This analysis also includes the risks associated with disputes over, and changes in sovereignty due to the realignment of, international borders. Where delimitation of an international boundary is disputed, any negotiated or adjudicated resolution could result in a concession holder being subjected to a very different fiscal, political and concessionary regime, or having significant sunk costs and ongoing commitments in a country which is subject to home-country sanctions, or even losing its concession entirely. An ongoing dispute or a non-peaceful resolution could also lead to suspension of operations, destruction of infrastructure, loss of reserves, expropriation, criminal and civil penalties, and potentially even loss of life.

SOVEREIGN RIGHTS OVER OFFSHORE PETROLEUM RESOURCES

The right to explore for and exploit offshore petroleum resources is codified in the United Nations Convention on the Law of the Sea (UNCLOS). UNCLOS provides that a coastal State has exclusive sovereign rights to exploit petroleum resources located in the subsoil of the seabed in the following three adjacent territorial zones:

Territorial Sea
The territorial sea is a twelve nautical mile belt of sea adjacent to the State’s coast measured from the appropriate baseline. The baseline is generally the low-water line of the coast, but this may vary where the coastline is characterised by certain features, such as a deep indentation, the entrance to a bay, an island or archipelago, or low tide elevation. A coastal state has territorial sovereignty in respect of its territorial sea and therefore has the right to explore and exploit the natural wealth in that area.

Exclusive Economic Zone (EEZ)
The exclusive economic zone, or EEZ is a zone which extends beyond the outer limit of a coastal State’s territorial sea to the extent declared by the State, up to 200 nautical miles from the baseline used to measure the State's territorial sea. Within its EEZ, a State has sovereign rights and functional jurisdiction for the purpose of exploring and exploiting the natural resources of the seabed and its subsoil.

Continental Shelf
The continental shelf is the area of seabed and subsoil extending beyond a State’s territorial sea to the farthest of: (i) the extent of the natural prolongation of the State’s land territory to the outer edge of the continental margin; or (ii) a distance of 200 nautical miles from the baseline from which the territorial sea is measured (i.e. coinciding with the limit of the EEZ). As with its EEZ, a State has sovereign rights and functional jurisdiction for the purpose of exploiting
mineral resources in the seabed subsoil of the continental shelf.

No state may conduct petroleum activities in the area which falls beyond the limits of national jurisdiction described above. UNCLOS declares that all rights in that area’s resources are vested in mankind as a whole. Petroleum activities in the area are to be conducted under the supervision of the International Seabed Authority and in accordance with the provisions set out in Part XI of UNCLOS.

The provisions of UNCLOS will only regulate those States which are party to the convention. However, as at November 16, 2004, of the 191 member States of the United Nations, 146 were party to UNCLOS and a further 11 had signed but not yet ratified the convention. Non-parties to the convention have also followed many of the obligations contained in UNCLOS, so that UNCLOS is now considered by many people to embody customary international law, perhaps with the exception of Part XI, and therefore represents the obligations binding on all States.

Coastal States are not conveniently positioned at least 400 nautical miles apart. The sovereign claims of adjacent coastal States and coastal States situated opposite each other may therefore overlap.

Article 15 of UNCLOS sets out the provisions for determining the boundary of the territorial seas of opposite or adjacent states. Unless otherwise agreed, the boundary line will be “the median line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of the two States is measured”. This equidistance rule will not apply however where reasons of historic title or other special circumstances require the territorial seas to be delimited in another manner. This principle is commonly referred to as the “equidistance/special circumstances” rule, and requires the prescribed equidistance line to be provisionally drawn before consideration is given as to whether special circumstances require the line to be adjusted to obtain an equitable result.
In respect of the EEZ and continental shelf, Articles 74 and 83 of UNCLOS provide that the delimitation shall be effected “by agreement on the basis of international law ... in order to achieve an equitable solution”. Applicable decisions of the International Court of Justice (ICJ) have held that “the tracing of a median line ... by way of a provisional step ... is the most judicious manner of proceeding with a view to the eventual achievement of an equitable result.” with the next step being to consider whether ‘relevant circumstances’ require any adjustment or shifting of that line.5

In considering what special or relevant circumstances might require the equidistance line to be shifted, the existence and location of petroleum concessions is only relevant where based on an express or tacit agreement between the States indicating a consensus as to the maritime areas which they consider they are entitled to.6 This is consistent with the notion that delimitation is designed to identify the extent of sovereignty which a State has, in principle, always enjoyed,7 and thus the unilateral act of one State in granting concessions is not determinative or even necessarily relevant in setting the maritime boundary in that area.

