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INTERNATIONAL LAW AND THE USE OF MARITIME HYDROCARBON RESOURCES

THEME PAPER

For the IFRI/CIEP project for TF3 IGU



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TABLE OF CONTENTS

| | |
|---|-----------|
| Foreword | 4 |
| Introduction | 5 |
| Law of the Sea | 5 |
| Disputes related to maritime delimitation..... | 9 |
| Disputes related to the use of transboundary maritime hydrocarbon resources..... | 10 |
| Disputes related to transboundary damage resulting from the use of maritime hydrocarbon resources | 13 |
| Conclusion | 14 |

FOREWORD

In the “New Dimensions of Geopolitics and Natural Gas”, both opportunities for and hindrances to the development of the natural gas business are emphasised, in the context of new geopolitical realities. Sometimes opportunities and hindrances have regional or local origins, while other times wider geopolitical issues play a role. Opportunities arise from settling potential disputes over cross-border deposits in an amicable manner, while also in situations where disputes have already flared up remedies can be found on political or legal grounds. In this topical paper the focus is on remedies offered by international law regarding maritime hydrocarbon resources.

Currently, disputes among coastal states about sovereignty over maritime hydrocarbon resources in the South China Sea, the East China Sea, and the Eastern Mediterranean Sea regularly feature in news headlines. In the Persian/Arabian Gulf as well, delimitation issues remain outstanding. But also in other areas, delimitations of exclusive economic zones have had to be settled before the expansion of offshore production could ensue. International law often offers solutions to coastal states, but sometimes countries do not accept the outcome for historic or geopolitical reasons and/or refuse to go to arbitration. In these situations other solutions are often found, such as joint production. The agreement between Norway and Russia is an example of a bilateral agreement in which two states settled their dispute amicably and opened up the potential for hydrocarbon exploitation in the previously contested area. Other examples attest to similar conflict resolution successes among states that wish to embrace their offshore hydrocarbon potential.

In some cases wider geopolitical and economic interests get in the way of finding a workable solution. The attempts of the coastal states of the South China Sea to come to a multilateral solution has so far not been embraced by China; China prefers bilateral agreements with individual states. The asymmetry in strategic and economic power between China and the other coastal states may play a role in this.

Although outstanding disputes over maritime hydrocarbon exploitation are often analysed within their geopolitical context, it is important to also look at the potential solutions that can be achieved through international law. Together with the other topical papers, this paper offers a wider perspective on the context of the international gas business.

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INTRODUCTION

International law offers various instruments for dealing with situations in which a hydrocarbon deposit lies across a maritime border or lies in a maritime area that is contested by the relevant coastal states. This paper explores the rights and obligations of coastal states in relation to hydrocarbon deposits that lie in their shared maritime areas. It also elaborates on the international legal mechanisms that coastal states have at their disposal when conflicting views exist among them as to the ownership of the field or the means of development – either independent or joint – of the hydrocarbon deposit.

LAW OF THE SEA

1. Coastal states have sovereign rights over hydrocarbon resources in maritime areas that are adjacent to their coasts. They are entitled to adopt and implement domestic regulations to enable the use of hydrocarbon resources found in these areas. This entitlement to exercise jurisdiction in prescribing and enforcing regulations is subject to compliance with international commitments, in particular the Law of the Sea.¹ These international commitments differ according to the categorisation of the maritime areas.

2. Under the Law of the Sea, the following maritime areas are relevant with regard to the use of hydrocarbon resources: internal waters, territorial sea, contiguous zone, exclusive economic zone, continental shelf and extended continental shelf (see figure 1 below). These areas are defined in reference to a baseline, which follows the low-water line along the coast, with specific rules for drawing straight baselines where the coastline is indented or where there is a fringe of islands along the coastline.

