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1. Introduction

1.1 'Insular Formations'

The term 'insular formations', which is not a term of art in the Law of the Sea, is used advisedly in this *Briefing* to include those formations which **are** included by treaty law as legal terms, namely islands and low-tide elevations. They must be naturally-formed elevations,[1] surrounded by water, which because of permanent (or sufficiently periodic appearance) above a requisite tidal level, have some effect on the generation of maritime zones for the owning State, including an effect on the fixing of maritime boundaries with neighbouring States where notional zones overlap.[2] In many areas of the world there are isolated (or collective groups of) formations which are only just above sea level[3] and which are only of interest to States because of their generative capacity in respect of maritime zones. Because such (naturally-created) formations retain an appearance above water at some state of the tide, descriptive phraseology such as 'insular formations' can be loosely justified for the purposes of discussion.[4] Such formations now include, in international legal terms, some supplementary sub-divisions introduced by the LOSC (Law of the Sea Convention) of 1982 such as 'rocks' and 'reefs'.

The importance of 'insular formations' in both the creation and the delimitation[5] of maritime zones is well established in the Law of the Sea. There are many instances where one State has denied the term 'islands' to dubious formations claimed as 'islands' by another.[6]

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1 See e.g. Symmons, 1979: 29-37.

2 See e.g. *ibid*, Chapter IV.

3 As e.g. some of the much-disputed Spratly Islands. See Thomas, 1990: 413, "*many of the features on which outposts have been set up are mere islets or cays - some even submerged reefs which have had to be built up to create dry land*", and who cites (ibid), Article 60 of the LOSC which excludes use of artificial islands for generation of 200 mile exclusive economic zones. It is noteworthy that Malaysia is reported to have specially classified Shallow Reef and Amboyne Cay (two formations to which it lays claim the Spratly Group) as 'islands' under Article 121 (3) of the LOSC; whereas it has classified two other formations as mere 'low-tide elevations': see Gardiner, 1994: 61, 67.

4 See e.g. Jayewardene, 1990: 7, who describes low-tide elevations as *"insular features"*.

5 The term *"delimitation"* here denotes a situation where a notional overlap of neighbouring maritime zones has to be settled in the form of agreed inter-State boundaries.

6 See e.g. the view of Qatar, contrary to the claim of Bahrain, that two disputed formations were *"shoals"* and not *"islands"*. It seems this view was expressed by the UK Government in 1947 (shoals not having territorial waters although **above** low spring-tide level), but changed in 1950, when the UK considered *"after a full examination of the position under international law"* that both reefs could generate territorial waters as *"islands"* (unpublished Supplementary Qatari Memorandum relating to the Shoals of Deeble and Jaradah, 1965:1).

1.2 Islands

Of the two basic above-mentioned 'insular formations' known to international law, it is the 'island' which is of most legal importance. In view of its importance in the fixing of maritime zones, its definition in international law (and not simply in geographical terms[7]) can be a vital matter, as this writer knows from recent experience as an expert witness in US Federal/State litigation which *inter alia* hinged on this very issue in a US-Alaska dispute over seabed rights in the Beaufort Sea.[8] Unfortunately, even the new LOSC the definition of this type of formation has elements lacking in clarity (and, indeed, in their consequential sub-divisions in the 1982 LOSC regime). For example, at least four legal requirements can be teased out of the definition in Article 121(1) of the LOSC (repeated from Article 10 of the 1958 Convention on the Territorial Sea and Contiguous Zone (hereafter TSC)), which defines an island as *"a naturally-formed area of land, surrounded by water, which is above water at high-tide"*. These are that: the formation (to use a neutral word) must be *"land"*, that this must be *"naturally-formed"*; that it must be *"surrounded by water"*; and lastly - and perhaps, most importantly - that it must be *"above water at high-tide"* - a definitional aspect often neglected or sidetracked by academic commentators.[9]

Space limitation for this *Briefing* forbids a comprehensive analysis of all these requirements of a juridical island in any depth. So that it is on the last criterion - the above-surface requirement (in the case of an island, above **high**-tide, in the case of a low-tide elevation, its above **low**-tide) - that this *Briefing* concentrates. But this in turn inter-relates with many of the other problematical aspects of the definition. For example, the requirement of the elevation being *"naturally-formed"*.[10]