**DISPUTE RESOLUTION**

The first step towards resolution of any dispute is for the affected States to attempt to agree the boundary between themselves. Articles 74 and 83 of UNCLOS each provide that if no agreement can be reached “within a reasonable period of time” then the States shall revert to the formal dispute resolution procedures in Part XV, which allows the State parties to choose whether to submit disputes to the ICJ, the International Tribunal for the Law of the Sea (ITLOS) or an arbitral tribunal constituted pursuant to UNCLOS. To date, the majority of disputes have been brought before the ICJ, although several arbitrations have been conducted.

However, the ICJ and ITLOS only have jurisdiction where the parties to the dispute have consented thereto. By becoming a State party to UNCLOS, a State will have agreed that disputes thereunder may be brought before the ICJ and/or ITLOS, unless at the time the State became a party it declared that it does not consent to such jurisdiction or it subsequently withdraws all or certain types of disputes from the compulsory jurisdiction of the ICJ and/or ITLOS.

The effect of the resolution of the boundary dispute on existing investors depends on the result and on how it was obtained. If the concession remains wholly within the territory of the granting State then the investors might find that the delimitation has little impact on them. If the States agree to realign the boundary then the agreement should also address treatment of those concessions which are moved partly or entirely across the realigned boundary.

For example, Article 8 of the 1972 Seabed Agreement between Australia and Indonesia8 provided that where an Australian petroleum licence had been granted for an area over which Australia ceased to exercise sovereign rights by virtue of the delimitation, then Indonesia would offer and negotiate an Indonesian production sharing contract in respect of the same part of the seabed on terms not less favourable than those provided under Indonesian law in existing production sharing contracts. If the concession is found through formal dispute resolution mechanisms to have moved partly or entirely into another State’s jurisdiction, then the investors’ activities will be governed by another government under a separate petroleum regime, and they might find their concession open to renegotiation or to even not be recognised by that State.

**DEVELOPMENT ZONES**

Where States are unable or unwilling to reach a speedy negotiated resolution to a maritime boundary dispute there may be sufficient common interest and goodwill for a development zone to be established, so that both States may benefit from petroleum activities without prejudicing their respective claims to sovereignty. This is encouraged by UNCLOS which, in Articles 74 and 83, provides that pending agreement of the delimitation of the EEZ and continental shelf 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 jeopardise or hamper the reaching of the final agreement. Such arrangements shall be without prejudice to the final delimitation.”

Development zones, if properly structured, give investors sufficient comfort that their operations will not be jeopardised by the ongoing boundary dispute so as to allow petroleum activities to continue in the
relevant area. Successful examples in Asia include the Malaysia-Thailand Joint Development Area and the Malaysia/Vietnam PM-3 Commercial Arrangement Area.

However, agreement on a development zone is often not easy to achieve as it requires States to agree on a number of potentially sensitive issues, including:

- the terms on which concessions in the area might be granted, especially where the States have different forms of concessions, such as licensing and buy-backs;
- revenue or production sharing, which prima facie should be shared equally, although there may be considerations which prompt the States to agree unequal sharing arrangements;
- the identity of the regulator for the zone, which may be one of the States, the two states equally, or a joint authority to which the States delegate their functional powers in respect of the zone; and
- the exact boundaries of the disputed area, which might be complicated where a State has not publicly declared the extent of its claim or where one State considers the other’s claim over certain territory to be spurious or merely tactical.

These issues are exacerbated when there are more than two States involved. One such intractable dispute involves the Spratley Islands covering an area of 180,000 km² in the South China Sea, where Brunei, Malaysia, the Philippines, the PRC, Taiwan, and Vietnam have all claimed rights.

AUSTRALIA AND TIMOR LESTE (EAST TIMOR)

An illustrative example of a prolonged maritime boundary dispute where development zones have facilitated investment, although not completely, can be seen in the overlapping claims between Australia and Timor Leste.

Negotiations on the maritime boundary between Timor Leste and Australia began in the 1960s, at a time when Timor Leste was a non-self governing territory under Portuguese trusteeship. In 1972 Australia and Indonesia separately signed the Seabed Agreement which permanently settled their maritime boundary. The agreed boundary left a gap of 129 nautical miles at the area which Indonesia and Australia agreed was the boundary between Australia and Timor Leste (the Timor Gap). The boundary was determined essentially on the basis of the line of equidistance. However, in the region either side of the Timor Gap, the boundary line departed from the median line and followed the Timor Trough, a deep cleft in the continental shelf about 40 nautical miles from Timor Leste. Negotiations between Australia and Portugal at that time failed to result in an agreement on delimiting the maritime boundary in the Timor Gap.

