Once again, it may be that long-standing dogmas have stood in the way of devising rather more effective means of tackling a matter of major international concern.

7. Terrorism and weapons of mass destruction

The 1988 SUA Convention was drafted in the wake of a terrorist outrage akin to piracy and so it was not surprising that the response was tailored to that form. As new concerns have emerged they too have been addressed within the model that the SUA provides, that is, through the identification and definition of additional forms of unlawful conduct and the utilization of cooperative arrangements to enable flag State consent to be more readily obtained for boarding, search and, if necessary, arrest of vessels by non-flag States. In October 2005 the International Maritime Organization adopted a Protocol to the SUA which would make it an offence under the convention to engage in an extremely broad range of activities at sea when the purpose of the activity, given its nature and context, is intended to 'intimidate a population, or to compel a Government or an international organization to do or to abstain from any act', or to knowingly transport persons who have committed such unlawful acts.[33] Moreover, the Protocol would permit participating States to notify the IMO Secretary General in advance that permission for boarding and searching is to be presumed if no reply is given to a requesting State within four hours of a request being made. This goes a long way to creating a presumption in favour of boarding by those States with reasonable grounds for suspicion and a heavy onus on those flag States that might seek to deny such a request. At the time of writing, however, the 2005 Protocol has not yet entered into force.[34]

The 2005 Protocol had already been prefigured by the 'Proliferation Security Initiative' (PSI), instigated by the USA in 2003 and which provides an enhanced framework for cooperation between participating States (see Byers, 2004; Guilfoyle, 2009, ch 9). The USA has also entered into reciprocal bilateral treaties with a number of States which, like the 2005 Protocol, provide for a presumption that a request for boarding has been granted if no response if given within a limited period of time.[35] Once again, these developments are consonant with the traditional principles of high seas and flag State jurisdiction, but point to a reality very different from that which those principles suggest for those willing to accept them through participating in the SUA Protocol, PSI or other bilateral arrangements. However, there is as yet no evidence to suggest that such broad-ranging rights and facilitative arrangements for boarding and search—even in this context—are reflective of customary international law.

[33] These acts not only embrace the use or discharge of any explosive, radioactive material or BCN (biological, chemical, nuclear) weapon in a manner that causes or is likely to cause death or serious injury or damage but also include the transportation of explosive or radioactive materials in the knowledge that they are intended to be so used, knowingly transporting a BCN weapon and a further range of related activities including the transportation of any equipment, materials or software or related technology that significantly contributes to the design, manufacture or delivery of a BCN weapon with the intention that they will be used for such purposes. See 2005 Protocol, adding Article 3 *bis* to the SUA.

[34] The Protocol had only attracted ten of the 12 ratifications needed to enter into force.

[35] The USA has so far concluded nine such bilateral agreements, with the Bahamas (2008), Belize (2005), Croatia (2005), Cyprus (2005), Liberia (2004), Malta (2007), Marshall Islands (August 2004), Mongolia (2007), and Panama (May 2004). These States account for much of the registered shipping in the world. The time period for notification before the presumption in its favour takes effect in these agreements is the even shorter period of two hours.

C. CONCLUSION

The freedom of navigation has, then, been the subject of some whittling away, both by reason of the increasing breadth of the territorial sea, outlined in Section III, and by the erosion of exclusive flag-State jurisdiction outlined above. However, the modifications to the regime of innocent passage and the new regime of transit passage, as well as the limited and piecemeal nature of the increased jurisdictional competence over non-flag State vessels, all point in the direction of the continuing significance of the freedom of navigation, albeit that this is 'freedom under the law' (Anderson, 2006, at p. 345). This is further underscored by the remaining sections of this chapter which chart the rise of functional zones of jurisdiction and which, although representing a marked diminution in other freedoms of the high seas, left navigation relatively untouched and also ensured that the increase in the breadth of the territorial sea was kept within modest bands.