1.2.1 'Naturally-formed'

There are many examples - especially in recent times - where States have attempted to preserve true insularity for a small formation by artificial building-up processes - e.g. on a formation in danger of erosion by natural forces (or even sinking because of man-made ones[11]). This, for example, has happened in the case of some Pacific reefs which have only marginal above-surface natural features, as in the case of Tokelau and Tele ki Tonga reefs in the Pacific where the natural **above-water** features have been described as *"probably impermanent"* in the marginal form of a few coral boulders *"hurled onto the reef by storm surges"*[12], hence Tonga's efforts at reef-building here.[13] Even in the western hemisphere, volcanically-formed islands such as tiny Kolbeinsey off Iceland, said to be in danger of being

7 See e.g. Cotter, 1965: 59.

8 In *US v. Alaska, No. 84, Original*, before the Special Master of the US Supreme Court. Although at the time of writing, the Special Master had still not given judgment in this long-running State/Federal litigation, reference is made to the pleadings in this case and to the writer's own expert witness Opinion of 1985 (published as Exhibit US 84A-602) in this *Briefing.*

9 See e.g. Jayewardene, 1990: 7, an *"island"* should be an *"elevation above the surface of the sea"*.

10 For a full discussion see Symmons, 1979: 29.

11 E.g. nuclear testing on Mururoa Atoll (see *The Times*, 7/12/1981) and gravel extraction from the Thousand Islands off Indonesia where several are reported to be in danger of disappearing: *The Times*, 19/6/1985.

12 Prescott, 1988a: 199.

13 *Ibid*

eroded back below sea level, have been subject to 'island-building' activities. In Kolbeinsey's case the Icelandic authorities have reportedly planned to 'cement' the island together to prevent the sea from eroding the last few remaining rocks.[14] And - perhaps most dramatically - in the eastern hemisphere, in the late '80s, it was reported that Japan feared that its southernmost islet of Okinotorishima - consisting at high-tide of only two small peaks (respectively between 17 and 7 feet in diameter) - was in danger of disappearing as an 'island' in international law, so losing Japan up to 160,000 square miles of seabed and fishery jurisdiction.[15] One of these peaks was reportedly no more than 20 inches to 3 feet above high water; and both are situated on an otherwise submerged reef which is itself some 10 feet under water. Hence Japan commenced in 1988 efforts to keep these peaks above high water by surrounding them with wave-absorbing steel blocks and concrete rising **higher** than the enclosed (natural) peaks themselves.[16]

Most controversially of all, a State may attempt to **create** insularity by building up an under-water formation which has never naturally protruded above high-tide level. In the Japanese case mentioned above, putting up an artificial structure alone was ruled out because international law requires the portion remaining **above** high-water to be naturally-formed.[17] Ironically Article 7(4) of the LOSC does give limited legal sanction to this stratagem for a very confined legal purpose mentioned below where *"lighthouses or similar installations"* which are *"permanently above sea level"*[18] have been built on a low-tide elevation.

It seems clear that in essence the *"above high-tide"* requirement relates to the **naturally-formed** element of such a man-enhanced 'island', so that whereas man-made attempts to preserve the **natural above high-water aspect** of an eroding formation may not disqualify its legal insularity, any similar attempt to create such status on a formerly **wholly-underwater** formation will be to no legal effect.[19]

1.2.2 'Land'

Likewise - though this point has seemingly never received any significant academic comment[20] - the meaning of 'land', even where undoubtedly naturally-formed, can cause legal definitional problems in connection with the above-water requirement. This, for example, occurred in *US v. Alaska* [21] where one of the difficulties concerning a formation known as 'Dinkum Sands' was whether a formation arguably above mean high-water, as maintained by Alaska could still be considered an 'island' when its composition (possibly from the seabed upwards) appeared to be of alternating layers of frozen sea-ice and gravel deposits from long-shore drift. Is the frozen sea-water content (including the so-called *"excess ice"*) - as compared with the truly-terrestrial gravel content in this instance - to be **deducted** from the calculation of the formation's true **above**-water height in international

14 *The Daily Telegraph*, 25/4/1985.