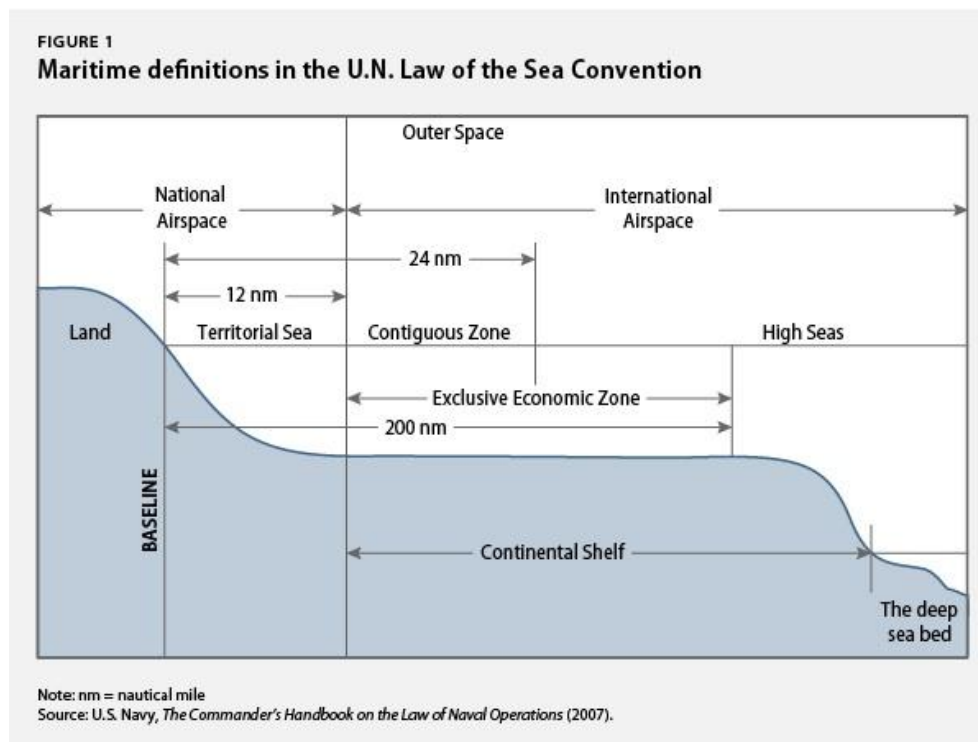
- *Internal waters.* These waters are situated landward of the baseline and are part of the land area of the coastal state.
- *Territorial sea.* This maritime area, including the seabed and the water column, is situated seaward of the baseline at a maximum of 12 nautical miles from the baseline. The coastal state does not have to claim its territorial sea, but it must establish the outer limit.
- *Contiguous zone.* This maritime area, including the seabed and the water column, is situated seaward of the baseline beyond the territorial sea at a maximum of 24 nautical miles from the baseline. The coastal state must claim a contiguous zone and establish its outer limit.
- *Exclusive economic zone.* This maritime area, including the seabed and the water column, is situated seaward of the baseline beyond the territorial sea at a maximum of 200 nautical miles from the baseline. The coastal state must claim an exclusive economic zone and establish its outer limit.
- *Continental shelf.* This maritime area consists of only the seabed and is situated seaward of the baseline beyond the territorial sea at a maximum of 200 nautical miles from the baseline. The coastal state does not need to claim its continental shelf. Even if a coastal state does not

¹ <http://www.unlawoftheseatreaty.org/>

claim an exclusive economic zone, the seabed adjacent to the land belongs to the coastal state irrespective of the geological features of the seabed. Since hydrocarbon resources are part of the seabed and, hence, the continental shelf, a coastal state does not need to claim an exclusive economic zone to ascertain its rights with respect to these resources.

- *Extended continental shelf.* This maritime area consists of the seabed beyond 200 nautical miles from the baseline. A coastal state is entitled to an extended continental shelf only if the geological features of the seabed qualify as a continental shelf. The coastal state must claim an extended continental shelf and can establish its outer limits only upon the recommendation of the Commission on the Limits of the Continental Shelf (CLCS). The CLCS was established in 1982 by the Third United Nations Convention on the Law of the Sea (UNCLOS III).

