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CENTRE FOR INTERNATIONAL LAW

Conference on Joint Development and the South China Sea

16–17 June 2011, Grand Copthorne Hotel, Singapore

Conference Report

by

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TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

1. The Centre for International Law (CIL) at the National University of Singapore (NUS) organized a **Conference on Joint Development and the South China Sea** on the 16th and 17th of June 2011 (Thursday and Friday) at the Grand Copthorne Hotel, Singapore. The Conference brought together international legal experts on both the South China Sea and joint development, representatives from the oil and gas industry, international organizations, non-governmental organizations (NGOs) and Government officials to examine the law and policy issues relating to the joint development of oil and gas resources in areas of overlapping claims in the South China Sea.

2. The first day gave Participants background to the South China Sea disputes and to the concept of joint development, its rationale, key provisions and issues. The second day was devoted to discussion of existing joint development arrangements (JDAs) in the region (a list of which can be found in the Annex A to this Conference Report), to determine whether there are lessons that can be applied to possible joint development arrangements in the South China Sea. The Conference Report is a summation of arguments from the Papers presented at the Conference, the Comments by Panellists and Participants at the Conference, as well as additional research done by CIL pursuant to its Research Project on the South China Sea. (see http://cil.nus.edu.sg/research-projects/south-china-sea/)

3. With regards to lessons learned from existing JDAs in the region, the Conference Report examines three (3) aspects of these JDAs, namely, a) why the States concerned entered into JDAs (***rationale***), b) what ***contextual factors*** played a role in negotiations and ultimately led to the conclusion of the JDAs and lastly, 3) ***key provisions*** in JDAs.

4. Based on this analysis and discussions at the Conference, the Conference Report makes the following recommendations on what steps can be taken to move forward on joint development in the South China Sea:

   a) Steps should be taken to increase knowledge about the features forming the Spratly Islands group;

   b) Claimants should clarify their claims so that a consensus can be reached on the areas in dispute which may be subject to joint development arrangements.

   c) Steps should be taken to increase knowledge about the extent of hydrocarbon resources through Joint Seismic Surveys;

   d) Claimants should take steps to implement the 2002 ASEAN-China Declaration on the Conduct of Parties in the South China Sea;

   e) Steps should be taken to enhance understanding on the nature, importance and variety of joint development arrangements;

f) Claimants should better manage the domestic politics and especially, the nationalistic rhetoric regarding their claims in South China Sea as well as potential utility of joint development arrangements for this area;

g) Further study and discussion should be undertaken on possible frameworks for discussion and negotiations for joint development arrangements in the South China Sea, including the involvement of Taiwan;

h) Consideration should be given to the invaluable role which the oil industry could play in educating the Claimants, the media and the general public about joint development;

i) More research should be undertaken on potential joint development regimes that would be suitable for the South China Sea.

II. INTRODUCTION

5. Confrontations at sea. Claim and counter-claim. Protest and counter-protest. Intemperate 'diplomatic' exchanges, including accusations of 'invasion', and threats of international legal action. All of these have been features of the South China Sea disputes in recent months. Underlying this tension is the dispute over sovereignty over features known as the Spratly Islands in the South China Sea between China, Vietnam, Philippines, Malaysia, Brunei Darussalam and Taiwan (the Claimants).

6. While the South China Sea has been an arena for competing maritime and territorial claims for decades, it appears that tensions have risen sharply of late. These disputes represent, at the least, irritants and sources of friction in relations between the Claimants and, at worst, flashpoints with the potential to threaten regional peace, security, and accordingly, economic prosperity. Recent events have given rise to significant fears in the latter regard. This provides a compelling rationale for discussions on conflict avoidance mechanisms and options such as joint development to circumvent the contentious sovereignty disputes.

7. To this end, CIL at NUS organized a **Conference on Joint Development and the South China Sea** on the 16th and 17th of June 2011 (Thursday and Friday) at the Grand Copthorne Hotel, Singapore. The Conference brought together international legal experts on both the South China Sea and joint development, representatives from the oil and gas industry, and Government officials to examine the law and policy issues relating to the joint development of oil and gas resources in areas of overlapping claims in the South China Sea.

8. The Conference commenced with a brief welcome address by the Co-Chairs of the Conference, Ambassador Tommy Koh, Chairman of the Board of CIL and Professor Dr. Hasjim Djalal, the initiator and convenor of the Workshop Process of Managing Potential Conflicts in the South China Sea. This was followed by a Keynote Address by Professor S. Jayakumar, former Foreign Minister and Senior Minister of Singapore. In his Keynote Address, Professor Jayakumar called upon the Claimants to make their claims consistent with the 1982 United Nations Convention on the Law of

the Sea (UNCLOS) and advocated joint development of hydrocarbon resources as a way to diffuse tension in the region. A copy of Professor Jayakumar's Keynote Address is available at http://cil.nus.edu.sg/wp/wp-content/uploads/2011/06/CIL_Keynote_Address_16_Jun_11_7.45am-pdf.pdf.

9. The first day gave Participants background to the South China Sea disputes and to the concept of joint development, its rationale, key provisions and issues. The second day discussed existing JDAs in the region, to determine whether there are lessons that can be applied to possible joint development arrangements in the South China Sea. The Programme for the Conference can be found at http://cil.nus.edu.sg/wp/wp-content/uploads/2011/05/10-June-2011-Draft-Information-and-Agenda-for-CIL-Conference-on-JD-and-the-SCS-pdf.pdf.

10. This Conference Report summarises the geopolitical considerations at play in the South China Sea (Part III), the international law relevant to the Spratly Islands dispute (Part IV), the lessons learned from existing JDAs (Part V) and Recommendations on how the Claimants and other interested stakeholders can move forward on joint development (Part VI). While the Conference was focussed on the joint development of hydrocarbon resources, much of the Report can also apply to joint development of fishing resources or other similar co-operative arrangements.

11. This Report is a summation of the Papers presented at the Conference, the Comments by Panellists and Participants at the Conference and additional research by CIL researchers pursuant to its Research Project on the South China Sea. CIL is indebted to Clive Schofield and Ian Townsend-Gault for their assistance in conceptualizing and planning the Conference and drafting this Report. CIL would also like to thank Andi Arsana of the Australian National Centre for Ocean Resources and Security (ANCORS) for providing the map of the South China Sea in the Appendix to this Report. Finally, CIL would also like to thank David Ong and Vasco Becker-Weinberg for their input on this report. However, any mistakes are the responsibility of CIL.

III. WHAT IS AT STAKE IN THE SOUTH CHINA SEA

12. The South China Sea is a large semi-enclosed sea encompassing approximately three million square kilometres of maritime space. This facet of the South China Sea, coupled with the fact that multiple states surround it, means that maritime entitlements tend to converge and overlap with one another. An additional and significantly complicating factor is the presence of a numerous islands, islets, rocks, reefs and shoals, many of which are subject to multiple competing claims to sovereignty. Although sovereignty over the Paracel Islands and other geographic features in the South China Sea are also in dispute, the focus of this Conference was on the Spratly Islands group, which has the most potential to cause conflict and tension.

13. The geopolitical importance and complexity of the South China Sea and its associated territorial and maritime disputes is derived from its multifaceted significance to multiple stakeholders. The majority of the features found in the Spratly Islands group are remote, small and barren and are for the most part, inhospitable environments for human populations. However, the sovereignty claims

are not motivated by a belief in the intrinsic value of the features themselves but rather by the maritime zones the features could potentially generate and the access to resources found within these zones.

14. Indeed, the South China Sea is said to be rich in seabed energy (especially oil and gas reserves). This perception is remarkably pervasive despite the fact that there is an absence of reliable hydrocarbon reserve data because the sovereignty disputes have prevented serious hydrocarbon exploration activities from going ahead. While overlapping maritime claim areas in the South China Sea may indeed host commercially viable oil and, particularly, gas reserves, such resources should be viewed in the regional and global context. It appears highly unlikely that the seabed energy resource of the South China Sea represent a significant solution to the region's (or world's) escalating energy security concerns.

15. A more proven marine resource is fisheries. The semi-enclosed, tropical environment of the South China Sea supports fisheries of significance in global, and certainly regional, terms. These marine living resources are fundamental to the food security of coastal populations numbered in the hundreds of millions. It can be observed that the ongoing sovereignty and maritime disputes in the South China Sea do little to help protect a marine environment of astonishing biodiversity.

16. The South China Sea also hosts sea lines of communication (SLOCs) that are critically important not only to the states of East and Southeast Asia but also to global trade. The vast majority of global trade by volume (over 80%) is carried by sea and this is certainly the case for the generally resource-poor but export-oriented states of East and Southeast Asia. While these highways for sea borne trade tend to avoid passage through the disputed island groups themselves, an escalation in the disputes related to these features retains the potential to disrupt the free flow of shipping and is thus of great significance to the states dependent on these SLOCs. In this context, it is worth emphasizing that interested stakeholders go beyond those states immediately implicated in the South China Sea sovereignty disputes, to include wider regional players (such as Australia, Japan, South Korea, Singapore and Indonesia) as well as extra-regional powers such as the United States and the Russian Federation.

17. Lastly, an increasingly crucial consideration for Claimants is the belief that sovereignty is at stake (as well as sovereign rights in respect of Exclusive Economic Zone (EEZ) and continental shelf claims). This is especially the case when coupled with the toxic influences of nationalism allied to historical competition and traditional animosity. In this context, compromising on sovereignty often appears to represent a near impossible challenge for the Claimants, seemingly regardless of the remote, uninhabited and apparently intrinsically worthless nature of the territory (islands) in question.

IV. INTERNATIONAL LAW AND THE SOUTH CHINA SEA

18. While international law may not ultimately determine the outcome of the Spratly Islands disputes, it will influence the conduct of the Claimants and will often frame and influence the debate. Any

discussion on possible solutions to the Spratly Islands dispute will be futile unless the Parties understand the legal issues relating to the dispute. Accordingly, this section will briefly highlight the relevant international law principles governing both the sovereignty claims over the features and maritime claims from these features.

Sovereignty Disputes

19. China, Taiwan and Vietnam claim sovereignty over all the features in the Spratly Islands. The Philippines claims fifty-three (53) of the features which they call the Kalayaan Island Group (KIG) and Malaysia claims sovereignty over eleven (11) features. Brunei Darussalam reportedly claims part of the area of water in the Spratly Islands nearest to it, including two features, namely Louisa Bank and Rifleman Bank, as part of its continental shelf.

20. The dispute over sovereignty over features in the Spratly Islands is governed by customary international law on the acquisition of territory as articulated by international courts and tribunals in cases concerning sovereignty disputes. The Conference deliberately avoided discussion on the relative merits of the sovereignty claims over the Spratly Islands. This was because the sovereignty disputes are unlikely to be resolved in the immediate or near-term future (either by negotiation or reference to an international court or tribunal) given the national sensitivities associated with the dispute and the potential access to resources which might come with sovereignty. In the context of the meeting, the minutiae of the rival claims was largely irrelevant and a potential distraction. Therefore, the Conference focussed on what is generally believed to be the most realistic interim solution, setting aside the sovereignty disputes and jointly developing the natural resources.

Maritime Claims in the South China Sea

21. Access to the resources surrounding the features in the Spratly Islands will be determined by UNCLOS which establishes a legal framework for all activities in the oceans. UNCLOS entered into force in 1994 and all the Claimants with the exception of Taiwan[1] are parties to it.

22. UNCLOS does not contain any provisions on how to decide the competing sovereignty claims over the features. UNCLOS assumes that it is known which State has sovereignty over land territory and off-shore features. It then sets out the maritime zones which can be claimed from such territory and / or features.

23. The sovereignty of a State extends beyond its land territory to a twelve (12) nautical mile (nm) adjacent belt of sea known as the territorial sea, which includes the sea-bed and subsoil.[2] States can also claim sovereign rights and jurisdiction to explore and exploit the natural living and non-living

[1] Taiwan is not able to ratify UNCLOS because it is not recognized as a State by the United Nations. However, Taiwan is likely to accept that it is bound by most of the provisions of UNCLOS under customary international law.