15 In 1977 Japan had declared a 200 mile EEZ around it: *The Daily Telegraph*, 20/10/1988.

16 *Pacific Stars and Stripes*, 16/11/1989; *The Daily Telegraph*, 20/10/1988. This operation was, therefore, strictly for land protection purposes, not for island-**building** purposes.

17 *Pacific Stars and Stripes*, *ibid*. See also Symmons, 1979: 35.

18 See Jayewardene, 1990: 72.

19 See Symmons, 1979: 35.

20 But see *ibid*: 21.

21 *Supra* footnote 8.

law? If so, such a natural formation may not qualify as an 'island'[22] (or even, as the case may be, a low-tide elevation) because such a **notional** reducing process may put the formation at a far lower level and below-water. Thus it may be validly argued in this context that a true island does not lose its elevation through temperature rises and maritime zones do not come and go with changes in the season.[23]

1.2.3 'Surrounded by water'

Even perhaps one of the least-discussed and so least controversial elements of the definition - *"surrounded by water"* - inter-relates with the above-surface problem generally in that some apparent 'islands' (or indeed low-tide elevations) may be linked to the mainland (or another 'island') by a periodically drying feature such a sand-bar.[24] Similarly in Arctic and Antarctic areas, coverage by pack-ice of another detached formation from the mainland arguably destroys a terrestrial formation's status as an island by depriving it of surrounding 'water' for most (or even all) of the year, so arguably making it, at most, a 'summer' island.[25]

If a formation is truly linked to the mainland, or another island in a sufficiently permanent way at high-tide (or low-tide in the case of low-tide elevations), then it assumes part of that linked coastal regime, and generates maritime jurisdiction accordingly by lack (or loss) of independent insular status.[26] So in fact this aspect of insular definition is not likely to be a problem in practice because, *a fortiori*, a mainland coastline possesses a baseline.

1.2.4 Other suggested legal elements of insularity

Other past suggested elements of insular definition only indirectly affect the vital above-water element of insularity. These have included elements such as habitability or size,[27] and have found no place in the present-day definition of an island (or, *a fortiori*, a low-tide

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22 This was my stated opinion in my expert witness report in the case.

23 See US *Post-Trial Memorandum*: 76, 78, 79, 104 (*"ice collapse"* or *"thermo-erosion"* in summer months). Cf. the Alaskan argument - ice below-water **may** be considered land (*Alaska Reply Brief*: 24).

24 See Symmons, 1979: 41.

25 See the *Post Trial Brief* of Alaska: 6, 7, and 10; cf the US *Reply Memorandum* where the US accused Alaska of arguing inconsistently that ice is water for the purpose of one criterion of definition of an island (surrounded by water) but is land for another (naturally-formed area of land).

26 See e.g. the Dissenting Opinion of Judge Evensen in the *Libya/Tunisia Delimitation* case (1982) ICJ Report 18: 30 (describing Djerba off Tunisia as *"scarcely an island"* **at low-tide**). Problems of insular status may also arise where an *"island"* is artificially linked to the mainland (e.g., by a causeway) (loss of insularity?) or where an entire natural peninsular has a canal cut through it (acquisition of insularity?):see e.g. Herman, 1985: 172, 188 footnote 46. Cf in the context of the regime of **bays** the dictum in the *Louisiana Boundary* case (394 US 11 [1969]): 67 *"...while there is little objective guidance* [on the meaning of natural entrance points to bays] *to be found in international law, the question whether a particular island is to be treated as* ***part of the mainland*** *would depend on such factors as its size, its distance from the mainland,* ***the depth and utility of the intervening waters****, the shape of the island, and its relationship to the configuration and curvature of the coast"* (emphasis added).

27 See Symmons, 1979: 45-51, 37-41.

elevation), though elements of both (either expressly or implicitly) have now gained a vestigial foothold in the LOSC definition of the new concept of 'rocks' (see below).