Figure 1 Maritime definitions



Source: <https://www.americanprogress.org/issues/china/news/2012/06/12/11698/chinas-rise-is-a-big-reason-to-ratify-the-law-of-the-sea-convention/>

3. The coastal state has exclusive rights over hydrocarbon resources in the maritime areas identified above and may exercise jurisdiction to use such resources, but in doing so must respect the rights other states enjoy in these areas.

- *Internal waters.* The Law of the Sea does not govern the use of these waters. The use of hydrocarbon resources found in these waters is subject to all international commitments incumbent on the coastal state concerned beyond the Law of the Sea, including such obligations related to the performance of an environmental impact assessment before permission can be granted to use those resources.

- *Territorial sea.* The use of hydrocarbon resources found in this area is subject to the Law of the Sea and any other international commitments of the coastal state concerned. In the territorial sea, other states enjoy certain rights, in particular navigational rights.
- *Contiguous zone.* Coastal states are allowed to regulate the removal of archaeological and historical objects from this area. Such regulations may affect the use of hydrocarbon resources. This maritime area is not relevant for the use of hydrocarbon resources in other respects.
- *Exclusive economic zone.* The use of hydrocarbon resources found in this area is subject to the Law of the Sea and all other international commitments of the coastal state concerned. Within exclusive economic zones, other states have rights, including navigational rights and the right to lay submarine cables and pipelines. Under the UNESCO Convention on the Protection of the Underwater Cultural Heritage, coastal states are responsible for the protection of such heritage in their exclusive economic zones. In exercising this responsibility they make take measures that affect the use of hydrocarbon resources.
- *Continental shelf.* The use of hydrocarbon resources found in this area is subject to the Law of the Sea and all other international commitments of the coastal state concerned. Other states have rights here, including the right to lay submarine cables and pipelines. The UNESCO Convention also applies to the continental shelf.
- *Extended continental shelf.* The use of hydrocarbon resources found in this area is subject to the Law of the Sea and all other international commitments of the coastal state concerned. Within the extended continental shelf, other states have rights under the Law of the Sea, including the right to lay submarine cables and pipelines. Furthermore, the coastal state must make a payment or contribution in kind for the use of these hydrocarbon resources. The rate is set in UNCLOS: 1 to 7 percent of the value or volume of production, depending on the year of production. The payments or contributions shall be made through the International Seabed Authority (ISA) to the states party to UNCLOS. The criteria for distribution have not yet been established by ISA.

4. The establishment of the outer limits of maritime areas by a coastal state seaward of its baseline is subject to the rights of opposite and adjacent states.

- In the event of overlapping claims, states must negotiate a maritime delimitation agreement or resort to a third party, such as an international court or tribunal, to effect the delimitation. Although many maritime boundaries have been delimited by agreement, others are the subject of disputes between coastal states, including certain maritime boundaries in the Arctic Ocean, the Eastern Mediterranean and the South China Sea.
- In the event of overlapping claims and in the absence of a maritime delimitation agreement, a coastal state may unilaterally establish the outer limits of its maritime areas pending delimitation.

On 6 May 2009, Vietnam and Malaysia both claimed an extended continental shelf in the South China Sea by means of a joint submission to the Commission on the Limits of the Continental Shelf (CLCS).¹ This submission was soon followed by a formal response from China, objecting to the joint submission and claiming 'indisputable sovereignty over the islands in the South China Sea'. The Philippines also objected to the joint submission, referring to the 'controversy arising from the territorial claims on some of the islands in the area'. China and the Philippines likewise objected to Vietnam's submission of 7 May 2009, which claimed an extended continental shelf in another area of the South China Sea. Pursuant to its Rules of Procedure, this dispute prevents the CLCS from considering the submissions before the dispute is resolved, unless consent is given by all states party to the dispute pending the dispute's resolution.¹

On 15 December 2014, Denmark submitted a claim to the CLCS with respect to the Northern continental shelf of Greenland.¹ This submission followed submissions by Russia (20 December 2001) and Norway (27 November 2006) with respect to an extended continental shelf in the Arctic Ocean as well as a claim by Denmark (26 November 2013) with respect to the North-Eastern continental shelf of Greenland.¹ These claims partially overlap and may overlap further with the potential claim of Canada. Canada has not yet made a submission with respect to an extended continental shelf in the Arctic Ocean, and the US cannot make a submission to the CLCS as long as it is not party to UNCLOS. The US and Canada have a maritime dispute that may result in overlapping claims to an extended continental shelf. To date, of all of these submissions, the CLCS has only made substantive recommendations on the submission made by Norway.

