9

The exclusive economic zone

Evolution of the EEZ

The exclusive economic zone (EEZ) is a zone extending up to 200 miles from the baseline, within which the coastal State enjoys extensive rights in relation to natural resources and related jurisdictional rights, and third States enjoy the freedoms of navigation, overflight by aircraft and the laying of cables and pipelines. The EEZ is a concept of recent origin. While its historical roots lie in the trend since 1945 to extend the limits of coastal State jurisdiction ever seawards (particularly in the Truman and other continental shelf proclamations, and the resource-oriented claims of Latin American and African States to broad territorial seas and fishing zones), its more direct and immediate origins lie in the preparations for UNCLOS III. The concept of the EEZ was put forward for the first time by Kenya to the Asian-African Legal Consultative Committee in January 1971, and to the UN Sea Bed Committee in the following year. Kenya's proposal received active support from many Asian and African States.[1] At about the same time many of the Latin American States began to develop the similar concept of the patrimonial sea.[2] The two lines of approach had effectively merged by the time UNCLOS began, and the new concept – the EEZ being the preferred name – had attracted the support of most developing States and began to attract support from some developed coastal States such as Canada and Norway.

The EEZ is a reflection of the aspiration of the developing countries for economic development and their desire to gain greater control over the economic

[1] See, for example, the Conclusions in the General Report of the African States Regional Seminar on the Law of the Sea, held in Yaoundé, June 1972. *UN Leg. Ser.* B/16, p. 601; *ND I*, p. 250.

[2] Declaration of Santo Domingo, June 1972. *UN Leg. Ser.* B/16, p. 599; *ND I*, p. 247. Although this declaration is the first Latin American Declaration to refer to the patrimonial sea, it is the culmination of a series of earlier Latin American proclamations moving towards this concept, in particular the Montevideo Declaration on the Law of the Sea, 1970 and the Lima Declaration on the Law of the Sea, 1970. *UN Leg. Ser.* B/16, pp. 586 and 587; *ND I*, pp. 235 and 237. For the differences between the Latin-American and African positions, see G. Pontecorvo (ed.), *The New Order of the Oceans* (New York, Columbia University Press), 1986, chapters 6 and 7, especially at p. 140.

resources off their coasts, particularly fish stocks, which in many cases were largely exploited by the distant-water fleets of developed States. At the same time the EEZ could be seen as something of a compromise between those States that claimed a 200-mile territorial sea (some Latin American and African States) and those developed States (e.g., Japan, the then USSR and the USA) which were hostile to extended coastal State jurisdiction. The fact that the EEZ could be seen as a compromise proposal led to its rapid acceptance in principle at UNCLOS by most States, although many landlocked and geographically disadvantaged States were initially rather reserved towards the EEZ because it reduced the area of high seas open to use by all States. Thereafter negotiations on the EEZ at UNCLOS were limited to points of detail, and eventually led to the inclusion in the Law of the Sea Convention of a special section – Part V – dedicated to the EEZ.

Under the Convention there is no obligation on a State to claim an EEZ. Nevertheless most coastal States have in fact exercised their right to make such a claim (for details of such claims see the Table of Claims in Appendix 1). The major exceptions are the States bordering the Mediterranean and some States bordering other semi-enclosed seas, where it is impossible for geographical reasons to establish an EEZ of a full 200 miles breadth; a handful of States which still claim a 200-mile territorial sea (see Table of Claims); and one or two developed States such as the United Kingdom, which have preferred to claim a 200-mile exclusive fishing zone (EFZ) rather than a 200-mile EEZ because the former, together with the exclusive rights over sea-bed resources which they already have under the continental shelf regime, give these States all that they at present want from an EEZ.[3] The vast majority of States which have so far claimed an EEZ did so well before the entry into force of the Law of the Sea Convention, many of them in the late 1970s when UNCLOS III was still in progress. The volume of such claims, coupled with an almost complete absence of protest, has led most commentators to conclude that the EEZ had become part of customary international law long before the entry into force of the Convention, and indeed in the *Libya/Malta Continental Shelf* case (1985) the International Court said that it is 'incontestable that . . . the EEZ . . . is shown by the practice of States to have become part of customary law'.[4] It would seem that what is part of customary international law are the broad rights of coastal and other States enumerated in articles 56 and 58 of the Convention. It is much more doubtful whether the detailed obligations in the articles relating to the exercise of coastal

[3] Quite a number of developed States, such as Canada, Germany, Japan, the former USSR and the USA, in fact began by claiming a 200-mile EFZ in the late 1970s. These claims were one by one converted to EEZs in the years following the adoption of the Law of the Sea Convention.

[4] [1985] *ICJ Rep.* 13, at 33. Note, too, that in the *Franco-Canadian Fisheries* arbitration the tribunal acknowledged that the EEZ was part of customary law, at least as far as sovereign rights to natural resources was concerned (see para. 49), and in the *Franco-Canadian Maritime Boundary* arbitration the tribunal observed that article 58, providing for freedom of navigation in the EEZ, 'undoubtedly represents customary law as much as the institution of the 200 mile zone itself' (para. 88).

State jurisdiction over fisheries, pollution and research have passed or are likely quickly to pass into customary international law, partly because of a lack of claims embodying the duties of the Convention, partly because there is some divergence between State practice and the Convention, and partly because some of the conventional rules would not seem to have the 'fundamentally norm-creating character' necessary for the creation of a rule of customary international law (see chapter one). This reflects a tendency for rights to pass more quickly into custom than duties. Even in relation to the broad rights enumerated in articles 56 and 58, there is some divergence between State practice and the Convention. This will be referred to at appropriate points below.[5]

The universal establishment of 200-mile EEZs would embrace about thirty-six per cent of the total area of the sea. Although this is a relatively small proportion, the area falling within 200-mile limits contains over ninety per cent of all presently commercially exploitable fish stocks, about eighty-seven per cent of the world's known submarine oil deposits, and about ten per cent of manganese nodules (see, further, table 1 below). Furthermore, a large proportion of marine scientific research takes place within 200 miles of the coast, and virtually all the major shipping routes of the world pass through the EEZs of States other than those in which the ports of departure and destination are situated. In view of these extensive activities conducted within 200 miles of land, the legal regime of the EEZ provided for in the Law of the Sea Convention is obviously of crucial importance.

This chapter begins by looking at the way in which the EEZ is delimited. It then considers the legal nature of the EEZ, examining in turn the rights which coastal States enjoy therein, the rights of other States, and the relationship between these two groups of rights.

Delimitation of the EEZ

Outer limit

The inner limit of the EEZ is the outer limit of the territorial sea (LOSC, art. 55). The zone's outer limit 'shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured' (LOSC, art. 57). The wording of this provision suggests that, while 200 miles is the maximum extent of the EEZ, it would be quite possible for a State, if it so wished, to claim an EEZ of some lesser extent.[6] In many regions, of course, coastal States have

[5] For a much fuller discussion of national laws relating to the EEZ and their compatibility with the Convention, see works by Burke, Juda and Smith (pp. 32–40), *op. cit.* in 'Further reading'.