V. RESOURCE JURISDICTION

A. THE CONTINENTAL SHELF

During the opening decades of the twentieth century improvements in technology made the exploration and exploitation of seabed and subsoil resources beyond the territorial sea—particularly oil and then natural gas—both increasingly possible and economically viable. In theory, these deposits were available to all since legally speaking they were high seas resources. However, orderly and effective development required some degree of involvement by a proximate coastal State and in the Truman Proclamation (1945), the US President declared 'the natural resources of the subsoil and seabed of the continental shelf beneath the high seas but contiguous to the coasts of the US as appertaining to the US, subject to its jurisdiction and control'.[36] Following consideration by the ILC, the 1958 CSC provided that 'The coastal state exercises over the continental shelf sovereign rights for the purpose of exploring it and exploiting its natural resources' and did so independently of express acts or declarations (Articles 2(1) and 2(3)). In the *North Sea* cases the ICJ recognized this as a statement of customary law, stressing that these rights existed '*ipso facto and ab initio*'.[37] LOSC Article 77 reiterates this approach.

Natural resources include both mineral and other non-living resources of the seabed and subsoil and well as 'sedentary species' (CSC Article 2(4); LOSC Article 77(4)). Thus pearling is clearly covered by this definition, whereas jurisdiction over wrecks is not. Whether crabs and lobsters are continental shelf resources is more controversial, although the EEZ now provides an alternative means of securing coastal State jurisdiction over such resources.

The most vexed question concerns the outer limit of continental shelf jurisdiction. The seabed off a coast may not be a 'continental shelf' in a geophysical sense at all: the coast may swiftly plunge to great depths, as it does off the western coasts of much of South America, or merely be shallow indentations into which water has flooded, as in the Gulf region of the Middle East. The continental shelf proper is merely a component of the 'continental

[36] 1 *New Directions in the Law of the Sea* 106.

[37] *North Sea Continental Shelf, Judgment, ICJ Reports 1969*, p 3, paras 19, 39, and 43.

margin' which comprises the gently sloping shelf, which gives way to a steep slope which then levels off into the continental rise that emerges from the ocean floor (sometimes rather prosaically described as the 'Abyssal Plain'). The 1958 CSC did not draw directly on any of these concepts and defined the continental shelf, for legal purposes, as comprising the seabed and subsoil adjacent to the coast but outside the territorial sea, extending to the point where the waters above were 200 metres deep, or as far seawards as it was possible to exploit (CSC Article 1). This was most unsatisfactory since it permitted States to claim ever more distant areas as technology rapidly developed. Moreover it ran into the claim advanced in the late 1960s that the deep seabed was the 'common heritage' of all mankind and not subject to single State jurisdiction. It was, then, necessary to place some limit on the seawards expansion of continental shelf jurisdiction.

In the *North Sea* cases the ICJ argued that the continental shelf represented the 'natural prolongation' of the landmass into and under the sea,[38] implying some limit to its seawards expansion. However, this still did not address the claims of States which had no 'natural prolongation' as such, but who nevertheless sought jurisdiction over offshore seabed and subsoil resources and who therefore argued that the continental shelf should be a fixed distance, measured from the baselines, irrespective of the nature of the seabed. This approach was opposed by some of the so-called 'broad shelf' States which already exercised jurisdiction on the basis of 'natural prolongation' beyond the most likely fixed limit of 200 n. miles.

This conundrum was resolved by the complex compromise found in LOSC Article 76, according to which the continental shelf extends to (a) 200 n. miles from the baselines or (b) to the outer edge of continental margin (this being seen as the natural prolongation), whichever is the further. The outer edge of the margin is calculated with reference to the 'foot' of the continental slope, this being the point where the continental slope gives way to the continental rise. From this point, a State might either exercise jurisdiction for a further 60 n. miles seawards, or as far as a point where the depth of the 'sedimentary rock' (loose, rather than bedrock) overlying the continental rise is more than 1% of the distance of that point from the foot of the slope. These outer lines are then subject to one of two alternative limitations: they cannot be drawn more than 350 miles from the baselines of a State, or more than 100 miles from a point at which the depth of the water is 2,500 metres. Finally, exploitation beyond the fixed 200 n. miles distance is subject to the State making 'payments or contributions in kind' through the International Seabed Authority (LOSC Article 82).