2. The Regime Attaching to 'Insular Formations' Known to International Law - Islands and Low-Tide Elevations

2.1 Islands

The most typical (and most legally important) insular formation in the Law of the Sea is, of course, an 'island' as now defined in Article 10 of the 1958 TSC, and as repeated verbatim in Article 121(1) of the LOSC 1982, namely (as seen), *"a naturally-formed area of land, surrounded by water, which is above water at high-tide"*. A formation of this nature, **wherever situated**[28] and of whatever size[29] (unless under the new LOSC regime it incidentally constitutes a 'rock' (see *infra*)), generates all the maritime zones now known to the Law of the Sea - territorial sea, contiguous zone, 200-mile exclusive economic zone (EEZ) (or exclusive fishery zone) and a continental shelf.[30] This is now explicitly confirmed in Article 121(2) of the LOSC 1982;[31] and implicitly islands may also generate internal waters (and, in appropriate circumstances of insular grouping, archipelagic waters).

Additionally, if an island is in the vicinity of a landmass – continental, or even insular - it may enhance that landmass' maritime areas by dint of coalescence of zones, or by constituting an *"appropriate point"* from which to draw a straight baseline system under Article 4 of the TSC (now Article 7 of the LOSC 1982)[32] (or in the case of a qualifying archipelagic State, an archipelagic baseline system[33]), so further extending the owner's maritime territory.

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28 Compare the legal effect of a *low- tide elevation infra.*

29 See Symmons, 1979: 37.

30 *Ibid*: Chap.3.

31 This reads: "*Except as provided for in paragraph 3, the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of an island are determined in accordance with the provisions of this Convention applicable to other land territory*".
At least one State has very recently claimed *"internal waters"* from coalescing off-shore insular zonesnot incorporated in a straight baseline system. See the Act on the Marine Areas of the IslamicRepublic of Iran concerning the Persian Gulf and the Oman Sea (1993), Article 3: *"waters on the landward side of the baseline of the territorial sea, **and waters between islands**... (not further than 24 miles apart), form **part of the internal waters*** (of Iran).." (emphasis added): see *Law of the Sea Bulletin* No. 24 (1993): 10. There have been suggestions made by some commentators since the 1930 Hague Conference that pockets of high seas landward of interconnecting insular territorial seas should be eliminated by being converted into territorial sea areas. See the survey in Briscoe, 1987: 32-34. These suggestions have no basis in the present Law of the Sea. Thus, for example, when Australia drew a three-mile territorial sea around all formations on the Great Barrier Reef which it considered to be islands, several small high seas enclaves were then created within this territorial sea regime.

33 See Article 47 (1) of the LOSC (*"outermost islands"* of an archipeligo).

Likewise in the case of notionally overlapping zones with neighbouring States, islands[34] may help boost their owner's share of the overlapping zone - including a continental shelf and 200-mile EEZ or fishery zone - by generating such zones in coalescence with the mainland or in isolation from it; or by constituting basepoints (to a greater or lesser degree) for median line (or allied) purposes of delimitation, unless, for example, they are (in continental shelf delimitation) disqualified either as being *"special circumstances"* under Article 6 of the 1958 Continental Shelf Convention (CSC) or in accordance with equitables principles under the LOSC.[35] There are in fact many examples throughout the world where an isolated small formation - technically an 'island' - such as a rock which is only **marginally** above sea level, has caused maritime disputes.[36]

2.2 Low-Tide Elevations

The second basic type of insular formation known to the Law of the Sea is the low-tide elevation. This is defined in Article 11 of the TSC (as confirmed in Article 13 of the LOSC) as a *"naturally-formed area of land which is surrounded by water at low-tide but submerged at high-tide"*. Just like the definition of 'rocks' (see below), so also in the case of low-tide elevations, many of the basic insular requirements mentioned above apply with, of course, the notable *exception*, as its very appellation necessarily suggests, of having to be above surface at **high**-tide like an island. As legally-defined, therefore, such a formation need only surface at **low-**tide. Though here, as in the case of an island, there is a problem relating to the appropriate tidal datum (see below).