[6] Throughout this book we refer frequently, in common with nearly all other writers, to a 200-mile EEZ. Strictly speaking, this is not accurate. Because the inner part of the 200 miles consists of territorial sea, one ought to refer to a 188-mile EEZ (in the case of a twelve-mile territorial sea) or a 197-mile EEZ (in the case of a three-mile territorial sea).

no option but to claim less than 200 miles because of the presence of neighbouring States' EEZs. It may be wondered why the figure of 200 miles was chosen as the maximum breadth for the EEZ. The reasons are historical and political: 200 miles has no general geographical, ecological or biological significance. At the beginning of UNCLOS the most extensive zones claimed by coastal States were the 200-mile claims of some Latin American and African States. Since it would have been very difficult to persuade those States to accept some lesser limit than 200 miles, it was thought – correctly, as it turned out – that it would be easiest to reach agreement on the outer limit of the EEZ by choosing the figure that represented the broadest existing claims. However, there remains the question as to why the figure of 200 miles was originally chosen by the first State to claim a zone of this limit, namely Chile. According to Hollick,[7] the figure of 200 miles seems to have been something of an accident. Chile's claim was motivated by a desire to protect its then new offshore whaling operations. The whaling industry only wanted a fifty-mile zone, but was advised that some precedent was necessary. The most promising precedent appeared to be the security zone adopted in the 1939 Declaration of Panama. This zone was wrongly thought to have been 200 miles in breadth: in fact it varied and was nowhere less than 300 miles.

Boundaries

In many regions States are unable to claim a full 200-mile zone because of the presence of neighbouring States, and it is therefore necessary to delimit the EEZs of opposite and adjacent States. The international law governing such boundary delimitation is discussed in the next chapter.

Islands

In principle all land territory can generate an EEZ. However, three qualifications must be made to this statement. First, although islands normally generate an EEZ, article 121(3) of the Law of the Sea Convention provides that 'rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf'. The poor drafting of this provision was criticised in chapter two. So far the provision seems to have had limited impact in practice. As far as can be ascertained, only one State with an EEZ – Mexico[8] – has incorporated provisions modelled on article 121(3) in its domestic legislation. On the other hand, a number of States have claimed EEZs around islands which could conceivably be regarded as uninhabitable rocks,

[7] A. L. Hollick, 'The origins of 200 mile offshore zones', 71 *AJIL* 494–500 (1977).

[8] Law regulating the Eighth Paragraph of Article 27 of the Constitution relating to the Exclusive Economic Zone, 10 February 1976, art. 3. *UN Leg. Ser.* B/19, p. 233; *ND V*, p. 292; subsequently replaced by Federal Act relating to the Sea, 1985, arts 51 and 63. 7 *LOSB* 53 (1986); 25 *ILM* 889 (1986).

e.g., France (in respect of various tiny islands in the Pacific and Indian Ocean),[9] Fiji (in respect of the island of Ceva-i-Ra)[10] and Venezuela (in respect of Aves island, an action which has been recognised in various bilateral boundary agreements[11] but which has drawn protests from Antigua, St Kitts, St Lucia and St Vincent on the ground that the action is contrary to article 121(3)[12]). And even Mexico itself has claimed an EEZ around tiny islets, such as Clarion and Roca Portida in the Pacific (although not around the Roca Alijos).[13] The main impact which article 121(3) seems to have had so far has been to lead the United Kingdom to give up the 200-mile fishing zone which it established in 1976 around the minute islet of Rockall (and which met with protests form several States[14]) when it acceded to the Law of the Sea Convention in 1997.[15] This suggests that the United Kingdom, at least before 1997, did not regard article 121(3) as being part of customary international law. It has also been argued that apart from the lack of State practice, another reason why article 121(3) has not become a customary rule is because it is not of the necessary fundamental norm-creating character.[16]

Non-independent territories

The second qualification relates to territories which have not attained either full independence or some other self-governing status recognised by the UN, and to territories under colonial domination. Resolution III, adopted by UNCLOS III at the same time as the Convention text, declares that in the case of such territories 'provisions concerning rights and interests under the Convention shall be implemented for the benefit of the people of the territory with a view to promoting their well-being and development.' This resolution replaced a transitional article at the end of earlier drafts of the Convention text, which had proposed to vest the resources of the maritime zones of such territories in their inhabitants. The

[9] Decrees Nos 78–143, 78–144, 78–146 and 78–147 (relating to French Polynesia; French Southern and Antarctic Territories; the islands of the Mozambique Channel; and Clipperton Island, respectively). *Journal Officiel*, 11 February 1978, pp. 683–7; *Smith, op. cit.* in 'Further reading', p. 154 *et seq.*

[10] *Limits in the Seas* No. 101 (1984).

[11] USA–Venezuela Maritime Boundary Treaty, 1978; Netherlands–Venezuela Treaty of Delimitation, 1978; and France–Venezuela Convention relating to the Delimitation of Economic Zones, 1980.

[12] 35 *LOSB* 97–100 (1997).

[13] C. R. Symmons, *The Maritime Zones of Islands in International Law* (The Hague, Nijhoff), 1979, pp. 125–6. Further on Mexican practice, see W. Van Overbeek, 'Article 121(3) LOSC in Mexican State practice in the Pacific', 4 *IJECL* 252–67 (1989).

[14] C. R. Symmons, 'The Rockall dispute deepens: an analysis of recent Danish and Icelandic actions', 35 *ICLQ* 344–73 (1986).

[15] See further R. R. Churchill, 'United Kingdom accession to the UN Convention on the Law of the Sea', 13 *IJMCL* 263 (1998), at 271–3.

[16] B. Kwiatkowska and A. H. A. Soons, 'Entitlement to maritime areas of rocks which cannot sustain human habitation or economic life of their own', *21 Netherlands Yearbook of International Law* 139–81 (1990) at 174–81.

transitional article presented formidable legal and political difficulties, and was opposed by most States which are administering powers – although it is noteworthy that New Zealand adopted legislation for the Tokelau Islands which is in keeping with its spirit.[17] Resolution III avoids the major difficulties inherent in its predecessor, but it is still not entirely clear to which territories it applies, or what the precise obligations of the administering powers might be.[18] In practice 200-mile EEZs or fishing zones have been established by administering powers for nearly all dependent territories.

Antarctica

Finally, it should be noted that the effect of article IV of the 1959 Antarctic Treaty (which prohibits new territorial claims in the Antarctic and the assertion or enlargement of existing territorial claims) would seem to be that EEZs cannot be claimed off territory lying within the area to which that Treaty applies, namely the area south of 60° South. Notwithstanding the prohibition in article IV, Australia claimed an EEZ off its Antarctic territory in 1994.[19] This claim has not (yet) evoked any reaction from other States, apart from the USA which made a protest in 1995.[20]

The legal status of the EEZ

During the earlier stages of UNCLOS there was considerable discussion as to the exact legal nature of the EEZ. Many maritime States argued, because of a fear of 'creeping jurisdiction', that the EEZ should have a residual high seas character, i.e., any activity not falling within the clearly defined rights of the coastal State would be subject to the regime of the high seas. This approach did not find favour with the majority of UNCLOS participants, and articles 55 and 86 of the Law of the Sea Convention make it clear that the EEZ does not have a residual high seas character. Equally it is clear that the EEZ does not have a residual territorial sea character, which would have created a presumption that

[17] Tokelau (Territorial Sea and Exclusive Economic Zone) Act 1977, *ND VII*, p. 468; *Smith, op. cit.*, p. 341.