This complicated formula is difficult to apply and its customary law status unclear. It is particularly difficult to see how Article 82 could have a life outside the convention framework. Nevertheless, it is vital to determine the outer limit of each State's continental shelf since the seabed beyond forms part of the 'Area', governed by its own legal regime (considered in subsection D, below). LOSC Article 76(8) therefore establishes the Commission on the Limits of the Continental Shelf, to which States must submit details of their outer limits should they lie beyond 200 n. miles from the baseline. Under the terms of the Convention States were to submit details of any such claims within 10 years of its entry into force for them, but it was subsequently agreed by the States parties to substitute the fixed date of 13 May 2009 for all States for whom the ten years would previously have expired. Fifty-one

[38] Ibid, para 18. For an extended discussion see Hutchinson, 1985.

claims have now been submitted, 16 before the end of 2008 and 36 in the weeks before the deadline elapsed.

The role of the Commission is to examine these submissions and to make recommendations to States 'on the basis of which' the State establishes its final boundary (see generally Cook and Carlton, 2000). This is clearly opaque and since the Commission has so far issued relatively few recommendations (the content of which it does not make public), practice is scant.[39] What is clear is that the entire regime reflects a careful balancing act between the interests of coastal States with varied geo-physical relationships to the sea; to the economic interests of the international community as a whole and to the interests of the freedom of navigation and of the high seas, which it leaves substantially untouched.

B. THE EXCLUSIVE FISHING ZONE

As States watched the international community recognize and legitimate coastal State jurisdiction over the resources of the seabed and subsoil, it was inevitable that the argument would be made that resources of the water column be treated likewise. This was always going to be controversial since the seabed was, by and large, chiefly of potential economic importance, whereas high seas fishing was already of very real economic importance and excluding foreign-flagged fishing vessels from waters beyond narrow belts of territorial seas would have serious consequences for many communities and economies. However, the increased capacity of vessels to harvest fish was putting stocks at risk and so there was a tension between maximizing access to resources and promoting effective conservation. Viewed in this light, increased coastal State control appeared more beneficial than high seas freedoms and this was reflected in the developing law of fisheries. This will be considered further in Section VII but it is important to note here the emergence of the Exclusive Fishing Zone (EFZ) as an autonomous zone of resource jurisdiction.

Neither UNCLOS I nor II could agree upon the establishment of an EFZ but State practice moved steadily in the direction of recognizing the right of a coastal State to assert jurisdiction over fisheries within 12 n. miles of its baselines and in the 1974 *Fisheries Jurisdiction* case the ICJ recognized this as reflecting customary law.[40] By this time claims for zones of up to 200 n. miles were being advanced yet the Court was unwilling to go further and endorse Iceland's claim for an EFZ of up to 50 n. miles. It did, however, suggest that a State might exceptionally be entitled to preferential access to the high seas resources within such a distance under certain circumstances.[41] Such hesitations were subsequently swept away by the development of the EEZ and, although there is no mention of the EFZ as an autonomous regime within the LOSC, it is clear that customary law now recognizes EFZ claims of up to 200 n. miles.[42]

[39] Four of the nine recommendations so far communicated to States were adopted in 2009, two in 2008 and two in 2007. For an overview of the practice of the Commission, given against to background of the joint submission made by France, Ireland, Spain, and the UK in 2007 see Llewellyn, 2007. The CLCS issued its recommendations in the light of this submission in March 2009.

[40] *Fisheries Jurisdiction (United Kingdom v Iceland), Merits, Judgment, ICJ Reports 1974*, p 3, para 53.

[41] Ibid, paras 55–60.

[42] See *Maritime Delimitation in the Area between Greenland and Jan Mayen, Judgment, ICJ Reports 1993*, p 316, accepting uncritically the Norwegian claim to an EFZ of this distance.