Such a formation differs in a vital way in its zone-generative capacity as compared with an island in that it may only constitute a 'baseline' from which to draw maritime zones if it is wholly or partly within the territorial sea of its owning State's mainland or island, unless it qualifies as an appropriate fixing point under the straight baselines provisions of Article 7(4) of the LOSC where (anomalously) low-tide elevations may be used for this baseline purpose if:

> *"lighthouses or similar installations which are permanently above sea level have been built on them or ...in instances where the drawing of baselines to and from such elevations has received general international recognition"*.[37]

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34 Some contentious small formations, such as Rockall, are well above high-tide level; and are obviously islands; but many are not.

35 See Article 83 of the LOSC (delimitation *"by agreement on the basis of international law"* as referred to in Article 38 of the ICJ Statute *"in order to achieve an equitable solution"*).

36 See e.g. Ong, (1992) 8: 221, 222, who confirms that Malaysia/Thailand negotiations over a continental shelf boundary in the south-west of the Gulf of Thailand broke down because of disagreement by Malaysia over use by Thailand of a rock, Ko Losin, only 5ft above high-tide, situated 39 nms off Thailand.

37 The latter proviso wording (*"received general international recognition")* is not to be found in the previous TSC provision in Article 4(3). Note also that in the context of the straight **archipelagic baseline system**, Article 47(4) of the LOSC does not repeat this same wording but does allow, in Article 47(1), *"drying reefs"* (not defined here) as basepoints. In possible distinction with the case of atolls and islands with fringing reefs (see *infra*), such reefs - as they have to be *"drying"*- would also approximate to low-tide elevations, though in their case they would not need, as in the case of the more general concept thereof, to be within the territorial sea width of the nearest island (as required in paragraph 4).

The change in terminology here from *"above high-tide"* to *"above sea level",* although anomalous, appears to have no special significance.[38]

As such its value as a basepoint for pushing out maritime zones is **geographically limited to a coastal location** and in this sense its zone-generative capacity (or qualification as a basepoint for delimitation purposes, e.g. a median line) can be said to be basically *"parasitic"*[39] to the mainland as compared with an island where location is, for such purposes, largely irrelevant because of its independent zone-creating capacity.

Accordingly, if a low-tide elevation is situated outside a territorial sea, it creates no jurisdictional advantages for its owner, and in this situation, it is no more than a navigational hazard.[40] Thus, to call such a formation *"an **insular** formation"* in **this geographical context** may be a misnomer because here it attracts no maritime regime.[41] Indeed, even where such a formation has zone-generative capability, it may be stretching strict terminology to call such a formation the *equivalent* of an island. However, in the latter situation several States, including the UK, have defined such a formation in their domestic legislation as if it were a 'fictive' island.[42] And in the past, before the 1958 regime materialised, there was evidence of State practice and academic opinion which equated low-tide elevations with islands proper, despite their location,[43] though such could never be considered as *"islands in every respect"*.[44]

Any past apparent amalgamation in State practice of the two legal regimes is not surprising considering that clarification between the two only came after the 1958 TSC.[45] What is surprising is that an element of this conflative approach can still be detected in the post-1958 State practice.[46]

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38 Symmons, 1979: xii.

39 See Briscoe, 1987: 5.

40 Dipla, 1984: 62, describes this phenomenon in strange terms - if such a formation is on the high seas, it is not considered *"comme une île"* (like an island).

41 Apart, of course, of constituting part of the seabed regime e.g. for continental shelf purposes. Sometimes such elevations have been confirmed to be part of the seabed in bilateral treaty, as in the Australia/PNG Agreement: see *infra* footnote 75.

42 See *infra* footnote 124. And note e.g. the US reply at the 1930 Hague Codification Conference that "*each body of land any part of which lies within 3 nms of the continental mainland shall be regarded as an island*". One of most recent examples is the Belize legislation (laid out in the UN *Law of the Sea Bulletin* No.21: 3) where section 4(2) states:*"*[f]*or the purposes of this Section, a low-tide elevation which lies wholly or partly within the breadth of the territorial sea which would be territorial sea if all low-tide elevations were disregarded for the purpose of the measurement thereof shall be treated as an island"*.