[2] Articles 2 and 3, UNCLOS.

resources on their continental shelf[3] and in a 200 nm EEZ measured from the baselines from which the territorial sea is measured.[4]

24. With regards to offshore features, States can claim maritime zones from offshore features depending on how they are categorized under UNCLOS. UNCLOS distinguishes between islands, rocks, low-tide elevations and artificial islands:

    a) *Islands* are in principle entitled to the same maritime zones as land territory, including a 12 nm territorial sea, a 200 nm EEZ and a continental shelf which could extend beyond 200 nm. An island is a naturally formed area of land above water at high tide.[5]

    b) *Rocks* are a sub-category of islands. Rocks which cannot sustain human habitation or economic life of their own are not entitled to an EEZ or continental shelf.[6] They are only entitled to a 12 nm territorial sea.

    c) *Low-tide elevations* are not entitled to any territorial sea of their own, but can be used as base points in measuring the territorial sea if they are within 12 nm from the mainland or another island. Low-tide elevations are above water at low tide but submerged at high tide.[7]

    d) *Artificial islands* are entitled to no maritime zones, except for a 500 metre safety zone.[8]

25. There are no definite accounts of the number of offshore features there are in the Spratly Islands group nor are there any definite and up-to-date accounts of which feature is an island, rock, low-tide elevation or artificial island under UNCLOS. While it has been estimated that there are 170 named features among the Spratly Islands group alone, the vast majority of these features are not, in fact, islands in the international legal sense. Perhaps only 48 features among the Spratly Islands meet the requirement of being naturally formed areas of land, surrounded by water and above water at high tide and hence subject to the regime of islands under UNCLOS.

26. The islands in the Spratlys are small, remote and uninhabited save for the presence of military garrisons. Many of these islands are not capable of sustaining human habitation or economic life of their own as provided for in Article 121 (3). Therefore, they are likely to be classified as rocks, and

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[3] Articles 76 and 77, UNCLOS.

[4] Articles 56 and 57, UNCLOS.

[5] Article 121 (1), UNCLOS.

[6] Article 121 (3), UNCLOS.

[7] Article 13, UNCLOS.

[8] Article 60 (5), UNCLOS.

would only be entitled to a 12 nm territorial sea. However, there may be a small number of islands which are large enough to sustain human habitation or economic life of their own. These islands would in principle be entitled to a 200 nm EEZ and a continental shelf of their own.

27. The majority of the geographic features in the Spratly Islands are rocks, reefs or shoals, which are either permanently submerged or above water only at low-tide. These features have no capacity to generate claims to maritime jurisdiction unless they are low-tide elevations within 12 nm of an island.

28. Apart from the status / classification of these features under international law, it is also not clear what maritime zones, if any, the Claimants are claiming from the features in the Spratly Islands.

29. None of the ASEAN Claimants (Vietnam, Malaysia, Philippines or Brunei Darussalam) have officially claimed any maritime zones (territorial seas, EEZ or continental shelf) from any of the features in the Spratly Islands, *ie* they have not drawn baselines around the features and established the outer limits of an EEZ or continental shelf by defined coordinates.[9]

30. Vietnam and Malaysia, however, made a Joint Submission to the Commission on the Limits of the Continental Shelf (CLCS) in 2009,[10] in which they claimed an extended continental shelf from their respective mainland territories. The map showing their extended continental shelf claims also included 200 nm EEZs from baselines around their mainland. By not claiming any EEZs and extended continental shelf from any of the Spratly Islands, Malaysia and Vietnam appear to be taking the position that sovereign rights to explore and exploit the resources in the South China Sea should be determined primarily by the EEZ and continental shelf measured from the mainland of Malaysia and Vietnam; and that the Spratly Islands should either be treated as rocks entitled to a 12 nm territorial sea or low-tide elevations entitled to no maritime zones.

31. The Philippines has also not claimed any maritime zones from the Spratly Islands, but has clarified its archipelagic baselines in its 2009 baselines law and states the baselines around the KIG shall be determined according to the 'Regime of Islands' consistent with Article 121 of UNCLOS.[11]

32. China has also not officially claimed any maritime zones from the features. China's claim to the waters surrounding the Spratly Islands is complicated by its controversial U-shaped line map. While the U-shaped line was officially published by the Republic of China (presently Taiwan) in 1947, China first officially relied on the map in its response to the 2009 Joint Submission of

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[9] See, for example, Article 75 of UNCLOS.

[10] Joint Submission dated 6 May 2009 by Malaysia and the Socialist Republic of Viet Nam to the Commission on the Limits of the Continental Shelf, through the UN Secretary-General, in accordance with Article 76, paragraph 8, of UNCLOS available at (www.un.org/Depts/los/clcs_new/submissions_files/submission_mysvnm_33_2009.htm).

[11] See Maritime Zone Notification 69 of 21 April 2009 at the UNDOALOS National Legislation Database available at http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PFFFILES/phl_2008-act9522.pdf.

Vietnam and Malaysia.[12] In this communication to the United Nations (UN) on the Malaysia-Vietnam Joint Submission, China asserted that 'China has indisputable sovereignty over the islands in the South China Sea and the adjacent waters, and enjoys sovereign rights and jurisdictions over the relevant waters as well as the seabed and subsoil (see attached map).' The use of this map in official communications raised old concerns that China was claiming all the waters within the U-shaped line, based on a historic claim or historic rights concepts which are not recognized under UNCLOS.

33. A more legally acceptable interpretation would be that the U-shaped line is used to indicate which features of the Spratly Islands that China has sovereignty over. China's claims to the sea-bed and waters surrounding the Spratly Islands would thus be based on claiming maritime zones from the features and this would be consistent with UNCLOS. China has in fact said in a later communication to the UN that the Spratly Islands are fully entitled to Territorial Seas, Exclusive Economic Zones and Continental Shelf.[13] However, China has yet to clarify the meaning of the U-shaped line map. Further muddying the waters is the fact that some Chinese government agencies appear to have a policy of enforcing China's rights and jurisdiction in all the waters inside the U-shaped line.

Maritime Delimitation in the South China Sea

34. UNCLOS contains provisions on the delimitation of boundaries in overlapping maritime zones claimed from either land territory or offshore features. The most important of these are the provisions in Articles 74 and 83 on the delimitation of the EEZ and the continental shelf.[14] The general principle is that boundaries are to be delimited by agreement on the basis on international law in order to reach an equitable solution.

35. While there are potentially overlapping maritime claims in the South China Sea between the Claimants, they have not crystallized as yet. If China treats the Spratly Islands (or at least the larger features) as 'islands' entitled to territorial seas, EEZs and continental shelf, this could potentially overlap with the EEZ and continental shelf claimed from the mainland of Malaysia and Vietnam and the archipelago of the Philippines. China has not claimed any maritime zones from the Spratly Islands as yet and hence, there is no clearly defined overlapping claim per se capable of maritime delimitation.

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[12] Note from China dated 7 May 2009 available at www.un.org/Depts/los/clcs_new/submissions_files/submission_mysvnm_33_2009.htm).

[13] See Note from China dated 14 April 2011 available www.un.org/Depts/los/clcs_new/submissions_files/submission_mysvnm_33_2009.htm).

[14] Articles 74 (1) and 83 (1), UNCLOS.

36. It should be noted, however, that international courts and tribunals have consistently held that even if a small island is capable of generating a continental shelf and EEZ of its own, it should not be given full effect in determining maritime boundaries with the mainland of a large State. Accordingly, in any boundary delimitation in the South China Sea, an international court or tribunal would not give the larger 'islands' in the Spratly Islands full effect in delimiting the boundary between the islands and the mainland territories of the states bordering the South China Sea.

37. Agreement on maritime delimitation in the South China Sea is unlikely to occur any time soon. At the moment, there does not exist any overlapping maritime claim capable of delimitation. Even if China were to officially claim maritime zones from the Spratly Islands, final delimitation between China and the other Claimants can only occur if the sovereignty claims over the Spratly Islands are resolved. Even if the sovereignty claims are resolved, there will also be likely be disagreements on the exact status of the features and the maritime zones they are entitled to generate.

Dispute Settlement under UNCLOS

38. Disputes on the interpretation or application of any provisions in UNCLOS are subject to a system of compulsory binding dispute settlement before either an international court or an international arbitral tribunal. However, States are permitted to 'opt out' of the dispute settlement system for certain categories of disputes, including disputes on the interpretation or application of the provisions on boundary delimitation, historic title and bays. China has exercised this right to opt out, so no disputes on boundary delimitation involving China can go to an international court or tribunal without its consent.

Provisional Arrangements of a Practical Nature

39. Unless the fundamental and intractable disagreements on sovereignty over the islands can be resolved, it will not be possible to negotiate any boundary agreements in the South China Sea. UNCLOS purports to provide a temporary solution to this in paragraph 3 of Articles 74 and 83. It provides that if delimitation cannot be effected by agreement:

> [T]he States concerned, in a spirit of understanding and cooperation, shall make every effort to enter into provisional arrangements of a practical nature and during the transitional period, not to jeopardize or hamper the reaching of final agreement. Such arrangements shall be without prejudice to the final delimitation.

40. This provision is designed to 'promote interim regimes and practical measures that could pave the way for provisional utilization of disputed areas pending delimitation' and 'constitutes an implicit

acknowledgement of the importance of avoiding the suspension of economic development in a disputed maritime area.'[15]

41. There are two aspects to the obligation in Articles 74 (3) and 83 (3) on 'provisional arrangements of a practical nature':

a) First, States should *make every effort to enter into provisional arrangements of a practical nature*. This imposes on parties a 'duty to negotiate in good faith' and to take 'a conciliatory approach to negotiations in which they would be prepared to make concessions in the pursuit of a provisional arrangement'.[16] In the *2007 Guyana and Suriname Arbitration*, it was found that both parties had breached their obligations to negotiate provisional arrangements in good faith pending maritime delimitation. This is because Guyana had failed to inform Suriname of its resource exploration plans in the overlapping claims area, had failed to give Suriname official and detailed notice of the planned exploration activities, had not offered to share the results of the exploration with Suriname, had not given Suriname an opportunity to observe the activities, and had not offered to share all the financial benefits received from the exploratory activities.[17] Similarly, the Tribunal found that Suriname's conduct after it became aware of Guyana's sanctioning of (private) exploration efforts in disputed waters was in breach of its obligations. Instead of attempting to engage it in a dialogue which may have led to a satisfactory solution for both Parties, it resorted to self-help in threatening the oil rig and drill ship in violation of UNCLOS.[18]

b) Second, during this transitional period States are obliged *not to jeopardize or hamper* the reaching of a final agreement on delimitation. International courts and tribunals have found that any activity which represents an irreparable prejudice to the final delimitation agreement is a breach of this obligation. A 'distinction is to be made between activities of the kind that lead to a permanent physical change, such as exploitation of oil and gas reserves, and those that do not, such as seismic exploration.'[19] For example, in the *Guyana and Suriname Arbitration* it was found that allowing exploratory drilling in disputed waters was a breach of the obligation to make every effort not to hamper or jeopardize the reaching of a final agreement as this could result in a physical change to the marine environment and engender a 'perceived change to the

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[15] *Guyana v. Suriname* (UN Law of the Sea Annex VII Arb.Trib. Sept. 17, 2007) at para 60 at http://www.pca-cpa.org.

[16] *Guyana v. Suriname*, at para 461.

[17] *Guyana v. Suriname*, at para 478.

[18] *Guyana v. Suriname*, at para 476.

[19] *Guyana v. Suriname*, at para 467.

status quo.'[20] This was in contrast to seismic testing, which was held not to cause a physical change to the marine environment.

42. Provisional arrangements of a practical nature are 'without prejudice to the final delimitation.'[21] This means that nothing in the arrangement can be deemed as a renunciation of the claim of any party (be it to sovereignty or sovereign rights over waters) and that it does not constitute an explicit or implicit acknowledgement of the legitimacy of the claim of any other parties.

43. The obligations in Article 74 (3) and 83 (3) relating to provisional arrangements would apply to the Claimants to the Spratly Islands even though delimitation is not imminent and is independent of resolution of the sovereignty disputes over the features.

44. Articles 74 (3) and 83 (3) do not mandate the type of provisional arrangements States can enter into and leave it to the discretion of the States concerned. State practice shows that provisional arrangements can include a wide variety of arrangements such as mutually agreed moratoriums on all activities in overlapping areas, joint development or cooperation on fisheries, joint development of hydrocarbon resources, agreements on environmental cooperation and agreements on allocation of criminal and civil jurisdiction. The next section will explore one type of provisional arrangement, namely, the joint development of hydrocarbon resources.