C. THE EXCLUSIVE ECONOMIC ZONE

The previous sections have already identified the reasons why during the 1960s and 1970s many coastal States wanted to have exclusive access to the resources of the seabed and the water column but were reluctant to extend the breadth of their territorial seas. In order to balance the competing interests, Latin and South American States advanced the claim that there should be a single zone of up to 200 n. miles in which the coastal State enjoyed sovereign rights over all natural living and non-living resources but within which the other freedoms of the seas, and in particular navigation, would be unaffected. Over time, this claim became refined into what is now known as the Exclusive Economic Zone, which became recognized as reflecting customary international law during the UNCLOS III process[43] and, of course, is established as a matter of treaty law by the LOSC itself.[44]

Under the regime established by the Convention, States may claim an EEZ of up to 200 n. miles (LOSC Article 57) within which the range of matters reserved for the coastal State are so extensive that the Zone is comprised of neither territorial seas nor high seas but is considered to be '*sui generis*' and subject to a distinct jurisdictional framework (LOSC Article 55). First and foremost, coastal States exercise sovereign rights within the EEZ for the purposes of 'exploring and exploiting, conserving and managing' both its living and non-living natural resources (LOSC Article 56(1)(a)). Although this may seem to be an amalgamation of the jurisdictional capacities which States already were able to enjoy on the basis of the continental shelf and the EFZ regimes, the EEZ does in fact embrace additional elements, including the harnessing of wind and wave power. The coastal State also has jurisdiction, subject to the other provisions of the convention, over the establishment and use of artificial islands and installations, marine scientific research, and the preservation of the marine environment, as well as a range of other matters (LOSC Article 56(b) and (c)).

Despite its '*sui generis*' nature, the EEZ is pulled in a number of different directions. As regards jurisdiction over the resources of the seabed and subsoil, it is closely aligned with the continental shelf (LOSC Article 56(3)). Article 58 provides that three of the freedoms of the seas expressly mentioned in the convention—navigation, overflight, and laying cables and pipelines, and related activities—are to be exercised by all States within an EEZ in accordance with the general framework for the high seas, as provided for in Articles 87–116. Thus of the six high seas freedoms identified in the convention, three pass to the predominant control of the coastal State within its EEZ whilst three remain open to the international community at large. This list of freedoms is not exhaustive and in situations not specifically provided for the question of whether a matter falls within the jurisdiction of the coastal State 'should be resolved on the basis of equity and in the light of all the relevant circumstances, taking into account the respective importance of the interests involved to the parties as well as to the international community as a whole' (LOSC Article 59). The *M/V Saiga (No 2)* illustrates the type of problem that might arise. Guinea arrested a vessel in its EEZ and argued, *inter alia*, that it was entitled to do so because the vessel had been 'bunkering' (transferring oil to) a fishing vessel and thereby avoiding customs duties.

[43] See *Continental Shelf (Libyan Arab Jamahiriya/Malta), Judgment, ICJ Reports 1985*, p 13.

[44] For general studies of the origins and background of the EEZ see Attard, 1986; Orrego-Vicuna, 1989.

The ITLOS found it unnecessary to decide this point,[45] but it is clear that had bunkering occurred within the territorial sea, and the arrest taken place within internal waters, the territorial sea, or a contiguous zone, the legitimacy of the arrest would not have been an issue at all.

The heart of the EEZ concerns jurisdiction over fisheries and this is considered in Section VII below. However, it should be noted here that coastal States enjoy broad-ranging legislative jurisdiction (LOSC Article 63(4)) and may take measures including 'boarding, inspection, arrest and judicial proceedings' which are necessary to enforce laws and regulations concerning its sovereign right to 'explore, exploit, conserve and manage' living resources of the EEZ (LOSC Article 73). This is not without difficulties. For example, the 1986 *Franco-Canadian Fisheries Arbitration*[46] took the view that a vessel engaged in processing fish at sea fell outside the range of activities over which the coastal State was entitled to exercise and enforce jurisdiction (for criticism see Churchill and Lowe, 1999, p 291). The convention also balances the potentially intrusive power of the coastal State over vessels within its EEZ against the risk of abuse by requiring that vessels or crew arrested 'shall be promptly released upon the posting of reasonable bond or other securities' and by restricting the nature of the penalties to which they might be subject (LOSC Article 73). Moreover, the International Tribunal on the Law of the Sea enjoys an automatic jurisdiction over claims concerning the prompt release of vessels (LOSC Article 292) and this has so far generated the majority of the admittedly modest number of cases that it has considered.[47]