43 See Dipla, 1984: 63.

44 See Jayewardene, 1990: 72.

45 low-tide elevations (or *"rocks awash"*) were often treated as being equivalent to an *"island"*, particularly in certain regional areas such as Scandinavia. Dipla, (1984: 32) views the Scandinavian practice of treating low-tide elevations as *"islands"* as being attached more to the straight baseline system than the definition itself of *"islands"* and as being of a *"purely regional character"*. Cf early British colonial practice below.

46 See footnote 42 above.

3. Insular Sub-Categories: Rocks and (Fringing) Reefs

3.1 Rocks

As a result of the LOSC, 1982, a more disadvantaged form of 'island' has been introduced under Article 121(3), namely a 'rock' which *"cannot sustain human habitation or economic life"* of its own. Such a formation is specifically disqualified from generating the two major maritime zones of continental shelf and 200-mile EEZ (Article 121(3)). Much ink has been spilt on the definitional aspects of such a formation. For much ambiguity resides as to what is the meaning of 'rocks' (as the plural version has it in the LOSC reference[47]) - a term which is not specifically defined;[48] and perhaps more particularly, the meaning of the qualifying phrase *"which cannot sustain human habitation or economic life of their own"*.[49] Less academic attention has been paid to the fact that such rocks must **still comply in other respects with the definition of an island proper in this context,**[50] most particularly that they are naturally-formed (as the very word 'rocks' implies in any event), and that they are above surface at high-tide[51], though neither of these requirements is specifically spelt out in the LOSC text in their connection. For in their **residual** insular capacity they may generate for their owner, by implication[52], a territorial sea and contiguous zone, as well as constituting an appropriate point for a straight baseline system, or (more controversially) a potential basepoint for fixing a boundary (e.g. median line) in maritime delimitation situations.[53]

So, depending on the interpretation of the word 'rocks' - and whether this has a literal geographic/geological meaning (which in the writer's view is not so),[54] it appears that an 'island' proper in its broad essential features (apart, of course, from the habitability/economic life aspects) may only differ from 'rocks' insofar as the latters' natural **composition** is, arguably, definitionally important in contrast to the broader concept of 'land' in the definition of an 'island'. Thus in respect of the vital *"above high-tide"* requirement, there is no difference between 'rocks' and 'islands'.[55]

47 Cf in the Convention's **definitional** reference in the **singular** to *"island"* and *"low-tide elevations"*.

48 See e.g. Alexander, 1987: 272, 273; alo Dipla, 1984:42.

49 For a recent survey of this literature, see Symmons, 1994: 82-83. And see recently the interesting 'declaration' of Iran on signature of the LOSC (para. 5) ("*islets situated in enclosed or semi-enclosed seas hich potentially can sustain human habitation or economic life of their own, but due to climate conditions have not yet been put to development, fall within the provision of para. 2 of Article 121 concerning 'Regime of Islands', and have, therefore, full effect in boundary delimitation of various maritime zones of the interested coastal states*": see UN *Law of the Sea Bulletin*, 25: 30).

50 See e.g. Symmons, 1979: 5.

51 See Alexander, 1987: 273 (and below).

52 See e.g. Symmons, 1979: 5.

53 *Ibid*:164.

54 *Ibid*:56.

55 See e.g. Dipla, 1984: 41 (*"les rochers découverts a marée haute"* ('rocks exposed at high-tide') are *"îles" ('islands')*, though not *"normales" ('normal ones') [author's translation]*.

3.2 (Fringing) Reefs

Although not mentioned in the 1958 regime,[56] 'reefs' get no less than two separate mentions in the 1982 LOSC. Firstly in Article 6 thereof (entitled 'reefs'), certain reefs may have baseline implications in a confined geographical situation (i.e. in the case of *"islands situated on atolls or islands having fringing reefs"*): they may be used as a territorial sea baseline along their *"seaward low-water line as shown by the appropriate symbol on charts officially recognised by the coastal State"* (Article 6, LOSC). 'Fringing reefs' - like 'rocks' mentioned above - are not legally defined in the Convention.[57] Such 'reefs' have (in the same way, possibly, as 'rocks') a distinct geographical connotation, they appear not necessarily to be required to have an **above-water** elevation. Such 'reefs' (which do not necessarily have to be of coral[58]) do not, therefore, on one interpretation, constitute what in this *Briefing* has been described as 'insular formations', except of course, insofar as they **may** incidentally protrude permanently above high-tide level[59] *or* make appearance at low-tide (so overlapping respectively with islands and low-tide elevations[60]). In the latter case, if situated wholly or partly within the breadth of the territorial sea, they may, in a broader definitional context, push out that zone like any other low-tide elevation.[61] Thus insofar as 'reefs' may overlap with the definition both of islands or low-tide elevations, the same rules applying to each of these regimes apply (albeit residually) to such 'reefs'.

