

대륙붕 공동개발협정 사례 검토 연구

A Case Study of Joint Development Agreements

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부록 : International Law for Offshore Joint Development of Shared Hydrocarbon Resources: Legal Concept, Judicial Authorities, Models of State Practice and Common Elements of Joint Development Agreements

한일 대륙붕 공동개발협정이 체결된 지 44년 발효된 지 40년이나 지났습니다. 체결 당시의 기대와 달리 한일 대륙붕 공동개발구역에서 천연자원 개발은 현재 답보 상태에 있습니다. 한일 대륙붕 공동개발협정은 당초 50년을 바라보고 기획되었습니다. 이제 10년이 남았습니다. 이 10년이라는 시간은 긴 시간이기도 하지만 자원 개발이라는 측면에서는 매우 짧은 시간입니다. 우리에게 남겨진 시간이 얼마 남지 않았다는 것을 의미합니다. 촉박한 시간 일정 가운데에서도 우리가 할 수 있는 최대한의 성과를 얻기 위해서 기초부터 다지는 것이 필수적이라고 생각합니다. 전 세계에는 여러 건의 공동개발협정이 존재합니다. 이 공동개발협정이 어떻게 체결되었고, 또한 어떻게 이행되고 있는지를 검토하는 것은 상당히 중요한 의미를 가지고 있습니다. 우리와 같이 답보 상태에 빠진 공동개발 사례를 검토하는 것 뿐 만 아니라, 반대로 협력이 잘 진행되어서 유전 개발을 성공적으로 진행하고 있는 사례도 검토하였습니다. 또한 공동개발의 성공 및 실패의 차원에서만 사안을 바라 볼 것이 아니라 공동개발 이후 해양경계획정까지 염두에 두고 사례 연구를 진행할 필요가 있습니다. 그런 의미에서 곧 결과가 나오게 될 호주-동티모르 해양경계획정 사례도 공동개발과 관련하여 반드시 검토해 두어야 할 사례입니다. 이러한 사례 연구 목적은 사례 연구를 통해서 우리가 준비해 두어야 할 바가 무엇인지를 찾아보고 현 시점에서 최선의 방안을 도출해내는 것입니다. 이번 연구가 그러한 방안 도출을 위한 여러 좋은 사례들을 우리나라에 소개해 주었다고 자부하는 바입니다. 이 과제가 한일 대륙붕 공동개발협정의 이행 방안 마련에 있어서 기초적인 연구 자료로 사용되기를 희망하는 바입니다.

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원 장 양 창 호



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요약

대륙붕 공동개발협정 사례 검토 연구

1. 연구의 목적

- 이 연구는 다른 국가들의 대륙붕 공동개발협정 사례를 비교 분석하여 한일 대륙붕 공동개발협정의 실질적 이행과 대응방안 마련을 위한 시사점을 얻는 것을 목표로 하고 있음

2. 연구의 방법 및 특징

1) 연구방법

〈표〉 본 연구 방법의 특징

특징	주요 내용	자료수집	방법론 선택 이유
기초 분석	- 문헌조사를 위하여 외교사료원, 국가기록원 사료 수집 분석 - 한일 대륙붕 공동개발협정 관련 우리나라 이행 현황 검토 - 개별 국가들의 대륙붕 공동개발협정 조약문, MOU 등 분석	- 관련 문헌조사 - 국내외 사례조사	- 한일 대륙붕 공동개발협정의 이행 현황 파악 - 다른 국가들의 대륙붕 공동개발협정 체결 현황 검토
국제 세미나 개최	- 해외 자료 수집을 위하여 관련 사례 전문가들을 초청하여 국제 세미나 개최	- 전문가들 해외 사례 자문	- 실제 공동개발협정을 이행한 실무 담당자들의 경험 공유
해외 공동 연구	- 주요 국가들의 대륙붕 공동개발협정 이행 현황 개괄	- 해외 주요연구기관과 공동연구	- 다른 국가들의 대륙붕 공동개발협정 이행 현황과 관련된 연구결과물이 축적된 해외 연구기관과의 연구협력을 통하여 KMI 연구진의 연구 역량 강화

2) 연구특징

- 2028년 한일 대륙붕 공동개발협정 종료 시까지 10년이 남은 상황에서 일본은 공동개발협정 이행을 해태하고 있음
 - 1974년 체결 1978년 발효된 한일 대륙붕 공동개발협정은 50년이 지난 2028년 종료될 수 있음
 - 발효 당시만 해도 상당히 진일보한 국제사회 협력 체제로서 평가를 받았으나, 40여 년이 지난 현시점에서는 그 평가가 무색할 정도로 서로 간에 협력이 지지부진한 상황임
- 이 연구는 일본이 한일 대륙붕 공동개발협정 이행에 협조하지 않고 있는 상황에서 이행을 현실화하기 위한 방안을 마련하기 위한 목적을 가지고 있음
 - 다른 국가들의 대륙붕 공동개발협정 이행 사례를 검토하고 우리나라에 대한 시사점을 도출하여 대응방안을 세우기 위한 목적을 가지고 있음

3. 연구 결과

1) 연구 결과 요약

- 사례 조사를 통하여 다음의 사안을 파악할 수 있었음. 우선 상호간의 협력 및 개별 이익을 조정하여 일국이 공동개발을 대행하는 것도 가능
 - 모델 II의 경우임에도 한 국가가 공동개발에는 찬성했지만 특정 광구나 지역에 상업적 이익의 불확실성을 이유로 참여를 원하지 않을 경우에는 이를 보완할 수 있는 체제를 마련하는 것도 가능(아이슬란드-노르웨이 사례)
- 대륙붕 공동개발협정이 체결되었음에도 불구하고 일방이 공동개발을 원하지 않고 최종적인 경계획정을 시도하려고 할 경우 공동개발협정 이행보다는 양국 간에 최종적인 경계획정을 완결 지은 사안도 있음
 - 최근 대륙붕 공동개발협정을 종료하고 해양경계획정을 체결하기로 한 호주-동티모르 사례는 우리에게 시사하는 바가 매우 큼

- 특히 이 사안은 대상 수역의 해양지형이 한국-일본 사례와 동일하게 마주보는 두 국가 사이에서 대륙붕의 자연적 연장이 한 국가로부터 유래하여 그 한계가 가상 중간선 너머 타국 측 해역에 가깝게 자리잡고 있다는 점에서 시사점이 매우 큰 사례임
- 말레이시아-태국 사례의 경우 우리나라와 달리 상호 간의 협력을 통하여 대륙붕 공동개발을 안정적으로 진행하고 있는 사례이며, 이는 추후 우리나라가 추후 새로운 공동개발을 추진할 경우 지향해야 할 바를 보여주는 사례라고 할 수 있음

2) 정책적 기여

- 아이슬란드-노르웨이 사례를 통해서 협정문에 개별 규정이 있는 경우에는 한 국가가 반대하더라도 다른 국가가 공동개발을 단독으로 진행할 수 있다는 점을 확인할 수 있었음
- 호주-동티모르 사례를 통해서 해양 경계획정의 경향이 중간선을 중시하는 경향으로 나아가고 있으며 이는 한일 대륙붕 공동개발협정에 있어 우리 측에 상당히 불리한 사례로 작용할 것임
 - 호주는 기존에 개발 중인 석유 광구가 있어서 경계획정 이후라도 그 이익을 공유할 수 있었지만 우리나라에는 공동개발구역에 기득권이라고 할 수 있는 이익이 없는 상황임
 - 우리나라로서는 최대한 해당 지역에서 석유 탐사 및 개발을 위한 노력을 경주해야 한다는 결론에 다다름
- 말레이시아-태국 사례의 경우 대륙붕 공동개발협정의 모범 사례로 불리고 있으며, 추후 우리나라가 일본 등 다른 국가와 새로운 공동개발협정을 체결하고자 한다면 반드시 참고해야 할 사례임

3) 기대효과 및 제언

- 한일 대륙붕 공동개발협정의 교착 상황을 타개하기 위해서 다른 나라사례와의 비교 연구가 필수적이라는 점을 확인할 수 있었음
 - 현재 한일 대륙붕 공동개발협정이 이행되지 않는 상황에서 이를 타개할

- 수 있는 방안으로 우리나라가 탐사 및 개발에 대한 위험부담을 단독으로 지고 독자적으로 개발하는 방안을 제안하는 것도 가능함
- 현재 상태에서 최종 경계획정을 추구하는 방법도 있지만 석유 개발 실적이 존재하지 않는다는 점은 우리에게 부담이므로 이를 타개할 수 있는 방안을 조속히 마련해야 함
 - 다른 국가들의 사례 연구에 있어서 실제 해당 실무자들과의 접촉 및 유대를 지속적으로 늘려나갈 필요가 있음
 - 실제적인 개발 이익을 창출하고 있는 공동개발협정 모범 사례를 계속적으로 탐색할 필요가 있음

Executive Summary

A Study on Agreement on Joint Continental Shelf Development Cases

1. Purpose

- The study aims to identify implications for the implementation of Korea-Japan Agreement on Joint Continental Shelf Development and countermeasures by conducting a comparative analysis on other countries' joint continental shelf development cases.

2. Methodologies and Features

1) Methodologies

〈Table〉 Research Methodologies

Div.	Major Description	Data Collection	Reason for Selection
Basic Analysis	– Gather and analyze data of Diplomatic Archives and National Archives of Korea for literature review – Review Korea's implementation of Korea-Japan Agreement on Joint Continental Shelf Development – Analyze Agreement and MOU on Joint Continental Shelf Development of each nation	– Literature review – Overseas and domestic case study	– Study implementation of Korea-Japan Agreement on Joint Continental Shelf Development – Review the current status of the Agreements on Joint Continental Shelf Development of other countries
Hosting	– Host international seminars	– Receive advice	– Share experiences of the

Div.	Major Description	Data Collection	Reason for Selection
International Seminars	and invite the related experts to collect overseas data	from overseas experts	working-level officers who actually implemented the Joint Development Agreements
Overseas Joint Research	- Summarize the current implementation status of the major countries' Agreement on Joint Continental Shelf Development	- Joint research with major research institutions abroad	- Strengthen research capabilities of KMI researchers through cooperation with overseas research institutions that have accumulated research database on the implementations of Agreement on Joint Continental Shelf Development

2) Features

- Japan fails to sincerely implement the Korea-Japan Agreement on Joint Continental Shelf Development with 10 years left before its termination in 2028.
 - The Korea-Japan Agreement on Joint Continental Shelf Development which was signed in 1974 and took effect in 1978 will be terminated in 2028 (50 years from its effectivation)
 - It was evaluated as an advanced international agreement when it was took effect, but mutual agreement does not fulfill its reputation for the lack of cooperation 40 years since its effectivation.
- The study aims to come up with the measures to implement the Agreement as Japan does not cooperate in fulfilling the Agreement.
 - The study also aims to review other countries' Agreements on Joint Continental Shelf Development cases to draw implications that are applicable to Korea and to develop countermeasures

3. Research Result

1) Summary

- The case study found out that one country can execute a joint development between two countries through mutual cooperation and adjustment of each country's interest.
 - Even in the Model II Case, when a country agrees with joint development but a certain sector or a region does not want to participate in for uncertain commercial profits, an alternative system can be developed for compensation (Iceland - Norway case)
- A case shows that one party did not want joint development and tried to demarcate final maritime boundary even though two countries signed the Agreement on Joint Continental Shelf Development, therefore both nations determined the final maritime boundary rather than implementing the joint development agreement.
 - The Australia -East Timor case that recently terminated the agreement on joint continental shelf development and demarcated final maritime boundary has many implications to Korea.
 - Especially, the case has a huge implication to Korea-Japan as the waters are between the two facing countries and the continental shelf naturally starts from a country and ends near to the other country beyond a virtual mid line.
- The Malaysia - Thailand case shows a stable implementation of joint continental shelf development though mutual cooperation unlike Korea-Japan case, from which Korea can take an example for a new joint development in the future

2) Policy Contribution

- The Iceland-Norway Agreement stipulates that one country can conduct joint development on its own against the opposition from the other according to an individual regulation.
- The Australia and East Timor Case tends to emphasize mid line when demarcating maritime boundary, which will be disadvantageous to Korea in the Korea-Japan Agreement on Joint Continental Shelf Development.
 - Australia could share the profit from the boundary delimitation as it has oil fields under development, but Korea does not have any profit that could be considered as vested interest in the joint development area.
 - Therefore, Korea reached to the conclusion that we need to make utmost efforts in exploring for and developing oil in the concerned area.
- The Malaysia-Thailand is considered as an exemplary joint continental shelf development agreement, which Korea should refer to for a new joint development agreement with other countries including Japan.

3) Expected Effects and Suggestions

- Confirmed that a comparative study on other countries' cases is required to break a deadlock in the Korea-Japan Agreement on Joint Continental Shelf Development.
 - To break a deadlock, Korea could make a suggestion that it takes risks for oil exploration and development to itself and conduct a development project on its own.
 - At the present status, Korea could delimit the maritime boundary,

but it needs to come up with the measures promptly as Korea does not get profit from oil development, but burdens Korea.

- The case study on other countries implies the needs to strengthen network and bonding with the relevant working-level officers.
- needs to continuously review exemplary joint development agreement cases that generate tangible profits.

제1장

서론 《

제1절 연구 배경 및 필요성

한일 대륙붕 공동개발협정은 1974년 체결 당시만 해도 상당히 진일보한 국제 사회 협력 체제로서 평가를 받았으나, 40여 년이 지난 현시점에서는 그 평가가 무색할 정도로 서로간에 협력이 지지부진한 상황이다. 한국과 일본은 1974년 양국 간 협상을 통하여 한일 대륙붕 공동개발협정을 체결하였다.¹⁾ 상호간의 국내 비준 절차를 거쳐서 1978년 발효된 한일 대륙붕 공동개발협정은 1987년까지 1차 탐사기간을 거친 뒤 2차 탐사기간에는 일본이 일정 기간의 사전준비를 한 뒤 자원 탐사 가능성이 없다는 이유로 광구를 반납하자 우리나라 역시 광구를 반납하게 된다. 2002년 이후부터는 일본의 조광권자와 한국석유공사가 운영 계약을 체결하고, 탄성과 탐사를 하였으나, 일본은 경제성을 이유로 공동탐사 중단을 선언하였다. 2006년부터 2010년까지 한일이 민간 차원에서 공동연구를 진행하였다. 그 결과 같은 데이터에 대해서 한국과 일본의 해석이 대립되었으며 일본은 석유자원 부존 가능성이 낮다는 이유로 모든 활동을 중단하였다. 일본은 현재까지 공동개발협정 이행에 협력하지 않고 있는 상황이다.

일본이 공동개발을 위한 협력에 응하지 않고 지지부진한 유보적 입장을 보이고 있는 것은 체결 이후 국제사회에서 해양경계획정과 관련한 해양법이 중간선을 중시하는 방향으로 발전한 것과 무관하지 않다. 1969년 북해대륙붕 사건 당시 대륙붕의 자연적 연장 중시 현상은 우리에게 유리한 현재의 한일 대륙붕 공동개발협정 체결의 근거가 되었다. 현재의 한일 대륙붕 공동개발구역은 한일 간의 가상 중간선에서 일본 쪽 수역에 치우쳐져 설정되어 있다. 우리나라 육지에서 뻗어나간 대륙붕의 자연적 연장을 고려한 결과이다. 1982년 채택된 유엔해

1) 정식명칭 'Agreement between the Republic of Korea and Japan concerning Joint Development of the Southern Part of Continental Shelf adjacent to the two Countries.' 이 조약은 영어로만 작성되었음 (이하 '한일 대륙붕 공동개발협정').

양법협약은 200해리 배타적 경제수역 제도를 도입하고, 모든 연안국에 200해리까지의 대륙붕을 보장하고 있다. 추후 국제 판례는 양 해안의 길이가 400해리 미만이 되는 해역에서는 중간선을 기준으로 해양경계를 획정하는 경향을 보이고 있다. 일본으로서는 2028년까지 아무런 행위를 하지 않는 것이 추후 해양경계획정을 위해서 유리할 수 있다. 일본은 굳이 공동개발에 협력할 필요가 없다고 느끼고 있는 상황이다.

일본 내부적으로는 굳이 공동개발을 추진할 동력이나 이익이 존재하고 있지 않은 상황이지만, 일단 국가 간의 조약으로 한일 대륙붕 공동개발을 약속한 이상 단지 상업적으로 개발 가능한 자원이 없다는 이유로 공동개발에 대한 협력을 거부하고 있는 것은 협약 위반에 해당될 소지가 있다. 협약은 공동개발구역의 개발은 공동으로 하도록 규정하고 있으며, 이는 공동개발에 협력할 의무를 한일 양 당사국에 부과한 것이다. 따라서 경제성이 없다는 의견을 가지고 있을지라도 다른 당사자가 이와 반대되는 입장을 가질 경우 이에 협력해야 한다. 하지만 현재 일본의 협조가 없는 상황에서 우리나라가 단독으로 탐사 및 개발을 할 수 있는 대응방안을 검토할 필요가 있으며 그 사전조사로 개별 국가들의 공동개발협정 실제 이행사례를 검토할 필요가 있다.

일본이 공동개발협정 이행에 협조하지 않을 경우 우리나라는 한일 대륙붕 공동개발협정과 유엔해양법협약상의 분쟁해결 절차를 이용하거나 단독으로 석유 탐사 및 개발을 추진하는 방식 등을 대응방안으로 생각할 수 있다. i) 한일 대륙붕 공동개발협정상의 분쟁해결 절차를 이용한 분쟁해결 시도, ii) 유엔해양법 협약상 분쟁해결 절차를 이용한 분쟁해결 시도 등이다. 일본을 지속적으로 설득하여 공동개발에 나서도록 하거나, 또는 공동개발에 나서지 않을 수 없도록 우리가 방안을 마련하는 것이 가장 합리적이며 실효적인 방법이 될 수 있다.

이러한 현실 상황을 인식하고 다른 국가들의 공동개발협정 체결 상황 및 실제 이행상황을 검토하고 이를 비교하여 우리나라와 일본의 공동개발협정 이행에 주는 함의 분석이 필요하다.

제2절 연구 목적

이 연구는 일본이 한일 대륙붕 공동개발협정의 이행을 거부하고 협조에 응하지 않고 있는 상황에서 한일 대륙붕 협정의 이행을 현실화하기 위한 대응책 마련을 목표로 한다. 2028년 종료될 수 있는 한일 대륙붕 공동개발협정에 있어서 우리가 취할 수 있는 법적 수단을 검토하기 위하여 필요한 여러 나라의 사례를 수집하는 것을 목표로 한다. 또한 협정의 이행을 유도하기 위하여 우리나라가 취할 수 있는 수단을 다른 국가들의 공동개발협정 비교 연구를 통하여 파악한다.

전 세계 대륙붕 공동개발협정 체결 경과 및 내용, 그리고 추후 이행상황을 검토하여 우리나라에 시사점을 줄 수 있는 사례를 검토한다. 초기의 대륙붕 공동개발협정에 해당하는 한일 대륙붕 공동개발협정 이외에 좀 더 발전된 형태의 대륙붕 공동개발협정의 내용은 무엇인지 검토한다. 일방이 공동개발협정 이행을 거부할 경우, 상대방이 취할 수 있는 수단을 명문으로 규정한 사례에 대해 검토한다. 또한 우리나라의 경우처럼 추후 일방이 아무런 협력을 하지 않아 공동개발협정이 교착 상태에 빠져 있는 사례에 대해서 검토한다.

제3절 연구 내용 및 방법

1. 연구 범위 및 주요 내용

한일 대륙붕 공동개발협정의 주요 내용 및 경과 사항에 대해 검토한다. 더불어 한일 대륙붕 공동개발협정 발효 이후 양국의 이행 상황 및 한일 대륙붕 공동개발협정의 주요 내용을 검토한다. 이를 토대로 전 세계 국가들의 대륙붕 공동개발협정 체결상황, 협정에 따른 실제 공동개발사업 현황에 대해서 검토한다. 전 세계 대륙붕 공동개발협정을 전수 조사하여 협정 상의 기본 골격 및 규정 내용을 검토한다. 그리고 실제 이행 상황을 검토하고 우리나라에 미치는 시사점을 검토한다. 협정문 이외에 공동개발 이행과정에서 이행이 일방에 의하여 거부되거나 정지된 경우 등 분쟁이 발생했던 상황을 검토하고 이를 어떠한 방식으로

개별 국가들이 해결해 나갔는지를 검토한다.

〈표 1-1〉 연구수행 체계도



2. 연구 방법

이 연구는 문헌조사를 위하여 외교사료원, 국가기록원의 사료 및 관련기록을 수집·분석하였다. 외교사료원에는 14점의 관련자료, 국가기록원에는 236점의 관련자료가 존재하였다. 또한 가장 중요한 연구대상인 한일 대륙붕 공동개발협정의 개발 규정을 조문별로 분석하였다. 또한 각국의 대륙붕 공동개발협정 협정문도 분석하였다.

또한 이 연구과제에서는 해외공동연구를 실시하고 있다. 영국 노팅엄 트렌트 대학교 등 해외 연구기관 및 해외 석학과의 협동연구를 진행하여 공동개발협정의 기본 열개와 현재 진행되고 있는 공동개발협정의 대략에 대해서 검토하는 연구를 진행하였다(부록 및 제2장 참조). 개별 국가들의 사례 수집 및 공동개발협정 담당 각국 실무자들과의 네트워크 확보를 위하여 국제 워크숍을 개최하였다. 이 연구를 통하여 아시아 태평양 지역의 공동개발협정을 검토하였고, 해당 공동개발을 담당하고 있는 개별 국가 공무원 및 해당 분야 전문가들을 참여시켰다. 이러한 문헌연구와 해외공동연구를 통하여 공동개발협정의 전 세계적인 흐름을 파악하고 한일 대륙붕 공동개발협정에 대한 시사점을 모색하였다.

제4절 선행연구 검토

현재까지 이루어진 연구는 대륙붕 공동개발협정 및 그 근거가 되는 유엔해양법협약 제74조 제3항 및 제83조 제3항에 대한 연구가 주를 이룬다. 혹은 ‘한일 대륙붕 공동개발협정’에 대해서만 연구하였다. 일부 일반적인 측면에서 공동개발협정 전반을 검토한 연구도 존재한다. 하지만 다른 나라의 공동개발 사례를 비교 연구한 연구 성과는 존재하지 않으며, 특히나 협정문의 내용 이외 협정을 실제로 어떻게 이행하고 있는지를 검토한 연구는 존재하지 않는다.

〈표 1-2〉 선행연구의 검토

구 분	선행연구와의 차별성		
	연구목적	연구방법	주요 연구내용
주요 선행 연구	과제명 : 영유권 미확정지역에서의 자원개발 분쟁사례 연구 연구자(년도) : 에너지경제연구원(2011) 연구목적 : 다양한 영유권 분쟁 지역 사례연구에서 나타나는 공동개발의 모습 및 정부가 공동개발 결정시 그 의사결정 과정에서 고려해야 할 요소	문헌조사 공동연구 사례연구	· 사례분석 · 공동개발협정문 내용 분석 · 우리나라 해외자원 개발 시 검토해야 할 사항
	과제명 : Joint Development of	문헌조사	· 공동개발협정의 기본 개념

구 분	선행연구와의 차별성		
	연구목적	연구방법	주요 연구내용
3	Offshore Oil and Gas 연구자(년도) : British Institute of International and Comparative Law(1989) 연구목적 : 전 세계 해양에서 이루어지고 있는 공동개발협정 사례 분석 및 공동개발협정 유형화	공동연구 사례연구	· 공동개발협정의 유형화 및 유형별 사례 분석 · 공동개발협정 모델 협정 도출
	과제명 : Report on the Obligations of States under Article 74(3) and 83(3) of UNCLOS in respect of Undelimited Maritime Areas 연구자(년도) : British Institute of International and Comparative Law(2016) 연구목적 : 유엔해양법협약 제74조 제3항과 제83조 제3항과 당사국의 의무 및 경계 미확정 지역에서 개별 국가의 공동개발협정 사례 분석 * 일본 정부가 영국 학회에 금전 지원을 하고 그 금전 지원에 따라 연구팀이 꾸려진 뒤 제출된 보고서	문헌조사 공동연구 사례연구	· 유엔해양법협약 제74조 제3항과 제83조 제3항의 체계적 해석 · 지역별 공동개발협정문의 분석 · 개별 국가들의 관행 분석

제2장

대륙붕 공동개발협정의 분류 <<

제2장은 한국해양수산개발원과 영국 노팅엄 트렌트 대학교의 해외공동연구 성과물을 요약 정리한 것이다. 연구 성과물 원문은 이 연구보고서에 부록으로 실려 있다. 이 공동연구보고서는 공동개발에 대한 국가실행을 살펴보고, 공동개발협정의 유형에 따른 분류법을 발전시키는 것을 목표로 하였다.

제1절 개요

‘공동개발(Joint Development)’이란 두 국가 이상의 관할권하에 있는 탄화수소 자원을 협력적으로 개발하기 위하여 체결된 국제협약을 지칭하는 개념이다. ‘공동개발’이라는 개념 자체가 일관된 방식으로 이해되거나 사용되지는 않지만, 공동개발협정이 효과적으로 공유 천연자원의 탐사와 개발에 필요한 협력을 도출한다는 점은 이미 입증되었으며, 전 세계 여러 지역에서 공동개발협정을 채택하고 있다는 점 또한 이를 뒷받침한다. 이러한 예시가 수적으로 증가하고 지리적으로도 다양하게 나타난다는 점은 공동개발협정이 우연한 국가 실행으로만 볼 수 없다는 것을 나타낸다.

공유자원의 개발에 있어서 공동개발의 방식으로 협력을 강제할 수 있는 관습 국제법이 형성되었는지 여부는 불확실하다. 하지만 British Institute of International and Comparative Law(BIICL)의 공동개발협정에 대한 연구 결과, 다음에 제시되는 세 가지 공동개발 모델 중 하나에 속할 수 있는 것으로 나타난다. 하지만 어떠한 분류 방식에 따르더라도 다양한 요인으로 말미암아 하나의 공동개발 유형에 속하는 것은 아니라는 것을 알 수 있다. 이번 보고서에서 다루어지는 공동개발협정은 다음 세 가지 공동개발모델로 분류할 수 있다:

모델 I에 속하는 공동개발협정은 이해관계가 있는 국가들 간의 합의로 구성되며, 한 국가가 관련 국가를 대표하여 지정된 공동구역의 개발을 관리하고, 나

머지 국가는 그 관리 국가에서 발생한 비용을 공제한 후 자원 개발로부터 발생하는 수입을 공유한다.

모델 II에 속하는 공동개발협정은 지정된 공동개발구역 또는 해양경계를 가로지르는 광구를 개발하기 위하여, 자국 또는 다른 지명 석유회사 간의 강제적인 합작 투자(compulsory joint ventures) 제도를 수립하는 계약으로 구성된다. 후자는 광구의 국제 또는 국가 간 초국경적 광구통합(transboundary unitization)으로 설명되어 왔다. 모델 II 공동개발협정의 두 가지 유형의 공통적인 특징은 지정된 공동개발구역에서 발견되거나 정해진 경계선을 가로질러 있는 공유 광구를 개발하는 단일 운영자를 강제 지명한다는 것이다.

모델 III은 가장 복잡하고 제도화된 형태의 공동개발협정으로, 이전 두 가지 모델보다 훨씬 높은 수준의 협력을 필요로 한다. 결과적으로는 개별 국가의 주권과 자치권이 제한되는 형태이다. 이 공동개발모델은 이해관계국 간 협정으로 구성되는데, 이 협정은 법인격, 허가 및 규제 권한, 그리고 관계국을 대표하여 지정 지역의 개발을 관리하는 포괄적인 권한을 가진 국제 공동 기구 또는 위원회를 설립한다.

이러한 공동개발모델과 상관없이, 유사한 유형의 조항들이 이러한 협정의 대부분에서 발견된다. 그러한 공통 조항은 다음의 사항들을 포함한다. 분쟁이 있는 유전에 대한 각 당사국의 주권에 대한 저해금지조항(non-prejudice exceptions), 관할 구역 지정, 조직 구성 및 자원에 대한 허가제도, 분쟁 해결, 환경 보호, 제 3자의 권리가 바로 그것이다.

제2절 공동개발모델의 분류와 그에 따른 협정 구분

1. 공동개발모델 I

1) 특징

공동개발모델 I은 이해관계국들 간 합의로 구성되며, 일방 국가가 타방 국가를 대리하여 공유 광구를 개발하고, 개발 이익의 일정 부분을 지급하는 방식이다. 이 방식은 공동개발을 공식적으로 진행하는 것에 부담을 느끼는 국가들이 최소한의 노력을 통하여 목적을 달성할 수 있는 방식으로 비교적 합의가 쉬운 모델이다.

이 방식은 초기 공동개발협정에서 많이 이용되었으나, 한 국가의 주권적 권리가 타국에 의해 행사될 수 있다는 점 때문에 최근에는 거의 채택되고 있지 않다. 만일 관할권 중첩 수역에서 개발을 진행할 경우, 자국의 관할 수역에서 타국이 관할권을 행사한다는 사실이, 추후 발생할 수 있는 분쟁에서 불리한 선택을 만들어낼 수 있다는 우려 때문이다.

2) 바레인-사우디아라비아

바레인과 사우디아라비아 간 체결된 1958년 공동개발협정의 첫 번째 특징은 공동개발로 인한 양국 권리의 저해금지조항이 없다는 것이다. 한 국가만이 개발 지역에 대한 주권적 권리와 사법권을 행사한다는 점 때문이다.

동 사안에서는 사우디아라비아가 바레인을 대신하여 공동개발을 관리하고 있는데, 석유자원 개발로 인해 발생하는 순수입을 균등하게 50대 50으로 분배하고 있다. 동 사안에서 수입을 분배하는 주요 이유로는 바레인 측 석유개발회사(Bapco)가 탐사 활동을 수행하였기 때문이며, 이 지역에서 사우디아라비아가 주권과 행정권을 침해하지 않는다는 명백한 양해가 있었기 때문이다. 동 사안에서는 순수익의 균등한 분배 자격을 나눈 것 이외에는 바레인의 권리 또는 관할권을 인정하는 다른 규정은 없다. 이 영역을 포함하여 경계가 확정된 영역은 전적으로 사우디아라비아 쪽 경계에 위치한다.

또한 양 당사국들이 공유광구에서 해양경계를 획정하지 않기로 결정한 이유는 광구의 일체성 보존 때문이라고 볼 수 있다. 해당 광구를 개발함에 있어 초국경적 광구통합협정 또는 다른 방식으로 광구를 통합할 수 있음에도 불구하고 양국은 광구의 일체성을 위하여 모델 I 방식을 채택하였다. 하지만 동 사례에서는 분쟁해결, 환경보호, 제3자의 권리 보호에 관한 조항은 존재하지 않는다.

3) 카타르-아부다비

카타르와 아부다비가 공유한 광구는 아부다비 해양개발회사(Abu Dhabi Marine Areas Co., ADMA)에 의해 개발되었고 양국을 대신하는 아부다비 국왕의 허가에 의해 모든 수익을 동등하게 나누었으나 비용은 나누지 않았다.

해당 광구에서도 양 당사국은 공유광구에 대한 동등한 소유권을 가지고 있으며, 해당 영역의 개발과 관련된 모든 문제에 대하여 서로 협의하는 것에 동의하였지만, 카타르의 권리와 관할권을 명시적으로 규정한 조항은 없다. 그러나 Razavi에 따르면, 동 사안에서의 협정이 앞선 바레인과 사우디아라비아 간의 협정보다 더욱 공정한 해결책을 제공한다고 보았다.

또한 모델 I의 초기 모델에서는 제3자의 권리, 환경보호, 분쟁해결에 관한 조항을 규정하지 않았으나, 동 협약에서는 공유 광구에서 발생하는 모든 문제에 대한 협의를 제공한다고 규정하였다.

4) 이란-샤르자

이란과 샤르자 간 공동개발협정은 이란, 샤르자, 움알카이와인(Umm al Qaiwain) 간 장기간의 분쟁과 제3자 간 분쟁에 대한 해결책을 제공하였다. 이란과 샤르자는 아부 무사(Abu Musa) 섬의 주권을 둘러싸고 오랜 기간 분쟁이 있었다. 샤르자는 1960년대 후반 분쟁 당시 이미 100여 년 이상 섬을 실효적으로 지배하였고, 이란은 20세기 초부터 간헐적으로 이 섬에 대한 소유권을 주장해온 상태였다. 이 기간 동안 샤르자는 영국 정부와 아부 무사 섬의 지배에 대한 협정을 체결한 상태였으며, 영국 정부는 샤르자의 지배를 인정하였다. 그러나 이에 대해 이란 정부가 반발하자, 양국은 수개월 간의 협상을 거쳐 1971년 11월 아부 무사 섬에 통치에 관한 양해각서를 체결하였다. 그러나 동 양해각

서에서 아부 무사 섬의 주권을 누가 행사할 것인지 여부에 대해서는 명시하지 않았다.

이 협정에서는 아부 무사 섬의 석유자원 개발에 대한 사항과 샤르자와 양허계약을 체결한 뷔트 유전개발회사(Buttes Gas&Oil Co.)의 자원개발에 대한 내용을 규정하였다. 따라서 양해각서에서는 이란이 기존의 뷔트사와 샤르자 간 협약을 받아들여야 한다는 내용을 규정하였다.

즉 이 양해각서에 따르면 뷔트사가 자원개발로 취득한 이익의 절반을 이란에 직접 지불하고, 나머지 절반은 샤르자에 지불해야 한다. 또한 제3자 조항이 없음에도 불구하고, 개발 이익의 35%를 샤르자에, 15%를 움알카이와인에 지불되었다고 보았다. 이러한 측면에서, 동 협정은 공동개발모델 I의 변형된 형태로 볼 수 있다.

2. 공동개발모델 II

1) 특징

공동개발모델 II는 세 가지 모델 중 가장 많이 채택된 모델로서, 공유광구 개발을 위한 운영자 간의 강제적인 광구 통합 방식을 채택하고 합작투자를 시행하는 모델이다. 즉 공동개발을 진행하기로 한 양 당사국이 지정된 공유광구 내에서 자국의 개발회사 또는 기타 지명된 개발회사 간 강제적인 합작 투자를 확립하는 협정을 요구한다. 또한 해당 개발에 참여하는 운영자를 대표하여 통합된 자원을 개발하는 단일 운영자를 지명할 것을 요구한다.

공동개발모델 II는 두 가지로 분류할 수 있는데, 첫째는 통합 광구(unitized deposits)에 대해서 강제적인 합작 투자를 설립하여 공동개발구역을 지정하는 협정이다. 둘째는 이미 획정된 해양경계에 걸쳐 있는 광구를 개발하기 위해 단일 운영자를 규정하는 초국경적 광구통합협정(transboundary unitization agreements)이다.

2) 쿠웨이트-사우디아라비아

쿠웨이트와 사우디아라비아의 해양경계획정을 규정한 1922년 알-위그르 협정(Al Uqair agreement)은 양국 사이에 위치한 중립지대(Neutral Zone)를 공동주권구역(area of joint sovereignty)으로 규정하였으며, 이를 통하여 양국은 해당 중립지대에 매장되어 있는 천연자원에 대해 동등한 지분을 보유하게 되었다. 원래의 조광권자였던 석유기업 게티사(Getty Co.)와 아미노일(American Independent Oil Company, Aminoil)은 공동운영협정을 체결하고, 중립지대에서의 운영을 통합하였다.

3) 프랑스-스페인

프랑스와 스페인은 1974년 비스케이 만의 해양경계획정협정(Convention between the Government of the French Republic and the Government of the Spanish State on the Delimitation of the Two States in the Bay of Biscay)을 체결하였다. 이 협정에서 양국은 처음으로 대륙붕 해양경계선을 확정하는 것에 합의하였다. 대륙붕 경계선이 공동개발구역을 가로질러 설정됨에 따라 공동개발구역에서 양국 간의 주권적 권리를 보장하는 어떠한 조항도 필요하지 않게 되었다.

공동개발협정에서 양 당사국은 자원의 동등한 분배를 목표로 하여 공동구역을 개발할 것을 촉진하였다. 따라서 양국은 합작 투자에서의 각 지분에 따라 동등한 파트너십 및 운영자금 조달을 바탕으로 각 국가의 국적을 지닌 기업 간의 합작투자 계약을 장려해야 한다. 따라서 이 협정은 공동개발모델 I 이 변형된 예에도 해당할 수 있다.

또한 동 협정에는 대륙붕 경계에 걸쳐 있는 초국경적 광구 통합에 대한 규정이 있다. 그러나 타 초국경적 광구 통합 규정과는 다르게, 이 조항에서는 경계의 한쪽에 위치한 자원의 일부를 개발하는 것이 단순히 다른 쪽의 개발 조건에 영향을 미친다고 하더라도, 광구통합을 위한 절차는 적용되어야 한다는 점을 규정하고 있다. 게다가 경계선을 가로지르는 매장지의 사전 개발에 대해서는 양 당사국이 적절한 보상에 합의하도록 요구한다.

동 협정에서는 정책에 협력하거나 협정의 기능을 감독하기 위한 공동기구를 위한 조항은 규정하지 않았다. 개발 면허 신청은 타방 당사국에게 통보하여 그들의 면허 소지자를 지명하도록 하였다.

뿐만 아니라 제5조 제1항에서는 외교적 수단에 의한 분쟁해결을 위한 조항을 규정하였다. 그러나 분쟁이 4개월 이내에 해결되지 않을 경우 일방 당사국의 요청에 따라 중재재판소에 분쟁을 회부한다는 내용을 규정하였다. 또한 제7조에서는 자원개발 활동으로 인해 발생하는 해양환경의 생태계적 균형과 기타 합법적인 이용을 위한 모든 노력을 다할 것을 규정하였다.

4) 대한민국-일본

대한민국과 일본이 체결한 1974년 대한민국과 일본 간 양국에 인접한 대륙붕 남부구역 공동개발에 관한 공동개발협정(Agreement between Japan and the Republic of Korea concerning the Joint Development of the Southern Part of the Continental Shelf Adjacent to the Two Countries)은 공동개발모델 II에 해당한다.

공동개발협정에서는 공동개발구역을 소구역(subzones)으로 나누어 석유 탐사와 개발을 수행하도록 규정하고 있다. 각 소구역은 일본과 대한민국 중 한 국가의 관할권에 종속되며, 그 관할권은 소구역에 지정된 조광권자가 선택한 운영자(operator)의 국적에 따라 결정된다.

당사국은 지명된 조광권자가 소구역에서 운영계약을 체결할 것을 요구하며(제15조), 운영계약은 소구역을 탐사하고 개발할 단일 운영자를 지정해야 한다. 따라서 소구역에서는 합작투자 또는 컨소시엄 형태의 자원 탐사와 개발이 허용되지 않는다. 또한 자원의 탐사 및 개발에 소요되는 비용은 각 소구역에 지정된 조광권자 간에 균등하게 부담하여야 한다.

공동위원회(Joint Commission) 또한 설립되었지만, 그 위임 사항은 제한적이며 연락 목적으로만 설계되었고, 조광권자 간 기술조정을 위한 협의 기구로 운영되었다.

공동개발협정의 해석 및 이행에 관한 분쟁은 처음에는 외교적 경로에 의해 해결하고(제26조 제1항), 실패할 경우 중재위원회(Arbitration Board)에 회부된

다(제26조 제1항). 중재위원회의 결정은 구속력을 가지며 긴급한 경우 일방이 요청하면 잠정 명령을 내릴 수 있다(제26조 제4항). 공동개발구역 내 천연자원 탐사와 채취는 항해나 어업과 같은 다른 정당한 작업이 부당하게 영향을 받지 않고 수행하도록 규정되어 있다(제27조). 또한 제20조에서는 공동개발구역에서 해양오염의 방지 및 제거 조치에 합의하고, 해양충돌을 방지하도록 당사국들에 규정한다. 마지막으로 협정은 비준서가 교환되는 날로부터 50년 후 종료될 수 있으며, 일방당사국이 타방당사국에 3년 전에 서면 통고를 해야 한다.

5) 영국-노르웨이

영국과 노르웨이는 1976년 프리그(Frigg) 광구 개발과 가스 수송에 관한 양국 간 협정(Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway relating to the Exploitation of the Frigg Field Reservoir and the Transmission of Gas therefrom to the UK)을 체결하였다. 이 협정은 1965년 Anglo-Norwegian 대륙붕 협약 제4조에 의거하여 체결되었으며, 공동개발모델 II에 해당한다.

1976년 협정에 따라 Frigg 광구는 단일 단위로 개발되었다. 각 당사국의 허가는 공동운영협정에 의해 발효되며, 이때 양국 정부의 승인을 필요로 한다. 단일 운영자는 양 당사국의 승인하에 피면허자 간 합의에 의해 임명된다. 동 협약 제27조에서는 동 협정의 이행을 위하여 프리그 광구 자문위원회(Consultative Commission)를 설립하였는데, 각 당사국 대표 3명씩 총 6명의 위원으로 구성된다. 위원회는 협정의 해석 및 적용, 피면허자 간 체결된 공동운영협정과 가스 수송을 감독하는 송유관 소유자 간의 합의에 관한 기타 문제에 관한 초기 분쟁을 해결하는 역할을 담당한다.

프리그 광구의 생산물 배분 또한 규정되었다. 각 당사국은 자체 세법에 따라 자국 면허의 전체 이익에 대하여 과세하게 되는데, 타 당사국이 대륙붕에서 수행한 생산을 언급하는지 여부와 관계없이 협정에 규정된 원칙에 따라 과세한다. 또한 이 협정의 어떠한 내용도 양국의 대륙붕에 대한 관할권에 영향을 미치지 않으며, 국제법에 따르는 관할권 적용을 침해하는 것으로 해석되지 않는다는 점

을 명시하였다.

6) 아이슬란드-노르웨이

아이슬란드와 노르웨이가 채택한 공동개발모델은 모델 I 과 모델 II를 혼합한 형태이다. 공동개발구역은 양국이 1980년 합의한 EEZ와 대륙붕의 단일경계를 가로지르는 형태이다. 현재 노르웨이의 법이 이 공동개발지역에 적용되며, 석유 개발활동 및 안전조치, 환경보호와 관련된 내용이 적용된다. 공동개발의 초기 탐사단계는 양국 간 공유되는 탄성파 검사 데이터의 판매 수익으로, 노르웨이가 자금을 지원하며, 특정한 탐사와 생산 허가(license)는 합작투자계약(joint venture contracts)에 따라 부여된다.

공동개발구역은 북부와 남부 지역으로 구분되는데, 면적이 더 큰 북부지역에 서는 아이슬란드가 개발활동의 25%에 해당하는 부분에 대해 참가할 권한을 가진다. 게다가 노르웨이는 탐사와 개발 과정에서 발생하는 양 측의 비용을 탐사 회사들이 부담하지 않는 안을 만들도록 요청받았다. 이것이 가능하지 않은 경우, 양 당사국은 합작투자계약을 위해 협상을 진행하여 비용을 분담하거나 부담해야 한다. 또한 아이슬란드가 이를 원하지 않는다면, 노르웨이 독자적으로 진행할 수 있다. 그러나 공동개발구역에서 상업적 이용이 가능한 자원이 발견된다면, 아이슬란드는 노르웨이의 합작투자 비용을 상환하는 대가로 자신의 할당분에 참여할 자격이 있다.

공동개발 남부지역은 북부에 비해 소규모인데, 노르웨이가 해당 개발활동에 있어 25%의 지분을 소유하고 있다. 그러나 탐사회사와의 협상과정에서, 아이슬란드는 노르웨이의 비용을 회수해야 하는 동일한 의무를 지니지 않는다. 이후 상업적 발견이 확실시되면, 양 당사국은 합작투자계약하에서 그들의 지분에 비례한 비용을 부담해야 한다. 공동개발협정 제5조에 따르면, 만일 상업적 발견이 확실시된 광구가 단일 경계선 또는 공동개발구역에 걸쳐서 존재하거나 전적으로 한쪽 지역에 존재한다면, 광구의 개발을 위한 일반적인 광구통합원칙(unitization principle)이 적용된다고 규정하고 있다.

아이슬란드와 노르웨이의 공동개발협정에 공동구역의 환경보호에 관한 구체적인 조항은 없지만, 환경보호에 관한 각국의 관할권은 1980년 대륙붕경제계획

합의에 따른 당사국 간의 공동개발구역 부문별 할당에 따른다. 따라서 만일 공동개발구역의 탐사 또는 개발 동안, 동 협정상 안전 및 환경에 관한 규정이 적절한 해결책을 제시하지 못한다고 일방 당사국이 판단할 경우, 양국은 상호 협의를 해야 하며, 협의가 되지 않을 경우 조정위원회(Conciliation Commission)에 회부되어야 한다.

7) 아르헨티나-영국

양 국가는 남서 대서양에서의 해양자원 개발활동을 장려하기 위하여 비구속적 공동선언(Non-binding Joint Declaration)에 1995년 합의했다. 공동선언을 통하여 양국은 공동위원회(Joint Commission)를 설립하였는데, 이 위원회는 양국 정부 대표로 구성되며 연 2회 회의를 개최한다. 이 위원회는 총 두 가지 분야의 업무를 수행하는데, 첫째, 특별 협력지역으로 지정된 6곳의 광구(현재 4곳 남음)에서 조정활동을 수행하며, 둘째, 남서 대서양 지역의 공동자원 개발을 증진하기 위한 활동을 수행한다.

첫 번째 업무와 관련하여 공동위원회는 그 하위기구로 소위원회를 설립하였는데, 소위원회에서는 양측이 합작투자 및 컨소시엄을 통하여 각 광구에서의 상업활동을 장려하며, 각 광구의 개발계획에 대한 회사들의 제안서를 양국 정부에 추천하는 역할을 담당한다. 또한 운영에 필요한 수수료, 로열티, 세금에 관한 전반적인 행정업무를 담당하고, 향후 운영에 필요한 모든 측면에 대한 긴밀한 조정을 모색한다.

두 번째 업무와 관련하여 공동위원회는 과학조사 및 상업적 목적의 심해저 활동에 관한 정보를 양측 및 운영자로부터 수령하게 된다. 이때 상업적 목적의 해양조사활동에 대한 기밀을 지키면서, 관련 정보를 양측에 제안하고, 이에 대한 모니터링을 실시한다.

8) 말레이시아-베트남

말레이시아와 베트남은 공동개발을 위하여 양해각서를 체결하였는데, 이 양해각서에서는 양 당사국이 지명한 국영 석유회사가 양국 간 중첩되는 대륙붕 지정수역에서의 석유 탐사와 채굴을 위한 협약을 체결할 수 있도록 규정하였다. 또

한 이 양해각서에서는 공동개발의 이행을 위한 복잡한 제도를 규정하지 않았다. 이러한 점에서 말레이시아와 베트남 간 공동개발은 1970/90 말레이시아-태국 공동개발협정과 1989년 호주-인도네시아 공동개발협정과 차이를 가진다.

따라서 말레이시아-베트남 공동개발에서는 명시적으로 지명된 두 개의 국영 석유회사가 지정 지역에서 석유 개발을 위하여 공동운영협정을 체결하면 된다. 다만 양해각서 제4조에서는 지정된 지역과 관련하여 양 당사국의 입장이나 주장을 저해해서는 안 된다는 점을 명시하였으며, 지정된 지역의 어떠한 석유자원에 관하여 당사자가 아닌 자에게 권리, 이익, 특권을 부여하지 않는다는 점을 명시하였다. 뿐만 아니라 양국 간 양해각서에서 규정하지는 않았지만, 지정구역의 석유개발과 관련하여 발생하는 해양환경보호를 고려하여 개발하는 것을 보장하기로 합의하였다.

9) 튀니지-리비아

튀니지와 리비아는 공동개발모델 I, II에 해당하는 모델을 채택하였다. 튀니지는 공동개발협정에 따라 리비아에 위치한 엘보리 유전에서 발생한 수입의 10%를 받게 된다. 양국은 공동개발을 위한 사전탐사를 위하여 튀니지와 리비아 간 합작회사를 설립하였다.

3. 공동개발모델 III

1) 특징

공동개발모델 III은 공동광구 개발에 대한 협력을 촉진하기 위한 초국가적 관리기구를 설립하여 관리하는 공동개발모델 III은 이전의 두 모델보다 높은 수준의 협력을 요구하며, 결과적으로 각 국가들의 자치권을 축소해야 하는 가장 복잡하고 제도화된 모델이다. 이 모델은 관계국들 간의 합의를 통하여 국가들을 대표하여 개발구역을 관리하기 위한 합법적인 법인격, 허가 및 규제 권한을 가진 공동개발기구(Joint Authority) 또는 공동위원회(Joint Commission)를 설립하여 진행된다.

공동개발기구들은 타 모델에서 나타난 관계국들의 지시에 따르는 약한 권한을 가진 기구들과는 달리, 공동개발에 대한 감독과 의사결정에 있어 광범위한 권한을 행사하는 강력한 기구이다.

2) 수단-사우디아라비아

수단과 사우디아라비아의 공동개발협정은 모델 III의 가장 초창기 형태로 볼 수 있다. 양국은 초국가적 기구인 공동위원회(Joint Commission)을 설치하였는데, 이는 협정을 이행하는 법인격과 광범위한 권한을 가지고 있다. 그러나 공동구역(Common Zone)에 대한 상세한 규정은 명시하지 않았다.

양 당사국은 당사국의 해안선에 인접한 해저에 대해서는 어떠한 권리도 가지지 않지만, 각 당사국은 홍해에서 해안선에 인접한 1,000m 해저 등심선까지 해저 지역에 대해서는 각 당사국이 배타적인 주권적 권리를 보유한다는 사실을 명시적으로 인정했다. 이 두 지역 사이에 있는 공동구역에 대해서 양 당사국이 그 구역의 천연자원에 대해서 동등하게 배타적인 주권적 권리를 가진다는 점에 동의했다.

공동위원회는 천연자원의 효율적인 개발을 보장하기 위해 양 당사국에게 법 인체의 형태로 설립된 기구이며, 위원회는 a) 공동구역의 조사와 경계획정, b) 공동구역에 대한 탐사와 개발에 대한 연구 수행, c) 특별기구들에게 공동구역 탐사 장려, d) 면허/양허 적용의 고려 및 결정, e) 생산단계의 감독, g) 그리고 이를 위해 필요한 규제 권한을 보유한다.

수단이 이미 국영석유자원회사인 수단 광물개발회사(Sudanese Minerals Ltd.)와 독일계 프로이삭(Preussag)사에게 공동구역을 탐사할 면허를 부과한 경우, 양 당사국은 공동위원회가 현 협정의 틀 안에서 수단의 권리를 보존하는 방식으로 결정을 내리도록 동의했다.

3) 호주-인도네시아

1989년 호주와 인도네시아 사이에서 체결된 공동개발협정(티모르갭 조약)²⁾은

²⁾ Treaty between Australia and the Republic of Indonesia on the Zone of Co-operation in an Area between the Indonesian Province of East Timor and Northern Australia.

모델 I 과 III이 혼합된, 지금까지 협상된 가장 정교한 공동개발체제이다. 이 공동개발협정의 지리적 구분과 제도적 설계는 모두 복잡한 양상을 띠고 있다. 공동개발구역(the Zone of Co-operation)은 A, B, C 세 영역으로 나누어지며, 이들은 세계의 다른 관할권 체제를 따른다. 지역 B, C는 각각 호주와 인도네시아 해안에 가장 가까운 당사국의 관할권을 따른다. 따라서 B구역에서는 호주의 관할권이 우선 적용되고, 석유자원개발로 인한 수입의 10%를 인도네시아에 제공하게 된다. C구역 또한 동일한 방식으로 인도네시아가 호주에 전체 수익의 10%를 제공하는 것을 조건으로 한다. A구역에서는 양 당사국의 권리와 의무가 형평하게 분배되고 각료이사회(Ministerial Council)와 공동개발기구(Joint Authority)에 의해 행사된다.

이 협정에서는 형사관할권 행사에 대해서도 규정하고 있는데, A지역에서 발생하는 석유자원의 탐사 및 개발과 관련되거나 그로부터 발생하는 행위 또는 부작위에 대하여, 속인주의를 택하고 있다.

이 협정에서는 특히 A지역의 석유자원 공동개발을 위하여 정교한 공동개발체제를 고안하였는데, 양국 동수의 각료로 구성되는 각료위원회가 바로 그 예이다. 양국은 교대로 매년 또는 필요에 따라 회합해야 하며, 양국이 번갈아 위원회 의장이 된다. 각료위원회의 결정은 합의를 통해 우선적으로 결정된다. 뿐만 아니라 각료위원회는 A지역의 석유자원 개발과 관련된 모든 문제에 대해 전반적인 책임을 진다. 그 기능은 특히 공동 당국에 지침을 제공하는 것을 포함한다.

또한 양국은 공동개발기구를 설립하여, 계약을 맺고 재산을 취득 및 처분할 수 있는 권리와 법적 소송절차를 진행할 수 있는 권리를 부여하였다. 공동기구는 각료위원회의 지시에 따라 A지역의 석유 탐사 및 개발 활동을 관리하며, 이는 석유광업규칙(the Petroleum Mining Code) 및 석유분배계약(Petroleum Sharing Contract)에 따라야 한다.

4) 호주-동티모르

(1) 배경

1975~1999년 동안 인도네시아의 지배를 받아온 동티모르는 독립 후인

2001년 호주와 티모르해 조약(Timor Sea Treaty)을 체결하였다. 호주는 동티모르와 티모르해 조약을 체결하기 이전 인도네시아와 공동개발구역(The Timor Gap Zone of Cooperation)을 설정하기로 한 1989년 티모르갭 조약(Timor Gap Treaty)을 체결한 바 있다. 그러나 1999년 동티모르가 인도네시아로부터 독립하게 되었고, 티모르 유엔 임시정부(UNTAET)는 티모르 해역에서 석유자원 개발을 위하여 2000년 MOU를 통하여 이전까지 인도네시아와 호주가 체결한 1989년 티모르갭 조약의 조건을 계속적으로 인정하였다.

그 후 2001년 동티모르는 독립과 동시에 티모르해 조약을 체결하였고, 공동석유개발구역(Joint Petroleum Development Area, JPDA)을 설정하였다. 티모르해 조약에 부속된 2001년 MOU³⁾에서는 공동석유개발구역의 이익 배분을 1989년 티모르갭 조약의 1 대 1 배분이 아닌 9 대 1 배분으로 변경하였다. 균등한 수입 배분은 이처럼 동티모르에 유리하게 변경되었으며, 새로운 조약을 이행하기 위한 법적 공동개발 체제와 함께 공동개발원칙이 지속되게 되었다.

(2) 2001년 티모르해 조약의 불확실한 법적 지위

티모르해 공동개발에 대해 논의하기 위해서 2001년 티모르해 조약이 불확실한 법적 지위에 있음을 주목할 필요가 있다. 2001년 티모르해 조약 역시 1989년 티모르갭 조약과 2000년 MOU와 같이 새로운 동티모르 국가를 법적으로 구속할 지위에 있지 않다. 1989년 티모르갭 조약의 당사국은 호주와 인도네시아였으며, 2001년 티모르해 조약과 2000년 MOU의 당사국은 호주와 티모르 유엔 임시정부이기 때문이다. 그러므로 동티모르는 새롭게 독립한 국가로서, 국가승계와 관련한 백지출발원칙(clean slate' rule)에 따라서 호주와 티모르 유엔 임시정부(UNTAET) 간 체결한 2001년 티모르해 조약과 더불어 2000년·2001년 MOU의 향후 적용을 거부할 권리가 있다고 보인다.

³⁾ Memorandum of Understanding between Australia and the UNTAET, 2001 incorporating the Timor Sea Arrangement as Attachment 'A'. Adopted on 5 July, 2001. Source: Department of Foreign Affairs and Trade (DFAT) Australia.

(3) 1989년-2001년 공동개발협정의 비교

1989년 티모르갭 조약은 지리적 구분(geographical division)과 조직 구성(institutional design) 모두 복잡하다. Onorato and Valencia(2001)는 1989년 티모르갭 조약에서는 공동개발을 하기 위한 포괄적이고 연계된 입법적·계약적·재정적 체제를 창안하고 있다는 점에서, 과거의 다른 공동개발협정보다 더욱 발전된 형태라고 언급한 바 있다.

2001년 티모르해 조약은 공동개발을 위한 ‘고전적인 법적 형식’을 따르고 있는데, 이는 i) 공동개발체제가 적용되는 지리적 지역의 지정, ii) 양 국에서 파견하는 동일한 대표로 구성되는 공동개발기구 형식의 설립, iii) 일방 당사국 또는 설립된 공동기구에 의해 지정된 공동개발구역의 탐사 및 개발 권리의 부여, iv) 공동지정개발구역(The designated JD area)의 광구를 개발하기 위한 단일 운영자의 개인적 권리 보유자에 의한 지명을 의미한다.

가. 공동지정개발구역(The designated JD area)

2001년 티모르해 조약 제3조에 의해 설정된 공동개발구역의 위치는 2001년 양해각서 부속서 A에서 규정하고 있으며, 이는 1989년 체결된 공동개발구역조약(Zone of Co-operation treaty)의 A영역과 동일한 위치를 지정하고 있다.

나. 저해금지조항

저해금지조항(non-prejudice exceptions)은 미확정 대륙붕 지역에서 관할권 중첩 주장이 있을 경우 일반적으로 채택되는 조항이다. 2001년 티모르해 조약에서는 제2조 (b)에서 동 조약이 해저와 관련된 양국의 어떠한 법적 지위나 권리를 침해하거나 법적 지위에 영향을 주는 것으로 해석되지 않는다는 점을 명시하였다.

다. 공동개발원칙

공동개발원칙은 공동개발구역의 경계를 가로지르는 모든 광구는 관리 및 개발 목적을 위한 단일 단위로 취급된다는 의미로, 공동개발구역에 걸쳐 있는 광구의 통합 조항에 명시되어 있다. 이 원칙은 2001년 티모르해 조약제9조(a)에

규정되어 있다.

라. 이전에 부여된 이익

이전에 부여된 이익 또는 양허의 법적 지위는 공동개발 협상과정에서 자주 반복되는 문제이다. 중첩된 대륙붕에 대한 주장은 경쟁국이 분쟁 중인 해저 지역에 대해 주장하는 주권적 권리의 행사로서 일방적으로 양허를 부여하는 결과를 낳는다. 그 결과 두 가지 문제가 발생하는데, 첫째, 중첩된 양허에 대해 상충하는 법적 권리를 해소하고 해결할 필요가 있다. 두 번째, 처음의 양허가 계속되거나 새로운 양허로 변경되는 경우, 초기 양허의 법적 지위 또는 조건의 변경을 확인해야 할 필요가 있다.

마. 공동 형사재판관할권

2001년 조약 제14조 (a)항에서는 각국의 국민 및 영주권자가 공동석유개발구역에서 저지른 범죄와 관련하여 속인주의를 취하고 있다. 그러나 동 조 (b)항에서는 제3국의 국민이 공동석유개발구역에서 범한 모든 범죄에 동티모르와 호주 형법을 모두 적용하는 것으로 제시하고 있다.

바. 공동조직의 구성

2001년 조약 제6조 (a)에서는 지정기관, 공동위원회, 각료회의를 구성하는 세 단계의 공동행정구조를 설립하였다. 이와 같은 구조는 1989년 조약에서 설립된 두 단계의 공동행정구조와는 다른 형태이지만, 최고위 수준의 공동의사결정 단계를 만들었다는 점에서 본질적인 차이가 있는 것은 아니다.

사. 공동 재정 및 조세 부과

2001년 조약에서는 공동 재정 및 세금 부과에 대한 규정을 포함하고 있다. 조약은 당사국들이 공동석유개발구역에서의 모든 석유 개발 프로젝트를 위한 공동재정계획에 동의하는 데 모든 노력을 다하여야 한다는 점을 명시하였다. 일방 당사국이 공동재정계획에 동의하지 않거나 전문가에 의해 권고된 바가 있을 경우에만 석유 개발 프로젝트의 석유 생산 비율에 대해 자체 재정 계획을 개별적으로 시행할 수 있을 뿐이다.

아. 환경 보호

2001년 조약의 공동개발체제 협력 수준은 공동석유개발구역에서의 해양환경 보호에 관한 부분에서 분명히 드러난다. 협약 제10조 (a)에서는 양국이 오염원과 기타 환경 피해를 예방하고 최소화하기 위해 협력할 것을 규정하고 있다. 이 조항은 공동석유개발구역에서의 석유활동으로 인한 오염이 없는 경우에도 환경 피해가 발생할 수 있음을 인정하는 것으로 볼 수 있다는 점에서 중요하다. 또한 동 조에서는 당사국들이 공동석유개발구역에서의 해양환경을 석유활동에 의한 유해한 결과로부터 보호하기 위한 최선의 수단에 관해 협의할 것을 요구한다. 그럼에도 불구하고 오염이 발생할 경우, 당사국들은 그러한 오염을 완화하고 제거하는 데에 있어 서로 협력해야 하며, 기업은 공동석유개발구역에서 해양환경 오염으로 인한 손해배상책임을 부담해야 한다.

자. 분쟁해결절차

2001년 티모르해 조약이 불확실한 법적 지위를 가지고 있지만 이 협정이 구현하는 공동개발원칙은 매우 중요하다. 여기서의 공동개발은 티모르 해의 중첩된 관할권 분쟁을 해결하기 위한 가장 실질적인 법적 해결책을 제시한다.

관련 당사국들이 1989년 티모르갯 조약에서 처음 도입된 공동개발체제를 승계해야하는지 여부에 관한 문제를 차치하고도, 일반적으로 공유 천연자원의 국제 협력을 위한 더욱 강화된 법적 주장을 언급하는 것이 가능하다. 특히 유엔해양법협약 제83조는 2001년 티모르해 조약 제2조 (a)의 내용과 동일하게, “양국은 최종경계획정이 체결되기 전까지, 실질적인 성격의 잠정 협정을 체결하기 위한 모든 노력을 다하여야 한다”는 점을 명시하고 있다. 이러한 맥락에서, 공동 광상에 대한 대륙붕 중첩 주장을 해결하기 위한 수단으로서 공동개발협정이 꾸준히 제안되고 있다.

국제법상에서는 현재 중첩된 대륙붕의 공동개발에 대한 구체적인 해결책을 규정하고 있지 않다. 2001년 티모르해 조약에서는 이 조약에서 발생할 수 있는 모든 분쟁이 가능한 한 협의 또는 협상에 의해 해결되어야 한다고 규정하였다. 그러나 이러한 방법으로 해결되지 않는 분쟁과 각료위원회에 의해 해결되지 않는 조약상 문제는 당사국의 요청에 따라 중재재판소에 회부되어야 한다고 하였다.

국제법에서는 단지 공동개발에 관한 몇 가지 다른 협력모델을 제시할 뿐이며, 그 모델들은 관련 당사국 간 합의에 의하여만 활용될 수 있다. 그러므로 공동개발협정에서 발생하는 법적 문제들은 고위급 외교회담으로 해결될 수 있으나 이를 위해서는 높은 수준의 협력이 필수적이다. 따라서 백지출발원칙에 따라 2001년 티모르해 조약의 불명확한 지위를 확정하기 위한 최종적인 해양경계 해결을 위한 새로운 협상을 시작할 것이 아니라 2001년 합의에 따라 현재의 공동개발협정을 수정하는 것이 더욱 실행 가능하고 합법적인 대안이라고 할 수 있다.

여러 매체에서는 동티모르가 이 분쟁을 국제재판절차에 회부함으로써 더 나은 법적인 결과를 확보할 수 있는지에 대해 다양한 의견을 내놓고 있지만, 여러 상황을 고려할 때, 2001년 티모르해 조약에서 제안된 공동개발체제가 가장 실질적인 법적 해결책을 제시한다고 볼 수 있다.

5) 말레이시아-태국

말레이시아와 태국은 1979년 대륙붕 자원의 개발을 위한 양국 간 공동개발기구 설립 양해각서⁴⁾와 1990년 공동개발기구의 구성과 제반 문제에 관한 양국 정부 간 협정⁵⁾을 체결하였다.

1979년 양해각서에서는 공동개발구역과 약 50년의 기간 동안 양국 사이 대륙붕이 중첩된 수역의 무생물자원 탐사와 개발을 위한 공동개발기구에 대해서 규정하고 있다. 또한 만일 양 당사자가 동 협정의 만료기간 전까지 대륙붕경계 획정에 합의하게 된다면, 공동개발기구 또한 종료한다는 내용을 포함하였다. 그리고 만일 50년 내에 경계획정에 합의하지 못하면, 동 문서들이 지속해서 적용할 것임을 규정하였다. 1990년 공동개발협정에서는 공동개발기구의 구성과 석유자원 개발 레짐, 재정 관련 사항에 대해 규정하였다.

그러나 공동개발기구는 공동개발구역에서 환경보호에 관한 관할권을 가지지

4) Memorandum of Understanding between Malaysia and the Kingdom of Thailand on the Establishment of the Joint Authority for the Exploitation of the Resources of the Sea bed in a Defined Area of the Continental Shelf of the Two Countries in the Gulf of Thailand, 1979.