Joint Development of Hydrocarbon Resources

45. Joint development can be defined as an agreement by two or more States whereby they pool their sovereign rights for the exploration and exploitation of natural resources and other purposes in a defined maritime area, which provides for the management of activities and the apportionment of production and / or resources.

46. As mentioned above, the joint development of hydrocarbon resources is clearly a 'provisional arrangement of a practical nature' contemplated by Articles 74 (3) and 83 (3). Indeed, joint development agreements concerning the exploration and exploitation of hydrocarbon resources in areas of overlapping claims appear to be one of the more common types of provisional arrangements adopted by States in areas of overlapping claim.

47. Joint development of hydrocarbon resources has also been explicitly recognized by international courts and tribunals as an equitable alternative to maritime delimitation in areas of overlapping claims.[22]

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[20] *Guyana v. Suriname*, at para 480.

[21] Articles 74 (3) and 83 (3), UNCLOS.

[22] See for example, Eritrea/Yemen II, 119 I.L.R p 417 (1999), *The Eritrea-Yemen Arbitration Awards of 1998 and 1999* online http://www.pca-cpa.org.

V. LESSONS LEARNED FROM JOINT DEVELOPMENT REGIMES IN ASIA

48. States in Asia have frequently employed the joint development of hydrocarbon resources as a 'provisional arrangement of a practical nature' either pending delimitation of maritime claims or as part of the maritime delimitation agreement. The objective of the Conference was to examine these JDAs to see whether there were any useful lessons that could be used to further discussion on joint development in the waters in the South China Sea. After all, the majority of the Claimants (China, Malaysia, Vietnam and Brunei Darussalam) have been party to one form of joint development or another, be it an 'in principle' agreement to jointly develop resources (such as the *2001 Cambodia-Thailand JDA*) or a comprehensive agreement setting out the framework in which joint development is to take place (such as the *1979 / 1990 Malaysia-Thailand JDA*).

49. This demonstrates that the Claimants have been able to put aside contentious and seemingly intractable maritime disputes in other areas in Asia, such as the Gulf of Thailand, the East China Sea and the Timor Sea, for example, and pursue joint development. Hopefully, the Claimants will be able to apply the same reasoning and spirit of cooperation to resolve their claims in the South China Sea.

50. For a list of the JDAs discussed in this Conference Report, please see the Annex A to the Report, which provides the Short Form Reference for the JDAs used in this Report. This Report will examine three (3) aspects of these JDAs, namely why the States concerned entered into JDAs (Rationale), what contextual factors played a role in negotiations and ultimately led to the conclusion of the JDA and lastly, key provisions in JDAs.

Rationale for JDAs in Asia

51. States in Asia entered into JDAs for a variety of political and economic reasons, depending on their own needs and circumstances at the time. These reasons are summarized below.

The Need for Hydrocarbon Resources (and the revenue it brings)

52. The need for hydrocarbon resources has been one of the major incentives for States to enter into JDAs in Asia. For example, for the *1974 Japan- South Korea JDA*, the oil crisis of 1973 which resulted in a debilitating shortage of oil for these States plus the need to reduce dependence on supplies from the volatile Middle-East was one of the primary factors behind this JDA. Similarly, Thailand was facing declining production in its Erawan fields when it concluded the *1979 / 1990 Malaysia-Thailand JDA* and Australia was facing a similar situation when it concluded the *1989 Australia-Indonesia JDA.*

53. The potential economic benefit that hydrocarbon resources can bring to less developed economies is also another reason why States enter into JDAs. For East Timor, the potential for hydrocarbon resources to transform its developing economy and reduce its dependence on aid was one of the major incentives to enter into the *2002 Australia-East Timor JDA.*

54. The majority of the JDAs in Asia, such as the *1979 / 1990 Malaysia-Thailand JDA*, the *1992 Malaysia-Vietnam JDA* and the *1989 Australia-Indonesia JDA* have been successful in the exploration and exploitation of hydrocarbon resources in the Joint Development Zones. With regards to the *1974 Japan-South Korea JDA*, there have been no discoveries of commercially viable oil and gas reserves, although Japan and South Korea have recently decided to resume joint surveys. The *2002 Australia-East Timor JDA* has faced issues in its implementation due to disagreements on downstream activities (which will be dealt with later in this Report).

Marked Asymmetries in Capacity

55. There is sometimes an incentive for less developed States to enter into a JDA with another State which has more developed petroleum expertise, legislation and infrastructure. One of the main reasons for some of the JDAs in Asia was the need of one of the States for assistance in developing hydrocarbon resources, ranging from technical or financial matters, to infrastructure, petroleum laws or human resources.

56. For example, in the *1992 Malaysia-Vietnam JDA*, Vietnam's national oil company lacked the necessary technical expertise as well as petroleum legislation to undertake exploration and exploitation of hydrocarbon resources. Vietnam was consequently agreeable to Malaysia's national oil company PETRONAS undertaking exploration and exploitation and giving Vietnam's national oil company PETROVIETNAM a share of the revenue. Similarly, the differences in the regulatory and management capacities of Australia and East Timor were also a significant impetus for East Timor to enter into the *2002 Australia-East Timor JDA*.

57. The co-operation and exchange of knowledge facilitated by JDAs also encourages the development of petroleum expertise and infrastructure and other related industries for these less developed States which can be used in other areas. For example, one of the indirect benefits of the *1979 / 1990 Malaysia-Thailand JDA* was the consequent development of the exploration and production national industries which also encouraged foreign investment and technology.

The Need for a Secure Investment Framework

58. Exploration and exploitation of hydrocarbon resources in offshore areas is a capital-intensive venture which usually requires the funds and expertise of private oil companies. However, the lack of political and legal certainty in an area claimed by two or more States is a major disincentive to such investment. Accordingly, another reason why States in Asia have entered into JDAs is to provide a secure investment framework for oil companies.

59. For example, in the *1974 Japan-South Korea JDA*, both States had awarded unilateral oil exploration and exploitation contracts to Western oil interests in the overlapping claim area. However, after China strongly objected to the continental shelf claims of Japan and Korea on the basis that it had sovereign rights in the area, all exploration activities in the East China Sea by US oil companies ceased, on the instructions of the US. Once the JDA was established, foreign

companies had no issues in investing in the JDA even though China had persistently protested its establishment.

60. Similarly, prior to the establishment of the *2009 Malaysia-Brunei JDA*, foreign oil companies had on several occasions been forced to leave the overlapping claim area by both Malaysian and Bruneian patrol forces and some foreign companies ceased operations in the area. The establishment of the JDA will undoubtedly give these companies the certainty they need.

Political Rationale

61. Overlapping maritime claims can be a major source of tension in relations between neighbouring States which can spill-over into other areas in bilateral relations. JDAs not only remove or reduce the tension, they also have the potential to create and / or cement good relations between the States concerned. Accordingly, the need to maintain and promote good relations is one of the rationales behind JDAs.

62. A good example of this is the *1992 Malaysia-Vietnam JDA*. Vietnam was more amenable to the idea of joint development because it was in the process of joining ASEAN, and cooperation with Malaysia, a key ASEAN State and a major regional oil player, was useful to it. Further, the JDA also fostered a better relationship between the two States and facilitated cooperation in other areas, as demonstrated by the 2009 Joint Submission by Malaysia and Vietnam to the CLCS.

63. Similarly, both the *1974 Japan-South Korea JDA* and the *2008 China-Japan JDA* were preceded by increasing tension, nationalistic rhetoric and military clashes at sea. However, despite the absence of significant oil and gas discoveries in the *1974 Japan-South Korea JDA*, and the absence of implementation of the *2008 China-Japan JDA*, they both significantly diffused the tension between the Parties.

Contextual Factors Influencing the Conclusion of JDAs

64. There are a variety of factors which played a role in influencing States in Asia to enter into JDAs, or in other words, contributed to an atmosphere which was conducive to joint development.

Defined Maritime Claims made in Good Faith

65. All the State Parties to the JDAs in Asia made clear their claims to the continental shelf by issuing maps or making statements which reflected the extent and / or nature of their claims. Further, the legal basis for such claims was made clear, and at the very least, had some legal justification under international law at the time the claim was made. This is of course consistent with the general

international law principle that when making unilateral claims, parties must act in good faith, believing that their claims have valid basis in the present corpus of international law.[23]

66. This is illustrated by the JDAs in Asia. For example, in the *1979 / 1990 Thailand-Malaysia JDA*, both Thailand and Malaysia had made their claims clear. Thailand made a unilateral continental shelf claim in the Gulf of Thailand in the 1970s, and Malaysia issued a map showing its territorial sea and continental shelf boundaries in 1979. Both their claims had some basis in international law. The overlapping maritime area which eventually became subject to joint development in the *1979 / 1990 Malaysia-Thailand JDA* was caused by Thailand's use of one of its offshore features, Ko Losin, 39 nm offshore and 1.5 m above water at high tide as a basepoint to measure its continental shelf boundary at the expense of Malaysia. It should be borne in mind that this was pre-UNCLOS; and although negotiations were going on at the time, the exact effect of islands in generating maritime zones or their effect in maritime delimitation was not clear.

67. Similarly, in the *1974 Japan-South Korea JDA*, both Japan and Korea had also clearly expressed their claims and the overlapping area was defined. In 1969, Japan and South Korea had made claims to the continental shelf in the East China Sea by unilaterally establishing offshore concession blocks and a boundary. Their claims also had some basis in international law. Japan's unilateral claims indicated that they were delimiting their continental shelf by applying the median line between Korea and Japan, but using the islets of Danjo Gunto and Tori Shima as basepoints in determining the median line. In contrast, Korea argued that the islets could not be used as basepoints and the presence of the Okinawa trough between Korea and Japan constituted special circumstances under which the median line-delimitation principle could not be applied as it interrupted the natural prolongation principle. At the time and even now, maritime delimitation principles were fluid. In 1969, at the time the claims were made, the natural prolongation principles had been identified in the *North Sea Continental Shelf Cases* and it was only in 1985, in the *Libya / Malta Case* the ICJ cast doubt on the relevance of the natural prolongation principle in delimitations between opposite States when the distance between them is less than 400 nm.

68. The lesson to be learned is that having clearly defined overlapping areas makes it easier to enter into JDAs as States are aware of what the other State is claiming and know the extent of the area in dispute. This is further evidenced by the fact that the majority of joint development zones consist of a designated area, subject to overlapping claims (this will be dealt with below).

69. It is more difficult to negotiate joint development if the claim to an overlapping area lacks adequate legal grounds. For example, in the *2001 Cambodia-Thailand JDA*, the overlapping area was divided into two Areas, an area north of the boundary in which negotiations on maritime delimitation would continue, and an area south of the boundary in which negotiations on joint development would continue. It was impossible for Thailand to have accepted joint development in the north of the

[23] See *North Sea Continental Shelf Case* [1969] ICJ Rep 51, Separate Opinion of Judge Jessup at 80.

overlapping area, as it would risk legitimizing Cambodia's arguably dubious claim in that area based on a 1907 Franco-Siamese Land Boundary.

Knowledge of Hydrocarbon Resources

70. Knowledge of the presence of hydrocarbon resources in an overlapping area is a double-edged sword. On one side, the discovery of new deposits compels States to make maximum claims, making compromise difficult. On the other hand, in many instances, the discovery of actual oil or gas reserves introduces an added impetus to parties to conclude JDAs in overlapping areas.

71. For example, prior to the *1979 / 1990 Malaysia-Thailand JDA*, drilling in 1971 by a Malaysian contractor and drilling in 1976 by a Thai concessionaire revealed the existence of gas and pushed parties towards joint development. Similarly, Malaysia and Vietnam were also spurred into entering into the *1992 Malaysian-Vietnam JDA* by the discovery of gas reserves in their overlapping claim area by a Malaysian concessionaire in 1991. This was protested by Vietnam and triggered negotiations between the parties. Another example of this can be seen in the 1989 Australia-Indonesia JDA. One of the major reasons why Australia was keen to consider joint development with Indonesia in the 1970s was the discovery in an area named Kelp in the north of the Timor Gap Area which was likely to contain exploitable hydrocarbons.