[18] For a discussion of these questions, see M. H. Nordquist (ed.) *United Nations Convention on the Law of the Sea 1982. A Commentary* (The Hague, Nijhoff), 1989, Vol. V, pp. 478–82 and R. R. Churchill, 'The Falkland Islands fishing zone: legal aspects', 12 *Marine Policy* 343–60 (1988) at 350–3.

[19] Maritime Legislation Amendment Act, 1994. 27 *LOSB* 49 (1995); Governor-General's Proclamation of 26 July 1994, 10 *IJMCL* 97 (1995).

[20] J. Green, 'Antarctic EEZ baselines', 11 *IJMCL* 333 (1996) at 341. For discussion of the Australian action, see S. Kaye and D. R. Rothwell, 'Australia's Antarctic maritime claims and boundaries', 26 *ODIL* 195–226 (1995), especially at 208–11, and C. C. Joyner, 'The Antarctic Treaty System and the Law of the Sea – competing regimes in the Southern Ocean?' 10 *IJMCL* 301–31 (1995) at 307–11.

any activity not falling within the clearly defined rights of non-coastal States would come under the jurisdiction of the coastal State – as was desired by some UNCLOS participants (notably those Latin American States claiming a 200-mile territorial sea). Instead, the EEZ must be regarded as a separate functional zone of a *sui generis* character, situated between the territorial sea and the high seas. The *sui generis* legal character of the EEZ has three principal elements: (1) the rights and duties which the Law of the Sea Convention accords to the coastal State; (2) the rights and duties which the Convention accords to other States; and (3) the formula provided by the Convention for regulating activities which do not fall within either of the two previous categories. We examine each of these three elements in turn.

The rights and duties of the coastal State in the EEZ

The coastal State's rights and duties are set out in broad terms in article 56 of the Law of the Sea Convention, and amplified in later articles. The coastal State's rights relate essentially to the natural resources of the EEZ, and fall under six broad headings.

1 Non-living resources

First, the coastal State has 'sovereign rights for the purpose of exploring and exploiting, conserving and managing' the non-living natural resources of the sea bed and subsoil and the superjacent waters. With the exception of the provisions relating to 'conserving and managing' and 'superjacent waters', the rights accorded to the coastal State are exactly the same as it enjoys in respect of sea-bed resources under the 1958 Geneva Convention on the Continental Shelf and customary international law (see chapter eight). Furthermore, these sea-bed rights are to be exercised in accordance with the provisions of the Law of the Sea Convention relating to the continental shelf (see chapter eight). Had it not been for a strong desire on the part of many coastal States, now reflected in the provisions of the Law of the Sea Convention, to include within the legal continental shelf those parts of the continental margin extending beyond 200 miles, the legal regime of the continental shelf could have been subsumed within the EEZ.

The reference to the coastal State 'conserving and managing' non-living resources seems to be a question of drafting rather than of substance. The whole phrase 'sovereign rights for the purpose of exploring and exploiting, conserving and managing' applies to both living and non-living resources: presumably the reference to 'conserving and managing' is intended to apply primarily, if not exclusively, to living resources, since the Convention contains no further provisions relating to the conservation or management of non-living resources. The reference to the non-living resources of the superjacent waters relates to the various minerals which can be extracted from sea water.

2 Living resources

Article 56 provides that the coastal State has 'sovereign rights for the purpose of exploring and exploiting, conserving and managing' the living natural resources of the sea bed and subsoil and the superjacent waters. These rights, together with certain duties imposed on the coastal State, are spelt out in detail in articles 61 to 73. We will examine these provisions in chapter fourteen. It may be noted here, however, that unlike the position in regard to non-living resources, the Convention gives the coastal State generally more extensive rights, exercisable in a greater area, than it enjoyed under customary international law in respect of its exclusive fishing zone.

3 Other economic resources

Article 56 gives the coastal State 'sovereign rights . . . with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds'. This provision gives the coastal State quite new rights, and reflects – and is phrased so as to permit the coastal State to take advantage of – developments in technology. The production of energy will usually require the construction of installations of some kind (e.g., wave barrages), so that this aspect of the right must be read in conjunction with the next right.

4 Construction of artificial islands and installations

In respect of this and the following two rights the Law of the Sea Convention confers on the coastal State, not 'sovereign rights' (as with the first three rights), but the more limited 'jurisdiction'. Article 56 provides that the coastal State has 'jurisdiction as provided for in the relevant provisions of this Convention with regard to . . . the establishment and use of artificial islands, installations and structures'. The 'relevant provisions' referred to are to be found in article 60. This article gives the coastal State:

> the exclusive right to construct and to authorise and regulate the construction, operation and use of:
> (a) artificial islands;
> (b) installations and structures for the purposes provided for in article 56 and other economic purposes;
> (c) installations and structures which may interfere with the exercise of the rights of the coastal State in the zone.

The coastal State has exclusive jurisdiction over such artificial islands, installations and structures, and has the right to establish safety zones, which are normally not to exceed 500 metres in breadth, around them (LOSC, art. 60(2), (4), (5)). The distinction between the rights of the coastal State to construct 'artificial islands' for any purpose, and the right to construct 'installations and structures'

for more limited purposes, seems tenuous, since, in the absence of a definition of an 'artificial island', an 'installation' or 'structure' could be regarded as being an 'artificial island'. On the other hand, since the Convention does make a distinction between 'artificial islands' and 'installations and structures', the categories are presumably not intended to overlap. It seems paradoxical that 'artificial islands' can be constructed for any purpose (such as deep-water ports, offshore airports or mining platforms) unlike 'installations and structures', when 'artificial islands' are normally larger and thus create a greater impediment to other uses of the EEZ. The reason for this distinction, it seems, is to prevent the coastal State having jurisdiction over installations and structures used for military purposes by other States.[21] Nevertheless, the distinction is frequently not maintained in national legislation.[22]

The rights of the coastal State in respect of artificial islands, installations and structures are subject to certain duties. Thus the coastal State must give due notice of the construction of artificial islands, installations and structures, must maintain permanent means for giving warning of their presence and must remove, in whole or in part, those installations and structures no longer in use, in order to ensure safety of navigation (LOSC, art. 60(3), and see further chapter eight). Furthermore, the coastal State must not construct artificial islands, installations and structures 'where interference may be caused to the use of recognised sea lanes essential to international navigation' (LOSC, art. 60(7)).

The rights which the coastal State is given in respect of artificial islands, installations and structures in its EEZ are similar to the rights the coastal State is given under the continental shelf regime in respect of structures for exploring and exploiting the natural resources of the continental shelf (see the previous chapter), but are wider, since they may be exercised for a broader range of purposes.