In 1976 Portuguese Timor Leste was integrated into Indonesia. In February 1979 Australia and Indonesia commenced negotiations on a permanent seabed boundary in the Timor Gap. No agreement was forthcoming, and attention was instead devoted to negotiating a development zone.

In December 1989 Australia and Indonesia signed the Timor Gap Treaty which prescribed a provisional, legally-binding regime for administering petroleum operations in an area referred to as the Zone of Cooperation (ZOC). The validity of the Timor Gap Treaty, though, was challenged by Portugal in the ICJ in 1991. However, the court refused to consider the merits of Portugal’s case on procedural grounds. Then in 1997 Australia and Indonesia signed a Delimitation Agreement. However, before that agreement was ratified, Timor Leste voted for and secured independence from Indonesia, and so the Delimitation Agreement never took effect.

Negotiations for the permanent delimitation of the maritime boundary then commenced between Australia and Timor Leste. Australia asserted that the maritime boundary line should follow the Timor Trough which, it claims, is a major break in the configuration of the seabed so that there are two distinct continental shelves between Australia and Timor. According to Australia, this is a relevant circumstance which renders the median line method of delimitation inappropriate. Timor Leste on the other hand claims the maritime boundary between the two States should be drawn at the median line drawn from the respective baselines of the two States. Timor Leste also claims a right to a 200 nautical mile exclusive economic zone extending from its coastal baseline and that this right exists independently of, and is therefore not prejudiced by, the existence of the Timor Trough as a geomorphological feature.

In 2002 Timor Leste agreed with Australia the Timor Sea Treaty. Among other things, the Timor Sea Treaty created the Joint Petroleum Development Area
(JPDA), over part (but critically not all) of the disputed area (see map). The Timor Sea Treaty did not delimit the maritime boundary between Australia and Timor Leste, but did establish a workable commercial arrangement within the JPDA. However, companies operating outside of the JPDA but still in the disputed area under Australian control continued to do so in the face of significant legal uncertainty.

Negotiations towards the permanent boundary delimitation ‘collapsed’ in October 2004. In the meantime, in March 2002 the Australian government had withdrawn from the maritime boundary dispute resolution mechanisms under the ICJ and ITLOS, so Timor Leste could not refer the dispute to the ICJ or ITLOS as envisaged under the UNCLOS dispute resolution provisions.

The dispute between Australia and Timor Leste continues to have a profound affect on petroleum activities in the area, particularly in the disputed area not covered by the JPDA. The Greater Sunrise LNG liquefaction and export project (which straddles the JPDA) has stalled. The Prime Minister of Timor Leste has demanded companies in the disputed area pay at least AU$600m in compensation to Timor Leste for royalties it claims it should have received. Timor Leste has also threatened civil and criminal prosecution against those companies and has stated an intention to grant petroleum licences in the disputed area which are currently licensed under Australian legislation.

Irrespective of the merits of Timor Leste’s claims, such assertions invariably have had a negative impact on the willingness of existing investors to continue exploiting the resource of, or for new investors to commence operations in, the disputed area.

Figure 1: Timor Gap
CONCLUSION

The Timor Gap experience (like the Malaysia-Thailand Joint Development Area and the Malaysia/Vietnam PM-3 Commercial Arrangement Area) shows that development zones can be effective solutions to maritime boundary disputes in Asia. However, the Timor Gap and Spratley Island disputes also show that development zones are not a panacea and, with fast dwindling worldwide oil and gas reserves, other solutions are urgently needed if the estimated trillions of US dollars in reserves in disputed areas in Asia are to be explored and developed in our lifetime.

Notes:

1. see e.g., Declaration by the Government of Indonesia concerning the Exclusive Economic Zone of Indonesia, 21 March 1980, and Article 2 of Law 5/1983 on the Indonesian Exclusive Economic Zone.
2. see An Overview of International Law (Working Draft), prepared by the United Nations Forum on Forests for the Ad hoc expert group on Consideration with a View to Recommending the Parameters of a Mandate for Developing a Legal Framework on All Types of Forests, New York 7-10 September 2004, para 29.
9. Treaty Between Australia and Republic of Indonesia on the Zone of Cooperation in an Area between the Indonesian Province of East Timor and Northern Australia.
14. see e.g. Australia, East Timor relations at historic low: Horta, transcript of interview between Mark Colvin (ABC Radio) and Jose Ramos Horta, Foreign Minister of Timor Leste, November 29, 2004, at http://www.abc.net.au/pm/content/2004/s1254106.htm.