72. However, it should also be borne in mind that the question of *how* such knowledge of hydrocarbon resources is acquired is important. Most of the discoveries prior to the conclusion of the JDAs in Asia were made through unilateral exploratory activities by one or both States. This prompted protests by the other State and heightened tensions. In addition, unilateral exploratory activities may also be a breach of the obligation to negotiate provisional arrangements of a practical nature in Article 83 (3) of UNCLOS. As mentioned above, in the *2007 Guyana and Suriname Arbitration*, the Tribunal found that Guyana had violated its obligation under Article 83 (3) in failing to inform, consult and involve Suriname of its unilateral exploratory activities.[24]

73. In light of the above considerations and on the basis that ascertaining the nature and amount of hydrocarbon resources facilitates the conclusion of JDAs, exploratory activities should either be done jointly or unilaterally, on the condition that the other party is notified of such exploratory activities, invited to participate and the results are shared. Such exploratory activities can be done on a 'without prejudice' basis during negotiations of joint development agreements.

Sovereignty Disputes Over Offshore Features

74. Sovereignty disputes over offshore features were only an issue in two of the JDAs in Asia, namely the *1982 Cambodia-Vietnam JDA* and the *2008 China-Japan JDA*. Notably, both of these are 'in principle' agreements to jointly develop.

[24] *Guyana v. Suriname*, *supra* note 6 at para 478.

75. In the *1982 Cambodia-Vietnam JDA*, the continental shelf claims of both Cambodia and Vietnam in the 1970s were based on full sovereignty over Phu Quoc Island, Koh Ses Island and Koh Thmei Islands and the seaward Islands of Puolo Wai and the Tho Chu Archipelago. The effect of the 1982 Cambodia-Vietnam Historic Waters Agreement (which includes an agreement to jointly develop resources) was that Cambodia effectively gave up its claim over Phu Quoc Island although it arguably simply endorsed a situation that had been prevalent for some time.

76. In the *2008 China-Japan JDA*, China and Japan chose to jointly develop an area north of the disputed islands which effectively sidestepped the sovereignty dispute over the Senkaku / Diao Yu Dao Islands. China had proposed joint development in the area surrounding Senkaku / Diao Yu Dao Islands, but this was rejected by Japan.

77. The *2009 Malaysia – Brunei JDA* did not involve sovereignty disputes over features, however, Malaysia agreed to give up its claims (and hence its sovereign rights) over blocks of hydrocarbon resources (known as Blocks L and M) off Borneo which were also claimed by Brunei Darussalam. This appeared to be in exchange for Malaysia, and particularly its national oil company, PETRONAS, being allowed to participate in the development of these Blocks. This is an exceptional case in state practice on joint development in Asia in that instead of preserving its claims in the joint development zone, Malaysia gave them up in exchange for being allowed to participate in the joint development of resources in the overlapping claim.

78. This illustrates the challenges that sovereignty over offshore features poses to negotiations on joint development agreements. However, it should be borne in mind that States **do not** have to give up or surrender sovereignty over offshore features or their sovereign rights over waters when entering into joint development arrangements. These claims can be preserved and protected by 'without prejudice' clauses in the JDA itself.

Claims of Third Party States

79. Two of the JDAs in Asia, namely *the 1974 Japan-South Korea JDA* and the *1979 / 1990 Malaysia-Thailand JDA* are subject to competing claims of Third Party States whose interests were not included or reflected in the JDA. This has several implications. First, it demonstrates that it is infinitely easier to conclude JDAs with two parties than with three. Second, while the existence of claims of Third Party States in the joint development area did not significantly hinder the conclusion of that JDA, such claims may impact the operation / implementation of the JDA later on.

80. For example, China claims part of the joint development zone of the *1974 Japan- South Korea JDA* and China protested both at the conclusion of the JDA in 1974 as well as when exploratory work began. However, the existence of such claims by China did not appear to deter investment and exploration in the Joint Development Zone once the JDA was concluded. While recent years have seen China's protests dwindle, if significant discoveries were made in the Japan-South Korea Joint Development Zone, China will likely protest. This will have consequences for the certainty that the JDA is supposed to create for investors and oil companies.

81. Another example is the *1979 / 1990 Malaysia-Thailand JDA*. The seaward part of the Malaysia-Thailand Joint Development Zone is also subject to a claim by Vietnam and covers approximately 256 nm. In 1999, Vietnam, Thailand and Malaysia reportedly agreed in principle on joint development for a small overlapping area although there have been no reports of progress on the implementation of this agreement. The potential claim of Vietnam in the 'Tripartite Overlapping Claim Area' in the Malaysia-Thailand Joint Development Zone has meant that no exploration or exploitation has taken place there.

82. Accordingly, for overlapping claim areas which are claimed by more than two parties, the preferable option would be to involve the Third Party State in the JDA despite the difficulties in doing so. This would avoid a 'persistent challenge' to the JDA by the Third Party State and contribute to the legal and political certainty of the JDA.

Managing Public Perception of JDAs

83. Public perception of a JDA plays a significant role in facilitating both the conclusion of a JDA and its successful implementation. In many of the JDAs under discussion, media portrayal and subsequent public reaction was a significant factor contributing to the success of negotiations and / or implementation of the JDA.

84. For example, with regards to the *2002 Australia-East Timor JDA*, there was much written by both the media and academics on whether the 2006 Certain Maritime Arrangements in the Timor Sea (CMATS) Treaty was the 'best deal' for East Timor and allegations were made that the negotiations were fundamentally unbalanced. This rhetoric has arguably hindered negotiations on the implementation of CMATS.

85. Similarly, after the *2008 China-Japan JDA*, differing interpretations of the Consensus arose with Japan claiming that China and Japan were carrying out joint development of the Chunxiao field and China claiming all they had allowed was capital participation of the Chinese and that Japan had acknowledged China's sovereign rights over Chunxiao. This has held up talks on the conclusion of a JDA between China and Japan.

86. The *2009 Malaysia-Brunei JDA* also met with controversy as the media (and certain former leaders of Malaysia) portrayed the JDA as the Malaysian Government being weak in having given up its sovereign rights to the overlapping area. It is unknown what effect this will have on negotiations of the Commercial Agreement between the national oil companies of Malaysia and Brunei Darussalam.

87. There are a few important lessons to learn from this. First, it is important that the JDA is perceived as fair and equal for both Parties. The provisions in the JDA itself will play an important part in determining whether the JDA is fair and equal. Provisions such as equal representation on Joint Authorities, equal sharing of revenue, without prejudice clauses, etc, will play a considerable role in demonstrating that a JDA is a 'win-win' situation for the parties concerned.

88. Second, States need to manage the expectations of their public. This includes refraining from stoking national sentiments when incidents occur which are perceived as a threat to national sovereignty and not taking unreasonable or extreme positions which are difficult to back down from. It also includes educating the public through the media and other avenues on the benefits of joint development and the fact that it does not involve a surrender of sovereignty.

89. Third, the *appearance* of transparency in the general negotiation process may also help to manage public perceptions of JDAs. For example, the *2009 Malaysia-Brunei JDA* was met with suspicion because it was shrouded in secrecy. This does not mean that States need to reveal every gritty detail of the negotiations but at least they should appear to be transparent.

The Existence of Good Bilateral Relations

90. Most JDAs in Asia were concluded in a period when there were good bilateral relations between the States concerned. For example, the *2000 China-Vietnam JDA* in the Gulf of Tonkin occurred after the relationship between the two countries normalised in 1991. Similarly, the improvement in general bilateral ties between China and Japan from 2006 prompted by changes in Japanese leadership (namely the resignation of Junichiro Koizumi who was famously nationalistic) also moved negotiations on the *2008 China-Japan JDA.*

91. JDAs were more difficult to conclude when relations are turbulent. For example, the *1979 / 1990 Malaysia-Thailand JDA* took eleven years to implement. This was arguably because of tension caused by Malaysia's unilateral claim to a fishing zone and its detrimental effect on bilateral relations. The *2001 Cambodia- Thailand JDA* which included a provision on jointly developing resources has not been implemented because of the thorny bilateral relationship between the two countries. In 2009, the Thai Government reportedly unilaterally revoked the MOU on the basis that it was negotiated by former Prime Minister Thaksin whom Cambodia had apparently appointed as its economic adviser. The situation now is likely to be even less conducive for implementation given the recent tension over the Temple of Preah Vihear.

92. Accordingly, in order to create a more conducive atmosphere for joint development, States should endeavour to take steps to improve their relationship. Such steps could include confidence-building measures, co-operative arrangements in non-controversial areas (such as search and rescue, scientific research, protection of the marine environment, etc), and regular opportunities for consultation and dialogue between high level officials.

Political Will of Parties

93. The JDAs in Asia were ultimately concluded because the States had the political will to make it happen. This political will needs to be sufficient to withstand domestic politics, changes in government and even conflict between the two States. Of course, political will is an ambiguous concept and can be attributed to a number of factors, such as the presence of resources, as well as the need and existence of good relations.

Common Provisions in JDAs in Asia

94. While there is no such thing as a model agreement that is capable of catering to the political, practical and legal needs of all States, examining some key provisions of JDAs in Asia can be instructive for the Claimants to the Spratly Islands disputes. It highlights the key issues in JDAs which need to be addressed and how States in Asia (including the Claimants) have addressed them.

Scope of Joint Development Zone

95. The Joint Development Zone is usually defined by a series of co-ordinates in which joint activities take place. Such geographical coordinates should be referenced to a geodetic datum. State Parties to JDAs in Asia have used a variety of methods to determine the Joint Development Zone, which have their relative advantages and disadvantages.

96. Generally, the Joint Development Zones in the majority of JDAs represent the whole area of overlapping continental shelf claims (see for example, the *1979 / 1990 Malaysia-Thailand JDA*, the *1992 Malaysia-Vietnam JDA*, the *1974 Japan-South Korea JDA*). This appears to be the easiest way to determine a Joint Development Zone and arguably, is also equitable in that the boundaries of the Joint Development Zone will usually accommodate the delimitation arguments of both States. Larger overlapping claim areas can be divided into subzones as was done in the *1974 Japan-South Korea JDA*. However, the key drawback of using the entire area of overlapping claims, particularly in situations where the claims are based on dubious legal principles, is that it confers on them a disproportionate amount of legitimacy and arguably encourages States to adopt extreme claims.

97. An alternative approach is to use a part of the overlapping claim area or a field or deposit within the overlapping claim areas. This has its advantages in that such an area is small and thus, it is usually easier to obtain agreement on joint development. It also particularly appropriate when the overlapping claim area is based on legally untenable principles, as jointly developing only part of the overlapping claim which is based on recognized legal principles may be more acceptable to State Parties. For example, in the *2001 Cambodia-Thailand JDA*, only part of the overlapping claims between Thailand and Cambodia were subject to joint development, the other part was subject to an agreement to continue negotiations on maritime delimitation as Thailand's claims in this area of overlapping claim were legally untenable.

98. The disadvantage to this approach is that it causes uncertainty and the remaining overlapping claim area which remains undeveloped has the potential to continue to cause tension. For example, in the *2008 China-Japan JDA*, the Joint Development Zone includes not only part of the overlapping claims on the eastern side of the median line between China and Japan, but also an area that is not subject to overlapping claims in the western side of the median line. However, there was also provision for continued consultations for joint development in other parts of the East China Sea. This has caused uncertainty on whether either side needs to consult and notify the other Party if conducting unilateral exploration / exploitation activities in other parts of the East China Sea.

99. A 'middle' ground between these two approaches can be seen in the *1989 Australia-Indonesia JDA*, where the joint development zone (known as the 'Zone of Cooperation') is divided into 3 areas (Areas A, B and C), in which different joint development regimes with differing levels of co-operation and revenue-sharing are applied. Areas B and C are under the sole jurisdiction of Indonesia and Australia respectively but each State is required to account for a share of the petroleum tax revenue in these Areas. Area A is under the joint control of Indonesia and Australia and management of resources is carried out by a Joint Ministerial Council and Joint Authority. Area A represents the area in which both States believed they had the strongest legal claim and in which compromise on a boundary was difficult to reach.

Institutional Arrangements for Management of Resources

100. States in Asia have adopted a diverse range of institutional arrangements for managing the exploration and exploitation of resources in the Joint Development Zone, varying from joint authorities or commissions to more flexible arrangements between national oil companies. Both have their advantages and disadvantages and will depend on the circumstances and needs of the States at that time.