5 Marine scientific research

Article 56 gives the coastal State 'jurisdiction as provided for in the relevant provisions of this Convention with regard to . . . marine scientific research'. The 'relevant provisions' of the Convention are to be found in Part XIII. Article 246(1) provides that the coastal State has 'the right to regulate, authorise and conduct' scientific research in its EEZ. The coastal State must normally give its consent to pure research by other States in its EEZ, but it may withhold its consent to resource-oriented research (LOSC, art. 246(3), (5)). In either case, those wishing

[21] See Orrego Vicuña (1989), *op. cit.* in 'Further reading', pp. 74–5. See also chapter seventeen below, pp. 427–8.

[22] For examples of such legislation, see Kwiatkowska, *op. cit.* in 'Further reading', p. 114 and *Smith, op. cit.* in 'Further reading', pp. 34–8. See also J. A. Roach and R. W. Smith, *United States Responses to Excessive Maritime Claims* (The Hague, Nijhoff), 2nd edn, 1996, pp. 183–4, 189–91.

to undertake research in another State's EEZ are subject to various obligations. These provisions are discussed in more detail in chapter sixteen.

The powers of control over scientific research in its EEZ which the coastal State is given by the Law of the Sea Convention are broadly similar to the powers the coastal State is given by the 1958 Continental Shelf Convention to regulate research on its continental shelf, except that here, of course, the powers are wider, since they relate not just to the sea bed but also to the superjacent column of water.

6 Pollution control

Article 56 confers on the coastal State 'jurisdiction provided for in the relevant provisions of this Convention with regard to . . . the protection and preservation of the marine environment'. The 'relevant provisions' of the Convention are to be found in Part XII. This part gives the coastal State legislative and enforcement competence in its EEZ to deal with the dumping of waste (LOSC, arts 210(5), 216), other forms of pollution from vessels (LOSC, arts 211 ((5)–(6)), 220, 234), and pollution from sea-bed activities (LOSC, arts 208, 214). These provisions are discussed in detail in chapter fifteen.

Apart from its competence to regulate pollution from sea-bed activities which is broadly similar to the powers which a coastal State has hitherto enjoyed under the continental shelf regime, the powers to control pollution in the EEZ given to a coastal State by the Law of the Sea Convention are quite novel. Previously the only powers which coastal States enjoyed in areas beyond the territorial sea were those powers to take action against maritime casualties threatening or causing serious oil pollution which were given by the 1969 International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (discussed in chapter fifteen).

The above six rights are set out in article 56(1), sub-paragraphs (a) and (b). Article 56(1) goes on, however, in sub-paragraph (c), to state that in addition to these rights the coastal State also has in its EEZ 'other rights and duties provided for in this Convention'. The principal rights which would appear to be referred to here are those which the coastal State has in its contiguous zone (LOSC. art. 33; and see chapter seven) – for the contiguous zone is coterminous with the inner twelve miles of the EEZ – and the right of hot pursuit (LOSC, art. 111; and see chapter eleven).

We have seen that, in relation to each of the six principal rights outlined above, the Convention imposes a number of duties on the coastal State. In addition, article 56(2) lays down a general duty on a coastal State:

> in exercising its rights and performing its duties under this Convention in the exclusive economic zone . . . [to] have due regard to the rights and duties of other States and [to] act in a manner compatible with the provisions of this Convention.

The rights and duties of other States in the EEZ

The rights and duties of other States are set out in article 58 of the Law of the Sea Convention. They are all essentially concerned with international communications and are those high-seas freedoms that have survived the demands of coastal States. Of the four freedoms specifically mentioned in the 1958 High Seas Convention, fishing in the EEZ has come within the jurisdiction of the coastal State: the other three freedoms remain open to all States, although subject to greater limitations than on the high seas. We now consider each of these three rights of other States in turn.

1 Navigation

Article 58(1) provides that in the EEZ all States enjoy 'the freedoms referred to in article 87 of navigation' and 'other internationally lawful uses of the sea related to' this freedom compatible with the other provisions of the Convention. This freedom is subject to a number of limitations. First, the freedom may possibly be subject to the general limitation governing all freedoms of the high seas set out in article 87(2) – namely, that these freedoms must be exercised 'with due regard for the interests of other States in their exercise of the freedom of the high seas'. The uncertainty arises because of the rather oblique and ambiguous reference in article 58(1) to article 87, which is located in Part VII of the Convention dealing with the high seas. Secondly, under article 58(2) freedom of navigation in the EEZ is subject to the provisions of articles 88 to 115 of the Convention and the other relevant rules of international law which deal with navigation on the high seas (see chapters eleven and thirteen), in so far as they are not incompatible with the Convention's provisions on the EEZ.[23] There are two further limitations on freedom of navigation in the EEZ not explicitly mentioned in the Convention but which are implicit in its provisions. First, foreign shipping is subject to the coastal State's powers of pollution control (discussed above). Secondly, foreign ships may be affected by the presence of artificial islands and installations – although, as we have seen, such structures may not be placed in 'recognised sea lanes essential to international navigation'. It must also not be forgotten that shipping in the inner twelve miles of the EEZ will be in the coastal State's contiguous zone and therefore subject to the jurisdiction which the coastal State enjoys in that zone (and see chapter seven). Indeed, there are signs of an extension into the rest of the EEZ of a competence similar to that enjoyed in the contiguous zone. Where this is effected by treaty it is, as between the parties, not controversial. An example arises at the regional level under the Council of Europe's Agreement on Illicit Traffic by Sea, Implementing article 17 of the United Nations Convention against Illicit Traffic in Narcotic Drugs and

[23] For an explanation of the effects of this qualifying phrase on the provisions contained in arts 88–115, see Orrego Vicuña (1989), *op. cit.* in 'Further reading', pp. 99–102.

Psychotropic Substances. Under articles 6 to 10 of the Agreement a coastal State (or for that matter any other State) which suspects that a vessel of another party to the Agreement is engaging in drug trafficking in the coastal State's EEZ, may request the flag State for authorisation to stop and board the vessel, and, if appropriate, take enforcement measures. It is, however, very doubtful whether the coastal State has a general right to assert unilaterally enforcement jurisdiction in respect of narcotics throughout its EEZ. However, when signing or ratifying the 1988 UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, Brazil and Jamaica made declarations that the consent of the coastal State is necessary if the flag State under article 17 of the Convention authorises another State to stop and search in the EEZ one of its vessels suspected of engaging in drug trafficking. The Member States of the European Union have objected to Brazil's declaration as being contrary to international law.[24]

In general terms the provisions of the Law of the Sea Convention outlined above appear reasonably adequate for guaranteeing unhampered navigation by foreign merchant shipping through coastal States' EEZs. It may be wondered, however, exactly how extensive the rights of warships are. In particular, can warships engage in naval manoeuvres or practise using their weapons? Naval manoeuvres, and perhaps weapons practice, are clearly 'uses of the sea related to' navigation, but there might be argument over the extent to which they are 'internationally lawful' (a majority of writers take the view that such uses of the high seas have been lawful in the past), or compatible with other provisions of the Convention – notably article 88, which provides that the high seas 'shall be reserved for peaceful purposes'. This question is discussed further in chapter seventeen (see pp. 427–8).