5) Agreement between the Government of Malaysia and the Government of the Kingdom of Thailand on the Constitution and other Matters relating to the Establishment of the Malaysia-Thailand Joint Authority, 1990.

않는다. 단지 양해각서 제4조에서 해양오염 방지와 조절과 관련한 일방당사국의 국내적 조치 이행이 공동개발구역에도 적용되어야 하며, 이는 공동개발기구에 의해 인식되고 존중되어야 한다는 점을 명시하였다. 또한 명시적 규정은 없지만 관할권 중첩 주장으로 인해 발생하는 대륙붕 경계 설정 문제는 당사자의 합의 또는 협상이나 다른 평화적 수단에 의해 해결되어야 한다는 것이 암묵적으로 합의되었다.

만일 우호적으로 해결할 수 없는 생산물분배계약(Production Sharing Agreement)과 관련한 모든 사항은 3인의 중재인(양 당사국이 한명씩 임명하고, 양 당사국이 공동으로 한 명을 임명)으로 구성된 중재절차에 회부된다. 양 당사국이 특정 기간 내에 제3의 중재인을 임명할 수 없는 경우 유엔국제거래위원회(UNCITRAL)가 선정하며, 중재절차는 동 위원회의 규칙에 적용받는다.

6) 기니 비소-세네갈

양국이 체결한 1993년 공동개발협정과 1995년 의정서는 양국이 1960년 체결한 해양경계의 한쪽이 연장되는 원추형의 공동개발구역에 대해 규정하였다. 그들은 공동개발구역의 어족자원과 대륙붕 무생물자원 모두를 개발하기 위한 '공동 관리·협력 기구(Joint Agency of Management and Co-operation, AMC)'를 규정하였다. 이에 따라 대륙붕 자원은 85(세네갈):15(기니 비소)의 비율로 공유된다.

공동 관리·협력 기구는 공동개발구역의 자원 개발과 관련하여 양국이 협정에 의해 부여받은 권리와 의무를 승계하며, 두 개의 기관, 즉 i) 국가 원수, 정부 또는 그들의 위임자들로 구성되는 기관(Authority)과 사무국, ii) 1993년 공동개발협정에 따라 공동 관리·협력 기구가 업무를 할당한 기업으로 구성된다.

첫 번째 기관(Authority)의 의장직은 2년의 임기로 교대로 주어지며, 공동 관리·협력 기구 자체의 의사결정을 위한 절차 규칙을 마련해야 한다. 또한 공동 관리·협력 기구의 의장은 기업감독위원회의 의장을 겸임한다. 기관은 공동 관리·협력 기구의 일반적인 정책을 확립하며 이는 사무총장에 의해 제안된 행정 정책이나 협력 정책을 확인하고 승인하기 위하여 적어도 1년에 한 번은 회합하

고, 다음과 같은 기능을 수행한다. i) 기업의 성과에 관한 지침을 기업에 제공, ii) 이사회 권고에 따라, 협정과 의정서 목표와 양립할 수 있는 방식으로 해당 지역의 자원 탐사, 개발에 관한 규정뿐만 아니라 과학적 연구에 대한 모니터링 및 통제에 관한 규정 개정, iii) 협약 및 의정서의 적용을 감독하고, 기업에 적용할 수 있는 규정 및 필요한 수정을 이사회에 권고, iv) 공동개발구역의 경찰력 규모의 확정 및 단속 기능을 수행한다.

공동 관리·협력 기구는 공동개발구역에서 광물자원, 석유 및 어업권에 관한 독점권을 보유하고 기업을 통해 이를 개발한다. 뿐만 아니라 양국은 공동 관리·협력 기구 직원, 기업에게 외교적 특권 및 면제를 부여하여 일반적인 국제기구의 대우와 동일하게 운영한다.

7) 콜롬비아-자메이카

콜롬비아와 자메이카는 공동개발 모델 II와 III을 혼재한 형태를 지니고 있으며, 공동개발협정은 양국 간 EEZ와 대륙붕의 단일경계선을 부분적으로 확정한다. 또한 양국의 공동개발구역(Joint Regime Area, JRA)을 설립하여, 생물자원과 무생물자원의 공동 관리, 컨트롤, 탐사, 개발을 진행한다. 공동개발구역에서 양 당사국은 모든 종류의 자원 탐사, 개발, 경제적 탐사와 개발을 위한 해저 상부수역에서의 활동, 인공섬·시설 및 구조물의 설치 및 사용, 해양과학조사, 해양환경의 보호 및 보존, 생물자원의 보전 등의 활동을 수행할 수 있다.

공동개발구역의 해저와 그 상부수역의 법적 지위는 확립되지 않았지만, 대륙붕과 EEZ 체제에 따르는 것으로 추정된다. 또한 공동개발구역에서 각 당사국은 자국의 기국선박에 대한 관할권을 가진다.

무생물자원의 탐사와 개발, 해양과학조사, 해양환경의 보호 및 보존 관련 활동은 양 당사국에 의해 합의에 의해 진행된다. 또한 공동개발구역에서의 활동의 이행 및 수행과 관련된 세부사항을 고려하기 위하여 양 국은 공동위원회(Joint Comission)를 설립하는 것에 합의하였다.

8) 200해리 이원 초국경적 광구 통합과 공동개발⁶⁾

(1) 멕시코 만의 서부 갭 지역에서의 멕시코-미국 간 초국경적 광구통합협정

미국은 유엔해양법협약 비당사국이지만, 멕시코 만 서부 갭 지역에서 멕시코와 초국경적 광구통합을 성공적으로 이루어 낸 예가 있다. 2000년 양국은 200해리 이원 멕시코 만 서부 갭 지역에 위치한 대륙붕 경계획정 조약⁷⁾을 채택한 바 있다. 이후 2012년 양국은 멕시코 만의 초국경적 광구 통합협정⁸⁾을 체결한 바 있다. 이 협약은 서문에서 “이 협정은 걸프 만에서의 초국경적 광구의 안전하고, 효율적이고, 형평하며, 환경적으로 책임질 수 있는 개발을 보장한다”는 점을 의도하였다. 이는 초국경적 자원의 형평하고 합리적인 통합을 증진하고 자원에서부터 발생하는 장기적인 이익을 극대화하고 양국의 자원을 보호하고자 하는 원칙에 기반한다.

초국경적 광구의 탐지와 결정에 따른 광구통합협정의 채택을 특별히 요구하는 것은 아니지만, 그러한 협정의 필수내용을 규정하는 제6조에서 나타난 것처럼 이러한 협정의 채택은 예상된다.

(2) 200해리 이원 대륙붕 중첩수역에서의 모리셔스-세이셸 간 공동개발협정

모리셔스와 세이셸 간 최근 협정은 200해리 이원 대륙붕 중첩수역 내 자원의 공동개발에 있어 전례 없는 예를 제공한다. 두 국가 모두 인도양 남서쪽에 위치한 소도서 국가이며, 유엔해양법협약의 당사국이다. 유엔해양법협약 제76조 제8항에 근거하여, 2008년 12월 1일 모리셔스와 세이셸은 마스카렌 고원(Mascarene Plateau)에 속하는 대륙붕 한계에 관한 정보를 대륙붕한계위원회에 제출했다. 이후 양국은 인도양 대륙붕의 396,000km²에 해당하는 지역을 확보

⁶⁾ 공동연구자가 표시한 표제의 원문은 다음과 같다. “Transboundary Unitization and Joint Development Agreements Beyond 200nm”

⁷⁾ Treaty between the Government of the United Mexican States and the Government of the United States of America on the Delimitation of the Continental Shelf in the Western Gulf of Mexico beyond 200 Nautical Miles (2000).

⁸⁾ Agreement between the United States of America and the United Mexican States Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico (2012).

하게 되었고, 이후 마스카렌 고원 지역에 위치한 대륙붕의 주권적 권리의 공동 이행에 관한 협정(이하 공동 주권적 권리 협정)⁹⁾과 마스카렌 고원에 위치한 대륙붕의 공동 관리에 관한 협정(이하 공동 관리 협정)¹⁰⁾ 총 2개의 협정을 체결하게 되었다. 공동 주권적 권리 협정은 총 4개의 조항으로 구성되어 있으며, 천연자원의 탐사·개발·생산을 관리하는 공동 관리 협정 보다 앞선 단계의 조약이다.

공동 주권적 권리 협정은 양 당사국이 ‘공동구역’(Joint Zone)에 있는 대륙붕의 탐사와 그 천연자원의 개발을 목적으로 공동으로 주권적 권리를 행사해야 한다는 점을 명시하고 있다. 공동관리협정에서 또한 공동구역을 명시하고 있으며, 이 지역의 천연자원 탐사·개발·생산에서 협력의 원칙 확장과, 공동구역 내의 이러한 활동에 적용 가능한 환경원칙을 규정하고 있다. 특히 서문에서 주권적 권리행사에 대한 형평하고 협력적인 법적 근거를 강조하였을 뿐만 아니라 해양환경의 보호, 생물다양성, 사전배려 원칙에 비추어 지속가능한 방식으로 대륙붕자원을 관리해야 할 중요성에 대해 강조하였다.

특히 제2조에서는 유엔해양법협약 제83조를 재언급하며, 국가들이 제83조상의 의무를 지켜야 하며, 실질적인 잠정협정을 발효할 것을 언급하였고 이는 동 협약 제23조 (a)항에서 잘 드러난다.

200해리 이원 대륙붕의 협력적인 지역 지정과 관련하여, 공동관리협정 제3조 (a)에서는 ‘공동구역’을 공동 주권적 권리 협정 제2조의 공동관리구역(Joint Management Area, JMA)으로 표현하였으며, 제3조 (b)에서 “체약당사국들은 공동관리구역 내의 대륙붕 개발과 그 자원의 보존, 개발을 공동으로 조절, 관리, 촉진하여야 한다는 점을 규정하였다. 뿐만 아니라 이 협정에서는 동 조약에서 개발할 자원의 종류, 생물탐사(bioprospecting) 등을 규정하였다.

또한 공동의 광상에서의 수익의 형평한 분배에 관한 규정을 포함하여 각료이사회(Ministerial Council), 공동위원회(Joint Commission), 지정기관(Designated Authority)로 이루어지는 세 단계로 구성되는 공동행정체제를 규정하였다.

9) Treaty concerning the Joint Exercise of Sovereign Rights Over the Continental Shelf in the Mascarene Plateau Region (2012).

10) Treaty concerning the Joint Management of the Continental Shelf in the Mascarene Plateau Region.

제3절 경계미확정 해역에 관한 국제사법기관의 판결

1. 2007년 가이아나/수리남 중재 사건

가이아나와 수리남은 양국 간 해양경계확정 분쟁 해결을 위하여 2004년 유엔 해양법협약 제7부속서 중재재판에 회부하기로 합의하였으며 2007년 최종판정을 받게 되었다. 동 분쟁은 양국의 식민지 시절 이전의 역사로부터 시작되었다. 그러나 본격적으로 분쟁이 표면화된 것은 2000년 수리남이 분쟁수역에 해군을 파견하여 가이아나의 조광권자를 위협한 사건부터이다. 1998년 가이아나는 수리남과의 중첩수역에서 석유 개발 및 시추를 위하여 CGX Resources사를 조광권자로 지정하였다. 이에 대해 수리남은 가이아나에 중첩수역에서 모든 석유 탐사활동을 중단할 것을 요구해왔으나 받아들여지지 않자, 2000년 군함을 파견하여 CGX사 시추선에 위협을 가하면서 수리남 수역에서 철수할 것을 명령하였다.

이 사건을 계기로 양국은 제7부속서 중재재판에 회부되기에 이르는데, 양국의 주장은 4가지이다. 첫 번째는 재판소의 해당 분쟁에 있어 관할권을 가지는지 여부, 둘째, 영해·배타적 경제수역·대륙붕의 경계확정문제, 셋째, 분쟁지역에서의 무력사용 문제, 넷째, 유엔해양법협약 제74조 제3항과 제83조 제3항에서 나타난 두 가지 양 당사국의 의무이다.

이 사건에서 중심이 되는 내용은 양국의 네 번째 주장인 유엔해양법협약 제74조 3항과 제83조 3항에서 나타난 ‘실질적인 잠정약정을 체결할 수 있도록 모든 노력을 다할 의무’와 ‘최종 합의에 이르는 것을 위태롭게 하거나 방해하지 않을 의무’에 대한 것이다. 동 사건에서 가이아나와 수리남 양국은 상대국이 유엔해양법협약 제74조 제3항과 제83조 제3항 상 의무를 위반하였다고 주장하였다.

첫 번째 의무에 대하여, 중재재판부는 분쟁수역에서 천연자원의 개발이 최종 경계확정에 영향을 미치지 않는다면 이러한 개발을 중단하지 않아도 된다고 보았다. 또한 동 조항의 ‘모든 노력(every effort)’이 다양하게 해석될 여지가 있지만, 이는 분쟁당사국이 신의성실하게 협의할 의무를 부가한다고 판시하였다.

그러나 현 사안에서 가이아나는 예전부터 진행하고 있는 탐사활동에 대해 수리남과 협의하지 않았고, 수리남 또한 자국의 군함을 파견하여 가이아나 측에 위협을 가하였기 때문에 양국 모두 동 협약 제83조 제3항상 의무를 위반하였다고 판단하였다.

두 번째 의무에 대하여, 재판부는 1976년 에게 해 대륙붕 사건을 언급하면서, 영구적으로 물리적인 변화 또는 사실상의 피해를 초래하는지 여부(permanent, physical change or in fact - damage)를 제시하며 분쟁수역에서 가이아나의 탄성파 검사가 해양환경에 물리적 변화를 초래하지 않는다고 보았다.

수리남 또한 가이아나의 석유개발 활동에 대한 다양한 대응조치를 선택할 수 있었음에도 불구하고 군함을 파견한 것은 두 번째 의무를 위반한 것이라고 보았다.

2. 2017년 가나와 코트디부아르 간 해양경계 사건

2014년 12월 3일, 가나와 코트디부아르는 특별협정을 체결하여, ITLOS 규정 제15조 제2항에 따라 설립되는 5인의 특별재판부(ITLOS Special Chamber)에 양국 간 해양경계획정 분쟁을 회부하기로 합의하였고, 2017년 9월 23일 최종판결을 선고하였다.

코트디부아르는 경계미획정 수역에서 가나의 일방적 석유개발 행위로 인해 대륙붕에 대한 자국의 주권적 권리를 침해받았다고 주장하였다. 또한 가나의 행위는 유엔해양법협약 제83조 제1항과 국제관습법에 따라 신의성실하게 협상할 의무를 위반하고, 유엔해양법협약 제83조 제3항에서 나타난 ‘최종 합의를 위태롭게 하거나 방해하지 않아야 할 의무’를 위반한 것이라고 주장하였다.

가나 또한 코트디부아르의 청구를 모두 기각해달라고 청구하였으며, 특히 코트디부아르의 유엔해양법협약 제83조 위반 주장과 주권적 권리 침해에 대한 주장을 기각되어야 함을 언급하였다.

특별재판부는 최종판결을 통하여, 가나가 코트디부아르의 주권적 권리를 침해한 사실이 없으며, 유엔해양법협약 제83조 제1항과 제3항 또한 위반하지 않았다고 판시하였다. 즉 특별재판부는 가나가 재판소의 잠정조치 명령에 따라 진행

하던 개발행위를 중단하고 새로운 시추를 하지 않았으며, 가나의 개발 활동 구역이 코트디부아르의 구역(Ivorian maritime area)이 아닌 경계획정 이후 가나의 구역에 속하기 때문에 의무의 위반이 없었다고 보았다.

그러나 백진현 재판관은 개별의견에서, 유엔해양법협약 제83조 제3항에서 나타난 최종경계를 저해하거나 영향을 미치지 않을 의무에는 판결이 진행 중인 사건에서 문제되는 분쟁수역에서 일방적 활동을 자제할 근본적인 의무가 포함된다고 보면서, 재판소에서 가나의 일방적 활동에 대한 적절한 근거를 제시하지 못했다고 보았다.

제4절 소결

공동개발모형을 채택하고 있는 국가들의 실행을 살펴본 결과, 공동개발모형이 관련국들에 공동개발방식에 대한 선택권을 제공하고 있다는 점을 확인하였다. 하지만 그 자체로는 공동개발협정이 과연 국제법상 어떠한 위치에 있는지에 대해서, 특히 공동개발협정을 체결하는 것을 국가들이 어느 정도 법적 관행으로 받아들이고 있는지에 대해서 답을 주고 있지 않다는 점을 확인하였다. 또한 세 가지 공동개발모형을 통한 국가들의 실행에서 중첩수역에서 공동개발을 체결해야 하는 법적 의무가 있다는 법적 확신(*opinio juris*) 역시 존재하지 않는다는 점을 확인하였다. 법적 확신이 존재하지 않기 때문에 법적으로 무효가 되는 것은 아니다. 하지만 공동개발을 위해 필요한 ‘협력의 원칙’이 법적 교착 상태에 대한 효과적인 대안으로서 존재하는지에 대해 논란이 발생할 수 있다.

하지만 지금까지 축적되어온 국제재판소의 판결과 공동개발에 관한 국가실행으로부터, 양국 경계에 걸쳐 있는 대륙붕의 매장된 공유자원을 개발할 경우 공동개발이 법적인 대안이 될 수 있음을 확인하였다.

결과적으로, 경계획정협정이 부재한 경우 공동개발은 더욱 필요하며, 최종적인 경계가 확정된 경우에도 경계에 걸쳐 있는 광구의 통합 역시 필요하다. 그러므로 어떠한 경우에 있어서도 ‘공동개발원칙’의 적용은 필연적이며, 공유자원을 개발하고자 하는 국가들은 계속해서 공동개발을 진행하고자 할 것이다.

제3장

대륙붕 공동개발협정 이행 사례 검토 《

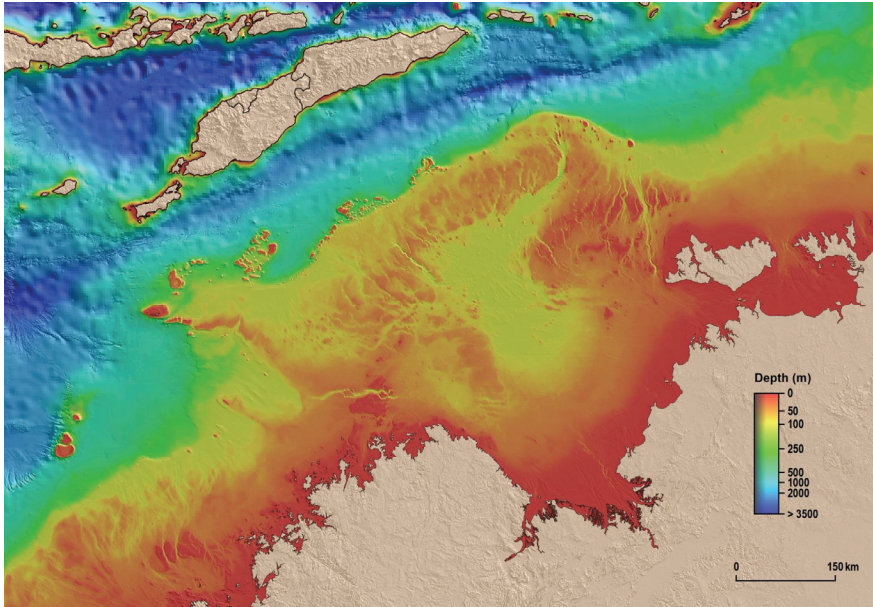
제1절 호주-동티모르

1. 개요

호주-동티모르 공동개발협정은 그 기원이 1989년 호주-인도네시아 공동개발 협정으로까지 거슬러 올라간다. 당시 동티모르를 점령하고 있던 인도네시아가 호주와 맺은 조약(티모르갯 조약)이다. 그러나 이후 동티모르가 인도네시아에서 독립하게 되고 이 지역의 공동개발과 관련하여 동티모르는 호주와 2002년 호주-동티모르 티모르해 조약(Timor Sea Treaty)을 체결하게 된다. 이 과정에서 실제 공동개발이 이루어지지만 동티모르는 계속적으로 공동개발협정의 이익 배 분 등에 불만을 제기하였고 지속적으로 호주를 상대로 최종적인 공동개발 획 정 을 주장하였다. 결국 2016년 동티모르가 호주에 제기한 유엔해양법협약 상 강 제조정에서 조정위원회가 경계획정에 관한 조정 권한이 있다고 결정하자 호주 와 동티모르는 경계획정에 관한 협상을 진행하기로 합의한다. 이 후 2017년 8 월 30일 해양경계획정에 관한 대강에 합의하였다는 점을 발표하고, 최종적인 경계획정을 예정하였다.

해당 지역은 우리나라와 일본 사이의 제주도 남방 해역과 해양 지형의 형상이 동일하다는 특징이 있다. 즉 두 국가의 해안선으로부터 400해리가 안 되는 해 역이며, 한 국가 - 여기서는 호주 -에서 연장되어온 대륙붕이 두 국가 사이의 가장 중간선 너머까지 존재하는 해역이다.

〈그림 3-1〉 호주-동티모르 해양 지형 구조



자료 : PCA, Case No. 2016-10, East Timor-Australia Conciliation
Presentation for Australia's Opening Statement.

이 해당 지역에는 여러 자원 개발 구역이 존재한다. 다른 호주 쪽 해역에 비해서 이 지역의 자원 개발 상황은 저조한 편이지만 실제 자원 개발이 이루어지고 있다는 점에서 우리나라와 차이가 있다. 활발하게 자원 개발이 이루어지고 있는 해역은 1972년 호주-인도네시아 해저 경계확정을 통하여 확정된 해역으로 모두 호주 대륙붕의 자연적 연장을 강조하여 호주 측의 해역으로 조약을 통하여 확정된 해역이다(〈그림3-2〉 참조).

〈그림 3-2〉 동티모르 해 인근 자원 개발 현황



자료 : OILPRICE.com.¹¹⁾

2. 경과

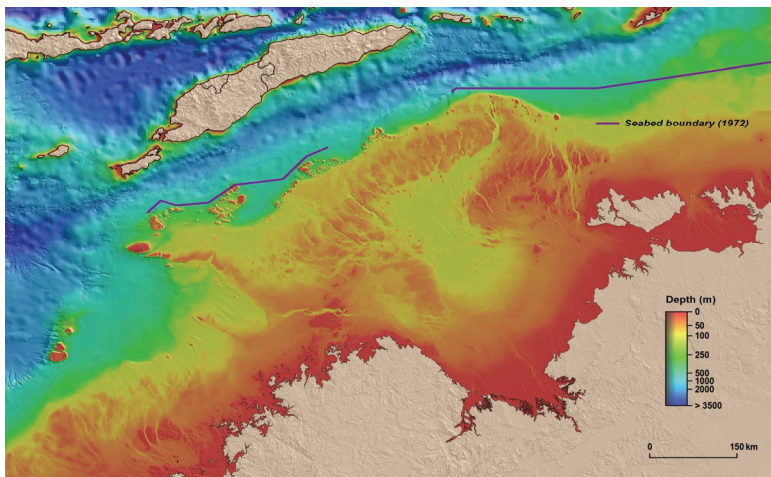
호주-동티모르 공동개발협정에 대해서 검토하려면 먼저 1972년 호주-인도네시아 해저 경계획정을 검토해야 한다. 당시에 이 협정은 동티모르가 포르투갈의 식민지였던 상황에서 체결된 조약으로 동티모르 해역만 제외한 채, 호주와 인도네시아 사이의 해역에 대해서만 경계를 획정하였다. 1972년에 호주와 인도네시아는 해저 경계획정¹²⁾을 하였는데, 1969년 북해 대륙붕 사건의 영향으로 대륙붕의 자연적 연장을 중시하여 인도네시아 해역 안쪽으로 호주의 대륙붕 자연적 연장을 따라 설정되었다. 당시 대륙붕 연장을 강조한 1969년 북해 대륙붕 사건이 경계획정에 상당한 영향을 끼친 것이다. 그러나 포르투갈령 동티모르의 존재

11) 해당 웹사이트, <http://oilprice.com/Energy/Crude-Oil/East-Timor-Close-To-Taking-Full-Control-Of-40-Billion-Oil-Field.html> (검색일: 2017. 11. 1).

12) Agreement between the Government of the Commonwealth of Australia and the Government of the Republic of Indonesia Establishing Certain Seabed Boundaries in the Area of the Timor and Arafura Seas Supplementary to the Agreement of 18 May 1971, 9 October 1972.

로 동티모르 앞 바다에서는 해저 경계선이 존재하지 않고 빈 공간이 나타나게 되었으며, 이를 ‘티모르갭(Timor Gap)’이라고 통상 칭하게 된다. 포르투갈과 경계획정을 호주가 기대하였으나, 동티모르의 독립 과정에서 포르투갈이 급작스럽게 철수하게 되고, 그 비워진 힘의 공백을 인도네시아가 동티모르를 무력으로 점령하면서 채우게 된다. 사실 동티모르에서는 1975년 11월 28일 프레틸린(FRETILIN)이라는 조직이 독립을 선언하였으나 9일 이후 인도네시아 군부가 동티모르를 무력으로 침공하여 지배하게 되었고, 호주는 1978년 인도네시아의 동티모르에 대한 사실상의 주권을 인정하게 되고, 1979년 3월 인도네시아의 지위를 법률적으로 승인하였다.¹³⁾ 이러한 과정의 연속선에서 인도네시아와 호주가 경계획정에 관한 협상을 진행하게 되었다.

〈그림 3-3〉 1972년 호주-인도네시아 해저 경계획정



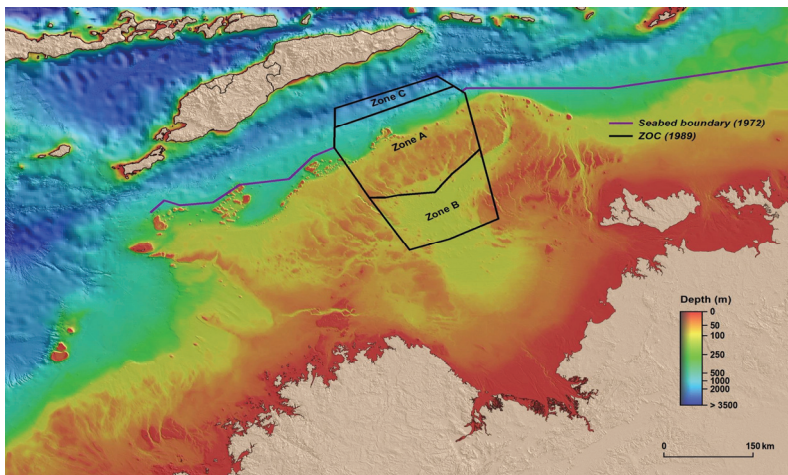
자료 : PCA, Case No. 2016-10, East Timor-Australia Conciliation Presentation for Australia's Opening Statement.

하지만 인도네시아는 동티모르 해역에 대해서는 이 전과 같은 입장을 취하지 않고 좀 더 강경한 입장을 취한다. 즉, 1972년 해저 경계획정 때와는 달리 인도

¹³⁾ S.B. Kaye, "East Timor and maritime boundary delimitations," pp.51-59, in R. Heath and B. Snushall(eds.), Protecting Maritime Resources: Boundary delimitation, resource conflicts and constabulary responsibilities(Canberra: Sea Power Centre Australia, 2003), p. 65.

네시아는 중간선에 의한 경계획정을 주장하였고, 결국 1989년 두 국가는 공동 개발구역(the Timor Gap Zone of Cooperation)을 설정하는 조약(티모르갭 조약)¹⁴⁾을 체결하였다. 왜냐하면 협상을 개시한 이래로 1969년 북해 대륙붕 사건과 배치되는 국제 판례들이 나오기 시작하였다. 우선 1985년 리비아/몰타 사건의 경우 200해리 이내 경계획정에서는 해양 지형의 존재가 중요하지 않다고 판단을 하였기 때문이다. 이런 판례의 변화는 결국 이전과는 달리 해당 대륙붕에 대한 호주의 전면적 지배를 인정할 수 없도록 하였던 것이다. 1997년 호주와 인도네시아는 상부 수역의 경계를 획정하는 EEZ 경계획정 조약¹⁵⁾을 체결하였으며, 이 조약은 동티모르 해역에 대해서도 경계획정을 하였으나, 비준을 하지 않아 발효되지 않았다.

〈그림 3-4〉 1989년 티모르갭 조약

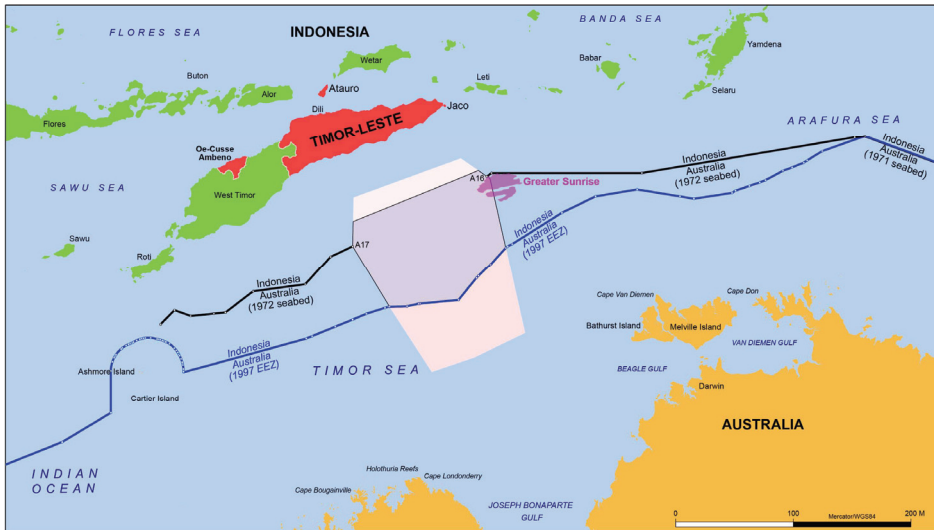


자료 : PCA, Case No. 2016-10, East Timor-Australia Conciliation Presentation for Australia's Opening Statement

¹⁴⁾ Treaty between Australia and the Republic of Indonesia on the Zone of Co-operation in an Area between the Indonesian Province of East Timor and Northern Australia.

¹⁵⁾ Treaty between the Government of Australia and the Government of Indonesia Establishing an Exclusive Economic Zone Boundary and Certain Seabed Boundaries, 14 March 1997.

〈그림 3-4〉 1997년 EEZ 경계 획정 조약 (파란색)



자료 : PCA, Case No. 2016-10, East Timor-Australia Conciliation Presentation for Timor-Leste's Opening Statement

조약 체결 2년 후인 1999년 동티모르가 인도네시아로부터 분리되는 정치적 변화가 발생한다. 1999년 국민투표를 통하여 동티모르가 인도네시아로부터 분리독립하게 되었고, '티모르 유엔 임시정부(UNTAET)'는 현재 티모르 해역에서 석유 개발을 보호하기 위하여 호주와 양해각서(Exchange of Note)¹⁶⁾를 통하여 이전까지 인도네시아가 호주에게 인정해 준 권리와 책임을 승인하였으며, 2000년 MOU¹⁷⁾를 통하여 이전의 법 체제와, 생산 제품 배분 계약 및 그 효력을 계속적으로 인정하여 주었다. 2002년 5월 20일 동티모르가 독립하였고, 독

¹⁶⁾ Exchange of Notes constituting an Agreement between the Government of Australia and the United Nations Transitional Administration in East Timor (UNTAET) concerning the continued operation of the Treaty between Australia and the Republic of Indonesia on the Zone of Co-operation in an area between the Indonesian Province of East Timor and Northern Australia of 11 December 1989, 10 February 2000.

¹⁷⁾ Memorandum of Understanding between the Government of Australia and the United Nations Transitional Administration in East Timor (UNTAET) acting on behalf of East Timor on arrangements relating to the Timor Gap Treaty, 10 February 2000.

립한 그 날 바로 호주와 동티모르는 2002년 호주-동티모르 티모르해 조약(Timor Sea Treaty)을 체결하고, 공동석유개발구역(Joint Petroleum Development Area, JPDA)을 설정하였다. 동티모르는 이전에 인도네시아가 동티모르 대신 체결한 조약에 구속받지는 않지만, 현재 존재하는 개발 활동을 계속 보장하기 위하여 이 조약을 체결한다고 하였다.¹⁸⁾ 티모르갭 조약의 경우 인도네시아와 호주 사이 배분이 1 대 1이었다면, 공동석유개발구역 이익 배분은 동티모르 대 호주 사이 배분이 9 대 1이 되었다. 티모르해 조약은 2003년 4월 2일 발효되었으며, 발효 전까지 두 국가는 양해각서¹⁹⁾를 통하여 공동개발구역내 석유 탐사 행위를 제한하지 않도록 하였다.

공동석유개발구역과 그 동쪽 지역의 초국경적 자원에 대한 광구 통합 문제(그레이트 선라이즈 광구/트로바도르 광구)로 두 국가는 2002년 양해각서(MOU)²⁰⁾에 서명하였으며, 2003년에 ‘선라이즈 공동광구협정’을 체결²¹⁾하였으나, 이 협정이 발효되지는 못하였다. 티모르해 조약 부속서E(Annex E)에 따르면 두 국가는 그레이트 선라이즈 광구를 호주 79.9%, 동티모르 20.1%의 비율로 배분하여야 하며, 이는 해당 광구에서 호주에 배타적으로 속하는 것으로 추정되는 해저 지형의 비율에 따른 것이지만, 호주에 배타적으로 속하는 선을 정하는 기준은 명확하지 않았다.²²⁾ 동티모르로서는 이러한 조건을 받아들일 수 없었으며,

18) Clive Schofield, "Minding the Gap: The Australia—East Timor Treaty on Certain Maritime Arrangements in the Timor Sea (CMATS)", *The International Journal of Marine and Coastal Law*, Vol. 22, No. 2 (2007), p. 195.

19) Exchange of Notes constituting an Agreement between the Government of Australia and the Government of the Democratic Republic of Timor-Leste concerning Arrangements for Exploration and Exploitation of Petroleum in an Area of the Timor Sea between Australia and East Timor, Dili, 20 May 2002.

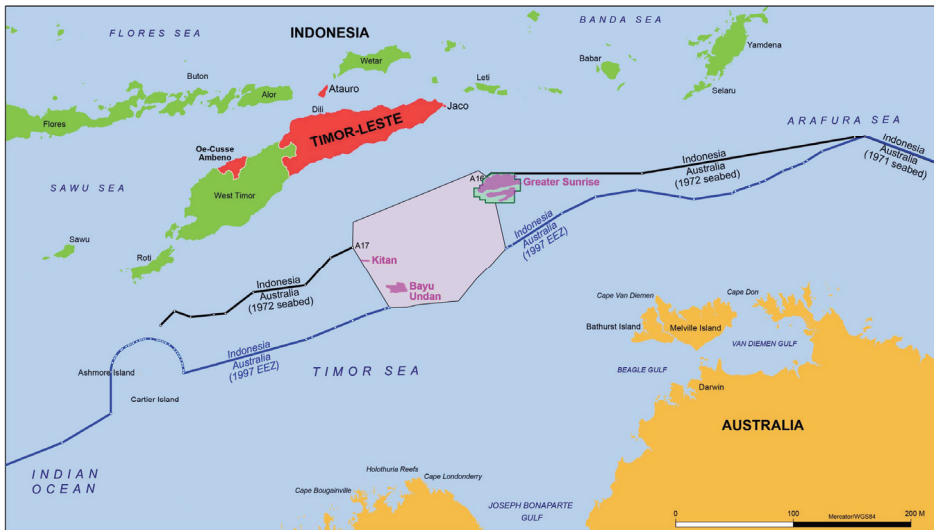
20) Memorandum of Understanding between the Government of the Democratic Republic of East Timor and the Government of Australia concerning an International Unitization Agreement for the Greater Sunrise field, Dili, 20 May 2002.

21) Agreement between the Government of Australia and the Government of the Democratic Republic of Timor-Leste relating to the Unitisation of the Sunrise Troubador Fields.

22) Clive Schofield, "Minding the Gap: The Australia—East Timor Treaty on Certain Maritime Arrangements in the Timor Sea (CMATS)", *The International Journal of Marine and Coastal Law*, Vol. 22, No. 2 (2007), p. 197. Clive Schofield는 인도네시아와 사이에 확정된 경계선에 따라 전적으로 호주에 속하는 면적이 79.1%에 속한다는 입장이나, 이에 대해서는 검토가 필요하다. JPDA와 호주의 대륙붕을 구분

이에 따라 동티모르 정부는 국회에 해당 조약의 승인을 요구하지 않기로 결정하였고, 결국 조약의 발효는 무산되었다.²³⁾ 이 조약이 결국 2007년 티모르해 특정해양조정조약이 발효되면서 함께 발효되게 된다.

〈그림 3-5〉 그레이터 선라이즈 유전 지역 (보라색)



자료 : PCA, Case No. 2016-10, East Timor-Australia Conciliation Presentation for Timor-Leste's Opening Statement

2006년 호주와 동티모르는 티모르해 특정해양조정조약(Treaty on Certain Maritime Arrangements in the Timor Sea, CMATS)을 체결하고, 특정해양 조정조약과 함께 공동광구협정²⁴⁾을 체결하였다. 이 조약은 그레이터 선라이즈 (Greater Sunrise) 유전의 석유 및 가스 개발 수익 배분에 관하여 정하고 있으며 그 수익을 동티모르와 호주가 1 대 1로 배분하도록 하였다. 그레이터 선라이

하는 경계선의 존재가 무엇을 의미하는지에 따라서 비율은 달라질 수도 있기 때문이다. 현재 호주가 주장하는 영 출 경계선을 동티모르가 받아들이지 않고 있는 것으로 판단된다.

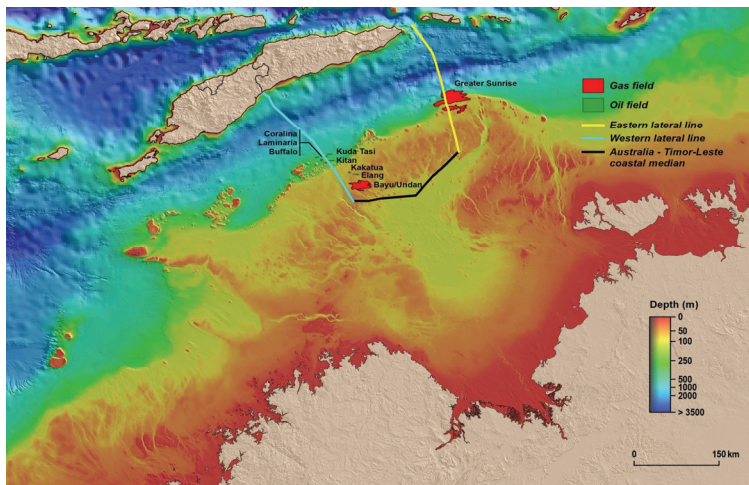
²³⁾ Clive Schofield, 앞의 주, p. 197.

²⁴⁾ Agreement between the Government of Australia and the Government of the Democratic Republic of Timor-Leste relating to the Great Sunrise Field, Unitization Agreement

즈 유전의 경우 호주 주장에 따르면 79.1%가 호주 관할 해역(동티모르 독립 전 호주와 인도네시아가 1972년 합의한 경계를 기준)에 위치하지만, 반면 동티모르의 주장에 따르면 그레이터 선라이즈 유전은 전부 다 동티모르의 영역이기 때문에 논란이 존재하는 지역이다.

〈그림 3-6〉 그레이터 선라이즈 유전 지역에 대한 호주와 동티모르의 입장 차이

〈호주 주장〉



〈동티모르 주장〉



자료 : PCA, Case No. 2016-10, East Timor-Australia Conciliation Presentation for Australia & Presentation for Timor-Leste's Opening Statement

2013년 동티모르는 호주를 상대로 특정해양조정조약이 무효라는 이유로 중재재판을 제기하여, CMATS를 통하여 이루어낸 합의를 이행하여 공동개발 체제를 지속시키기 보다는 최종적인 경계획정을 추구하게 된다. 동티모르는 2002년 티모르해 조약 제23조에 따라 소를 제기하고, 2006년 특정해양조정조약의 무효를 주장하였다. 특정해양조정조약 제11조는 분쟁해결방법으로 ‘협상’만을 명시하고 있으므로 강제적 분쟁해결절차를 진행할 수 없어, ‘티모르해 조약’에 근거하여 특정해양조정조약의 무효를 주장하는 것이 동티모르에게 가장 합리적인 대응 수단이었다.

하지만 최종적으로 2016년 4월 11일, 동티모르 정부는 호주를 상대로 유엔해양법협약상의 강제 조정(conciliation) 절차를 개시한다고 공표하고 조정 절차를 개시하였다. 이는 특정해양조정조약의 무효에 관한 중재재판이 계속되는 와중에 제기된 것이어서 결국 동티모르가 원하는 것이 해당 해역의 최종 경계획정이라는 것을 확인할 수 있게 하는 대목이다. 동티모르가 유엔해양법협약상의 강제적 분쟁해결절차 혹은 국제사법재판소(International Court of Justice, ICJ)의 소송절차에 사건을 회부하지 않고 법적 구속력이 없는 강제 조정 절차에 사건을 회부한 것은 호주가 관할권에 대한 유보 및 선택적 예외(유엔해양법협약 제298조)를 주장하였기 때문이다. 호주 정부는 2002년 동티모르의 독립이 확정되기 불과 두 달 전 유엔해양법협약상 제298조에 따라서 해양경계획정 사건에 대한 선택적 배제를 선언하였으며, 국제사법재판소의 선택조항 수락 선언에 대해서는 강제관할권 수락 대상에서 해양경계획정 부분을 삭제하였다. 동티모르는 호주 정부가 계속해서 중국적인 해양경계획정을 위한 협상을 거절함에 따라 동티모르는 유엔해양법협약상 ‘강제 조정’이 호주를 협상 테이블에 앉힐 수 있는 유일한 방안이라고 주장하였다. 반면 호주 외교부 장관(Julie Bishop)의 대변인은 강제조정 절차에 회부한 동티모르의 행위가 양국 간의 합의 위반²⁵⁾이라고 비난하였다.

결국 2016년 9월 19일 결정을 통하여 강제조정위원회는 자신이 호주-동티모르 해양경계획정을 다룰 권한이 있다고 하였다. 강제조정위원회가 해양경계획정

25) 어떠한 합의 위반인지에 대해서는 구체적으로 지적하지 아니하였다.

문제를 검토할 권한이 없다고 호주가 주장하였으나, 강제조정 위원회는 이를 배척하고 해양경계획정 문제에 관한 자신의 권한을 인정하는 결정을 내렸다. 호주는 강제조정 위원회가 이 문제를 검토할 권한이 있다고 결정을 내리자 전격적으로 통합적 일괄조치를 취하고 최종적인 경계획정 회담에 들어가기로 합의하였다. 강제조정위원회가 본안 문제에 대해서 검토하고 해양경계획정에 관한 조정 의견을 확정하더라도 이 의견은 법적 구속력은 없으나, 호주는 사안을 최종적으로 해결하는 것이 자신에게 이익이 된다고 판단한 것으로 보인다. 호주와 동티모르는 2017년 1월 9일과 24일 협의를 통하여 공동서명을 2차례 발표하였다. 이 성명에서 동티모르는 2013년 특정해양조정조약의 무효를 청구한 중재재판과 2015년 호주의 동티모르 문서 탈취 문제로 제기된 또 다른 중재재판 사건을 동티모르가 취하하는 것으로 합의하였다. 또한 양국은 2006년 특정해양조정조약을 종료시키고(제12조 제2항) 2002년 티모르해 조약은 효력을 유지하기로 하였으며 추후 경계획정 회담을 지속하기로 합의하였다.

이에 따라 2017년 8월 30일 동티모르와 호주는 유엔해양법협약 제5부속서에 따라 진행된 강제조정절차에서 양국의 해양경계획정에 관한 합의에 도달하였다. 양국이 도달한 합의는 아직 공개되지 않았지만, 강제조정 절차의 사무국 역할을 수행한 PCA는 양국의 합의 도달을 알리는 언론보도 자료를 배포하였다. 동티모르와 호주 간의 합의는 해양경계선 이외에도 그레이터 선라이즈 유정의 법적 지위, 그레이터 선라이즈를 위한 특별체제의 수립, 자원개발과 이익 공유 방법 등을 포함하고 있다고 전해지나, 최종 내용은 아직 확정되지 않은 상황이다.

3. 주요 내용

2002년 호주-동티모르 티모르해 조약(Timor Sea Treaty)의 경우 모델 III의 경우에 해당한다. 호주와 동티모르는 ‘공동으로(jointly)’ 석유 자원 탐사, 개발, 이용을 통제, 경영, 운영한다고 규정하고 있다(조약 제3조(b)). 다만 석유 활동²⁶⁾을 공동으로 진행하더라도 지정기관(Designated Authority)과 유한회사와

²⁶⁾ 조약의 제1조는 정의규정으로 석유 활동을 다음과 같이 정의한다.

의 계약을 통해서 진행되도록 하였다(조약 제3조(c)). 원칙적으로 두 국가는 공동석유개발구역에서 생산되는 석유 자원에 관한 권원을 가지며 생산된 석유 중에서 90%는 동티모르가, 10%는 호주가 가지도록 하였다.

관리를 위하여 3개의 기구를 두도록 하였다. 지정기관(Designated Authority), 공동위원회(joint commission), 각료이사회(Ministerial Council)가 이 세 기구이다(조약 제6조). 조약 발효 이후 3년간 지정기관이 공동석유개발구역을 관리하며, 이 3년 이후에는 동티모르 해당 부처가 이를 관리하도록 하였다(조약 제6조(b)). 공동위원회는 동티모르와 호주가 각각 임명한 위원으로 구성된다. 공동위원회는 일 년에 한 번 혹은 필요한 경우에만 소집되며 공동석유개발구역의 석유활동과 관련하여 정책 및 지침을 확정하고 지정기관을 감독하는 역할을 한다(조약 제6조(c)). 각료이사회는 두 국가의 동수로 장관으로 구성된다. 두 국가가 필요한 경우 혹은 공동위원회가 필요하다고 요청하는 경우에만 구성된다.

2002년 호주-동티모르 티모르해 조약은 공동석유개발구역 너머에 걸쳐서 존재하는 유공이 있을 경우 그 목적상 이 조약과는 별개로 취급하기로 하였다(조약 제9조). 여기에 해당하는 것이 그레이터 선라이즈 광구와 트로바도르 광구이다. 두 국가는 이 광구를 규율하기 위하여 2003년 광구 통합과 관련된 ‘선라이즈 공동광구협정’을 체결하였다. 이 협정에 공동광구를 담당하는 주체는 각 영역의 관리기관(Regulatory Authorities)이다. 공동석유개발구역(JPDA)에서는 해당 구역의 담당기관이 이 관리기관이 되고 호주 쪽 해역에서는 호주 정부 내부의 석유 탐사 및 이용에 관한 권한을 가지고 있는 기관이 관리기관이 된다. 사실상 두 개 영역의 탐사 및 개발을 책임지고 있는 기관이 그 탐사 및 개발을 주도하고, 여기에 일종의 조언 및 권고를 하는 위원회를 두는 방식을 취하였다. 따라서 이 경우도 모델II에 해당한다고 할 수 있다.

이 협정에 따르면 두 국가는 선라이즈 합작투자사(joint venture)를 설립하

Article 1 (k)

(k) “petroleum activities” means all activities undertaken to produce petroleum, authorised or contemplated under a contract, permit or licence, and includes exploration, development, initial processing, production, transportation and marketing, as well as the planning and preparation for such activities

고 그 합작투자사가 ‘조인트 벤처어 협정’을 체결하도록 한다(협정 제5조). 합작 투자사는 협정을 통하여 단일 합작 투자자를 임명하고, 이 투자자가 운영자(Unit Operator)로서 활동하도록 하였다(협정 제6조). 이 협정에 따르면 해당 개발 구역이 공동석유개발구역과 호주(추정) 해저에 걸쳐 있기 때문에 해당 구역의 관리자를 뜻하는 관리기관(Regulatory Authorities)²⁷⁾ 석유 활동을 모두 규율한다. 그리고 선라이즈 위원회(A Sunrise Commission, 협정 제9조)가 이 협정의 이행을 원활하게 하기 위하여 설립되는데 호주가 임명하는 2명의 위원과 티모르가 임명하는 1명의 위원으로 구성된다. 구체적으로 선라이즈 위원회는 관리기관의 개발 계획을 검토하고 이에 대해서 권고할 수 있는 권한을 가지고 있다(협정 제9조(4)). 협정은 부속서II에서 안전, 건강, 환경보호와 관련하여 개별 국내규정이 적용되도록 하였는데 이 국내규정의 적용과 관련하여 감독할 수 있는 권한이 선라이즈 위원회에 있다(협정 제9조(5)). 하지만 이 협정은 발효되지 못 하다고 2007년에 들어서 특정해양조정조약과 함께 발효되었다.

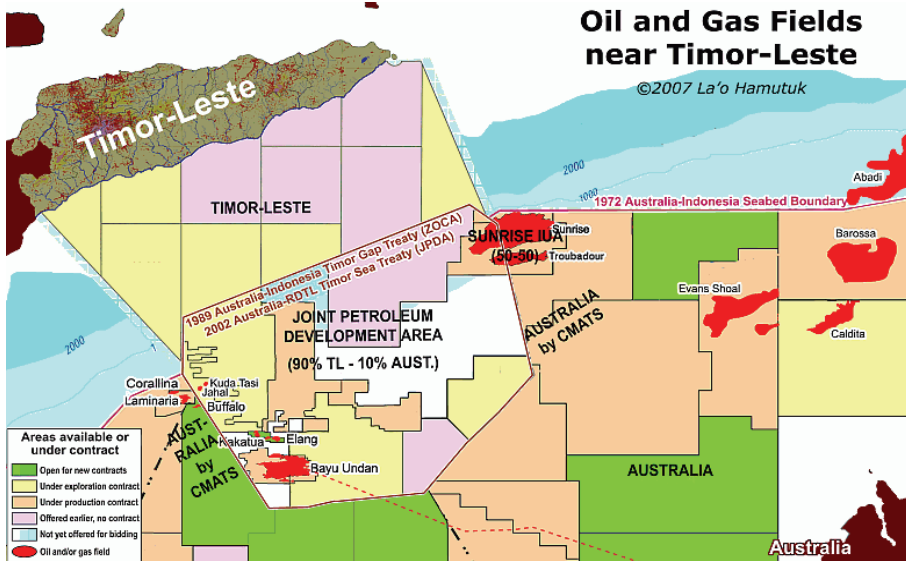
특정해양조정조약을 통해서 이전에 8 대 2로 나뉘어졌던 이익 배분은 50 대 50으로 조정하였다(조약 제5조 제1항). 여기서는 공동개발을 촉진하기 위한 여러 가지 규정이 포함되었지만, 이전의 공동개발의 형식을 바꾸지는 않았다. 다만 새로운 해양위원회가 구성되도록 하였는데(조약 제9조) 양국 간에 해양안보, 해양환경, 천연자원의 개발 등에 관한 협의 절차를 촉진하는 역할을 담당한다.

4. 이행에 대한 평가

양국이 티모르해 조약에 따라 설정한 공동석유개발구역(JPDA)에는 여러 유전이 존재한다.

²⁷⁾ 공동석유개발구역내의 운영을 담당하고 authority와 해당 석유 개발 구역 내 호주 쪽의 authority를 모두 일컫는 말이다. (협정 제1조 (k) 참조) .

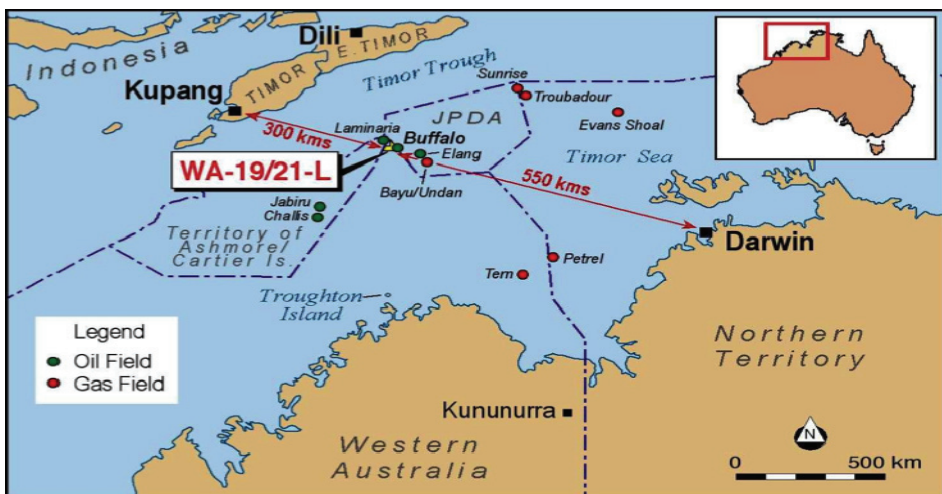
〈그림 3-7〉 티모르해 지역 개발 및 탐사 구역



연두색 - 새로운 계약에 열린 지역, 노란색 - 탐사 계약 중인 지역, 살구색 - 생산 계약 중인 지역
 핑크색 - 이전에 계약을 추진했던 지역, 푸른색 - 계약에 제공될 지역, 빨간색 - 석유가스 지역

자료 : La'o Hamutuk

〈그림 3-8〉 티모르해 석유 및 가스 지역



자료 : NAUITCAWT 웹사이트²⁸⁾

일단 바유운단(Bayu Undan) 석유 광구는 다윈에서 약 500km 정도 떨어진 해역에 약 80미터 정도의 얇은 해역이다. 약 25년의 기간 동안 26개의 유정을 세울 수 있는 것으로 알려져 있다.²⁹⁾ 약 33억 달러 규모의 비용이 사용되었으며 약 2억 4천에서 4억 배럴의 석유와 3.4tcf의 가스를 개발할 수 있는 것으로 알려져 있다.³⁰⁾ 현재 Phase II 단계로 가스를 개발하는 단계에 있다. 2006년에 개발을 시작하여 파이프 라인을 통하여 다윈으로 가스를 수송하는 단계에 있다. 1년에 약 324만 톤의 가스를 생산한다. Phase III의 단계는 2014년에 시작한 것으로 알려져 있다.

선라이즈 유전은 2007년에 특정해양조정조약이 체결되었음에도 불구하고, 개발이 이루어지지 않고 있다. 동티모르가 계속적으로 불만을 가지고 있기 때문이다. 특정해양조정조약은 분쟁을 협상과 합의(consultation)를 통해서만 해결하도록 규정하고 있으며(조약 제11조), 사법적 해결을 예정하지 않고 있다. 동티모르는 특정해양조정조약 체결 과정에서 호주가 불법적인 행위를 저질렀다는 이유로 이 조약을 무효라고 주장하였으며 특정해양조정조약이 무효이기 때문에 이 전 조약인 2002년 티모르해 조약을 근거로 국제재판을 제기하였다(조약 제23조 Annex B paragraph (b)).

결국 2016년 9월 19일 동티모르 호주 강제조정 결정 이후 호주와 동티모르는 특정해양조정조약을 종료하기로 합의하였다. 이에 따라 2017년 1월 10일 동티모르가 특정해양조정조약의 종료를 선언하였으며, 조약은 3개월 후인 4월 10일에 종료하였다. 하지만 특정해양조정조약 제12조 제4항의 존재 때문에 추후 선라이즈 유전의 개발이 가능해지면 특정해양조정조약 자체가 재생하는 상황이 생길 수 있었다. 그럼에도 불구하고 두 국가는 합의에 의하여 제12조 제4항 역시도 종료시키는 것으로 합의하였다.³¹⁾ 따라서 공동개발 협력은 일단 중

28) NAUITCAWT 웹사이트

<http://www.nauticawt.com/turnkey-solutions/field-abandonment-well-plugging-solutions/project-experience-2/> (검색일 : 2017. 12. 27).

29) Offshore Technology 홈페이지. <https://www.offshore-technology.com/projects/bayu-undan/> (검색일 : 2017.12.18.).

30) *Ibid.*

31) Parliament of the Commonwealth of Australia, *Certain Maritime Arrangement-Timor Lester* (Joint

단되었다.

5. 시사점

호주와 동티모르의 공동개발협정은 협정을 이행해 온 것보다는 협정 체결 이후에도 동티모르가 계속적으로 공동개발협정을 무위로 돌리고 계속적으로 해양 경계확정을 추구해왔다는 점을 눈여겨 보아야 한다. 1974년 한일 대륙붕 공동개발구역과 호주-동티모르 공동개발구역은 해저 지형의 형상이나 공동개발구역 채택의 법적 근거에 있어 상호 유사성을 가지고 있기 때문이다. 1969년 북해 대륙붕 사건의 영향으로 대륙붕의 연장을 중요시하는 경향이 확인되었으며, 이러한 영향으로 한일 대륙붕 공동개발협정이 체결(1974년) 및 발효(1978년)될 수 있었다. 호주-동티모르 공동개발협정의 경우 그 모태라고 할 수 있는 호주-인도네시아 티모르갯 조약은 대륙붕의 자연적 연장 개념이 퇴조한 1989년 체결되었다. 퇴조한 관행이라고 하지만 대륙붕의 자연적 연장을 완전히 무시할 수 없었다. 즉, 잠정적 중간선 너머에 대륙붕 자연적 연장 부분에 공동개발구역이 설정되었다는 점이 1974년 한일 대륙붕 공동개발구역, 1989년 ‘티모르갯’ 설정의 근거인 것이다.

1982년 유엔해양법협약 채택 이후 400해리가 넘지 않는 수역에서는 대륙붕의 자연적 연장을 경계확정 과정에서 고려하지 않는 경향이 나타나게 되었으며, 그러한 법적 변화가 동티모르가 계속적으로 호주-동티모르 공동개발에 부정적 입장을 취한 근거이다. 독립 이후 동티모르 해역에서 진행 중인 석유 유전 탐사와 개발의 안정적인 지속을 위하여 2002년 티모르해 조약을 체결하였으나 동티모르가 최종적으로 추구한 것은 중간선 경계확정을 통한 석유 탐사 및 개발권 최종 확보였다. 결국 동티모르는 2016년 역사상 최초로 유엔해양법협약상 강제조정을 신청하게 되고, 이 전략이 성공하게 되어 결국 최종 해상 경계확정 직전의 상황에까지 이르게 된 것이다.

다만 동티모르가 최종적으로 해양경계확정이라는 목적을 달성하게 되었으나,

실제 협정의 세부 사항이 동티모르에게만 유리한 것은 아닐 것으로 예상되고 있기는 하다. 최종적인 경계획정선이 중간선을 기준으로 확정될 것이라 선불리 예단할 수 없다. 국제법 판례의 변화를 고려한다면 상부 수역의 경계획정과 마찬가지로 가상 중간선을 기준으로 경계획정이 이루어질 가능성을 무시할 수 없다. 그러나 현재 상황에서 중요한 부분은 경계획정 선 자체가 아니라 현재 개발이 이루어지고 있는 유전 지역의 추후 이익 배분 문제이다. 그레이터 선라이즈 유전 등에 대한 개발 문제, 이익 공유 문제가 최종 경계획정 조약에 포함될 것으로 예상되고 있어, 실질적인 석유 개발로 인한 수익구조 배분이 ‘기존의 합의’를 완전히 무시하지는 못할 것으로 추정되고 있다. 따라서 중간선이라는 해양경계 획정의 형식은 동티모르가 가져가더라도 석유 개발로 인한 이익이라는 실질 측면에서 호주가 손해 보는 협상 결과가 나올 가능성도 있다. 실제 티모르 해령의 존재로 그레이터 선라이즈 등 해저 유전지대에서 ‘해저 파이프’를 통하여 동티모르로 원유를 이송하는 것은 기술적으로 불가능한 상황이다. 또한 석유 정유 및 정제 시설이 동티모르에 있지도 않아 결국 호주의 석유 생산 인프라를 이용할 수밖에 없다는 현실도 무시할 수 없다. 결국 형식적 명분은 동티모르가 가져가더라도 실질적 이익은 호주가 취할 가능성을 배제할 수 없다.

제2절 말레이시아-태국

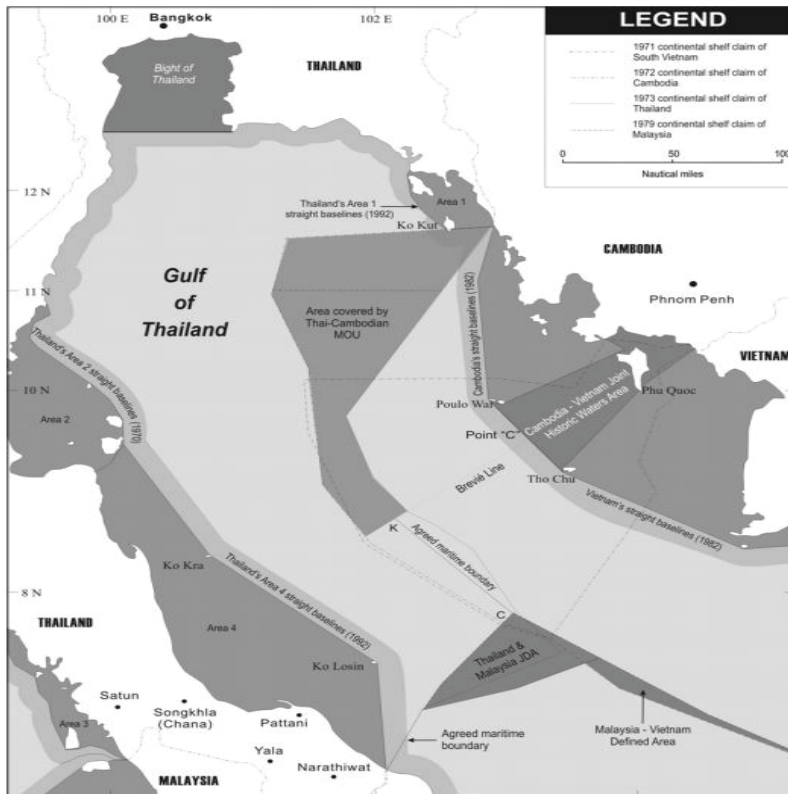
1. 개요

말레이시아와 태국은 수세기 동안 문화적, 사회적 및 역사적 유대를 공유해 왔다. 1970년대 초에 양국은 말레이 반도 육지국경에 인접한 동쪽과 서쪽 해역의 경계를 획정하기로 약속하였다. 1971년 12월 21일 양국은 인도네시아와 함께 말라카 해협 북부의 대륙붕 경계를 획정하는 3국간 협정에 서명하였다.³²⁾

³²⁾ Agreement Between the Government of the Republic of Indonesia, the Government of Malaysia, and the Government of the Kingdom of Thailand Relating to the Delimitation of the Continental Shelf Boundaries in the Northern Part of the Straits of Malacca, signed in Kuala Lumpur on 21

1972년에 양국의 협상단은 태국 만 남서부 근해에서 약 29해리에 이르는 대륙붕 경계에 합의할 수 있었다. 그러나 태국이 자국의 로신 섬(Ko Losin)을 기점으로 하여 잠정적인 경계선을 말레이시아 측 수역으로 이동시킬 것을 주장하면서 그 협상은 결렬되었다. 로신섬은 만조시에 약 1.5m 높이를 가진 해양지형이었고, 합의가 추진되었던 해양경계선 북쪽으로 약 39해리에 위치하고 있었다. 태국과 말레이시아가 주장하는 경계선은 연안으로부터 29해리 거리의 더 가까운 지점에서부터 북쪽과 남쪽으로 나누어졌다.

〈그림 3-9〉 태국 만의 해양경계선과 공동개발구역



자료 : Clive Schofield et al.³³⁾

December 1971, V. Prescott, "Indonesia-Malaysia-Thailand", Report No. 6-12, in J. I. Charney and L. M. Alexander(eds.), *International Maritime Boundaries* (Martinus Nijhoff, 1993), Vol. II, pp. 1443-1454.

또한 양국은 권원이 중첩되는 해역에 잠재적인 천연가스가 있을 것을 우려했기 때문에 이어진 해양경계 협상에서 아무런 성과를 내지 못하였다. 양국은 분쟁 해역에서 일방적으로 탐사 양허권을 부여함으로써 선제적 조치를 취하기도 하였고, 이러한 예방적 조치는 공동개발에 관한 합의가 이루어진 후에 계속 문제가 되기도 하였다.

1972년 해양경계획정 협상이 실패한 이후에도 양국은 협상을 계속 진행하여 1979년에 영해 경계획정 조약과 대륙붕 경계획정 및 공동개발에 관한 양해각서를 체결하였다. 서로 인접하고 있는 태국과 말레이시아는 1979년 10월 24일 말라카 해협과 태국 만에서 양국 간 영해 경계를 확정하는 조약에 서명하였다.³⁴⁾ 말레이시아와 태국 간 영해 경계조약은 1979년 10월 24일 서명되었고, 1982년 7월 15일 발효되었다.