D. THE DEEP SEABED

The final zone of resource jurisdiction which has been carved out of the high seas is the most dramatic in both kind and extent. The claim that the seabed beyond the limits of national jurisdiction form the 'common heritage of mankind', fuelled initially by some near fantastical estimates of the potential mineral wealth at stake, has already been noted. The difficulty lay in translating that idea into a workable regime: the developed world favoured a loosely structured international agency to oversee and regulate activities of those wishing to conduct mining whereas the developing world generally favoured creating a strong international mechanism that would itself undertake mining activity and distribute the proceeds as appropriate, taking account of the needs of developing countries and developing land-based producers. Negotiations at UNCLOS III were tortuous and produced an outcome—Part XI of the LOSC—which satisfied few and was

[45] *M/V Saiga No 2* (*St Vincent and the Grenadines* v *Guinea*), Case No 2, Judgment of 1 July 1999, paras 56–59.

[46] *Franco-Canadian Fisheries Arbitration* (1986) 90 *RGDIP* 713.

[47] A total of 16 cases have been submitted to the ITLOS since its inception, nine of which have concerned applications for prompt release. See *M/V Saiga* (*St Vincent and the Grenadines* v *Guinea*), Case No 1, Judgment of 4 December 1997; *Camouco* (*Panama* v *France*), Case No 3, Judgment of 7 February 2000; *Monte Confurco* (*Seychelles* v *France*), Case No 6, Judgment of 19 December 2000; *Grand Prince* (*Belize* v *France*), Case No 8, Judgment of 20 April 2001; *Chaisiri Reefer 2* (*Panama* v *Yemen*), Case No 9, Order of 13 July 2001; *Volga* (*Russian Federation* v *Australia*), Case No 11, Judgment of 23 December 2003; *Juno Trader* (*St Vincent and the Grenadines* v *Guinea-Bissau*), Case No 13, Judgment of 18 December 2004; *Hoshinmaru* (*Japan* v *Russian Federation*), Case No 14, Judgment of 6 August 2007; *Tomimaru* (*Japan* v *Russian Federation*), Case No 15, Judgment of 6 August 2007.

considered completely unacceptable by the developed world in general and the USA in particular (Schmidt, 1989).

Even at the time of its adoption, it was clear that the convention text would need to be modified in some way in order to accommodate the interests of the major industrialized powers whose support would be necessary for the regime to become a practical reality. Some concessions were made in Resolutions I and II which were appended to the Final Act of the Conference. These granted certain privileges to 'pioneer investors', States and companies registered in States which had already made a significant investment in seabed mining. This, however, proved to be too little too late. The breakthrough came in the early 1990s when the likelihood of the convention's entry into force, coupled with the demise of communism and changing economic and geo-political factors, produced a climate in which it was possible to revisit the convention text, sweep away some of the more bureaucratic and arcane layers of regulation and strike a new balance between the interests of those States and those companies which were already practically engaged in activities relating to mining the deep seabed and the more general interests of the international community as a whole. Far reaching changes were made in the 1994 Implementation Agreement which paved the way for widespread ratification of the convention and which has been considered in Section I, above. Underlying this change of approach was the realization that the financial rewards were likely to be considerably less than originally thought—if, indeed, there were likely to be any at all.[48]

Under the current arrangements, resource exploration and exploitation of the seabed and subsoil beyond the limits of national jurisdiction, known as the 'Area', is administered by the International Seabed Authority (ISA) to which applicants must submit 'plans of work'. These must identify two areas of roughly equal mining potential, one of which is to be mined by the applicant whilst the other will be 'reserved' for exploitation by the international community. In the original convention scheme, exploitation of the 'reserved' site would be undertaken by the 'Enterprise', an independent commercial mining arm of the ISA but under the 1994 Agreement the 'Enterprise' was given a considerably reduced role and, at least initially, might only engage in joint ventures. If the Enterprise does not undertake the mining of a reserved site within 15 years, the original applicant may do so. Moreover, if it does seek to mine the site, the original applicant is to be offered the chance to participate in the joint venture. The reality of the situation is that the Enterprise does not yet exist as an entity, and the ISA is currently fulfilling its functions. It will only be established should seabed mining becomes commercially feasible, and it may be that it never will be. In the meanwhile, the Authority has since 2001 entered into a number of 15-year contracts with a range of governments, government entities and commercial consortia whose activities are largely focused on exploration and research at present, in the Clarion-Clipperton Zone in the Pacific Ocean and the Central Indian Ocean Basin.