The legislation of a number of States (nearly all of which are parties to the Law of the Sea Convention) is not in conformity with the Convention as far as the navigational rights of other States in the EEZ are concerned. Thus the Maldives[25] and Portugal[26] accord to foreign shipping the right, not of freedom of navigation, but of innocent passage. Possible unjustifiable interference with navigation may result from the legislation of Guyana,[27] India,[28] Mauritius,[29]

[24] United Nations, *Multilateral Treaties deposited with the Secretary-General. Status a 31 December 1995* (New York, United Nations), 1996, pp. 293–6. See also Roach and Smith, *op. cit.* in footnote 22, pp. 414–7; and see p. 219 below.

[25] Law No. 32/76 of 5 December 1976, s. 1. *UN Leg. Ser.* B/19, p. 134; *ND IX*, p. 295 *Smith, op. cit.* in 'Further reading', p. 278.

[26] Act No 33/77 of 28 May 1977, art. 3. *UN Leg. Ser.* B/19, p. 93; *ND VIII*, p. 1; *Smith op. cit.*, p. 371. Article 3 is somewhat ambiguous on this point. It reads: 'Establishment o the exclusive economic zone shall take into account the rules of international law, namely those concerning innocent passage and overflight.'

[27] Maritime Zones Act, 1977, s. 18. *UN Leg. Ser.* B/19, p. 33; *Smith, op. cit.* in 'Further reading', p. 193.

[28] Territorial Waters, Continental Shelf, Exclusive Economic Zone and Other Maritime Zones Act, 1976, s. 7(6). *UN Leg. Ser.* B/19, p. 47; *ND V*, p. 305; *Smith, op. cit.*, p. 213

[29] Maritime Zones Act, 1977, s. 9. *ND VII*, p. 414; *Smith, op. cit.*, p. 287.

Pakistan[30] and the Seychelles,[31] each of which claims the competence to designate certain areas of its EEZ for resource exploitation: within such areas provision may be made for 'entry into and passage through the designated area of foreign ships by the establishment of fairways, sealanes, traffic separation schemes or any other mode of ensuring freedom of navigation which is not prejudicial to the interests' of the coastal State concerned. Furthermore, these five States claim to be able to extend any law in force to the EEZ and to regulate the conduct of any person in the EEZ:[32] a somewhat similar claim is found in the legislation of Bangladesh,[33] Barbados,[34] Belize,[35] Grenada,[36] Jamaica,[37] Samoa,[38] St Kitts and Nevis,[39] Sri Lanka,[40] and Vanuatu.[41] Nigerian law provides that, to protect any installation in designated areas of its EEZ, the Nigerian authorities may prohibit ships from entering without consent a specific part of the zone.[42] Haiti claims to be able to exercise in its EEZ 'any control which it deems necessary to' ensure navigational safety, prevent violations of health, fiscal, customs and immigration laws, and prevent pollution.[43] Cape Verde claims to prohibit any activity by foreign shipping in its EEZ which causes pollution or is prejudicial to the marine environment or material resources of its EEZ,[44] while possible unjustifiable interference with shipping may result from Namibia's claim to exercise any powers which it may consider necessary to prevent the contravention of any law relating to the natural resources of the sea[45] and from Iran's claim to prohibit any activity

[30] Territorial Waters and Maritime Zones Act, 1976, s. 6(4). *UN Leg. Ser.* B/19, p. 85; *ND VII*, p. 478; *Smith, op. cit.*, p. 357.
[31] Maritime Zones Act, 1977, s. 9. *UN Leg. Ser.* B/19, p. 102; *ND VIII*, p. 11; *Smith, op. cit.*, p. 407.
[32] Guyana's Act, ss. 19 and 41; India's Act, ss. 7 and 15; Mauritius's Act, ss. 10 and 15; Pakistan's Act, ss. 6(5) and 14(2); Seychelles Act, ss. 10 and 15.
[33] Territorial Waters and Maritime Zones Act, 1974, s. 9. *UN Leg. Ser.* B/19, p. 4; *ND V*, p. 286; *Smith, op. cit.*, p. 69.
[34] Marine Boundaries and Jurisdiction Act, 1978, s. 8. *ND VII*, p. 335; *Smith, op. cit.*, p. 73.
[35] Maritime Areas Act, 1992, s. 23. 21 *LOSB* 3 (1992).
[36] Marine Boundaries Act, 1978, s. 8. *Smith, op. cit.*, p. 175.
[37] Exclusive Economic Zone Act, 1991, s. 9. 21 *LOSB* 28 (1992).
[38] Exclusive Economic Zone Act, 1977, s. 15, *ND VIII*, p. 38; *Smith, op. cit.*, p. 483.
[39] Maritime Areas Act, 1984, s. 28. United Nations (1993), *op. cit.* in 'Further reading', p. 303.
[40] Maritime Zones Law, 1976, s. 12. *UN Leg. Ser.* B/19, p. 120; *ND V*, p. 317; *Smith, op. cit.*, p. 427.
[41] Maritime Zones Act, 1981, s. 14. *Smith, op. cit.*, p. 471. Under s. 13(g) the Minister is also empowered to make regulations to provide for 'such other matters as may be required for giving full effect to the sovereignty of Vanuatu in relation to' the EEZ.
[42] Exclusive Economic Zone Decree, 1978, s. 3(2). *ND VII*, p. 474; *Smith, op. cit.*, p. 347.
[43] Decree No. 38 of 8 April 1977, art. 7. *Smith, op. cit.*, p. 201.
[44] Law No. 60/IV/92 delimiting the Maritime Areas of the Republic of Cape Verde, 1992, art. 16. 26 *LOSB* 24 (1994).
[45] Territorial Sea and Exclusive Economic Zone of Namibia Amendment Act, 1991, s. 2. 21 *LOSB* 64 (1992).

in its EEZ inconsistent with its rights.[46] These claims give rise to concern that what many hoped the Law of the Sea Convention would achieve, namely a clear demarcation of coastal States' rights and an end to 'creeping jurisdiction', will be undermined.

2 Overflight

Article 58 provides that all States enjoy freedom of overflight in the EEZ, and 'other internationally lawful uses of the sea related to' this freedom compatible with the provisions of the Convention. This freedom is subject to the first two limitations to which the freedom of navigation is subject, namely due regard for other States, and articles 88 to 115, etc. (although many of these articles have no application to aircraft). In addition, the freedom is implicitly subject to two further possible limitations. First, the coastal State's right to construct artificial islands and installations might effectively prevent low flying in the vicinity of such structures. Secondly, aircraft are subject to the coastal State's competence to regulate the dumping of waste. Given the attitude of some States, such as Brazil, to military activities in their EEZs, there may also be some uncertainty about the use of the EEZ by foreign military aircraft for the purpose of military exercises (and see further chapter seventeen).

