that were adopted in 2014 present a dramatic turn of events: they open up the energy sector to private investment. One can speculate that if the energy reforms had been adopted before the end of the 2012 Transboundary Agreement negotiations, the provisions in the agreement would have been different: at least the fears that the U.S. licensee would have to negotiate only with PEMEX would have been off the table. It is now up to a Joint Commission, that is atypical under international standards, and the governmental authorities designated by the States to give life to an international instrument that was signed under a different

scenario and set of assumptions, and to make it efficient for the benefit of both nations. The level of political maturity from both sides in designating their representatives, and the level of communications between both governments will be essential in order to secure an effective regime. For the reasons stated in this Article, the regime is complex enough as it is. If politics override technological and science-based decisions, the development of the regime will be in danger with the risk that both nations will lose the chance to benefit from the extraordinary resources of the region.