5. There are rules to unilaterally establish or delimit by agreement opposite and lateral maritime boundaries. Although equidistance is an important factor, it is not decisive and not even necessarily the point of departure.

- *Territorial sea.* A coastal state may unilaterally establish the boundaries of its territorial sea on the basis of equidistance, unless an historic title or other special circumstance requires the use of a different delimitation method.
- *Contiguous zone.* There are no established rules for the delimitation of this maritime area. Overlapping claims may even coexist. An exception is the regulation of the removal of archaeological and historical objects from this area, as without this the simultaneous exercise of jurisdiction prescribed and enforced by two or more states could lead to disputes.
- *Exclusive economic zone, continental shelf and extended continental shelf.* There are no established rules for the unilateral establishment of these maritime areas. Coastal states are obliged to negotiate in good faith, with the aim of achieving a maritime delimitation agreement. Equity is the dominant factor. This means that the coastal states concerned have to balance all relevant factors, including equidistance, configuration of the coastline, islands, historic titles and other special circumstances. However, this obligation to negotiate in good faith does not mean that states have to accept any result or that a delimitation will be agreed upon.

DISPUTES RELATED TO MARITIME DELIMITATION

6. In the event of overlapping maritime claims that cannot be delimited by agreement, the coastal states concerned may agree to submit the dispute to an international court or tribunal on an ad-hoc basis. However, one state cannot submit the dispute to an international court or tribunal without the consent of another state, unless both states have accepted the same mechanism for the compulsory settlement of disputes in a multilateral or bilateral convention. The appropriateness of such a mechanism must be verified on a case-by-case basis, and any such verification should include the following mechanisms:

- *UNCLOS*. Pursuant to this Convention, states may declare a preference for the submission of disputes to the International Tribunal for the Law of the Sea (ITLOS), the International Court of Justice (ICJ) or an arbitral tribunal constituted under UNCLOS; if states have not accepted the same institution or have not indicated a preference, an arbitral tribunal is competent to settle the dispute. No consent is required beyond a state's expression of its consent to be bound by UNCLOS. However, a state may opt out of this mechanism with respect to maritime boundaries.
- *Statute of the ICJ*. This statute is annexed to the Charter of the United Nations and enables states to accept the compulsory jurisdiction of the ICJ. As of 1 September 2014, 70 states have accepted the compulsory jurisdiction of the ICJ. A state must opt in to this mechanism and may limit the scope of its acceptance of the Court's jurisdiction by means of a declaration. Hence, it may exclude disputes with respect to maritime boundaries or the use of maritime hydrocarbon resources. Several states have done so, including Australia, New Zealand and the Philippines.
- *Regional conventions*. In addition, a state's acceptance of a mechanism for the compulsory settlement of disputes may originate in its adherence to a regional convention, such as the American Treaty on Pacific Settlement (Pact of Bogotá) or the European Convention for the Peaceful Settlement of Disputes. Such conventions may provide for the submission of disputes to the ICJ and/or arbitration. It must be verified on a case-by-case basis whether a state has accepted a specific mechanism and whether any reservations apply.

7. Numerous disputes related to the delimitation of maritime boundaries have been submitted to the ITLOS, the ICJ and arbitral tribunals. In the cases where the court or tribunal found that it had jurisdiction, it established the maritime boundary or provided guidance to the states concerned in establishing the maritime boundary through negotiations.