한편 양국은 영해 이원의 해양경계에 합의하지 못하자 분쟁해역에서 공동개발 제도를 수립하기로 합의하고 이를 위하여 태국 만에서 태국과 말레이시아 간 대륙붕 경계획정에 관한 양해각서(이하 '1979년 양해각서')를 체결하였다.³⁵⁾ 지리적으로 대륙붕 권원이 중첩되는 해역은 태국과 말레이시아 간의 육지 국경에 인접한 태국 만 남서부 지역과 말레이 반도의 북동 해안에 위치하고 있다. 1979년 양해각서가 대상으로 하고 있는 공동개발구역은 연안에서 약 39해리 떨어져 있고, 5,439km² 크기의 오각형 모양을 이루고 있다. 지형학적으로 공동개발구역은 말레이 분지의 최북서단과 동일하게 위치하고 있다. 전체 말레이 분지는 200해리 등심선 내에 위치하고 있으며, 양국의 공동개발구역에 있는 천연가스정의 부존량은 약 14조 ft³에 이르는 것으로 추정되고 있다.³⁶⁾

33) Clive Schofield et al., "From Disputed Waters to Seas of Opportunity: Overcoming Barriers to Maritime Cooperation in East and Southeast Asia", National Bureau of Asian Research, Special Report No. 30 (2011), p. 6.

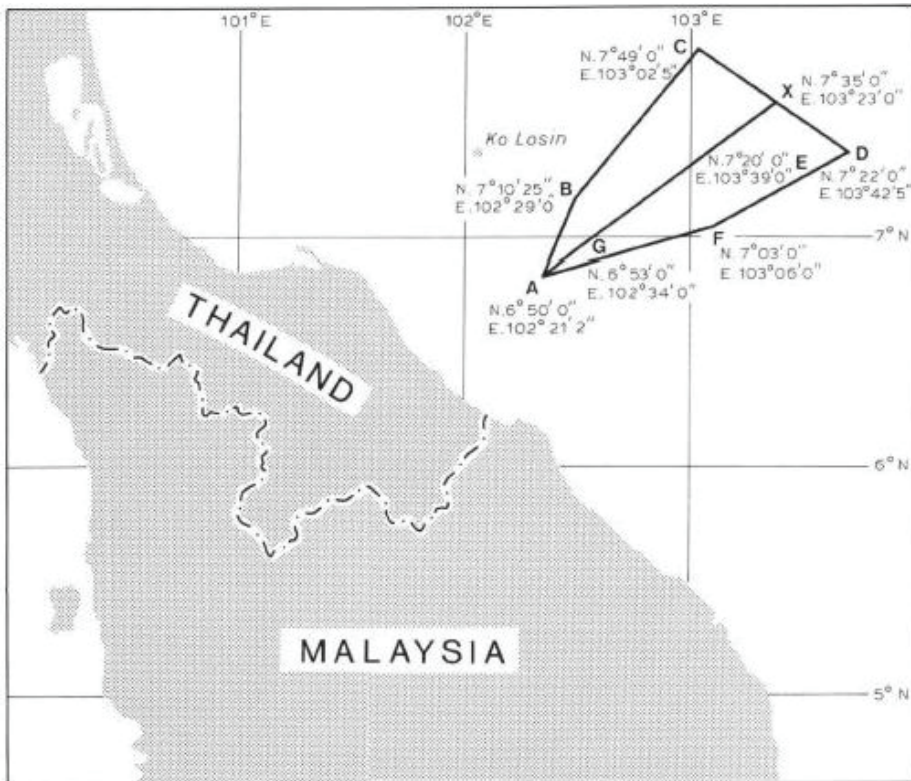
34) Treaty between the Kingdom of Thailand and Malaysia Relating to the Delimitation of the Territorial Seas of the Two Countries.

35) Memorandum of understanding between Malaysia and the Kingdom of Thailand on the establishment of the joint authority for the exploitation of the resources of the sea bed in a defined area of the continental shelf of the two countries in the Gulf of Thailand 1979.

36) T. L. McDorman, "Thailand and the 1982 Law of the Sea Convention", *Marine Policy*, Vol. 9 (1985), p. 295.

1979년 양해각서는 영해 경계조약과 동일한 날짜에 서명되고 발효되었다. 따라서 말레이시아와 태국은 태국 만 쪽 영해에 인접한 대륙붕의 경계를 획정하면서 우호, 상호호혜 및 상호협력 정신에 기초하여 향후 50년 동안 태국 만에서 대륙붕 권리 주장이 중첩되는 특정 구역의 해저자원 탐사 및 개발을 위해 공동 기구를 설립하기로 합의하였다.

〈그림 3-10〉 태국 만에 있는 해양경계선과 공동개발구역



자료 : David Ong.³⁷⁾

³⁷⁾ David Ong, "The Joint Development Agreement 1990", *International Journal of Estuarine and Coastal Law*, Vol. 6, No. 1 (1991), p. 58.

2. 경과

1979년 양해각서의 실질적 이행을 위한 공동기구 회의에서 다양한 문제점들이 논의되었다. 먼저 1979년 양해각서가 공동기구에 준정부 역할을 부여한 것과 관련하여 태국과 말레이시아 정부의 공적 관행과 절차에 차이가 있고, 두 국가에서 법안을 제정할 때 사용하는 용어가 상이하기 때문에 양해각서를 이행함에 있어 여러 문제점들이 제기되었다.

또한 공동기구는 적절한 개발체제를 채택하기 위한 기술위원회의 권고안과 공동기구의 헌장 초안을 양국에 전달하고 승인을 요청하였다. 양국은 1981년에 공동기구 헌장을 공식적으로 승인하였지만, 다른 권고안들은 절차적인 사항들이 해결되는 대로 법적 효력을 부여받을 것이라고 선언하였다. 그러나 제6차 공동기구 회의가 개최된 1983년 8월이 되어서야 공동기구의 법적 체제가 공식적으로 마련되었으며 여전히 일부 조항들에 대해서는 양국이 완전한 합의에 이르지 못하였다.

특히 양국이 합의를 도출하기 어려웠던 것은 공동개발구역의 석유생산에 대해 생산물 분배 또는 사용료 부과 양허 중 어떠한 허가제도를 만들 것인지 여부와 정부 권한을 어느 정도로 공동기구에 위임해야 할 것인지 여부였다. 결국 1980년대 후반 협상의 돌파구가 생기기 전까지 구체적인 진전이 거의 이루어지지 않았고, 1989년이 되어서야 최종 합의에 도달하여 1990년 공동개발협정을 채택하게 되었다.

1990년에 양국이 합의한 말레이시아-태국 공동개발기구협정(Malaysia-Thailand Joint Authority, 이하 공동개발기구협정)은 ASEAN의 이웃 국가 간의 전통적 우호관계를 위한 또 하나의 이정표였다.³⁸⁾ 양국의 정치지도자들은 선견지명과 공통의 비전을 가지고 1991년에 말레이시아와 태국의 국내법에 따른 법률상 기구로 공동개발기구를 설립하였다. 양국의 국내법에 따라 공동개발기구가 양국을 대표하여 ‘공동개발구역’으로 알려진 중첩수역에서 무생물 자원,

³⁸⁾ Agreement between The Government of Malaysia and the Government of the Kingdom of Thailand on the Constitution and other matters relating to the establishment of the Malaysia-Thailand Joint Authority 1990.

특히 석유를 탐사하고 개발하기 위한 모든 권리와 책임을 부여받았다. 공동개발 기구가 설립됨으로써 양국은 공동개발구역 무생물자원의 개발을 실현하고 그로 인한 경제적 이익을 동등하게 공유할 수 있게 되었다.³⁹⁾

1979년 양해각서 및 1990년 공동개발기구협정과 관련하여 공동개발구역의 가스전에서 생산된 천연가스의 매매 협정이 1998년 4월 체결되었다. 공동개발 기구와 계약자 간에 매매 협정이 체결됨으로써 1979년 양해각서에 의해 시작된 공동개발의 전반적 법적 절차가 한 단계 발전하게 되었다. 공동개발구역에 석유 자원 개발을 위한 절차는 공동개발구역의 지정, 생산물분배계약에 따른 천연가스 정 탐사 및 개발을 위한 공동개발기구와 석유회사 컨소시엄 간의 공동운영협정 체결, 가공을 위한 천연가스 생산 및 배송을 위한 매매 협정 체결 순으로 진행되는 데 이 매매협정 단계에 이르렀다는 것을 시사하는 것이다.

최초의 매매 협정은 공동개발기구와 Block A-18 계약자들 간에 서명된 것이었다. Block A-18 계약자로는 말레이시아 페트로나스 카리갈리(Petronas Carigali)사, 태국 트리톤 석유회사(Triton Oil Company)와 태국 트리톤 석유회사(Triton Oil Company Ltd)가 공동 매도자이고, 말레이시아 페트로나스 카리갈리사와 태국의 석유개발기구(Petroleum Authority)가 공동 매수자이다. 이 매매 협정은 첫 번째 단계의 Block A-18 가스 생산이 2001년 상반기에 1일 최대용량 1천만㎥로 매도자에게 전달되도록 규정하였다. 두 번째 협정은 공동개발기구와 Blocks B-17, C-19의 계약자들 간에 체결된 것이고, 페트로나스 카리갈리사와 PTTEP 국제개발회사(PTTEP International Ltd)가 공동 매도자, 페트로나스 카리갈리사와 태국의 석유개발기구가 공동 매도인이다. 이 협정은 첫 번째 단계의 Block B-17, C-19 가스 생산이 2002년 ¼분기에 1일당 최대용량 7백만㎥로 매도자에게 전달되도록 규정하고 있다.⁴⁰⁾

이러한 매매 협정들은 가스 생산과 함께 공동개발구역의 통합적 개발이 시작되었음을 보여주는 것이다. 근해 가스전에서 개발된 가스는 관선을 통해 가스

39) https://www.mtja.org/about_mtja.php(검색일 : 2017. 11. 15).

40) David Ong, "The 1979 and 1990 Malaysia-Thailand Joint Development Agreements: A Model for International Legal Co-operation in Common Offshore Petroleum Deposits?", International Journal of Marine and Coastal Law, Vol. 14, No. 2 (1999), p. 236.

분리 공장으로 보내지고, 전력생산, 산업계, 상업계 및 주거지에서의 사용을 위해 가공 처리된다. 태국과 말레이시아의 국경을 횡단하는 관선을 통하여 가스 분리 공장으로 모인 천연가스들이 말레이 반도 북부와 태국 남부로 이동한다. 양국의 국경을 가로지르는 관선과 가스 분리 공장 같은 기간시설은 태국 석유개발기구와 말레이시아 페트로나스가 공동으로 개발하고 운영한다. 태국-말레이시아 횡단 관선은 태국 남부에 있는 송클라(Songkhla) 주에서 연장되어 말레이 반도 북부 케다(Kedah) 주에 있는 반도가스통합(Peninsular Gas Utilisation) 관선으로 연결된다.

이는 ASEAN 회원국들이 안정적인 에너지 확보를 위해 초국경 관선 설치와 연결을 추진하고 있는 초국경적 아세안 가스 파이프라인 프로젝트(Trans ASEAN Gas Pipeline Project, TAGP)의 중요한 부분을 구성하게 되었다. 2015년 4월 말레이시아-태국 공동개발구역의 Block B-17에서 테렝가누(Terengganu) 주로 가는 관선이 완공되면서 TAGP의 열세 번째 양자 간 연결이 이루어졌고, 국경을 통과하는 관선의 길이가 3,631km로 증가하게 되었다.⁴¹⁾ 말레이시아와 태국의 가스 공동개발과 초국경 가스 운송은 ASEAN 회원국들의 초국경적 아세안 가스 파이프라인 프로젝트와 맞물려 더욱 시너지 효과를 낼 수 있을 것으로 보인다.

3. 주요 내용

1) 공동개발모델 검토

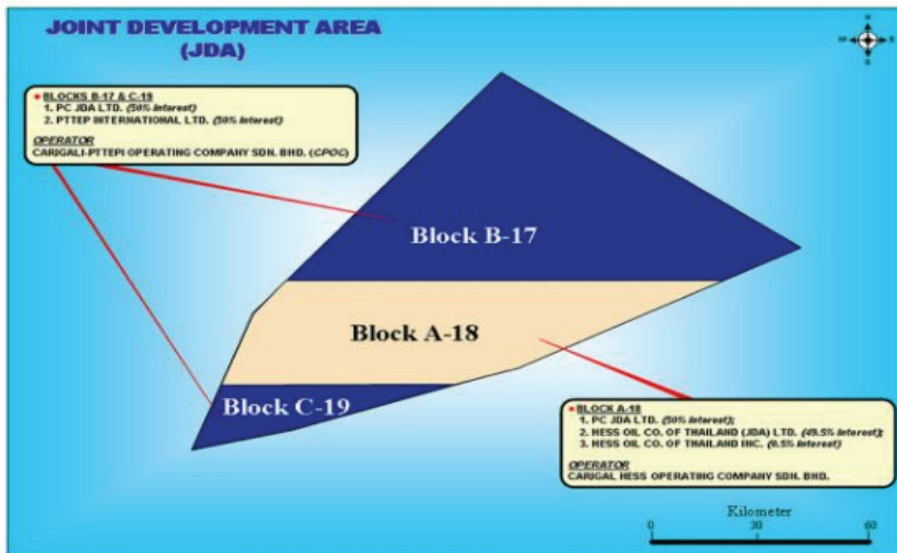
말레이시아와 태국 간의 1979년 양해각서와 1990년 공동개발협정 사례는 모델 III에 해당된다. 한국과 일본 간의 공동개발협정과 달리 말레이시아와 태국 정부 간의 공동개발협정은 국내 허가권 부여 혹은 공동 활동에 대한 승인 등의 행위를 양국 정부가 직접 개입하지 않아 공동개발에 관하여 국내법적으로 직접 규율하고 있지 않다. 양국 정부 국민이 동등하게 참여하는 공동개발기구를 설립하여 공동개발을 실시하도록 규정하고 있다.

⁴¹⁾ <http://www.ascopes.org/Projects/Detail/1060> (검색일 : 2017. 11. 15).

공동개발기구는 1979년 양해각서와 1990년 공동개발기구 협정에 따라 공동 개발구역에서의 무생물자원, 특히 석유의 탐사와 개발에 관한 모든 권리와 책임을 양허받았다. 직접적인 허가권은 공동개발기구가 행사하고, 공동개발구역이 하위구역으로 나누어지지 않았다. 1979년 양해각서의 유효기간은 발효일로부터 50년이고, 1990년 공동개발기구 협정은 1979년 양해각서의 유효기간 동안에만 효력이 있는 것으로 규정되었다.⁴²⁾

말레이시아와 태국은 공동개발을 이행하기 위해 1991년 2월 말레이시아-태국 공동개발기구법을 동시에 제정하여 각각 국내적으로 이를 시행하였다. 양국은 공동개발구역에서의 개발권과 관련하여 1994년과 2004년에 생산물분배계약 (Production Sharing Contract)을 체결한 바 있다. 1979년 양해각서, 1990년 공동개발기구 협정, 1990년 공동개발기구 설립법에 따라 1994년 4월 21일 두 건의 생산물분배계약이 체결되어 공동개발구역에 있는 두 지역에서 특정 계약자들에게 개발이 허용되었다. 계약자들은 각 계약 구역에서 자신을 위한 운영자로 활동하게 될 공동의 두 운영회사를 형성하고 지정하였다.

〈그림 3-11〉 공동개발구역의 운영자



자료 : MTJA 홈페이지.⁴³⁾

42) 1979년 양해각서 제6조, 1990년 공동개발기구 협정 제18조 참조.

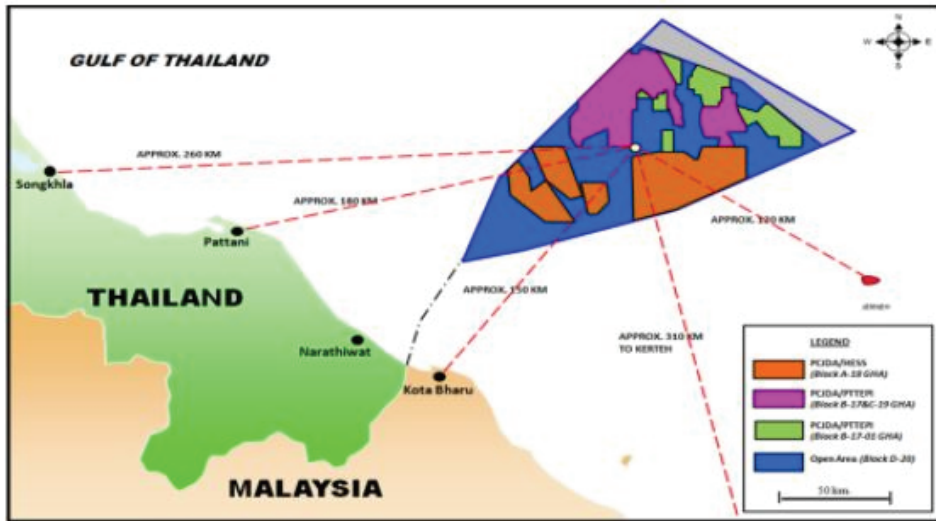
먼저 Block A-18의 경우 운영권은 태국 카리갈리 헤스 운영회사(Carigali Hess Operating Company Sdn. Bhd.)에 있고, 말레이시아 페트로나스의 자회사인 PC JAD Ltd가 50%, 태국의 Hess Oil Company of Thailand Ltd가 49.5%, Hess Oil Company of Thailand Inc.가 0.5%의 지분을 보유하고 있다. Blocks B-17과 Blocks C-19의 운영권은 Carigali-PTTEPI Operating Company Sdn. Bhd.에 있으며, PTTEP International Ltd와 PC JDA Ltd가 각각 50%의 지분을 가지고 있다. 또한 Block B-17-01의 경우 Carigali-PTTEPI Operating Company Sdn. Bhd.에 운영권이 부여되었으며, 2004년 체결된 생산물분배계약에 따라 PTTEP International Limited와 PC JDA Limited가 각각 50%의 지분을 가지고 있다.⁴⁴⁾

가스가 매장된 Blocks A-18, B-17, C-19 이외의 구역은 2002년 4월 20일 포기되었으며, 아래 그림에서 회색으로 표시된 부분이 포기된 지역을 나타낸다. 아래 그림 중 주황색으로 표시된 부분이 PC JDA/HESS가 개발하고 있는 Block A-18, 자주색 부분이 PC JDA/PTTEPI가 개발하고 있는 Blocks B-17, C-19, 녹색 부분이 PC JDA/PTTEPI가 개발하고 있는 Blocks B-17, C-19 지역을 나타낸다. 파란색으로 표시된 부분은 아직 운영권자가 지정되지 않은 곳으로 Block D-20이다.

43) <https://www.mtja.org/operators.ph>(검색일 : 2017. 11. 15).

44) <https://www.mtja.org/operators.php>(검색일 : 2017. 11. 15).

〈그림 3-12〉 공동개발구역의 가스정과 운영자

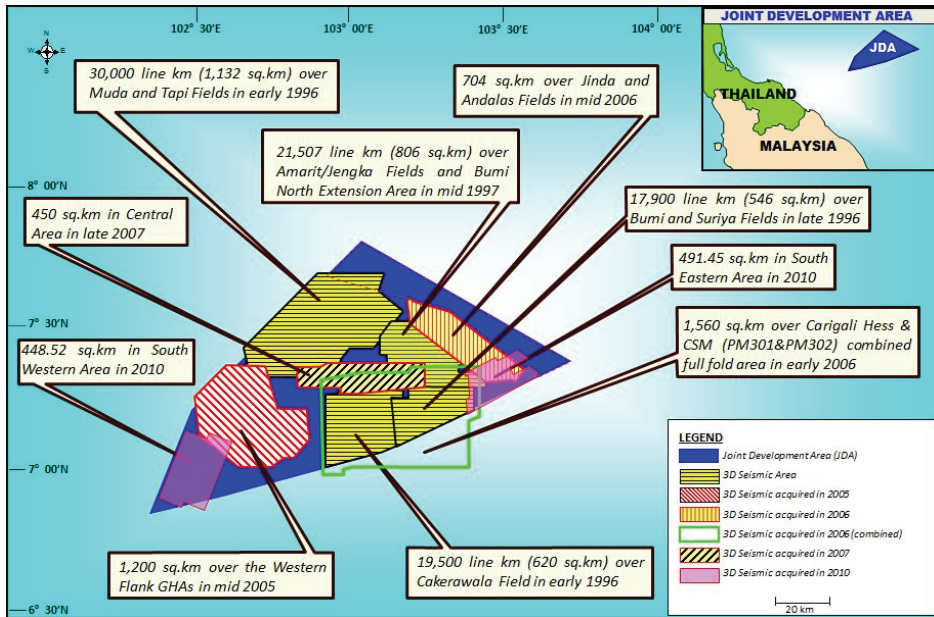


자료 : MTJA 홈페이지⁴⁵⁾

2014년 6월 기준으로 공동개발구역에서 총 72회 탐사와 유정 평가가 이루어졌고, Block A-18에서 38회, Block B-17, C-19에서 22회, Block B-17-01에서 12회 탐사와 유정 평가가 실시되었다. 공동개발구역에서 27개 가스정이 확인되었으며, Block A-18에서 9개, Block B-17, C-19에서 9개, Block B-17-01에서 9개가 확인되었다. 이들 가스정 중에는 소량의 석유가 매장된 곳도 있었다. 공동개발구역에서 총 217개 개발공이 시추되었으며, Block A-18에서 115개, Block B-17, C-19에서 102개가 시추되었다.

⁴⁵⁾ <https://www.mtja.org/operators.php> (검색일 : 2017. 11. 15).

〈그림 3-13〉 3D 탄성파 탐사



자료 : MTJA 홈페이지.⁴⁶⁾

말레이시아와 태국 간의 공동개발은 1990년 이후 공동개발기구가 제기능을 수행하게 되면서 매우 활발하게 탐사와 개발이 이루어지고 있다. 특히 공동개발 기구와 운영자의 거버넌스 측면에서 말레이시아와 태국의 인사들이 동등하게 참여하도록 기회를 보장하고, 공동개발 참여 회사나 생산물 분배 제도가 동등한 수익을 보장하면서 매우 효과적인 해저자원 탐사와 개발이 이루어지고 있다.

2) 공동개발기구의 조직

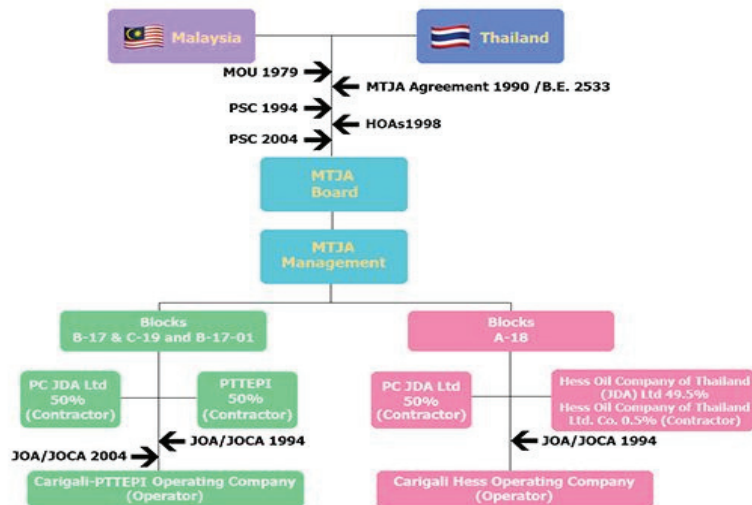
쿠알라 룸푸르에 본사가 있는 공동개발기구는 말레이시아와 태국 정부가 각각 임명하는 7인의 자국 국민으로 구성되는 이사회에 의해 운영된다. 공동개발 기구 이사회의 감독을 받는 공동개발기구 경영진은 석유 사업의 기술, 법률 및 재정을 담당하는 직원들로 구성된다. 공동개발기구는 두 국가 간의 독특한 협력

⁴⁶⁾ <https://www.mtja.org/operators.php> (검색일 : 2017. 11. 15).

을 시행한 세계 최초의 기구라고 할 수 있다.

1990년 공동개발협정 제3조에 따라 공동개발기구의 이사회는 양국 정부가 동등한 수로 임명한 2인의 공동 이사장과 12인의 이사로 구성된다. 2017년 6월 현재 말레이시아의 Tan Sri Dr Rahamat Bivi binti Yusoff와 태국의 Kurujit Nakornthap이 공동 이사장을 맡고 있다. 또한 말레이시아는 Tan Sri Dato' Sri Haji Mohamed Apandi Bin Ali 법무장관을 비롯한 총 6명의 이사를 임명하였고, 태국도 Thammayot Srichuai 에너지부 장관을 비롯한 6명의 이사를 임명하였다.⁴⁷⁾

〈그림 3-14〉 공동개발기구 조직 및 생산물 분배 계약자와의 관계도



자료 : MTJA 홈페이지⁴⁸⁾

공동개발기구 아래에 경영부서가 있으며, 경영부서에 있는 8개의 직위에 말레이시아와 태국 국민이 동수로 근무하고 있다. 경영부서는 그 아래에 3개 부서를 두고 있으며, 각각 탐사 및 생산, 재정회계 및 감사, 사업지원 및 법률서비스 업

47) <https://www.mtja.org/organization.php> (검색일 : 2017. 11. 15).

48) <https://www.mtja.org/organization.php> (검색일 : 2017. 11. 15).

무를 담당하고 있다. 공동개발기구의 경영부서는 공동개발구역 중 Block A-18, Blocks-17 및 C-19, 그리고 Block-B 17-01에서 이루어지는 생산물분배계약자의 석유 탐사, 개발 및 생산활동을 감독하고 모니터링 업무를 수행하고 있다. 공동개발기구의 경영부서 직원들은 각각 4년씩 순환 근무를 하게 된다.

3) 공동개발기구의 권한

공동개발협정에 따라 설립된 공동개발기구(Joint Authority)는 공동개발구역에서의 탐사 및 개발 활동에 대한 책임을 부담한다. 1979년 양해각서와 1990년 공동개발협정은 1979년 양해각서 제1조에서 대륙붕 권원 중첩해역 중 공동개발구역으로 지정된 해역에 대해 규율하고 있다. 1979년 양해각서 제3조 제2항 및 제3조 제4항은 공동개발구역에서 수행될 수 있는 모든 무생물자원 개발 활동에 대해 공동개발기구에 광범위한 권한을 부여하고 있었다. 다만 1990년 공동개발협정 제2조 제1항은 “공동개발기구의 목적은 공동개발구역에서 무생물 자원, 특히 석유의 탐사와 개발이 되어야 한다”고 규정함으로써 1979년 양해각서 제3조 제2항에 규정된 공동개발기구의 권한 중 석유 탐사와 개발을 강조하였다.

또한 1990년 공동개발기구 협정 제7조 제2항은 공동기구가 운영계획과 탐사 개발사업의 결정, 운영 허가와 매매 또는 계약 체결, 탐사와 개발기간의 승인 및 연장, 탐사 및 개발사업과 계약자의 예산 승인, 생산비용과 생산의 조건 및 일정을 포함하여 계약자의 생산활동 승인, 운영자의 장부와 회계에 대한 감독 및 감사, 입찰과 계약의 승인 및 결정에 대한 권한과 기능을 가진다고 규정하고 있다.

공동개발에 관한 최종 정책결정권자가 공동개발기구인지 아니면 양국 정부인지 여부에 관하여 1990년 공동개발협정 제7조의 문언만으로는 명확하게 파악하기 어려운 면이 있다. 1990년 공동개발협정 제7조는 “공동개발기구는 공동개발구역에서 모든 무생물자원의 탐사 및 개발을 통제해야 하고 동일한 사안에 관한 정책 수립에 대한 책임을 부담해야 한다”고 규정하고 있다. 다만 1979년 양해각서 제3조 제2항은 공동개발기구의 권한으로 ‘개발(development)’, ‘통제(control)’ 및 ‘행정(administration)’이라는 세 가지를 규정하고 있었으나, 1990

년 공동개발협정 제7조에 규정된 공동개발기구의 정책수립 권한에 관한 지리적 범위는 공동개발구역으로 한정되었다. 이러한 점을 고려할 때 공동개발에 관한 광범위한 권한이 공동개발기구에 부여되어 있지만 여전히 최종적인 결정권은 양국 정부에 있다고 볼 수 있다. 공동개발기구의 운영 관련 정책에 관한 최종 결정권은 말레이시아와 태국 정부가 보유하고 있다는 해석이 보다 타당한 것으로 보인다.

1990년 공동개발기구 협정 제1조 제1항은 공동개발기구에 법인격을 부여하였고, 제7조 제1항 및 제2항(d)은 공동개발구역에서의 정책수립 권한을 공동개발기구에 부여하였으며, 제7조 제2항(e)는 공동개발구역의 무생물 자원 탐사 및 개발에 관한 계약체결권을 부여하였다. 그러나 공동개발기구는 양국 정부의 사전 승인 없이는 국내외에서 공동개발을 진행할 수 없다. 따라서 공동개발기구에 부여된 법적 권한이 엄밀하게 상업적인 성격을 가진 경우를 제외하면 외부 법인격체와 독립적인 관계를 가질 수 있을 정도로 확대된 것은 아니다.

1990년 공동개발협정 제7조 제2항(e)는 공동개발기구가 무생물자원의 탐사 및 개발에 관한 활동을 허가하거나 거래 또는 계약을 체결할 때 양국 정부의 승인을 받도록 규정하고 있다. 공동개발기구를 설립하여 법인격을 부여하고 필요한 권한을 공동개발기구에게 부여하기 위해 양국이 제정한 국내 법령은 양국 정부가 위임하기로 합의한 계약상 권한과 기타 다른 권한만을 인정하고 있다. 1979년 양해각서에서 당사국들이 본래 의도했던 바와 달리 공동개발기구는 좀 더 부차적인 역할을 수행하게 되었다고 볼 수 있다.⁴⁹⁾

말레이시아와 태국 정부는 공동개발기구에 고도의 독립성을 부여하면 석유 탐사 및 개발의 허가부여 또는 개발계약과 같은 공동개발구역 자원에 대한 정부 통제가 포기된 것으로 비추어질 수도 있어 이를 주저한 것으로 보인다. 공동개발기구의 설립이 1981년에 공식적으로 승인되었지만, 공동개발기구의 최종적인 형태는 공동개발구역 생산체계에 관한 합의에 따라 결정된 측면이 있다.⁵⁰⁾ 결

49) Hazel Fox et al., *Joint Development of Offshore Oil and Gas: A Model Agreement for States for Joint Development with Explanatory Commentary*, British Institute of International and Comparative Law (1989), p. 135, 235.

50) *Ibid.*, p. 135.

국 1979년 양해각서와 1990년 공동개발기구 협정은 공동개발구역에서 개발되는 석유 또는 가스 구조의 조직화된 개발을 위한 대안을 제시한 것으로 평가할 수 있을 것이다.

4) 생산물분배계약 제도

1990년 공동개발기구 협정은 석유 재정제도와 관련하여 생산물분배계약 제도를 규정하였다. 1990년 협정 제8조 제1항은 “공동개발구역에서 석유의 탐사와 개발을 위해 부여되는 모든 계약은 생산물분배계약이어야 한다”고 규정하였다. 따라서 1979년 양해각서 체결 후 가장 다투어졌던 이익 분배에 관한 법적 형식이 생산물분배계약을 체결하는 것으로 결론내려졌다.

또한 협정 제8조 제2항은 생산물분배계약의 조건에는 다음과 같은 사항이 포함되어야 한다고 규정하였다. 첫째, 생산물분배계약은 35년을 초과하지 않는 기간 내에 유효하지만, 1990년 협정의 유효기간을 초과할 수 없다. 둘째, 계약자는 생산물분배계약이 정하는 방식과 시기에 석유 총생산의 10%를 사용료로 공동기구에 지불해야 한다. 셋째, 석유개발에 대한 비용 보전을 위해 계약자는 석유 총생산의 50%를 충당해야 한다. 넷째, 석유 총생산에서 사용료와 비용보전액을 제외한 잔여 분량이 있으면 이는 이익으로 간주되고 공동개발기구와 계약자에게 동등하게 분배된다. 다섯째, 석유 활동을 위한 모든 비용은 계약자가 부담해야 하고, 생산을 통해 보전 가능해야 한다. 여섯째, 계약자가 생산물분배계약에 따라 석유개발에 지출해야 하는 최소 금액은 공동개발기구와 계약자 간에 최소한으로 합의될 수 있다. 일곱째, 계약자가 공동개발기구에 내는 연구 징수금(research cess)의 지불은 공동개발기구가 결정할 수 있으나, 그 조사 요금을 석유 생산을 통하여 보전할 수는 없다. 여덟째, 계약으로부터 발생하는 분쟁이 평화적으로 해결될 수 없는 경우에는 중재에 회부된다.

또한 1990년 협정 제8조 제3항은 공동개발기구가 선택하면 생산물분배계약에 유효기간, 장비와 자산에 대한 권원, 원본 데이터에 대한 권원 등에 관한 추가 조건을 규정할 수 있도록 하고 있다. 제8조 제4항은 공동개발기구가 양국 정부의 승인을 얻어 생산물분배계약에 관해 제2항 (c), (d), (g)에 규정된 금액을 다양하게 정할 수 있도록 하고 있다. 더 나아가 제8조 제6항은 계약자가 동 협

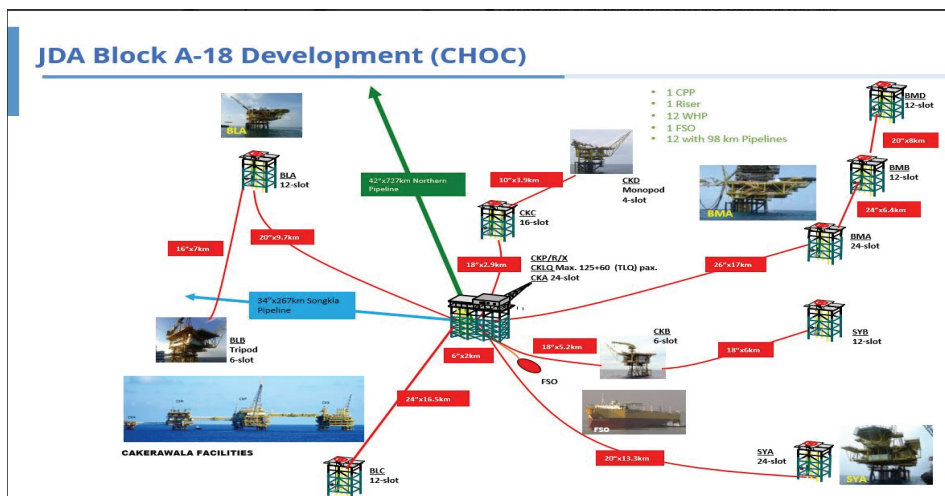
정 제16조 및 제17조에 따라 석유 이익 지분에 대한 수출세와 석유 소비세를 각각 납부해야 한다고 규정하고 있다.

4. 이행에 대한 평가

말레이시아와 태국은 1979년 양해각서, 1990년 공동개발기구 협정, 1991년 공동개발기구 법을 통해 공동개발구역에서 가스정과 유정의 탐사, 개발 및 상업적 이용 단계에 진입한 상황이다. 1979년 양해각서를 체결한 이후에도 본격적인 공동개발에 착수하기 위한 협상을 10여년 가까이 더 진행함으로써 결국 1990년 공동개발기구 설립을 위한 협정과 그 협정에 기반한 국내법을 제정, 시행할 수 있었다. 대륙붕 경계획정 등 해양 분쟁을 뒤로하고 공동개발을 실시하기 위한 양국의 정치적 의지가 결실을 맺게 되었다고 평가할 수 있다.

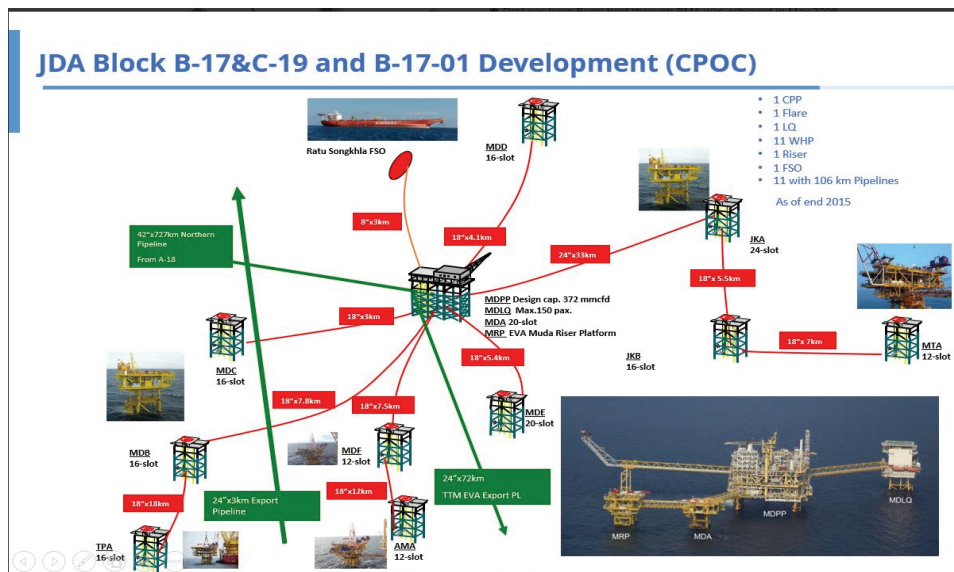
구체적인 이행 상황을 살펴보면 Block A-18에서 수행되고 있는 공동개발 프로젝트로는 12개 유정 플랫폼, Central Processing Platform & Living Quarters, Riser Platform, FSO 등이 있다. 가공된 가스가 790 mmscf/d의 비율로 배송 지점을 통해 매수인의 판매 관설로 배송되고 있다.

〈그림 3-15〉 공동개발구역 Block A-18 개발 상황

자료 : MTJA 홈페이지.⁵¹⁾

또 Blocks B-17, C-19에서 수행되고 있는 공동개발 프로젝트로는 10개 유정 플랫폼, Muda Central Processing Platform, Living Quarter Platform, Flare Tripod and Floating Storage Offloading이 있다. 1일 계약량 335mmscfd의 가공된 가스가 10년 동안 운송되고 2026년 1월 1일 종료일 6년 이전부터는 250mmscfd로 운송될 예정이다. Block B-17-01에 있는 Melati 유정은 2008년에 발견되었고 하나의 유정 플랫폼만 있다. 2017년에 다른 유정도 개발할 계획이며 2018년에 최초로 가스를 생산할 것으로 전망되고 있다.

〈그림 3-16〉 공동개발구역 Block B-17, C-19, B-17-01 개발 상황



자료 : MTJA 홈페이지⁵²⁾

말레이시아와 태국 간의 공동개발협정 이행 상황은 매우 성공적이라고 평가할 수 있다. 초기에 협상과정에서 여러 가지 법률적 및 실무적 장애들이 있었

51) <https://www.mtja.org/organization.php> (검색일 : 2017. 11. 15).

52) <https://www.mtja.org/organization.php> (검색일 : 2017.11.15.)

지만 양국의 정치지도자들의 협력과 인내심이 현재와 같은 공동개발 성과를 달성하는 밑거름이 되었다. 공동개발기구와 양국 정부 간의 권한관계와 위임 범위 등에 관하여 10여 년 가까이 지난한 협상과정이 있었지만 무사히 합의를 도출하여 효율적이고 공정한 공동개발기구 거버넌스 체계가 구축되었다.

또한 양국은 1990년 공동개발기구 협정에서 생산물분배계약 제도를 도입하여 공동개발에 참여하는 자국의 공공기관과 회사들이 개발이익을 공평하게 분배받을 수 있도록 함으로써 공동개발의 촉진에 크게 기여하였다. 최종적인 대륙붕 경계가 확정되지 않았지만 말레이시아와 태국은 공동개발기구를 효율적이고 공평하게 운영하는 데 성공함으로써 경계미확정 지역에서도 에너지 개발과 그로 인한 수익 공유 가능성을 입증했다고 평가할 수 있다.

5. 시사점

말레이시아와 태국 간의 공동개발협정은 한국과 일본 간의 공동개발협정과는 달리 공동개발기구를 설립하여 공동개발을 진행하는 모델이다. 소위 공동기구모델은 가장 복잡하고 제도화 수준이 높은 개발유형이다. 공동개발기구를 별도로 설립하기 때문에 당사국들 간에 매우 높은 수준의 국제협력이 필요하고, 당사국들이 직접 공동개발 과정을 통제하거나 권한을 행사하지는 않는다는 점에서 국가의 권한이 축소된 유형의 공동개발이다. 다만 말레이시아와 태국은 공동개발기구 설립 협정에서 그러한 국가 통제 또는 권한의 약화 가능성을 견제할 수 있는 장치를 마련하였고, 공동개발기구의 운영 및 개발활동과 관련하여 실효적이고 공정한 거버넌스를 구축한 것으로 평가할 수 있다.

특히 공동개발 세부 시행에 있어서 가장 걸림돌이 되었던 양국 간의 법제도적 차이점을 해결하기 위해 공동개발에 관한 동일한 내용의 국내법을 제정 시행하였다는 점은 앞으로 공동개발을 추진하는 국가들에 시사하는 바가 크다. 공동개발을 추진하기 위한 국내법 및 국제법적 제도의 정비와 집행은 양국 정치지도자들의 협력정신과 타협이 있었기에 가능하였다.

말레이시아와 태국 간의 공동개발협정은 한국과 일본 간의 공동개발협정과는

유형이 다르기 때문에 직접적인 시사점을 도출하기는 어렵다. 다만 앞으로 한일 공동개발협정이 종료되고 협정을 갱신하거나 새롭게 협정을 체결한다면 보다 효과적인 자원 탐사와 개발을 위해 양국 정부의 통제력과 권한 행사를 가급적 축소하되 공정하고 효율적인 거버넌스를 가진 기관을 설립하여 공동개발을 추진한 말레이시아와 태국 간의 공동개발 사례를 적극적으로 참조할 필요가 있을 것이다.

제3절 말레이시아-베트남

1. 개요

태국만(Gulf of Thailand)은 태국의 해안선 1,560km, 베트남의 해안선 230km, 말레이시아 해안선 150km, 캄보디아 해안선 460km으로 둘러싸여 있는 300,000km² 넓이의 반폐쇄해이다. 만의 모양은 길고 좁은 형태이며, 평균 너비가 385km, 즉 215해리이다. 따라서 유엔해양법협약상 이 만의 해역은 연안의 모든 국가들의 관할권이 중첩될 수밖에 없다.⁵³⁾ 베트남과 말레이시아 양국 간에 2,500km² 넓이의 해역이 중첩되어 있다.

베트남은 1971년 6월, 말레이시아의 섬과 베트남 사이 섬을 기점으로 그 해저에 중간선을 그어 자신의 관할권을 주장했다. 말레이시아는 1979년에 대륙붕에 대한 자국의 주장을 담은 해도를 공개했다. 이 지도에서 말레이시아는 말레이시아 레당(Redang)섬과 베트남의 까마우(Ca Mau)곶 간의 중간선을 기준으로 대륙붕의 외측한계를 설정한 것으로 베트남 연안 해역의 섬은 무시한 것이다.⁵⁴⁾

지리적으로 이 중첩수역은 말레이 해분에 있으며, 8~9km의 퇴적층으로 이루

⁵³⁾ Nguyen Hong Thao, *Vietnam's First Maritime Boundary Agreement*, IBRU Boundary and Security Bulletin Autumn 1997.

⁵⁴⁾ Nguyen Hong Thao, *Joint Development in the Gulf of Thailand*, IBRU Boundary and Security Bulletin Autumn 1999.

어져 있어, 석유가 매장되어 있을 것으로 추정되었다. 말레이시아는 1980년대부터 태국만에서의 석유 및 가스 등 천연자원에 대한 개발에 관심을 가지기 시작했다. 그리고 이 해역에 외국 석유 개발회사와 세 건의 개발 계약을 체결했다. 1991년 5월 이 외국 석유 회사 중 하나인 해밀턴(Hamilton)사가 이 중첩 수역 내에 있는 Bunga Orkid-1 유정에서 석유 탐사를 한 결과 1일 4,400배럴을 시추할 수 있는 석유가 매장되어 있음이 밝혀졌다. 또한 중첩수역 내에 1.1zft³에 달하는 가스가 매장되어 있음을 확인했다고 밝혔다.⁵⁵⁾

2. 경과

양국 공동개발 과정은 대륙붕이 중첩하는 해역에서 말레이시아가 일방적으로 석유 및 가스 등 천연자원에 대한 탐사개발 활동을 시작하면서 촉발되었다. 베트남은 1991년 말레이시아와 계약한 외국 석유회사의 발표가 나자 이러한 일방적인 행동에 대해 반박하는 의견서를 말레이시아 외교부에 전송했다. 양국 모두 제3자를 통해 일방적으로 중첩수역에서 탐사개발을 하지 않도록 협력하기로 한 것을 재확인하는 내용이 요지였다. 아울러 중첩되는 대륙붕에서 해양경계획정과 관련하여 협의를 할 의사를 밝혔다. 이에 말레이시아도 이 협의 결과에 따라 탐사를 진행하는 것으로 결정하고 일단 탐사개발을 중단했다.

해밀턴사의 탐사결과는 양국이 최대한 빨리 합의 가능한 결과를 도출하도록 하는 계기가 되었다. 1992년 초 베트남 수상이 말레이시아를 공식 방문했을 당시 중첩하는 대륙붕에 대한 협의를 개시할 것에 대해 양국의 합의가 이루어졌다. 그리고 그 해 6월 양국은 첫 협상을 성공적으로 마무리했다. 양국 간 최종 경계획정이 결정된 이후 서로의 권리를 침해하지 않는 한에서 중첩수역에서의 공동개발을 진행하기로 결정했다.⁵⁶⁾

1992년 6월 MOU에서 서말레이시아의 북동 해안과 베트남 남서해안에서 양국 간 중첩되는 해역에 대해 ‘지정구역(Defined Area)’라고 명명했다. 그리고

55) *Ibid.*

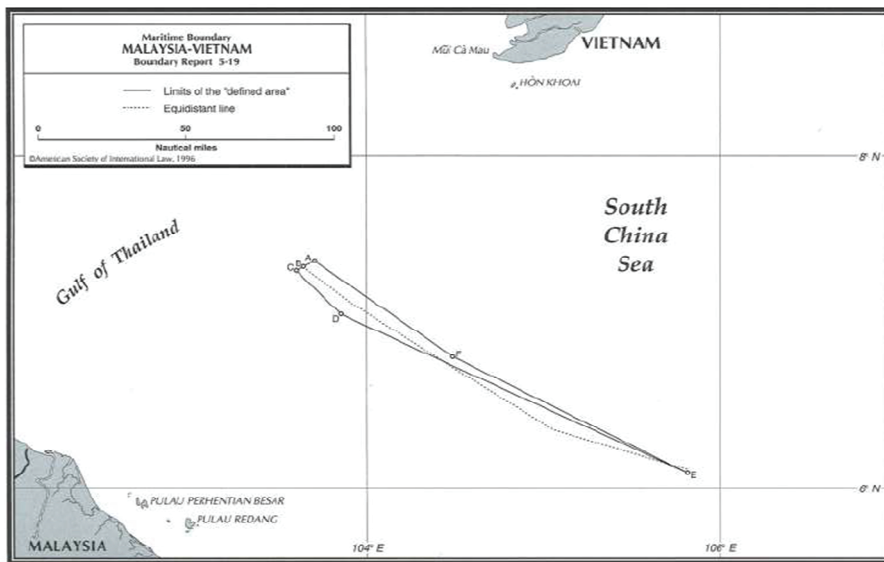
56) *Ibid.*

제3국으로부터의 분쟁이 문제가 되는 지역은 배제하기로 했다.⁵⁷⁾ 이 ‘지정구역(Defined Area)’의 길이는 100마일이 넘으나 폭은 10마일이 안 되는 형태의 해역이다. 따라서 모든 유전이나 가스 매장지가 중첩수역 이외의 수역에 걸쳐질 수밖에 없는 상황이다. 따라서 양국은 자원탐사개발과 관련하여 상호 수락 가능한 조항을 만들어야 했다. 1992년 6월 5일 양국 간 중첩수역에 대한 MOU가 최종 확정되었다.

3. 주요 내용

1992년 6월 5일 양국은 중첩수역에서의 공동개발을 추진하기 위해 1992 MOU⁵⁸⁾를 체결했다. MOU는 8개 조항으로 이루어져 있다.

〈그림 3-17〉 말레이시아와 베트남 공동개발구역 “지정구역(Defined Area)”



자료 : 말레이시아 베트남 MOU.

57) 따라서 태국, 말레이시아, 베트남 3국 간에 중첩되는 수역에 대해서는 1997년 말 별도의 협상이 진행되었다.

58) 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.

MOU에서는 6개 기점을 기준으로 직선으로 공동개발수역을 규정하고 있다(제1조). 양국 간 결정되지 않은 해양경계획정과 관련해서는 이해와 협력을 기반으로 결과를 침해하지 않는 범위에서 최종 경계획정을 협의하도록 규정하고 있다. 우선 이번 MOU에서 적용되는 주된 법률은 말레이시아 국내법이다. 양국 공동개발과 관련하여 분쟁이 발생할 시 MOU 내 중재규정은 쿠알라룸푸르 지역중재센터의 중재규칙에 따라 중재한다고 규정하고 있다. 수출품에 대해서도 말레이시아 관세법을 적용하기로 합의했다.⁵⁹⁾

이 MOU에 따라 지정구역(Defined Area)에서 자원탐사개발을 실시할 기업으로 페트로나스와 페트로베트남(PETROVIETNAM)을 지명했다(제3조(a)). 양국은 또한 페트로나스와 페트로베트남에 양 당사자의 승인을 조건으로 하여 지정 영역의 석유 개발을 위한 상업협정을 맺도록 요구하기로 동의했다(제3조(b)). 이 조항에 따라 MOU를 이행하기 위해 페트로나스와 페트로베트남 사이에 다음의 네 개 협정이 체결되었다. 1993년 상업협정(Commercial arrangement 1993)을 체결하고, MOU 이행을 위한 조정위원회(Coordination Committee)를 구성했다. 그리고 석유 공유 협정, 가스 공유 협정, 세금 및 수수료 협정이 체결되었다. 또한 양 당사국은 지정 지역에서 조기 석유 탐사를 보장하기 위해 모든 노력을 다할 것에 동의했다(제3조 (c)).

제4조에서는 이 양해각서의 어떤 내용도 지정 구역(Defined Area)과 관련하여 양 당사자의 입장과 소유권을 침해하거나 제3조의 규정을 침해하지 않더라도 지정 구역(the Defined Area) 내의 석유 자원에 관하여 당사자가 아닌 자에게 어떠한 권리, 이익 또는 특권을 부여해서는 안 된다고 규정한다.

이 양해각서에 따르면 협정의 이행은 양국의 합의에 따라서 이행되며 어떤 기관도 이를 통제하지 못한다. 양해각서에 규정되어 있지는 않지만, 양국은 지정 구역의 석유 개발에 대해서 해양환경 보호를 고려하여 개발하는 것을 보장하기로 합의한 바 있다⁶⁰⁾.

이 양해각서 규정의 해석 또는 이행으로 인해 발생하는 모든 분쟁은 양 당사

59) *Ibid.*

60) 양국의 공식적인 입장이나 문서를 확인할 수 있는 자료는 없으나, David Ong 교수가 관계자를 통해 확인한 내용임.

국 간의 협의 또는 협상에 의하여 평화롭게 해결되어야 한다. 석유 유전이 지정 지역에 부분적으로 위치하고, 부분적으로는 말레이시아 또는 베트남 대륙붕의 해당 지역 바깥에 위치하는 경우, 양 당사국은 석유 개발을 위해 상호 용인 가능한 조건에 도달해야 한다(제2조 제2항). 양국 간 MOU에는 종료와 관련한 기간을 정해두지 않았다는 특징이 있다. MOU는 외교 각서⁶¹⁾ 교환에 따라 발효되며(제7조), MOU 기간은 양 당사국의 검토와 동의에 따라 연장할 수도 있다(제5조). 양해각서에 규정되어 있지는 않지만, 양 당사국은 발행된 양허(concessions) 또는 면허의 유효성 및 석유 개발에 관한 일방 당사국의 약정이 부정적인 영향을 받지 아니한다는 데에 또한 동의하였다.

조정위원회에서는 페트로나스와 페트로베트남에서 각각 4명씩 대표자를 지명하고 이들은 동등한 투표권을 가진다. 그리고 위원회장은 2년마다 양 당사자가 돌아가며 호선하도록 규정했다. 조정위원회는 만장일치에 따라 의사 결정을 하고 ‘지정구역(Defined Area)’에서의 석유 시추 작업 운영에 대한 정책 가이드라인(지침)을 제시한다.

분쟁이 발생할 경우, 양국의 우호 관계와 신중한 판단 그리고 국제석유산업계 최근 관행에 의거하여 조정하도록 되어 있다. 그러나 우호적인 방법으로 원만하게 해결이 안될 경우 말레이시아와 베트남 정부에 분쟁을 제출하도록 되어 있는데, 단 양국 정부는 기업 경영에 깊이 관여하지는 않는다.

석유생산물분배계약(The Petroleum Sharing Contracts, PSC)에 따라 계약자들은 석유 시추 작업의 진행 상황을 양측 모두에게 알려야 하고, 석유공유계약을 개정, 변경, 내용 추가할 경우 양 당사자의 합의가 우선되어야 한다.

말레이시아와 베트남 간 공동개발에는 ‘지정구역(Defined Area)’ 내 관할권이 여전히 중첩되고, 석유 시추활동 외 다른 사안은 배제되어 있다는 한계가 있다. 공동개발수역 이외 해역까지 석유, 가스, 다른 광물 매장지가 연장될 경우 당사자는 모든 관련 정보를 서로 협의해야 하며, 이런 자원의 탐사 개발과 관련하여 쌍방이 수용 가능한 조건에 도달하도록 노력해야 한다. 또한 양국 간 MOU에서는 공동 개발 수역에서의 어업, 항해, 수로학·해양학 조사, 해양오염의

61) 이 외교 각서에서 MOU의 기간은 40년이라고 규정하고 있어, 우선 2033년까지 유효하다.

제어와 금지, 범죄에 대한 관할권, 기타 등등에 대한 ‘기능적인’ 규정은 없다.⁶²⁾

MOU 규정의 이행이나 해석에 있어 어떤 불일치나 분쟁이 발생할 경우, 양국 간 선린의 원칙과 국제법에 합치되도록 양 당사자의 조정과 협상을 통해 평화적으로 해결할 것을 규정하고 있다.

페트로나스와 페트로베트남 간 상업적 활동에 대한 규정은 MOU가 종료하거나, 석유공유계약이 종료하거나 양국 정부가 합의할 때 규정이 종료된다고 명시하고 있어 역시 명확한 기간이 정해져 있지 않다.

말레이시아와 베트남은 공동개발을 위하여 양해각서를 체결하였는데, 이 양해각서에서는 양 당사국이 지명한 국영 석유회사가 양국 간 중첩되는 대륙붕 지정수역에서 석유 탐사와 채굴 협약을 체결할 수 있도록 규정하였다. 따라서 양국의 공동개발 형식은 공동 광구 개발을 위해 운영자 간의 강제적인 합작 투자방식을 채택하고 공동 경영을 시행하는 모델에 가깝다. 양국의 정부가 합의하여 자국 국적의 석유회사를 각각 MOU의 당사자로 지정하고, 각 석유회사에서 4명씩 선발된 대표가 조정위원회를 운영하여 MOU 이행을 위한 지침을 제공받는다.

5. 이행에 대한 평가

1993년 상업협정이 이루어진 후 4년이 지나지 않은 1997년 7월 29일 Bunga Kekwa 유전에서 첫 번째 석유가 시추되었다. 이후 19년간 성공적으로 이행되고 있으며, 양국에 경제적으로 이익이 되고 있다고 평가받고 있다.⁶³⁾

베트남은 2001년 탈리스만 에너지(Talisman Energy)사에 말레이시아와 베트남의 중첩수역 중 한 구역인 PM3 CAA(Commercial Arrangement Area)에 대한 탐사 지위를 부여했다.⁶⁴⁾ 탈리스만 에너지사에서는 말레이시아와 베트남 중첩수역 중 PM3 CAA(Commercial Arrangement Area)에 대해 2008년에는 가스 탐사를, 2009년에는 석유 탐사 개발을 시작했다고 밝힌 바 있다.⁶⁵⁾

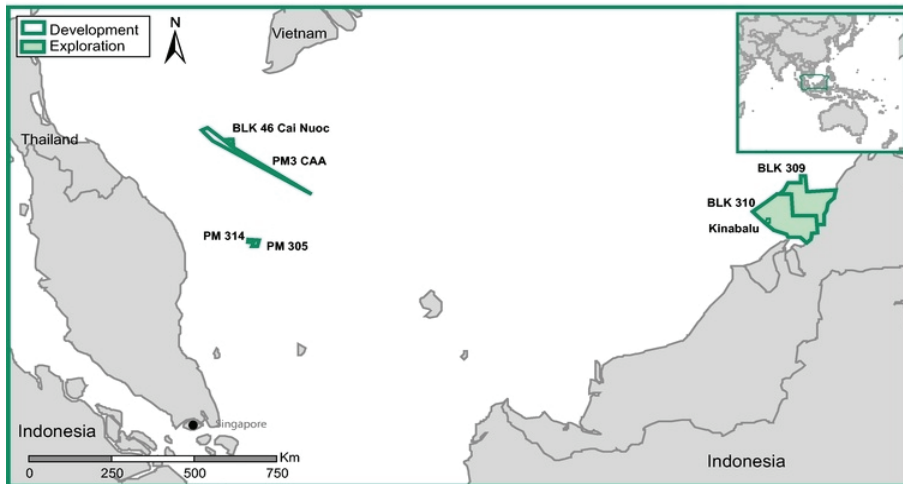
⁶²⁾ Ibid.

⁶³⁾ Ibid.

⁶⁴⁾ Vietnam Energy Online, <http://nangluongvietnam.vn/news/en/investment-activity/talisman-desires-vietnam-to-be-a-key-market-in-asia.html> (검색일 : 2017. 12. 4).

그리고 2016년 5월에는 해당 수역에 대해 페트로나스와 페트로베트남과 PSC를 10년 더 연장하여 2027년까지 운영하기로 하였다.⁶⁶⁾

〈그림 3-18〉 말레이시아와 베트남 중첩수역 내 탈리스만 에너지 광구 지도



자료 : www.sec.gov.⁶⁷⁾

5. 시사점

말레이시아와 베트남 간의 MOU는 양국의 합의를 기초로 양국의 상업적 개발을 담당할 국영기업들이 실무를 진행하고 있다는 데 있다. 우선 양국은 경계 미확정 수역에서의 자원 공동개발에 대해 합의를 달성하고 실무적인 협의를 진행했다는 점에 주목할 필요가 있다. 한일 간의 공동개발은 협정은 체결이 되었으나, 현재까지 1차 탐사기간을 거친 후 일본의 지지부진한 태도로 인해 더 이상의 탐사는 진행되지 못하고 있다.

⁶⁵⁾ Marketwired, <http://www.marketwired.com/press-release/talisman-energy-announces-first-oil-from-the-northern-fields-development-nyse-tlm-968560.htm> (검색일 : 2017. 12. 4.).

⁶⁶⁾ Offshore Energy Today.com, <https://www.offshoreenergytoday.com/malaysias-petronas-vietnam-petrovietnam-sign-10-year-psc-extension/> (검색일 : 2017. 12. 4.).

⁶⁷⁾ U.S. Securities and Exchange Commission, https://www.sec.gov/Archives/edgar/data/201283/000104746913002244/a2213283zex-99_5.htm (검색일 : 2017. 12. 4.).

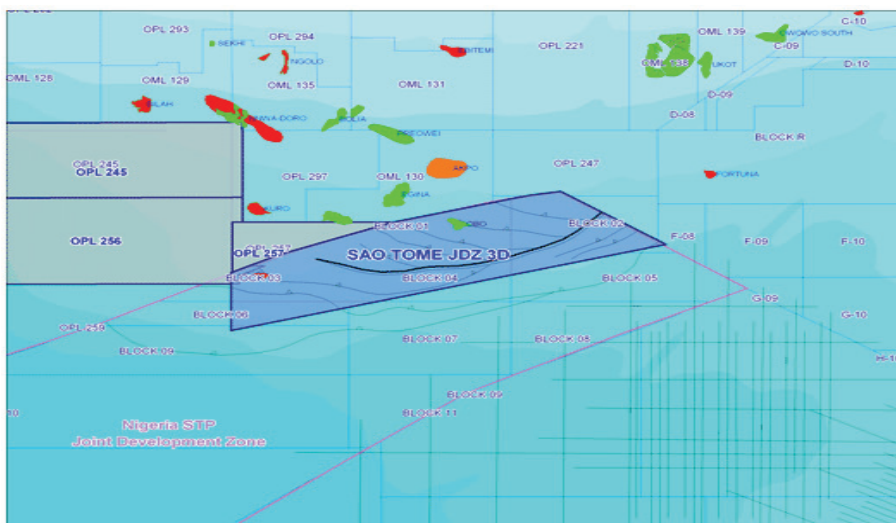
또한, 상업협정의 세부내용을 실행할 각 국가의 국영기업을 MOU에서 미리 지정함으로써 추후 채산성이나 지원기업 부재 등의 이유를 들어 기업 선정을 미루고 MOU 조항을 이행하지 않는 등 양국 합의를 해태할 수 있는 가능성을 미리 배제한 것도 의미가 있다.

제4절 나이지리아-상투메 프린시페

1. 개요

아프리카 기니 만(Gulf of Guinea)에 위치한 나이지리아와 상투메-프린시페는 양국 간 배타적 경제수역에 관한 경계획정 교섭 과정에서 경계획정방식에 대한 커다란 입장차로 합의에 실패하였다. 이를 대신하여 양국은 2008년 8월을 기점으로 공동개발을 시행한다는 내용의 공동개발협정을 체결하였다. 따라서 양국이 체결한 공동개발협정은 유엔해양법협약 제74조 제3항의 취지에 입각한 잠정약정(provisional arrangement)의 성격을 지니고 있으며, 동 협정은 2003년 1월에 발효되었다.

〈그림 3-19〉 나이지리아-상투메 - 프린시페 공동개발구역의 위치



자료 : 나이지리아-상투메-프린시페 공동개발 홈페이지.68)

2. 경과

나이지리아와 상투메 프린시페의 공동개발 구역은 총 19개의 광구로 나누어져 있다. 2010년, 전체 광구 중 7개 광구에 대한 입찰 결과로 2011년 5월 나이지리아 오란토 석유개발(Oranto Petroleum)사에 1개 구역이 할당되었고 2012년 5월에 계약이 체결되어 2015년 6월까지만 해도 석유 탐사 및 생산을 위한 계약이 민간 석유기업들을 상대로 진행되었다.⁶⁹⁾

현재 나이지리아와 상투메 프린시페 간 공동개발은 재정상 이유로 그 이행이 미진한 상황이다. 따라서 양국 간 공동개발구역이 설치된 지 15년이 경과한 현재까지도 첫 번째 원유 생산이 요원할 것으로 전망된다.

3. 주요 내용

1) 모델 III : 공동기구모델 채택

동 협정은 공동개발구역의 관리와 운영을 위한 조직으로 ‘공동각료이사회(Joint Ministerial Council)’와 ‘공동개발기구(Joint Authority)’를 구성하여 동 협정이 발효된 때부터 업무를 개시하였다. ‘공동기구’는 공동각료이사회에 지시·감독하에 자원의 탐사·개발과 관련된 포괄적인 권한 행사와 기능을 수행하고 있다. 특히 실무적인 집행기구로 공동각료이사회에 승인을 받아 공동개발 협정을 체결하고 동 협정에 대한 감독·통제에 대해 포괄적인 권한을 행사한다.

68) 나이지리아-상투메 프린시페 공동개발기구 홈페이지, <http://www.nstpjda.com/portfolio-item/bathymetric-maps-of-the-jdz/>(검색일: 2017. 11. 3).

69) 나이지리아-상투메 프린시페 공동개발 웹사이트, <http://www.nstpjda.com/new-jdz-block-1-production-sharing-contractor-psc/>(검색일: 2017. 12. 28).

2) 공동개발협정 내용 검토⁷⁰⁾

(1) 공동각료이사회의 기능

공동각료이사회는 공동기구에 대해 업무를 지시·감독하고 공동개발에 관한 최종 책임과 권한을 가진 기구이다. 따라서 공동기구는 공동개발협정 발효 후 가능한 한 빠른 시일 내에 개발계획(Zone Plan)을 수립하여 공동각료이사회에 보고하여 승인을 받도록 규정되어 있으며, 적어도 3년마다 이를 재검토 및 개정하여야 한다(제19조 제1항).