101. On one end of the spectrum, some States have selected a 'joint authority' or 'commission' with legal personality and wide-ranging powers, such as licensing and regulatory powers, to manage the resources in the joint development zone. Examples of this are the Malaysia-Thailand Joint Authority (MTJA) established under the *1979 / 1990 Malaysia-Thailand JDA* and the Joint Authority and Designated Authority established respectively in the *1989 Australia-Indonesia JDA* and the *2002 Australia-East Timor JDA*.[25]

102. The key advantages to such a structure is that Governments are fully informed as to the manner in which national resources are being developed and decision-making is made jointly and at the highest level. This can give a degree of certainty and reassurance to State Parties that they have ultimate say in the management of their resources. Further, a Joint Authority requires considerable co-operation, collaboration and contact between States and their respective Government representatives and arguably, fosters better relations between States than a JDA based on an agreement between national oil companies.

103. There are also several disadvantages to such complex institutional structures. First, establishing a Joint Authority requires a degree of legal integration and harmonization and the nature and extent of powers given to the Joint Authority can take a considerable amount of time to negotiate. This is exemplified by the MTJA which took eleven (11) years to negotiate, due to disagreements between Malaysia and Thailand on the extent of authority which should be given to the MTJA. This was exacerbated by the fundamentally different licensing systems in Malaysia (which adopted a

[25] In addition to the Joint Authority in the 1989 Australia-Indonesia JDA, there is also the Ministerial Council whose role is essentially supervisory and policy oriented. Similarly, for the 2002 Australia-East Timor JDA, in addition to the Designated Authority, there is also the Ministerial Council and the Joint Commission.

production sharing system) and Thailand (which adopted a royalty-concession system), which meant that Thailand was reluctant to part with control over licensing. However, both States managed to overcome such difficulties after eleven years of negotiations and in 1990 agreed to the establishment of the MTJA, which controls[26] all exploration and exploitation of non-living resources in the joint development zone and is responsible for the formulation of policies, including the right to permit operations and conclude transactions for resource exploration and exploitation subject to the approval of both Governments.

104. Second, such complex institutional frameworks may lack flexibility and run the risk of unduly interfering with business operations in that practical matters still require the joint approval of both Governments. A third criticism of such complex institutional frameworks is the cost incurred in setting up the infrastructure and administrative machinery that establishment of a Joint Authority necessitates.

105. At the other end of the spectrum, some States selected more flexible arrangements between their national oil companies to manage the resources in the Joint Development Zone. Examples of this are the *1992 Malaysia-Vietnam JDA* and (arguably) the *2009 Malaysia-Brunei JDA*. In the *1992 Malaysia-Vietnam JDA*, both parties agree to nominate their national oil companies PETRONAS and PETROVIETNAM to undertake exploration and exploitation of petroleum in the defined area pursuant to a commercial arrangement agreement subject to the approval of both governments.[27] PETRONAS undertakes all operations in the Defined Area under the Coordination Committee and remits to PETROVIETNAM its equal share of net revenue free of any taxes, levies or duties.[28]

106. Malaysia appears to have favoured this approached in the *2009 Malaysia-Brunei JDA*. Both States agreed to establish a joint commercial arrangement area whereby PETRONAS will participate in the development of Blocks L and M, although the terms of the agreement are reportedly still being negotiated.

107. The obvious advantage of such flexible arrangements is that it took a much shorter time to negotiate the *1992 Malaysia-Vietnam JDA* (two years) as compared to the *1979 / 1990 Malaysia-Thailand JDA* (eleven years). It also avoids the pitfalls of having to create a supra-national authority and reduces the need for legal integration and harmonisation.

108. The *1974 Japan-South Korea JDA* perhaps represents a compromise between the complex institutional arrangements established under the *1979 / 1990 Malaysia-Thailand JDA* and the *1989 Australia-Indonesia JDA* and the more flexible arrangements between oil companies in the *1992 Malaysia-Vietnam JDA*. The Joint Development Zone is presently divided into six subzones. Each

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[26] Article 7, 1990 Agreement.

[27] Article 3 (b), 1992 Malaysia-Vietnam JDA.

[28] *Ibid.*

State appoints one or more concessionaires in each subzone[29] who have rights of exploration and exploitation. If a Party authorises more than one concessionaire with respect to one subzone, all shall such concessionaires shall have an undivided interest.[30] The method of selection of concessionaires is left to individual States, although the States have an obligation to notify each other of selected concessionaires. Concessionaires of both Parties are required to enter into an operating agreement to carry out joint exploration and exploitation in the Joint Development Zone[31]. The Parties also established a Joint Commission[32] whose function is more consultative as opposed to a powerful Joint Authority. Accordingly, while the *Japan-South Korea JDA* avoids the complexity of having a supra-national joint authority, it also preserves a substantial role for State licensing authorities and has a joint body to facilitate dialogue and discussion. The workability of such an arrangement has not been tested yet due to the lack of commercially viable hydrocarbon resources.

109. Notwithstanding the relative advantages and disadvantages of the types of institutional arrangements adopted by States in Asia, they ultimately did not affect the exploration and exploitation of oil and gas resources. Both the *1979 / 1990 Malaysia-Thailand JDA* and the *1989 Australia-Indonesia JDA*, despite having a 'Joint Authority', have successfully extracted resources from the joint development zone as did the more simple and flexible arrangement adopted in the *1992 Malaysia-Vietnam JDA*. This demonstrates that once political will is present, successful development of hydrocarbon resources can take place regardless of the institutional framework adopted.

Licensing Regimes

110. Provisions related as to how States award licenses for petroleum activities are crucial in JDAs. Such provisions include rules specifying qualifications for potential exploration holders; the area in which the license is granted; the duration of the exploration rights; conversion of such exploration rights into exploitation rights; programmes of exploration work to be undertaken during this period (extent of seismic surveys, the number of wells to be drilled, etc); reporting requirements (reports to relevant agency on exploration activities, *ie* a form of free information for governments); provisions on employment, training and procurement as well as relationship with other uses of the sea.

111. State Parties may use the domestic petroleum law of one of them (as was the case in the *1992 Malaysia-Vietnam JDA* where the Malaysian licensing regime was used due to the fact that Vietnam lacked developed petroleum legislation) or of both of them (as was the case in *the 1974*

[29] Article IV (1), Japan South Korea JDA 1974.

[30] Article IV (1), Japan South Korea JDA 1974.

[31] Article V, Japan South Korea JDA 1974.

[32] Article XXIV, Japan South Korea JDA 1974.

Japan-South Korea JDA). State Parties may also decide to establish a discrete licensing regime as was the case in the *1989 Australia-Indonesia JDA* and the *2002 Australia-East Timor JDA*.

112. It should be borne in mind that the terms and conditions of the licenses will need to be attractive to encourage investment from oil companies. Overly stringent licensing terms will discourage investment and defeat one of the main objectives of a JDA, *ie* the effective exploration and exploitation of hydrocarbon resources.

Fiscal Provisions between States and Oil Companies

113. The fiscal provisions in a JDA which set out the allocation of revenue and costs between the States concerned and the third party contractor / oil company are also critical. For example, in the *1979 / 1990 Malaysia-Thailand JDA*, the sharing of revenue from gross production of petroleum is set out as follows:

- The Contractor pays 10% of the gross production of petroleum to the Joint Authority as royalty and 5% to each government;
- All costs of petroleum production is borne by the contractor and 50% of gross production of petroleum shall be applied by the contractor for the purpose of recovery of costs for petroleum operations;
- The remaining percentage of gross production of petroleum (after royalty and costs payments) shall be divided equally between the Joint Authority and the contractor.

114. State Parties should agree to this at the outset. Commercial investors will require absolute clarity on governance issues such as these before entering into making commitments to explore and develop, and these requirements may be more stringent than those of the state parties. The fiscal regime will play a major role in determining the level of oil industry interest in the joint development zone. Fixing a high level of state return in unproven or possibly marginally commercial areas is unlikely to generate the desired degree of interest in obtaining licenses of permits.

Sharing of Revenue and Costs between States

115. The majority of the JDAs provide for equal sharing of revenue between the Parties (see for example, the *1979 / 1990 Malaysia-Vietnam JDA*, the *1992 Malaysia-Vietnam JDA* and the *1974 Japan-South Korea JDA*). This helps ensure that the JDA is equitable and fair or at least perceived as such, which makes it easier for State Parties to conclude such arrangements.

116. However, there have been instances where JDAs provide for an unequal sharing of revenue. For example, the *2002 Australia-East Timor JDA* provided for a 90:10 split in favour of East Timor (as opposed to the 50:50 split in the *1989 Australia-Indonesia JDA*). This is estimated to give East Timor huge revenues over 20 years from 2004. There may be several reasons for Australia's acceptance of ostensibly less favourable revenue-sharing terms. First is, of course, the fact that

although Australia had a lesser share of revenue, at the time of entry into the 2002 Timor Sea Treaty, it stood to gain in downstream activities as all the oil and gas extracted from the joint development zone would have been processed in Darwin. Second, Australia may have wanted to give East Timor every incentive to enter into the 2002 Treaty given Australia's concern that the alternative, *ie* agreeing to East Timor's claim for an equidistance boundary, would affect its existing maritime boundaries with Indonesia.

117. This illustrates that an unequal sharing of revenue may be necessary in some circumstances. For example, if one State has a considerably weaker claim to overlapping areas, it may be in its interest to agree in negotiations to a reduced share of the revenue. The State concerned has an incentive to agree to a reduced share of the revenue because it will still derive some benefit from the JDA despite its weaker position. At the same time, because that State is willing to accept a reduced share, it gives the other State an incentive to agree to the arrangement.

Hiring, Employment and Training of Personnel

118. JDAs have enormous potential implications for proximate coastal communities, providing opportunities for employment, and the use of local goods and services lasting perhaps for decades. In cases of economic disparity between two States, it is in the interest of both States that as many employment opportunities as possible go to nationals and companies of the less developed State. Where nationals lack the necessary skills, the regime can also require licensees to remedy this through training programmes. For example, in the *2002 Australia-East Timor JDA*, both States were required to give preference to the employment of nationals of East Timorese and facilitate as a matter of priority training and employment for East Timorese nationals.

119. However, where the parties are at an equal level of industrial development, as is the case with Malaysia and Thailand, there would seem to be no clear rationale for preferring the nationals of one over the other and there is no provision in the *1979 / 1990 Malaysia-Thailand JDA* for this. Similarly, in the *1989 Australia-Indonesia JDA*, it was provided that the contractor shall give preference to the employment of Indonesia and Australian nationals and permanent residents and employ them in equal numbers.

120. It is important, however, for the JDA to lay down an overall policy in this regard and to ensure that the international agreement is implemented either through mirror legislation or in the terms applicable to all licenses. The political will required to sustain the JDA might come under stress if it was thought that nationals of one country were being given preferential treatment in hiring and employment, especially if workers with equal skill levels were available from the other.

Pre-Existing Rights

121. Pre-Existing Rights, *ie* exploration / exploitation rights granted by States unilaterally to private parties or to national oil companies prior to the establishment of the JDA, may create obstacles to effective joint development, particularly if such right holders refuse to give up their claims. For example, in the *1979 / 1990 Malaysia -Thailand JDA*, pre-existing rights proved to be a major point

of contention between parties. Thailand had granted exploration permit licenses to Texas Pacific who was later not allowed to commence drilling due to ongoing negotiations between Thailand and Malaysia; and due to the acceptance by Thailand of the production-sharing system advocated by Malaysia. This problem was resolved in 1994 when the pre-existing concessions were incorporated into separate joint operating agreements between PETRONAS (for Malaysia) and PTT (for Thailand) which had taken over the Texas Pacific Concession.

122. This highlights the importance of addressing or accommodating pre-existing rights in JDAs. Of course, much may depend on the extent to which a licensee has undertaken exploration programmes and expended financial resources, as opposed to merely holding a licence and doing nothing until the jurisdictional picture has been resolved.

Competing Uses of the Joint Development Zone

123. If the joint development zone falls within the EEZ of coastal States or under the high seas, competing uses in these maritime zones recognised by UNCLOS will also have to be taken into consideration.