The first decision of the ICJ on maritime delimitation concerned disputes between Denmark and Germany, and the Netherlands and Germany, with respect to their shared continental shelf in the North Sea (1969). Other ICJ decisions on maritime delimitation include disputes between Tunisia and Libya (1982), Canada and the United States (1984), Malta and Libya (1985), Denmark and Norway (1993), Qatar and Bahrain (2001), Cameroon and Nigeria (2002), Nicaragua and Honduras (2007), Romania and Ukraine (2009), Nicaragua and Colombia (2012), and Chile and Peru (2014). Currently pending before the ICJ are maritime delimitation disputes between Nicaragua and Colombia, Costa Rica and Nicaragua, and Somalia and Kenya.¹

The first and only decision by the ITLOS on maritime delimitation was related to a dispute between Bangladesh and Myanmar (2012). Currently pending before the ITLOS is a maritime delimitation dispute between Ghana and Ivory Coast.¹

Decisions by arbitral tribunals on maritime delimitation include disputes between Eritrea and Yemen (1999), Barbados and Trinidad & Tobago (2006), Guyana and Suriname (2007), and Bangladesh and India (2014). Currently pending before an arbitral tribunal is a maritime delimitation dispute between Croatia and Slovenia.¹

DISPUTES RELATED TO THE USE OF TRANSBOUNDARY MARITIME HYDROCARBON RESOURCES

8. A transboundary resource is a resource for which two or more states have either recognised rights or asserted claims. In the first case, the resource straddles an agreed upon boundary. In the second case, the resource is situated in area that is claimed by two or more states. Due to their chemical composition – either gaseous or liquid – the extraction of hydrocarbons from a transboundary resource by one state necessarily affects the rights of other states.

9. All attempts to codify and develop rules governing the use of transboundary hydrocarbon resources at the global level met with resistance in the United Nations and were abandoned.² The majority of states have been of the view that transboundary oil and gas issues are essentially bilateral in nature as well as highly political and technical involving different situations. Accordingly, the exploitation of transboundary hydrocarbon resources is currently not subject to universally applicable rules of international law. Yet, albeit with due caution, some general notions may provide guidance in this area.

- *Community of interest.* International courts and tribunals have recognised the existence of a community of interest surrounding the use of transboundary natural resources, particularly in international watercourses. Although unilateral use of such resources is permitted, such use must take into account the interests of all states that have a legitimate interest in the resource. In general, a state is required (1) to utilise the resource equitably and reasonably and (2) to prevent and abate significant transboundary harm. In addition, a state is subject to

² See International Law Commission, Report of the Work of its Sixty-Second Session, UN Doc. A/65/10, para. 382.

a number of procedural obligations, including the obligation to notify, inform and consult other states on the use of the resource. States are also required to cooperate on the use of the resource.

- *Rule of capture.* Since the community-of-interest doctrine has not been applied to transboundary mineral resources, a state does not necessarily commit a wrongful act if it authorises the use of the resource on its side of the border without the prior consent of the other state(s) where the resource is situated. In the case of extraction of solid minerals, the application of the rule of capture does not affect the rights of other state(s). In the case of the extraction of hydrocarbons, such rights are affected when the level of extraction does not correspond with an equitable apportionment.
- *Joint development.* Instead of making unilateral use of a transboundary resource under the community-of-interest doctrine or the rule of capture, states may also agree to develop the resource jointly. States must then agree on specific arrangements governing the use of the resource, including apportionment, management and dispute settlement.

While the original idea of joint development seems to date back to the 1930s, when studies and judicial cases on joint petroleum development first appeared in the US, current ideas of joint development of offshore oil and gas date back to the judgment of the ICJ in the North Sea Continental Shelf Cases of 1969, in which the Court referred to the possibility of parties deciding on 'a régime of joint jurisdiction, user, or exploitation for the zones of overlap or any part of them'.¹

10. In the absence of an agreed upon maritime boundary, the states concerned cannot unilaterally use a transboundary resource without risking a conflict. If the states concerned recognise that overlapping maritime claims exist and wish to use the resource pending delimitation of the maritime boundary, they can arrange for the joint development and sharing of the resource in agreed proportions. They may also decide to refrain from delimiting a maritime boundary and, instead, designate an area for the joint development of resources identified in that area.