(2) 운영협정과 공동기구와의 관계

공동개발협정에 따르면 개발지역에서 개발활동 주체 간의 계약내용을 규정한 운영협정(operating agreement)에 의해 실질적인 운영행위를 시행하는 자를 운영자로 지명해야 한다. 공동기구는 공동개발협정을 체결하고 운영에 대한 감독권한을 행사한다(제9조 제6항).

(3) 공동개발 세부 운영 지침

공동개발구역 석유 탐사 및 개발로 인한 정부 수익은 나이지리아와 상투메 프린시페 사이에 6 대 4의 비율로 분배된다(제17조 제7항). 공동개발협정에서 광구통합(Petroleum Unitisation)에 대한 규정을 두고 있으며(제31조), 개발계획(Zone Plan)에 석유·가스 이외의 자원에 대한 개발도 포함하였다(제9장 Other Resources of the Zone). 협정은 해양오염의 방지 및 해양환경보전(제38조), 민·형사 관할권의 행사(제39조, 제40조)를 포함한 해당 수역에서 자원의 공동개발 관련 내용 또한 포함하고 있다. 공동기구와 개발권자 간 또는 개발권자 및 운영자들 사이의 분쟁과 공동기구 내부 또는 공동각료이사회에서 발생하는 분쟁을 구분하여 분쟁해결에 관련된 규정을 명시하였다(제47조 제1항). 공동개발협정 체결일로부터 30년 이후 재검토를 통해 45년까지 작용할 수 있다(제51조

⁷⁰⁾ Treaty between the Federal Republic of Nigeria and the Democratic Republic of Sao Tome and Principe on the Joint Development of Petroleum and other Resources, in respect of Areas of the Exclusive Economic Zone of the Two States, 21 February 2001.

제1항).

4. 이행에 대한 평가

양국 간 공동개발구역이 설치된 지 15년이 경과한 현재까지도 공동개발 이행이 제대로 진척되지 않는 이유로는 크게 채산성 문제와 과다한 운영비용 지출문제를 들 수 있다.

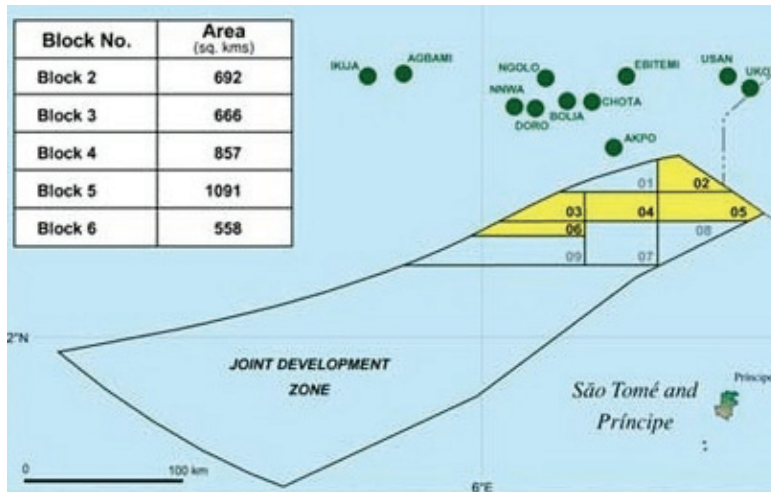
1) 채산성 문제⁷¹⁾

현재 공동개발구역은 양국이 주체가 되어 다국적 석유생산기업들의 참가를 허용하는 컨소시엄 형태로 진행되고 있다. 미국에 본사를 두고 있는 다국적 에너지기업 ERHC Energy Inc.의 주도로 쉘브론(Chevron)사, 시노펙(Sinopec)사와 어닥스(Addax)사 등이 공동개발에 참가하고 있다. 그러나 오랜 기간 동안 조광권을 따내기 위해 경쟁했던 많은 기업들은 탐사활동에 많은 예산을 투자하였으나 뚜렷한 성과를 거두지 못하였다. 이로 인해 개발에 참여한 기업들은 개발구역에서 상업적인 이익을 도출할 수 있는 생산이 가능한지에 대한 의문을 제기하였다. 그 예시로는 ERHC의 상황을 들 수 있다. ERHC는 2, 3, 4, 5, 6, 9 구역(Block 2, 3, 4, 5, 6, 9)에 관심을 가지고 채굴에 5억 달러(한화 약 5,670억 원)가 넘는 돈을 투자했으나 현재까지 명확한 성과를 도출하지 못하였다.

또한 2009년 8월부터 2010년 1월까지 ERHC와 그 파트너들은 5개의 탐사 유정(well), 즉 2구역과 3구역에 속해 있는 유정과 4구역에 속해 있는 3개의 유정에서 채굴을 진행하였다. 이 과정에서 3개의 유정에서 생물발생 메탄가스(bio-genetic methane gas)가 발견되었지만 상업적 이용이 가능한 충분한 양을 생산하지 못했다.

⁷¹⁾ Sweet Crude Reports, <http://sweetcrudereports.com/2017/03/25/15-years-later-nigeria-sao-to-me-jdz-remains-unproductive/> (검색일 : 2017. 11. 1).

〈그림 3-20〉 공동개발구역 내 ERHC Energy Inc.사의 생산구역



자료 : ERHC Energy Inc. 홈페이지.⁷²⁾

대상 해역과 같이 깊은 해역에 존재하는 유정을 탐사하기 위해서는 유정 당 탐사비용이 1억 달러(한화 약 1,100억원) 정도로 막대한 금액이 요구되고 있다. 유정탐사를 위한 추가 준비비용 등도 생각한다면 탐사를 위하여 막대한 비용을 사용해야 한다는 점을 알 수 있게 한다.

공동개발지역에서 철수했던 지역이지만 다시 탐사를 재개한 사례도 있다. 주요 에너지 기업들은 2010년 셰브론사에 의해 채굴이 중단되었던 1구역에서 2013년 8월 채굴을 재개한 바 있으나 추가적인 투자를 할 만큼 새로운 유정이 발견되지 않았다는 결론을 내놓았다. 중국 시노펙사와 어닥스사 또한 같은 이유로 2구역과 4구역에서 작업을 철수할 것이라고 전하였다.

또한 1구역에서 탐사를 진행했던 Total사 또한 미흡한 탐사결과 및 고정비용이 과다 지출된다는 이유로 2013년 9월 탐사를 중단한 상태이다.⁷³⁾ 따라서 현재까지의 개발상황을 가늠해볼 때 상업적인 효과를 거둘 수 있다는 과학적 실증 없이는 공동개발구역에서의 시추는 기대하기 어려울 것으로 전망된다.

⁷²⁾ ERHC Energy, <https://investorshub.advfn.com/ERHC-Energy-Inc-ERHE-1909/>(검색일 : 2017. 11. 5).

⁷³⁾ 주 가봉대사관, 「상투메 프린시페 에너지/인프라 개발동향」, 2013. 8, pp.1~2.

2) 과도한 운영비용의 지출⁷⁴⁾

2014년 채굴산업투명성운동기구(Extractive Industries Transparency Initiative, EITI)의 보고서에 따르면, 나이지리아와 상투메 프린시페 간 JDZ가 설립된 이후 전체 예산의 43%가 운영비용(operating costs)으로만 소요되었다고 밝혔다. 즉, 자원 탐사 및 개발 계약 체결 시 운영자가 자원보유국 국가에 제공하는 비용(signature bonuses), 탄성파 자료 판매(sales of seismic data), 허가 (licences) 등으로 창출된 총 예산 3억 260만 달러(한화 약 3,432억 원) 중 1억 2900만 달러(한화 약 1,464억 원)가 넘는 액수가 공동기구의 운영비용(JDA operating expenses)으로만 충당되었다는 문제가 있다.

5. 시사점

나이지리아와 상투메 프린시페는 오랫동안 공동개발의 성공적인 예로 제시되었던 국가이다. 그러나 현재 양국은 채산성 문제와 과도한 운영비용 문제로 인하여 이행이 원활하게 진행되고 있지 않다. 공동개발협정이라는 협력증진모델의 존재 의의에도 불구하고 결국 대상 광구가 경제적 이익을 창출해야 협력 증진 모델도 실질적인 의미를 가지게 되는 것이다. 선한 의도가 항상 선한 결과를 가져오는 것은 아니라는 점은 결국 공동개발의 운영에서도 경제적 이익 창출을 최우선의 과제로 놓아야 한다는 점을 보여주고 있다.

⁷⁴⁾ Sweet Crude Reports, <http://sweetcrudereports.com/2017/03/25/15-years-later-nigeria-sao-to-me-jdz-remains-unproductive/> (검색일: 2017. 11. 1).

제4장

사례 연구의 시사점 <<

제1절 한일 대륙붕 공동개발협정

1. 개요

우리나라는 1969년 12월 해저광물자원법을 제정하고 1970년 1월 1일 이를 시행하였다. 1970년 5월 한반도 남쪽의 7광구를 설정하고 ‘대륙연장론’에 근거하고 있다고 주장하자, 일본이 ‘중간선’을 주장하며 양국은 대립하게 되었다. 1974년 1월 양국 간 협상으로 한일 대륙붕 공동개발구역(JDZ) 설정을 내용으로 하는 조약을 체결하였다. 이는 1978년에 양국 국회의 비준 및 양국 정부의 비준서 교환으로 발효되었다(협정 제31조 제1항). 이 협정의 발효 기간은 1978년부터 2028년까지 50년이며 종료 3년 전에 타방에게 서면통고를 하면 50년 기간 종료 시 협정이 종료된다(협정 제31조 제2항 제3항). 협정의 본문은 31개의 조문으로 구성된 본문과 공동개발구역의 좌표를 표시한 부록으로 구성되어 있다. 이 외에 합의의사록 및 3개의 교환각서(굴착의무에 관한 각서교환, 해상 충돌방지에 관한 각서교환, 해수오염의 방지 및 제거에 관한 각서교환)가 있다. 한일 양국은 각각 국내법에 따라서 탐사권과 채취권을 가지고 있는 조광권자를 선정할 수 있으며, 이 조광권자들이 해당 지역을 탐사 채취할 수 있다(협정 제3조, 제4조, 제10조). 양국의 조광권자들은 운영계약⁷⁵⁾을 체결하고, ‘운영자 지

75) 한일 대륙붕 공동개발협정 제5조 제1항

1. 양 당사국의 조광권자는 공동개발구역 내의 천연자원 탐사와 채취를 공동으로 수행하기 위하여 운영계약을 체결하여야 한다. 동 운영계약에는 특히 다음 사항을 규정하여야 한다.

- (a) 제9조에 의한 천연자원과 비용의 분배에 관한 세부사항
- (b) 운영자의 지정
- (c) 단독 위험부담작업의 취급
- (d) 어업상 권익의 조정
- (e) 분쟁의 해결

정' 등에 대해서 결정하며, 이렇게 지정된 '운영자'가 운영계약에 따라 모든 작업을 배타적으로 통제한다(협정 제5조). 운영권자의 지정은 양 당사국의 조광권자가 합의를 통하여 지정하며, 합의에 이르지 못한 경우 당사국이 협의를 하고, 그래도 지정되지 않으면 추첨에 의하여 결정한다(협정 제6조). 양 당사국의 조광권자는 공동개발구역에서 산출된 천연자원을 공동으로 분배받을 권리가 있으며, 또한 탐사와 채취에 소요되는 비용 또한 동등하게 부담한다(협정 제9조). 탐사권 기한은 8년, 채취권 기한은 30년이다. 천연자원 개발이 상업적으로 가능하다고 밝혀지면, 조광권자는 채취권을 신청하며 채취권이 설정됨과 동시에 탐사한다(협정 제10조). 양 당사국의 조광권자는 별도의 약정에 따라 탐사권 기간 중 수개의 유정을 굴착해야 한다. 단, 각 소구역에 관하여 굴착될 최소한의 유정 수는 운영계약의 효력발생일로부터 최소 3년, 다음 3년 및 잔여 2년의 각 기간 중 2개 공을 초과할 수 없다(협정 제11조). 하지만 '굴착의무에 관한 교환각서'에 따르면 그 굴착공은 최초 3년의 기간, 다음 3년의 기간, 잔여 2년의 기간에 각각 1개 공만을 굴착하도록 하였다.

작업은 의무사항으로 되어 있으며 조광권자는 탐사권 또는 채취권 설정일로부터 6개월 이내에 작업을 착수하여야 하고, 계속하여 6개월 이상 작업을 중지하지 못한다(협정 제12조). 조광권자는 조광권을 단계적으로 포기할 수 있으며,⁷⁶⁾ 의무를 이행하지 않을 경우 조광권이 취소될 수 있다(협정 제13조, 제14조).⁷⁷⁾ 조광권자 일방이 조광구역 전체를 포기하거나 그 조광권이 취소된 경우 남은 조광권자는 상대방 국가가 새로운 조광권자를 허가할 때까지 천연자원의 탐사 또는 채취를 수행한다. 조광권자가 권리를 가지는 천연자원의 몫은 당사국의 대륙붕에서 산출된 천연자원으로 보고 그 나라의 법이 적용된다. 운영권자가 해당 소구역 내의 천연자원을 탐사 또는 채취할 경우에도 그 당사국의 법규가 적용된다(협정 제16조). 이 협정의 '해석 및 적용'에 관한 분쟁은 우선 외교 경

76) 제13조에 따르면 조광권자는 운영계약의 효력 발생일로부터 3년 내에 원래의 소구역의 25%를, 6년 내에 동 소구역의 50%를, 8년 내에 동 소구역의 75%를 포기하도록 강제하고 있다.

77) 제14조에 따르면 조광권자가 본 협정 또는 운영계약에 의한 의무를 이행하지 못하였을 경우에는 타방당사국과의 협의 후, 조광권자 보호에 관한 자국의 법규에 규정된 적절한 절차에 의하여 동 조광권자의 탐사권 또는 채취권을 취소할 수 있다.

로, 즉 교섭을 통하여 해결하며, 교섭을 통하여 해결이 이루어지지 않을 경우에는 3인의 중재위원회로 구성되는 중재위원회에 회부된다(협정 제26조). 하지만 중재위원회 구성이 강제되는 것은 아니므로 일방이 중재위원회 구성에 합의하지 않을 경우 타방이 이를 강제할 수 있는 방법이 없다는 문제가 있다.

본 협정의 어느 규정도 공동개발구역의 전부나 어느 부분에 대한 주권적 권리의 문제를 결정하는 것으로 볼 수 없으며, 대륙붕 경계확정에 관한 각 당사국의 입장을 침해하는 것으로 볼 수 없다(협정 제28조). 일방당사국의 요청이 있으면 당사국은 본 협정의 이행에 관하여 협의한다(협정 제29조). 당사국은 본 협정을 이행하기 위하여 필요한 모든 국내조치를 취한다(협정 제30조).

2. 이행상황

1980년부터 1986년까지 7개 공구를 탐사하였으나 성과가 미비하여 1980년대 중반 이후 탐사가 중단되었다.⁷⁸⁾ 당시 2, 4, 6소구에서 모두 7개 공을 시추하여⁷⁹⁾ 가스징 2공, 유가스징 1공이 발견되었다.⁸⁰⁾ 1987년 9개 소구역을 6개 소구역으로 조정하였다. 6개의 소구역으로 재조정된 것은 당시 원유 시장의 상황을 감안하여 6개의 소구역으로 구역 수를 줄이고 굴착의무를 11개에서 7개로 축소하기 위한 목적에서였다.⁸¹⁾ 2001년 12월 양국 산업 관련 장관회담에서 '유망지역에 3D 탄성파 탐사 공동 실시'에 합의하였다. 2002년 8월 1일 석유공사-JNOC간 공동 탄성파 탐사 운영계약(JSOA)을 체결하였다. 2소구에 503km²의 3D 탄성파 탐사자료 취득, 전산처리 및 해석을 수행하기로 규정⁸²⁾하였다.

78) '10년 국정감사_강창일위원_한국석유공사, 「제7광구(JDZ: 한일공동개발구역), 이대로 방치할건가?」

79) '80~'81 NOEC 시추 (3공) / '84~'85 Hamilton 시추 (3공) / '86 일본석유와 공동시추 (1공).

80) 이달석, 「국내 대륙붕 유전개발연구 : 주변국의 개발전략 및 상호 갈등요인 분석」, 에너지경제연구원, 수시연구보고서 09-02 (2009), pp. 6~7.

81) Masahiro Miyoshi, *The Joint Development of Offshore Oil and Gas in Relation to Maritime Boundary Delimitation*, International Boundaries Research Uni, Maritime Briefing, Volume 2 Number 5 (1999), p. 13.

82) 산업자원부 보도자료, 2002년 8월 1일, 「한일대륙붕공동개발구역에서의 공동조사 실시」.

〈그림 4-1〉 한일 대륙붕 공동개발구역 소구역(변경 후)



자료 : 산업자원부 보도자료, 2002년 8월 1일, 「한일대륙붕공동개발구역에서의 공동조사 실시」.

2004년 3월 12일, JSOA에 의하여 한국석유공사, 일본석유공사(JNOC) 간 운영위가 개최되었으며, 여기서 탐사완료를 확인하고 해석결과를 교환하기로 합의하였다.⁸³⁾ 이 결과에 대해 한국석유공사는 5개의 유망구조와 다수 잠재구조를 확인했다는 점에서는 한일 간에 동일한 입장이다(“한일 간 3D탐사 기술평가 결과’ 참조).⁸⁴⁾ 그럼에도 일본 측은 경제성이 없다고 일방적으로 공동탐사 중단을 선언하였다.⁸⁵⁾ 그 후 일본 국영 석유개발업체인 일본석유공사(JNOC)는

83) 산업자원부 보도자료, 2006년 5월 25일, 「丁 산자, 일측에 한일대륙붕 공동개발구역 (JDZ)공동시추 제안」.

84) 한국은 13개의 잠재구조를 확인했다는 입장이지만, 일본 측 입장은 다수의 잠재구조만 확인하였다는 것으로 차이가 있었다. 예상 가채매장량에 대해서 약 3,600만 톤의 천연자원이 매장되어 있다는 것이 한국의 입장이었으나 이에 대해서 일본은 의견을 제시하지 않았다.

85) '10년 국정감사_강창일위원_한국석유공사, 「제7광구(JDZ: 한일공동개발구역), 이대로 방치할건가?」.

2005년 법인을 청산하게 된다.⁸⁶⁾ 2006년부터 2010년까지 한일은 탐사가 아니라 기존 탐사결과를 토대로 공동연구를 수행하였다. 일본은 정부수준의 활동을 민간수준으로 격을 낮추었다. 우리 측은 석유공사가 참가한 반면 일본 측은 민간기업들이 참가하였다.⁸⁷⁾ 2006년부터 2010년까지 1980년대 탐사자료와 2002년 탐사자료를 가지고 공동연구를 수행한 바에 따르면 결론이 판이하게 달랐다. 2010년 3월 일본 측이 석유자원 부존 가능성이 낮다며 공동연구 종료 의사를 표명하였다. 우리나라 측은 부존 가능성을 긍정적으로 해석한 반면, 일본 측은 부정적으로 해석하면서, 2010년 3월 공동연구도 중단시켰다.⁸⁸⁾

〈표 4-1〉 한일 간의 대륙붕 공동개발구역 공동연구 성과

기 간	참여자	내 용	성 과
'04.10~'05.06	석유공사 Japex JED Cosmo Teikoku	Regional G&G Study in JDZ, Korea-Japan Continental Shelf	2개 유망구조 도출 (Fugu, Hirame)
'07.03~'07.08	석유공사 Japex JED Cosmo	인공위성 영상자료를 이용한 JDZ Oil Seepage 분석	근원암 부존 및 액티브 차지 포텐셜 확인
'08.11~'09.03	석유공사 Japex JED Cosmo	퇴적모델 도출을 위한 JDZ 지역 순차층서학 연구	퇴적시스템 및 저류층 발달 양상 규명
'09.09~'10.03	석유공사 Japex JED Cosmo	JDZ 지역 석유시스템 연구	유망구조 및 탐사리스크 평가

자료: '10년 국정감사_강창일위원_한국석유공사, 「제7광구(JDZ: 한일공동개발구역), 이대로 방치할건가?」 참조.

86) 머니투데이, 2009년 5월 12일, 「한일 대륙붕 공동개발 사업 표류」

<http://www.mt.co.kr/view/mtview.php?type=1&no=2009051216455822926&outlink=1> (검색일: 2016. 4. 21).

87) '10년 국정감사_강창일위원_한국석유공사, 「제7광구(JDZ: 한일공동개발구역), 이대로 방치할건가?」.

88) 앞의 주.

한국은 2010년 6월 일본과의 11차 배타적 경제수역 회담에서 공동위원회 개최 등 협정 이행을 촉구하였다. 또한 2011년 6월 23일 2+2 과장급 회의 시 민간부분 워크숍 개최를 제안하였다. 이에 따라 2011년 11월 25일에 민간 워크숍을 동경에서 개최하는 방안을 추진하였으나 일본 측이 한국 정부 인사 참관 관련 문제로 거부하였다. 이후 공동개발에 관하여 일본의 거부로 어떠한 협의도 진행되지 않고 있는 상황이다.

일본이 협력을 거부하고 있는 상황에서 한국의 기본입장은 2014년 9월 산업통상자원부가 발표한 ‘제2차 해저광물자원개발 기본계획’을 통해서 확인된다. 이 계획에 따르면 석유공사는 i) 지질자원연구원 등과 일본 민간기관 간 공동연구협력을 강화하며, ii) 2002년 실시한 공동 물리탐사 결과 도출된 JDZ 1개 유망구조에 대한 추가 탐사계획을 일본 정부와 협의해야 한다. iii) 이에 따른 탐사계획과 추진일정도 마련해야 한다.

3. 검토

현재 우리나라는 한일 대륙붕 공동개발협정을 적극적으로 이행해야 한다는 입장이다. 반면 여러 가지 정황상 일본으로서는 협정 이행에 적극적으로 나설 이유가 없는 상황이다. 일단, 공동개발구역이 일본에 치우쳐져 놓여 있기 때문에 등거리선을 중시하는 현재 경계획정에 있어서 국제 관행상 굳이 이를 개발할 수 있는 내부적 동인이 약하기 때문이다. 동시에 한일 대륙붕 공동개발구역에 대해서 중국 역시 자신들의 대륙붕이라고 주장하는 등 중국 압박 요인을 무시할 수 없기 때문에 굳이 개발에 적극적일 필요가 없다.

이러한 상황에서 우리는 이러한 개별 사례 연구를 통해서 우리가 취할 수 있는 수단을 강구하는 것이 필요하다. 특히 일방이 상업적 이익의 부재를 근거로 협정 이행에 소극적인 입장을 취할 경우 이를 타개할 수 있는 대책이 있는 것인지 검토할 필요가 있다.

이에 더 나아가 일본이 2028년 이후 최종적인 경계획정을 추진하려고 할 경우 우리가 취할 수 있는 수단이 많지 않다는 점을 인식해야 한다. 호주-동티모

르 공동개발 사례가 우리에게 제시하고 있는 바는 일방이 공동개발에 소극적 입장을 취하고 결국 최종적인 경제획정을 추진할 경우 이에 대응하기가 만만치 않다는 점이다. 더군다나 기존의 석유 및 천연가스 개발로 인한 이익이 존재하지 않을 경우 미래의 이익을 보장받기란 쉽지 않을 수 있다는 점을 가늠하게 한다. 따라서 시급하게 한일 대륙붕 공동개발협정에 대한 대응수단 마련이 필요하다는 것을 보여주는 것이 이번 동티모르-호주 공동개발 사례이다.

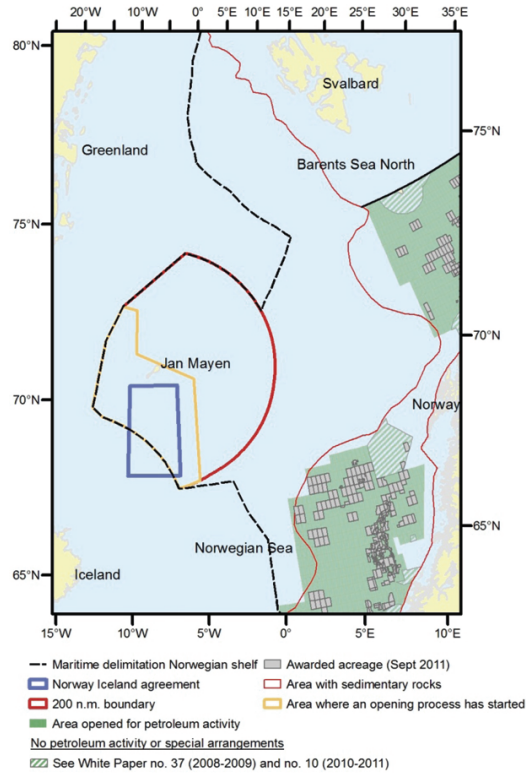
우리나라가 2028년 이후에도 한일 사이에서 공동개발 체제를 유지할 경우 현재의 틀 내에서 새로운 변화를 모색할 필요가 있다. 현재의 한일 대륙붕 공동개발협정 체제 내에서는 다른 일방의 협력을 강제할 수 있는 수단이 없다는 점이 큰 문제이다. 따라서 현재 협정을 폐기하지 않으면서 새롭게 공동개발협력에 관한 이행 체제를 바꾸어 나가는 방안을 고려해야 한다. 새로운 공동개발모델을 찾을 경우 실질적으로 모델 III의 형태를 고려해야 하며 이러한 점에서 태국-말레이시아 공동개발 모델이 우리에게 여러 가지로 시사하는 바가 크다.

제2절 우리나라에 대한 시사점

1. 공동개발 불응 시 조치

일본은 현재 공동개발 이행에 협조하지 않고 있는 상황이다. 현재 일본은 상업적으로 개발 가능한 자원이 없다는 입장이며, 이를 이유로 공동개발에 응하지 않고 있다. 협정은 일방이 개발 가능한 자원이 없다고 하여 협조하지 않을 경우 이를 타개할 수 있는 방안을 마련해 놓고 있지 않다. 이와 관련하여 참작할 수 있는 사례는 아이슬란드-노르웨이 사례이다.

〈그림 4-2〉 아이슬란드-노르웨이 공동개발구역



자료 : 노르웨이 정부 홈페이지.⁸⁹⁾

아이슬란드-노르웨이의 경우 일단 두 국가가 협정에 따라⁹⁰⁾ 해양경계획정을 완료한 상황에서 양국에 걸쳐서 공동개발구역을 설정하였다(〈그림 4-2〉 파란색 네모 참조). 각각 아이슬란드와 노르웨이는 상호 반대 국가의 해역에 설정된 공동개발구역에 대해서는 25%의 지분만을 가지고 참여하였다. 탐사과정상 소요된 비용을 배분하는 데 일단 노르웨이 측 수역의 공동개발구역(공동개발구역 중 경계획정선을 기준으로 북쪽 구역)의 경우 노르웨이가 관련 민간기업이 탐사비용

⁸⁹⁾ <https://www.regjeringen.no/>(검색일: 2017. 12. 1).

⁹⁰⁾ Agreement on the Continental Shelf Between Iceland and Jan Mayen.

을 선제적으로 부담하도록 유도해야 하지만 이에 실패할 경우에는 양국은 협상을 통해서 합작투자(joint venture) 형태로 비용 부담을 정한다. 그러나 아이슬란드가 이를 거부할 경우에는 일단 노르웨이가 자신의 부담으로 탐사를 시작할 수 있다. 다만 상업적 개발이 확인될 경우에는 아이슬란드가 처음부터 참여하였다면 부담하였을 부분을 부담한 이후에 공동개발에 참여할 자격을 얻을 수 있게 된다(제5조 참조).⁹¹⁾

〈표 4-2〉 아이슬란드와 안마옌 사이 대륙붕에 관한 협정 제5조

아이슬란드와 안마옌 사이 대륙붕에 관한 협정 제5조

제2조에 의하여 확정된 영역에서 두 국가 사이 경제수역을 나누는 경계획정선 북쪽 영역에서 아이슬란드는 25%의 지분으로 제4조에서 언급한 석유 활동에 참여할 자격을 얻는다. 정부 외곽에서 그리고 비정부기관과 협상할 때 노르웨이는 탐사를 진행할 때 상업적으로 이용 가능한 부분에 다다랐다고 선언할 때까지 석유 활동 비용을 그 회사가 노르웨이와 아이슬란드가 그 지분에 따라서 부담하도록 하는 협정을 체결하도록 노력해야 한다.

만약 두 국가가 부담하는 비용을 해당 회사가 이행하도록 하는 협정 체결이 불가능하다면 합작투자(joint venture) 형태로 개별 국가가 자신의 비용을 부담하거나 비용을 공동으로 나누는 방식으로 개발을 진행할 가능성에 대해서 협상한다. 만약 아이슬란드가 여기에도 참여하길 원하지 않는다면 노르웨이가 자신의 부담으로 진행할 수 있다. 다만, 상업적으로 이용가능한 유전의 존재가 알려지면 아이슬란드가 자신이 초기에 부담했을 부담에 대해서 자신의 비용으로 부담하는 것을 대가로 여기에 참여할 자격을 얻을 수 있다.

안전조치, 환경 보호와 관련한 조치에 대해서는 첫 번째 항에 언급된 문제와 관련하여서는 노르웨이 입법, 노르웨이 석유 정책, 노르웨이 규정이 적용된다. 또한 노르웨이 당국이 해당 지역의 법집행에 관한 임무를 담당한다.

Article 5, Agreement on the Continental Shelf Between Iceland and Jan Mayen

In the part of the area defined in Article 2 north of the delimitation line between the two Parties' economic zones (approximately 32 750 sq. km.), Iceland shall be entitled to participate with a share of 25 percent in such petroleum activities as are referred to in Article 4. In negotiations with outside governmental or non-governmental petroleum companies, Norway shall seek to arrive at an arrangement whereby both the Norwegian and the Icelandic percentage of the costs of such petroleum activities are carried by the company (or companies) concerned up to

91) 반대로 아이슬란드 측 수역 공동개발구역(공동개발구역 중 경계획정선을 기준으로 남쪽 구역)에서는 노르웨이가 25%의 지분만을 가지고 참여하나, 아이슬란드가 민간이 초기 비용을 부담하도록 유도할 의무가 없을 뿐만 아니라, 노르웨이가 이에 거부할 경우 아이슬란드가 자신의 비용으로 일단 공동개발을 시작할 수 있는 권한도 없다는 점에서 차이가 있다.

the stage where commercial finds have been declared.

If it is not possible to obtain an arrangement whereby the two Parties' costs are carried by the company (or companies) concerned, the Parties shall initiate negotiations on the possibility of conducting the operations as a joint venture where each of them carries its own costs, or where they share the costs. If Iceland does not wish to participate on this basis, Norway may proceed on its own. If commercial finds are declared, Iceland shall be entitled, at this stage, to enter into participation with its share in return for reimbursing Norway for that share of the costs incurred up to this juncture which would correspond to

Iceland's share if Iceland had participated from the outset.

Norwegian legislation, Norwegian petroleum policy and Norwegian regulations relating to the control of such activities, safety measures and environmental protection shall apply to the activities in the area referred to in the first paragraph. The Norwegian authorities shall also be responsible for enforcement and administration in the said area.

이러한 아이슬란드-노르웨이의 사례를 유추한다면, 한국과 일본 사이의 공동 개발 중지 상황을 타개할 수 있는 방향을 찾을 수 있다. 일단 상업적으로 개발 가능한 천연자원의 존재에 있어서 한국과 일본의 의견이 상충하는 만큼 우리로서는 일단 한국의 부담으로 초기 비용을 대고 상업적으로 이용가능한 자원의 존재가 확정되는 경우에는 일본이 자신의 비용을 부담하고 공동개발에 참여하도록 유도할 수 있다. 현재 한일 대륙붕 공동개발협정에 따를 경우 한일 양국이 50%의 배분으로 비용과 이익을 부담함으로써 일본은 초기 투자비용의 50%를 부담하고 공동개발에 참여할 수 있을 것이다.

물론 아이슬란드-노르웨이의 경우 아이슬란드가 참여를 원하지 않을 경우에 노르웨이가 자신이 독자적으로 탐사 및 개발을 진행할 수 있도록 조약에 이에 관한 규정을 마련해둔 상태이다. 이와 달리 한일 대륙붕 공동개발협정의 경우 해당 조문이 존재하지 않는 상황이기 때문에 우리가 이와 같은 사항을 일본에 강제하거나 요구할 수 없다는 한계가 있다. 한일 양국의 합의에 의해서만 가능한 것이다.

2. 등거리선 중시 현상과 경계획정 추진 가능성

유엔해양법협약 제74조/제83조는 해양경계획정과 관련하여 양 당사국이 형

평한 해결에 이르기 위하여 국제법을 기초로 합의에 의하여 획정하도록 하였다.

〈표 4-3〉 유엔해양법협약 제74조 제1항 및 제83조 제1항

1. 서로 마주보고 있거나 인접한 연안국 간의 배타적 경제수역/대륙붕 경계획정은 형평한 해결에 이르기 위하여(to achieve an equitable solution), 국제사법재판소규정 제38조에 언급된 국제법을 기초로 하여 합의에 의하여 이루어진다.

그러나 동시에 유엔해양법협약은 개별 국가들에 200해리 배타적 경제수역을 인정해 주었을 뿐만 아니라 자연적 대륙붕의 존재를 무시하고 일률적으로 모든 연안국이 200해리 대륙붕을 갖는다고 규정하였다. 이러한 점 때문에 결국 유엔 해양법협약 발효 이후 등거리선을 중시하는 방향으로 판례가 형성되었다. 특히 3단계 방법론은 기본적으로 잠정적 등거리선을 기준으로 해양경계를 획정한다. 또한 400해리 이내에서는 대륙붕의 해양 지형을 고려하지 않는 현상이 나타나고 있다.⁹²⁾

〈표 4-4〉 유엔해양법협약 제55조, 제57조 배타적 경제수역

제55조 배타적 경제수역의 특별한 법제도

배타적 경제수역은 영해 밖에 인접한 수역으로서, 연안국의 권리와 관할권 및 다른 국가의 권리와 자유가 이 협약의 관련규정에 의하여 규율되도록 이 부에서 수립된 특별한 법제도에 따른다.

제57조 배타적 경제수역의 폭

배타적 경제수역은 영해기선으로부터 200해리를 넘을 수 없다.

〈표 4-5〉 유엔해양법협약 제76조 대륙붕

제76조 대륙붕의 정의

1. 연안국의 대륙붕은 영해 밖으로 영토의 자연적 연장에 따라 대륙변계의 바깥끝까지, 또는 대륙변계의 바깥끝이 200해리에 미치지 아니하는 경우, 영해기선으로부터 200해리까지의 해저지역의 해저와 하층토로 이루어진다.

92) ITLOS 방글라데시-미얀마 경계획정 사건 .

이러한 경향성 때문에 2028년 한일 대륙붕 공동개발협정이 종료될 경우 최종 대륙붕 경계획정은 등거리선이 중시되게 되며 자연적 연장론에 비해 우리나라에 불리하게 진행될 가능성이 매우 크다. 이러한 판례의 변화는 호주-동티모르의 공동개발 구역 운영에서 동티모르가 최종적으로 해양경계획정을 추구한 법적인 근거가 되고 있다.

해역의 거리가 400해리 미만인 지역에서는 대륙붕의 자연적 연장이 ‘관련사정’으로 고려되지 않을 가능성이 매우 크며, 한일 간의 해양경계획정이 이루어질 경우 7광구의 대부분을 잃을 가능성이 매우 크다.⁹³⁾ 특히 호주-동티모르 사안의 경우 개발가능한 유전의 존재가 확인되었기 때문에 실제 석유 개발로 인한 이익 공유에서 호주의 이익을 고려해야 할 여지가 있었으나, 우리나라는 실질적 이익도 기대하기 힘든 상황이다. 왜냐하면 한-일 대륙붕 공동개발 구역은 현재 잠정적으로 탐사 중단 상태에 있으며, 부존 자원의 존재도 확인하지 못하고 있는 상황이기 때문이다. 따라서 2028년 이후 최종 경계획정이 이루어질 경우 우리나라는 실질적 이득은 취하지 못한 채 형식적으로 7광구의 대부분을 잃는 방식으로 해양경계획정을 체결할 가능성이 매우 크다.

이러한 상황을 고려할 때 우리나라로서는 최대한 해저 자원의 존재를 확인할 수 있는 탐사를 하루 빨리 시행할 수 있는 방안을 구하는 것이 필요하다. 현재 우리나라는 조광권자로 한국석유공사를 지정해 놓고 있을 뿐, 일본 측에 조광권자 지정을 요구하지도, 공동개발협정에 따른 탐사 행위 협력을 요구하지도 않고 있다. 이러한 무대응은 추후 우리가 부존 자원이 없다는 일본의 입장을 묵인한 것으로 해석될 수 있어 위험성이 매우 큰 상황이며 대책 마련이 시급하다.

3. 경계획정 이후 공동개발 추진 가능성

아이슬란드와 노르웨이의 경우도 같은 조약⁹⁴⁾ 내에서 해당 수역의 대륙붕 경

⁹³⁾ 우리나라가 일본과 중국을 상대로 차단 효과(cut-off effect)를 주장하여 가상 중간선을 조정할 수 있는 가능성은 매우 크나, 얻을 수 있는 실익이 그리 많지 않다.

⁹⁴⁾ Agreement on the Continental Shelf Between Iceland and Jan Mayen.

계획정에 관하여 규정한 뒤에 동시에 동일 조약에서 공동개발에 관한 규정을 두어 경계획정과 공동개발구역을 동시에 설정하였다. 이란 카타르 역시 현재 상호간의 경계획정은 완료한 상태이다. 현재 경계획정이 되었지만 동일 광장에서 석유를 채굴하고 있는 상황이므로 공동개발을 통하여 문제를 해결하자는 주장이 꾸준히 제기되고 있다.

한국과 일본 사이에서도 상호간의 경계획정을 완료한 후에 공동개발을 추진하는 것도 좋은 방안이 될 수 있다. 일단 경계획정을 완료하게 되면 상호간 분쟁의 여지를 줄일 수 있으며, 동시에 이 지역에서 가장 첨예하게 이해가 엇갈리고 있는 석유 개발과 관련하여 상호간에 협력을 추구한다는 점에서 한일 양국의 신뢰회복에도 좋은 징표가 될 수 있다.

또한 한국과 일본이 이 해역에서 해양 경계를 획정할 경우 중국의 입장을 차단할 수 있다는 점에서 상당히 중요한 의미를 가지게 된다. 이미 중국은 한일 대륙붕 공동개발협정 체결 과정에서 한일 양국에 항의를 제기한 바 있다. 또한 양국이 기득권을 주장하면서 이 구역에서 양국의 이익을 공고히 한다면 중국이 자신의 입장을 주장할 여지는 상당히 줄어들 것이라고 할 수 있을 것이다. 다만 이 역시 일본이 지금까지 입장을 변경해서 상업적으로 이용 가능한 천연자원의 존재를 확인해 주어야 한다는 점에서 기존 입장에서 전향적으로 자신의 입장을 변경해야 한다는 것을 의미한다.

4. 새로운 공동개발 추진

한일 양국이 현재의 공동개발모델에서 벗어나 새로운 공동개발모델을 검토하는 것도 필요하다. 현재 일본의 입장에서는 한일 대륙붕 공동개발협정을 종료하려고 시도할 수도 있으나, 제3국인 중국도 해당 수역에 대한 관할권을 주장하고 있으므로 종료 상황 자체가 일본에 반드시 유리한 것만도 아니다. 따라서 한일 간의 공동개발 협력이 지속되는 상황도 가정해 볼 수 있다.

한일 간의 공동개발 체제가 유지된다면 현재의 공동개발에서 한 발자국 더 나아가 모델 III 형태의 공동기구모델 채택 방안을 고려해야 한다. 한일 대륙붕 공

동개발협정은 한 국가가 협정의 이행을 해태하면 공동개발 자체가 불가능한 상황이다. 즉 공동개발협정을 체결하고도 두 국가의 합의가 없으면 한 국가만의 결정만으로는 공동개발협정을 이행할 수 없다. 결국 협정을 체결하여 합의하였음에도 또 다시 그 실행을 위해서 타방과의 합의가 필요한 이중의 합의를 필요로 하는 것이다. 이는 공동개발협정의 존재 의의를 몰각시키는 것이다. 이러한 점에서 현재 태국과 말레이시아가 진행하고 있는 공동개발모형을 참고할 필요가 있다. 두 국가가 개입하지 않는 공동개발기구가 개발을 진행할 경우 정치적 문제를 고려하지 않고 일단 채산성이 있는 유전 개발을 위하여 기관의 운용을 집중할 것이기 때문이다. 따라서 한 국가의 임무 해태가 문제되지 않을 것이다. 철저히 경제적 관점에서만 기관이 운용될 것이다.

태국 말레이시아의 경우 정부는 공동기구의 운영에는 개입하지 않는다. 공동기구가 1년간 개발 및 이용에 관한 업무를 수행하고 이에 따라서 이익이 발생하면 이익 중 일부를 각각의 재정으로 귀속시키는 형태이다. 조직상 공동기구의 운영에는 개별 국가의 영향력이 미치지 않고, 독립적으로 운영된다. 상호 간에 상당한 신뢰가 생성되었기 때문에 가능한 측면도 있지만, 동시에 이러한 과정을 통해서 상호간의 신뢰를 높이는 효과도 있다. 이러한 태국과 말레이시아의 신뢰는 MTJA의 홈페이지 첫 화면에서도 확인할 수 있다. 홈페이지 첫 화면은 ‘BROTHERS Drinking From the Same Well’⁹⁵⁾이다.

한일 간의 신뢰는 역사 문제 등으로 이러한 수준에는 많이 못 미치는 상태이지만, 신뢰가 닿는 영역까지는 최대한 상호간의 협력 수준을 높이는 것이 필요하다. 이러한 협력 관계가 추후 더 높은 단계의 협력을 낳을 수 있으며 상호간의 긴장 수준 및 갈등 요인을 낮출 수 있다.

⁹⁵⁾ <https://www.mtja.org/home.php>(검색일: 2017. 11. 1).

제5장

결론 및 정책제언 《

한일 대륙붕 공동개발협

정은 현재 일본의 협력 거부로 답보 상태에 있다. 제대로 협정이 이행된 것은 1978년부터 1987년까지 1차 탐사기간만이며 그 이외에는 사실상 협정이 이행되지 않은 상황이다. 이러한 상황에서 다른 나라의 공동개발협정 틀을 검토하는 것은 우리나라에 상당한 시사점을 준다. 또한 현재 우리나라 주변 해역은 아직까지도 해양 경계획정이 거의 이루어지지 않은 상황이다. 대한해협의 해저를 포함한 일부 지역의 대륙붕에 대해서만 경계획정이 완료되어 있는 상태이다.⁹⁶⁾ 따라서 주변국과의 공동개발 추진 여지도 상당히 높은 상황이다. 경계획정 협상이 진행되고 있는 중국의 경우에도 공동개발을 추진할 여지가 있다. 이러한 상황에서 지구상의 대륙붕 공동개발협정에 대해서 검토하는 것은 우리에게 상당한 시사점을 준다고 할 수 있다.

대륙붕 공동개발을 가능하게 하는 것은 양 국가의 실질적인 의지이다. 한 국가라도 이에 대한 의지가 없거나, 혹은 외형적으로 합의를 이루었지만 내심 이에 대항 협력을 거부하는 경우라면 공동개발은 성공적으로 이루어질 수 없다. 모델 I, 모델 II, 모델 III의 세 가지 체제로 분류되고 있지만 모든 경우에 마찬가지로 할 수 있다. 다만, 상호 양국 간의 공동개발을 위한 공동기제를 충실하게 마련할수록 그리고 공동기구를 설립하는 방안을 마련할수록(모델III) 그 성공의 가능성은 높아질 수 있다. 협력 체제 및 공동기구를 만드는 과정에서 지난한 정치적 타협 및 협상이 이루어지지만 일단 하나의 기구를 통하여 통합적으로 운영이 이루어질수록 실제 협약이 이행되는 단계에서 개별 국가들의 개입이 차

96) '한일 양국에 인접한 대륙붕 북부지역의 경계확정에 관한 협정(Agreement between the Republic of Korea and Japan concerning Establishment of Boundary in the Northern Part of Continental Shelf adjacent to the two Countries)'.

단될 수 있는 여지가 높아진다. 따라서 국내적·국제적 정치적 변화 및 압력으로 부터 비교적 자유로운 체제가 마련되어 최상의 이익 추구라는 경제적 목표에 충실하게 운영될 가능성이 높아진다. 그러한 선행이 바로 말레이시아와 태국 사이의 공동개발협정이라고 할 수 있다.

비록 공동개발기구 모델(모델III)을 따르지 않는다고 하더라도 상호간의 협력 및 개별 이익을 조정하여 공동개발을 이행하는 것도 가능하다. 특히 한 국가가 공동개발에는 찬성했지만 특정 광구나 지역에 상업적 이익의 불확실성을 이유로 참여를 원하지 않을 경우에는 이를 보완할 수 있는 체제를 마련하는 것도 가능하다. 아이슬란드-노르웨이의 경우 경제획정협정을 체결하면서 공동개발에 관한 사항을 포함시켰다. 공동개발구역의 약 75% 정도의 해역이 획정된 경제획정선을 기준으로 노르웨이 측 해역에 위치하게 되었다. 아이슬란드로서는 25% 지분만으로 이 해역의 공동개발에 참여하고 싶지 않을 수 있다는 점이 고려되었다. 결국 협정은 아이슬란드가 참여를 원하지 않을 경우 초기 탐사 및 개발에 관한 비용을 전적으로 노르웨이가 부담하는 방식으로 공동개발을 체결하였다. 만약 아이슬란드가 상업적 개발 이후 공동개발에 참여하기를 원한다면 초기 투자 및 비용 중 자신이 부담해야 했던 25%를 부담하는 것을 조건으로 공동개발에 참여할 수 있다. 현재 일본이 상업적 개발 이익이 없다는 이유로 한일 대륙붕 공동개발에 참여하지 않고 있는 상황에서 우리에게 시사하는 바가 큰 사례라고 할 수 있다.

다만 대륙붕 공동개발협정이 체결되었음에도 불구하고 일방이 공동개발을 원하지 않고 최종적인 경제획정을 시도하려고 할 경우 공동개발협정 이행보다는 양국 간에 최종적인 경제획정을 완결지은 사안도 있다. 호주-동티모르 사례가 바로 그것이다. 특별히 이 사안은 대상 수역의 해양 지형이 한국-일본 사례와 동일하게 마주보는 두 국가 사이에서 대륙붕의 자연적 연장이 한 국가로부터 유래하여 대륙붕의 한계가 가상 중간선 너머 타국 측 해역에 가깝게 자리잡고 있다는 점에서 그 유사성이 크다. 한국-일본의 경우 대륙붕의 자연적 연장이 우리나라로부터 유래하는 반면 호주-동티모르의 경우 대륙붕의 자연적 연장이 호주로부터 유래한다. 따라서 공동개발구역의 대부분이 가상 등거리선을 기준으로 일방의 해역에 치우쳐져서 존재하고 있다. 즉 한국-일본의 경우 가상 등거리선

을 경계로 일본 측 해역에, 호주-동티모르의 경우 가상 등거리선을 경계로 동티모르 측 해역에 공동개발구역이 설정되어 있다. 결국 유엔해양법협약의 체결 및 발효 이후 해양경계획정에 관한 국제법이 등거리선에 큰 의미를 부여하는 방향으로 발전하게 되면서 일본 및 동티모르는 현재 자연적 연장에 기초하여 설정된 대륙붕 공동개발협정에 대해서 이를 이행하지 않으려는 입장을 보이고 있는 것으로 풀이된다. 현재 호주와 동티모르 사이에는 해양경계획정이 마무리 단계에 있으며 최종적인 해양경계획정 체결을 눈앞에 두고 있다. 해양경계획정 결론이 어떻게 나올지 예상하는 것은 무리이지만, 등거리선을 중시하는 현재 국제법의 추세를 무시할 수 없을 것으로 판단된다. 물론 기존에 개발 중인 유전에 대해서는 경계획정 협상 과정에서도 이를 계속적으로 운영하고 있으며, 또한 현재 개발 이익이 현실화되어 있는 광구에 대해서는 경계획정과 별도로 호주의 기존 이익을 확보해주는 내용이 최종 경계획정 조약에 포함될 것으로 예상되고 있다. 그런데 이와 비견되게 한일 간에는 개발 중인 광구가 하나도 존재하지 않다는 점이 매우 우려스럽다. 즉, 최종적인 경계획정을 하게 될 경우 우리나라의 이익으로 고려될 수 있는 현실적 이익이 하나도 없기 때문에 경계획정 협상 과정에서 공동개발과 관련된 사항은 전혀 고려되지 않을 수 있는 상황이다. 호주-동티모르 사례와 비교해 보았다. 현재 우리가 처해져 있는 상황이 매우 우려스러운 이유이다.

개별 국가의 사례는 우리에게 시사하는 바가 크지만 동시에 사안마다 개별 국가들이 처해 있는 정치적, 경제적, 지리적 상황이 다르기 때문에 함부로 우리나라의 그것과 동일하게 판단해서는 안 될 것이다. 우리나라 역시 처해 있는 상황이 다르기 때문에 다른 나라 사례를 바로 우리에게 적용하는 것은 무리가 있다는 점은 분명히 기억해야 한다. 특히 우리나라와 일본 사이 대륙붕 공동개발 문제는 중국이라는 요인을 무시할 수 없다. 공동개발협정 초창기부터 중국은 이에 대해서 항의를 제기해 온 바가 있다. 현시점에서도 특히 일본은 중국이라는 요인을 상당히 무겁게 다루고 있는 것으로 판단되며, 일본이 한일 대륙붕 공동개발협정 이행을 해태하고 있는 한 요인으로 중국 요인이 지목되기도 한다. 이러한 점만 고려하더라도 우리가 다른 나라의 사례를 그대로 한일 대륙붕 공동개발협정에 적용하는 것은 무리가 있다고 할 것이다.

다른 나라의 사례연구는 현시점에서 우리에게 놓여져 있는 과제에 대한 시사점 및 해결 방안에 해답을 구하기 위하여 참조할 수 있는 자료로서 가치가 있다고 할 것이다. 하지만 동시에 향후 우리나라가 새로운 과제를 설정하는 데에도 반드시 참고해야 할 과제이기도 한다. 우리나라가 1974년 한일 대륙붕 공동개발협정을 체결할 당시의 상황과 현재 국제사회가 대륙붕 공동개발을 추진 및 이행하는 상황은 다르다. 무엇보다 공동개발협정의 내용 자체가 상당히 발전하게 되었다. 공동개발협정의 발전 내용을 검토하고 추후 우리가 새로운 방식의 공동개발을 다른 나라와 추진하게 될 때에 이를 시작점으로 삼아 우리 상황에 가장 합리적인 모델을 마련하는 것이 필요하다. 동시에 협정의 내용뿐만 아니라 실제 이행 상황을 점검하는 것은 그 성공 및 실패 요인을 평가하는 데 매우 중요하다. 협정문이 아무리 훌륭하다고 하더라도 협정이 최종적으로 추구하고 있는 자원의 공동개발이라는 목적을 달성하였느냐는 다른 요인들에 의하여 좌우될 수 있기 때문이다. 따라서 협정문이 마련한 체제에 대한 검토 뿐 만 아니라 이를 가능하게 한 주변 상황 및 개별 국가의 이행 정책을 검토하는 것이 필요하다. 협정문의 내용뿐만 아니라 현시점에서 어떠한 방식으로 공동개발이 이루어지고 있는지를 검토하는 것은 이러한 점에서 시사하는 바가 크다고 할 것이다.

부록 <<

공동연구 제목

International Law for Offshore Joint Development of Shared Hydrocarbon Resources: Legal Concept, Judicial Authorities, Models of State Practice and Common Elements of Joint Development Agreements

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About the Author:

David M. Ong is Research Professor of International and Environmental Law at Nottingham Trent University, UK. His main research interests are in the International Law of the Sea, particularly on offshore joint development, published in *American Journal of International Law* (1999); *International Journal of Marine & Coastal Law* (1999, 2002) and *Netherlands Yearbook of International Law*, 2000 (2001). Recent Law of the Sea publications relating to the Southeast Asian region are as follows: 'Specifying Procedural Obligations for Joint Development and Alternative Joint Development Models for the South China Sea', in Wu Shicun and Nong Hong (eds), *Recent Developments in the South China Sea Dispute: The Prospect of a Joint Development Regime*, London: Routledge (2014) Chapter 7, 99-136; and 'Implications of Recent Southeast Asian State Practice for the International Law on Offshore Joint Development', in *Beyond Territorial Disputes in the South China Sea: Legal Frameworks for the Joint Development of Hydrocarbon Resources*, edited by Beckman *et al.*, Edward Elgar (2013) 181-217. More recently, he has begun to consider China's growing role in global economic governance, specifically through its establishment of the Asian Infrastructure Investment Bank (AIIB) and its complex relationship with the West in general and the USA in particular within this context. He has published on these issues in the *Journal of International Economic Law* (OUP).

Introduction

This study will assess the international legal concept and practice of offshore joint development, first by reference to the burgeoning State practice of bilateral joint development agreements (JDAs) and then by a taxonomic representation of this State practice in the form of three 'Joint Development (JD) Models' in order to highlight the different levels of institutionalization, as well as summarize the common elements present within examples of each of these three JD Models. It will then examine related international judicial authorities. To begin with, a few words should be said about the legal conception of 'joint development', particularly within the context of disputed areas of sea-bed jurisdiction, as follows:

I. The International Legal Concept of Offshore 'Joint Development'

Offshore 'joint development' agreements' (JDAs), which for these purposes also include those agreements more commonly known as transboundary unitization agreements (TUAs),¹⁾ can be defined as the results of a co-operative negotiation process undertaken between interested coastal States involving the exploration and exploitation of hydrocarbon field/deposits found either a) within a disputed sea-bed area of overlapping continental shelf/EEZ claims,²⁾ or b) lying across

¹⁾ 'Unitization' agreements per se are defined by Taverne as agreements between two or more entities holding exploration and exploitation rights in common petroleum reservoirs by which these reservoirs will be exploited in an integrated manner, as a single unit. See: Bernard Taverne, *An Introduction to the Regulation of the Petroleum Industry: Law Contracts and Conventions* (1994) at 149.

²⁾ A recent study conducted by the British Institute of International & Comparative Law (BIICL) and

an already delimited maritime boundary. Thus, 'joint development' is a generic term given to international agreements between coastal States whose main function is to provide for the co-operative exploitation of hydrocarbon resources that come under the jurisdictional entitlement of two (or more) of these States.

The 'joint development' concept itself has not been understood or utilized in a uniform way.³⁾ Mensah notes that this concept emerged during the latter half of the 1950s, and is now well-known and widely used by States, although there is not full agreement among international lawyers regarding its definition or essential characteristics. Indeed, no formal legal definition for 'joint development' and/or 'transboundary unitization' agreements has ever been adopted.⁴⁾ At least one eminent commentator – Kusuma-Atmadja, suggests that these two concepts should be separately conceived, arguing that 'joint development' properly relates only to overlapping sea-bed area claims subject to joint jurisdiction, rather than the unitization of oil and gas structures straddling the boundaries of neighbouring countries.⁵⁾ In the 2007 Guyana/ Suriname Arbitral Tribunal Award,

funded by the Government of Japan focused on the applicable international law to this set of issues, namely, the Obligations of States under Articles 74(3) and 83(3) of UNCLOS in respect of Undelimited Maritime Areas. This study was completed in 2016 and the results of the research have been published in the Report on the Obligations of States under Articles 74(3) and 83(3) of UNCLOS in respect of Undelimited Maritime Areas, BIICL (2016) ISBN: 978-1-905221-68-4. Accessible at: <https://www.biicl.org/reports-and-other-publications>

An online copy of the report is also available here, as well as through the following link: https://www.biicl.org/documents/1192_report_on_the_obligations_of_states_under_articles_743_and_833_of_unclos_in_respect_of_undelimited_maritime_areas.pdf?showdocument=1

³⁾ For a selected catalogue of 'joint development' definitions utilized over the years by different commentators, see David M. Ong, 'Joint Development of International Common Offshore Oil and Gas Deposits: 'Mere' State Practice or Customary International Law?' (1999) 93 AJIL 771. at 772, fn.8.

⁴⁾ Thomas Mensah 'Joint Development Zones As An Alternative Dispute Settlement Approach In Maritime Boundary Delimitation', in Rainer Lagoni & Daniel Vignes (eds) *Maritime Delimitation*, (2006) 151-160, at 146.

for example, the term ‘joint development’ is described by the Tribunal as follows: ‘the co-operation between States with regard to exploration for and exploitation of certain deposits, fields or accumulations of non-living resources which either extend across a boundary or lie in an area of overlapping claims.’⁶⁾

Such ‘joint development’ arrangements have proved to be an effective legal option for co-operation in the exploration and exploitation of shared offshore mineral resources. There are now numerous examples of bilateral joint development agreements.⁷⁾ Significantly,

⁶⁾ See: Mochtar Kusuma-Atmadja, ‘Joint Development of Oil and Gas by Neighbouring Countries’, in M. Kusuma-Atmadja, T. A. Mensah and B. H. Oxman (eds), *Sustainable Development and the Preservation of the Oceans: The Challenges of UNCLOS and Agenda 21*, Proceedings of the Law of the Sea Institute’s Twenty-Ninth Annual Conference, Denpasar, Bali, Indonesia, June 19–22, 1995, Honolulu, Hawaii: The Law of the Sea Institute, William S. Richardson School of Law, University of Hawaii, Honolulu (1997) 592–609, at 592.

⁶⁾ Para.462, at pp.153–154 of the 2007 Guyana/Suriname Arbitral Tribunal Award.

⁷⁾ The offshore joint development agreements featured here include (but are not limited to) those between the following States: Agreement concerning the Delimitation of the Continental Shelf in the Persian Gulf between the Shaykhdom of Bahrain and the Kingdom of Saudi Arabia, 22 February 1958, in R. Churchill, M. Nordquist & S. Houston Lay (eds.), *New Directions in the Law of the Sea*, Dobbs Ferry, NY: Oceana Publications, Vol.5, 207–11, ST/LEG/SER.B/16, 409; Agreement between the State of Kuwait and the Kingdom of Saudi Arabia Relating to the Partition of the Neutral Zone, 7 July, 1965, in 4 ILM (1965) 1134; Agreement on the Settlement of Maritime Boundary Lines and Sovereign Rights over Islands between Qatar and Abu Dhabi, 20 March 1969, ST/LEG/SER.B/16, 403; Memorandum of Understanding between Iran and Sharjah, 18 November 1971, Middle East Economic Survey, Vol.15, No.28 (1972) Supplement; Convention between the Government of the French Republic and the Government of the Spanish State on the delimitation of the Continental Shelf of the Two States in the Bay of Biscay, 29 January 1974, ST/LEG/SER.B/19, 445; Agreement between Japan and the Republic of (South) Korea concerning Joint Development of the Southern Part of the Continental Shelf adjacent to the Two Countries, 5 February 1974, in Churchill et al, Vol.4 (1975) 117–33; Agreement between Sudan and Saudi Arabia relating to the Joint Exploitation of the Natural Resources of the Sea-Bed and Sub-soil of the Red Sea in the Common Zone, 16 May 1974, ST/LEG/SER.B/18 452–5; Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway relating to the Exploitation of the Frigg Field Reservoir and the Transmission of Gas therefrom to the United Kingdom, 10 May 1976, entered into force: 22 July 1977, UKTS (1977) 113, also in *Energy* Vol.6 (1981) 1317–24; Memorandum of Understanding between Malaysia and the Kingdom of Thailand on the Establishment of a Joint Authority for the Exploitation of the Resources in the Sea-Bed in a

such bilateral State practice can now be found in many different regions of the world.⁸⁾ Both their increasing numbers and geographical diversity preclude any attempt at dismissing their repeated occurrence as merely coincidental State practice. These many examples of bilateral State practice, along with increasing judicial support for such co-operative behaviour on the part of such interested States by successive international tribunals, have provided legal commentators with much empirical evidence and legal authorities with which to

Defined Area of the Continental Shelf of the Two Countries in the Gulf of Thailand, 21 February 1979, entered into force: 24 October 1979, in Appendix I of D. Ong, 'Thailand/Malaysia: The Joint Development Agreement 1990', Appendix II, *International Journal of Estuarine (now Marine) and Coastal Law*, Vol.6, No.1 (February, 1991) 57-72, at 61-3, also in *Energy*, Vol.6 (1981) 1355-6. Followed by the Agreement between the Government of Malaysia and the Government of the Kingdom of Thailand on the Constitution and Other Matters relating to the Establishment of the Malaysia-Thailand Joint Authority, 30 May 1990, in Appendix II of Ong, 64-72; Agreement on the Continental Shelf between Iceland and Norway, 22 October 1981, 21 ILM (1982) 1222-6; Treaty between Australia and the Republic of Indonesia on the Zone of Co-operation in an Area between the Indonesian Province of East Timor and North Australia, 11 December 1989, 29 ILM (1990) 469-537; Memorandum of Understanding between Malaysia and Vietnam for the exploration and exploitation of petroleum in the Gulf of Thailand, 5 June 1992, entered into force: 4 June 1993. See: T.L. McDorman, 'Malaysia- Vietnam', Report No.5-19, in J.I. Charney & L. M. Alexander (eds.), *International Maritime Boundaries*, Vol.III, The Hague: Martinus Nijhoff (1998), 2335-44, text of MOU at 2341 -44; Maritime Delimitation Treaty between Jamaica and the Republic of Colombia, 12 November 1993, entered into force: 14 March 1994, see: K. G. Nweihed, 'Colombia-Jamaica', Report 2-18, in Charney & Alexander (eds.) Vol. III (1998) op. cit., at 2179-2204; Management and Co-operation Agreement between the Government of the Republic of Senegal and the Government of the Republic of Guinea-Bissau, 14 October 1993, and Protocol of Agreement relating to the Organization and Operation of the Agency for Management and Co-operation between Senegal and Guinea-Bissau, 12 June, 1995, both entered into force: 21 December 1995, 31 LOS Bull. 40 & 42, respectively (1996). See also: J. R. V. Prescott, 'Guinea-Bissau-Senegal', Report 4-4(4) & (5) in Charney & Alexander (eds.) Vol.III (1998) op. cit., 2251-78. Joint Declaration of Argentina and the United Kingdom on Co-operation over Offshore Activities in the South West Atlantic, 27 September 1995, 35 ILM (1996) 301, 'Current Developments: UK-Argentina', *International Journal of Marine and Coastal Law*, Vol.11, No.1 ((March, 1996) 113-8, see also: R.R. Churchill, *Falkland Islands - Maritime Jurisdiction and Co-operative Arrangements with Argentina*, *International and Comparative Law Quarterly*, Vol.46 (1997) 463-77.

⁸⁾ Specifically, the North Sea, Middle East, West African, as well as East and Southeast Asian regions. See: List of joint development and transboundary unitization agreements above.

consider whether an international legal obligation now exists requiring co-operative agreements for sharing the revenues obtained from the joint exploitation.⁹⁾ This leads to the preliminary observation that the lack of any binding legal obligation to co-operate in the joint development of an international common deposit has less to do with the lack of State practice than with the absence of the other imperative in the formation of customary international law, namely the psychological or subjective element of acceptance of the specific obligation as binding in law, *opinio juris sive necessitatis*.¹⁰⁾ Thus, whether an international legal obligation exists to strictly pursue either joint development (including transboundary unitization) in such situations, is still a matter for debate. In the present author's view, however, the key element underlying all offshore joint development and transboundary unitization agreements is the requirement of co-operation between all interested State parties, manifested in negotiations towards an agreement for the efficient exploration and exploitation of the disputed hydrocarbon resources. Within this context, the form of the resulting co-operative arrangement is arguably less significant

⁹⁾ Notable recent contributions in this regard include the following papers: Gao Jianjun, 'Joint Development in the East China Sea: Not an Easier Challenge than Delimitation', *International Journal of Marine & Coastal Law*, Vol.23, No.1 (March, 2008) 39-75; Clive Schofield, 'Minding the Gap: The Australia-East Timor Treaty on Certain Maritime Arrangements in the Timor Sea', *International Journal of Marine & Coastal Law*, Vol.22, No.2 (June, 2007) 189-234, and Chidinma Bernadine Okafor, 'Joint Development: An Alternative Legal Approach to Oil and Gas Exploitation in the Nigeria-Cameroon Maritime Boundary Dispute?', *International Journal of Marine & Coastal Law*, Vol.21, No.4 (December, 2006) 489-522. For the ICJ Judgment in the *Nigeria v Cameroon* case, see: *Case concerning the Land and Maritime Boundary between Cameroon and Nigeria (Cameroon v. Nigeria) Judgment of 10 October, 2002 ICJ Reports (2002) p.303*. For an authoritative discussion of the utility of joint development arrangements as an alternative method for resolving maritime boundary delimitation disputes, see: Mensah (2006) *op. cit.*

¹⁰⁾ For a fuller discussion of this issue, see: David M. Ong, 'Joint Development of Common Offshore Oil and Gas Deposits: 'Mere' State Practice or Customary International Law?', *American Journal of International Law*, Vol.93, No.4 (October, 1999) 771-804.

than the acceptance and application by the States involved of the substantive obligation to co-operate towards a joint development (or transboundary unitization) agreement, coupled with the procedural requirements that must be followed to fulfill this substantive obligation to co-operate. Commenting on this State practice, the Tribunal in the 2007 Guyana/Suriname Award notes that: 'There have been a number of examples of arrangements for the joint exploration and exploitation of maritime resources, often referred to as joint development agreements.'¹¹⁾

The international law governing offshore joint development and/or transboundary unitization of disputed hydrocarbon fields has also arguably progressed through successive models of State practice on joint development/transboundary unitization,¹²⁾ which have in turn received international judicial approbation within several international maritime delimitation cases.¹³⁾ International judicial opinion has expressed guarded support for the application of the joint development principle. This is manifest in the 1969 North Sea Continental Shelf cases, the 1981 Joint Commission over Jan Mayen island between Iceland-Norway, the 1982 ICJ Judgment in the Tunisia/Libya case, and the second phase of the Eritrea/Yemen Arbitration Award

¹¹⁾ Para.462 at p.153 of the present Award.