124. Some of the JDAs in Asia appear to have at the very least recognised the existence of these competing uses and they provide that the activities in the zone shall not affect other legitimate activities in the zone and its superjacent waters such as navigation and fisheries (see for example, *1979 Malaysia-Thailand JDA*[33] and the *1974 Japan- South Korea JDA*[34]). The *1992 Malaysia-Vietnam MOU* does not deal with navigation and third party rights, perhaps because the zone is smaller than the Malaysian-Thailand zone and hence, it is less affected by fishing questions.

125. Another related issue is how JDAs accommodate the traditional fishing interests of one or both State Parties in areas of the joint development zone as these fishing interests can affect the operation of the JDA and will also influence negotiations of JDAs. The *1974 Japan-South Korea JDA* states that operating agreements must provide for the accommodation of fishing interests.[35] The State Parties also agreed to give administrative guidance to their concessionaires so that in advance of operations they will endeavour to make adjustments for fishing interests of nationals concerned. This includes guidance to the operators not to carry out exploratory activities during the fishing season of January through May. The Japanese Ad Hoc mining law also provides for designated areas within the sub-zones of the joint development zone where development of hydrocarbon resources is restricted in areas where fish are present.[36] It also requires concessionaires

[33] Article IV, 1979 Malaysia-Thailand MOU.

[34] Article XXVII, Japan-South Korea JDA.

[35] Article V (1), Japan-South Korea JDA.

[36] Article 36, Japanese Ad Hoc Mining Law.

under the joint operating agreements to pay compensation to fishermen as a consequence of damage to fishing interests.

Prevention of Pollution and Protection of the Marine Environment

126. Part XII of UNCLOS obligates States to enact comprehensive legislation for the prevention of marine pollution from all sources, including offshore installations engaged in continental shelf activities,[37] and to make provision for monitoring and enforcement of such rules and standards.[38] Such installations (however defined) are subject to the jurisdiction of the coastal state,[39] but there may be concurrent jurisdiction where the installation is registered either as a ship or mobile offshore drilling unit under the law of another state.

127. The Deepwater Horizon blow-out of 2010 showed the capacity for massive damage resulting from a blow-out and consequent spill from an uncapped wellhead. The oil industry can cause pollution simply through the conduct of normal operations, such as the use of oil-based drilling muds, effluent of all kinds from installations, including garbage and sewage (some platforms will house hundreds of workers 365 days of the year for many years), as well as tailings (razor-sharp rocks brought to the surface as drilling proceeds) and equipment lost (or thrown) over the side.

128. Many of the JDAs in Asia do not have any provisions on the protection of the marine environment (see for example, the *1992 Malaysia-Vietnam JDA* and the *1974 Japan-South Korea JDA*[40]). Although the *1989 Australia-Indonesia JDA*[41] and the *2002 Australia-Indonesia JDA*[42] have provisions on the protection of marine environment, these are quite general and confined to obligations to co-operate in the protection of the marine environment in responses to oil spills and the liability of the contractor. There are more extensive obligations placed on the contractor in the Licensing Agreement between the States and the contractor.

129. Accordingly, it is important to have provisions on the protection of the marine environment in the JDA itself as well as to specify the applicable law governing marine environmental damage. More detailed obligations can also be imposed on the operator or concessionaire.

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[37] Article 208, UNCLOS.

[38] Article 214, UNCLOS.

[39] Article 60, UNCLOS.

[40] Although the 1974 Japan-South Korea JDA has an additional exchange of notes setting out safety standards which the operators must comply with.

[41] Article 18, *1989 Australia-Indonesia JDA.*

[42] Article 10, *1989 Australia-Indonesia JDA.*

Downstream Activities

130. The majority of the JDAs have no provisions for downstream activities, with the exception of the *2002 Australia-East Timor JDA* which has a generic provision on pipelines.[43]

131. However, in a number of instances they proved to be issues after the JDA was adopted. For example, in the *1979 / 1990 Malaysia-Thailand JDA*, there were difficulties in bringing the extracted gas from the JDA onshore through a Thai-Malaysian Pipeline project which included the construction of a gas-separation plant as well as offshore pipelines. The latter was reported to have roused considerable protest due to environmental pollution concerns and potential social and cultural impacts, particularly in Songkla in southern Thailand.

132. Similarly, after the conclusion of the *2002 Timor Sea Treaty*, another bone of contention between Australia and East Timor was the issue of whether the pipeline from the Sunrise Field would lead to Dili or Darwin and where the liquefied natural gas processing operations would take place. The CMATS did not resolve this issue and in early 2011, issues resurfaced in negotiations between Woodside and East Timor as the Timorese want a pipeline built from the field to the gas liquefaction plant near Dili, providing jobs and boosting East Timor's economy. Woodside, however, claims that piping the gas to East Timor through a three (3) kilometres deep trench in the seabed makes the plan technically challenging and expensive. East Timor is presently threatening to terminate the agreement in 2013.[44]

133. An important lesson from this is that States negotiating JDAs should have as much agreement as possible on downstream activities before entering into any JDA, although of course, this could make the negotiations more contentious.

Applicable Law / Jurisdiction

134. To avoid problems of overlapping jurisdiction, it is important to identify a particular set of national laws that will apply to activities in the joint development zone. The choice is usually between the national laws of one of the State Parties, the national laws of both the State Parties or a new single law to govern petroleum activities in the zone. Each of these options has its advantages and disadvantages.

135. When one of the State Parties lacks a developed petroleum law, it may be appropriate for the other State's laws to apply to activities in the joint development zone. For example, the *1992 Malaysia-Vietnam JDA* contains no express provision for applicable law in the Defined Area. However, by virtue of the fact that PETRONAS carries out all joint development operations, the applicable law for petroleum operations is the Petroleum Law of Malaysia.

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[43] Article 8, *2002 Timor Sea Treaty*.

[44] Ian Lewis, 'Greater Sunrise under Threat' Petroleum Economist, 21 March 2011.

136. None of the JDAs established a new single law to govern petroleum activities in the zone even with the creation of a supra-national authority. In the *1979 / 1990 Malaysia-Thailand JDA*, the State Parties exercise a concurrent jurisdiction in certain matters, in that rights conferred or exercised by the national authority of either Party in matters of fishing, navigation, hydrographic and oceanographic surveys, the prevention and control of marine pollution and other similar matters (including all powers of enforcement in relation thereto), shall extend to the joint development zone and such rights shall be recognised and respected by the Joint Authority. Both parties also agreed to have a combined and coordinated security arrangement in the joint development area.[45] The Parties have also decided to divide criminal jurisdiction in the Area along an arbitrary line[46] which shall not in any way be construed as indicating the boundary line of the continental shelf between the two countries in the joint development zone and prejudice the sovereign rights of either Party in the joint development zone.[47]

137. In the *Japan-South Korea JDA*, Japanese law will apply in the sub-zone where a Japanese concessionaire works as the operator whereas Korean law will apply in a sub-zone where a Korean concessionaire works as the operator, *ie* the applicable law follows the nationality of the operator. This appears to make the most sense as the operators will be most familiar with their own national laws and majority of the workers will be the nationals of the State where the operator is registered.

Without Prejudice Clauses

138. One of the major 'selling points' about joint development arrangements is that it enables States to preserve their claims while at the same time pursuing the development of the resources. State practice in Asia shows a divergence of practice on 'without prejudice' clauses. For example, in the *1979 / 1990 Malaysia-Thailand JDA*, there is no express 'without prejudice' clause, although there is a clause stating that the Parties would continue boundary delimitation negotiations.[48] The *1992 Malaysia-Vietnam JDA* contains a simple statement that Agreement shall not 'prejudice the position and claims of either party in relation to and over the Defined Area'.[49]

139. More detailed 'without prejudices' clauses can be seen in the *1974 Japan-South Korea JDA*,[50] the *1989 Timor Gap Treaty*[51] and the *2002 Timor Sea Treaty*.[52] The clauses provide that nothing shall

[45] Article IV, 1979 MOU.

[46] *Ibid* at 144 and Article V, 1979 MOU.

[47] Article V, 1979 MOU.

[48] Article II, 1979 MOU.

[49] Article 4 (a), 1992 Malaysia- Vietnam JDA.

[50] Article XXVIII, 1974, Japan-South Korea JDA.

be interpreted as prejudicing the position of either State on permanent continental shelf delimitation or affecting the sovereign rights claimed by each contracting State to the seabed.

140. At the other end of the spectrum is the 2006 CMATS between Australia and East Timor where one of the more extensive 'without prejudice' clauses can be found:

> 1. Nothing contained in this Treaty shall be interpreted as:
>
> a) prejudicing or affecting Timor-Leste's or Australia's legal position on, or legal rights relating to, the delimitation of their respective maritime boundaries;
>
> b) a renunciation of any right or claim relating to the whole or any part of the Timor Sea; or
>
> c) recognition or affirmation of any right or claim of the other Party to the whole or any part of the Timor Sea.
>
> 2. No act or activities taking place as a result of, and no law entering into force by virtue of, this Treaty or the operation thereof, may be relied upon as a basis for asserting, supporting, denying or furthering the legal position of either Party with respect to maritime boundary claims, jurisdiction or rights concerning the whole or any part of the Timor Sea.

141. The without prejudice clause in the CMATS is supplemented by a unique and detailed provision setting out a moratorium on each Party's claim, which includes *inter alia*, an agreement between Australia and East Timor not to pursue their respective claims to sovereign rights and jurisdiction and maritime boundaries during the duration of the CMATS, not to commence proceedings against each other which would raise directly or indirectly issues relevant to maritime delimitation in the Timor Sea and an agreement not rely on such findings even if they are made.[53] This can be attributed to Australia's concern not to re-visit issues of maritime delimitation.

142. Robust 'without prejudice' clauses such as that in the CMATS may be suitable in situations where parties are especially concerned to preserve their claims (with suitable adjustment of language to take into account of sovereignty dispute over features).[54] Such clauses can go a long way in allaying the concerns of the States as well as their populations that they are not surrendering their claims to sovereignty in any way (rather than any actual legal effect).

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[51] Article 2 (3), 1989 Timor Gap Treaty.

[52] Article 2, 2002 Timor Sea Treaty.

[53] Article 4, CMATS.

[54] For an extensive 'without prejudice' clause which refers also to territorial sovereignty, please refer to Article IV of the 1959 Antarctic Treaty.

VI. JOINT DEVELOPMENT IN THE SOUTH CHINA SEA: MOVING FORWARD

143. Joint development in the South China Sea has been suggested as a solution to the Spratly Islands disputes since the 1980s. China was one of the earliest proponents of 'setting aside the dispute and pursuing joint development.' The South China Sea Workshops on Managing Potential Conflicts in the South China Sea, headed by Hasjim Djalal and Ian Townsend-Gault, discussed joint development but ran into obstacles because of the sensitivity of the sovereignty disputes. Therefore, they focussed on less contentious issues. However, the workshops were instrumental in building trust and confidence among the claimants and in getting them to consider cooperative measures in areas of common interest.

144. This section will examine why States should enter into joint development arrangements in the South China Sea (Rationale) and will also suggest steps which should be taken to move forward on joint development (Recommendations).

Rationale for Joint Development in the South China Sea

145. Examining the rationale behind the JDAs in Asia highlights that the Claimants have every incentive to enter into joint development arrangements in the South China Sea. First, resolution of the sovereignty disputes and maritime delimitation are unlikely to occur either in the immediate or near future. Entering into a joint development arrangement as a 'provisional arrangement of a practical nature' is an accepted legal option, warranted under UNCLOS and recognized by international courts and tribunals as an equitable solution to overlapping maritime claims. It is also a functional necessity to enable utilization of resources in disputed areas.