UNCLOS encourages coastal states to enter into provisional arrangements of a practical nature pending delimitation of their exclusive economic zones and/or continental shelves (Articles 74.3 and 83.3).

The first such joint development area was established in the Yellow Sea pursuant to the 1974 Agreement between Japan and South Korea Concerning Joint Development of the Southern Part of the Continental Shelf Adjacent to the Two Countries (Article 3 and Annex II).

11. If a hydrocarbon resource straddles an agreed upon maritime boundary, each state concerned has sovereign rights and a legitimate interest in its use. Numerous maritime delimitation agreements acknowledge the existence of such resources but have addressed it in various ways.

- *Unity-of-deposit clause.* In a maritime delimitation agreement, states may wish to protect the unity of any transboundary resources identified under the agreement in order to prevent competitive exploration and exploitation through unity-of-deposit clauses. Such clauses typically require states, upon the identification of a transboundary resource, to consult on its development and apportionment. Such clauses may be accompanied by a provision prohibiting the unilateral use of the resource without the prior consent of the other state(s).

The first time a unity-of-deposit clause was included was in the 1965 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, which requires the parties, with respect to straddling deposits, to 'seek to reach agreement' on the 'manner in which the ... field shall be most effectively exploited' and on the 'manner in which the proceeds ... shall be apportioned' (Article 4). Since then, similar clauses have appeared in numerous treaties. A recent example in the Mediterranean Sea is the 2010 Agreement Between the Government of the State of Israel and the Government of the Republic of Cyprus on the Delimitation of the Exclusive Economic Zone.

- *Framework establishing principles for the use of transboundary deposits.* In a maritime delimitation agreement, states may agree on the principles governing the use of transboundary resources identified under the agreement. Such principles may prohibit unilateral use without the prior consent of the other state(s) and the provision for equitable apportionment.

The first time such a framework was established was in 2005 with the Framework Agreement Between the UK and Norway Concerning Cross-Boundary Petroleum Cooperation. Recent examples include the 2010 Treaty between the Kingdom of Norway and the Russian Federation Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean and the 2012 Agreement Between the United States of America and the United Mexican States Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico.

- *Joint development of transboundary deposits.* In a maritime delimitation agreement, states may agree to jointly develop transboundary resources or the resources in a defined area, as identified in the agreement.

The 1974 Convention Between France and Spain on the Delimitation of the Continental Shelf in the Bay of Biscay delimits the continental shelf boundary but designates an area extending on both sides of the boundary which is subject to a joint mechanism that encourages exploitation 'conducive to equal distribution of its resources'.

12. Irrespective of whether a delimitation agreement addresses transboundary hydrocarbon resources, following the identification of such a resource the states concerned must conclude a specific agreement for its use (also known as unitisation agreements). Such agreements need to contain the terms for the development of a specific resource, such as apportionment of the benefits, management of the resource including delegation of certain powers to licensee holders, and settlement of disputes.

13. The principles above are likewise applicable when a state wishes to use a transboundary resource for the injection of carbon to maintain pressure or as part of a carbon capture and storage programme.

DISPUTES RELATED TO TRANSBOUNDARY DAMAGE RESULTING FROM THE USE OF MARITIME HYDROCARBON RESOURCES

14. The use of maritime oil and gas deposits is not without risk. Risks include damage-causing oil spills, such as the Deepwater Horizon Oil Spill and the Montara Oil Spill. Deposit states must prevent significant transboundary damage, thereby minimising the risk of oil spills. In order to effectively implement this obligation, deposit states must conduct an environmental impact assessment and notify, inform and consult potentially affected states on the impacts of such oil spills. Taking into account the information acquired, the deposit state must adopt, implement, supervise and enforce appropriate measures to prevent such oil spills. Potentially affected states may question the procedure to be followed or the effectiveness of the measures to be taken to prevent oil spills.