The details of the regime, and the manner in which it balances the interests of various interest groups—including consumer States, investing States, producing States, developing States, landlocked States, and others—is such as to defy easy and succinct description

[48] Indeed, commercial interest was already switching away from polymetallic nodules, primarily located beyond national jurisdiction in the Area, and becoming more focused on polymetallic sulphides which are more usually found within areas of national jurisdiction within the continental shelf and EEZ, further lessening the significance of the Deep Seabed regime.

and may be pursued elsewhere.[49] For current purposes what is significant is the manner in which the international community—after a number of false starts—was able to agree to extract the resource potential of the seabed and subsoil from of the high seas regime and create a further regime of resource jurisdiction whilst preserving the integrity of the general jurisdictional framework applicable to the law of the sea.

VI. DELIMITATION OF MARITIME ZONES BETWEEN OPPOSITE OR ADJACENT STATES

It will often be impossible for States to extend their jurisdiction as far seawards as international law permits because of the claims of other States. The resulting problem of delimiting maritime zones between opposite or adjacent coastal States whose claims overlap is extremely difficult and has given rise to more cases before the ICJ than any other single subject, as well as having generated a considerable number of ad hoc arbitrations.

A. EQUIDISTANCE OR EQUITABLE PRINCIPLES?

LOSC Article 15 provides that, in the absence of agreement to the contrary, States may not extend their territorial seas beyond the median, or equidistance line, unless there are historic or other 'special' circumstances that dictate otherwise. This 'equidistance/special circumstances' rule has been accepted by the ICJ as customary international law[50] and it is clear that only in exceptional cases will the equidistance line not form the basis of the boundary between overlapping territorial seas, although recent practice has in fact produced rather more exceptions than might have been thought probable.[51]

Article 6 of the 1958 CSC adopted the same approach to the delimitation of overlapping continental shelves but its application in this context has had a more chequered history (see generally Evans, 1989; Weil, 1989; Antunes, 2003; Tanaka, 2006). In the *North Sea* cases Denmark and the Netherlands argued that Article 6 represented customary law and so bound Germany, a non-State party. Applying this rule mechanically to the concave Germany coastline sandwiched between Denmark and Norway restricted Germany

[49] For details see the information available on the International Sea Bed Authority website: http://www.isa.org.jm. For a helpful overview of its work see Nandan, 2006.

[50] *Maritime Delimitation and Territorial Questions Between Qatar and Bahrain (Qatar v Bahrain), Merits, Judgment, ICJ Reports 2001*, p 40, paras 175–176. Cf Separate Opinion of Judge Oda, paras 13–21, who challenged the Court's views of customary law. The Court reaffirmed its view in *Territorial and Maritime Dispute between Nicaragua and Honduras in the Caribbean Sea (Nicaragua v Honduras)*, Judgment of 8 October 2007, nyr, paras 268 and 281.

[51] In the *Territorial and Maritime Boundary Dispute between Nicaragua and Honduras in the Caribbean* the ICJ, whilst emphasizing that equidistance remained the general rule, took the view that both the configuration and unstable nature of the relevant coastal area made it impossible to identify basepoints and construct a provisional equidistance line at all. This amounted to a 'special circumstance' justifying the use of an alternative method, the use of a line which bisected two lines drawn along the coastal fronts of the two States. See *Territorial and Maritime Dispute between Nicaragua and Honduras in the Caribbean Sea (Nicaragua v Honduras)*, Judgment of 8 October 2007, nyr, paras 268–281. Also in that year the Annex VII Arbitration Award in the case concerning *Guyana/Suriname*, 17 September 2007, paras 323–325 concluded that historical and navigational issues were considered to amount to special circumstances justifying a departure from the use of the equidistance line for the territorial sea.