The LOSC regime appears to give such reefs *"specific recognition"* in that, most particularly, they **may** differ from low-tide elevations in being *"usually covered by water"*[62] and so may not even be (always) visible at low-tide. However, the ultimately-changed LOSC wording mentioning the *"**low-water** line"* (emphasis added) is to be the baseline of the reef, implies that **submerged** reefs are excluded from such baseline consideration;[63] as they must (arguably) be drying *"in the sense that they must be above water at some point in order to possess a low-water line"*.[64] As against this it has been argued for practical reasons that in the case of reefs as marked on normal charts the *"seaward edge"* of the reef should be regarded as the **equivalent** of the seaward low-water line,[65] and that straight baselines may be drawn across any channels intersecting the reef.[66] On balance, from an interpretive point of view, the phrase *"low-water line"* does appear to imply (as indeed was the Drafting Committee's intention), restriction of the provisions to *"drying reefs"* to the exclusion of *"submerged reefs"*.[67]

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56 Kawaley, 1992: 41: 152, 156.

57 See Herman, 1985: 191; nor indeed are *"atolls"* as such: see Dipla, 1984: 47.

58 See Jayewardene, 1990: 96.

59 *Ibid*: 95.

60 Kawaley, 1992: 157.

61 Jayewardene, 1990: 95. Cf Herman, 1985: 192, who suggests that a low-tide elevation may be distinguished from a *"reef"* on the basis that a *"low-tide elevation is made up of land while a reef is not"*. This view seems misconceived, as there seems to be no doubt in international legal terms that coral would qualify as *"land"* in the definition of insular formations.

62 Jayewardene, *ibid*: 89, 91.

63 *Ibid*: 96.

64 Herman, 1985: 193.

65 Jayewardene, 1990: 96.

66 *Ibid*: 98.

67 Noted by Kawaley, 1992: 157 and Jayewardene, 1990: 96.

It follows from this that insofar as such reefs may **not** also qualify as 'insular formations', they are, in general legal terms, essentially a shallow area of the seabed in a *sui generis* legal category.[68] The same situation would appear not to apply to the second - and quite separate - mention of reefs as basepoints - that is in the context of archipelagic straight baseline systems allowed in Article 47(1) of the LOSC where 'drying reefs' of an archipelago[69] in an archipelagic State may be used as connecting basepoints. Here it has been argued that such reefs may be similar to low-tide elevations in that the use of the word 'drying' implies at some point the reef is entirely submerged..while at other times (low-tide*) "it is emergent"*.[70] These definitional difficulties may entail practical problems, as it seems that **both** these LOSC category of 'reefs' operate in a broader way than low-tide elevations; namely that there is no explicit **intra-territorial sea** distance criterion with which they have to comply to create maritime zones, except insofar, of course, that as regards the first category of reefs at least, the epithet 'fringing' has a connotation of some proximity to the coast.[71]

4. No Third Insular Category in International Law

It follows from the above that the two basic categories of insular formations having legal importance in the Law of the Sea are 'islands' proper (with their possible insular sub-division now of 'rocks'[72]) on the one hand, and low-tide elevations (including, in some cases, reefs) on the other. So if one excludes 'reefs' which may (arguably) in the case of the 'fringing reefs' situation at least (Article 6 of the LOSC) have permanent underwater characteristics and so no insular qualities, there is, as it were, no **insular tertium quid.**[73] This must mean that an alleged 'island' which, on the requisite tidal or other datum, does not appear for sufficiently long periods above the high-water level, may have to fall into the **residual** catch-all *"low-water elevation"* category despite its occasional apparent insular characteristics (see below); i.e. inasmuch as it does not constantly **submerge at high-tide.**[74] Likewise, if an

68 See O'Connell and Shearer, 1982: 195 (submerged reefs may be in the category of "other features which the [two-fold insular category] dichotomy does not adequately comprehend").