15. In the event of an oil spill resulting from an offshore facility used in connection with exploration for, or production of, oil and gas, the deposit state must take appropriate response measures to prevent, mitigate or eliminate damage. If the oil spill straddles maritime boundaries or the deposit state lacks equipment or expertise, it may request the assistance of other states. Other states are not obliged to provide such assistance, unless they have explicitly accepted such an obligation. Examples of international agreements arranging for cooperation between states in responding to oil spills include:

- Protocol to the Convention for the Protection of the Mediterranean Sea Against Pollution Concerning Co-operation in Combating Pollution of the Mediterranean Sea by Oil and Other Harmful Substances in Cases of Emergency; and the
- Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic.

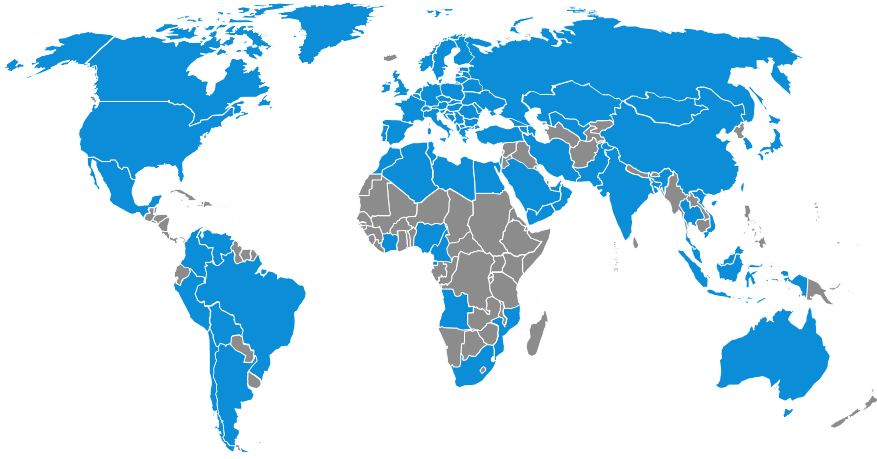
16. In the event that transboundary damage is caused by an oil spill resulting from an offshore facility used in connection with exploration for or production of oil and gas, the deposit state is not automatically liable for such damage. This state is only liable if it has not exercised due care in meeting its obligations referred to in the preceding paragraphs. With the aim of ensuring that prompt and adequate compensation is available for the victims of transboundary damage, the deposit state should provide for effective domestic remedies enabling victims to claim compensation from the operator of the offshore facility.

17. To promote a level playing field and overcome any jurisdictional difficulties in the pursuance of domestic remedies, private sector initiatives may facilitate the compensation of damage caused by an oil spill. An example is the Oil Pollution Liability Agreement (OPOL), which applies to damage resulting from the escape or discharge of oil from offshore facilities used in connection with exploration for, or production of, oil and gas in the North-East Atlantic.

18. As for the use of maritime gas deposits, the risk of transboundary damage may be less than for the use of maritime oil deposits, but it cannot be completely eliminated. Hence, disputes may arise over the minimisation of such risks or damage caused as a result of their materialisation. Likewise, such disputes may result from the use of a wholly or partly depleted transboundary hydrocarbon resource for the injection of carbon to maintain pressure or as part of a carbon capture and storage programme.

CONCLUSION

States rely on international law to establish rules and legal mechanisms for dealing with transboundary hydrocarbon deposits. Coastal states in all regions of the world have made arrangements, or agreed to make arrangements, to overcome potential political or technical obstacles to develop hydrocarbon deposits in their maritime areas, either jointly or on the basis of an agreed upon apportionment. Nevertheless, the potential for conflicts remains in regions where states have to date failed to agree on maritime boundaries or provisional arrangements pending delimitation, such as in the South China Sea and the Eastern Mediterranean (see *The New Dimensions of Geopolitics*, section 2).



The International Gas Union (IGU) was founded in 1931 and is a worldwide non-profit organisation promoting the political, technical and economic progress of the gas industry with the mission to advocate for gas as an integral part of a sustainable global energy system. The IGU has more than 142 members worldwide and represents more than 97% of the world's gas market. The members are national associations and corporations of the gas industry. The working organisation of IGU covers the complete value chain of the gas industry from upstream to downstream. For more information please visit www.igu.org

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