¹²⁾ The three models of joint development/transboundary unitization agreements utilized by States are described and catalogued in Ong (1999) op. cit., at 788-792, and updated in David M. Ong, 'The Progressive Integration of Environmental Protection within Offshore Joint Development Agreements', in Malgosia Fitzmaurice and Milena Szuniewicz (eds.) *Exploitation of Natural Resources in the 21st Century: The Challenge of Sustainable Development*, Kluwer Law International (2003) 113-41, at 121-140. See below: Section III.

¹³⁾ As His Excellency Judge Jessup presciently observed in his Separate Opinion in the North Sea Continental Shelf (ICJ) cases, the principle of joint exploitation might have wider application in agreements on overlapping areas of disputed continental shelf that were yet to be delimited. See: ICJ Reports (1969) at 82.

relating to maritime boundary delimitation between the two countries, in 1999.¹⁴⁾ In this case, the Arbitral Tribunal did not acknowledge the need to establish joint resource zones for fisheries resources within Yemen's waters, despite accepting Eritrea's historic fishing rights in that area. However, when it came to non-living hydrocarbon resources such as petroleum deposits, the Tribunal reiterated the Parties' duty to inform and consult each other on any oil and gas and other mineral resources that may be discovered to straddle the single maritime boundary between them, or that lie in its immediate vicinity. Relying on the historical ties and friendly relations between the two States, as well as State practice on joint development, the Eritrea/Yemen Tribunal also inferred an obligation to 'give every consideration to the shared or joint or unitized exploitation' of resources that straddle maritime boundaries.¹⁵⁾ More recently, the 2007 Guyana/Suriname UNCLOS Annex VII International Arbitral Tribunal Award and the recent Ghana/Cote d'Ivoire (2015 & 2017) ITLOS Special Chamber Decisions arguably lay out the specific duties of performance for interested States in situations of overlapping sea-bed jurisdiction claims, either in advance or in lieu of any maritime boundary delimitation agreement. These duties were elaborated by these tribunals in their interpretation of Articles 74(3) and 83(3) of the 1982 UN Convention on the Law of the Sea (UNCLOS). It is submitted here that the articulation of these specific duties of performance in these Awards add considerably to the overall scope

¹⁴⁾ See: Report of the Arbitral Tribunal in the Second Stage of the Proceedings (Maritime Delimitation) Eritrea/Yemen, 17 December, 1999. Accessible at <http://www.pca-cpa.org> See also: W. Michael Reisman, 'Eritrea-Yemen Arbitration (Award, Phase II: Maritime Delimitation)', American Journal of International Law, Vol.94, No.4 (October, 2000) 721-72?

¹⁵⁾ Arbitral Tribunal Report (1999), *ibid.*, at para.86?

of procedural rules within the international legal regime for offshore joint development.

II. Three Models of Joint Development Agreements

The lingering uncertainty as to whether a substantive rule of customary international law enjoining co-operation in the form of joint development exists is enhanced by an appreciation of the fact that no particular type or model of joint development agreement would appear to have achieved significant pre-eminence over the rest in numerical terms alone. As the seminal British Institute study on joint development agreements observed: 'Each of these models has a number of possible variations yet none seems capable of commanding universal acceptance due to differing political and economic systems, traditions of conflict and degrees of national sensitivity.'¹⁶⁾

Taxonomically, the bilateral agreements featured in this collection of State practice can be grouped into three different joint development models, as outlined below. They are as follows:

The first 'Joint Development' (JD) Model (I) comprises of an agreement between the interested States whereby one State manages the development of a designated joint zone on behalf of the other State(s) concerned, with all the State(s) sharing the revenues arising from the exploitation of the resources, once the costs incurred by the first State have been subtracted. This joint development model is arguably the simplest option available to interested States because it requires the least amount of effort by the governments concerned in

¹⁶⁾ H. Fox et al (1989) op. cit., at 115.

the way of formal bilateral co-operation and legal and institutional harmonization. Many of the earliest joint development agreements utilized this model. Examples are the 1958 Saudi Arabia-Bahrain,¹⁷⁾ 1969 Qatar-Abu Dhabi,¹⁸⁾ and 1971 Iran-Sharjah,¹⁹⁾ agreements.

Of late, this first JD Model (I) has fallen into disuse. This is principally due to the apparently unacceptable loss of autonomy on the part of the State that allows its sovereign rights to be administered by another State. Many States are reluctant to accept such a situation, especially within a disputed sea-bed area subject to overlapping claims. They are fearful of appearing to accept, however implicitly, a status quo that confers *de facto* jurisdiction to the other State, even if the *de jure* position is explicitly reserved. The main disadvantage is the other State's concern about the possible adverse inferences drawn from the managing State's pre-emptive role in the disputed area and its effect on the strength of the other State's claims to this area.

The second JD Model (II) is the most popular option among the three models discussed here. This JD Model II consists of an agreement establishing a system of compulsory joint ventures between their national or other nominated oil companies either in designated joint

17) Full title: Agreement concerning the Delimitation of the Continental Shelf in the Persian Gulf between the Shaykhdom of Bahrain and the Kingdom of Arabia. Entered in to force: 26 February, 1958. Source: Jonathan Charney and Lewis Alexander (eds.), *International Maritime Boundaries*, hereinafter: IMB, Dordrecht: Martinus Nijhoff, Vol.II (1993) Rep. No. 7-3, 1495-97.

18) Full title: Agreement on the Settlement of Maritime Boundary Lines and Sovereign Rights over Islands between Qatar and Abu Dhabi. Signed & in force: 20.3.1969. Source: UN Doc. No. ST/LEG/SER.B/16, 403 (1974) See also: Charney & Alexander (eds.), IMB, Vol.II, Rep.No.7-9 (1993) 1547-8.

19) Full title: Memorandum of Understanding between Iran and Sharjah. Adopted by exchange of letters between the Parties abd the concession-holder: Buttes Co. in November, 1971. Source: Supp. to Middle East Economic Survey, Vol.XV, No.28 (May, 1972)

development zones (JDZs), or in order to exploit deposits lying across already delimited boundary lines. Where these JD Model II agreements are established in designated JDZs, these usually correspond to disputed continental shelf/EEZ claims between the two States concerned. Alternatively, JD Model II also consists of an agreement establishing a system of compulsory joint ventures between their national or other nominated oil companies. This latter sub-species of Model II joint development agreements has also been described as the international or transboundary unitization of deposits. A common feature of both types of Model II joint development agreements is the compulsory nomination of a single operator to exploit the shared deposit(s) found in the designated joint development zone, or lying across the delimited boundary. Such JD Model II agreements usually provide for the compulsory unitization of transboundary deposits and the nomination of a single operator on behalf of all the interested operators in order to exploit deposits lying across already delimited boundary lines. While the *modus operandi* in both situations described above is similar, the geographical context within which these different types of Model II joint development agreements operate is quite different.

Thus, it may be noted that there are two distinctive sub-species of Model II-type JD agreements. First, agreements that designate specific joint development zones in which compulsory joint ventures are established in respect of unitized deposits, and secondly, transboundary unitization agreements (TUAs) that provide for a single operator to exploit a 'straddling' deposit lying across a previously agreed maritime boundary. This latter sub-species of Model II-type JD/TU agreements has also been described as merely being the international or transboundary unitization of deposits, and thus even been renounced as not being

true 'joint development'.²⁰⁾ Despite this objection to the classification of these types of Model II JD agreements as being 'joint development' agreements, the present taxonomic exercise adopts an inclusive approach to them in order to provide as many different working examples of state practice as possible. In any case it should be re-iterated that these transboundary unitization agreements represent successful instances of international co-operation that merit examination in their own right. A few of these JD Model II agreements also combine several of these features. Examples of both these sub-species of Model II-type joint development agreements are as follows: The 1974 France-Spain,²¹⁾ and Japan-Republic of (South) Korea,²²⁾ JDAs are examples of the first sub-species of this Model II-type JD Agreement in that they require their respective Parties in each case to encourage joint venture agreements between their nominated companies within designated joint development zones. The 1992 Malaysia-Vietnam Memorandum of Understanding (MOU),²³⁾ also requires the two Parties' explicitly nominated state oil companies -

²⁰⁾ See Kusuma-Atmadja (1995) *op. cit.*, at 592, for example, who argues that the unitization of oil and gas structures, even when they are found to be straddling the boundaries of neighbouring countries, is merely the extended application of the well known unitization principle in the petroleum industry.

²¹⁾ Full title: Convention between the Government of the French Republic and the Government of the Spanish State on the Delimitation of the Two States in the Bay of Biscay. Signed: 29.1.1974; in force: 5.4.1975. Source: Churchill *et al* (eds.) *New Directions in the Law of the Sea*, Vol.V (1976) 251-60.

²²⁾ Full title: Agreement between Japan and the Republic of Korea concerning the Joint Development of the Southern Part of the Continental Shelf Adjacent to the Two Countries. Signed: 5.2.1974; in force: 22.6.1978. Source: Churchill *et al* (eds.) Vol.IV 117.

²³⁾ Full title: 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. Signed: 5.6.1992; in force: 4.6.1993. Source: Ted L. McDorman, 'Malaysia-Vietnam', Report No. 5-19, in Charney & Alexander (eds.) *IMB, op. cit.*, Vol.3 (1998) 2335-44, at 2341.

Petronas (Malaysia) and Petrovietnam (Vietnam), to enter into a joint operating agreement for their petroleum exploration and extraction activities within a Defined Area of sea-bed corresponding to their overlapping continental shelf claims in the South China Sea. Unlike two previous examples of Southeast Asian State practice namely, the 1979/1990 Malaysia-Thailand, and 1989 Australia-Indonesia Agreements, as well as the more recent, 2002 Australia-Timor Leste Agreement (considered below), this Malaysia-Vietnam MOU does not provide for the establishment of a complex institutional framework to implement the joint development concept.

On the other hand, the second sub-species of JD/TU Model II agreements can be seen in the 1976 UK-Norway Frigg Field Agreement²⁴⁾ and similar agreements subsequently adopted between the same two Parties in the form of the 1979 Statfjord, and Murchison Field Agreements,²⁵⁾ as well as the 1982 Markham Field Agreement between the UK and Netherlands.²⁶⁾ All of these are transboundary field agreements adopted pursuant to relevant provisions in previously agreed continental shelf delimitation treaties between the countries concerned in the North Sea area. Within this context, the recent 2005 Framework Agreement between Norway and the UK (hereinafter, 2005 UK-Norway Framework Agreement) acts to consolidate this bilateral State practice of transboundary unitization for these two

²⁴⁾ Full title: Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway relating to the Exploitation of the Frigg Field Reservoir and the Transmission of Gas therefrom to the UK. Signed: 10.5.1976; in force: 22.7.1977. Source: 1977 UK Treaty Series (UKTS) 113.

²⁵⁾ Both signed: 16.10.1979, in force: 30.1.1979. Sources: (1981) UKTS 44 (Statfjord) and (1981) UKTS 39 (Murchison)

²⁶⁾ Full title: Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of The Netherlands relating to the Exploitation of the Markham Field Reservoirs, signed on ??/??/1982.

North Sea littoral States in treaty form.²⁷⁾ The 2005 Framework Agreement provides under 'Article 3.1: Unitisation and Authorisations', within 'Chapter 3: Joint Exploitation of Trans-Boundary Reservoirs as a Unit', that: 'Where the two Governments, after consultation with their respective Licensees, agree that a Petroleum reservoir is a Trans-Boundary Reservoir which should be exploited, it shall be exploited as a single unit in accordance with the terms of this Agreement, unless otherwise agreed by the two Governments.'

Finally the 1981 Iceland-Norway Jan Mayen Agreement arguably applies a hybrid of both JD Models I & II.²⁸⁾ A designated joint development zone (JDZ) has been divided by a single continental shelf/ EEZ boundary with Norwegian law applying to the Norwegian sector of this JDZ, while Icelandic law applies to the Icelandic sector of this JDZ, with specific exploration and production licenses awarded on the basis of joint venture contracts. Notwithstanding this, the initial exploration of the whole JDZ is funded by Norway, with any net profit from the sale of seismic data obtained from such initial exploration to be shared between the two Parties to this JD Model II Agreement. This last provision undoubtedly incorporates elements of the first type of JD Model (I) agreements.

The third type of JD Model (III) agreement is the most complex and institutionalized option, requiring a much higher level of co-operation, and consequently reduced individual national sovereignty

²⁷⁾ Full title: Framework Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway Concerning Cross-Boundary Petroleum Co-operation, signed on 4 April, 2005. Accessible at: <http://www.dti.gov.uk/> and <http://www.odin.dep.no/>

²⁸⁾ Full title: Agreement on the Continental Shelf between Iceland and Jan Mayen. Signed: 22.10.1981; in force: 2.6.1982. Source: 21 International Legal Materials (ILM) (1982) 1222; Charney & Alexander (eds.) IMB, Vol.II (1993) Report 9-4, 1762-65.

and autonomy, than the previous two JDA models. This joint development model consists of an agreement between the interested States establishing an international joint authority or commission with legal personality, licensing and regulatory powers and a comprehensive mandate to manage the development of the designated zone on behalf of the States concerned. Model III JD Agreements usually comprise an institutional framework established to facilitate co-operation in the exploitation of shared deposits. This institutional framework consists of an initial joint development agreement between the interested States establishing an international joint authority or commission with its own legal personality, licensing and regulatory powers and a comprehensive mandate to manage the development of the designated zone on behalf of the States concerned. These joint authorities have been described as 'strong' institutions, with extensive supervisory and decision-making powers and wide-ranging functions, as opposed to the 'weaker' liaison or consultative-type bodies under the direction of the State parties established by a number of JD agreements incorporating the second JD Model, described above.

An early example of this third, more institutionalized, JD Model (III), is the 1974 Sudan-Saudi Arabia Agreement.²⁹⁾ As alluded to above, several Southeast Asian agreements, ranging from the 1979/1990 Malaysia-Thailand Agreements,³⁰⁾ the 1989 Australia-Indonesia,³¹⁾ and

²⁹⁾ Full title: Agreement between Sudan-Saudi Arabia relating to the Joint Exploitation of the Sea-bed and Sub-soil of the Red Sea in the Common Zone, 1974. Adopted: 16 May, 1974. Source: ST/LEG/SER.B/18 452-5.

³⁰⁾ Full titles of the 1979 and 1990 Agreements: Memorandum of Understanding between Thailand and Malaysia establishing a Joint Authority for the Exploitation of the Resources of the Sea-bed in a Defined Area of the Continental Shelf of the Two Countries in the Gulf of Thailand, 1979; and Agreement between Malaysia and Thailand on the Constitution and Other Matters relating to the

2002 Australia-Timor Leste,³²⁾ Agreements all provide for an altogether more sophisticated legal and institutional framework to oversee the exploration and exploitation of natural resources within a designated joint development zone. This is also the case for the 1993 Guinea-Bissau/Senegal Agreement,³³⁾ and its 1995 Protocol,³⁴⁾ which establish a Joint Agency of Management and Co-operation (AMC) to exploit both fishery and continental shelf resources within a cone-shaped joint exploitation zone extending to either side of the 1960 maritime boundary between two Parties. Regionally, West African State practice has continued more recently with the 2001 Nigeria-Sao Tome Treaty,³⁵⁾ which is yet another one of the new breed of Model III-type JD Agreement, establishing both a Joint Development Zone and a related (international) Authority.

Regardless of the joint development model utilized in State practice,

Establishment of the Malaysia-Thailand Joint Authority, 1990. Source: David Ong, 'Thailand/Malaysia: The Joint Development Agreement 1990', *International Journal of Marine (previously, Estuarine) and Coastal Law*, Vol.6, No.1 (February, 1991) 57-72.

³¹⁾ Full title: Treaty between Australia and the Republic of Indonesia on the Zone of Co-operation in an Area between the Indonesian Province of East Timor and Northern Australia. Adopted: 11 December, 1989 (in the airspace above the 'Timor Gap') and entered into force: 9 February, 1991. For a discussion of this main elements of this Treaty and its eventual replacement by the 2002 Timor Sea Arrangement, see: David M. Ong, 'The Legal Status of the 1989 Australia-Indonesia Timor Gap Treaty Following the End of Indonesian Rule in East Timor', *Netherlands Yearbook of International Law (NYbIL)* 2000, Vol.31 (December, 2001) 67-129

³²⁾ Full title:

³³⁾ Full title: 1993 Management and Co-operation Agreement between the Government of the Republic of Senegal and the Government of the Republic of Guinea-Bissau. Adopted: 14.10.1993; in force: 21.12.1995. Source: Charney & Alexander (eds.) *IMB*, Vol.III (1998) 2257-2278.

³⁴⁾ Full title: 1995 Protocol of the Agreement relating to the Organization and Operation of the Agency of Management and Co-operation between the Republic of Senegal and the Republic of Guinea-Bissau. Adopted: 12.6.1995; in force: 21.12.1995.

³⁵⁾ Full title: Treaty between the Federal Republic of Nigeria and the Republic of Sao Tome e Principe on the Joint Development of Petroleum and other Resources, in respect of Areas of the Exclusive Economic Zone of the Two States. Adopted at Abuja, on 21.2.2001. Accessible at: <http://www.un.org/Depts/los/legislationandtreaties>

similar types of provisions can be found in most of these agreements. Such common provisions include the following: non-prejudice exceptions to the sovereign rights of each party over the disputed deposit; jurisdictional allocations; institutional arrangements and hydrocarbon licensing regime; dispute settlement; environmental protection; third party rights. In this survey, the relevant agreements identified as belonging to each of the three taxonomic categories outlined above will be described. The main features of each of the three different joint development models will be distilled and their comparative utility for future joint development negotiations discussed. Finally, a list of joint development 'best practice' will be made drawing on the common provisions found in these regimes.

A. Joint Development Model I: One State exploits the shared offshore hydrocarbon deposit on behalf of another State, paying that State a share of the revenues

The first joint development model examined here is arguably the simplest option available to interested States because it requires the least amount of effort by the governments concerned in the way of formal bilateral co-operation and legal and institutional harmonization. This model comprises an agreement whereby one State manages the development of the deposits located in a disputed area on behalf of both States. The other State shares in the revenues arising from the exploitation of resources, once the costs incurred by the first State have been subtracted. Many of the earliest joint development agreements utilized this model. Of late it has fallen into disuse. This is principally due to the apparently unacceptable loss of autonomy on the part of the State that allows its sovereign rights to be

administered by another State. Many States are reluctant to accept such a situation, especially within a disputed sea-bed area subject to overlapping claims. They are fearful of appearing to accept, however implicitly, a status quo that confers de facto jurisdiction to the other State, even if the de jure position is explicitly reserved. The main disadvantage is the other State's concern about the possible adverse inferences drawn from the managing State's pre-emptive role in the disputed area and its effect on the strength of the other State's claims to this area.³⁶⁾

Bahrain-Saudi Arabia³⁷⁾

This agreement is a good example of the first joint development model described above. One of the main features of this joint development model is the redundancy and hence absence of any provision that expressly reserves the rights of the interested States in the sea-bed area subject to the joint development agreement. Such a 'non-prejudicial'-type clause is superfluous since by agreement only one State will be exercising its sovereign rights and jurisdictional powers over the designated field or area concerned. The second

³⁶⁾ Fox et al (1989) op. cit., at 149 & 152.

³⁷⁾ Full title: Agreement concerning the Delimitation of the Continental Shelf in the Persian Gulf between the Shaykhdom of Bahrain and the Kingdom of Arabia. The agreement was made on 22 February, 1958 but signed and entered into force on 26 February, 1958. Source: Charney & Alexander (eds.), Report No. 7-3, Vol. II (1993) 1495-7. Also see: Churchill et al (eds.) *New Directions in the Law of the Sea*, Vol. V, 207; UN Doc. No. ST/LEG/SER.B/16, 409 (1974). Clause 6 provides that the agreement shall come into effect from the date on which it is signed by the two parties. Hence although the agreement was initially made on 22 February, 1958 it was only signed on 26 February, 1958 and entered into force on this date. See: R. F. Pietrowski, Jr., 'Bahrain-Saudi Arabia', Report No. 7-3, in Charney & Alexander, *International Maritime Boundaries*, Vol. II, op. cit., 1489-93, at 1489. Also see: A. A. El-Hakim, 'Bahrain-Saudi Arabia boundary agreement', *The Middle Eastern States and the Law of the Sea*, Manchester: Manchester University Press (1979) 86-91, at 86, fn. 7.

clause of this simple continental shelf boundary delimitation agreement provided for the oil resources in the Fasht bu Saafa or Fasht Abu-Sa'fah field³⁸⁾ to be managed by Saudi Arabia on behalf of Bahrain on an equal net revenue-sharing basis (50:50). According to Razavi, the main reason for sharing the oil revenues was due to the exploration activities already carried out by the Bahrain Petroleum Company (Bapco).³⁹⁾ The equal division of net revenues is made on the express understanding that Saudi right of sovereignty and administration (sic) over the area is not infringed.⁴⁰⁾ Indeed, it is provided that the oil field is to be developed in the manner which His Majesty, the King of Saudi Arabia may choose.⁴¹⁾ There is no other provision acknowledging Bahrain's rights or jurisdiction in the field except for the entitlement to an equal share of the net revenues from its exploitation.⁴²⁾ The delimited hexagonal area containing the field is located wholly on the Saudi side of the boundary,⁴³⁾ and is therefore subject only to Saudi jurisdiction. El-Hakim suggests that at least part of the reason why the two parties decided not to draw a boundary line across the deposit was due to considerations related to the preservation of the unity of the deposit.⁴⁴⁾ However, this view appears to discount the fact that a boundary line could easily have

³⁸⁾ Although this field is not specifically named in the agreement, it is clearly delineated by the given co-ordinates and labeled as such in the accompanying map to the agreement.

³⁹⁾ A. Razavi, 'The Bahrain-Saudi Arabia Agreement', *Continental Shelf Delimitation and Related Maritime Issues in the Persian Gulf*, The Hague: Martinus Nijhoff (1997) 122-8, at 124.

⁴⁰⁾ Second clause of the 1958 Agreement, op. cit.

⁴¹⁾ *Ibid.*

⁴²⁾ *Ibid.*

⁴³⁾ Para. 16 of Clause One states that '(e)verything lying to the left of the line referred to in the above paragraphs belongs to the Kingdom of Saudi Arabia...', thereby incorporating the Fasht bu Saafa or Fasht Abu-Sa'fah field, although this provision is subject to the revenue sharing arrangement set out in Clause Two.

⁴⁴⁾ El-Hakim (1979) op. cit., 91.

been drawn across the deposit, but incorporating a transboundary unitization clause or providing for some other form of joint exploitation of the unitized deposit. The application of any such transboundary unitization clause in the form of a further Transboundary Unitization Agreement (TUA) would then have placed this example within the second category of Joint Development model, discussed below. No dispute settlement, environmental protection or third party rights provisions are included within this arguably first example of offshore joint development.

Qatar-Abu Dhabi⁴⁵⁾

Like the foregoing 1958 Bahrain-Saudi Arabia agreement, this delimitation agreement provided for a 'field specific' arrangement in which the Al-Bunduq or Hagl ElBundug field was exploited by ADMA (Abu Dhabi Marine Areas Co.),⁴⁶⁾ under licence from the Ruler of Abu Dhabi, on behalf of both States, with all revenues, profit and benefits (but interestingly, not costs) divided equally.⁴⁷⁾ Again, there is no provision expressly reserving the rights and jurisdiction of Qatar in respect of the designated field, although the Parties have equal rights of ownership over the field and agreed to consult each other on all matters concerning the exploitation of the field.⁴⁸⁾

⁴⁵⁾ Full title: Agreement on the Settlement of Maritime Boundary Lines and Sovereign Rights over Islands between Qatar and Abu Dhabi. Signed: 20.3.1969; in force: 20.3.1969. Source: UN Doc. No. ST/LEG/SER.B/16, 403 (1974). Also see: Charney & Alexander (eds.) Vol. II, Rep. No. 7-9 (1993) 1547-8.

⁴⁶⁾ According to Amin, the concession rights were later transferred to the Al-Bunduq Company Ltd., see: S.H. Amin, 'Customary Rules of Delimitation of the Continental Shelf: The Gulf States Practice', *Journal of Maritime Law and Commerce*, Vol.11 (1980) at 518.

⁴⁷⁾ Para. 7, *ibid.*

⁴⁸⁾ Para. 6, *ibid.*

Razavi however considers this arrangement to provide a more equitable solution than that which obtained in the foregoing agreement between Bahrain and Saudi Arabia.⁴⁹⁾ This early example of an offshore joint development agreement also did not provide for the rights of third parties, environmental protection, or dispute settlement measures for resolving problems between the two Parties, although the present agreement provides for consultation on all matters concerning exploitation of the designated field, which presumably includes any disputes between Parties.

Iran-Sharjah⁵⁰⁾

This agreement provided a resolution for a protracted and at times three-way dispute between on the one hand, Iran and Sharjah and on the other, Sharjah and its fellow United Arab Emirates State of Umm al Qaiwain (UAQ). The latter dispute will not be considered here save to note (below) that UAQ may have received a share of the proceeds from this agreement. The dispute between Sharjah and Iran concerned the sovereignty of Abu Musa island, lying about 40 nautical miles (nm) off the coasts of both Sharjah and UAQ. While Sharjah had occupied and exercised its jurisdiction over the island for more than one hundred years at the time of the dispute during the late 1960s, Iran had intermittently claimed title over the island since the beginning of the last century. During this period, both Sharjah and UAQ had special treaty relations with the UK, whose government supported the Sharjah claim over Abu Musa island.

⁴⁹⁾ Razavi, op. cit., at 140.

⁵⁰⁾ Full Title: Memorandum of Understanding (MOU) between Iran and Sharjah. Adopted by exchange of letters between the Parties and the concession-holder: Buttes Co. in November, 1971. Source: Supp. to Middle East Economic Survey, Vol. XV, No.28 (May,1972)

However, Iran revived her claim in 1968 after the British government announced its decision to end the treaties binding the UK to Sharjah and the other Trucial States. Following months of negotiations, an understanding was reached between Sharjah and Iran in November, 1971.

The first sentence of this Memorandum of Understanding (MOU) recognises that neither Iran nor Sharjah will give up its claim to Abu Musa, nor recognise the other's claim. It divides Abu Musa between Iran and Sharjah with full jurisdiction (sic) to each Party in their designated areas.⁵¹⁾ There is no specific provision for allocation of the various maritime jurisdiction zones, except for recognition of the 12-nm breadth of the island's territorial sea.⁵²⁾ Iran and Sharjah nationals have equal rights to fish in the Abu Musa territorial sea.⁵³⁾ The agreement provided for the exploitation of petroleum resources of Abu Musa island and the sea-bed of its territorial sea (including the Mubarak Field) to be conducted by a specific, named company (Buttes Gas & Oil).⁵⁴⁾ Buttes had in fact obtained a concession from Sharjah prior to the present MOU.⁵⁵⁾ Hence the further requirement in the MOU that the existing agreement (between Buttes and Sharjah) must be acceptable to Iran.⁵⁶⁾ Half (50%) the governmental oil resources (sic) was to be paid directly by the company to Iran, and

⁵¹⁾ Para. 2(a) and (b), *ibid.*

⁵²⁾ Para. 3, *ibid.*

⁵³⁾ Para. 5, *ibid.*

⁵⁴⁾ Para. 4, *ibid.*

⁵⁵⁾ A similar concession had also been obtained by Occidental Petroleum Corporation from the adjacent UAQ, resulting in a dispute over the lateral boundaries of each concession. This gave rise to protracted litigation between the two concessionaires in both US and English courts. See: I.A.E. Insley and Frank Wooldridge, 'The Buttes Case: The Final Chapter in the Litigation', *International and Comparative Law Quarterly*, Vol.32, Part 1(January, 1983) 62-81.

⁵⁶⁾ Para. 4, *op. cit.*

half to Sharjah.⁵⁷⁾ Other reports state that 35% went to Sharjah and 15% to Umm al Qaiwain respectively, despite the fact that there were no provisions for third parties in the MOU. In this respect, the present arrangement is a variation of the standard Model I-type joint development agreement discussed above in that it provides for the sharing of revenues generated from petroleum exploitation by one Party's concessionaire (in this case, specifically named) in a designated area where the resource rights are pooled but the rest of the territory is separately administered. A financial assistance agreement was also to be signed,⁵⁸⁾ whereby Iran would pay Sharjah USD\$150,000 annually until Sharjah's annual revenue reached USD\$3,000,000.⁵⁹⁾ There was no provision for dispute settlement, environmental protection in the agreement.

B. Joint Development Model II: Compulsory unitization and joint ventures between operators for the exploitation of shared deposits

The second joint development model is the most popular option among the three models analysed here. It usually comprises an agreement requiring the Parties to establish compulsory joint ventures between their national or other nominated oil companies in designated joint development zones. Alternatively, the agreement provides for the compulsory unitization of transboundary deposits and the nomination of a single operator to exploit the unitized deposit on behalf of all the interested operators. A few agreements also combine several of these features. While the *modus operandi* in both situations described

⁵⁷⁾ *Ibid.*

⁵⁸⁾ Para. 6, *ibid.*

⁵⁹⁾ literature ref.?

above is very similar, the geographical context within which these different types of Model II joint development agreements operate is quite different.

A number of these Model II joint development agreements provide for the unitization of deposits found both within, or lying across, the boundaries of a specifically designated area of marine space. These designated joint development zones usually correspond to disputed continental shelf/EEZ claims between the two states concerned. Other Model II agreements require the compulsory unitization of transboundary deposits in situations where the maritime boundary has been previously agreed. This latter type of Model II agreement has even been renounced as not being true 'joint development'.⁶⁰⁾ Despite this objection to the classification of these types of agreements as being 'joint development agreements', the present taxonomic exercise adopts an inclusive approach to them in order to provide as many different working examples of state practice as possible. Moreover, these transboundary unitization agreements represent successful instances of international co-operation that merit examination in their own right.

Thus, it may be noted that there are two distinctive sub-species of Model II-type joint development agreements. First, agreements that designate specific joint development zones in which compulsory joint

⁶⁰⁾ Kusuma-Atmadja for example argues that 'joint development' properly relates only to overlapping claim areas subject to joint jurisdiction, rather than the unitization of oil and gas structures straddling the boundaries of neighbouring countries, which is merely a well known principle in the petroleum industry. See: Mochtar Kusuma-Atmadja, 'Joint Development of Oil and Gas by Neighbouring Countries', in M. Kusuma-Atmadja, T. A. Mensah and B. H. Oxman (eds), *Sustainable Development and the Preservation of the Oceans: The Challenges of UNCLOS and Agenda 21*, Proceedings of the Law of the Sea Institute's Twenty-Ninth Annual Conference, Denpasar, Bali, Indonesia, June 19-22, 1995, Honolulu, Hawaii: The Law of the Sea Institute, William S. Richardson School of Law, University of Hawaii, Honolulu (1997) 592-609, at 592.

ventures are established in respect of unitized deposits, and secondly, transboundary unitization agreements that provide for a single operator to exploit a 'straddling' deposit lying across a previously agreed maritime boundary. Examples of both these sub-species of Model II-type joint development agreements will be highlighted among the agreements discussed below.

Kuwait-Saudi Arabia⁶¹⁾

The 1922 Al Uquair agreement provided for the so-called Neutral Zone between Kuwait and Saudi Arabia to be an area of joint sovereignty, with both States having equal shares over the land and maritime territory of the Zone and its natural resources. The original concessionaires, Getty and Aminoil, entered into a joint operating agreement and unitized their operations in the Zone.⁶²⁾ The present 1965 agreement partitioned the Neutral Zone that had previously been jointly administered by both States between 1922-1965 into two equal parts.⁶³⁾ Article III provides administration, legislation and defence rights to the Party over that part of the Partitioned Zone annexed to its own territory, without prejudice to the rights of the Parties to natural resources in the whole Zone. Article III thus provides that each of the Contracting Parties has almost exclusive sovereignty over its part of the divided Neutral Zone annexed to its territory. The main exception to the full exercise of sovereignty relates to the equal rights each Party has over the natural resources

⁶¹⁾ Full title: Agreement between the State of Kuwait and the Kingdom of Saudi Arabia Relating to the Partition of the Neutral Zone. Adopted: 7.7.1965. Source: (1965) 4 ILM 1134.

⁶²⁾ Fox *et al* (1989) op. cit. at 55.

⁶³⁾ Art. I, *ibid*.

of the whole Zone. Thus, the joint interest in the resources of the Zone was maintained. Indeed, the new boundary had little practical significance for the conduct of petroleum mining operations. In other words, the rights of both Parties to the shared natural resources in the partitioned Neutral Zone are maintained notwithstanding the division of land territory of the Neutral Zone and territorial waters up to 6-nm offshore between the two Parties.⁶⁴⁾ Beyond 6 nautical miles, Article VIII also provides that the equal rights of the two parties shall be exercised by means of shared exploitation.

This agreement is a good example of the first variation of the Model II-type joint development agreement described above. It provides for voluntary (as opposed to compulsory) joint ventures between concessionaires in the divided Neutral Zone. It allows the respective concessionaires of each Party, both onshore and offshore, to enter into joint operating agreements providing for the unitization of fields lying across their concession area boundaries. However, Razavi notes that problems have arisen in relation to the Safaniya and Khafji offshore oilfields because of the possibility that they are linked to each other. The Safaniya field operated by Aramco is said to be located on the Saudi continental shelf, with revenues flowing solely to Saudi Arabia. Whereas the Khafji field operated by AOC (a Japanese company) is in the Neutral Zone and therefore shared with Kuwait. Should the oilfields in fact be directly linked to each other then arguably Kuwait is not getting a fair share of the overall revenues from these fields.⁶⁵⁾

The petroleum licensing regime is based on the concession system

⁶⁴⁾ Arts. IV and VII, *ibid.*

⁶⁵⁾ Razavi, *op. cit.*, at 222-3.

but with different taxation burdens. Any new or amended concession is subject to bilateral ministerial consultation.⁶⁶⁾ A joint Permanent Committee was established to co-ordinate the exploitation efforts of the Parties.⁶⁷⁾ The Committee is composed of an equal number from the two Parties' representatives as well as the two competent government ministers. The Parties shall agree on the number of Committee members and its rules of procedure.⁶⁸⁾ The Committee's remit is to (a) facilitate passage of officials and employees who are not citizens of either of the two Parties; (b) commission studies on the exploitation of the common natural resources; (c) study the new licenses, contracts and concessions relating to common natural resources and submit recommendations to the ministers;⁶⁹⁾ and (d) discuss any issues the ministers refer to it.⁷⁰⁾ Significantly, the Committee does not exercise any legal authority in respect of the concessions themselves, or the joint operating agreements entered into by the concessionaires to exploit fields lying across different concession blocks. Each Party also undertook to enact legislative safeguards against double taxation of concessionaires granted licenses in the Partitioned Zone.⁷¹⁾

Any dispute arising between the Parties is to be settled by friendly means, including recourse to the Arab League. If these methods should fail both Parties shall accept the compulsory jurisdiction of the ICJ and submit it before the Court. Either Party may also ask the

⁶⁶⁾ Art. XX, *op. cit.*

⁶⁷⁾ Art. XVII, *ibid.*

⁶⁸⁾ Art. XVIII, *ibid.*

⁶⁹⁾ This is significant as at the time of the agreement neither of the Parties had specific petroleum legislation and petroleum development activities were governed solely by the terms of the concession agreements.

⁷⁰⁾ Art. XIX, *op. cit.*

⁷¹⁾ Art. XIII, *ibid.*

ICJ for provisional measures to suspend an objectionable measure introduced by the other Party.⁷²⁾ In keeping with early State practice on joint development no specific provision for environmental protection is made in the agreement but a private arrangement on pollution control establishing a joint monitoring system was devised amongst the companies granted concessions by Bahrain, Kuwait, Saudi Arabia and Iraq. There was also no provision for third party rights in the land and maritime territories covered by this agreement.

France-Spain⁷³⁾

This agreement first draws a continental shelf boundary line between the two States in the Bay of Biscay,⁷⁴⁾ before further designating a rectangular-shaped joint development zone (*zone speciale*).⁷⁵⁾ As the continental shelf boundary line runs through the joint development zone, no provision reserving the sovereign rights of the two Parties in the joint development zone was deemed necessary. Article 6 affirms that the present Convention shall not affect the status of the superjacent waters or airspace. The two Parties thus have sovereign rights and jurisdiction over activities in their own continental shelf sectors of the designated zone, limited only by the relevant provisions in Annex II. This obliges the Parties to promote the exploitation of the zone, while aiming at an equal division of resources therein.⁷⁶⁾

⁷²⁾ Art.XXII, *ibid*.

⁷³⁾ Full Title: Convention between the Government of the French Republic and the Government of the Spanish State on the Delimitation of the Two States in the Bay of Biscay. Signed: 29.1.1974; in force: 5.4.1975. Source: Churchill et al (eds.), *New Directions in the Law of the Sea*, Vol.V (1976) 251-60.

⁷⁴⁾ Art.2, *ibid*.

⁷⁵⁾ Art.3 *ibid*.

⁷⁶⁾ Annex II, para.1, *ibid*.

Each Party is required to encourage joint venture agreements between companies of each nationality to participate in the natural resource development of the zone on the basis of equal partnership and financing of operations in accordance with their respective shares in the joint venture.⁷⁷⁾ This agreement is therefore a good example of the first variation of the Model II-type joint development noted above.

There is also provision for the transboundary unitization of deposits lying across the continental shelf boundary.⁷⁸⁾ Unlike other transboundary unitisation provisions, however, this clause specifies that the unitization procedure shall be applied even if the exploitation of part of the deposit situated on one side of the boundary merely ‘affects the conditions of exploitation of the other part,’ as opposed to being ‘exploitable’ from the other side of the line. Moreover, it is specifically provided that the prior exploitation of a deposit lying across the boundary line obliges the Parties to seek agreement on appropriate compensation.⁷⁹⁾ There is no provision for a joint body to co-ordinate policy or oversee the functioning of the agreement. Applications for exploration licences must be notified to the other Party to allow it to nominate its own licensee.⁸⁰⁾ Subsequent amendment of licences awarded in one Party’s sector must also be agreed to by the other Party.⁸¹⁾ Proposals for amendment of the individual joint venture agreements by the licensee companies should also be notified to the Parties.⁸²⁾

⁷⁷⁾ Annex II, para.2, *ibid.*

⁷⁸⁾ Art.4(1) *ibid.*

⁷⁹⁾ Art.4(2) *ibid.*

⁸⁰⁾ Annex II, para.3, *ibid.*

⁸¹⁾ Annex II, para.6, *ibid.*

⁸²⁾ Annex II, para.5, *ibid.*

Article 5(1) initially provides for dispute settlement by diplomatic means. Should the dispute not be settled within four months, it will be submitted to an arbitral tribunal at the request of one of the Parties.⁸³⁾ The composition,⁸⁴⁾ division of expenses,⁸⁵⁾ method of binding decision-making by majority,⁸⁶⁾ and possibility of interim protection measures,⁸⁷⁾ are all provided for. Unlike earlier joint development agreements where the provision for environmental protection was conspicuous in its brevity or total absence, Article 7 provides that the Parties shall by mutual consultation make every effort to prevent interference with the ecological equilibrium and other legitimate uses of the marine environment from natural resource development activities in the Bay of Biscay continental shelf. However, the more comprehensive nature of this agreement as compared to the simpler co-operative models established in the Persian Gulf examples above has not been tested to date as no petroleum exploitation has yet taken place in the zone.

Japan -Republic of (South) Korea⁸⁸⁾

Another prime example of the first type of Model II joint development agreement is the 1974 Japan-Republic of (South) Korea Agreement. This Agreement provides for petroleum exploration and

⁸³⁾ Art.5(2) *ibid.*

⁸⁴⁾ Art.5(3) *ibid.*

⁸⁵⁾ Art.5(4), *ibid.*

⁸⁶⁾ Art.5(5), *ibid.*

⁸⁷⁾ Art.5(6), *ibid.*

⁸⁸⁾ Full title: Agreement between Japan and the Republic of Korea concerning the Joint Development of the Southern Part of the Continental Shelf Adjacent to the Two Countries Signed: 30.1.1974; in force: June, 1978. Source: C. H. Park, 'Japan-South Korea', Report 5-12, in Charney and Alexander (eds.) Vol. I (1993) op. cit., 1065-89. Also in Churchill *et al* (eds), *New Directions in the Law of the Sea*, Vol. IV, 117.

exploitation in a defined Joint Development Zone (JDZ)⁸⁹⁾ to be carried out within further divided subzones.⁹⁰⁾ The Agreement provides that each of the subzones delineated within the overall JDZ will be subject to the jurisdiction of one of the Parties. The designation of the appropriate national jurisdiction applicable to each subzone is in turn dependent on the nationality of the operator chosen by the nominated concessionaires to that subzone.⁹¹⁾ The Parties require their nominated concessionaires to enter into a Joint Operating Agreement (JOA)⁹²⁾ within each of the subzones designated (initially nine, later reduced to six as a result of an Exchange of Diplomatic Notes on 31 August, 1987). The JOA must in turn designate a single operator to explore and exploit the subzone.⁹³⁾ Thus, a joint venture or consortium is not allowed for the actual exploration and exploitation of a subzone. The natural resources extracted and the expenses incurred in the exploration and exploitation shall be shared equally between the nominated concessionaires to each subzone.⁹⁴⁾

The legal positions of the two Parties in relation to the overlapping area of their respective continental shelf claims is preserved by providing that: ‘Nothing in the Agreement shall be regarded as determining the question of sovereign rights over all or any portion of the Joint Development Zone or as prejudicing the positions of the respective Parties with respect to the delimitation of the continental shelf.’⁹⁵⁾ Strategic control of hydrocarbon development in the JDZ is

⁸⁹⁾ Delineated by Art.II(1) of the 1974 Agreement *ibid.*, and encompassing some 24,101 sq. nautical miles.

⁹⁰⁾ Art.III(1), *ibid.*

⁹¹⁾ Art.XIX, *ibid.*

⁹²⁾ Art.V(1), *ibid.*

⁹³⁾ Arts.V(1)(b) & VI(1), *ibid.*

⁹⁴⁾ Art.IX, *ibid.*

retained by the two States through the mechanism of joint approval of the joint operating agreements.⁹⁶⁾ Although a Joint Commission is established,⁹⁷⁾ its terms of reference are limited and designed for liaison purposes only.⁹⁸⁾ The Joint Commission comprises two nationals from each of the Parties and operates as a consultative body for technical co-ordination between the concessionaires,⁹⁹⁾ rather than as a supranational institution with legal personality and comprehensive powers, such as the Joint Commission established under the 1974 Saudi Arabia-Sudan agreement, the Joint Authority established by the 1979 and 1990 Malaysia-Thailand agreements, and the Ministerial Council and Joint Authority established by the 1989 Australia-Indonesia agreement featured below in the section on Model III-type joint development agreements.

Disputes concerning the interpretation and implementation of the Agreement shall be initially settled by diplomatic channels,¹⁰⁰⁾ failing this by resort to an Arbitration Board, whose decisions are binding and which can issue provisional orders. The resolution of navigational and fisheries issues involving both Parties and third states is specifically provided under Article XXVII. Provision for the co-ordination of bilateral fisheries interests within each subzone is also included within the joint operating agreements between the nominated concessionaires.¹⁰¹⁾ Article XX provides for the Parties to agree on

95) Art. XXVIII, *ibid.*

96) Art.V(2), *ibid.* Approval is deemed to have been implicitly given unless either Party explicitly disapproves the operating agreement within two months of it having been submitted to the Parties for approval. See also: Fox et al, Vol. I (1989) *op.cit.*, at 58 & 116–32.

97) Art.XXIV, *ibid.*

98) Art.XXV, *ibid.* See also: Miyoshi *op.cit.*, (1999) at 14 & 44.

99) Art.XXIV, *ibid.*

100) Art.XXVI, *ibid.*

101) Art.V(1), *ibid.*

measures to prevent and remove marine pollution from activities in the joint development zone, and prevent collisions at sea. Finally, the duration of the Agreement is set for fifty years, or whenever the Parties agree to terminate it, either by giving 3 years' notice, or when the Parties agree that the natural resources are no longer economically viable.¹⁰²⁾

United Kingdom-Norway¹⁰³⁾

This agreement and similar ones agreed subsequently between the same two Parties, namely the 1979 Statfjord¹⁰⁴⁾ and Murchison Field Agreements, as well as the 1982 Markham Field Agreement between the UK and Netherlands are international transboundary field unitization agreements made pursuant to relevant provisions in previously agreed continental shelf delimitation treaties in the North Sea. The 1976 Frigg Field agreement was made pursuant to Article 4 of the Anglo-Norwegian Continental Shelf Agreement, 1965. All these agreements are therefore excellent examples of the second variation of the Model II-type joint development agreements described above.

Under the 1976 Agreement, the Frigg gas field reservoir was exploited as a single unit.¹⁰⁵⁾ Each Party's licensee is required to enter into a joint operating agreement, requiring the approval of both governments.¹⁰⁶⁾ A Unit Operator will then be appointed by

¹⁰²⁾ Art.XXXI, *ibid*.

¹⁰³⁾ Full title: Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway relating to the Exploitation of the Frigg Field Reservoir and the Transmission of Gas therefrom to the UK. Signed: 10.5.1976; in force: 22.7.1977. Source: 1977 UK Treaty Series (UKTS) 113.

¹⁰⁴⁾ Both signed: 16.10.1979, in force: 30.1.1979; sources: (1981) UKTS 44 (Statfjord) and (1981) UKTS 39 (Murchison).

¹⁰⁵⁾ Art.1(1), *ibid*.

¹⁰⁶⁾ Art.1(2), *ibid*.

agreement between the licensees, subject to the approval of the two Parties.¹⁰⁷⁾ Article 27 establishes the Frigg Field Consultative Commission to facilitate the implementation of this Agreement. The Commission comprises six persons, with three representatives from each Party. The functions of the Commission were to be elaborated by further arrangements but include matters referred to it by the Parties. The Commission also functions as an initial forum for the settlement of disputes about the interpretation or application of the Agreement, or any other matter relating to the joint operating agreements concluded between the respective licensees,¹⁰⁸⁾ or the agreement between the pipeline owners regulating the transmission of gas.¹⁰⁹⁾

The limits and total reserves of the Frigg Field and an apportionment thereof were agreed before production commenced.¹¹⁰⁾ These limits and total reserves were to be reviewed at certain times. Each Party taxes the whole profit of its own licenses according to its own taxation laws, in accordance with the principles set out in the following provision, regardless of whether this refers to production carried out on the continental shelf of the other Party, but shall not tax any profits arising from the licenses of the other Party.¹¹¹⁾ This taxation of the profits shall be based on the principle that over the production life of the Field, the respective licensees shall be taxed by reference to their income from so much of the total production as is attributed to them under the final apportionment of the Frigg Field,¹¹²⁾ which is to be made in accordance with Article 3.

¹⁰⁷⁾ Art.5, *ibid.*

¹⁰⁸⁾ Art.1(2), *ibid.*

¹⁰⁹⁾ Art.14, *ibid.*

¹¹⁰⁾ Arts.2(2) and 2(3), *ibid.*

¹¹¹⁾ Art.9(1), *ibid.*

¹¹²⁾ Art.9(2), *ibid.*

Nothing in this Agreement shall be interpreted as affecting the jurisdiction that each State has over its continental shelf, or prejudicing the application of its laws and the jurisdiction of its courts, in conformity with international law.¹¹³⁾ The jurisdictional allocation follows the previous (1965) continental shelf delimitation and provides for jurisdiction and rights to each Party over activities within its own continental shelf. A partial exception to the territorial basis for jurisdiction over petroleum development activities is where concurrent UK and Norwegian civil and criminal jurisdiction applies, subject to UK rules on conflicts of laws, over the Norwegian pipeline utilized to transmit Frigg gas to the UK.¹¹⁴⁾

The two Parties agreed to consult each other on the appropriate safety measures for offshore installations with a view to ensuring that all such installations are subject to uniform safety and construction standards.¹¹⁵⁾ In relation to pipelines crossing the dividing boundary line between installations, the two Parties shall consult in order to formulate joint safety measures and shall require compliance of these measures by their licensees.¹¹⁶⁾ Article 23 provides that the Parties undertake, jointly and severally, to ensure that the exploitation of Frigg, including any installation or pipeline involved, shall not cause pollution of the marine environment or damage by pollution to the coastline, shore facilities or amenities, or vessels or fishing gear of any country.

The Commission established under Article 27 shall be the initial forum for any dispute settlement concerning the interpretation or

¹¹³⁾ Art.29(1) and (2), *ibid.*

¹¹⁴⁾ Art.13(2), *ibid.*

¹¹⁵⁾ Art.7(1), *ibid.*

¹¹⁶⁾ Art.7(2), *ibid.*

application of this Agreement.¹¹⁷⁾ Another alternative provided is through negotiation between the two Parties.¹¹⁸⁾ If any dispute remains unresolved by the above or any other procedure agreed to by the two Governments, then the dispute shall be submitted at the request of either Party to an Arbitral Tribunal composed as follows: Each Party chooses one arbitrator and they both elect the third, who shall be the Chairman and not a national or habitually reside in either the UK or Norway. If either Party fails to nominate an arbitrator within three months, either Party may request the President of the International Court of Justice to appoint one. The same procedure shall apply if a third arbitrator is not elected within one month of the appointment of the second arbitrator. The Tribunal shall decide its own procedure, save that all decisions shall be taken by a majority vote, in the absence of unanimity. The Tribunal decisions shall binding upon the two Parties and for the purposes of this Agreement shall be regarded as agreements between the two Parties.¹¹⁹⁾

Iceland-Norway¹²⁰⁾

This Agreement applies a hybrid of Joint Development Models I and II. Article 2 established a rectangular joint development zone of some 45,470 sq. km. A previously agreed (1980) single continental shelf-EEZ boundary cuts across the zone, leaving approx. 32,750 sq. km. within Norwegian jurisdiction and the rest (12,720 sq.km.) within

¹¹⁷⁾ Art.28(1) *ibid.*

¹¹⁸⁾ *Ibid.*

¹¹⁹⁾ Art.28(2), *ibid.*

¹²⁰⁾ Full title: Agreement on the Continental Shelf between Iceland and Jan Mayen Signed: 22.10.1981; in force: 2.6.1982. Source: 21 ILM (1982) 1222; Charney & Alexander (eds.) Vol.II (1993) Report 9-4, 1762-65.

Icelandic jurisdiction. Norwegian law applies in relation to petroleum activities, safety measures and environmental protection within the Norwegian sector and likewise in the Icelandic sector. The initial exploration phase of the joint zone is funded by Norway, with any net profit from the sale of seismic data shared between the Parties.¹²¹⁾ Specific exploration and production licenses are awarded on the basis of joint venture contracts.¹²²⁾

In the (larger) northern sector of the joint zone, Iceland is entitled to participate with a 25% share of any petroleum exploitation activities.¹²³⁾ Furthermore, in negotiations with exploration companies, Norway is required to seek an arrangement whereby both Norwegian and Icelandic costs are carried by these companies.¹²⁴⁾ If this is not possible, the Parties shall negotiate towards a joint venture arrangement, sharing or carrying their own costs. If Iceland does not wish to so, Norway may proceed on its own. However, if there are commercial finds, Iceland is entitled to participate for its share in return for reimbursing its share of Norway's costs in the venture, as if it had participated from the outset.¹²⁵⁾ In the southern (smaller) sector, Norway is entitled to a 25% share in such petroleum activities.¹²⁶⁾ However, Iceland are not under the same obligation to recover Norwegian costs in its negotiations with exploration companies. After a finding is declared commercial, each Party shall carry its costs in proportion to its share under the joint venture contract.¹²⁷⁾ If a

¹²¹⁾ Art.3, *ibid.*

¹²²⁾ Art.4, *ibid.*

¹²³⁾ Art.5, *ibid.*

¹²⁴⁾ Art.5, *ibid.*

¹²⁵⁾ Art.5, *ibid.*

¹²⁶⁾ Art.6, *ibid.*

¹²⁷⁾ Art.7, *ibid.*

deposit is found either to straddle the single delimitation line, or entirely in the southern (Icelandic) sector but extends beyond the joint zone, then the usual unitization principles for the exploitation of the deposit shall apply. On the other hand, if a deposit lies entirely in the northern sector but extends beyond the joint zone, it shall be considered to lie entirely within the joint zone and exploited according to the provisions of Article 5.¹²⁸⁾ This reflects the favorable terms of the Agreement vis-a-vis Iceland.

There are no specific provisions regarding environmental protection in the joint zone but jurisdiction over environmental protection follows the sectoral allocation of the joint zone between the Parties by the earlier, 1980 agreement.¹²⁹⁾ If one of the Parties considers that the safety or environmental regulations fail to provide adequate protection during exploration or production in the joint zone, then the Parties are required to consult each other. If the Parties disagree during such consultations, the question shall be referred to a Conciliation Commission. The Conciliation Commission shall consist of three members, one appointed by each Party and the Chairman jointly appointed by the Parties. The Commission's recommendations are not binding on the Parties but they are required to pay reasonable regard to them.¹³⁰⁾ The Parties shall not commence or continue operations before the Commission's recommendations are available, unless there are weighty grounds for doing so.¹³¹⁾

¹²⁸⁾ Art.8, *ibid.*

¹²⁹⁾ Arts. 5 and 6, *ibid.*

¹³⁰⁾ Art. 9, *ibid.*

¹³¹⁾ Art. 9, *ibid.*

Argentina – United Kingdom¹³²⁾

By this non-binding Joint Declaration, the two Governments agreed to co-operate in order to encourage offshore activities in the South West Atlantic.¹³³⁾ Exploration and exploitation of hydrocarbons by the offshore oil and gas industry will be carried out in accordance with sound commercial principles and good oilfield practice, drawing upon the Governments' experience in both the South West Atlantic and in the North Sea.¹³⁴⁾ Co-operation has been furthered by establishing a Joint Commission¹³⁵⁾ and by means of co-ordinated activities in up to 6 tranches, each about 3,500 sq. km.¹³⁶⁾ These tranches have been reduced to 4 as a result of the latest technical advice on the basis of the geological data obtained so far. Regular meetings between the two protagonists continue negotiations towards a possible Model II-type joint development agreement.

Paragraph 1 of the Joint Declaration provides an agreed formula on the Falkland Islands' sovereignty, based on that contained in the Joint Statement by the two Governments issued at Madrid on 19 October, 1989. Nothing in the present Joint Declaration or any similar subsequent Joint Statements and meetings shall be interpreted as a change in either the position of the UK or the Argentine Republic with regard to the sovereignty or territorial and maritime jurisdiction over the Falkland Islands, South Georgia and the South Sandwich Islands and the surrounding maritime areas.¹³⁷⁾ Moreover,

¹³²⁾ Full title: Joint Declaration on Co-operation over Offshore Activities in the South West Atlantic. Adopted: 27.9.1995. Source: 35 ILM 301 (1996) Also: International Journal of Marine & Coastal Law, Vol.11, No.1 (1996) 113-8.

¹³³⁾ Para.2, *ibid.*

¹³⁴⁾ Para.2, *ibid.*

¹³⁵⁾ Para.2(a), *ibid.*

¹³⁶⁾ Para.2(b), *ibid.*

no act or activity carried out by the UK, the Argentine Republic or third parties as a consequence and in implementation of anything agreed to in the present JD or in any similar subsequent Joint Statements and meetings shall constitute a basis for affirming, supporting, or denying the position of the UK or the Argentine Republic regarding sovereignty over the same islands and surrounding maritime areas.¹³⁸⁾ Furthermore, the areas subject to the controversy on sovereignty and jurisdiction will not be extended in any way as a consequence of this JD or its implementation. And this Declaration does not apply to the maritime areas surrounding South Georgia and the South Sandwich Islands.¹³⁹⁾

The Joint Commission (JC) established by the Declaration is composed of a delegation from each of the two Governments, meeting twice a year. (para.3) It has now met six times since the JD was announced.¹⁴⁰⁾ (FCO Sources) The JC will have the following functions, inter alia, co-ordinating activities in the 6 (now 4) tranches which are designated Areas for Special Co-operation (para.4(b)), and promoting the development of hydrocarbon resources in the South West Atlantic maritime areas. (para.4(c)) In the former function, a sub-committee to the JC has been established which is subordinate to the JC. (para.4(b)) It meets regularly and is charged with: encouraging commercial activities in each tranche by means of joint ventures and consortia from both sides (para.4(b)(i)); seeking nominations from companies for each tranche, by offering appropriate terms for a challenging environment (para.4(b)(ii); making recommendations to

¹³⁷⁾ Paras.1(a) and 1(b), *ibid.*

¹³⁸⁾ Para.1(2), *ibid.*

¹³⁹⁾ Para.1(2), *ibid.*

¹⁴⁰⁾ Foreign and Commonwealth Office (UK) sources.

the two Governments on company proposals for development projects in each tranche, including the limits of the tranches (para.4(b)(iii)); seeking close co-ordination of all aspects of future operations, including the overall level of fees, royalties, charges and taxes, the harmonisation of timing, commercial terms and conditions, and compliance with recommended standards (para.4(b)(iv)); recommending on the basis of geological data known to both sides, additional tranches, either within the present sedimentary structure or in a further area to be agreed by the Governments on the recommendation of the Commission. (para.4(b)(v))

In the latter case, the JC promotes hydrocarbon development through co-operation between industry on both sides (para.4(c)(i)), receiving information from both sides and from operating companies on scientific research and commercial sea-bed activities, while respecting commercial confidentiality (para.4(c)(ii)), proposing to both sides co-ordinated research work by commercial undertakings (para.4(c)(iii)), and submitting to both sides recommendations for health, safety and monitoring standards for offshore activities. (para.4(c)(iv)) Both sides will take appropriate measures to ensure that companies keep the JC informed on the development of their activities. Other functions of the JC include: proposing further areas of special co-operation, on the basis of the geological data known to both sides and on terms similar to those contained in paragraph 4(b) above;¹⁴¹⁾ and considering and submitting recommendations to both Governments on future issues such as the possible need for unitisation of any discoveries in accordance with good oilfield practice, pipeline issues, and the efficient use of infrastructure. (para.4(e))

¹⁴¹⁾ Para.4(d), *ibid.*

Paragraph 6 provides that each Government will take the appropriate administrative measures for hydrocarbon development in the designated areas of special co-operation. They agreed that such measures regulating corporate activities in these areas would be subject to the formula on sovereignty provided in para.1. The Parties (sic) will create the conditions for substantial participation in the activities by companies from both sides. They will also communicate to each other relevant information relating to the conduct of the activities. Both Parties agreed to abstain from taking action or imposing conditions designed or tending to inhibit or frustrate the possibility of carrying out hydrocarbon development in the designated areas. In order to implement the different arrangements in the JD as an interdependent whole, the two Governments agreed to co-operate throughout the different stages of offshore activities undertaken by commercial operators, including the regime for the eventual abandonment of installations. (para.7) Although this is not provided in the Joint Declaration, it is apparently envisaged that companies will operate in the Areas for Special Co-operation on a joint venture basis with 50% licensed by the Falkland Islands Government (FIG) and 50% by Argentina. Apart from its functions in relation to petroleum development activities in the designated Areas of Special Co-operation, the JC also submits to both Governments recommendations and proposed standards for the protection of the marine environment of the South West Atlantic, taking into account relevant international conventions and recommendations of competent international organisations (para.4(a)) The two Governments also agreed to co-operate throughout the different stages of offshore activities undertaken by commercial operators, including the regime for the eventual abandonment of installations. (para.7) The arrangements regarding search and

rescue set out in the Joint Statements of 25.9.1991 and 12.7.1993 or any future arrangements between the Parties (sic) on the same subject will apply to offshore activities. Civilian helicopter traffic will be the subject of future discussion. (para.5)

Malaysia-Vietnam¹⁴²⁾

This MOU provides for the two Parties' nominated state oil companies to enter into an agreement between them for the exploration and exploitation of petroleum (art.3) in a Defined Area (art.1) of overlapping continental shelf claims between the two countries. Unlike the two previous Southeast Asian examples of joint development, namely the 1979/90 Malaysia-Thailand (13) and 1989 Australia-Indonesia agreements (12), this MOU does not provide for the establishment of any international institutional framework to implement the joint development concept. It merely requires the two explicitly nominated state oil companies to enter into a joint operating agreement for their petroleum development and extraction activities in the Defined Area. Article 4 provides that nothing in this MOU shall be interpreted so as in any way (a) to prejudice the position and claims of either party in relation to and over the Defined Area; and (b) without prejudice to the provisions of art.3, to confer any rights, interests or privileges to any person not being a party thereto in respect of any petroleum resources in the Defined Area.

Art.3 provides that both Parties agree to nominate Petronas and

¹⁴²⁾ Full title: 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. Signed: 5.6.1992; in force: 4.6.1993. Source: Charney & Alexander (ed.), *International Maritime Boundaries*, Vol.III (1998) 2335 – 44.

Petrovietnam, respectively, to undertake petroleum exploration and exploitation in the Defined Area. (art.3(a)). They also agreed to require Petronas and Petrovietnam to enter into a commercial arrangement as between them for petroleum development in the Defined Area, subject to the approval of the two Parties. (art.3(b)) Both Parties also agreed that every effort shall be made to ensure the early petroleum exploration in the Defined Area. (art.3(c)) Although there is no environmental provision in this MOU, both Parties agreed to ensure that petroleum development in the Defined Area shall be conducted with due regard to the protection of the marine environment. (pers. comm., Ministry of Foreign Affairs, Malaysia) Any dispute arising out of the interpretation or implementation of the provisions of this MOU shall be settled peacefully by consultation or negotiation between both Parties. (art.6) Where a petroleum field is located partly in the Defined Area and partly outside that area in the continental shelf of Malaysia or Vietnam, as the case may be, both Parties shall arrive at mutually acceptable terms for petroleum development therein. (art.2(2)) In the exchange of Diplomatic Notes bringing the MOU into force on 4.6.1993 (art.7), it was specified that the duration of the MOU is for 40 years, subject to any extensions or reviews, as both Parties may agree. (art.5) Although it is not provided in the MOU, both Parties also agreed that the validity of concessions or licences issued and arrangements made by either Party pertaining to petroleum development shall not be adversely affected.¹⁴³⁾

¹⁴³⁾ Pers. comm., Ministry of Foreign Affairs, Malaysia.

Tunisia-Libya¹⁴⁴⁾

JDA Model: I/II. This Agreement was adopted as a specific part of the broader, 1988 Djerba Agreement on the economic and social merger of Libya and Tunisia. Under this Agreement, Tunisia receives 10% of the income from production in the El Bouri (later re-named: 7th November) oilfields in the Libyan continental shelf, which corresponds to the south-east part of a joint development zone agreed in August, 1988 in the Gulf of Gabes. This earlier agreement appears to be in two parts, divided by a boundary line running close to that indicated by the ICJ in the Tunisia-Libya Continental Shelf Case (1982). In a later, 1989 Agreement,¹⁴⁵⁾ a joint Tunisia-Libya exploration company was established in Djerba (or Jarba), Tunisia as an enterprise to explore the offshore gas field lying in the north-west part of the joint exploration zone. This further, 1989 agreement provided, inter alia, as follows: that a company was to be established for the joint exploration, exploitation and oil services.¹⁴⁶⁾ The objectives of the company are, inter alia, the joint exploration and exploitation of the oil and gas resources for the sea areas in both countries.¹⁴⁷⁾ Both States agreed to grant the company a licence to explore and develop the designated sea areas on both sides of the demarcation line of the continental shelf between them.¹⁴⁸⁾ The above license was granted on the basis that all oil and gas resources

¹⁴⁴⁾ Full title: Agreement between President Ben Ali of Tunisia and Colonel Khaddafi of the Libyan Arab Republic Relating to the El Bouri Field. Signed: 4.9.1988.