146. Second, there are considerable economic incentives for Claimants to enter in joint development arrangements as was discussed in the previous section of this Report on *Rationale for JDAs in Asia*. Admittedly the exact amount of hydrocarbon resources in the South China Sea is unknown and may not be as much as estimated in some accounts. However, the cost of oil is rising and coupled with shortage in supply, the Claimants will want to and may need to exploit every resource possible. China and Vietnam in particular have a pressing need for oil to feed local consumption. China became a net importer of oil in 1993 and is the second largest consumer of oil after America. In 2006, its consumption of oil was 3.5 million barrels per day and is set to increase to 13.1 million barrels per day in 2030.[55] China is looking to diversify in order to avoid overdependence on one supplier or oil region such as the volatile Middle East which in 2005, supplied China with 45 % of its oil needs. Similarly, Vietnam is an emerging economy and faces the issue of demand outstripping supply. While Vietnam is reportedly 31st in the world in oil production, its output is

[55] Praveen Swami, 'Why Oil is so important to China?' The Telegraph, 8 March 2011, available at http://www.telegraph.co.uk/finance/newsbysector/energy/oilandgas/8369641/Why-oil-is-so-important-to-China.html.

apparently steadily shrinking and its Bach Ho oil field is expected to close in 2020.[56] The Philippines is also looking to reduce its dependence on costly imported oil products.[57]

147. The Claimants will face considerable difficulties in exploiting any oil in areas which are subject to different claims, particularly if the exploration and exploitation is done in areas near the disputed features. This is evidenced by the fact that exploration in and around the Spratly Islands remains meagre. Even the seismic activities by Vietnam far away from the disputed features and within Vietnam's 200 nm EEZ have been subject to strong protests by China. While it is of course questionable whether China has a right to protest such actions, it highlights the difficulties that oil companies face in any sustained investment in the South China Sea. A joint development agreement will create the necessary legal certainty for oil companies to provide the necessary capital to develop such resources.

148. The third major incentive for Claimants to enter into joint development of hydrocarbon resources is political. Undoubtedly, the Spratly Islands disputes have been a long-standing source of tension in the region. Military clashes and strongly worded diplomatic protests occur frequently, bringing tensions to the surface. While all the Claimants have publicly expressed their desire to resolve the dispute peacefully and it is unlikely (although not impossible) that military conflict will occur because of these disputes, there is no doubt that the Spratly Islands are a major irritant in relations which spills over to other aspects of bilateral and multilateral relations. Thus, the most compelling reason for joint development in the South China Sea is its potential to reduce tension and facilitate cooperation between Claimants.

Recommendations for Moving Forward on Joint Development

149. While there are numerous incentives for the Claimants to enter into joint development arrangements in the South China Sea, an analysis of the factors which influenced JDAs in Asia suggests that there are also political, legal and practical considerations that need to be overcome before joint development can even take place. The following recommendations set out actions that can enable joint development to be considered in a serious and meaningful manner.

Increase Knowledge of Features in the Spratly Islands

150. As mentioned previously, the number and nature of the features in the Spratly Islands remains shrouded in mystery. While there are accounts of physical descriptions of some of the features made by geographers and academics, they are not up to date and not consistent with each other. The lack of definitive information on the number and nature of the features means that any discussion on the maritime zones that these features can generate is mere speculation. This lack of

[56] Thien Tan, 'Vietnam Deals With Energy Crisis Risk', Vietnam Business Forum, 5 October 2010, available at http://www.vccinews.com/news_detail.asp?news_id=21742.

[57] Amy R Remo, 'Philippine Oil, Gas Sector gets attention', Philippine Daily Inquirer, 12 June 2011.

knowledge contributes to the uncertainty and lack of clarity of the claims made by the Claimants and also makes it difficult to identify disputed areas in which joint development can take place.

151. Accordingly, there should be further research on the features in the Spratly Islands. This could start with collating present information available and then verifying such information with satellite data. A more radical and expensive but arguably more accurate approach would be to have physical surveys done of the Spratly Islands and information collected by qualified geographers.

152. Before any such research takes place, it should preferably be supported or agreed to by the Claimants. This can be done on a 'without prejudice' basis. If neutral organisations or bodies carry out such research, it is more likely to be accepted by the Claimants.

153. It should be borne in mind that even if such research on the physical description of features is done, it would still be subject to a legal analysis on whether particular features meet the definition of an 'island' or 'rock' under UNCLOS. To date, no reliable or accepted method of distinguishing between islands and rocks has emerged and Article 121 remains open to diverse interpretation. Nonetheless, having information on the physical attributes of the features (*ie* its size, vegetation, whether it is above water at high tide) is critical before such a legal analysis can take place.

Encourage Claimants to Clarify Claims

154. At present, there is a significant lack of clarity on the basis, nature and extent of the maritime claims surrounding the Spratly Islands features. It is not clear what maritime zones, if any, are being claimed from the Spratly Islands features. The ASEAN Claimants, at least for now, appear to be treating the Spratly Islands features as either 'rocks' only entitled to a 12 nm territorial sea or low-tide elevations not entitled to any maritime zone.

155. China's claim from the Spratly Islands is ambiguous to say the least. While it has recently confirmed that it believes the Spratly Islands are entitled to a territorial sea, EEZ and continental shelf, its U-shaped line map surrounding the Spratly Islands and covering a large part of the waters of the South China Sea continues to raise suspicions that it is claiming rights and jurisdiction to explore and exploit the natural resources in the whole of the waters within the U-shaped line. The only possible basis for this claim is that China has historic rights in these waters. However, such an argument has dubious merit under international law because all parties to UNCLOS have agreed that the exploration and exploitation of the natural resources of the oceans will be determined by the provisions of UNCLOS, and UNCLOS does not recognize such historic rights.

156. China can clarify its claim without abandoning the U-shaped line map. It can simply state that it is claiming sovereignty over the islands and other features within the U-shaped line, and that the islands within the U-shaped line are entitled to a territorial sea, EEZ and continental shelf. Such a clarification would be completely consistent with its official statements on the features and would make its claim consistent with UNCLOS.

157. Such a clarification would not solve all the legal issues, but it would mean that all the Claimants are following the legal framework in UNCLOS as the basis for claims to explore and exploit the natural resources in the South China Sea. Issues would remain on the status of the various features under UNCLOS and on how many of the features, if any, would be entitled to an EEZ and continental shelf of their own. In other words, such a clarification would be major step toward reaching a consensus among the Claimants on which areas in the South China Sea are in dispute and potentially subject to joint development arrangements, and which areas are not in dispute.

158. A clarification of the claims would help the Claimants move towards joint development in two ways:

a) It would help clarify the areas which could be subject to joint development. As demonstrated from the experience of JDAs in Asia, it was much easier to come to agreement on joint development when the disputed area (or overlapping claim area) was defined and the claims giving rise to the overlapping area were made in good faith. Indeed, in most cases, the overlapping claim area became the joint development zone. Even if the Claimants choose to only develop a part of the overlapping claim area or a specified field or deposit, it would still have to be in an area that is in dispute.

b) It would foster an atmosphere of trust and confidence necessary for joint development. Once the U-shaped line is clarified and the prospect of claims based on historic rights is put to rest, the necessary trust and confidence to pursue joint development will be present.

Increase Knowledge of Hydrocarbon Resources Through Joint Seismic Surveys

159. While the Spratly Islands are often referred to as 'oil rich,' estimates of hydrocarbon resources differ widely and there is an absence of reliable publicly available hydrocarbon reserves data. While actual knowledge of hydrocarbon resources has the potential to make compromise more difficult, experience in other JDAs in Asia demonstrates that actual discoveries of resources can also add an impetus to enter into joint development. Such knowledge will enable the Claimants to know what is at stake. More practically, it will enable the Claimants to know where the hydrocarbons are and hence, assist in identifying an area that could be suitable for joint development.

160. There have been attempts to do joint seismic surveys by some of the Claimants. The 2005 Joint Seismic Marine Undertaking (JMSU) between China, Vietnam and Philippines was a very positive development even though it subsequently met with controversy and became mired in domestic politics in the Philippines. It is doubtful that the JMSU in its original form can be revived, particularly considering the opposition of the Philippines to the JMSU. Nonetheless, even if the 2005 JMSU cannot be revived, the ideas, principle and spirit of co-operation behind it can serve as a very useful model.

161. In light of this, joint seismic surveys between some or all the Claimants done on a without prejudice basis in areas which are clearly in dispute would be a tremendous step towards joint development.

The following points should be taken into account when negotiating an agreement for a joint seismic surveys, based in part on lessons learned from the 2005 JMSU and from the existing JDAs:

a) The terms of any joint seismic survey should be fair and equal to all Parties and should be perceived as fair and equal. The area in which the joint seismic survey is done will play an important role in whether the joint survey is perceived as fair and equal. The fact that the JMSU covered an area too close to the Philippines territory of Palawan prompted protests that Philippines had compromised its sovereignty.

b) The Parties to the joint seismic survey should be the Claimants which have bona fide claims made in good faith to the area in which the survey will be taking place. It should also involve all Claimants which have claims in that area as possible so as to avoid protests and persistent challenges. For example, if there is an area which is claimed by China, Philippines and Vietnam, all three States or their national oil companies should be Parties.

c) The agreement for the joint seismic survey should have robust 'without prejudice' clauses to allay concerns of States and their national populations.

d) The States concerned may wish to engage seismic survey companies which have no connection to or interest in the Spratly Islands disputes. Similarly, they may wish to use foreign-flagged vessels which have no connection to the States concerned. This will contribute to the perception of neutrality.

e) The States concerned should be allowed to have observers on board the survey vessels carrying out the survey.

f) The States concerned should be as transparent as possible in negotiations and in the actual agreement negotiated.

g) The States concerned should also manage the expectations of the public by emphasising how the survey does not prejudice their claims in any way.

Implement the 2002 ASEAN-China Declaration on Code of Conduct in the South China Sea

162. The 2002 ASEAN-China Declaration on the Code of Conduct in the South China Sea (DOC) was an important milestone as it set down a series of conflict avoidance mechanisms such as mutual restraint and co-operative activities designed to build confidence between Parties.

163. Discussions are presently ongoing on implementing the DOC. This is to be welcomed and in particular, efforts and discussions on how to implement the co-operative arrangements in the DOC should be continued. The co-operative activities which the Parties are encourage to undertake are marine environmental protection, marine scientific research, safety of navigation, communication at sea, search and rescue operations as well as combating transnational crime. These are arguably less controversial activities than joint development of hydrocarbon resources and hence, may be easier

to reach agreement on. Such small incremental steps such as these will help foster the good will and trust necessary for discussions on joint development.

Enhance Understanding on Nature and Importance of Joint Development Arrangements

164. There appears to be a lack of understanding on the nature of joint development arrangements, particularly that joint development can be done without compromising either the sovereignty claims of the Claimants. The key advantage of joint development is that it enables utilisation of the resources while at the same time preserving the sovereignty or maritime claims of the Parties. However, some officials or groups in Claimant States perceive that such joint development arrangements will compromise their sovereignty claims. Similarly, there is also a lack of understanding on the importance of cooperation with regard to shared interests and / or shared resources.

165. One of the ways in which such understanding can be enhanced is to organise seminars, workshops and other such meetings where such issues can be discussed and concerns raised. Such seminars, workshops and meetings can be organised by think tanks and research institutes on a Track 2 basis so as to encourage free and frank discussion. Given the role of the media in fanning the flames of nationalism, some of the sessions should include members of the media.

Better Management of Domestic Politics and Nationalistic Rhetoric

166. The Spratly Islands have become potent symbols of nationalism for the populations of the Claimants. Accordingly, the public often perceives its Government as weak if it fails to aggressively assert its claims over the Spratly Islands. For example, while the international community perceives China as aggressively protecting its claims in the South China Sea, the Chinese people, particularly the netizens, often criticize their Government for not adequately asserting its position. There is a natural tendency for Governments to take actions and make decisions based on the prevailing domestic politics or sentiments. This is dangerous, as not only does it further inflame national sentiments and emotions, it makes it difficult for the Claimants to make a reasonable compromises in international negotiations without being accused of surrendering its sovereignty. This is a major obstacle to any joint development agreement in the South China Sea (and any peaceful settlement of the disputes for that matter).

167. Accordingly, the Governments of the Claimants and the media have a significant role in managing domestic politics and nationalistic rhetoric associated with the Spratly Islands. First, Governments and the media can refrain from stoking national sentiments when incidents occur which are perceived as a threat to national sovereignty. Second, the Governments can avoid taking extreme positions which are difficult to back down from. Third, the Governments can educate the public on the benefits and importance of joint development and the fact that it does not involve a surrender of sovereignty. Last, the Governments should be as transparent as possible or at the very least, give the appearance of transparency, in any negotiations relating to joint development.

Greater Discussion on Appropriate Institutional Framework for Discussion and Negotiations

168. There is a lack of agreement on the appropriate institutional framework for discussion and negotiations on joint development. This did not prove to be an important issue with the other JDAs in Asia because they were negotiated on a bilateral basis. However, in the South China Sea there five (5) Claimant States plus Taiwan. While it is unlikely that a joint development agreement in the South China Sea will ever have six (6) parties, in many areas in the South China Sea, there may be up to four (4) parties including Taiwan. There appears to be a lack of agreement between Claimants on the forum where such issues should be discussed and on who should be included in the discussions.