There is one further matter of importance about which there is also uncertainty, and that is the rules of the air which apply to aircraft in the EEZ. Under article 12 of the Convention on International Civil Aviation 1944, aircraft over the 'high seas' must comply with the Rules of the Air laid down by the International Civil Aviation Organisation (ICAO). Over a State's territory and territorial sea, however, aircraft must comply with that State's regulations, which may diverge from ICAO rules (art. 38 of the 1944 Convention). In this context, is the EEZ to be regarded as high seas or territorial sea? The Law of the Sea Convention gives no direct answer, but it would seem reasonable to argue that article 12 is one of the 'pertinent rules of international law' which by virtue of article 58(2) apply to the EEZ. Furthermore, articles 39(3) and 54 of the Law of the Sea Convention provide that aircraft exercising a right of transit passage over straits or archipelagic sea-lanes passage over archipelagic waters, i.e., *landwards* of the EEZ, must observe ICAO rules: this also suggests that ICAO rules apply in the EEZ. A similar conclusion was put forward in a 1987 study by the ICAO secretariat.[47] If it is correct that ICAO rules do apply in the EEZ, this position might

[46] Act on the Marine Areas of the Islamic Republic of Iran in the Persian Gulf and Oman Sea, art. 16. 24 *LOSB* 10 (1993). For protest from the EU, see 30 *LOSB* 60 (1996): for Iran's response, see 31 *LOSB* 37 (1996). The USA has objected to many of the claims referred to above. See Roach and Smith, *op. cit.* in footnote 22, pp. 186–9.
[47] 'The United Nations Convention on the Law of the Sea – Implications, if any, for the Application of the Chicago Convention, its Annexes and other International Air Law Instruments', Doc. No. LC/26 – WP/5–1 of 4 February 1987, para. 11.12. Reproduced in 3 *International Organisations and the Law of the Sea Documentary Yearbook* 243 (1987).

require modification where a coastal State built an airport on an artificial island in its EEZ, because it would probably be thought necessary that the coastal State's regulations should apply, to some degree at least, in and around the airport.

3 Laying of submarine cables and pipelines

Finally, all States enjoy the freedom of laying submarine cables and pipelines in the EEZ, and 'other internationally lawful uses of the sea related to' this freedom compatible with the other provisions of the Convention. This freedom is subject to the first two limitations to which the freedom of navigation is subject, namely due consideration for the interests of other States and articles 88 to 115 of the Convention. While many of these articles have no application to cables and pipelines, articles 112 to 115 are specifically concerned with them, dealing principally with the question of their being broken or damaged. In addition, there is a further explicit limitation contained in article 79. Although this article is in the part of the Law of the Sea Convention dealing with the continental shelf, it must also apply to the EEZ, since the sea bed of the EEZ consists of the continental shelf. Article 79(3) provides that 'the delineation of the course for the laying of' pipelines (but not cables) is 'subject to the consent of the coastal State'. Article 79(4) empowers the coastal State to lay down conditions for cables and pipelines entering its territorial sea, and to establish its jurisdiction over cables and pipelines constructed on or used in connection with the exploration and exploitation of its continental shelf[48] or the operations of artificial islands and installations under its jurisdiction. How far article 79(3) is compatible with a freedom to lay pipelines may be questioned, and to use the term 'freedom' here is perhaps misleading. Furthermore, two States – Cape Verde[49] and Sao Tome e Principe[50] – purport to make the laying of both cables and pipelines as such, rather than simply the delineation of the course of pipelines, subject to their prior consent.

The effect of the above provisions is that the rights of other States to navigate, overfly and lay cables and pipelines in a coastal State's EEZ are less extensive than their corresponding rights on the high seas. Furthermore, article 58(3) obliges other States when exercising their rights in a coastal State's EEZ to

> have due regard to the rights and duties of the coastal State and . . . comply with laws and regulations adopted by the coastal State in accordance with the provisions of this Convention and other rules of international law in so far as they are not incompatible with Part V of the Convention (on the EEZ).

[48] In practice the coastal State and the State which is the owner of the pipeline may agree on a regime of concurrent jurisdiction. For an actual example, see the Agreement between Norway and the United Kingdom relating to the Exploitation of the Frigg Field Reservoir and the Transmission of Gas therefrom to the United Kingdom, 1976, arts 13–21.
[49] *Loc. cit.* in footnote 44, art. 21.
[50] Decree Law No. 15/78, art. 5. *Smith, op. cit.*, p. 405.

Relationship between the rights of the coastal State and the rights of other States

It is clear from the enumeration given above of the rights expressly attributed to the coastal State and to other States that there is considerable potential for conflict between these two groups of rights. The regulation of such conflict is in some cases expressly provided for in the Convention. Thus, for example, the provisions of article 60 (quoted above) are designed to avoid conflicts between the right of the coastal State to construct artificial islands or installations and the rights of foreign shipping. Similarly the coastal State's powers of pollution control are carefully spelt out in Part XII in order to minimise interference with foreign shipping. But in some cases the Convention contains no specific rules to avoid conflicts of use. For example, it is unclear whether and to what extent a coastal State may, as part of its sovereign rights to exploit and manage living resources, regulate foreign shipping in order to minimise conflicts with fishing in its EEZ, e.g. by requiring ships to avoid areas where there are standing nets or which are important spawning and nursery grounds for fish. In such cases the only guidance (if it can be called that) given by the Convention is the mutual obligation of coastal States and other States to have 'due regard' to each other's rights. In some cases other treaties will help to regulate conflicting uses: for example, the 1972 Convention on the International Regulations Preventing Collisions at Sea governs the relationship between vessels which are fishing and other vessels.[51]

The attribution of other rights in the EEZ

The Law of the Sea Convention, in attributing rights in the EEZ to the coastal State and other States, has covered most of the more obvious uses of the EEZ. There may, however, be some uses of the EEZ which do not fall within the rights of either the coastal State or other States. Possible examples include the emplacement of underwater listening devices for submarines (see chapter seventeen); the recovery of historic wrecks beyond the contiguous zone (for the position within the contiguous zone see article 303 of the Convention and chapter seven);[52] and

[51] For fuller discussion of these problems, see the articles by Brown and Robertson listed in 'Further reading' and W. T. Burke, 'Exclusive fisheries zones and freedom of navigation', 20 *San Diego Law Review* 595–623 (1983).
[52] But it should be noted that three States – Cape Verde, Jamaica and Morocco – require advance authorisation for archaeological exploration anywhere in their EEZs. See, respectively, Law No. 60/IV/92, *op. cit.* in footnote 44, art. 28; Exclusive Economic Zone Act, 1991, s. 7(1), 21 *LOSB* 20 (1992); and Decree No. 1–81–179 of 8 April 1981, art. 5, *Smith, op. cit.*, p. 303. In the declaration it made when ratifying the Convention Malaysia claimed that without prejudice to article 303, no archaeological or historical object should be removed from its maritime zones without its prior authorisation and consent. A similar declaration was made by Portugal. See also the literature referred to in notes 25 and 26 of the previous chapter.

jurisdiction over buoys used for pure scientific research (discussed in chapter sixteen): developments in technology may produce further examples. What is the position in relation to such uses? Which States are to have the competence to enjoy and regulate them? The Convention does not give a precise answer. Instead it provides, in article 59, a general formula for attributing rights in such cases. Article 59 reads as follows:

> In cases where this Convention does not attribute rights or jurisdiction to the coastal State or to other States within the exclusive economic zone, and a conflict arises between the interests of the coastal State and any other State or States, the conflict 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.