¹⁴⁵⁾ Full title: An Agreement between the Arab Socialist Republic of Libya and the Republic of Tunisia to Establish a Joint Company for Shared Consumption, Exploitation and Oil Services, adopted: 22 August, 1989.

¹⁴⁶⁾ Article One of this 1989 Agreement, *ibid.*

¹⁴⁷⁾ Article Two, *ibid.*

¹⁴⁸⁾ Article Three, *ibid.*

will be divided equally between the two countries.¹⁴⁹⁾

Joint Development Model III: Institutional framework established to facilitate co-operation in the exploitation of shared deposits.

The third joint development model is the most complex and institutionalized option, requiring a much higher level of co-operation, and consequently reduced national autonomy, than the previous two models. This model consists of an agreement between the interested States establishing an international joint authority or commission with legal personality, licensing and regulatory powers, and a comprehensive mandate to manage the development of the designated zone on behalf of the States. These joint authorities have been described as 'strong' institutions, with extensive supervisory and decision-making powers and wide-ranging functions, as opposed to the 'weak' liaison or consultative-type bodies under the direction of the parties established by a number of agreements incorporating the second joint development model, described above.¹⁵⁰⁾

Sudan-Saudi Arabia¹⁵¹⁾

This is the earliest example of a Model III-type Joint Development agreement, providing for a supranational institution: *i.e.*, the Joint Commission, with legal personality and extensive powers to implement its provisions. However, there is no explicit provision for delineating the Common Zone. Instead this area is defined by default. Both

¹⁴⁹⁾ Article Four, *ibid.*

¹⁵⁰⁾ Miyoshi (1999) *op. cit.*, at 43–44.

¹⁵¹⁾ Full title: Agreement between Sudan and Saudi Arabia relating to the Joint Exploitation of the Natural Resources of the Sea-bed and Sub-soil of the Red Sea in the Common Zone. Signed: 16.5.1974, in force: 26.8.1974. Source: *New Directions in the Law of the Sea*, Vol.V, 393–7.

Parties explicitly recognise that they have no rights over the sea-bed adjacent to the other Party's coastline within the 1000 metre (m) isobath, but each retain exclusive sovereign rights over the sea-bed area adjacent to their own respective coastlines in the Red Sea up to the 1000m isobath.¹⁵²⁾ In the sea-bed area lying between the two areas defined above, designated as the Common Zone, the Parties agree that they have equally exclusive sovereign rights over the natural resources therein.¹⁵³⁾ Natural resources are defined here as only the non-living substances, including hydrocarbon and mineral resources.¹⁵⁴⁾ This Agreement was at least in part a means to head-off claims by a US firm that the mineral-rich brines in the Red Sea deeps were not subject to the national sovereignty of any State and therefore susceptible to exploitation without their approval or consent.¹⁵⁵⁾

A Joint Commission was established as a body corporate in both Parties¹⁵⁶⁾ to ensure the prompt and efficient exploitation of the natural resources therein.¹⁵⁷⁾ The Commission is charged with: (a) surveying and delimiting the Common Zone; (b) undertaking studies on the exploration and exploitation of the Zone; (c) encouraging specialised bodies (*sic*) to explore in the Zone; and most importantly, (d) considering and deciding on license/ concession applications. It also expedites (e) and supervises (f) the production stage; and has regulatory powers (g) necessary for its functions. It consists of an equal number of representatives from each Party and each side is headed by the competent Minister.¹⁵⁸⁾ Funding for the Commission

¹⁵²⁾ Arts.III and IV.

¹⁵³⁾ Arts.V and VI, *ibid.*

¹⁵⁴⁾ Art.I(2), *ibid.*

¹⁵⁵⁾ A.A. El-Hakim (1979) *op. cit.*, at 183-4.

¹⁵⁶⁾ Art.VIII, *ibid.*

¹⁵⁷⁾ Art.VII, *ibid.*

was initially provided by Saudi Arabia but shall be recovered from production returns of the Common Zone in a manner agreed to by both Parties.¹⁵⁹⁾ The Commission met for the first time on 10 May, 1975 in Khartoum (Sudan) where it decided in accordance with Article XI to locate its secretariat in Jeddah.¹⁶⁰⁾ It also decided to proceed with a number of projects, including studies of the deep sea in the common zone, geological studies of the Red Sea sedimentary basin, aerial magnetometric surveys of the common zone, and an investigation of the feasibility of exploiting the mineral deposits in the common zone.¹⁶¹⁾

Where Sudan had already licensed its national minerals company (Sudanese Minerals Ltd.) and a German company (Preussag) to explore the Common Zone,¹⁶²⁾ the Parties agreed that the Joint Commission would decide on the matter in such a way as to preserve Sudanese rights within the context of the present agreement.¹⁶³⁾ It was later reported that Preussag signed a US\$20 million contract with the Joint Commission for the development of mineral deposits in the common zone.¹⁶⁴⁾ Any dispute shall be settled by amicable means initially,. Should this fail, it will be submitted to the ICJ, both Parties accepting the compulsory jurisdiction in this respect. Either Party can also request interim measures from the ICJ.¹⁶⁵⁾ The Parties

¹⁵⁸⁾ Art.IX, *ibid.*

¹⁵⁹⁾ Art.XII, *ibid.*

¹⁶⁰⁾ El-Hakim (1979) *op. cit.*, at 187.

¹⁶¹⁾ See: *Middle East Economic Survey* (Beirut) No.30, 16 May, 1975 at 5, cited in El-Hakim (1979) *op. cit.*, at 187, n.38.

¹⁶²⁾ Awarded on 15 September, 1973.

¹⁶³⁾ Art.XIII, *op. cit.*

¹⁶⁴⁾ See: *Middle East Economic Digest* (London), 21 May, 1976 at 126, cited in El-Hakim (1979) *op. cit.*, at 187, n.39.

¹⁶⁵⁾ Art.XVI, *ibid.*

undertake to protect their sovereign rights and defend them (*sic*) against third parties. But the application of this agreement shall not affect the high seas legal status of the superjacent waters over the Common Zone, nor obstruct navigation.¹⁶⁶⁾

Australia-Indonesia¹⁶⁷⁾

This Agreement is probably the most sophisticated joint development regime negotiated so far. Both the geographical division and institutional design of this JDA are complex. Petroleum resource exploration and exploitation in Area A is subject to joint control and revenue sharing. (art.2(2)(a)) It will be administered by a Ministerial Council (Part III: arts 5 & 6) and Joint Development Authority (Part IV: arts. 7-11) on the basis of production-sharing contracts. (Annex C) The Zone of Co-operation is divided into three areas: A, B, & C, that are subject to three different jurisdictional frameworks. (art.2) Areas B & C are situated closest to the Australian and Indonesian coastlines, respectively. These two Areas are subject to the jurisdiction of the Party closest to them. Thus, in Area B, Australian jurisdiction and laws prevail, subject to the provision of 10% of gross tax revenues from petroleum resource exploitation in this Area to Indonesia. (art.4(1)) A similar arrangement occurs in respect of tax revenues from the exploitation of Area C, by the Indonesians to the Australians.(art.4(2)) Finally, Area A which lies in between the other two Areas is subject to a truly joint development arrangement whereby the rights and responsibilities of the two Parties in relation

¹⁶⁶⁾ Art.XV, *ibid*.

¹⁶⁷⁾ Full title: Treaty between Australia and the Republic of Indonesia on the Zone of Co-operation in an Area between the Indonesian Province of East Timor and Northern Australia. Signed: 11.12.1989; in force: ??..??..?? Source: ?

to exploration and exploitation of the petroleum resources therein shall be exercised by the Ministerial Council and Joint Authority on the basis of equal shares.(arts.2(2)(a) & 3)

In the exercise of criminal jurisdiction, a national or permanent resident of a State Party shall be subject to the criminal law of that State for acts or omissions in Area A connected with or arising out of the exploration and exploitation of petroleum resources, provided that a permanent resident of one State Party who is a national of the other Party shall be subject to the criminal law of the latter State. (art.27(1)) A national of a third State, not being permanent resident of either Party, shall be subject to the criminal law of both State Parties in respect of acts or omissions in Area A, subject to a double-jeopardy clause. (art.27(2)(a)) In such a case the two Parties shall consult each other as to which criminal law is to be applied, taking into account the nationality of the victim and the interests of the State Party most affected by the alleged offence. (art.27(2)(b)) All the above provisions are subject to the rule that the criminal law of the flag State shall apply in relation to acts or omissions on board vessels including seismic or drill vessels in, or aircraft in flight over, Area A.¹⁶⁸⁾

The Parties shall assist and co-operate, through agreements if appropriate, for the purposes of criminal law enforcement, including the obtaining of evidence and information. (art.27(4)(a)) They also recognise the interest of the other Party where the alleged victim is a national of the other Party and shall keep this Party informed to the extent permitted by the law. The Parties may arrange for officials of one Party to assist in enforcing the criminal law of the

¹⁶⁸⁾ Art.27(3), *ibid.*

other Party. Where such assistance involves detention of a person who under art.27(1) is subject to the jurisdiction of the other Party, then such detention can only continue until it is practicable to hand the person over to the relevant officials of that other Party. (art.27(5))

The sophisticated nature of this Agreement is evident from the complex institutional framework laid down for the joint development of petroleum resources in Area A. Part III established a Ministerial Council (MC) for the Zone of Co-operation (art.5(1)), consisting of an equal number of Ministers designated by each Party (art.5(2)), meeting annually or as often as required (art.5(3)), alternately in Indonesia or Australia and chaired alternately by a Minister nominated by each Party. (art.5(4)). Decisions of the Council shall be taken by consensus and it may establish procedures for taking decisions out of session. (art.5(5)) The Ministerial Council (MC) has overall responsibility for all matters relating to the development of the petroleum resources in Area A of the Zone of Co-operation. (art.6(1)) Its functions include, inter alia, giving directions to the Joint Authority (art.6(1)(a)); amending the Petroleum Mining Code to facilitate petroleum development in Area A (art.6(1)(b)); modifying the Model Production Sharing Contract (art.6(1)(c)); approving the agreement, termination, and variation of production sharing contracts between the Joint Authority (JA) and firms (art.6(1)(d), (e) & (f)); approving JA petroleum sales (h); approving the distribution of revenues from production sharing contracts in Area A between Australia and Indonesia (i); settling disputes in the JA through consultation (k); approving rules, regulations and procedures for the effective functioning of the Joint Authority, including staff regulations (m); reviewing the Treaty operation and making recommendations to the Parties that

the Council considers necessary for Treaty amendment (n); appointing the Executive Directors of the JA (o); inspecting and auditing the JA's accounts (p); considering and adopting the annual report of the JA (r); and finally, reviewing distribution among Indonesia, Australia and third countries, of expenditure on petroleum operations in Area A. The MC shall also ensure optimum commercial utilization of Area A's petroleum resources consistent with good oilfield and sound environmental practice. (art.6(2))

Part IV established a Joint Authority (art.7(1)), that has juridical personality and such legal capacities under the two Parties' laws as necessary to exercise its powers and perform its functions, in particular, capacity to contract, acquire and dispose property, to institute and be party to legal proceedings. (art.7(2)) The JA is responsible to the MC. (art.7(3)) The Joint Authority shall consist of equal numbers of Executive Directors appointed by the MC, nominated by each Party (s.9(1)(a)); three Directorates responsible to the executive Directors: a Technical Directorate (s.9(1)(b)(i)); a Financial Directorate (s.9(1)(b)(ii)); and a Legal Directorate (art.9(1)(b)(iii)); and a Corporate Services Directorate (art.9(1)(c)). Of the 4 Directors heading the Directorates, the Executive Directors shall appoint two from each Party. (art.9(2)) The Executive Directors and the 4 Directors shall constitute the Executive Board. (art.9(4)) The Executive Directors and personnel of the JA shall have no financial interest in any activity relating to exploration for and exploitation of petroleum resources in Area A. (art.9(5)) Decisions of the Executive Directors shall be reached by consensus, failing this by reference to the MC. (art.7(4)) The Joint Authority has its head office in Jakarta and an office in Australia, each of which shall be headed by an Executive Director. (art.7(5))

The Joint Authority, subject to directions from the MC, is responsible for the management of petroleum exploration and exploitation activities in area A, in accordance with the treaty, the Petroleum Mining Code and production sharing contracts (PSCs). (art.8) These management functions include, inter alia: dividing area A into contract areas; commissioning environmental investigations prior to contract areas being advertised; making recommendations to the MC on production-sharing contract applications (art.8(a)); entering into production sharing contracts with companies, subject to MC approval; supervising the contractors pursuant to the requirements of the Petroleum Mining Code (art.8(b)); terminating and transferring contractors (art.8(c), (d) & (e)); collecting and with the approval of the MC distributing the proceeds of the JA's share of the petroleum production from contracts awarded in Area A between the two Parties (art.8(f)); preparing annual accounts of the JA for submission to the MC art.8(g)); controlling movements into, within and out of Area A vessels, aircraft, structures and other petroleum exploration and extraction equipment; ,subject to Art.23, authorising the entry of workers (art.8(h)); establishing safety zones (art.8(i)); issuing regulations under the Petroleum Mining Code on all matters related to the supervision and control of health and safety, environmental protection and work practices (art.8(j)); making recommendations to the MC to amend the PSCs (art.8(k)); requesting action by the Parties for search and rescue and anti-terrorist operations in Area A (art.8(l)(i) & (ii)); requesting assistance with pollution prevention measures from the Parties (art.8(m)); preparing annual reports to the MC (art.8(n)); with the approval of the MC, varying the terms of the PSCs (art.8(o) & (q)); with the approval of the MC, marketing of petroleum production (art.8(r)); inspecting and auditing the contractors' accounts (art.8(s));

and such other functions as may be conferred on it by the MC (art.8(u)).

In Area A, the Parties shall co-operate to prevent and minimise pollution of the marine environment arising from the exploration and exploitation of petroleum, in particular by providing assistance to the JA as may be requested pursuant to art.8(m) and where pollution in Area A spreads beyond it. (art.18(1)(a) & (b)) Pursuant to art.8(j), the JA shall issue regulations for marine environmental protection in Area A and establish an oil spill contingency plan. (art.18(2)) Contractors shall be liable for damage or expenses incurred as a result of marine environmental pollution arising out of petroleum operations in Area A in accordance with contractual arrangements with the Joint Authority and the law of the State in which a claim in respect of such damage or expenses is brought. (art.19) Any dispute arising between the Parties concerning the interpretation or application of this Treaty shall be resolved by consultation or negotiation between the Parties. (art.30(1)) Each production sharing contract entered into by the Joint Authority shall contain provisions to the effect that any dispute concerning the interpretation or application of such contract shall be submitted to a specified form of binding commercial arbitration. The Parties shall facilitate the enforcement in their respective courts of arbitral awards made pursuant to such arbitration. (art.30(2))

In the event that the Treaty ceases to be in force due to the conclusion of a permanent continental shelf boundary and that there are in existence immediately prior to the date the Treaty ceases to be in force, production sharing contracts with the Joint Authority, these contracts shall continue to apply to each State Party or some other person nominated by the State Party, in place of the JA, in so

far as the contract is to be performed in the territorial jurisdiction of each State Party, having regard to the agreed boundary delimitation. In such cases, each Party shall apply to contractors within its territorial jurisdiction a regime no more onerous than that set out in this Treaty and the relevant production sharing contract. (art.34(1)(a) & (b)) The two Parties shall at the time of concluding the permanent boundary delimitation make arrangements to give effect to art.34(1).

Australia – East Timor

After almost twenty-five years under Indonesian rule between 1975 and 1999,¹⁶⁹⁾ East Timor achieved full Statehood in 2002. Its initial concerns as a newly independent state are political and economic stability.¹⁷⁰⁾ The current UN presence in East Timor should help ensure that the former concern is addressed so that the transition from a war torn non self- governing territory to a democratically elected government proceeds as smoothly as possible.¹⁷¹⁾ The latter concern over East Timor's future economic stability is presently tied to the imminent revenues derived from the new joint development arrangement, namely the 2001 Timor Sea Arrangement.

On 5 July 2001 the UN Transitional Administration of East Timor (UNTAET)¹⁷²⁾ and Australia culminated sixteen months of negotiation

¹⁶⁹⁾ For a critical account of the failure of international law to fully address the Indonesian annexation of East Timor, see: Catriona Drew, 'The East Timor Story: International Law on Trial', *European Journal of International Law*, Vol.12, No.4 (September, 2001) 651-84.

¹⁷⁰⁾ For a recent account of East Timor's rocky road to full independence and statehood, see: Anthony L. Smith, 'East Timor's Difficult Transition to Independence', in Daljit Singh and Nick J. Freeman (eds.), *Regional Outlook: Southeast Asia 2001-2002*, Singapore: Institute of Southeast Asian Studies (2001)

¹⁷¹⁾ For an analysis of the legal authority for the UN presence in East Timor, see: Michael J. Matheson, 'United Nations Governance of Post Conflict Societies', *American Journal of International Law*, Vol.95, No.1 (January, 2001) 76-85, at 81-3.

¹⁷²⁾ The UNTAET was established by UN Security Council Resolution 1272 (1999) adopted on 25

s¹⁷³⁾ with the adoption of a Memorandum of Understanding (MOU) providing for a new Timor Sea Arrangement.¹⁷⁴⁾ This Arrangement is to be adopted by Australia and East Timor upon East Timor's full independence. This new joint development arrangement will therefore in due course replace the currently applicable 2000 MOU also agreed between the UNTAET and Australia,¹⁷⁵⁾ which in turn continues the terms of the 1989 Timor Gap Zone of Co-operation Treaty¹⁷⁶⁾ agreed

October, 1999. S/RES/1272 (1999) see: 38 ILM (2000) at 240. UNTAET is endowed with overall responsibility for the administration of East Timor and is empowered to exercise all legislative and executive authority, including the administration of justice. (para.1)

¹⁷³⁾ Negotiations between Australia and the UNTAET, along with representation from the East Timor Transitional Administration (ETTA), began in March, 2000.

¹⁷⁴⁾ Memorandum of Understanding between Australia and the UNTAET, 2001 incorporating the Timor Sea Arrangement as Attachment 'A'. Adopted on 5 July, 2001. Source: Department of Foreign Affairs and Trade (DFAT) Australia. See: DFAT website: <http://www.dfat.gov.au>. The MOU also includes Annexes A to F. Under Article 19(a), the 'Arrangement' also means these Annexes and any others subsequently agreed between East Timor and Australia. The Arrangement will enter into force 30 days after East Timor and Australia have notified each other in writing that their respective requirements for its entry into force have been fulfilled. (Article 25)

¹⁷⁵⁾ Full Title: Memorandum of Understanding between the Government of Australia and the UNTAET, acting on behalf of East Timor, on Arrangements Relating to the Timor Gap Treaty, 10 February 2000. Adopted in an Exchange of Notes constituting an Agreement between the Government of Australia and UNTAET concerning the continued operation of the treaty between Australia and the Republic of Indonesia on the Zone of Co-operation between the Indonesian Province of East Timor and Northern Australia of 11 December 1989. Performed at Dili, 10 February 2000. Entry into force: 10 February, 2000 but with effect from 25 October 1999. This arrangement was brought into force by an exchange of Diplomatic Notes on 10 February, 2000 that retrospectively applied the provisional agreement as from 25 October 1999, *i.e.*, the date when UNTAET took over government functions on behalf of East Timor. See: Australian Treaty Series 2000, No.9, accessed at the following website: <<http://www.auslii.edu.au/au/other/dfat/treaties/2000/9.html>> In April, 2000 Australia approved legislation giving effect to the above treaty with UNTAET. See: Timor Gap Treaty (Transitional Arrangements) Act 2000.

¹⁷⁶⁾ Full title: Treaty between the Australia and the Republic of Indonesia on the Zone of Co-operation in an Area between the Indonesian Province of East Timor and Northern Australia, signed (in the airspace) over the Timor Gap on 11 December, 1989; entered into force on 9 February, 1991. (hereinafter: the Timor Gap treaty) Sources: 29 ILM 469 (1990) and V. Prescott, 'Australia-Indonesia (Timor Gap)', Report No. 6-2(5), in Jonathan I. Charney & Lewis M. Alexander (eds.), *International Maritime Boundaries*, Vol. II, The Hague: Martinus Nijhoff (1993) at 1245-1328. Also in H. Fox (ed.): *Joint Development of Offshore Oil and Gas*, Vol. II, London: The

between Indonesia and Australia. This is indeed a significant achievement in the prospects for future joint development of the petroleum resources in the Timor Gap. The adoption of the 2001 MOU, incorporating the new Timor Sea Arrangement, represents the application of a modified version of the joint development principle enshrined in the earlier Timor Gap treaty in a manner which should prove much more favourable to the imminent East Timor state. In particular, government revenues from the initial upstream activity in the designated Joint Petroleum Development Area (JPDA) will be shared on a 90:10 basis in favour of the new East Timor state, rather than the present 50:50 split initially provided by the 1989 Timor Gap treaty and continued under the present 2000 MOU.

This 2001 Timor Sea Arrangement will take the place of the current arrangement between the UNTAET and Australia in their 2000 MOU continuing the terms of the joint development regime first established by the 1989 Timor Gap treaty. This bilateral treaty was initially agreed in 1989 between Australia and Indonesia, which controlled East Timor from 1975 to 1999. The 1989 Timor Gap treaty gave each side a 50:50 share of any revenues generated in Area A of the Zone of Co-operation,¹⁷⁷⁾ now re-named as the Joint Petroleum Development Area (JPDA) under the 2001 Arrangement.¹⁷⁸⁾ This equal division of revenues was continued under the 2000 MOU between the UNTAET and Australia noted above. However, the proposed new 2001 Arrangement is much more advantageous to a newly-independent

British Institute of International and Comparative Law (1990), Part III, 235–51. For an early analysis of the background and main features of the Treaty, see: V. L. Forbes and F. M. Auburn, 'The Timor Gap Zone of Co-operation', Boundary Briefing, No.9, Durham: IBRU (1991)

¹⁷⁷⁾ Article 2(2)(a) of the 1989 Treaty, op. cit.

¹⁷⁸⁾ See: Articles 1(g) and 3 as well as Annex B of the 2001 Arrangement, op. cit.

East Timor than the previous 1989 and 2000 agreements as the revenue split will be 90:10 in favour of East Timor. Significantly, despite the lopsided nature of the proposed new government revenue division, the joint development principle remains applicable, along with a joint institutional framework for implementing the new agreement.

The Uncertain Legal Status of the New Timor Sea Arrangement

At the outset of this section of the analysis, it is important to note the uncertain legal status of this arrangement under international law in respect of a future, newly independent East Timor state. The present 2001 Memorandum of Understanding, like the 1989 Timor Gap treaty and the 2000 MOU before it (both discussed in the article above), will not necessarily be legally enforceable against the new East Timor state that will soon rise to take its place in the international community of states. This is because none of these treaties have directly involved the fledgling East Timor state itself. The Timor Gap treaty 1989 was agreed between Australia and Indonesia, and the two later agreements in 2000 and 2001 were between Australia and the UN Transitional Administration in East Timor (UNTAET). Although the recent 2001 MOU purports to apply to a newly-independent East Timor state, this is belied by the MOU itself when it provides that the Timor Sea Arrangement forming Attachment 'A' to the MOU 'is suitable for adoption as an agreement between Australia and East Timor upon East Timor's independence.'¹⁷⁹⁾

The legal implication here is that the MOU and the new

¹⁷⁹⁾ *Ibid.*

Arrangement it embodies cannot of themselves be binding upon a newly-independent East Timor state. This view is confirmed in the Australian government's own joint media release on the eve of the adoption of the 2001 MOU when it stated that 'the terms of the (new) Arrangement are to be incorporated into a new treaty upon East Timor's independence, replacing the existing agreement.' As a newly-independent state, East Timor will therefore be fully entitled to argue for the application of the 'clean slate' rule of state succession in order to deny the future application of the Timor Sea Arrangement and indeed even the 2000 and 2001 MOUs between Australia and the UNTAET.

Balanced against this view are the arguments made elsewhere concerning the possible succession of a new East Timor state to the governing principles of the 1989 Timor Gap treaty, if not the treaty itself.¹⁸⁰⁾ These arguments may also be utilized for the succession of a new East Timor state to both the 2000 and 2001 agreements between the UNTAET and Australia. These relate mainly to the arguably territorial nature of the arrangements, which constitute an almost uniformly accepted exception to the 'clean slate' rule for state succession among newly independent states. Moreover, the 2001 Arrangement has no equivalent agreement which explicitly provides that the conclusion of this agreement is without prejudice to the position of the future government of an independent East Timor with regard to the 1989 Treaty. However, this argument is now difficult to sustain in legal, policy and factual terms. It is increasingly clear that neither the UNTAET, nor the East Timorese representatives, nor even the Australians themselves, regard these joint development agreements

¹⁸⁰⁾ See: Ong, *NYIL* (2001) *op. cit.*

as continuing to be applicable upon a future East Timor state under the state succession doctrine.

A further legal uncertainty arising from adoption of the 2001 MOU embodying the Timor Sea Arrangement concerns the timing of its initiation. The Australian joint media release suggests that the revenues from the petroleum development in the designated Area will only flow from 2004,¹⁸¹⁾ although East Timor itself is widely expected to achieve independence and statehood within the next year or so (2002).¹⁸²⁾ Therefore, in the interim period before the 2001 Arrangement is formally adopted by the new East Timor state, it should be presumed that the 2000 MOU providing for the *status quo* is to be applied, namely the 1989 Timor Gap treaty regime with equal division of the upstream petroleum revenues.

A Comparative Analysis of the 1989 and 2001 Joint Development Regimes in the Timor Sea

In this section, we will examine the joint development regime that the new Timor Sea Arrangement of 2001 purports to establish in comparison with the previous regime established by the 1989 treaty and continued in its application by the 2000 agreement. The Timor Gap treaty, along with its 4 annexes,¹⁸³⁾ is probably one of the most

¹⁸¹⁾ Australian Joint Media Release, op. cit.

¹⁸²⁾ The first post-independence East Timor elections for a Constituent Assembly took place on 30 August, 2001. For latest news on East Timor's progress towards full independence and statehood, see: <http://www.un.org/peace/etimor/news>.

¹⁸³⁾ Under art. 1(o), Annexes A, B, C, and D are included within the meaning of the 'Treaty'. Annex A contains the designation and description including maps and coordinates of the areas A, B and C comprising the Zone of Cooperation and is incorporated into the Treaty by Article 1. Annex B contains the Petroleum Mining Code for Area A of the Zone of Cooperation. This Code governs operational activities relating to exploration and exploitation of the petroleum resources in Area A subject to the power of the Ministerial Council under Article 6.1(b) of the Treaty to amend it (Article 1.1(i)) Annex C to the treaty contains the Model Production Sharing Contract between the Joint

sophisticated joint development regimes agreed to date.¹⁸⁴⁾ Both the geographical division and institutional design are complex. As Onorato and Valencia note, ‘the treaty goes far beyond any previous arrangements for joint development in that it creates, in detail, a comprehensive, interlocking legislative, contractual and fiscal regime to govern joint development in the chosen area ... never before have contracting states purposefully negotiated in advance a complete and area-specific regime, solely for the purposes of setting the total parameters of their intended joint endeavor.’¹⁸⁵⁾

We can now proceed to compare the main features of this treaty with their equivalent provisions in the new joint development regime to be established by the 2001 Arrangement. In passing we should briefly note how far the present Arrangement incorporates many of the ‘classic’ features normally included in joint development

Authority and contractors on the basis of which production sharing contracts for Area A are to be concluded subject to modification by the Ministerial Council under Article 6.1(c) of the treaty (Articles 1.1(g)).

¹⁸⁴⁾ For an early analysis of its provisions see: Anthony Bergin, ‘The Australian–Indonesian Timor Gap Maritime Boundary Agreement’, *International Journal of Estuarine (now Marine) and Coastal Law*, Vol.5, No.4 (November, 1990) 383–93. It should be noted however that unique as the Timor Gap treaty is, it is but one of three such joint development arrangements in Southeast Asian waters alone. The other two are: The 1979 Memorandum of Understanding between Thailand and Malaysia establishing a Joint Authority for the exploitation of the resources of the sea-bed in a defined area of the continental shelf of the two countries in the Gulf of Thailand, followed by the 1990 Agreement between the same two countries on the Constitution and other matters relating to the establishment of the Malaysia–Thailand Joint Authority, both texts in David Ong, ‘Thailand/Malaysia: The Joint Development Agreement 1990’, *Current Legal Developments*, *International Journal of Estuarine (now Marine) and Coastal Law*, Vol. 6, No. 1, February 1991, pp. 57–72. Also, the 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, in Ted L. McDorman, ‘Malaysia–Vietnam’, Report No. 5–19, in Charney & Alexander (eds.) *op. cit.*, Vol.3 at (1998) 2335, at 2341.

¹⁸⁵⁾ William T. Onorato and Mark J. Valencia, ‘International Cooperation for Petroleum Development: the Timor Gap Treaty’, *ICSID Review – Foreign Investment Law Journal*, Vol.5, No.1 (Spring, 1990) 1–29, at 26.

agreements. According to Onorato and Valencia, the ‘classic’ legal format for joint development includes: (i) a treaty designating the geographical area subject to the joint development regime, (ii) the establishment of some form of international joint body, composed of equal representatives from both parties, (iii) the grant of exploration and exploitation rights over the designated joint development area, either by the parties or the established joint body, and (iv) the nomination by the individual rights holders of a single operator to exploit the deposits in the designated area.¹⁸⁶⁾ We therefore begin this analysis of the 2001 Arrangement with the designated Joint Petroleum Development Area (JPDA), before examining the main aspects of the proposed new joint development regime, namely the non-prejudice clause, institutional framework, jurisdiction allocation, tax regime, dispute settlement mechanism and environmental protection clause.

1. The designated joint development area

The latitude and longitude co-ordinates of the designated Joint Petroleum Development Area (JPDA) established by article 3 of the new Timor Sea Arrangement are provided in Annex A to the 2001 MOU. The JPDA covers precisely the same area as Area A of the 1989 Zone of Co-operation treaty. Petroleum exploitation in this Area was previously subject to a 50:50 split in the government revenues derived from the upstream petroleum development activities undertaken there. The new division of upstream revenues incorporates a major distributional realignment by providing that the future East Timor state will receive 90% of the proceeds with Australia’s share

¹⁸⁶⁾ Onorato & Valencia (2001) *op. cit.* at 63.

reduced to only 10%. (art.4(a)) East Timor's share of the revenues is estimated to be more than A\$7 billion (US\$4 - US\$5 billion) over the 20 years from 2004. Australia stands to gain about A\$1billion in direct revenue over that period. On the other hand, the downstream benefits that will accrue to Australia are potentially highly lucrative, as virtually all the oil and gas found is to be refined or otherwise industrially processed in Darwin, Australia.¹⁸⁷⁾ Australia is therefore likely to make more than four or five times the amount of its direct revenues from refining Timor Sea oil and gas as the new East Timor state is not expected to build the facilities to do so in the near future.¹⁸⁸⁾

2. The without prejudice clause

This is a standard clause incorporated in most joint development agreements of this kind, involving an as yet undelimited area of overlapping continental shelf claims. Its main purpose here under article 2(b) is to ensure that neither the provisions of the new Arrangement, nor any acts undertaken during the time it is in force, can be interpreted as prejudicing or affecting either party's legal positions and rights to the seabed concerned.

3. The joint development principle

It is imperative to note the extent to which the joint development

¹⁸⁷⁾ Australian Joint Media Release, *op. cit.* In a recent interview with a regional news magazine, Horta confirmed that the pipeline will go down to Darwin and create downstream jobs in Australia. Moreover, as government revenues will only be collected at the end of the pipeline, Australia has agreed to compensate the East Timorese to the tune of US\$8 million each year for the delay. See: 'Interview: Jose Ramos Horta - Plans for Peace and Prosperity', *Far East Economic Review*, 13 September 2001, 21-22, at 21.

¹⁸⁸⁾ See: John Aglionby, 'East Timor signs lucrative oil deal', *The Guardian* (UK) newspaper, 6 July 2001, at 14.

principle underlies overall regime despite the uneven 90:10 division of revenues generated by the upstream activities in the Area. It manifests itself most vividly in the joint development of common deposits found in the designated JPDA. For example, article 3(b) provides for the joint control, management, exploration, development and exploitation of the petroleum resources in the designated JPDA. Moreover, article 7(a) provides that the two parties shall negotiate an agreed Petroleum Mining Code, which shall govern the exploration, development and exploitation of petroleum within the JPDA, as well as the export of petroleum from the JPDA. Thus, the joint development principle itself is clearly applied by the 2001 Arrangement. However, it is not applied equally in respect of its division of government revenues, based as it is on a 90/10 split in the revenues generated by the straightforward extraction of the petroleum resources from the seabed. On the other hand, the downstream benefits that will accrue to Australia are also highly lucrative, as virtually all the resources found is to be refined or otherwise industrially processed in Darwin, Australia.¹⁸⁹⁾

The joint development principle also manifests itself in the provision for the unitisation of deposits found to straddle the designated joint development area, in the sense that any petroleum deposit extending across the JPDA boundary is treated as a single entity for management and development purposes, under article 9(a). Article 9(b) further provides that the two parties shall reach an agreement on the effective exploitation and equitable sharing of the benefits from such unitisations. In this sense the present agreement continues the unitisation principle applied by the earlier 1989 treaty regime for

¹⁸⁹⁾ Australian Joint Media Release, *op. cit.*

deposits found to extend across any of the boundary lines of Area A of the Zone of Co-operation, corresponding to the JPDA of the present Arrangement.

Pursuant to article 9(b) of the Timor Sea Arrangement, Annex E of the Arrangement contains an unitisation agreement for the 'Greater Sunrise' deposits on the basis that 20% of these deposits lie within the JPDA. Thus, 20% of production is attributed to the JPDA and the remaining 80% to Australia. It should be noted that the Greater Sunrise unitisation agreement is, like the present Timor Sea Arrangement itself, without prejudice to a permanent seabed delimitation between the two parties. (Annex E, para. (c)) Indeed, in the event of such permanent delimitation, the parties will reconsider the terms of the unitisation agreement. (Annex E, para. (d)) The location of the Greater Sunrise deposits may raise difficulties for unitisation should the Indonesian authorities demand a trilateral re-negotiation of the lateral boundaries of the JPDA, now including East Timor as well as Indonesia and Australia.¹⁹⁰⁾

4. Previously granted interests

The legal status of previously granted interests or concessions is a recurring problem in negotiations towards a joint development regime.¹⁹¹⁾ Rival overlapping continental shelf claims often result in the unilateral granting of concessions as an exercise of the sovereign rights the competing states purport to assert over the disputed sea bed areas. Where these overlapping claims occur, at least two

¹⁹⁰⁾ See: Horta Interview (2001) *op. cit.*, at 22.

¹⁹¹⁾ See: Ian Townsend-Gault, 'The impact of a joint development zone on previously granted interests,' in Hazel Fox (ed.) *Joint Development of Offshore Oil and Gas*, Vol.II, London: British Institute of International and Comparative Law (1989) 171-186.

problems arise. First, there is a need to disentangle and resolve the conflicting legal rights to the overlapping concessions. This process usually results in at least two possibilities: i) the buy-out and/or cancellation of both concessions followed by the award of a new concession covering the entire joint development area; ii) the requirement that both concessionaires participate in a joint venture and nominate an operator for the whole joint development area.

Secondly, there is a need to confirm any change in the legal status or terms of the initial concessions should they be continued or indeed exchanged for a new concession. Fortunately, the former situation involving the unilateral grant of overlapping concessions by both parties and the consequent need to disentangle these interests in a new joint development zone did not occur in the new Timor Sea Arrangement. Neither UNTAET nor the fledgling East Timor government has unilaterally granted concessions in this area.¹⁹²⁾ Australia however had licensed interests in the area. Therefore, the latter problem concerning the confirmation of the legal status and continued application of the terms of these concessions needed to be resolved. Thus, Annex F to the 2001 Arrangement provides that contracts shall be offered to those corporations holding concessions prior to the entry into force of the Arrangement, 'in the same terms' as the previous contracts, modified as necessary to account for the new joint administrative structure under the 2001 Arrangement.

5. Joint criminal jurisdiction

Another aspect of the proposed joint development regime to be

¹⁹²⁾ On the other hand, a lapsed concession holder from the previous Portuguese colonial administration, awarded prior to the Indonesian invasion and annexation of East Timor in 1975/76, brought a claim based on its previously granted interest before the Australian courts.

instituted once the newly-independent East Timor state agrees to the new Arrangement relates to the criminal jurisdiction powers exercised by both parties to the 2001 Arrangement. Essentially these powers are similar to those provided under article 27 of the 1989 Timor Gap treaty regime. Article 14(a) of the 2001 Arrangement initially provides for the application of the nationality principle of jurisdiction in relation to crimes perpetrated in the JPDA by nationals and permanent residents of either of the two countries. In other words, a crime committed by an Australian will be subject to Australian criminal law and vice versa. However, article 14(b) applies both East Timor and Australian criminal laws to any offence committed in the JPDA by a third state's national. This is very similar to the applicable rule under article 27(2)(a) of the 1989 treaty. This rule is of course subject to the usual protection against double jeopardy, thus preventing a person from being tried and discharged or acquitted, or convicted for the same offence twice. A further exception is provided in article 14(d) for crimes committed aboard vessels in JPDA waters or flights over the area. These are subject to the flag state jurisdiction as per the international norm. Article 27(3) provided a similar arrangement under the 1989 treaty.

Co-operation in the exercise of their criminal jurisdiction is enhanced by the requirement that both parties co-operate, co-ordinate and exchange any information derived from their right to conduct surveillance activities in the JPDA. (art.18) A curious anomaly, however, relates to the application of custom, migration and quarantine laws under article 15. Although art.15(c) provides for bilateral consultations and the possible adoption of co-ordinated arrangements in relation to the entry of particular persons, equipment and goods, article 15(d) retains the rights of either party to apply its own laws, without the

authority of the other party. This may give rise to situations where items are subject to customs duties under one party's laws when they may not be under the other party's laws. On the other hand, most of the goods and equipment entering and leaving the JPDA will be related to petroleum activities and it is provided that these shall not be subject to customs duties. (arts.15(e) and (f))

6. Joint institutional framework

Next, we can examine the joint institutional framework to be introduced for overseeing the joint development activities in the JPDA. Article 6(a) of the 2001 Arrangement establishes a three-tiered joint administrative structure comprising of a Designated Authority, Joint Commission (JC) and Ministerial Council. (MC) This appears to be different from the two-tier system established under the 1989 treaty and continued by the 2000 MOU, incorporating a Ministerial Council and Joint Authority. In practice, however, the different institutional design of the 2001 Arrangement does not necessarily depart from the essential principle of joint decision-making at the highest institutional level. For example, the Ministerial Council (MC) established under the 2001 Arrangement shall consist of an equal number of ministers from East Timor and Australia. (art.6(d)(i)) A similar requirement for equal numbers of ministers from Australia and Indonesia serving on the Ministerial Council was provided in the 1989 treaty. (art.5(2))

The MC established under the 2001 Arrangement is mandated to consider any matter relating to the operation of this Arrangement that is referred to it by either East Timor, Australia, (art.6(d)(i)) or their Joint Commission (JC) members. (art.6(c)(iii)) However, in the event that the MC is unable to resolve a matter, either party may

invoke the dispute resolution procedures set out in Annex B to the Arrangement. (art.6(d)(ii)) (see sub-section 9, below) The only exception to the decision-making authority of the MC relates to the issue of the construction of pipelines from the JPDA to the territory of either state party. (art.8(c)) This is the sole preserve of the JC. All the members of the Joint Commission are also appointed by East Timor and Australia. The major difference here with the equally balanced MC membership numbers is that East Timor shall appoint one more Commissioner than Australia. (art.6(c)(i)) The JC shall establish policies and regulations relating to petroleum activities in the JPDA and oversee the work of the Designated Authority (DA). A more detailed but non-exhaustive list of the powers and functions of the JC is set out in Annex D. (art.6(c)(ii)) The JC shall meet annually or as required and shall be chaired by a Commissioner nominated by the parties on an alternate basis. (art.6(c)(iv))

Finally, the Designated Authority (DA) will play the same role as the Joint Authority established under Part IV of the 1989 treaty. It is responsible to the JC and carries out the day-to-day regulation and management of petroleum activities. (art.6(b)(iv)) A non-exclusive listing of more detailed powers and functions of the DA is set out in Annex C. (art.6(b)(v)) These include: (a) the day-to-day management and regulation of the petroleum activities undertaken according to the Arrangement; (b) preparation of annual estimates of DA income and expenditure; (c) reports for submission to the JC; (d) assistance requests for (i) search and rescue operations, (ii) terrorists threats, and (iii) air traffic services; (e) pollution prevention measures, in the JPDA; (f) establishment of safety zones; (g) controlling movements of vessels and persons, into, within and out of the JPDA; (h) issuing regulations on health and safety, environmental and other issues

related to the supervision and control of petroleum activities; and finally, (i) such other powers and functions as conferred to it by the Arrangement or the Joint Commission.

Significantly, bearing in mind the one-sided (90:10) breakdown of upstream revenues, the DA is designated by the JC but after the first three years of the Arrangement coming into force, the DA shall revert to the East Timor Government Ministry responsible for petroleum activities. (art.6(b)(ii)) During these three years, the DA will have juridical personality and such legal capacities under the laws of both East Timor and Australia as necessary for the exercise of its powers and performance of its functions. (art.6(b)(iii))

7. Joint fiscal and taxation regime

Like many other aspects of the 2001 Arrangement, the fiscal and taxation arrangements also embody joint, rather than individual, aspirations. This Arrangement provides that the parties shall make every effort to agree on a joint fiscal scheme for every petroleum project in the JPDA. (art.5(a)(i)) Only if they do not agree to the joint fiscal scheme, either between themselves, or as recommended by an independent expert (art.5(a)(ii), can they separately impose their own fiscal schemes on their proportions of the petroleum production from the project. (art.5(a)(iii))

8. Environmental protection

The high level of co-operation engendered by the joint development regime established under the 2001 Arrangement is also manifest with regard to marine environmental protection in the JPDA. Article 10(a) provides that East Timor and Australia shall co-operate to prevent and minimise pollution and other environmental

harm. (emphasis added) This provision is significant because it appears to acknowledge that environmental damage can occur despite the lack of pollution from petroleum activities in the JPDA.¹⁹³⁾ For example, damage to ecosystems such as coral reef during hydrocarbon extraction activities is considered to be environmental damage. However, such damage does not necessarily fall within the meaning of ‘pollution of the marine environment’ under article 1(1)(4) of the 1982 LOSC. This is defined as ‘the introduction by man, directly or indirectly, of substances and energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.’ Thus, environmental damage caused by petroleum exploration activities on the sea bed would not qualify as marine pollution under this definition as such activities do not necessarily introduce substances or energy into the marine environment.

Article 10(a) also requires the parties to consult as to the best means to protect the JPDA marine environment from the harmful consequences (*i.e.*, not merely pollution) of petroleum activities. Article 10(a) specifies that special efforts are to be made to protect marine wildlife including marine mammals, seabirds, fish and coral. In respect of all these endeavours, the designated Authority shall issue regulations to protect the JPDA marine environment. (art.10(c))

¹⁹³⁾ For more details of the legal relationship between pollution and environmental damage, see: David M. Ong, ‘The Relationship between Environmental Damage and Pollution: Marine Oil Pollution Laws in Malaysia and Singapore’, Chapter 9 in M W Bowman & A E Boyle (eds.), *The Definition and Valuation of Environmental Damage*, Oxford: OUP (2002)

Should pollution nevertheless occur, the parties shall co-operate in mitigating and eliminating such pollution. (art.10(b)) Moreover, companies shall be liable for damage as a result of pollution within the JPDA marine environment, with claims allowed to be brought in either party's jurisdiction (art.10(d)(ii))

9. Dispute settlement procedure

The dispute settlement provisions of the new agreement first lays down a general requirement that any dispute concerning the interpretation or application of the 2001 Arrangement shall, as far as possible, be settled by consultation or negotiation. (art.23(a)) However, any dispute that is not settled by these methods, as well as any matter relating to the operation of the Arrangement that is unresolved by the Ministerial Council (art.6(d)(ii)), shall at the request of either party, be submitted to an arbitral tribunal in accordance with the procedure set out in Annex B of the Arrangement. Annex B, in turn, establishes a sophisticated dispute resolution procedure consisting of an arbitral tribunal to which a dispute is submitted pursuant to Article 23(b). The tribunal shall consist of three persons appointed as follows: East Timor and Australia shall each appoint one arbitrator; ii) the two arbitrators shall, within sixty (60) days of the appointment of the second of them, by agreement, select a third arbitrator who shall be a citizen, or permanent resident of a third country which has diplomatic relations with both East Timor and Australia; iii) East Timor and Australia shall, within sixty (60) days of the selection of the third arbitrator, approve the selection of that arbitrator who shall act as Chairman of the Tribunal. (Annex B, (a))

Arbitration proceedings shall be instituted upon notice being given through the diplomatic channel by the country instituting such

proceedings to the other country. Such notice shall contain a statement setting forth in summary form the grounds of the claim, the nature of the relief sought, and the name of the arbitrator appointed by the country instituting such proceedings. Within sixty (60) days after the giving of such notice, the respondent country shall notify the country instituting proceedings of the name of the arbitrator appointed by the respondent country. (Annex B, (b)) The Arbitral Tribunal shall decide all questions relating to its competence and shall, subject to any agreement between East Timor and Australia, determine its own procedure. (Annex B, (f)) Before the Tribunal makes a decision, it may at any stage of the proceedings propose to East Timor and Australia that the dispute be settled amicably. The Tribunal shall reach its award by majority vote taking into account the provisions of this Arrangement and relevant international law. (Annex B, (g)) It shall afford to East Timor and Australia a fair hearing. It may render an award on the default of either East Timor or Australia. In any case, the Arbitral Tribunal shall render its award within 6 months from the date it is convened by the Chairman of the Tribunal. Any award shall be rendered in writing and shall state its legal basis. The award shall be final and binding on both East Timor and Australia. ((Annex B, (j))

Notwithstanding the uncertain legal status of the proposed new Timor Sea Arrangement of 2001 vis-à-vis a newly-independent East Timor state, it is important to highlight the joint development principle that this agreement embodies. As we noted earlier on, there are several legal arguments suggesting that joint development represents the most practical legal solution for the resolution of the overlapping claims dispute in the Timor Sea. Even leaving aside the question as to whether the parties concerned should succeed to the

joint development regime first introduced by the 1989 Timor Gap treaty, it is possible to note more compelling legal arguments for such international co-operation over shared natural resources generally.¹⁹⁴⁾ In particular, article 83 of the 1982 UN Law of the Sea Convention is specifically invoked by article 2(a) of the 2001 Arrangement as requiring states to make every effort to enter into provisional arrangements of a practical nature pending a final continental shelf delimitation agreement between them. In line with this provision, international tribunals are increasingly proposing joint development agreements as a means of resolving overlapping continental shelf claims in the presence of hydrocarbon deposits.

In the not too distant future, East Timor will take up its rightful place as a new sovereign state. Traub suggests that the UNTAET and the National Council of Timorese Resistance (CNRT) have agreed on the road to independence.¹⁹⁵⁾ The process will begin with a mass convocation of East Timorese to debate constitutional principles, followed by the drafting of a constitution and the election of a Constituent Assembly. Latest reports suggest that this election has taken place on 30 August 2001 and statehood should soon follow.¹⁹⁶⁾ The Assembly elections will lead to the drafting of a new Constitution within ninety (90) days, following which the Assembly will transform itself into Parliament. Then, in what is expected to be late 2001 or early 2002, the elected Assembly/Parliament will sign the constitution and the country will declare its independence.¹⁹⁷⁾

¹⁹⁴⁾ See: Ong, *AJIL*, (1999) *op. cit.*, at 780-4.

¹⁹⁵⁾ James Traub, 'Inventing East Timor', *Foreign Affairs*, Vol.79, No.4 (July/August, 2000) 74-89, at 88.

¹⁹⁶⁾ See: 'The UN in East Timor: Any lessons for others?', in *The Economist* newspaper (UK) Vol.361, No.8243, 13-19 October, 2001 at 73.

¹⁹⁷⁾ The gradual process towards laying the foundations for democratically elected government in East

This new legal status raises several questions in respect of the continuing application of Timor Gap treaty. These questions have been enumerated in this essay as follows: Will a new East Timor state succeed to the Timor Gap treaty initially agreed between Indonesia and Australia? Even if the Timor Gap treaty is found to be inapplicable in this context, is there nevertheless a legal requirement to jointly develop the hydrocarbon deposits found in the overlapping continental shelf claims area that will result from the treaty being rendered invalid, or otherwise inapplicable? It is submitted here that the very nature of the legal problem that would have confronted the two states almost inevitably lead them to contemplate a similar type of joint development arrangement to resolve the outstanding legal issues raised by the shared hydrocarbon resources in their overlapping continental shelf claims. This is evidenced by the interim agreement between UNTAET and Australia to continue the current joint development regime while negotiating a new treaty as noted above. In other words, a newly independent East Timor state will need to negotiate an alternative joint development regime with Australia to exploit the shared hydrocarbons coveted by both parties. The legal arguments developed in the course of this essay conspire to suggest that the joint development principle currently embodied in the present Timor Gap arrangement is sufficiently robust to stand the test of time. The precise application of the joint development principle, whether in its present form, or through a system of

Timor is continuing and was recently boosted by the news that one of East Timor's biggest and best known political groups, *Fretilin*, which spearheaded the bloody 24-year struggle for independence from Indonesia has begun the process of transforming itself from a revolutionary front to a mainstream political party. See: Mark Dodd, *Sydney Morning Herald* newspaper (Australia) May, 2000.

compulsory transboundary unitizations of straddling hydrocarbon deposits across a modified median line continental shelf boundary, is reliant upon the political will of the future parties. International law does not currently prescribe a specific solution for this problem of hydrocarbon deposits situated in a disputed area of overlapping continental shelf claims. It merely provides for several different models of co-operation in the joint development of these deposits, any model of which can be utilized by agreement between the parties concerned.¹⁹⁸⁾

The continuing legal difficulties arising from this new Arrangement will no doubt continue to exercise the minds of officials on both sides of the Timor Sea in years to come. Therefore, it is clear that the intense co-operative effort by both Australia and Indonesia, engendered and maintained by the negotiation, agreement and implementation of the 1989 Timor Gap treaty throughout the 1990s, will need to continue at a high diplomatic level in the new bilateral relationship between Australia and an independent East Timor state. Continued high level co-operation is imperative to prevent possible disruption of the oil and especially natural gas supplies from newly-designated JPDA, which was previously Area A of the Zone of Co-operation. Thus, modifying the present joint development arrangements in the Timor Gap as the 2001 Arrangement purports to do, rather than beginning negotiations anew for a permanent maritime boundary settlement under the 'clean slate' approach represents the politically astute, economically viable and arguably also legally correct, if not legally imperative, solution to the Timor Gap dilemma. Despite

¹⁹⁸⁾ See: Ong (1999) *op. cit.*, at 788–92, for a basic typology of the main joint development models adopted by states in their bilateral practice on this issue.

continuing speculation in various media as to whether a new East Timor state might be able to secure an even better legal result by bringing the dispute to an international adjudication procedure, the proposed joint development regime in the 2001 Timor Sea Arrangement represents the most practical legal solution that could be arrived at given the circumstances of this case. Although the 2001 Arrangement was later formalised (with amendments) as the 2002 Timor Sea Treaty, the dispute between these two State continued over the next decade and a half with no solution in sight.

Finally, (as mentioned in the Author's note above) it can be reported that in the course of the conciliation proceedings between the Timor-Leste and Australia being conducted by a Conciliation Commission pursuant to the UN Convention on the Law of the Sea and under the auspices of the Permanent Court of Arbitration (the "PCA"), Australia and Timor Leste have reached agreement on the following issues in relation to their dispute in the Timor Sea: 1) the text of a treaty which delimits the maritime boundary between them in the Timor Sea and addresses the legal status of the Greater Sunrise gas field; 2) the establishment of a Special Regime for Greater Sunrise, providing a pathway to the development of the resource and the sharing of the resulting revenue. Moreover, the two States have also commenced engagement with private stakeholders in the Timor Sea regarding the effect of the treaty on private interests, as well the transitional arrangements envisaged by the two governments. Following the adoption of the Comprehensive Package Agreement reached on 30 August 2017 regarding maritime boundaries in the Timor Sea, which includes an "Action Plan" for engagement regarding the development of the resource, the Timor-Leste and Australian governments, as well as the Greater Sunrise Joint Venture, have

engaged in numerous meetings where both governments and Joint Venture have sought to elaborate and reach agreement on a development concept for the Greater Sunrise gas fields.¹⁹⁹⁾

Malaysia-Thailand²⁰⁰⁾

The 1979 Memorandum of Understanding (MOU) established a Joint Development Area (art.I) and a Joint Authority (art.III(1) & art.2 of the 1990 Agreement) to assume all rights to explore and exploit the non-living natural resources of the sea-bed in the area of overlapping continental shelf claims for a period of 50 years, commencing from the date the 1979 MOU came into force. The 1990 Agreement provided for the Constitution of the Malaysia-Thailand Authority (arts.1-7) and the petroleum development regime (based on the production-sharing model) in the JD Area. (art.8) It also provides for financial (arts..9-12), customs and excise and taxation (arts.16-17) arrangements in the JD Area. If the Parties reach agreement on the delimitation of the continental shelf boundary before the expiry of the 50 years, the Joint Authority shall be wound

¹⁹⁹⁾ See: 'Timor-Leste and Australia continue engagement with Greater Sunrise Joint Venture and progress towards signature of maritime boundary treaty', CONCILIATION BETWEEN THE DEMOCRATIC REPUBLIC OF TIMOR-LESTE AND THE COMMONWEALTH OF AUSTRALIA, Permanent Court of Arbitration, The Hague, Press Release No.11, 23 NOVEMBER 2017. Accessible at: <http://www.gfm.tl/wp-content/uploads/2017/11/Press-Release-No.-11-EN.pdf>

²⁰⁰⁾ Full titles of both agreements: Memorandum of Understanding between Malaysia and the Kingdom of Thailand on the Establishment of the Joint Authority for the Exploitation of the Resources of the Sea bed in a Defined Area of the Continental Shelf of the Two Countries in the Gulf of Thailand, 1979 (hereinafter, 1979 MOU) and Agreement between the Government of Malaysia and the Government of the Kingdom of Thailand on the Constitution and other Matters relating to the Establishment of the Malaysia-Thailand Joint Authority, 1990 (hereinafter, 1990 Agreement). 1979 MOU, signed: 21.2.1979; entered into force: 24.10.1979; 1990 Agreement, signed: 30.5.1990; entered into force: ???. Source: International Journal of Estuarine (now Marine) and Coastal Law, Vol.6, No.1 (Feb., 1991) in Appendix 1 & 2, 61-63 and 64-72, respectively.

up. (art.VI(1) of MOU) However, if no satisfactory solution is found within 50 years, the existing arrangement will continue. (art.VI(2)) Although there is no explicit provision to this effect, it is arguably implicit in the agreement between both Parties to continue to resolve the continental shelf boundary delimitation problem resulting from their overlapping claims by negotiations or such other peaceful means as agreed by the Parties.(art.II of 1979 MOU)

Article V of the 1979 MOU also provides that the designated areas of criminal jurisdiction shall not in any way be construed as indicating the boundary line of the continental shelf between the two Parties in the JD Area. The 1979 MOU divided the criminal jurisdiction of both Parties within the JD Area by means of a straight line through the Area, roughly corresponding to the equidistance line from the two parties' adjacent coastlines. (art.V) In addition, the rights (including powers of enforcement) exercised by the parties over fishing, navigation, marine scientific research, and marine pollution shall extend to the JD Area. (art.IV) The Joint Authority (JA) consists of (a) two joint chairmen, one from each country, and (b) an equal number of members from each country. (art.3 of the 1979 MOU) The initial number of members, excluding the Co-Chairmen, appointed by each Party, was six. (art.3(1)(b) of the 1990 Agreement) The Co-Chairmen alternate when performing the functions of Chair at the JA meetings. (art.4(1) of the 1990 Agreement) The quorum for any JA meeting shall not be less than ten. (art.4(2) of 1990 Agreement) All costs incurred and benefits derived by the Joint Authority from activities carried out in the JD Area is equally borne and shared by both Parties. (art.III(5) of MOU)

The Joint Authority has juristic (sic) personality and such capacities

as provided by laws enacted by both Parties. (Art.1 of 1990 Agreement)

Its powers and functions are set out in Article 7 of the 1990 Agreement. These include: control over all exploration and exploitation of the non-living resources in the JDA and responsibility for the formulation of policies for the same (art.7(1)); deciding the organisational structure of the JA, with the approval of the Parties (art.7(2)(a)); appointing the chief executive and other officers of the JA, provided that the chief and deputy chief shall require the approval of the two Parties (art.7(2)(b)); deciding their terms and conditions of service (art.7(2)(d)); deciding a plan of operation and working programme for the administration of the JDA (art.7(2)(e)); permitting operations and concluding transactions or contracts for the exploration and exploitation of the non-living natural resources in the JDA, subject to the approval of the two Parties (art.7(2)(e)); approving and auditing the activities of operators in respect of such activities in the JDA (art.7(2)(f) & (g)); awarding tenders for goods and services required to carry out petroleum operations in the JDA (art.7(2)(h)); appointing committees or independent experts where necessary for the administration of the JA (art.7(2)(i)); regulating any meeting of the JA (art.7(2)(j)); and doing anything necessary for the performance of its functions (art.7(2)(k)). The JA submit recommendations on regulations to the two Parties for consideration (art.13). To fulfil its purpose, the JA may also co-operate and even conclude any agreement with another government or organisation, subject to the approval of the Parties. (art.14)

The financial, budgetary, accounting and audit provisions are provided in Chapter III of the 1990 Agreement. (arts.9-12) And finally, the customs and excise, and taxation arrangements between the two Parties within the JDA are provided in Chapter VI, arts.16 & 17, respectively. Article 8 provides that any petroleum exploration

and exploitation contract in the JDA shall be a production sharing contract. (art.8(1)) The precise terms and conditions of these contracts are provided in art.8(2)(a) - (g) and art.8(3).

The JA does not have jurisdiction over environmental protection in the JDA. Art.IV of the MOU provides that the enforcement powers exercised by the national authorities of either Party in relation to, inter alia, the prevention and control of marine pollution shall extend to the JDA and shall be recognised and respected by the JA. Any difference or dispute arising out of the interpretation or implementation of the provisions of the MOU shall be settled peacefully by consultation or negotiation between the Parties. (art.VIII) The application and interpretation of the provisions of the 1990 Agreement shall be consistent with the spirit and provisions of the MOU. (art.19) Any differences or disputes arising out of the provisions of the 1990 Agreement shall be settled peacefully by consultation or negotiation between the Parties. In the event that no settlement is reached within a period of three months, either Party may refer the matter to the Prime Ministers of both Parties who shall jointly decide on the mode of settlement for the purpose of the particular matter referred to them. (art.21) More specifically, any disputes or differences arising out of or in connection with the production sharing contract which cannot be amicably settled shall be referred to arbitration before a panel consisting of three arbitrators, one to be appointed by each Party and a third to be jointly appointed by both Parties. If the Parties are unable to concur on the choice of the third arbitrator within a specified period, the third arbitrator shall be appointed upon application to the UN Commission of International Trade Law (UNCITRAL). The arbitration proceedings shall be conducted in accordance with the UNCITRAL rules. The

venue shall be either in Bangkok or Kuala Lumpur, or any other place as may be agreed by the Parties. (art.8(2)(h) of the 1990 Agreement) There is no explicit provision for third party rights, although it is envisaged that the Joint Authority may co-operate with any government and organisation and may conclude agreements or arrangements with them, subject to the approval of the two Parties. (art.14 of 1990 Agreement)

***Guinea- Bissau - Senegal*²⁰¹⁾**

The 1993 Agreement and its 1995 Protocol provide for a cone-shaped joint exploitation zone extending to either side of the 1960 maritime boundary between the two Parties. They also provide for a joint Agency of Management and Co-operation (AMC) to exploit both the fishery and continental shelf resources of the zone. The resources of the continental shelf shall be shared between the Parties in the following proportions: (Senegal) 85:15(Guinea-Bissau), subject to the provision that in the event of discovery of additional resources, these proportions shall be reviewed, having regard to the magnitude of such discoveries.(art.2 of 1993 Agreement) The Agreement entered into force at the same time as the Protocol concerning the establishment and functions of the joint Agency was concluded and the exchange of ratification instruments for both instruments occurred (21.12.1995). (art.6) It shall remain in force for a period of

²⁰¹⁾ Management and Co-operation Agreement between the Government of the Republic of Senegal and the Government of the Republic of Guinea-Bissau of 14 October 1993, and Protocol of the Agreement having reference to the organization and co-operation of the Agency of Management and Co-operation between the Republic of Senegal and the Republic of Guinea-Bissau instituted by the Accord of 14 October, 1993. 1993 Agreement, signed: 14.10.1993; in force: 21.12.1995. 1995 Protocol, signed: 12 June 1995; in force: 21 December, 1995. Source: 31 Law of the Sea (LOS) Bulletin 42 (1996)

twenty years and shall be automatically renewable. (art.8) The Parties established a joint International Agency (art.4 of the 1993 Agreement), later renamed the Agency of Management and Co-operation (AMC) by the 1995 Protocol. (art.2 of 1995 Protocol) The organisation and operation of the Agency was to be the subject of a joint agreement within one year of the signing of the 1993 Agreement.(art.4) However, the 1995 Protocol was signed more than a year later on 12.6.1995.

By the 1993 Agreement, the Parties shall pool the exercise of their respective rights, without prejudice to legal titles previously acquired by each of them and confirmed by judicial decisions, and without prejudice to claims previously formulated by them in respect of non-delimited areas. (art.6) There is uncertainty over the seaward limits of the joint zone. It consists of an arc of 48° of a circle with a radius assumed to be 200nm. Since neither the 1960 Agreement (delimiting the maritime boundary) nor the 1993 Agreement & 1995 Protocol specify the length of the maritime boundary, the seaward limits of the joint zone are assumed rather than established. In so far as the joint zone regulates fishery resources, the assumption must be correct. However, the continental margin in this area is wider than 200nm. Therefore, it is possible that in respect of mineral resources, the joint zone will extend beyond the 200nm (EEZ) limit, perhaps to the edge of the continental margin, should this be capable of being brought within the legal definition of the continental shelf, under art.76 of the 1982 UNCLOS.