169. The confusion on the proper forum is exacerbated by China's insistence that sovereignty disputes and competing claims be discussed bilaterally between individual Claimants and by the actions of some ASEAN Claimants to organise conferences and workshops which appear to be intended to internationalise the issues. There also seems to be some confusion on the role of ASEAN in the Spratly Islands disputes.

170. ASEAN can provide a forum for discussion between the Claimants without it becoming a dispute between the ASEAN Claimants and China. In fact, there is little likelihood that ASEAN will have a common position since the Non-Claimant Members view the issues differently than the Claimants. Also, there appear to be differences even among ASEAN Claimants on some issues (it should be noted that the Philippines and China both formally protested the joint submission of Malaysia and Vietnam on their extended continental shelf). Also, during discussions between China and ASEAN, Non-Claimant States such as Indonesia can help find areas of common agreement among the Claimants and help bring the Parties together. Further, discussions between ASEAN and China on implementation of the DOC through discussions, confidence-building measures and cooperative measures can be very important in developing the trust and confidence necessary for serious negotiations between the Claimants on joint development.

171. Once the claims of all of the Claimant States have been clarified, all of the Claimants should be able to agree that there are areas in the EEZ of the ASEAN Claimant States which are not in dispute and which are not subject to joint development. While it may be difficult to reach a formal agreement clarifying the areas not in dispute, such a consensus can be achieved by state practice. For example, if the Philippines licences a company to do a seismic survey in an area of its EEZ which is informally agreed to be not in dispute; and if none of the other Claimants protest when the survey is done, they will have impliedly agreed that the area in question is solely within the EEZ of the Philippines.

172. It may be equally difficult to reach an agreement on the areas in dispute which are subject to joint development arrangements. However, if the claimants follow the advice of Hasjim Djalal, they will begin with the easy cases, or 'low hanging fruits'. It may be easier to begin in an area where there are only two (2) or three (3) Claimant States. For example, the only other State claiming some areas in the EEZ of Vietnam is China. Also, most the areas in dispute are in the KIG group of islands,

which are claimed by the Philippines, China and Vietnam. Therefore, the three Claimant States, or their national oil companies, could undertake action in a small area which all of them agree is in dispute, such as an area within the 12 nm territorial sea of several of the disputed islands in the KIG. They could agree to undertake joint seismic surveys in this area and to share the data, and they could specifically agree that the arrangement is without prejudice to the sovereignty disputes or to the eventual delimitation of maritime boundaries. Negotiations for such arrangements could be done directly by the concerned claimant States, or through mediators.

173. Taiwan is a Claimant to the Spratly Islands dispute but is not recognised by the international community. Also, China is reluctant to allow Taiwan to enter into negotiations as an equal party as it could imply that it is a State. Since the ASEAN States follow a one-China policy, the role of Taiwan in any joint development arrangements must be decided between China and Taiwan. Negotiations on the joint development of hydrocarbons could proceed without Taiwan so long as it did not include the area adjacent to the island of Itu Aba, which is occupied by Taiwan. It would be much more difficult to include Taiwan in joint development arrangements for fisheries because it is a major fishing entity.

Role of Oil Companies

174. Oil Companies (both state-owned and privately owned) have a significant role to play in facilitating joint development in the South China Sea. They are the contractors who will ultimately be carrying out exploration and exploitation and will be required to provide considerable capital input. They have the potential to exert influence on States to enter into a JDA in order to ensure political and legal certainty for their investment. For example, for many of the JDAs in Asia, oil companies ceased exploration in overlapping areas prior to the conclusion of the JDA due to persistent interference by other States. This provided significant impetus for those States to enter into a JDA so as to provide a secure investment framework for these oil companies.

175. A more indirect way for oil companies to facilitate joint development is through education and dialogue with the Claimants on the benefits of joint development and on technical matters related to joint development (such as licensing regimes, petroleum laws, safety of installations, etc). This would not only enhance understanding on joint development but also improve the lines of communication between the Claimants and oil companies.

More Research on Joint Development Regimes Suitable for the South China Sea

176. While examining common provisions in existing JDAs in Asia was useful in setting out the issues and considerations that need to be addressed in any joint development arrangement, it also demonstrated that each situation is unique and the terms of any JDA will depend on the needs and circumstances of the States at the time.

177. Accordingly, it would greatly move joint development forward if more research was done on joint development regimes that would be suitable specifically for the South China Sea. Such research can be done by independent experts, lawyers, think tanks or research institutions which are neutral and

have no interest or connection to the disputes in the South China Sea. Such research could begin by focusing on the main provisions in a joint development agreement that need to be decided, *ie* the area in which the joint development should take place, the parties to such an agreement and the necessary institutional framework for management of the resources. Such research should also be done with the input and involvement of the Claimants on a non-binding and 'without prejudice' basis.

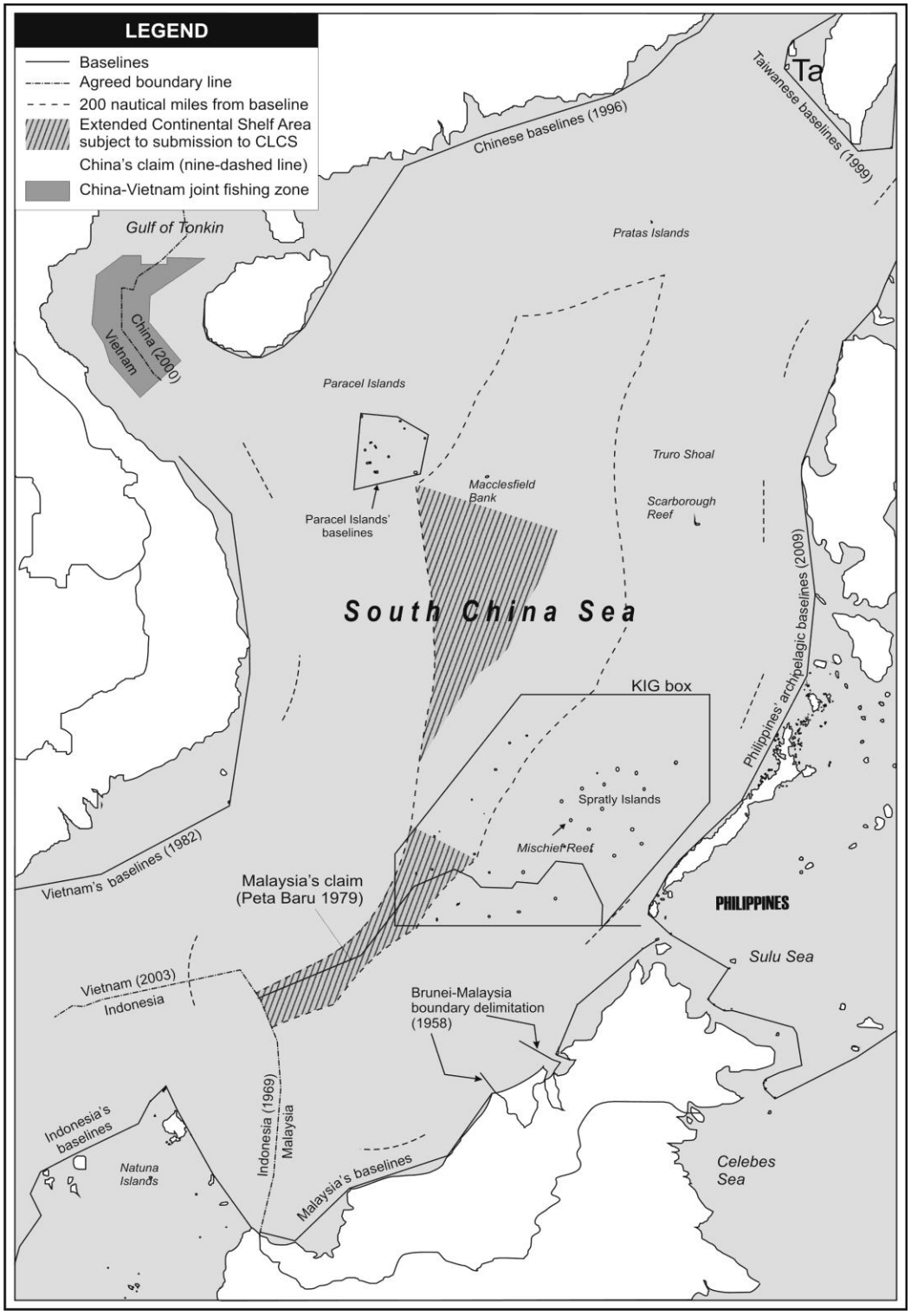
178. If the Claimants were to actually see *how* and / or *on what terms* joint development can be done in real terms (as opposed to the abstract way joint development has been discussed until now), it would significantly increase the chances of them coming to an agreement on joint development. While the joint development regime put forward would not bind the Claimants in any manner, it would provide an excellent starting-point for negotiations.

VII. ANNEX A

No	Short - Form Reference	Parties	Relevant Agreements	Remarks
Gulf of Thailand				
1.	**1979 / 1990 Malaysia-Thailand JDA**	Malaysia Thailand	a. 1979 *Memorandum of Understanding between Malaysia and Thailand on the Establishment of a Joint Authority for the Exploitation of the Resources of the Sea-Bed in a Defined Area (***1979 Malaysia-Thailand MOU***)* b. 1990 *Agreement between the Government of Malaysia and the Government of the Kingdom of Thailand and other matters relating to the establishment of the Malaysia-Thailand Joint Authority* (**1990 Malaysia-Thailand Agreement**)	
2.	**1982 Cambodia-Vietnam JDA**	Cambodia Vietnam	1982 *Agreement on Historic Waters of Vietnam and Kampuchea,*	In Principle Agreement Only
3.	**1992 Malaysia-Vietnam JDA**	Malaysia Vietnam	1992 *Memorandum of Understanding between Malaysia and the Socialist Republic of Vietnam for the Exploration and Exploitation of Petroleum in a Defined Area of the Continental Shelf involving the Two Countries*	
4.	**2001 Cambodia-Thailand JDA**	Cambodia Thailand	*2001 Memorandum of Understanding on the Area of Overlapping Maritime Claims to the Continental Shelf*	In Principle Agreement Only
Borneo				
5.	**2009 Malaysia-Brunei JDA**	Brunei Darussalam Malaysia	*2009 Exchange of Letters between Malaysia and Brunei Darussalam dated 16 March 2009*	Commercial Agreement still being negotiated
Gulf of Tonkin				
6.	**2000 China-Vietnam JDA**	China Vietnam	*2000 Agreement between the People's Republic of China and the Socialist Republic of Vietnam on the Delimitation of the Territorial Seas, Exclusive Economic Zones and Continental Shelves of the Two*	In Principle Agreement Only [A Maritime Delimitation

No	Short - Form Reference	Parties	Relevant Agreements	Remarks
			Countries in the Beibu Gulf / Bac Bo Gulf	Agreement with a provision on jointly developing resources straddling the boundary]
East China Sea				
7.	**1974 Japan-South Korea JDA**	Japan South Korea	*1974 Agreement Concerning Joint Development of the Southern Part of the Continental Shelf adjacent to the two countries*	
8.	**2008 China-Japan JDA**	China Japan	2008 *Principled Consensus on the East China Sea Issue*	In Principle Agreement Only
Timor Sea				
9.	**1989 Australia-Indonesia JDA**	Australia Indonesia	*1989 Treaty between Australia and the Republic of Indonesia on the Zone of Cooperation in the Area between the Indonesian Province of East Timor and Northern Australia*	No longer in force
10.	**2002 Australia-East Timor JDA**	Australia East Timor	*a. 2002 Timor Sea Treaty between the Government of East Timor and the Government of Australia* *b. 2003 Agreement between the Government of Australia and the Government of the Democratic Republic of Timor-Leste Relating to the Unitisation of the Sunrise and Troubadour Fields* c. *2006 Treaty between Australia and the Democratic Republic of Timor-Leste on Certain Maritime Arrangements in the Timor Sea*	

VIII. ANNEX B



Source: Andi Arsana, Australian National Centre for Ocean Resources and Security (ANCORS), University of Wollongong, Australia