Article 59 thus makes it clear that, in the case of unattributed rights, there is no presumption in favour of either the coastal State or other States: each case, as it arises, will have to be decided on its own merits on the basis of the criteria set out in article 59.[53] As far as the machinery for deciding such cases is concerned, this will be determined by the provisions of the Convention dealing with the settlement of disputes (discussed in detail in chapter nineteen). Essentially this means that there must first be an attempt at settlement by consensual means: if this is unsuccessful, the dispute must be referred to one of the judicial bodies listed in article 287, unless the dispute relates to military activities and one of the parties has made a declaration under article 298 exempting itself from settling such disputes by compulsory third-party means.

Significance of the EEZ

The extension of coastal State jurisdiction by means of 200-mile EEZs from what had previously generally been narrow coastal State limits to encompass areas which had formerly been high seas – areas containing the major proportion of the ocean's resources and being the site of most ocean activities – has represented a major change in the regulation of and access to ocean activities. It has meant a move away from open access to resources and regulation based primarily on flag State jurisdiction, to near-exclusive coastal State access to resources and regulation based primarily – though not exclusively – on coastal State jurisdiction. In chapters fourteen and fifteen we consider whether in practice the EEZ regime

[53] But note that Cape Verde, in clear contradiction of article 59, claims 'exclusive jurisdiction' with regard to any unattributed rights: see article 13 of Law No. 60/IV/92, *op. cit.* in footnote 44. A similar position was taken by Uruguay in the declaration it made when ratifying the Convention. Note also the comment of Nordquist, *op. cit.* in footnote 18, Vol. II (1993), p. 569: 'Given the functional nature of the exclusive economic zone, where economic interests are the principal concern, this formula [i.e., that in article 59] would normally favor the coastal State. Where conflicts arise on issues not involving the exploration for and exploitation of resources, the formula would tend to favor the interests of other States or of the international community as a whole.'

has been any better at managing fish stocks and preventing pollution than the previous narrow coastal State jurisdiction/high seas regime. Here it may be noted that in many cases the responsibility for managing the resources of the EEZ assumed by the coastal State, together with the necessary enforcement machinery, have represented for many coastal States a significant new undertaking as well as a new form of expenditure (which may, of course, be more than offset by an increase in revenue from the resources of the EEZ).

As regards the question of whether the EEZ has led to any fundamental redistribution of the ocean's resources – as many developing countries argued that it would and should – the following observations can be made. First, it seems that few developing countries are among the main beneficiaries of EEZs. Only about thirty States have gained significantly from establishing an EEZ, at least in terms of area (the resources of the area are not, of course, necessarily commensurate with its size), and these States are those that front the great oceans of the world. As a quick glance at an atlas will show, many such States are developed, not developing. African, Caribbean and Middle Eastern States, in particular, come off badly. Not only do most such States have small EEZs, their EEZs are poor in resources. The main developing States benefiting from an EEZ are China and many Latin American and Pacific island States. The fifteen leading beneficiaries of EEZs, together with some indication of the resources of their zones, are shown in table 1.

Secondly, one would have expected the widespread introduction of 200-mile EEZs and EFZs in the 1970s to have led to a reduction in the catches of distant-water fishing nations and an increase in the catches of the States off whose coasts they fished. This has to a considerable degree been the case, at least in relative terms. Distant-water catches peaked at a level of nearly sixteen per cent of the total world marine fish catch in 1972 and thereafter declined fairly steadily so that in 1994 the figure was no more than five per cent. On the other hand, in absolute terms the picture is less clear-cut. The distant-water catch amounted to about 8.5 million tonnes in 1972, declined to 6.5 in 1979, thereafter rose to 9 million in 1989, but declined to 4.5 million tonnes in 1994.[54] This reduction in catches has not been spread evenly among distant-water fishing States, however. Some, such as South Korea, Spain and Thailand, have been more successful in maintaining and obtaining fishing opportunities in distant waters than others, such as Bulgaria and Portugal, while the two leading distant-water fishing States, Japan and the former USSR/Russia, have to a considerable extent offset their losses by increased fishing in their own large EEZs. Many of those States which have successfully reduced foreign fishing off their coasts by the introduction of a 200-mile zone have significantly increased their catches (e.g., the USA, Canada, Iceland, Mexico and New Zealand). In the case of some developing countries which have substantially increased the size of their catch in recent years, e.g., Guinea-Bissau, Indonesia, Malaysia, Pakistan and Sri Lanka, the increase may

[54] FAO, *Yearbook of Fishery Statistics*, Vol. 78, 1994 (1997), p. xviii.

Table 1. *Leading EEZ beneficiaries*

State	*Area of 200-mile zone (square nautical miles)*[55]	*Offshore oil production 1992 in '000 tonnes (proven reserves in million tonnes)*		*Offshore natural gas production 1992 in million cubic metres (proven reserves in billion cubic metres)*		*Fish catches or estimated potential (EP) in 200-mile zone (million tonnes)*
1. USA	**2,831,400**	**35,308**	**(707)**	**103,471**	**(1,189)**	**5.5 (1994)**
2. France	**2,083,400**	**0**		**0**		**Not available**
3. Indonesia	**1,577,300**	**57,270**	**(286)**	**7,236**	**(1,447)**	**6.7 (EP)**
4. New Zealand	**1,409,500**	**797**	**(18)**	**2,998**	**(82)**	**0.7 (1995)**
5. Australia	**1,310,900**	**24,153**	**(258)**	**16,952**	**(538)**	**2.5 (1995)**
6. Russia	**1,309,500**	**10,558**	**(41)**	**10,337**	**(17)**	**3.0 (1994)**
7. Japan	**1,126,000**	**697**	**(1)**	**286**	**(0)**	**6.5 (1994)**
8. Brazil	**924,000**	**26,145**	**(631)**	**7,236**	**(2)**	**0.6 (1995)**
9. Canada	**857,000**	**498**	**(162)**	**0**	**(298)**	**0.8 (1995)**
10. Mexico	**831,500**	**85,656**	**(5,712)**	**11,370**	**(1,926)**	**1.2 (1995)**
11. Kiribati	**770,000**	**Not available**		**Not available**		**Not available**
12. Papua New Guinea	**690,000**	**0**	**(37)**	**0**	**(314)**	**Not available**
13. Chile	**667,300**	**847**	**(54)**	**569**	**(65)**	**7.5 (1995)**
14. Norway	**590,500**	**89,640**	**(2,364)**	**32,044**	**(3,088)**	**3.0 (1995)**
15. India	**587,600**	**35,856**	**(1,047)**	**6,202**	**(430)**	**2.0 (EP)**
Total all States	**37,745,000**	**909,398**	**(37,276)**	**355,697**	**(25,393)**	**91.9 (1995)**