With regard to mineral or oil resource prospecting, exploration and exploitation and scientific research in this area, the applicable law shall be the law of Senegal as amended and modified by the Authority under art.10.4(b). (art.24.1 of the 1995 Protocol) With regard to fishery resource exploitation, monitoring and research, the

applicable law shall be the law of Guinea-Bissau. (art.24.2) In conformity with Art.10.1 of the 1995 Protocol and objectives of the 1993 Agreement, the Authority may propose to the Parties any necessary modifications or amendments to the aforementioned regulations. (art.24.3 of the 1995 Protocol) The Agency for Management and Co-operation (AMC) succeeds the Parties with respect to the rights and obligations arising out of agreements concluded by each of them relating to exploitation of the resources of the joint zone. (art.5 of the 1993 Agreement) The Agency comprises two organs: 1) the Authority made up of the Heads of State, or Government, or persons delegated by them, and the Secretariat of the Agency; (art.9 of the 1995 Protocol) and 2) the Enterprise, which is the organ through which the Agency shall execute the mission assigned to it under the 1993 Agreement.(arts.6 & 12 of the Protocol) The Presidency of the Authority shall be assumed on a rotating basis, for a term of two years. The Authority shall establish the procedural rules for its decision-making process. The President of the Authority shall serve concurrently as the Chairman of the Board of Directors of the Enterprise. (art.9) The Authority defines the general policy of the Agency.(art.10.1) It meets at least once a year to examine and approve the administration and co-operation policies proposed by the Secretary-General. (arts.9 & 10.2) It has the following functions: (a) providing the Enterprise with guidance as to its performance; (b) upon the recommendation of the Board of Directors, in a manner not incompatible with the aims of the Protocol and Agreement, amending the regulations governing prospecting, exploration, and exploitation of the resources of the area, as well as those governing monitoring and scientific research; (c) supervising the application of the Agreement & Protocol, regulations applicable to the Enterprise

and recommending to the Board of Directors (BoD) any necessary modifications; and finally (d) determining and exercising the scope of police powers in the zone. The Authority shall ensure that resource development in the zone is carried out in an optimal manner, in conformity with good mining or oil industry practices and with regard to the marine environment and conservation of fishery resources. (art.10.5)

The Agency is an international organization with responsibility for managing the resources of the zone, either directly by means of the Enterprise or its subsidiaries, or indirectly through other companies. It is also responsible for promoting co-operation between the Parties. (art.4) The Agency has general and specific functions in the fields of mineral and petroleum resource development (art.5(a)) and fisheries (art.5(b)). Its general functions include the rational exploitation of the zone's resources, co-operation with parties and competent international organizations, safety, and protection of the marine environment. (art.5(c)) The Agency holds the exclusive title to mineral and oil and fishing rights in the joint zone. It shall act in this connection through the Enterprise. (art.6) The Parties have granted the Agency, its staff members and the Enterprise diplomatic privileges and immunities ordinarily granted to international organizations and their officers. (art.8) The resources of the Agency include equity capital resulting from operations (art.15) and other resources from minerals and oil tax revenues (art.15(a)), sale of fishing licences, fishery products, and levied fines (art.15(b)), contributions to training and research activities from private oil and fishing companies and international organizations (art.15(c)), and international aid from other States or international organizations. (art.15(d))

The Secretary-General of the Agency (Sec-Gen) is a natural person

appointed by the Authority as its representative and has a general executive role and personal administrative authority. (art.11.1) Within limits defined by the Authority, the Secretary-General shall be empowered to contract for, acquire and dispose of movable and immovable property, and to represent the Agency in all legal proceedings. (art.11.2) The Sec-Gen shall report to the Authority (art.11.3) and is responsible for the management of resource prospecting, exploration and exploitation activities (art.11.4), especially: (a) advising the Board of Directors (Enterprise) on hydrocarbon development contracts and fishery agreements; (b) concluding hydrocarbon contracts and fishery agreements, upon recommendation of the BoD and subject to the Authority's approval, with the exception that fishing contracts shall not be subject to this procedure; ((c)-(d)) supervising and enforcing the regulations applicable to the zone and ensuring the implementation of the hydrocarbon contracts and fishery agreements; ((e)-(f)) suspending or terminating them should they not comply with their terms, with the consent of the BoD and the Authority's approval; (g) effecting the payment of the shares of the Parties from the proceeds of the resource exploitation activities in the zone; ((h)-(i)) ensuring the control of entry, movement and navigational safety in the zone; ((j)-(k)) formulating rules on the resource development activities, health and safety, and environmental issues under the regulations in force in the zone; (l) recommending amendments to the resource development regulations and modifications; (m) requesting the Authority to take measures for the rescue of vessels and platforms involved in resource development; (n) requesting assistance from the Parties during a disaster or serious pollution incident; (o) modifying the financial and other provisions of hydrocarbon contracts and fishery agreements, with the approval of the BoD and

the agreement of the Authority.

The Enterprise monitors the mining and hydrocarbon resource development as well as fishing activities. It acts to muster financial support and business interest in its activities. In particular, it assists petroleum company and fishing licensees in their administrative dealings with the Parties. (art.6) The Enterprise is administered by a Board of Directors composed of at least 3 and at most 11 members appointed by the General Assembly (*sic*) from among the representatives of the Parties in the Authority and those natural persons or legal entities holding shares (*sic*); and by a Director-General (D-G)'s office responsible for all administrative, organizational and management functions of the Enterprise. The D-G's office shall in turn be assisted by three departments: 1) mineral and oil development; 2) fisheries monitoring and research and 3) administrative and financial. The heads of departments are appointed by the D-G, after consultation with the Board of Directors. The D-G is appointed by the Board of Directors upon the recommendation of the Authority (art.12), the President of the Authority being also the Chairman of the Board of Directors. (art.9) The D-G shall have the following areas of competence: (a) approval of transfer of rights to other companies; (b) establishment of the provisional budgets of the Enterprise; (c) authorization of the entry into the zone of employees of enterprises, their sub-contractors and others; (d) conduct the sale of all or part of mineral, petroleum or fishery product reverting to the Enterprise; and (e) exercise all other functions assigned by the Authority or Board of Directors.

The share capital of the Enterprise shall be set at US\$100,000 to be fully paid up by both Parties according to the following percentages: Senegal-67.5% & Guinea-Bissau-32.5%. 51% of the shares shall be Class A shares held by the Parties and are non-transferable. The

remaining 49% are Class B shares, transferable to the private sector. At each sale, 67.5% of the shares sold shall be applied to the capital of Senegal and 32.5% to Guinea-Bissau. The form of the shares and the entitlements to which they give rise shall be determined in accordance with the by-laws of the Enterprise (art.14)

The Parties shall co-operate with the Agency to prevent or minimise pollution and all other forms of marine environmental degradation from activities in the zone. (art.23.1) In particular, the Parties shall assist the Agency as may be requested of them under art.11(4)(m) & (n) of the 1995 Protocol; and when marine pollution in the zone extends, or presents the risk of doing so, the Parties shall co-operate to prevent, reduce and eliminate this pollution. (art.23.1) Under art.11, the Agency shall enact regulations to protect the marine environment in the zone. It shall also establish an emergency or management plan for combating pollution or any form of degradation from activities in the zone. (art.23.2) Companies shall be liable for the damage and expense caused by pollution or any form of degradation resulting from activities in the zone of the marine environment. (art.23.3) (The term ‘companies’ is defined in art.1.15 to mean juridical person(s) with a fishing or hydrocarbon resource development contract, and any other juridical person to which an interest is assigned and may be described as a company under art.24 on the applicable law.) Disputes concerning this 1993 Agreement or the International Agency shall be resolved initially by direct negotiations and should these fail, after a period of six months, by arbitration or by the ICJ. In the event of the suspension of this Agreement, or upon its expiry, the Parties shall have recourse to direct negotiation, arbitration or the ICJ in respect of any delimitations remaining unsettled. (art.9 of 1993 Agreement) All

disputes between Parties concerning the interpretation or application of this 1995 Protocol shall be resolved with the terms of Article 9 of the 1993 Agreement. (art.25.1) All disputes between the Agency and one or other of the Parties regarding the interpretation or application of this Protocol shall be resolved initially through direct negotiation. If the dispute has not been resolved after three months, it shall be settled by arbitration. (art.25.2) The Parties shall ensure the execution of the arbitration awards. (art.25.3) All conventions (mining or hydrocarbon development contracts), fishery agreements and contracts concluded by the Enterprise must contain specific regulations stipulating the means of settling disputes concerning the interpretation or application of the said conventions, fishery agreements or fishing contracts. The instant agreement and protocol and the next one below (Colombia-Jamaica) are the only joint development agreements to date that make explicit provision for the sharing of fishery resources within their established joint zones. The common resources in the present joint exploitation zone shall be shared 50:50.²⁰²⁾

The Parties and the Agency undertake to co-operate in the areas of scientific research, safety, monitoring, rescue, protection of the marine environment and transport within the joint area. To this end, they will regularly exchange information obtained by one or other of the Parties on the above issue areas. (art.16) In the area of safety, the Parties shall exercise control and police powers on behalf of the Agency within the joint zone. (art.17.2) The Parties and Agency shall exchange information on everything capable of affecting resource prospecting, exploration and exploitation within the joint zone, as well as on incidents that might impair the safety of its activities.

²⁰²⁾ Art.2 of the 1993 Agreement, *ibid*.

(art.17.2) The Parties and the Agency shall co-operate in the area of monitoring activities (art.18), making arrangements for search and rescue operations (art.19), and providing transport services (art.20) within the joint zone. At the request of the Agency, the Parties shall provide the Agency with all data relating to the mineral, hydrocarbon and fishery resource potential, and marine environmental quality of the zone. (art.21.1) The Parties guarantee to the Agency free access to this data, under conditions of confidentiality. (art.21.2) The Parties shall co-operate directly or through international organizations in the area of scientific, technical and technological research in the joint zone, and co-ordinate their activities in this area. (art.22.1) The Parties shall also allow the Agency the possibility of undertaking for itself, alone or in association with other States, organizations or companies, any scientific research or studies. (art.22.2) In return, the Agency shall, at the request of the Parties, provide them with the data, samples and/or results obtained from this research. (art.22.3)

***Colombia-Jamaica*²⁰³⁾**

This Agreement partly delimits an apparently multi-purpose single maritime boundary, presumably incorporating both EEZ and Continental Shelf boundaries between the two Parties. (art.1) It also establishes a Joint Regime Area (JRA), where, pending the determination of the jurisdictional limits of each Party, the designated JRA will be a zone of joint management, control, exploration and exploitation of the living and non-living resources. (art.3(1)) In the JRA, the Parties may carry out the following activities: exploration and exploitation of the

²⁰³⁾ Maritime Delimitation Treaty between Jamaica and the Republic of Colombia. Signed: 12.11.1993; entered into force: 14.3.1994. Source: 26 LOS Bulletin 50 (1994); Also: Charney & Alexander(eds.), Vol.III (1998) 2179-2204.

natural resources, whether living or non-living, of the waters superjacent to the seabed and the seabed and its subsoil, and other activities for the economic exploration and exploitation of the JRA (art.3(2)(a)); the establishment and use of artificial islands, installations and structures (art.3(2)(b)); marine scientific research (art.3(2)(c)); the protection and preservation of the marine environment (art.3(2)(d)); the conservation of living resources (art.3(2)(e)); and such measures as are authorized by this Treaty, or as the Parties may otherwise agree for ensuring compliance with and enforcement of the regime established by this Treaty.(art.3(2)(f))

Although the legal status of the sea-bed and superjacent waters in the JRA is not given, it is assumed that they are governed by the continental shelf and EEZ regimes, respectively. Furthermore, within the JRA itself, two maritime areas of 12nm radius surrounding the Serranilla Bank (art.3(1)(b)) and Bajo Nuevo (art.3(1)(c)) cays are excluded from the JRA. The legal status of the waters contained in these maritime areas is also not specified in the Agreement, although it is possible to assume they are designated Colombian territorial waters from the legend of the map annexed to the Agreement's text. (Charney & Alexander Vol.III(1998) at 2184) In the JRA, each Party has jurisdiction over its nationals and vessels flying its flag, over which each party exercises management and control in accordance with international law. (art.2(5))

Activities relating to exploration and exploitation of non-living resources, as well as marine scientific research and the protection and preservation of the marine environment will be carried out on a joint basis agreed by both Parties. (art.3(3)) Towards these ends, the Parties agree to establish a Joint Commission (JC) which shall

elaborate the modalities for the implementation and carrying out of the activities set out in art.3(2), the measures adopted pursuant to art.3(6), and any other functions which may be assigned to it by the Parties for the purpose of implementing the Treaty provisions. (art.4(1)) The JC shall consist of one representative from each Party, assisted by advisers as necessary. (art.4(2)) The conclusions of the JC shall be adopted by consensus and shall be only recommendations to the Parties. However, should they be adopted by the Parties, they shall become binding on them. (art.4(3)) The JC was to begin work immediately and conclude the tasks assigned to it in art.4(1), *i.e.*, to elaborate the modalities for natural resource development, marine scientific research, and other activities assigned to it by the Parties. (art.4(4))

The modalities for the implementation of the task of protection and preservation of the JRA marine environment are to be elaborated by the Joint Commission (art.4(1)), and carried out by the Parties. (art.3(2)(d)) Any dispute between the Parties on the interpretation or application of this treaty shall be settled by agreement in accordance with the means of peaceful settlement of disputes provided for by international law. (art.7) Furthermore, in any case where there are alleged breaches by the nationals or vessels of the other Party of the treaty or any measures adopted by the Parties for their implementation, the party alleging the breach shall bring it to the attention of the other Party, following which both Parties shall commence calculations with a view to arriving at an amicable settlement within 14 days. On receipt of an allegation that a breach was committed, the Party shall: (a) ensure that the subject-matter of the allegation does not recur; and if it is being committed, (b) ensure that the activities are

discontinued.

The Parties shall not authorize third States and international organizations or vessels of such States and organizations to carry out the natural resource development and other activities referred to in art.3(2), although this does not preclude a Party from entering into, or authorizing arrangements for leases, licences, joint ventures and technical assistance programmes in order to facilitate the exercise of their rights under art.3(2), in accordance with the JC established under art.4. (art.3(4)) The Parties also agree to adopt measures in the JRA for ensuring that nationals and vessels of third States comply with any regulations and measures adopted by the Parties for implementing the activities set out in art.3(2). (art.3(6))

Transboundary Unitization and Joint Development Agreements Beyond 200nm

The Mexico-US Transboundary Unitizations Agreement in the Western Gap area of the Gulf of Mexico

Of particular interest in this context is the practice of the United States of America (USA) as arguably the most significant non-party to UNCLOS. US practice is also of interest because it is widely expected that the first successful exploitation of hydrocarbon resources occurring beyond the 200 nm limit will take place in the continental shelf area located in the Gulf of Mexico.²⁰⁴⁾ In jurisdictional terms, most of the western Gulf of Mexico falls within the 200 nm limits of

²⁰⁴⁾ Potential developments include the Perdido facility at Alaminos Canyon Block 857. See further http://www.subseaiq.com/data/Project.aspx?project_id=125&AspxAutoDetectCookieSupport=1. Or the Jack/St Malo project. See <http://www.offshore-technology.com/projects/jackstmalodeepwaterp>

both the USA and Mexico, now delimited according to the equidistance method under a 1997 Mexico-US treaty.²⁰⁵⁾ However, according to McLaughlin, the geography of this area of the Gulf leaves a triangular-shaped of roughly 8,722 square miles called the 'Western Gap',²⁰⁶⁾ where a further bilateral treaty was agreed in 2000 to delimit the Mexico-US maritime boundary beyond 200 nm.²⁰⁷⁾ Noting the possibility of transboundary deposits, Article 4 is significant in that the 2000 treaty requires the parties to refrain from authorising or permitting 'petroleum or natural gas drilling or exploitation of the continental shelf within one and four-tenths (1.4) nautical miles of the boundary set forth in article I.' Paragraphs 4, 5 and 6 further require the parties to ensure that the existence and location of transboundary reservoirs can be determined, through the grant of permission for surveys, the sharing of information, or the notification of the other party. Finally, article 5 of the 2000 treaty provides for periodic meetings to confirm the location and characteristics of transboundary resources. The parties are then required to seek to reach agreement on efficient and equitable exploitation of such reservoirs. This includes the right of each party to initiate consultations on matters related to such reservoirs. Each party must inform the other of any authorisations granted for exploration or development, as well as the date when production commences. Any such authorisation

²⁰⁵⁾ Treaty on Maritime Boundaries between the United States of America and the United Mexican States (adopted 4 May 1978, entered into force 13 November 1997) (1978) 17 ILM 1073. Mexico ratified this treaty a year later but the US Senate only ratified it on 23 October, 1997.

²⁰⁶⁾ McLaughlin (n 19), 199 and 208-9.

²⁰⁷⁾ Treaty between the Government of the United Mexican States and the Government of the United States of America on the Delimitation of the Continental Shelf in the Western Gulf of Mexico beyond 200 Nautical Miles (adopted 9 June 2000, entered into force 17 January 2001) 2143 UNTS 417.

must be in accordance with the terms of the 2000 Treaty.

In 2012, the two States entered into a further agreement on transboundary reservoirs in the Gulf, entitled: 'Agreement between the United States of America and the United Mexican States Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico'.²⁰⁸⁾ As the preamble emphasises, this is intended to secure safe, efficient, equitable and environmentally responsible exploitation of transboundary hydrocarbon reservoirs' in the Gulf. This is to be based upon principles that promote equitable and reasonable utilization of transboundary resources; desiring to maximize the long term benefits from their exploitation, as well as to protect the resources of both Parties; and recognizing that this framework is intended to encourage the establishment of cooperative arrangements based primarily on principles of unitization; and further recognizing that additional cooperative arrangements may be developed outside of the framework of this Agreement and that such arrangements may also promote efficient, equitable, and environmentally responsible exploitation of transboundary reservoirs.

While not specifically requiring the adoption of a unitization agreement following the detection and determination of a transboundary reservoir,²⁰⁹⁾ this is anticipated by article 6, which sets out the requisite content of any such agreement. The depth of bilateral co-operation that will be required to fulfil the detailed procedures and criteria for any unitization agreements lends credence to the view that the principle of transboundary unitization/joint development that has been argued to apply in all similar situations within the 200

²⁰⁸⁾ Adopted 20 February 2012. Text accessible at US Department of State website: <http://www.State.gov/p/wha/rls/2012/185259.htm> (2012 Agreement).

²⁰⁹⁾ See Arts 4 and 5, 2012 Agreement.

nm limits of coastal State maritime jurisdiction,²¹⁰⁾ is also applicable beyond the 200 nm limits. This is especially so when juxtaposed against the Joint Sovereign Rights & Joint Management Treaties agreed between Mauritius and the Seychelles discussed below.

The Mauritius-Seychelles Joint Development Agreement(s) in their overlapping continental shelves beyond 200 nm

The two recent agreements between the island Republics of Mauritius and the Seychelles herald an unprecedented example of State practice for putative joint development of natural resources within their overlapping continental shelf areas beyond 200 nm. These two States are small island nations located in the south-western corner of the Indian Ocean and are both Contracting Parties to UNCLOS.²¹¹⁾ In accordance with article 76(8) of UNCLOS, on 1 December 2008, Mauritius and the Seychelles submitted information on the limits of the continental shelf beyond 200 nm appurtenant to the region of the Mascarene Plateau to the CLCS. Following their successful joint submission to the CLCS for an 'extended' continental shelf beyond 200 nm, which was the subject of favourable recommendations by the CLCS on 30 March 2011, these two island States gained an additional 396,000 square kilometres of continental shelf in the Indian Ocean – an area equivalent in size to Germany.²¹²⁾ They then concluded two treaties, the Treaty concerning the

²¹⁰⁾ See DM Ong, *AJIL* (1999) *op. cit.*; DM Ong, 'The New Timor Sea Arrangement, 2001: Is Joint Development of Common Offshore Oil and Gas Deposits Mandated under International Law?' (2002) 17 *IJMC* 79.

²¹¹⁾ Both States became signatories when UNCLOS was opened for signature on 10 December 1982. The Republic of Seychelles subsequently ratified the Convention on 16 September 1991. The Republic of Mauritius ratified the Convention on 4 November 1994.

²¹²⁾ See: 'Mauritius and Seychelles successfully claim 396,000 km of additional seabed', 6 May 2011,

Joint Exercise of Sovereign Rights Over the Continental Shelf in the Mascarene Plateau Region (hereinafter, Joint Sovereign Rights Treaty) and the Treaty concerning the Joint Management of the Continental Shelf in the Mascarene Plateau Region (hereinafter, Joint Management Treaty).²¹³⁾ The Joint Sovereign Rights Treaty is very brief, comprising only four articles, and should be seen as a precursor to the more extensive and comprehensive Joint Management Treaty which governs the exploration, exploitation and production of 'natural resources'.²¹⁴⁾ Article 1 of the Joint Sovereign Rights Treaty provides that the parties shall exercise sovereign rights jointly for the purpose of exploring the continental shelf and exploiting its natural resources in a 'Joint Zone', delineated by reference to designated points comprising coordinates of latitude and longitude set out in Annex 1. Article 3 provides that nothing in the treaty, or any acts taking places whilst it is in force shall prejudice the legal position of the parties concerning the future delimitation of the continental shelf. This is reaffirmed in Article 2(b) of the Joint Management Treaty.

A potentially significant aspect of the Joint Management Treaty is the clear wording in both the preamble and article 2 recognizing the extent of the principle of co-operation in the exploration, exploitation and production of natural resources from the 'Joint Zone', as well as the environmental principles that are applicable to such activities

Commonwealth Secretariat website. Accessed at:

<http://www.thecommonwealth.org/news/34580/34581/236405/050511unseabed.htm>

²¹³⁾ Available at:

<http://mdr.govmu.org/English/defence/Documents/treaties/Treaty%20Concerning%20the%20Joint%20Management%20of%20the%20Continental%20Shelf%20in%20the%20Mascarene%20Plateau%20Region.pdf>

²¹⁴⁾ Article 1(1) Joint Management Treaty

within the 'Joint Zone.' The preamble emphasizes the equitable and cooperative legal basis for the exercise of sovereign rights, and the importance of managing continental shelf resources in a sustainable manner in light of the precautionary principles and the protection of the marine environment and biological diversity. Article 2 follows this up by re-stating the requirement under article 83 of UNCLOS for States to enter into provisional arrangements of a practical nature and noting that, '(t)his Treaty is intended to adhere to such obligation.'²¹⁵⁾ The provisional nature of this agreement is evident from article 23(a) providing for this Treaty to 'remain in force until a permanent delimitation of the continental shelf is agreed between the Contracting Parties or for thirty (30) years from the date of its entry into force, whichever is sooner', with the possibility in article 23(b) that it 'may be renewed by agreement between the Contracting Parties.' However, the Treaty also provides for the stability of ongoing projects, under article 23(c) that '[n]atural resource projects commenced under this Treaty shall continue, notwithstanding that this Treaty is no longer in force, under conditions that are consistent with those that are provided for under this Treaty.' Significantly from the perspective of investors keen to protect their investments in such natural resource projects by ensuring the certainty of applicable domestic taxation regimes, article 6(b) of the Treaty provides that: 'Neither Contracting Party may during the life of a natural resource project vary any of the provisions of the Taxation Code applicable to it except by mutual agreement.'

With respect to the designation of the co-operative area of continental shelf beyond 200 nm, article 3(a) of the Joint Management

²¹⁵⁾ Art 2(a), Joint Management Treaty.

Treaty denotes the Joint Zone described in article 2 of the Joint Sovereign Rights Treaty as the 'Joint Management Area (JMA)', and provides in article 3(b) that '[t]he Contracting Parties shall jointly control, manage and facilitate the exploration of the continental shelf within the JMA and the conservation, development and exploitation of its natural resources.' Natural resources are defined widely in terms similar to Article 77(4) of UNCLOS, but with explicit reference to 'petroleum' as well as minerals.²¹⁶⁾ Similarly, 'natural resource activities' is broadly defined to include means 'all activities authorised or contemplated under a contract, permit or licence that are undertaken to explore and exploit natural resources in the JMA'.²¹⁷⁾ This is distinct from a 'natural resources project' defined as meaning 'any natural resource activity taking place with the approval of the Designated Authority in a specified area of the JMA. A potentially interesting variation of a 'natural resources project' falling within the remit of this Treaty is raised by the inclusion of 'Biological Surveys and Bioprospecting' activities in article 13. For these purposes, article 1(b) defines 'bioprospecting' as 'the examination of biological resources for features including but not limited to chemical compounds, genes and their products and physical properties that may be of value for commercial development.' Article 13 then provides that each party has the right to conduct biological surveys and engage in bioprospecting to identify and examine living natural resources that may be of commercial use or conservation significance. What is notable here is that the 'living natural resources' that may be subject to bioprospecting activities for commercial development in the JMA

²¹⁶⁾ Article 1(n).

²¹⁷⁾ Article 1(o).

is not necessarily limited to the sedentary species identified within the definition of ‘natural resources’ in article 1(n) of this Treaty. This potentially wider scope for bioprospecting of ‘living natural resources’ in the JMA may exceed the legal constraints on sovereign rights to ‘natural resources’ within the continental shelf regime, as established under article 77 of UNCLOS.

Under article 3(c): natural resource activities in the JMA shall be carried out under the direction of the Designated Authority, ... including where appropriate through the issue of licences or pursuant to contracts between the Authority and a contractor. This provision shall also apply to the successors or assignees of such contractors. Paragraph (d) of article 3 then provides that the two States shall ‘make it an offence under their respective national laws for any person to conduct resource activities in the JMA otherwise than in accordance with this Treaty.’ This raises the issue of the exercise of the application of domestic laws and criminal jurisdiction within the JMA by the two States parties. Article 7 provides that the JMA shall be deemed to be and treated by each Contracting Party as forming part of its respective territory for the purposes of the application of the domestic laws related directly or indirectly to exploration and exploitation of the continental shelf of the JMA, as well as acts, matters, circumstances and things touching, concerning, arising out of or connected with, natural resource activities in the JMA. As for the actual exercise of such jurisdiction, article 16 provides for criminal jurisdiction over persons in the JMA.²¹⁸⁾ Apart from the normal modes of jurisdiction based upon nationality or flag State jurisdiction, article 3(c) is significant in that it provides for

²¹⁸⁾ Criminal law is defined widely under Article 1(g).

criminal jurisdiction over the nationals of third States for act or omissions occurring in the JMA that are connected to natural resource activities. Given the potential for overlapping and conflicting jurisdiction over criminal acts occurring in the JMA, article 16 further provides for a range of cooperative and information sharing measures. In addition to providing both States parties with jurisdiction in respect of acts or omissions occurring in the JMA connected with or arising out of natural resource activities, article 19 also provides that the parties may carry out surveillance activities in relation to natural resources, and cooperate or coordinate such activities, including the exchange of information on threats or security incidents related to natural resources.

Where petroleum fields or mineral deposits are found lying within or across the 200 nm limits of one or other of the EEZs of either State party and the JMA, as has proved to be so problematic in the Australia - Timor Leste situation, article 10 provides for 'Unitisation', treating a reservoir as as a single entity for exploration, development and management purposes. the parties shall work expeditiously and in good faith to reach agreement on how to manage, develop and share the revenues from the development. Moreover, to ensure this 'equitable sharing of revenue' occurs, article 5(c) provides that article 5(a) providing for the 50:50 split shall not apply to the equitable sharing of the benefits arising from unitisation under article 10, unless mutually agreed by the Contracting Parties. This is notwithstanding the 50:50 basis for revenue-sharing in the JMA itself.

Mention of the 'Designated Authority' (in article 3(c) above) leads us to a consideration of the regulatory bodies established under article 4(a) of Part 3 which provides for a 'three-tiered joint administrative

structure consisting of a Ministerial Council, a Joint Commission and a Designated Authority...'. Article 4(b)(i) provides for a Ministerial Council consisting an equal number of Ministers designated by the Contracting Parties, which under article 4(b)(ii), shall consider any matter relating to the operation of this Treaty that is referred to it by either of the Contracting Parties. It shall also consider any matter referred to it from the Joint Commission under article 4(c)(iii). Under article 4(b)(iv) all decisions of the Ministerial Council shall be adopted by consensus and (v): 'No decision of the Ministerial Council shall be valid unless it is recorded in writing and signed by at least one member from each Contracting Party.' Under article 4(c)(i): 'The Joint Commission shall consist of an equal number of commissioners appointed by the Contracting Parties. The Joint Commission shall establish policies and regulations relating to petroleum and other natural resource activities in the JMA and shall oversee the work of the Authority', with sub-paragraph (ii) providing that a 'non-exhaustive list of more detailed powers and functions of the Joint Commission is set out in Annex C.' The Ministerial Council thus performs a general decision-making role over all treaty matters, whereas the Joint Commission deals with all natural resource issues, as well as supervising the Authority.

Like the Ministerial Council, article 4(c)(iv) and (v) provide that decisions of the Joint Commission meeting at least once a year, shall be made by consensus. Article 4(d)(i) and (ii) then provide that 'the Joint Commission shall establish the Designated Authority, which shall have juridical personality and such legal capacities under the law of the Contracting Parties as are necessary for the exercise of its powers and the performance of its functions. It shall have the capacity to contract, to acquire and dispose of movable and immovable

property and to institute and be party to legal proceedings.’ Significantly, under sub-paragraph (iii), the Authority shall be responsible to the Joint Commission and shall carry on the day-to-day regulation and management of natural resource activities in the JMA, with sub-paragraph (iv) noting that a non-exhaustive list of more detailed powers and functions of the Authority is contained in Annex D and other annexes to this Treaty and that the Authority also has such other powers and functions as may be conferred upon it by the Commission. Article 4(d)(v) then provides that the Authority shall be financed on an equal basis by the Contracting Parties, including eventually through the remittance of fees collected under natural resource codes, established under article 8.

The centre-piece of this set of co-operative bilateral arrangements is the revenue sharing mechanism set out in article 5 of the Joint Management Treaty. This provides for an equal split of revenues (and expenditure) to Mauritius and the Seychelles. A further substantive development in this evolving international legal regime for co-operation is the detailed provisions for ‘Protection of the Seabed Marine Environment’ within the designated JMA/JZ. The main provision is article 12. Particular attention should be paid to paragraphs (b), (e) and (f) of this article as, much like article 13 on ‘Bioprospecting’ (above), these provisions represent potential extensions of the two coastal State’s prescriptive or legislative and enforcement jurisdiction beyond that allowed under Parts V, VI, and VII of UNCLOS. First, paragraph (e) of article 12 provides the Authority with prescriptive jurisdiction to issue regulations to protect living natural resources and the seabed environment, thereby apparently including those living resources present in the superjacent high seas waters outside the jurisdiction of the coastal State party, as well as those present on

the seabed and subsoil that is within the coastal State party's sovereign rights and jurisdiction under the continental shelf regime. The second sentence of paragraph (b) then clearly allows the relevant coastal State party to exercise enforcement jurisdiction by undertaking 'measures concerning fishing activity', again in the high seas waters superjacent to the seabed in the JMA. Last but not least, paragraph (f) provides that contractors shall be liable for damage or expenses incurred as a result of marine environmental pollution arising from natural resource activities within the JMA, but where such damage occurs within the superjacent high seas waters rather than the underlying seabed, then it will be affecting an area lying beyond national jurisdiction. This begs the question as to whether either of the coastal States parties can prosecute against such damage when they have technically suffered no injury themselves from it?

Finally, article 21, entitled: 'Settlement of Disputes', provides as follows:

(a) With the exception of disputes falling within the scope of the Taxation Code referred to in article 6 of this Treaty and which shall be settled in accordance with that Code as agreed by the Contracting Parties, any dispute concerning the interpretation or application of this Treaty shall, as far as possible, be settled amicably through mutual consultation.

(b) Any dispute which is not settled in the manner set out in paragraph (a) and any unresolved matter relating to the operation of this Treaty under article 4(b)(ii) shall, at the request of either of the Contracting Parties, be submitted to an Arbitral Tribunal established in accordance with the procedure set out in Annex B.

III. Common Elements within Joint Development Agreements

Regardless of the JD model utilized in State practice, similar types of provisions can be found in most of these agreements. The common features that are present to a greater or lesser extent in all three JD models discussed here can be summarized as follows: 1) the specific designation of a Joint Development/Transboundary Unitization Area or Zone; 2) the inclusion of a non-prejudice clause maintaining the sea-bed claim of the interested State party; 3) the obligation to co-operate and negotiate in good faith towards a JDA; 4) the allocation of criminal and civil jurisdiction within the JD Area/Zone; 5) Environmental Protection within the JDA Area/Zone; 6) the resolution of previously granted and overlapping concessions; 7) the inclusion of dispute settlement clauses. These common JDA elements can be further elaborated in the following ways:

- 1) A clear indication of the shared hydrocarbon deposits or designation of the overlapping claims area that is the subject of the joint development or transboundary unitization agreement concerned usually expressed in the form of latitudinal and longitudinal co-ordinates.
- 2) The inclusion of non-prejudice provisions safeguarding the legal rights of the interested States in respect of the shared hydrocarbon deposit(s) or overlapping claims area(s) where hydrocarbons are situated. This provision is to guard against any adverse inference that can be construed from the co-operative behaviour of these States in respect of the shared deposit(s) or overlapping claims area(s).
- 3) A statement of principle regarding the joint or shared nature of

the sovereign rights of the two States over the shared deposit or overlapping claims area concerned. This usually manifests itself in the form of a clause within the JDA providing for the joint development, transboundary unitization, or other type of specific co-operative approach to the shared resources problem between the two States. It is imperative to note that joint development or transboundary unitization does not always provide for an equal, 50:50 division of the resource in question. Several of the JDAs noted above purport to apply the joint development principle yet allocate different proportions of the revenues arising from the exploitation of the relevant resources for each of the States concerned. An early example of this asymmetrical division of revenues can be found within the 1993/1995 Guinea-Bissau/Senegal Agreement, which provides for an 85:15 differential favouring Senegal in its division of revenues.²¹⁹⁾ The most vivid example of the very different allocations of the shared resource that can be agreed between the contracting States is embodied in the 2002 Australia-Timor Leste (East Timor) Timor Sea Agreement, which provides that the profits from the exploitation of petroleum resources within the Joint Petroleum Development Area (JPDA) were to be divided 90:10 in favour of East Timor.²²⁰⁾

- 4) The inclusion of provisions setting out the division of civil and criminal jurisdiction within the overlapping claims area

²¹⁹⁾ See Article 2 of 1993 Guinea-Bissau/Senegal Agreement, op. cit.

²²⁰⁾ For a discussion of the background and main aspects of this Agreement, see: David M. Ong, "The New Timor Sea Arrangement, 2001: Is Joint Development of Common Offshore Oil and Gas Deposits Mandated under International Law?" *International Journal of Marine and Coastal Law*, Vol.17, No.2 (June, 2002) 79-122.

designated as the joint development zone, or over the unitized deposit lying across the already delimited continental shelf/EEZ boundary line. In the latter situation, this jurisdictional division usually follows the already delimited maritime boundary line. The former situation, within overlapping claim areas, is more fraught precisely because the dispute within these areas usually centers on precisely where such jurisdictional lines must be drawn in the first place. Nevertheless, once the joint development zone itself has been agreed, the parties usually manage to agree on an appropriate criminal jurisdiction line relatively easily. A good example of such a specific jurisdictional delimitation is Article V of the 1979 Malaysia-Thailand MOU, which delineated their respective criminal jurisdictions within the designated joint development zone according to a modified equidistance line once the question of sharing the petroleum resources within their overlapping continental shelf claim areas had been resolved by the adoption of this MOU, and subsequently the 1990 Joint Development Agreement.

- 5) The provision of some form of joint institution for the management of the shared resource, again ranging from the simplest forms of bilateral frameworks within Model I-type JDAs, to the most highly sophisticated and complex institutional and legal structures in the latest of the Model III-type JDAs. These latter agreements also provide for the specific taxation regime that will apply to the petroleum resources exploited from the designated deposits or overlapping claims areas. They also incorporate increasingly sophisticated dispute settlement mechanisms in the event of disputes arising from the interpretation and implementation of these agreements.

More specifically, there is a clear trend that runs in parallel to the increasing level of institutional provision within the later JDAs, especially those that are Model III JDAs. This trend is for environmental provisions to be increasingly manifest in these more recent JDAs as well.²²¹⁾ An obvious explanation for this trend is that it reflects growing public consciousness of environmental protection issues generally and marine oil pollution issues in particular. Hence the need to include environmental considerations within the negotiation, adoption, and implementation of more recent JDAs.

Several other more specific characteristics of these environmental considerations within bilateral JDAs can also be observed. First, conceptual advances in what constitutes ‘environmental protection’ are now reflected in such provisions within JDAs. These include: protecting ecosystem integrity as opposed to merely preventing pollution from joint development activities,²²²⁾ and recognising that environmental damage does not necessarily only occur as a result of pollution.²²³⁾

Second, environmental protection provisions within JDAs now also extend to apply to the entire life-cycle of the joint petroleum development activities. The 1989 Timor Gap treaty, for example, contains requirements to consider or include environmental concerns in many of its operative decisions. This emphasis on the inclusion of environmental considerations within every aspect of offshore petroleum

²²¹⁾ For an analysis of the relevant environmental protection provisions within the bilateral JDAs covered here, see: David M. Ong, ‘The Progressive Integration of Environmental Protection within Offshore Joint Development Agreements’, in Malgosia Fitzmaurice and Milena Szuniewicz (eds.), *Exploitation of the Natural Resources of the 21st Century*, The Hague: Kluwer Law International (2003) 113–41.

²²²⁾ See art. 7 of the 1974 France–Spain, Bay of Biscay JDA, op. cit.

²²³⁾ See art.10(a) of the 2002 Australia–Timor Leste (East Timor) Timor Sea Arrangement, op. cit.

activities now specifically includes the final, abandonment or decommissioning phase of any such activity.²²⁴⁾

Third, more recent JDAs increasingly establish sophisticated legal and institutional frameworks for joint exploitation of resources and many other wide-ranging functions including, *inter alia*, environmental protection within the designated joint development zone or transboundary unitization field. This is particularly true of many of the Model III-type JDAs that are characterised by the establishment of Joint Commissions/Authorities with powers to provide for environmental protection. This allows for increased flexibility and adaptability of these measures to take into account the different types of environmental threats and conditions under which joint development is undertaken. In the long run, such qualities may prove to be more effective at ensuring overall environmental protection from joint development activities.

Concluding this section of the study tracing the evolution of joint development models and their common elements, we should also note the apparently trite but nonetheless important observation that simply by agreeing to negotiate, adopt and implement these bilateral JD agreements, States are taking steps to avoid ultimately wasteful and potentially environmentally hazardous unilateral action over common hydrocarbon deposits. Thus, the practice of joint development itself can also be seen as a form of environmentally responsible behaviour by the interested States concerned in respect of shared natural resources.

²²⁴⁾ See, for example, the 1995 Argentina-UK Declaration which provides for environmental protection even in the abandonment/decommissioning phase, as opposed to the 1976 Norway-UK Frigg Field Agreement that does not. Full title: UK-Argentina Joint Declaration on Co-operation over offshore Activities in the South West Atlantic. Adopted: 27.9.1995. Source: 35 ILM 301.

IV. International Judicial Authorities on Joint Development Within Undelimited (or Overlapping Claims) Sea-bed Areas

In light of the above examples of bilateral State practice on joint development, coalescing into three main models and exhibiting several common elements between them, as discussed above; international judicial opinion has collectively expressed initially guarded, but increasingly strengthening, support for the application of the joint development principle. This is manifest in a line of cases beginning with the 1969 ICJ Judgment in the North Sea Continental Shelf cases,²²⁵⁾ followed by the 1981 Conciliation Commission Report on the Continental Shelf between Iceland and the Norwegian island of Jan Mayen,²²⁶⁾ the 1982 ICJ Judgment in the Tunisia/Libya case,²²⁷⁾ and in the 1999 Eritrea-Yemen Arbitration (Stage II-Maritime Delimitation) relating to maritime boundary delimitation between the two countries.²²⁸⁾

²²⁵⁾ As noted above, the ICJ held that JD Agreements were 'particularly appropriate' for preserving the unity of deposits lying across boundaries or within overlapping but equally justifiable continental shelf claims. See ICJ Reports (1969) op. cit., para.99, at 52. Accessible at: <http://www.icj-cij.org>. See also: Ong, AJIL (1999) op. cit., at 785.

²²⁶⁾ 20 ILM 797 (1981) This Commission recommended a single maritime boundary line, with a joint development zone covering the overlapping claims area as well as a unitization clause for any hydrocarbon deposits found lying across the boundary line. These recommendations were subsequently included within the 1981 Iceland-Norway Agreement on the Continental Shelf between Iceland and Jan Mayen island. See: 21 ILM 1222. See also: Ong, AJIL (1999) *ibid.*, at 785-786.

²²⁷⁾ Here, Judge Evensen, who was also a member of the 1981 Iceland-Norway Conciliation Commission, recommended the joint development solution in his dissenting opinion. This proposed solution was eventually taken up by the two parties, culminating in the 1988 Agreement establishing an equally owned company for petroleum exploration, exploitation and services, made in Benghazi, Libya on 8 August 1988; followed by a further Agreement complementary to the Agreement for the incorporation of joint oil exploration and exploitation, and oil services company concluded by and between the Republic of Tunisia and the Great Socialist People's Libyan Arab Jamahiriya. Adopted: 25 October 1995. (Unpublished, copy on file with author)

²²⁸⁾ See: Eritrea/Yemen, Award of the Arbitral Tribunal in the Second Stage of the Proceedings

In this last case, the Arbitral Tribunal did not acknowledge the need to establish joint resource zones for fisheries resources within Yemen's waters, despite accepting Eritrea's historic fishing rights in that area. However, when it came to non-living hydrocarbon resources such as petroleum deposits, the Tribunal observed that 'in the last thirty years there has grown up a significant body of cooperative state practice in the exploitation of resources that straddle maritime boundaries'.²²⁹⁾ Relying on this State practice in favour of joint development and transboundary unitization arrangements, as well as the historical ties and friendly relations between the two States, the Tribunal noted that such cooperative State practice in the exploitation of resources that straddle maritime boundaries had particular relevance in the instant case between Yemen and Eritrea as they face each other across a relatively narrow body of water.²³⁰⁾

Moreover, on the procedural front, the Tribunal held that the two Parties are bound to inform and consult one another on any oil and gas deposit or other mineral resources that may be discovered to straddle the recommended single maritime boundary between them or lie in its immediate vicinity.²³¹⁾ It concluded that this body of State practice on joint development and transboundary unitization dictates 'that Eritrea and Yemen should give every consideration to the shared or joint or unitized exploitation of any such (straddling) resources.'²³²⁾ (emphasis added) Commenting on this decision, Reisman notes that 'the Tribunal seemed to assume that some of

(Maritime Delimitation), 17 December, 1999. Accessible at: <http://www.pca-cpa.org>.

²²⁹⁾ See para.84, at p.27 of the *Eritrea/Yemen Award* (1999) *ibid*.

²³⁰⁾ *Ibid.*, at para.85, at p.28 of the *Eritrea/Yemen Award*.

²³¹⁾ *Ibid.*, at para.86, at p.28 of the *Award*.

²³²⁾ *Ibid.*, at para.86, at p.28 of the *Award*.

these (State) practices were rapidly acquiring, but have not yet attained, customary international law status.’²³³⁾ In the 2007 Guyana/Suriname Award, the Tribunal arguably provided the most supportive statement so far of international judicial opinion in favour of the ‘joint development’ principle, noting that: ‘Joint exploitation of resources that straddle maritime boundaries has been particularly encouraged by international courts and tribunals’²³⁴⁾ (emphasis added) and explicitly citing both the above Eritrea/Yemen (Stage II) Award and the North Sea Continental Shelf cases as previous international judicial authorities for this claim.

More generally, it can now be argued that the joint development principle is mandated under international law as both a viable legal solution and valid alternative to straightforward continental shelf boundary delimitation, especially in the presence of common hydrocarbon deposits. The steadily accumulating legal authorities for this conclusion derive from continuing, indeed even accelerating, bilateral State practice on joint development, coupled with increasingly favourably-worded international judicial decisions. In the case of shared hydrocarbon deposits within a disputed, overlapping sea-bed claims area, the legal mandate for joint development in the form of such provisional arrangements is now clear, even in the absence of any final continental shelf delimitation agreement. This is notwithstanding the fact that no single joint development/transboundary unitization model or type of provisional agreement is specifically required under international law. As Lagoni notes in relation to such

²³³⁾ W. Michael Reisman, ‘Eritrea-Yemen Arbitration Award Phase II-Maritime Delimitation’, International Decisions, *American Journal of International Law*, Vol.94, No.4 (October, 2000) 721-36, at 735.

²³⁴⁾ Para.463, at p.154 of present *Guyana/Suriname Award*.

provisional arrangements, '(t)he States concerned are obliged not to undertake specific actions but to endeavour to reach an agreement on interim measures.'²³⁵⁾ Indeed, even where continental shelf delimitation has already occurred, a further need for the international or transboundary unitization of straddling deposits may well be necessary, where these are found to be lying across the boundary line. The application of the joint development principle in each of these cases is well nigh inevitable and appears to be increasingly accepted as such by the interested states concerned.

A. International Judicial Authorities on the Procedural Rules for Joint Development in Undelimited/Overlapping Claims Areas

Of late it is possible to discern further progressive developments in the specification of the procedural aspects of the international law governing this issue. In a significant contribution to the literature on these 'rules of engagement', Cameron holds that: 'The international legal regime might therefore be better described as providing States with 'rules of engagement' rather than 'rules of cooperation.'²³⁶⁾ While not necessarily agreeing with the notion that the international legal regime governing joint development provides 'no more than' these 'rules of engagement',²³⁷⁾ it is submitted here that the 2007 Guyana/Suriname Award fulfills an important function for this emerging legal regime by considerably fleshing-out the applicable legal framework of procedural obligations owed between interested

²³⁵⁾ Lagoni, AJIL (1984) op. cit., at 354.

²³⁶⁾ Peter D. Cameron, 'The Rules of Engagement: Developing Cross-Border Petroleum Deposits in the North Sea and the Caribbean', *International & Comparative Law Quarterly*, Vol.55, Part 3 (July, 2006) 559-585, at 561.

²³⁷⁾ *Ibid.*

States in disputed maritime areas. Thus, it is possible to suggest that both the general character of the co-operative principle and specifically, the lack of clarity in the requirements for consultation and negotiation as elaborative elements of this principle, as highlighted by Cameron,²³⁸⁾ have now been addressed by the Tribunal in this Award. Moreover, the Award deals with these procedural elements for co-operation in such a way as to considerably reduce the scope for any unilateral action by interested States in a disputed maritime area, where hydrocarbon resources have been detected. While Cameron is correct to observe that '(t)he existence of a procedural rule requiring co-operation is distinct from a requirement that the shared petroleum deposit be developed jointly'²³⁹⁾, it is at least arguable that the Award's detailed elaboration of the procedural requirements to negotiate such provisional arrangements will, by implication, considerably improve the scope for the adoption of JDAs in many, if not most, cases. Notably, as Aust states in this context, any such agreement to negotiate (*pactum de negotiando*) must be carried out in good faith.²⁴⁰⁾ In this regard, it is instructive that Article 300 of the 1982 UNCLOS specifically incorporates the notion of 'abuse of rights' within its articulation of the 'good faith' principle to the 'rights, jurisdictions and freedoms' of States provided in this treaty,²⁴¹⁾ thus highlighting both aspects of co-operation and

²³⁸⁾ *Ibid.*, at 560–61.

²³⁹⁾ *Ibid.*, at 564.

²⁴⁰⁾ Anthony Aust, *Modern Treaty Law and Practice*, 2nd ed., Cambridge: CUP (2008) at 31, citing H. Thirlway, 'The Law and Procedure of the International Court of Justice', *British Year Book of International Law* 1992, Vol.63 (1993) 3–10, and the case of the *Railway Traffic between Lithuania and Poland*, Permanent Court of International Justice (PCIJ) Reports (1931) Series A/B.No.42, p.109.

²⁴¹⁾ Article 300 of the 1982 UNCLOS, *op. cit.*, provides as follows: 'States Parties shall fulfil in good faith the obligations assumed under this Convention and shall exercise the rights, jurisdiction and

mutual restraint in the exercise of coastal States' sovereign rights within the present context.

B. The 2007 Guyana/Suriname UNCLOS Annex VII Arbitral Tribunal Award

The Guyana/Suriname dispute before the Tribunal had its flashpoint in an incident that occurred on 3 June 2000, when a Guyanese concessionaire - CGX Resources Inc.'s (hereinafter, CGX) oil rig and drill ship, the C.E. Thornton, a vessel conducting exploratory operations on behalf of the Canadian-based company, was ordered to leave the disputed maritime area claimed by both Guyana and Suriname off their respective coastlines by armed Surinamese naval patrol boats.²⁴²⁾ This dispute however has its roots further back in the colonial and post-colonial history of both these two relatively young, developing States situated on the north-east coast of the South American continent. In essence, an initial disagreement over the maritime boundary both within and especially beyond the (then) 3 nautical mile territorial seas between the two colonial powers, Britain and The Netherlands, going back at least to the eve of World War II in 1939,²⁴³⁾ has spilled over from history into the present day to colour the positions adopted by post-colonial, independent States of Guyana (formerly British Guyana) and Suriname (formerly, Dutch Guyana) in respect of their extended maritime jurisdiction claims, namely, the EEZ and continental shelf.

Summarizing the Parties' claims before the Arbitral Tribunal constituted

freedoms recognized in this Convention in a manner which would constitute an abuse of right.'

²⁴²⁾ Para.151, at p.32 of the present *Guyana/Suriname Award*

²⁴³⁾ For more background information on this dispute, see: Chapter II-Introduction, B. Historical Background, paras.137-156, at pp.29-34 of the present Award.

under Annex VII of the 1982 UNCLOS, it is possible to state that essentially, the present dispute coalesced around four main issues – one procedural and three substantive in nature. These are outlined as follows: The first, procedural, question relates to Suriname’s preliminary objections to the Arbitral Tribunal’s jurisdiction to hear this case,²⁴⁴⁾ which were rejected by Guyana.²⁴⁵⁾ The Tribunal’s response to the Parties’ submissions on its jurisdiction to determine the maritime boundary is presented in Chapter IV of the Award, where it found that it had ‘jurisdiction to delimit the maritime boundary in dispute between the Parties.’²⁴⁶⁾

The second major issue and first substantive question placed before the UNCLOS Annex VII Arbitral Tribunal related to this maritime boundary delimitation dispute between the two Parties, off their respective coastlines. This delimitation question arose in relation to three maritime jurisdiction zones, namely, the 12 nautical mile (nm) territorial sea, the Exclusive Economic Zone (EEZ) and the continental shelf, until the 200 nautical mile (nm) limit, as measured from the baselines of the territorial sea. The positions, arguments and submissions of both Parties on these delimitation questions are outlined by the Arbitral Tribunal in Chapter III. C., of the Award,²⁴⁷⁾ followed by the Arbitral Tribunal’s Findings on these delimitation questions in ‘Chapter V – Delimitation in the Territorial Sea’,²⁴⁸⁾ and ‘Chapter VI

²⁴⁴⁾ These submissions were initially made in Suriname’s Memorandum of 23 May, 2005 setting out her Preliminary Objections and later reaffirmed in her Counter-Memorial, filed on 1 November, 2005. See: Paras. 160–161, at p.35 of the present Award. The Parties’ respective submissions on the jurisdiction of the Tribunal are summarized by the Tribunal in ‘Chapter III – Arguments of the Parties, A. Submissions on Jurisdiction’, paras.164–185, at pp.39–47 of the Award.

²⁴⁵⁾ In Guyana’s First Submission before the Tribunal and in her Reply. See para.157, at pp.34–35 of the present Award, citing para.10.1 of Guyana’s Reply (to Suriname’s 23 May 2005 Memorial).

²⁴⁶⁾ Para.280, at p.85 of the present Award.

²⁴⁷⁾ Paras. 209–262, at pp.56–77 of the Award.

- Delimitation of the Continental Shelf and Exclusive Economic Zones'.²⁴⁹⁾ The third question and second substantive issue considered by the Arbitral Tribunal centres on Guyana's claim that Suriname was responsible under international law for the alleged use of armed force during the 'CGX incident' on 3 June 2000. This was the subject of 'Guyana's Third Submission', summarized in Chapter III. D,²⁵⁰⁾ and dealt with by the Arbitral Tribunal in Chapter VII of the Award.²⁵¹⁾ Finally, the fourth question and third substantive issue before the Arbitral Tribunal related to the conduct of the Parties in relation to their duties under the identically worded Articles 74(3) and 83(3) of the 1982 UNCLOS, respectively. It is this fourth and final issue that will be the focus of this section of the present study, as follows:

C. Guyana's Fourth Submission

In the context of the present dispute, the specific references to Articles 74(3) and 83(3) were made by Guyana in her Fourth Submission and responded to by Suriname in her Submissions 2.C and 2.D. These arguments were summarized by the Tribunal in Chapter III.E,²⁵²⁾ before being subject to detailed consideration in Chapter VIII,²⁵³⁾ of its Award. According to the Tribunal, Guyana claimed that Suriname breached these two Articles by failing to seek resolution by resort to practical provisional arrangements and by conducting itself in manner that jeopardized reaching a final agreement.²⁵⁴⁾ Moreover, Guyana traced this failure to co-operate on

²⁴⁸⁾ Paras. 281–329, at pp.87–104, with an attached Map (2), at p.105 of the Award.

²⁴⁹⁾ Paras.330–400, at pp.107–129, with an attached Map (3), at p.130 of the Award.

²⁵⁰⁾ Paras.263–278, at pp.78–84 of the Award.

²⁵¹⁾ Paras.401–452, at pp.131–150 of the Award.

²⁵²⁾ Paras. 274–278, pp.82–84, of the Award.

²⁵³⁾ *Ibid.*, paras 453–486, pp.151–163, of the Award.

the part of Suriname from the (ultimately unsuccessful) negotiations between the parties following the 1989 *modus vivendi*, the 1991 Memorandum of Understanding (MOU), and the events of June 2000, when CGX's vessel was ordered to leave the disputed maritime area.²⁵⁵⁾ Guyana also rejected Suriname's claim that events prior to 1998 (the year of Suriname's accession to the 1982 UNCLOS) were irrelevant to the Tribunal's determination, arguing that 'those events are relevant to the interpretation of post-1998 conduct as they demonstrate a consistent pattern of negative conduct.'²⁵⁶⁾

D. Suriname's Submissions 2.C and 2.D

Suriname, on the other hand, submitted that only conduct following 8 August 1998, when the 1982 Convention entered into force between the Parties was relevant to Guyana's allegations. In respect of the relevant Articles invoked by Guyana in this aspect of her Submissions, Suriname contended that Guyana's 'unyielding' approach to their bilateral negotiations constituted a breach of these Articles.²⁵⁷⁾ According to Suriname, the unyielding nature of Guyana's approach to these negotiations was manifest in her 'unworkable' proposals and lack of disclosure of the Guyana-CGX commercial arrangements within the disputed area.²⁵⁸⁾ Finally, Suriname submitted that the 1989 *modus vivendi* and 1991 MOU themselves amounted to provisional arrangements that had been violated by Guyana's 'unreasonable departure' from these agreements,

²⁵⁴⁾ *Ibid.*, para.274, at p.82 of the Award, citing para.10.6 of Guyana Memorial, also accessible at: <http://www.pca-cpa.org/>

²⁵⁵⁾ *Ibid.*, fn.303, para.275, at p.83 of the Award, citing Guyana Reply, paras. 9.1-9.14.

²⁵⁶⁾ *Ibid.*, fn.304, para.275, at p.83, citing Transcript, pp.607-609.

²⁵⁷⁾ *Ibid.*, para.276, at p.83.

²⁵⁸⁾ *Ibid.*, para.277, at p.83.

through its contractual arrangements with oil companies within the disputed area.²⁵⁹⁾

E. The Tribunal's Interpretation of Articles 74(3) and 83(3) of the 1982 UNCLOS

Articles 74(3) and 83(3) of the 1982 UNCLOS provide identically as follows:

‘Pending agreement as provided for in paragraph 1, the States concerned, in a spirit of understanding and co-operation, shall make every effort to enter into provisional arrangements of a practical nature and, during this transitional period, not to jeopardize or hamper the reaching of the final agreement. Such arrangements shall be without prejudice to the final delimitation.’

As every word within each of these provisions is identical, the following discussion will refer to the individual words and phrases as they are present within each provision, with their legal implications being assumed to apply *mutatis mutandis* in respect of either disputed EEZ or continental shelf claims. To begin with, it is important to know what States had in mind when they negotiated these provisions. As Klein notes, ‘(t)he policy of allowing such arrangements rests in the promotion of stability in the relations between States.’²⁶⁰⁾ Charney had previously suggested that ‘(s)uch arrangements enable States to make use of the disputed areas and to conduct normal relations there. In the absence of such arrangements, States may feel compelled at some cost, to forcefully challenge each other’s action

²⁵⁹⁾ Ibid., para.277, at pp.83–84.

²⁶⁰⁾ Natalie Klein, *Dispute Settlement in the UN Convention on the Law of the Sea*, Cambridge: Cambridge University Press (2005) at 248.

in the area to maintain legal rights.’²⁶¹⁾ On the other hand, these provisions have also been criticized as ‘so vague that it can be of little practical assistance in establishing interim measures.’²⁶²⁾ As Klein observes, ‘the LOSC requirement leaves States with considerable discretion on what temporary measures should be taken’²⁶³⁾, as with their negotiation of ‘final’ maritime boundary delimitation agreements. She concludes that ‘(S)tates are under no obligation to devise provisional arrangements but must only endeavour to reach agreement on these arrangements.’²⁶⁴⁾ However, Klein is also not alone in highlighting the potential legal significance of the phrase ‘shall make every effort’ within the present Articles.²⁶⁵⁾ Lagoni had previously noted that this phrase was ‘crucial to our understanding of paragraph 3 (of Articles 74/83)···’, as ‘(t)he language used indicates that this requirement is not merely a nonbinding recommendation or encouragement, but a mandatory rule whose breach would represent a violation of international law.’²⁶⁶⁾ Thus, the previously perceived lack of a specific legal requirement to negotiate and actually adopt provisional arrangements may now need to be revised in light of the interpretation of the phrase ‘shall make every effort’ that was adopted by the Tribunal in the present Award.

The Tribunal considered both Parties’ submissions on Articles 74(3)

²⁶¹⁾ Jonathan I. Charney, ‘Progress in International Maritime Boundary Delimitation Law’, *American Journal of International Law*, Vol.88, No.2 (1994) 227, at 227.

²⁶²⁾ David Attard, *The Exclusive Economic Zone in International Law*, Oxford: Oxford University Press (1987) at 228.

²⁶³⁾ Natalie Klein, ‘Provisional Measures and Provisional Arrangements in Maritime Boundary Disputes’, *International Journal of Marine & Coastal Law*, Vol.21, No.4 (December, 2006) 423-460, at 444.

²⁶⁴⁾ *Ibid.*

²⁶⁵⁾ *Ibid.*, at 445.

²⁶⁶⁾ Lagoni, *AJIL* (1984) *op. cit.*, at 354.

and 83(3) in detail within Chapter VIII of its Award. Prior to this exercise, the Tribunal lays out and examines the obligations provided by these provisions. It first declares that these Articles impose two obligations which according to the Tribunal ‘simultaneously attempt to promote and limit activities in a disputed maritime area.’²⁶⁷⁾ The first requirement is that pending the final delimitation agreement, States Parties are to make ‘every effort to enter into provisional arrangements of a practical nature.’²⁶⁸⁾ The second obligation is that the Parties must during this transitional period also make every effort not to jeopardize or hamper the reaching of the final delimitation agreement.²⁶⁹⁾

In relation to the first obligation contained within these Articles, the Tribunal was of the view that it was intended to promote the provisional utilization of natural resources within disputed maritime areas, pending their delimitation. Thus, according to the Tribunal, ‘this obligation constitutes an implicit acknowledgement of the importance of avoiding the suspension of economic development in a disputed maritime area, as long as such activities do not affect the reaching of a final agreement.’²⁷⁰⁾ In doing so, the Tribunal also noted that such provisional arrangements would achieve one of the 1982 Law of the Sea Convention’s objectives, namely, ‘the equitable and efficient utilization of the resources of the seas and oceans.’²⁷¹⁾ Focusing on the normative density of this first obligation, the Tribunal noted that despite the fact that the phrase ‘every effort’

²⁶⁷⁾ Para. 459, at 152 of the present Award.

²⁶⁸⁾ *Ibid.*

²⁶⁹⁾ *Ibid.*, para.459, at p.153.

²⁷⁰⁾ *Ibid.*, para.460, at p.153.

²⁷¹⁾ *Ibid.*, citing the Preamble to the 1982 Convention, where this term can be found in the 4th indent.

leaves room for interpretation by the interested States or any dispute settlement body, 'it is the opinion of the tribunal that the language in which the obligation is framed imposes on the Parties a duty to negotiate in good faith.'²⁷²⁾ The Tribunal buttresses this finding by suggesting that the inclusion of the phrase 'in a spirit of understanding and co-operation', indicates the drafters' intent to require of the parties a conciliatory approach to negotiations, pursuant to which they would be prepared to make concessions in the pursuit of a provisional arrangement.'²⁷³⁾ This allusion to the intentions of the parties to the 1982 Convention is returned to by the Tribunal later on in the Award when it notes that: 'Provisional arrangements of a practical nature have been recognized as important tools in achieving the objectives of the Convention, and it is for this reason that the Convention imposes an obligation on parties to a dispute to make every effort to reach such agreements.'²⁷⁴⁾

The manner in which the Tribunal emphasized the co-operative element inherent in the first obligation of the relevant Articles makes it possible to suggest that this particular obligation to make every effort to enter into provisional arrangements of a practical nature is arguably unqualified and with few possible exceptions. This then raises the question as to whether the assumption that no such provisional arrangement must actually be concluded should still prevail. Cameron, for example, is emphatic in stating: 'States are not required to conclude the negotiations with a successful outcome.'²⁷⁵⁾

²⁷²⁾ *Ibid.*, para.461.

²⁷³⁾ *Ibid.* This term does replicate almost word for word: 'in a spirit of mutual understanding and co-operation', the very first indent of the Preamble to the 1982 Convention.

²⁷⁴⁾ *Ibid.*, at para.464, at p.154 of the Award.

²⁷⁵⁾ Cameron, ICLQ (2006) op. cit., at 566.

At the very least, this assumption must now be qualified to the extent that interested States are required to show that they have made ‘every effort’ to enter into such provisional arrangements. This much can at least be discerned from the facts in the present Award where a last-minute offer of negotiations made by Guyana, after initiating an exploratory drilling programme, went unheeded by Suriname. Both the last-minute negotiations offer by Guyana and Suriname’s refusal to negotiate was held by the Tribunal to be insufficient to fulfill this first obligation on the part of each of these two States. Certainly, this should preclude any interested State finding itself in a similar situation from prolonging the negotiations, either unnecessarily or unjustifiably.²⁷⁶⁾

Turning now to the Tribunal’s consideration of the second obligation inherent within these Articles, it can immediately be discerned that the Tribunal is more circumspect in its articulation of the obligation not to jeopardize or hamper the reaching of any provisional arrangements. In contrast to the apparently unequivocal nature of the first obligation, the Tribunal’s approach to this second obligation is altogether more qualified in its articulation. As the Tribunal notes: ‘It should not be permissible for a party to a dispute to undertake any unilateral activity that might affect the other party’s rights in a permanent manner. However, international courts and tribunals should also be careful not to stifle the parties’ ability to pursue economic development in a disputed area during the boundary dispute, as the resolution of such disputes will typically be a time-consuming process. The Tribunal’s interpretation of the obligation not to hamper or jeopardize the reaching of a final

²⁷⁶⁾ Ong, *AJIL* (1999) *op. cit.*, at 784, cited in Cameron, *ICLQ* (2006) *ibid.*, at 567.

agreement must reflect this delicate balance.’²⁷⁷⁾

Thus, while imposing the equivalent wording to this obligation in the sense of the ‘duty to make every effort’, the Tribunal nevertheless states: ‘However, it is important to note that this obligation was not intended to preclude all activities in a disputed area.’²⁷⁸⁾ (emphasis added) Here, the Tribunal refers favourably to the authoritative Virginia Commentary which notes that activities which are not prejudicial to the final delimitation agreement are not excluded.²⁷⁹⁾ The Tribunal then proceeds to specify two classes of activities that are permissible in this context. The first class of such permissible activities comprise of any acts taking place under the auspices of an adopted provisional arrangement, as envisaged by the relevant Articles. The second class of permissible activities includes those acts that are unilateral in nature but do not necessarily have the effect of jeopardizing or hampering the final delimitation agreement.²⁸⁰⁾ At this juncture, the Tribunal makes an all-important distinction between two categories of such unilateral activities on the part of the initiating State. It states that ‘unilateral acts which do not cause physical change to the marine environment would generally fall within the second (permissible) class. However, acts that do cause physical change would have to be undertaken pursuant to an agreement between the parties to be permissible, as they hamper or jeopardize the reaching of a final agreement on delimitation.’²⁸¹⁾ The Tribunal then further specifies the nature of the physical change in

²⁷⁷⁾ Para.470, at p.156 of the present Award.

²⁷⁸⁾ Para.465, at pp.154–155 of the Award.

²⁷⁹⁾ *Ibid.*, citing Myron H. Nordquist (ed.) *United Nations Convention on the Law of the Sea 1982: A Commentary*, Leiden: Nijhoff (hereinafter, Virginia Commentary) Vol.II at 815.

²⁸⁰⁾ Para.467, at p.155 of the Award.

²⁸¹⁾ Para.467 *ibid.*

the sense that this change must be ‘permanent physical change, such as exploitation of oil and gas reserves, and those that do not, such as seismic exploration.’²⁸²⁾ (emphasis added)

The Tribunal continues its discussion on this issue by reference to the Aegean Sea Continental Shelf (Interim Measures) case before the International Court of Justice (ICJ) in 1976.²⁸³⁾ Here, the Tribunal notes that the ICJ refused to order interim measures for three reasons: (1) the fact that seismic exploration does not involve any risk of physical damage to the seabed or subsoil, (2) the activities were of a transitory character and did not involve the establishment of installations, and (3) no operations involving the actual appropriation or other use of natural resources were embarked upon. Thus, the ICJ found that Turkey’s conduct did not pose the risk of irreparable prejudice to Greece’s rights.²⁸⁴⁾ The Tribunal then concludes that drawing a distinction between activities having a permanent physical impact on the marine environment, and those that do not, effectively accomplishes the balance previously alluded to above. This reflects the balance between one party’s right to economic development and the risk of irreparable prejudice to another party’s sovereign rights. According to the Tribunal, this distinction is also consistent with other international tribunals’ jurisprudence on other aspects of the law of the sea and international law.²⁸⁵⁾

However, a few definitional questions can be raised at this point. Notably, how much *permanent, physical change* or in fact – *damage*,

²⁸²⁾ *Ibid.*

²⁸³⁾ *Aegean Sea (Greece v Turkey) case, ICJ Reports (1976) 3.*

²⁸⁴⁾ Para.468, at pp.155–156 of the present Award, citing the Aegean Sea case, ICJ Reports (1976) *ibid.*, at paras. 30 and 31.