Note: The figures for the areas of the EEZs of the USA and France include their overseas and dependent territories. There appear to be no separate figures for their metropolitan territories. The figure given for the area of Russia's EEZ is that given for the former Soviet Union: Russia's EEZ is unlikely to be significantly smaller. Micronesia and the Marshall Islands are almost certainly in the top fifteen States in terms of the area of their EEZs, but there appear to be no figures for these areas.
Source: Cols 1 and 2: *Limits in the Seas* No. 36, 4th revision (1981), p. 12; Cols 3 and 4: World Resources Institute, *World Resources 1994–95* (Oxford, Oxford University Press), 1994, pp. 354–5; Col 5: the figures (which are very approximate) have been calculated from a variety of EC, FAO and OECD publications.

be due as much to improvements in technology and greater investment in the fishing industry as to phasing out foreign fishing off their coasts. Even where a developing country has not reduced foreign fishing off its coasts, it may nevertheless have benefited economically from establishing a 200-mile zone through being able to impose licensing fees on foreign vessels fishing in the zone (although against this must be set the costs of managing its zone and enforcing its legislation). Many developing States, however, still lack the necessary capital and manpower to manage their EEZ properly and benefit from its resources.

[55] But note that *Smith*, *op. cit.* in 'Further reading', pp. 13–16 gives slightly different figures for the areas of some States' EEZs.

Overall, therefore, the establishment of 200-mile EEZs and EFZs has to some extent led to some redistribution of fishery resources.[56] This redistribution has largely been from distant-water fishing States to the States off whose coasts they fished. Although the former are nearly all developed States, the latter are by no means exclusively – and perhaps not even principally – developing States.[57] As regards resources other than fish, in the case of offshore oil and gas the introduction of the EEZ has effected no redistribution. Where the EEZ covers areas of sea bed that are continental shelf, any oil or gas there already belonged to the coastal State under the continental shelf doctrine. In areas of the EEZ where the sea bed is too deep to be continental shelf under the pre-LOSC regime, it is highly unlikely that there is any oil or gas. In the case of manganese nodules the establishment of the EEZ means that about ten per cent of the nodules are now under national jurisdiction rather than in the International Sea Bed Area. This represents a redistribution in favour of those States, such as Mexico and Papua New Guinea, whose EEZs contain manganese nodules, from the international community as a whole. Overall, therefore, it is likely that the introduction of the EEZ concept has not produced as much material gain for the developing countries as its original proponents suggested. Nevertheless, as a symbol of the control exercised by a State over its natural resources the introduction and acceptance of the EEZ was a considerable psychological gain for developing countries.

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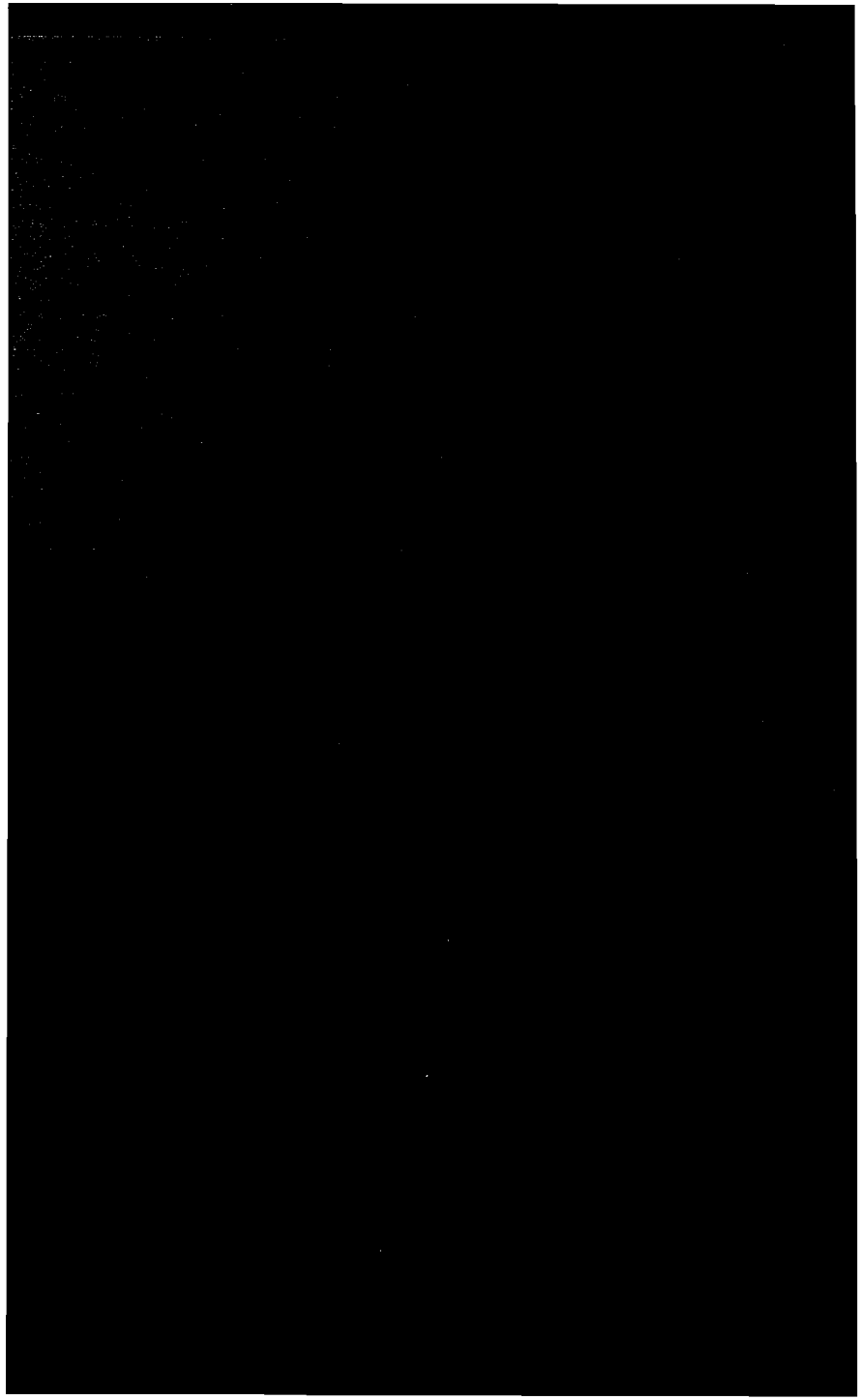
[56] For a fuller analysis, see L. Juda, 'World marine fish catch in the age of exclusive economic zones and exclusive fishery zones', 22 *ODIL* 1–32 (1991); and G. Pontecorvo 'The enclosure of the marine commons: adjustment and redistribution in world fisheries' 12 *Marine Policy* 361–72 (1988).

[57] One calculation is that about two-thirds of the redistribution would go to developed States. See P. M. Wijkman, 'UNCLOS and the redistribution of ocean wealth', 1 *Journal of World Trade Law* 27 (1982), at 31–2.



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