²⁸⁵⁾ Para.470, at p.156.

must occur before irreparable prejudice can be presumed? This issue relates in particular to the notion that appears to be accepted by the Tribunal in the present case, which is that the balancing act at the threshold point of the legality of a State's actions is between seismic activities and drilling operations. In the *Aegean Sea* dispute, for example, the Turkish seismic testing activities apparently did not cause *physical damage* and were ultimately not held to be irreparably prejudicial to Greek interests, but these tests did involve the detonation of small explosions within the marine environment to create and send sound waves through the seabed that could then be examined for indications of hydrocarbon accumulations. Thus, *physical change*, possibly of a *permanent* nature, may have been caused within the relevant marine environment concerned, even if this did not amount to *physical damage*.²⁸⁶⁾ The present Tribunal's apparent lack of concern over whether *physical damage*, as opposed to merely *physical change*, has taken place can perhaps be explained by its acknowledgement that the legal standard or threshold for an indication of interim or provisional measures is higher than that required for jeopardizing or hampering the reaching of a final delimitation agreement.²⁸⁷⁾ Thus, while permanent, *physical damage* is required in order to amount to an irreparable prejudice of a State's sovereign rights such that an international tribunal will make a provisional/interim measures order; *permanent, physical change* is all that is needed for a finding that the activity in question is hampering

²⁸⁶⁾ Similar conceptual difficulties are raised by the notion of change and damage within the context of marine contamination and marine pollution, see: David M. Ong, 'The Relationship between Environmental Damage and Pollution: Marine Oil Pollution Laws in Malaysia and Singapore', in Michael Bowman & Alan Boyle (eds.) *Environmental Damage in International and Comparative Law*, Oxford: Oxford University Press (2002) 191-212.

²⁸⁷⁾ Para.469 at p.156 of Award.

the reaching of the final agreement.

A further pertinent question that was not specifically considered by the Tribunal is the exact time period within which the Parties must make every effort not to jeopardize the reaching of the final agreement. This question relates to the phrase ‘during this transitional period’. Specifically, should this phrase be interpreted to mean that the obligation not to jeopardize the final agreement extends also to the period of negotiations for the provisional arrangement itself, or does it only arise and apply when the provisional arrangement has been negotiated and adopted until such time as a final delimitation agreement has been effectuated. A strictly literal interpretation of this phrase would lead to the conclusion that the transition period referred to here means only the period *after* any provisional arrangement has already been concluded, so that the obligation not to jeopardize or hamper the final maritime boundary delimitation agreement only applies during the period when the adopted provisional arrangements are applicable.

However, according to the general rule of interpretation embodied in Article 31(1) of the 1969 Vienna Convention on the Law of Treaties (hereinafter, VCLT):

‘A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.’

Within this context, the application of the ‘good faith’, ‘object and purpose’ (or teleological) and arguably also the ‘effectiveness’ principles of treaty interpretation would suggest that the obligation not to jeopardize or hamper the final agreement is applicable to both the period of negotiations for the provisional arrangement and

the entire duration of its necessarily temporary existence. Such an interpretation of this phrase should not go unchallenged, especially when we consider that the latter (effectiveness) principle was not viewed by McNair as being necessarily applicable in the law of treaties.²⁸⁸⁾ Fitzmaurice on the other hand, held that the ‘principle of effectiveness’ was in fact a more restrained application of the teleological interpretation of treaties, to the effect that treaty texts are to be presumed to have been intended to have a definite force and effect.²⁸⁹⁾ Thus, according to him, the effectiveness principle meant that ‘(t)reaties are to be interpreted with reference to their declared or apparent objects and purposes; and particular provisions are to be interpreted so as to give them their fullest weight and effect consistent with the normal sense of the words and in such a way that a reason and meaning can be attributed to every part of the text.’²⁹⁰⁾ On the other hand, he observed that it was through the effectiveness principle that the International Court of Justice (ICJ) applied the teleological element in treaty interpretation.²⁹¹⁾ Moreover, he noted that ‘the Court had subordinated the principle of effectiveness to that of the textual and natural meaning, in the sense that it is never legitimate, even with the object of giving maximum effect to a

²⁸⁸⁾ Lord McNair, *The Law of Treaties*, Oxford: Clarendon Press (1961, reprinted in 1998) at 383–385.

²⁸⁹⁾ Gerald G. Fitzmaurice, *The Law and Procedure of the International Court of Justice*, Cambridge: Grotius (1986) at 49. See also Fitzmaurice’s two *British Yearbook of International Law* articles, which deal with the principles of treaty interpretation, as applied by the International Court of Justice in the period prior to 1951, see G.G. Fitzmaurice, ‘The Law and Procedure of the International Court of Justice: Treaty Interpretation and Certain Other Treaty Points’, *BYIL* 1951, Vol.28 (1952) 1–27; and by the ICJ from 1951–54, see Sir Gerald Fitzmaurice, ‘The Law and Procedure of the International Court of Justice, 1951–4: Treaty Interpretation and Other Treaty Points’, *BYIL* 1957, Vol.33 (1958) 203–93.

²⁹⁰⁾ Fitzmaurice, *BYIL* 1957 (1958) *ibid.*, at 211.

²⁹¹⁾ *Ibid.*, at 220–221.

text, to interpret it in a manner actually contrary to, or not consistent with, its plain meaning.’²⁹²⁾ Thirlway further distinguishes between two strands of the effectiveness principle as applied to treaty interpretation, with the first being that all provisions of a treaty ‘must be supposed to have been intended to have significance and to be necessary to convey the intended meaning;... (and) (t)he second is the rule that the instrument as a whole, and each of its provisions, must be taken to have been intended to achieve some end,...’²⁹³⁾ Here, Thirlway, like Fitzmaurice before him, acknowledges the similarity of this articulation of the effectiveness principle with the ‘object and purpose’ criterion for treaty interpretation and, again like Fitzmaurice, cautions against the unbridled application of this principle, stating that it needs ‘to be employed with discretion.’²⁹⁴⁾ Finally, Aust too confirms that ‘although paragraph 1 (of Article 31 of the VCLT) contains both the textual and the effectiveness (or teleological) approaches, it gives precedence to the textual.’²⁹⁵⁾

Applying these learned opinions on the principle of effectiveness in treaty interpretation to the present phrase, it can certainly be argued that reading this phrase: ‘during this transitional period’, as extending the duty ‘not to jeopardize or hamper the reaching of the final agreement’ to include both the period of negotiations towards the provisional arrangements concerned, as well as the duration of the application of these provisional arrangements, would both improve the effectiveness of these arrangements, as well as achieve

²⁹²⁾ *Ibid.*, at 223.

²⁹³⁾ Hugh Thirlway, ‘The Law and Procedure of the International Court of Justice 1960–1989 (Part Three)’, *BYIL* 1991, Vol.62 (1992) 1–75, at 44.

²⁹⁴⁾ *Ibid.*, at 44.

²⁹⁵⁾ Aust, 2nd ed. (2007) *op. cit.*, at 235, citing O’Connell, at 255.

at least one of the objects and purposes of the 1982 UNCLOS, namely, 'the equitable and efficient utilization of their resources.'²⁹⁶⁾ Moreover, this application of the efficiency principle to the interpretation of this phrase, while arguably in line with the teleological approach, nevertheless does not appear to go beyond the ordinary (or literal) meaning of the phrase.

Generally, an ordered, even hierarchical, approach by the Tribunal can be discerned when comparing its consideration of both obligations inherent in the relevant Articles, in the sense that the first, co-operative obligation is without qualification, whereas the second obligation of mutual restraint is tempered by the fact that not all types of exploration activity by an initiating State would be considered to be jeopardizing or hampering the final delimitation agreement. This would seem to mitigate against the procedural order implied by Cameron whereby the obligation of mutual restraint is given pride of place before the twin principles of co-operation and good faith.²⁹⁷⁾ The Tribunal would appear to have clearly asserted a natural order of proceedings in the application of the first (co-operative) obligation, to be followed by the second (mutual restraint) obligation inherent within Articles 74(3) and 83(3).

F. The Tribunal's Application of Articles 74(3) and 83(3) to Guyana and Suriname Actions in the Overlapping Claims Area

1) Suriname

Applying these general deliberations to the facts of the case at

²⁹⁶⁾ See 4th indent of Preamble to the 1982 UNCLOS.

²⁹⁷⁾ Cameron, *ICLQ* (2006) *op. cit.*, at 565-568.

hand, the Tribunal was unequivocal in its conclusion that ‘the evidence demonstrates that Suriname did not make every effort to enter into provisional arrangements before 8 August, 1998.’ Although the Tribunal acknowledged that this evidence alone could not form the basis for a finding that Suriname violated the Convention, the Tribunal further held that Suriname’s subsequent conduct (after 1998) ‘was consistent with her pre-1998 conduct’ and when taken together, did constitute a violation of the Convention.²⁹⁸⁾ The Tribunal then recounted the specific details of both Guyana’s and Suriname’s actions upon hearing of CGX’s plans to follow-up its seismic testing within the disputed maritime area with the commencement of a drilling programme, approved by Guyana. This authoritative summary of the events leading to the 3 June 2000 incident, closes with the Tribunal’s observation that just hours before this incident occurred, Guyana invited Suriname to ‘send a high level delegation to Georgetown within twenty-four (24) hours to commence dialogue.’²⁹⁹⁾

This still leaves us with the question of what precise actions, or indeed omissions, on Suriname’s part allowed the Tribunal to find against her. This question was answered in specific terms by the Tribunal in the next paragraph of the Award.³⁰⁰⁾ In doing so, the Tribunal began by returning to the first part of Articles 74(3) and 83(3), noting that Suriname’s obligation to co-operate towards a provisional arrangement exists ‘(a)t all times...’ and became ‘particularly pressing and relevant’ when Suriname became aware of CGX’s planned drilling programme. The Tribunal then criticized first, Suriname’s lack of engagement with Guyana ‘in a spirit of understanding and

²⁹⁸⁾ Para.474, at p.158 of the Award.

²⁹⁹⁾ *Ibid.*, para.475 at p.158 of the Award.

³⁰⁰⁾ Para.476 of the Award.

co-operation as required by the Convention' and secondly, Suriname's 'resort to self-help in threatening the CGX rig, in violation of the Convention.' The Tribunal followed this up by noting that '(i)n order to satisfy its obligation to make every effort to reach provisional arrangements, Suriname would have actively had to attempt to bring Guyana to the negotiation, or, at a minimum, have accepted Guyana's last minute 2 June invitation and negotiated in good faith.' (emphasis added) The Tribunal also noted that Suriname 'could have insisted on the immediate cessation of CGX's exploratory drilling as a condition to participating in further talks.' It concludes that since Suriname did not opt for either of these two courses of action - actively attempting to negotiate with Guyana, or accepting Guyana's last minute offer of negotiations in good faith - she had failed in her duties under the relevant Articles 74(3) and 83(3) of the Convention.³⁰¹⁾ It is submitted here that the emphasis the Tribunal placed on first, the continuing nature of the obligation to negotiate towards a provisional arrangement, and secondly, in accordance with this obligation, to negotiate actively and in good faith, constitute a significant and authoritative statement of the legal standard applicable to interested States in similar disputes.

Moving to the second obligation that the Tribunal held was incumbent upon both States as a result of the application of Articles 74(3) and 83(3) - the obligation not to jeopardize or hamper the reaching of the final agreement; the Tribunal first notes that 'Suriname had a number of peaceful options to address Guyana's authorization of the exploratory drilling.'³⁰²⁾ Two of these options are

301) Para.476 at p.159 of the Award, *ibid*.

302) Para.484, at p.162 of the Award, *ibid*.

then specifically mentioned by the Tribunal. First, in keeping with her other obligation under Articles 74(3) and 83(3), that of entering into discussions with Guyana on provisional arrangements. Secondly, the Tribunal continues by holding that: ‘In the event of failure of the negotiations, Suriname could have invoked compulsory dispute resolution under Part XV, Section 2 of the Convention’, noting further that this course of action would have also given Suriname the possibility to request provisional measures to preserve her rights in the disputed maritime area, or to prevent serious harm to the marine environment, pending the final decision.³⁰³⁾

In this context, Klein has noted that among the provisional measures that could be requested by the applicant State in order to ensure that their sovereign rights in any disputed maritime area are not prejudiced is in fact a provisional measure for the enforcement of the requirement for negotiations in good faith towards the provisional arrangements envisaged by Articles 74(3) and 83(3).³⁰⁴⁾ Klein elaborates this view in a more recent contribution, where she notes that a court or tribunal issuing provisional measures under Article 290 specifying the type of provisional arrangements to be established might be seen as an over-reach of the relevant tribunal’s jurisdiction.³⁰⁵⁾ However, for the tribunal to recommend (as opposed to prescribed measures) that interested States ‘enter into an interim joint exploration or exploitation regime would not exceed the obligation set out in paragraph 3 of Articles 74 and 83, but could reinforce the need for States to make “every effort” to devise

³⁰³⁾ *Ibid.*, citing Article 290 of the 1982 UNCLOS, which provides for the prescription of provisional measures by a court or tribunal to preserve the respective rights of the parties to the dispute.

³⁰⁴⁾ Natalie Klein (2005) *op. cit.*, at 249.

³⁰⁵⁾ Klein (2006) *op. cit.*, at 453.

provisional arrangements.’³⁰⁶⁾

At this juncture, it is also imperative to note that this suggestion is supported by the judicial practice of the International Tribunal for the Law of the Sea (ITLOS) on successive occasions, such as in its Provisional Measures Orders in the MOX Plant (2001) and Land Reclamation (2003) cases. In both these cases, the ITLOS held in almost identical terms that the Parties concerned were required to enter into bilateral consultations to exchange information first, as to the possible consequences of the commissioning and operation of the UK’s MOX plant for the Irish Sea, and devising measures to prevent marine pollution which might result from the operation of the MOX plant;³⁰⁷⁾ and secondly, to establish mechanisms for exchanging information, assessing the risks of Singapore’s land reclamation projects for her shared marine environment with Malaysia, and devising ways to deal with them.³⁰⁸⁾ These ITLOS Orders have recently been described by the present author as the imposition of a ‘constrained or enforced’ bilateral negotiation procedure by an international tribunal established through recourse to the UNCLOS Part XV dispute settlement system.³⁰⁹⁾

Returning to the Tribunal’s findings on Suriname’s behaviour in

³⁰⁶⁾ *Ibid.* See also Klein (2005) *op. cit.*, at 84–85.

³⁰⁷⁾ See: Para.1 (a)–(c) of the ITLOS Order, *MOX Plant (Ireland v. United Kingdom)*, Request for Provisional Measures, ITLOS Case No.??, 3 December, 2001. (2002) 41 *ILM* 405. Accessible at: <http://www.itlos.org>.

³⁰⁸⁾ See: Para.99 of the ITLOS Judgment, in the *Case Concerning Land Reclamation by Singapore in and around the Straits of Johor (Malaysia v. Singapore)*, Request for Provisional Measures, ITLOS Case No.12, 8 October, 2003. Accessible at: <http://www.itlos.org>.

³⁰⁹⁾ See: David M. Ong, ‘International Environmental Law’s ‘Customary’ Dilemma: Betwixt General Principles and Treaty Rules’, *Irish Yearbook of International Law*, Vol.I, 2006, Oxford: Hart (2008) 3–60, at 42–47.

relation to the second obligation, it concludes ‘that Suriname’s threat of force to the disputed area, while also threatening international peace and security, jeopardized the reaching of a final delimitation agreement.’³¹⁰⁾ The constraints of this paper do not allow the full implications of this finding by the Tribunal for the international law prohibiting the use of force. However, it is as well to note that the Tribunal accepted that such contravention of this prohibition against the use of force could engage State responsibility on the part of the perpetrating State.³¹¹⁾

2) Guyana

The Tribunal then turned to an assessment of Guyana’s actions as the State which initiated the exploration activities in the disputed maritime area between the two Parties. Here the Tribunal ruled that Guyana had also violated her obligations under the relevant Articles. In relation to the first, co-operative, obligation to make every effort to enter into provisional arrangements, the Tribunal placed a specific obligation upon Guyana to inform Suriname *directly* of her plans to allow CGX to undertake exploratory drilling, noting further that ‘notification in the press by way of CGX’s public announcements was not sufficient for Guyana to meet its obligation under Articles 74(3) and 83(3) of the Convention.’³¹²⁾ Guyana’s 2 June 2000 invitation to bilateral negotiations was also held by the Tribunal to be insufficient to discharge her obligations under the Convention.

In an unprecedented move, the Tribunal then specified the precise steps that Guyana could have taken that would have been consistent

³¹⁰⁾ Para.484, at 162 of the present Award.

³¹¹⁾ Para.439, *ibid.* of the Award.

³¹²⁾ Para.477, at pp.159–160.

with her obligations under the Convention and thus sufficient to discharge her duty to make every effort to reach a provisional agreement. These steps 'include (1) giving Suriname official and detailed notice of the planned activities, (2) seeking (the) co-operation of Suriname in undertaking the(se) activities, (3) offering to share the results of the exploration and giving Suriname an opportunity to observe the activities, and (4) offering to share all the financial benefits received from the exploratory activities.'³¹³⁾ By providing this detailed exposition of the required notification, information-sharing, and consultation process that the interested States must enter into, the Tribunal has clearly established the legally authoritative standards of behaviour for any State finding itself in a similar situation where it is seeking to initiate exploration activities, either in respect of a transboundary deposit or overlapping claims area. In doing so, the Tribunal has also clearly drawn from, and analogously applied, the prior notification requirement incumbent upon the International Sea-bed Authority (ISA) in similar situations of mineral deposits lying across the limits of national jurisdiction and the deep sea-bed Area, under Article 142(2) of the 1982 Convention.³¹⁴⁾

Within this notification, information-sharing, and consultation process, Step (3) is arguably unprecedented in its requirement to share the scientific information gathered from the exploration activities. Here, the Tribunal has also drawn from similar requirements in the marine scientific research regime established under Part XIII of the 1982 Convention. Article 248 of UNCLOS requires the researching State (or international organization) to provide, *inter alia*, the following

³¹³⁾ *Ibid.*, para.477, at p.160 of the Award.

³¹⁴⁾ See: Ong (1999) *op. cit.*, at 785, and Cameron (2006) *op. cit.*, at 567.

information to the coastal State in whose EEZ, or on whose continental shelf, they want to conduct research: (a) the nature and objectives of the project; (b) the method and means to be used; (c) the precise geographical area in which the project is to be conducted; (d) the visiting dates of the vessels or the equipment being utilized; (e) the name of the sponsoring institution; and (f) the extent to which the coastal State can participate, or be represented in the project.

Significantly, these additional requirements for notification and consultation laid down by the Tribunal go a long way towards addressing one of the main Greek concerns in the Aegean Sea case,³¹⁵⁾ as reiterated by the Greek nominated ad hoc Judge Stassinopoulos in his Dissenting Opinion.³¹⁶⁾ This was to the effect that irreparable prejudice was caused by the gathering of resource-related information and its possible dissemination for financial gain. Fietta observes that: 'Modern seismic exploration techniques can provide coastal states with an effective means of assessing the potential natural resources of the continental shelf (indeed much more effective than at the time of the Aegean Sea case, three decades ago) Such techniques can reliably inform a state of those parts of a disputed area that are potentially rich in natural resources. Unilateral seismic exploration could therefore, in some circumstances, significantly alter the status quo as regards the comparative levels of knowledge of two neighboring coastal States about the value of all (or part) of a disputed maritime area.'³¹⁷⁾ (emphasis added) Brilmayer and Klein have described this as a concern over the international marketability

³¹⁵⁾ Para.26 of the Aegean Sea Judgment, *op. cit.*

³¹⁶⁾ *Ibid.*, at 38.

³¹⁷⁾ Fietta, *AJIL* (2008) *op. cit.*, at 127.

of the sovereign rights to natural resources of the concerned States.³¹⁸⁾ As Fietta notes further, ‘Such a disequilibrium in knowledge between two States could, in many cases, make a final delimitation agreement more difficult to obtain. Seismic exploration by one coastal State could also, of course, interfere with another coastal State’s exclusive and inherent sovereign rights over its continental shelf, as set forth in LOS Convention Article 77.’³¹⁹⁾ Within this context, the Tribunal’s advocacy (in step (4), above) of the sharing of any benefits derived from exploration activities is both useful as well as arguably establishing a clear legal presumption for the joint development (and revenue-sharing) of any hydrocarbon deposits found in a disputed maritime area.

In relation to the second obligation not to jeopardize or hamper the reaching of the final delimitation agreement, the Tribunal considered the specific question of whether Guyana’s consent for her concessionaire’s exploratory drilling programme to commence constituted an irreparable prejudice to Suriname’s sovereign rights so as to entail a breach of the second obligation inherent in the relevant Articles. As Fietta notes, ‘(t)he practical implications of the Award’s dicta concerning the distinction between exploratory drilling and seismic exploration are potentially significant.’³²⁰⁾ However, given that the Tribunal declares that Guyana also violated this second (mutual restraint) obligation inherent in the relevant Articles, it is notable that the Tribunal does not actually undertake a detailed

³¹⁸⁾ See Lea Brilmayer and Natalie Klein, ‘Land and Sea: Two Sovereignty Regimes in Search of a Common Denominator’, New York University (NYU) Journal of International Law and Politics, Vol.33 (2001) 703, at 732–36, where the importance of the international marketability of such sovereign rights for States is explained.

³¹⁹⁾ Fietta, *ibid.*, at 127.

³²⁰⁾ Fietta, *AJIL* (2008), *op. cit.*, at 127.

analysis of the legal implications of Guyana's actions in allowing exploratory drilling to go ahead.

Thus, although the Tribunal re-iterates its finding that unilateral acts that cause a physical change to the marine environment may jeopardize or hamper the reaching of a final delimitation agreement, resulting in either a perceived, or genuine, prejudice to the position of the other party, it does not actually proclaim the individual actions of Guyana in this respect to violate this obligation.³²¹⁾ Indeed, the Tribunal also re-emphasizes the view that not all exploratory activities need be frozen, with unilateral seismic testing in particular being permissible and only exploratory drilling that might cause permanent damage to the marine environment being potentially prejudicial to the other party's interest such that it is in breach of the relevant obligation of mutual restraint.³²²⁾ Here, the Tribunal appears to be suggesting that the higher standard of proof, that it had hitherto held applicable for interim/provisional measures applications, is also the standard to be applied for holding that a breach of Articles 73(4) and 83(3) has occurred. This is despite its earlier suggestion that a 'lower threshold' of proof applied for these two provisions.³²³⁾

Moreover, even in this latter situation of Guyana's authorization of such exploratory drilling, the Tribunal's view is that failing negotiations, Suriname's only legal recourse is resort to peaceful settlement of the dispute under Part XV of the Convention.³²⁴⁾ This is arguably the least helpful aspect of the Tribunal's findings on this vital question.³²⁵⁾

³²¹⁾ Para.480, at p.161 of the Award.

³²²⁾ *Ibid.*, para.481, at p.162.

³²³⁾ *Ibid.* See also Fietta, *AJIL* (2008) *op. cit.*, at 127.

³²⁴⁾ *Ibid.*, para.482, at p.162.

Nevertheless, the Tribunal unanimously and unequivocally declares in the final paragraph of its findings,³²⁶⁾ and again in its Dispositif for the Award,³²⁷⁾ that *both* Suriname and Guyana violated their co-operative and mutual restraint obligations under Articles 74(3) and 83(3) of the Convention in respect of their disputed maritime area.

V. Recent International Judicial Authority on Procedural Rules for Undelimited/Overlapping Claims Areas: Dispute Concerning Delimitation of the Maritime Boundary between Ghana and Côte d'Ivoire in the Atlantic Ocean (Ghana/Côte d'Ivoire)

This case consists of two related decisions by an ITLOS Special Chamber consisting of a provisional Measures Order on 25 April, 2015 and a final Judgment delivered on 23 September, 2017.³²⁸⁾ The dispute between these two neighbouring West African countries with coastlines bordering the Gulf of Guinea concerned the delimitation of their common maritime boundary in the Gulf, as part of the Atlantic Ocean. Following the commencement of proceedings by Ghana before a Special Chamber of the ITLOS, Cote D'Ivoire then filed for a Provisional Measures Order. The implications of this Order by the Special Chamber will be outlined first, as follows:

³²⁵⁾ Cf. with Fietta, who suggests that 'the Tribunal thereby provided effective guidance to any coastal State that is faced with exploratory drilling by a neighbor in a disputed area.' See Fietta (2008) *AJIL*, *op. cit.*, at 12.

³²⁶⁾ Para. 486, at p.163 of the Award.

³²⁷⁾ *Ibid.*, Para.488, at p.166.

³²⁸⁾ DISPUTE CONCERNING DELIMITATION OF THE MARITIME BOUNDARY BETWEEN GHANA AND COTE D'IVOIRE IN THE ATLANTIC OCEAN (GHANA/COTE D'IVOIRE) ITLOS List of cases: No. 23, ITLOS Special Chamber, PROVISIONAL MEASURES ORDER OF 25 April 2015, & Judgment, 23 September, 2017.

Ghana/Côte d'Ivoire, ITLOS Sp Chamber, Provisional Measures Order, 25 April, 2015

Côte d'Ivoire requested the Special Chamber to prescribe provisional measures requiring Ghana, *inter alia*, to 1) take all steps to suspend all ongoing oil exploration and exploitation operations in the disputed area; 2) refrain from granting any new permit for oil exploration and exploitation in the disputed area; 3) take all steps necessary to prevent information resulting from past, ongoing or future exploration activities conducted by Ghana, or with its authorization, in the disputed area from being used in any way whatsoever to the detriment of Côte d'Ivoire; and, 4) generally, take all necessary steps to preserve the continental shelf, its superjacent waters and its subsoil; and 5) desist and refrain from any unilateral action entailing a risk of prejudice to the rights of Côte d'Ivoire and any unilateral action that might lead to aggravating the dispute (para.25)

Initial considerations of the ITLOS Special Chamber in relation to Côte d'Ivoire's claims in support of its Provisional Measures application were divided into Jurisdictional and Substantive issues, as follows:

ITLOS Special Chamber, Provisional Measures, Jurisdictional Issues

The Special Chamber considered that it may not prescribe provisional measures unless it finds that there is "a real and imminent risk that irreparable prejudice may be caused to the rights of the parties in dispute."³²⁹ (para.41) and further, that in this regard, urgency is

³²⁹ See M/V "Louisa" (Saint Vincent and the Grenadines v. Kingdom of Spain), Provisional Measures, Order of 23 December 2010, ITLOS Reports 2008–2010, p. 58, at p. 69, para. 72.

required in order to exercise the power to prescribe provisional measures to avert a real and imminent risk that irreparable prejudice may be caused to rights at issue before the final decision is delivered.³³⁰⁾ (para.42) The Special Chamber also considered that, before prescribing provisional measures, it need not concern itself with the competing claims of the Parties, and only needed satisfy itself that the rights which Côte d'Ivoire claimed on the merits and seeks to protect were at least plausible. (para.58, emphasis added) In the circumstances of this case, the Special Chamber found that Côte d'Ivoire has presented enough material to show that the rights it seeks to protect in the disputed area are plausible. (para.62, emphasis added) Thus, the Special Chamber held that there is a link between the rights Côte d'Ivoire claims and the provisional measures it seeks.³³¹⁾ (para.63, emphasis added)

ITLOS Special Chamber, Provisional Measures, Substantive Issues

Côte d'Ivoire requested the prescription of provisional measures to preserve three categories of “exclusive sovereign rights that are the subject of this dispute, rights arising under UNCLOS” (para.44) Of these three categories as established by Côte d'Ivoire, arguably the significant and novel addition is laid down in paragraph 47, as follows: Côte d'Ivoire also claims “the right to exclusive access to confidential information about its natural resources” in the disputed area, and argues that this is one of the sovereign rights of the

³³⁰⁾ See *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica)*; *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Provisional Measures, Order of 13 December 2013, I.C.J. Reports 2013, p. 398, at p. 405, para. 25.

³³¹⁾ See *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Provisional Measures, Order of 8 March 2011, I.C.J. Reports 2011, p. 6, at p. 18, para. 54.

coastal State for the purpose of exploring the continental shelf and exploiting its natural resources as provided for in article 77 of the Convention, and that the sovereign rights “include all rights necessary for and connected with the exploration and exploitation of the resources of the shelf”. Côte d’Ivoire’s novel claim under paragraph 47 came under immediate protest from Ghana in paragraph 55 of the Order, as follows: Ghana submits that Côte d’Ivoire’s alleged right referred to in paragraph 47 is not based on any specific provisions of the Convention, that “Côte d’Ivoire has failed to establish a basis for the legal existence of an alleged right to information newly claimed to be harmed”, and that “Côte d’Ivoire has cited no legal authority for any such right to information.”

ITLOS Special Chamber’s Jurisdiction for Provisional Measures on the Basis of Serious Environmental Harm:

Côte d’Ivoire also requested the prescription of provisional measures to prevent serious harm to the marine environment (para.64), maintaining that “oil-related activities being carried out today on behalf of and in the name of Ghana, whether in or near the disputed area, have already given rise to pollution incidents”, and that Ghana’s lack of due diligence is highlighted by “its failure to monitor oil activities effectively” and “the shortcomings in its legislative framework” (para.65). To which Ghana contended that “[s]ince the start of the Jubilee operations, there has not been an oil pollution incident resulting in an oil slick that has reached the shores of Ghana”, that constant monitoring is required by law, and that Ghana’s environmental protection legislation is among the most robust in the region. (para. 66) This leads the Special Chamber to find that Côte d’Ivoire had not adduced sufficient evidence to

support its allegations that the activities conducted by Ghana in the disputed area are such as to create an imminent risk of serious harm to the marine environment. (para. 67) Despite this apparent denial by the Special Chamber of Côte d'Ivoire's claims re: imminent risk of serious harm to the marine environment as amounting to an (equally plausible) claim/argument for the Special Chamber to accept jurisdiction over these claims, the Special Chamber nevertheless held, *inter alia*, as follows: There is a risk of irreparable prejudice where, in particular, activities result in significant and permanent modification of the physical character of the area in dispute and where such modification cannot be fully compensated by financial reparations (para.89), and that whatever its nature, any compensation awarded would never be able to restore the status quo ante in respect of the seabed and subsoil. (para.90) Thus, this situation may affect the rights of Côte d'Ivoire in an irreversible manner if the Special Chamber were to find in its decision on the merits that all or any part of the area in dispute belongs to Côte d'Ivoire.(para.91)

Significantly, the Special Chamber also reiterated that it considered that the rights of the coastal State over its continental shelf include all rights necessary for and connected with the exploration and exploitation of the natural resources of the continental shelf and that the exclusive right to access to information about the resources of the continental shelf is plausibly among those rights (para.94), and considering that the acquisition and use of information about the resources of the disputed area would create a risk of irreversible prejudice to the rights of Côte d'Ivoire should the Special Chamber, in its decision on the merits, find that Côte d'Ivoire has rights in all or any part of the disputed area. (para.95) Thus, the Special Chamber held that the exploration and exploitation activities, as

planned by Ghana, may cause irreparable prejudice to the sovereign and exclusive rights invoked by Côte d'Ivoire in the continental shelf and superjacent waters of the disputed area, before a decision on the merits is given by the Special Chamber, and that the risk of such prejudice is imminent. (para.96) On the other hand, the Special Chamber clearly bore in mind the possibility of prejudicing Ghana's sovereign rights in this disputed area, as follows: In the view of the Special Chamber, the suspension of ongoing activities conducted by Ghana in respect of which drilling has already taken place would entail the risk of considerable financial loss to Ghana and its concessionaires and could also pose a serious danger to the marine environment resulting, in particular, from the deterioration of equipment (para.98) Moreover, in the view of the Special Chamber, an order suspending all exploration or exploitation activities conducted by or on behalf of Ghana in the disputed area, including activities in respect of which drilling has already taken place, would therefore cause prejudice to the rights claimed by Ghana and create an undue burden on it. (para.100) and that such an order could also cause harm to the marine environment. (para.101) Nevertheless the Special Chamber considered it appropriate, in order to preserve the rights of Côte d'Ivoire, to order Ghana to take all the necessary steps to ensure that no new drilling either by Ghana or under its control takes place in the disputed area. (para.102)

For these reasons, THE SPECIAL CHAMBER, *inter alia*,⁽¹⁾ Unanimously prescribed, pending the final decision, the following provisional measures under article 290, paragraph 1, of the Convention:

- (a) Ghana shall take all necessary steps to ensure that no new drilling either by Ghana or under its control takes place in the disputed area as defined in paragraph 60;

- (b) Ghana shall take all necessary steps to prevent information resulting from past, ongoing or future exploration activities conducted by Ghana, or with its authorization, in the disputed area that is not already in the public domain from being used in any way whatsoever to the detriment of Côte d'Ivoire;
 - (c) Ghana shall carry out strict and continuous monitoring of all activities undertaken by Ghana or with its authorization in the disputed area with a view to ensuring the prevention of serious harm to the marine environment;
 - (d) The Parties shall take all necessary steps to prevent serious harm to the marine environment, including the continental shelf and its superjacent waters, in the disputed area and shall cooperate to that end;
 - (e) The Parties shall pursue cooperation and refrain from any unilateral action that might lead to aggravating the dispute.
- (para.108)

Ghana/Côte d'Ivoire, ITLOS Special Chamber, (final) Judgment, 23 September, 2017

When making claims for the international responsibility of Ghana, Côte d'Ivoire invoked three different grounds for its claim that Ghana is internationally responsible. First, it based its claim upon an alleged violation of Côte d'Ivoire's sovereign rights by Ghana by conducting or licensing hydrocarbon activities in an area over which Côte d'Ivoire claimed to have sovereign rights; second, it invoked a violation of article 83 of the Convention; and, third, it claimed that Ghana acted contrary to its obligations as set out in the Order of the Special Chamber of 25 April 2015. (para.544, at p.151) Thus, in its final submissions, Côte d'Ivoire requests the Special Chamber "to

declare and adjudge that the activities undertaken unilaterally by Ghana in the Ivorian maritime area constitute a violation of: ... the exclusive sovereign rights of Côte d'Ivoire over its continental shelf, as delimited by this Chamber". Côte d'Ivoire submits that Ghana's unilateral activities in this respect engage the latter's responsibility. (para.561, pp.155-156.) In support of its claim, Côte d'Ivoire refers to the principle whereby "States should refrain from any unilateral economic activity in a disputed area pending a definitive delimitation". (para.562, emphasis added) Côte d'Ivoire refers to "three unchallenged foundations" of its argument on sovereign rights, namely that "the rights pertaining to the exploration and exploitation of the continental shelf are exclusive rights; ... those rights exist ipso facto and ab initio; [and] the delimitation does not have the effect of creating them but of clarifying their scope". In its response, Ghana submitted that "even if there were ... a rule against unilateral activity in a disputed area, that is not the sort of activity that we are dealing with here". According to Ghana, its activities "in the relevant area are not, and have never been 'unilateral'", they "have been conducted openly and with Côte d'Ivoire's cooperation", "in accordance with a common understanding of a customary boundary". Ghana further submits that "[u]ntil 2009, when Côte d'Ivoire proposed a new maritime boundary line, there was no 'disputed area'". Ghana contends that "it is very difficult for a State to say that its rights have been violated by things which another State has done with its consent". (para.581, at pp.159-160)

ITLOS Special Chamber's Deliberations on Sovereign Rights in Overlapping Claims Areas of Continental Shelf

The Special Chamber noted that the arguments advanced by the

two Parties touch upon several distinct but interrelated factual and legal issues. As far as facts are concerned, the Parties disagree as to when Ghana should have been aware that a delimitation dispute with Côte d'Ivoire existed and, when it was aware as to the scope of the disputed area. The Parties further disagree about the legal consequences of such knowledge. Although the Parties agree upon the nature of the rights of coastal States in respect of the continental shelf off their coast, they disagree about the consequences to be drawn therefrom. The Parties further agree upon the legal nature of a judgment on delimitation but again disagree on the consequences to be drawn therefrom in the present case. Finally, the Parties disagree on the manner in which the compensation claimed should be calculated. (para.585, p.161) On the basis of these considerations, the Special Chamber held that it must now establish whether hydrocarbon activities carried out by a State in a disputed area before the area in question has been delimited by adjudication may give rise to international responsibility when these activities are carried out in a part of the area attributed by the judgment to the other State. (para.589) The Special Chamber first emphasized that in a case of overlap both States concerned have an entitlement to the relevant continental shelf on the basis of their relevant coasts. Only a decision on delimitation establishes which part of the continental shelf under dispute appertains to which of the claiming States. This means that the relevant judgment gives one entitlement priority over the other. Such a decision accordingly has a constitutive nature and cannot be qualified as merely declaratory. (para.591) The Special Chamber then followed up this confirmation of the international legal entitlement of coastal States within their respective overlapping continental shelf claims until such time as the overlapping claims

were delimited with a significant and arguably far-reaching finding as to legal effects of respective coastal State entitlements within such an overlapping continental shelf claims area, as follows:

‘In the view of the Special Chamber, the consequence of the above is that maritime activities undertaken by a State in an area of the continental shelf which has been attributed to another State by an international judgment cannot be considered to be in violation of the sovereign rights of the latter if those activities were carried out before the judgment was delivered and if the area concerned was the subject of claims made in good faith by both States.’ (para.592, emphasis added)

This finding by the Special Chamber appears to negate the governing principle advanced by Côte d’Ivoire as applicable in these situations of overlapping continental shelf claims, whereby “States should refrain from any unilateral economic activity in a disputed area pending a definitive delimitation”.³³²⁾ Moreover, on the basis of the foregoing, the Special Chamber found the argument advanced by Côte d’Ivoire that the hydrocarbon activities carried out by Ghana in the disputed area constitute a violation of the sovereign rights of Côte d’Ivoire is not sustainable, even assuming that some of those activities took place in areas attributed to Côte d’Ivoire by the present Judgment. Therefore, the Special Chamber held that Ghana did not violate the sovereign rights of Côte d’Ivoire. (para.594, at p.163)

³³²⁾ Re-iterated by the Sp Chamber in para.562 of its (final) Judgment on 23 September, 2017.

(1) Violation of UNCLOS article 83, paragraph 1, and the customary law obligation to negotiate in good faith:

In its final submission 2(ii), Côte d'Ivoire requested the Special Chamber to declare and adjudge that the activities undertaken unilaterally by Ghana in the Ivorian maritime area constitute a violation of "the obligation to negotiate in good faith, pursuant to article 83, paragraph 1, of [the Convention] and customary law". (para.598, at p.164) Côte d'Ivoire submitted that "Ghana's unilateral activities in the disputed area, its inflexibility in the negotiations, together with the timely closing off of all avenues for settling the dispute judicially" constitute "violations of the obligation to negotiate in good faith, as prescribed in article 83, paragraph 1 of [the Convention]". (para.599) Côte d'Ivoire argued that Ghana's behaviour "is contrary to paragraph 1, which provides that delimitation is determined by way of agreement (and not by way of a fait accompli)". Côte d'Ivoire explains that "[t]he obligation to negotiate in good faith is even more necessary when the deposit is shared ('straddles' the boundary)". It contends that "Ghana never negotiated in good faith on the delimitation of its maritime boundary with Côte d'Ivoire". (para.600, p.164, emphasis added) In its final submissions, Ghana requested the Special Chamber to adjudge and declare that "Côte d'Ivoire's claim alleging violation of Article 83 of [the Convention] ... is rejected". (para.601. p.165)

On the other hand, Ghana pointed out that Côte d'Ivoire "does not refer to any specific facts in support of Ghana's alleged violation of international law" and fails to set out the respects in which Ghana is said to have been "inflexible" or to explain why it claims that Ghana was "aware of the illegality of its attitude". Ghana stated that its

“activities have been conducted openly and with Côte d’Ivoire’s cooperation, on the basis of a common understanding of the location of the international maritime boundary, and in reliance on representations made by Côte d’Ivoire”. (para.602) Finally, Ghana submitted that, despite the fact that “Côte d’Ivoire abruptly and unexpectedly changed position”, it “engaged with Côte d’Ivoire in good faith in order to negotiate a settlement, including engaging in ten bilateral meetings over five years”. (para.603)

Special Chamber Deliberations on UNCLOS Art.83(1):

The Special Chamber began this section of its analysis by observing that the obligation under article 83, paragraph 1, of the Convention to reach an agreement on delimitation necessarily entails negotiations to this effect. The Special Chamber emphasizes that the obligation to negotiate in good faith occupies a prominent place in the Convention, as well as in general international law, and that this obligation is particularly relevant where neighbouring States conduct maritime activities in close proximity. The Special Chamber notes, however, that the obligation to negotiate in good faith is an obligation of conduct and not one of result. Therefore, a violation of this obligation cannot be based only upon the result expected by one side not being achieved. (para.604, at p.165)

Negotiations took place between Ghana and Côte d’Ivoire over six years, with 10 meetings between 2008 and 2014. Those meetings all dealt with the issue of maritime delimitation. In the view of the Special Chamber, Côte d’Ivoire has not produced any convincing arguments that these negotiations were not meaningful. Agreement was reached at least on the exact location of the land boundary terminus (BP 55), for example. The fact that Ghana tried to preserve

the status quo as it saw it is, in the view of the Special Chamber, not a violation of an obligation to negotiate in good faith. Equally, the fact that Ghana initially closed off the avenue for a judicial settlement is not contrary to the obligation to negotiate in good faith, as Côte d'Ivoire claims. Article 298 of the Convention explicitly permits States Parties to exclude certain disputes from compulsory procedures. (para.604, at p.166) In conclusion, the Special Chamber took the view that Côte d'Ivoire has not convincingly substantiated that Ghana did not negotiate in good faith and accordingly dismisses Côte d'Ivoire's claim against Ghana for international responsibility on the basis of a violation of article 83, paragraph 1, of the Convention. (para.605)

Special Chamber Deliberations on UNCOS Article 83(3):

In its final submission no. 2 (iii), Côte d'Ivoire requested the Special Chamber to declare and adjudge that the activities undertaken unilaterally by Ghana in the Ivorian maritime area constitute a violation of "the obligation not to jeopardize or hamper the conclusion of an agreement, as provided for by article 83, paragraph 3, of [the Convention]". Côte d'Ivoire submitted that "Ghana's unilateral activities in the disputed area ... constitute violations of the specific obligations provided for in paragraph 3 of article 83". (par.606) Côte d'Ivoire contended that Ghana has engaged its responsibility with respect to Côte d'Ivoire for ... having, by its unilateral behaviour, rendered impossible both the conclusion of provisional arrangements and the conclusion of a definitive delimitation agreement, in application of article 83, paragraph 3, of [the Convention]. (para.607) Regarding its interpretation of article 83, paragraph 3, Côte d'Ivoire submitted that "unilateral economic

activities are prohibited in an area under dispute” and that “the only activities authorized on the continental shelf of a disputed area are those carried out by virtue of provisional arrangements”. According to Côte d’Ivoire, article 83, paragraph 3, “imposes on States an obligation to exercise restraint during the transitional period before the conclusion of an agreement on delimitation or the end of judicial proceedings”. (para.607) Côte d’Ivoire further submitted that “there is no reason to consider that invasive activities alone are prohibited by paragraph 3 of article 83” and that “[u]nilateral exploration and exploitation activities in the disputed area are in particular of a nature ‘to jeopardize or hamper the reaching of the final agreement’, both because they always create an atmosphere of animosity between the Parties and because they tend to create a fait accompli on which the wrongdoing State may subsequently attempt to rely”. (para.609) Invoking the Guyana/Suriname decision, Côte d’Ivoire stated that “[t]he arbitration in Guyana v. Suriname is the first clear example of engagement of responsibility for wrongful acts in a disputed area” and that in relation to “invasive exploration activities” that tribunal, “without any ambiguity, considered that Guyana had violated [the Convention]”. (para.610) Regarding State practice in undelimited maritime areas, Côte d’Ivoire noted that “States generally refrain from undertaking exploration or exploitation activities there without the consent of the other State concerned”. (para.611)

In its response, Ghana maintained that “[t]here has been no violation of Article 83(3)” of the Convention. Ghana maintains that “[i]t cannot be the case that the reaching of a final agreement on the Parties’ maritime boundary is hampered or jeopardized by the continuation of peaceful economic activities which have represented

the status quo for many years”. (para.616) Moreover, Ghana disputed Côte d’Ivoire’s interpretation of article 83, paragraph 3. According to Ghana, “Article 83(3) imposes no obligation actually to enter into provisional arrangements, and a State does not violate that provision by not entering into such arrangements, so long as a good faith effort has been made in that direction”. Where no provisional arrangements are made, Ghana submits that “[t]he drafters of the Convention specifically chose not to impose” a complete moratorium on economic activity in an area in dispute. (para.617) According to Ghana, Article 83(3) does not require States to refrain from any particular type of activity – however defined – in a disputed area; rather, it requires them “not to jeopardize or hamper” the reaching of the final agreement. Any activity in a disputed area must therefore be judged, not on the basis of its physical effects, but on the basis of its likely effect on the process of reaching a final agreement. For Ghana, “the question is always what disturbs the status quo and hampers the reaching of agreement”. (para.618) Ghana also maintained that neither the travaux of the Convention nor the Award in the arbitration regarding the delimitation of the maritime boundary between Guyana and Suriname supports Côte d’Ivoire’s case on article 83. Ghana distinguishes *Guyana v. Suriname* from the present case on the basis that, in *Guyana v. Suriname*, “wholly new and unilateral activities had been undertaken following the emergence of the dispute”. In contrast, Ghana describes its activities in the relevant area as “simply the continuation of decades of previous activity of a kind which would have been conducted by Côte d’Ivoire”. (para.619, at p.169)

Regarding the State practice referred to by Côte d’Ivoire, Ghana submits that it is “of no assistance at all” and that “in any event

there is nothing to say that any restraint demonstrated by those States in their particular circumstances was based on what they considered to be their obligations under article 83". Ghana distinguishes the examples cited by Côte d'Ivoire on the basis that "none of them involved demands by one State that the other State cease activities which it had undertaken without opposition for decades". (para.620)

Ghana highlighted the importance of the factual background and contends that "Ghana's activities cannot meaningfully be described as unilateral". It maintains that "rather than changing the status quo, [its] activities in the relevant area are the status quo". Accordingly, Ghana argues that "in those circumstances it is impossible to see how they jeopardize or hamper the reaching of a final agreement". (para.621.) Regarding provisional arrangements, Ghana submitted that Côte d'Ivoire "was not proposing any such arrangements, rather ..., it demanded a moratorium on all economic activity in the area to which it had abruptly laid claim". In this context, Ghana contends that its "entirely reasonable position [does not] amount to a violation of Article 83". (para.622) In respect of the obligation not to jeopardize or hamper the reaching of an agreement, Ghana submitted that "Côte d'Ivoire has simply failed to point to any conduct whatsoever by Ghana which could be said to conceivably jeopardize or hamper the determination of the boundary". Referring to the history of negotiations between the Parties, Ghana states that the "record shows that [it] was conscious of, and took very seriously, its obligation not to jeopardize or hamper the reaching of a final agreement, and acted throughout in a spirit of good faith and neighbourliness". (para.623, at p.170)

In response to both parties' arguments, the Special Chamber noted that the Parties disagree on the interpretation of article 83, paragraph

3, of the Convention and on the possibility of its application. In its reasoning, Côte d'Ivoire relies, in particular, on the Guyana/Suriname Arbitral Award of 17 September 2007. (para.624) Following a recital of Article 83(3), the Special Chamber noted that article 83, paragraph 3, of the Convention contains two interlinked obligations for the States concerned, namely to "make every effort to enter into provisional arrangements of a practical nature" and "during this transitional period, not to jeopardize or hamper the reaching of the final agreement". (para.626, p.170) The Special Chamber would like to point out that the first of the two obligations under article 83, paragraph 3, of the Convention constitutes an obligation of conduct, as evidenced by the words "shall make every effort". The obligation is designed to promote interim regimes of a practical nature pending final delimitation. The wording of this obligation, in the view of the Special Chamber, clearly indicates that it does not amount to an obligation to reach an agreement on provisional arrangements. The Special Chamber notes, however, that the language in which the obligation is couched indicates that the parties concerned are under a duty to act in good faith. This obligation is enhanced by the phrase that such acts have to be undertaken "in a spirit of understanding and cooperation". (para.627, at pp.170-171)

Significantly, the Special Chamber noted that, as far as the case before it is concerned, Côte d'Ivoire did not request Ghana to enter into provisional arrangements. Côte d'Ivoire only requested Ghana to refrain from continuing its hydrocarbon activities. As has already been stated above (para. 605), the Special Chamber held that Côte d'Ivoire did not substantiate its claim that Ghana did not act in good faith. In the view of the Special Chamber, it would have been for Côte d'Ivoire to propose the establishment of "provisional arrangements

of a practical nature” and thus to trigger the requisite negotiations. This was all the more necessary since Ghana’s hydrocarbon activities had continued over several years. Although the Special Chamber holds that this practice was not acquiesced to by Côte d’Ivoire, it is nevertheless a fact to be taken into account when assessing the relationship between the two Parties. Not having requested Ghana to enter into negotiations on provisional arrangements of a practical nature bars Côte d’Ivoire from claiming that Ghana has violated its obligations to negotiate on such arrangements. (para.628, at p.171, emphasis added)

The Special Chamber then turned to the second obligation under article 83, paragraph 3, of the Convention, namely “during this transitional period, not to jeopardize or hamper the reaching of the final agreement”. In its view, in interpreting the obligation “not to jeopardize or hamper the reaching of the final agreement”, account has to be taken of article 83, paragraph 3, of the Convention as a whole. This is confirmed by the fact that the first obligation (shall make every effort to enter into provisional arrangements of a practical nature) and the second (during this transitional period, not to jeopardize or hamper the reaching of the final agreement) are connected by the word “and”. This is not without relevance. This means, in the view of the Special Chamber, that the two obligations are connected. The introductory words to the effect that the States concerned have to act in “a spirit of understanding and cooperation” apply to both. Consequently, the words “shall make every effort” also apply to the second obligation, qualifying it as an obligation of conduct too. (para.629, at pp.171-172) On that basis, the Special Chamber reads the provision of article 83, paragraph 3, of the Convention as follows: the transitional period referred to means the

period after the maritime delimitation dispute has been established until a final delimitation by agreement or adjudication has been achieved. Article 83, paragraph 3, covers two situations in this transitional period, namely the situation where a provisional arrangement has been reached which would regulate the conduct of the parties in the disputed area and the situation where no such provisional arrangement has been reached. The obligations States encounter in respect of a disputed maritime area for which no provisional arrangement exists are described by the words “not to jeopardize or hamper the reaching of the final agreement”. In interpreting these words, account has to be taken of the general obligation under article 83, paragraph 3, of the Convention that in the transitional period States have to act “in a spirit of understanding and cooperation”. (para.630)

On the basis of the above, it is now for the Special Chamber to decide whether the hydrocarbon activities of Ghana in the disputed maritime area, after realizing that that area was also claimed by Côte d’Ivoire, jeopardized or hampered the reaching of the final agreement as claimed by Côte d’Ivoire. The Special Chamber does not come to this conclusion for two reasons. (para.631) First, the Special Chamber took note of the fact that Ghana finally suspended its activities by implementing its obligations in accordance with the Order of the Special Chamber of 25 April 2015 namely, inter alia, to ensure that no new drilling either by Ghana or under its control would take place in the disputed area. It would, however, have been preferable if Ghana had adhered to the request of Côte d’Ivoire earlier to suspend its hydrocarbon activities in that area. (para.632) Secondly, the Special Chamber takes into account that Ghana has undertaken hydrocarbon activities only in an area attributed to it.

This is particularly relevant in this case in the light of paragraph 2 (iii) of the final submissions of Côte d'Ivoire which reads: "to declare and adjudge that the activities undertaken unilaterally by Ghana in the Ivorian maritime area constitute a violation of ... the obligation not to jeopardize or hamper the conclusion of an agreement, as provided for by article 83, paragraph 3, of UNCLOS". Hence the activities of Ghana do not meet the qualification of the relevant submission of Côte d'Ivoire since they did not take place in the Ivorian maritime area. It was therefore impossible to state that Ghana has undertaken activities that have jeopardized or hampered the conclusion of an agreement as envisaged by article 83, paragraph 3, of the Convention. (para.633. pp.172-173) On the basis of the foregoing, the Special Chamber found that Ghana has not violated article 83, paragraphs 1 and 3, of the Convention, and accordingly it dismisses final submission no. 2 (ii) and (iii) of Côte d'Ivoire. (para.634) Finally, on the basis of the above considerations, the Special Chamber concluded that none of the activities of Ghana engages its international responsibility. Therefore, the Special Chamber considers that there is no need to address the question of reparation. (para.659)

While the final Judgment of the Special Chamber in the Ghana/Cote d'Ivoire case appears to re-set the legal thresholds for initiating State actions (in an un-delimited seabed area) to a higher level than previously thought to have been established in the 2007 Guyana/Suriname case, the Separate Opinion of Judge Jee-Hyun Paik should give such States pause for thought.

Judge Paik begins his Separate Opinion by observing that: The obligation "not to jeopardize or hamper" embodies a fundamental duty of restraint in the disputed area pending agreement. As the

Annex VII Arbitral Tribunal stated in *Delimitation of the Maritime Boundary between Guyana and Suriname*, this obligation is “an important aspect of the Convention’s objective of strengthening peace and friendly relations between nations and of settling disputes peacefully” (Reports of International Arbitral Awards, Vol. XXX, para. 465). It also has a significant practical dimension, given the fact that there are a large number of maritime areas in which continental shelf entitlements of neighbouring States overlap and that the reaching of the agreement on a maritime boundary usually takes a considerable amount of time. (For the survey of State practice in undelimited maritime areas, see British Institute of International and Comparative Law, Report on the Obligations of States under Article 74(3) and 83(3) of UNCLOS in respect of Undelimited Maritime Areas, 2016). The obligation under article 83, paragraph 3, of the Convention, though scant in substance, gives States in various parts of the world a guideline as to their conduct in the disputed maritime area during a lengthy transitional period. The present dispute provided the Special Chamber with an opportunity to clarify the meaning of this obligation. In light of its weight as a fundamental norm as well as its practical utility, the question as to how the obligation not to jeopardize or hamper should be interpreted and applied deserved scrutiny, but in the view of Judge Paik, the Special Chamber’s response fell short in this respect. (para.3, at p.2 of Separate Opinion)

Judge Paik agreed with the Special Chamber’s finding in paragraphs 627 and 629 of the Judgment that both obligations under article 83, paragraph 3, of the Convention are an obligation of conduct (para.4), and that the obligation not to jeopardize or hamper the reaching of a final agreement does not completely preclude activities by the States concerned in the disputed maritime area. (para.5)

Moreover, where a provisional arrangement exists, it is expected that activities would be conducted in accordance with that arrangement. However, in the absence of such an arrangement or where a provisional arrangement covers only a limited category of activities, the obligation not to jeopardize or hamper would be particularly relevant to regulating the conduct of States in the area to be delimited. (para.5, at pp.2-3)

In Judge Paik's view, a key criterion re: actions that would jeopardize or hamper the reaching of the final agreement under Article 83(3), is whether the actions in question would have the effect of endangering the process of reaching a final agreement or impeding the progress of negotiations to that end. In other words, it is a result-oriented notion. As such, the answer to the above question depends much on the particular circumstances of each case. (para.6)

Therefore Judge Paik did not consider that it would serve the purpose of article 83, paragraph 3, of the Convention to attempt to identify in general and in the abstract what are permissible activities and what are not. While activities that cause a permanent physical change to the marine environment would likely prejudice the reaching of the final agreement, as the Annex VII Arbitral Tribunal suggested in *Guyana v. Suriname* (see *Reports of International Arbitral Awards*, Vol. XXX, para. 467), less invasive activities carried out unilaterally could also be the source of serious tension between States, thus jeopardizing the prospects of agreement. A permanent physical change to the marine environment thus may be considered one of several relevant factors but should not be applied as a hard and fast threshold of jeopardizing or hampering the reaching of the final agreement. (para.7)

For Judge Paik, the determination of what acts would cause

irreparable prejudice to the rights of the parties pending the *final decision* and determination of what acts would have the effect of jeopardizing or hampering the reaching of the *final agreement* are *two different legal functions*. Therefore it is not guaranteed that criteria for the former can be applied by analogy to the latter. This is clear if the purposes of the two legal functions are compared. While the purpose of provisional measures is to preserve the rights of the parties pending the final decision, that of the obligation not to jeopardize or hamper is rather to facilitate and ensure the reaching of the final agreement, thus “strengthening peace and friendly relations between nations and of settling disputes peacefully”.(para. 9)

In Judge Paik’s view, when assessing whether the conduct of States would have the effect of jeopardizing or hampering the reaching of the final agreement, several factors may be considered. In particular, the type, nature, location, and time of acts as well as the manner in which they are carried out may be relevant. There is no single test or criterion that must be applied in all situations. A judicial body faced with the alleged violation of article 83, paragraph 3, of the Convention should take all those relevant factors into account and balance them in the framework of relations between the States concerned before making its decision. (para.10)

Judge Paik held that, since the Special Chamber has found that no tacit agreement on the maritime boundary between the Parties exists and that the requirements of estoppel have not been met in the present case, therefore Ghana’s argument that its activities in the disputed area were not unilateral was untenable. Nor was he convinced by Ghana’s argument that its activities were the *status quo*, because drilling operations in the disputed area, unlike less invasive activities such as seismic surveys, would more likely engender

the perception of change to the *status quo*. In his view, that is why Côte d'Ivoire broke its silence and decided to react to Ghana, first apparently in 1992 and then clearly in 2009, 2011 and 2014. (para.13) Judge Paik assumed that Ghana believed for a long time that Côte d'Ivoire tacitly consented to its activities in the area in question, and he also understood that it had reason to believe so. However, he noted that by February 2009 at the latest, when Côte d'Ivoire made a concrete proposal for the boundary using the geographical meridian, the existence of a dispute and the location of the disputed area were, and should have been, clear to Ghana. However, Ghana did not pay due attention to this development and its legal implications, but instead continued and even stepped up its unilateral activities in the disputed area. *Such conduct was far from the exercise of restraint required under article 83, paragraph 3, of the Convention.* (para.14, at p.6)

Judge Paik acknowledged that Côte d'Ivoire has not fully substantiated the effect of Ghana's unilateral activities upon the then ongoing negotiations for the delimitation of the maritime boundary between the Parties, and that there is no clear indication one way or another in this respect in the minutes of the ten rounds of meetings. However, he noted that it would have been reasonable to assume that the intensive hydrocarbon activities with accompanying massive financial investment in the disputed area would have left Ghana little room for flexibility in its negotiations with Côte d'Ivoire. This assumption can be further strengthened by Ghana's own position that the purpose of the bilateral negotiations was simply to formalize what the Parties had already agreed in practice. (para.15) Thus Judge Paik found that the highly invasive activities carried out unilaterally by Ghana in the disputed area close to the "customary equidistance

boundary” since 2009, if not earlier, appear to be quite troublesome. By carrying out and even stepping up those activities despite Côte d’Ivoire’s repeated protests, he believed that Ghana violated its obligation under article 83, paragraph 3, of the Convention to make every effort, in a spirit of understanding and co-operation, not to jeopardize or hamper the reaching of the final agreement. (para.16)

Judge Paik also noted that the fact that Ghana suspended much of its activities in compliance with the Order of the Special Chamber of 25 April 2015 (see paragraph 632 of the Judgment) cannot exonerate Ghana from its responsibility. Nor does the fact that Ghana’s unilateral activities took place in the maritime area which the Special Chamber decides to allocate to Ghana preclude the wrongfulness of its activities. The obligation not to jeopardize or hamper under article 83, paragraph 3, of the Convention is applicable to the States concerned during the transitional period. It is an obligation to exercise caution and restraint in the area the legal status of which has yet to be decided. Therefore this obligation is breached as long as a State fails to exercise the required caution and restraint pending agreement, regardless of to which State the disputed area is allocated. To exonerate acts that could jeopardize or hamper the reaching of the final agreement for the reason that the area is ultimately attributed to a State undertaking such acts would significantly diminish the value of this obligation. (para.17, at pp.6-7)

As far as activities in the disputed area are concerned, the obligation not to jeopardize or hamper the reaching of a final agreement under article 83, paragraph 3, of the Convention is all the more important in light of the Special Chamber’s finding in paragraph 592 of the Judgment that “maritime activities undertaken by a State in an area

of the continental shelf which has been attributed to another State by an international judgment cannot be considered to be in violation of the sovereign rights of the latter if those activities were carried out before the judgment was delivered and if the area concerned was the subject of claims made in good faith by both States.” Now States may see less reason to exercise restraint in the disputed maritime area. While a State may still be able to claim for compensation with respect to damage arising from activities of another State in the above situation, for example, on the basis of unjust enrichment, article 83, paragraph 3, of the Convention seems to be the only reliable legal device that can regulate the conduct of States in the area yet to be delimited. This is another reason why the obligation not to jeopardize or hamper should not be taken lightly. (para.18, emphasis added)

Finally, Judge Paik observes that the Special Chamber decided that the oil concession limits of the Parties could not be considered to be their maritime boundary (see paragraph 225 of the Judgment). In so doing, the Special Chamber observed, quite rightly, that “[t]o equate oil concession limits with a maritime boundary would be equivalent to penalizing a State for exercising ... caution and prudence” and that “[i]t would be contrary to ... article 83, paragraph 3, of the Convention”. The Special Chamber went further to warn that “[i]t would also entail negative implications for the conduct of States in the area to be delimited elsewhere”. In a similar vein, to condone the unilateral activities of such a scale in the circumstances of the present case would certainly send a wrong signal to States pondering over their next move in a disputed maritime area elsewhere.³³³⁾

³³³⁾ *Ibid.*, para.19, at p.8.

(para.19, emphasis added)

Concluding Observations

Having surveyed the bilateral State practice featuring the three different models of joint development agreements, a preliminary conclusion is that while these models provide a variety of choice for interested States, they do not indicate acceptance of the joint development solution per se as required by international law. The essential element of *opinio juris* remains indiscernible. Its absence however does not necessarily indicate a legal void on this issue. Indeed, it is arguable that a general principle of co-operation enjoining joint development as an effective alternative to legal stalemate exists, even if its precise normative content cannot be determined. Moreover, this does not negate the utility of the present exercise in providing for the taxonomic categorization of these joint development agreements. This exercise has yielded several insights into the various joint development agreements and their common features, both within and across the three types of joint development models featured here.

More generally, it can now be argued that joint development is mandated under international law as a viable legal alternative to straightforward continental shelf boundary delimitation in the presence of common hydrocarbon deposits. The steadily accumulating legal authority for this conclusion derives from favourable judicial decisions and continuing, indeed even accelerating, bilateral state practice on joint development. The last but one example of this burgeoning trend is the joint development agreement adopted between Nigeria and São Tome e Principe, coincidentally also a

former Portuguese colony, as is East Timor.³³⁴⁾ In the case of a shared hydrocarbon deposit, the legal mandate for joint development is now clear in the absence of any agreement for continental shelf delineation. Indeed, even where continental shelf delimitation has already occurred, a further need for international unitisation of straddling deposits may be necessary where these are found to be lying across the boundary line. The application of the joint development principle in each of these cases is well nigh inevitable and appears to be increasingly accepted as such by the interested states concerned.

Finally, recent international decisions in the form of the South China Sea Arbitral Tribunal Awards and the Ghana/Cote d'Ivoire Provisional Measures and final Judgment decisions of the ITLOS Special Chamber have re-iterated the growing importance of environmental concerns in un-delimited (or overlapping claims) sea-bed areas for UNCLOS-established tribunals. This consolidates a trend first observed in the Chagos MPA Arbitral Tribunal Award. On the other hand, the specific duties of States under UNCLOS Articles 83(1) and 83(3) when dealing with a situation of overlapping continental shelf claims in a disputed maritime area have arguably been rendered more uncertain following the final Judgment of the ITLOS Special Chamber in the Ghana/Cote d'Ivoire case. It would appear that a State can unilaterally initiate and conduct activities within such a disputed area of overlapping continental shelf claims in advance (or absence) of any negotiated maritime delimitation agreement or

³³⁴⁾ Full title: Treaty between the Federal Republic of Nigeria and the Democratic Republic of São Tome e Principe on the Joint Development of Petroleum and other Resources, in respect of Areas of the Exclusive Economic Zone of the two States. Done at Abuja on 21 February, 2001. Unpublished, copy on file with author.

definitive international court/tribunal judgment rendering such delimitation. Moreover, a State opposing such unilateral activities must not only argue for mutual restraint by all parties to the disputed area but also couple this claim with a proposal to enter into provisional arrangements in the advance/absence of a negotiated boundary or definitive international court/tribunal decision on the final maritime boundary between the States concerned.

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