69 At the Third UN Conference on the Law of the Sea (UNCLOS III), it has been commented that there was seemingly little discussion on the meaning of an *"archipeligo"*:See Herman, 1985: 189.

70 Herman, 1985: 193.

71 Cf the same epithet phrase *"fringing islands"* in Article 7 of the LOSC. See Churchill and Lowe, 1988: 44. Not surprisingly, some national legislation has spelt out the meaning of this phrase: see e.g. the definition in the recent Belize maritime legislation (UN *Law of the Sea Bulletin* no. 21: 4) "*'fringing reefs' means reefs attached directly to, or located in the immediate vicinity of, the coast or any coastal lagoon"*). In the case of the second category of reef (i.e. in an archipelagic system), the provisos as regards inclusion of the *"main islands"* and the requisite land to water ratio may eliminate too distant reefs.

72 Appropriately named in non-legal jargon as *"non-conforming islands"* by one geographer: Alexander, 1987: 273.

73 Such e.g. as the common geographical term *"islet"*. See Hodgson, "Islands and Special Circumstances", in Gamble and Pontecrvo, 1973: 137, 173; and the French argument in the *Western Approaches* case, *infra.*

74 See, e.g., Phillips, 1971: 129,134, "*a low-tide elevation in terms of the Geneva Convention* [i.e. the TSC] *is a land feature that is bare at any stage of the tide between low-water datum and the plane of mean high water*".

alleged low-tide elevation does not appear for sufficiently long periods at **low-water**, its legal status is simply part of the seabed.[75]

There is then, in the present Law of the Sea (with the possible exception of certain types of reefs), no **hybridised** concept like an *"occasional"* island or low-tide elevation.[76] For example, in the latter case, the predominant definitional requirement may be said to be the regular periodic **low-tide appearance** rather than, on the other side of the coin, the regular **high-tide disappearance** of same.[77]

5. The Effect of Agreement or Estoppel on Insular Status

Occasionally, in the context of maritime boundary delimitation, there are examples of States **implicitly** accepting insular status for an apparently underwater formation. For example it appears from the France-Australia delimitation agreement concerning the EEZ off New Caledonia that a reef (Middleton Reef) may have been utilised *"even though it does not have any features which stand above high-tide"*;[78] and that likewise in the 1983 Fiji-France Agreement, a dubious insular formation called *"Cera-i-Ra"* - a reef surmounted by a sand cay - *"has been recognised as an island"*.[79] Likewise, a bilateral treaty may (more exceptionally) **explicitly** confirm, as between the parties, the status of a dubious formation as an existing island; or as a permanent island even if it should in fact lose any insular characteristics **in the future**. This occurred in the Australia-PNG treaty of delimitation.[80]

Another way in which international law can bestow insular status on an otherwise dubious formation is by implied acceptance or acquiescence by another State (or States) - particularly where the doctrine of estoppel applies. Thus, for example, in the arbitral decision in the

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75 Sometimes a bilateral treaty has specifically relegated low-tide elevations to the **seabed** regime. For a good example of this see Article (1)(i) of the 1979 PNG-Australia Maritime Boundary Agreement which defines *"seabed"* jurisdiction as entailing sovereign rights over the continental shelf in accordance with international law, including jurisdiction over low-tide elevations and the right to exercise such jurisdiction over such elevations. See Burmester, 1982: 339 *"*[b]*ecause the area is full of low-tide elevations of one sort or another, it was thought desirable to put the matter beyond doubt"*.

76 Such, as, for example to allow a State **periodically to claim maritime zones from an intermittently qualifying formation**: this claim was made as a fall-back argument in respect of Dinkum Sands in the *U.S. v. Alaska* litigation before the Special Master, but was not argued seriously during the hearing. See *Joint Statement of Questions Presented and the Contentions of the Parties*, No. 84 Original 1979): 13, 14(US) Alaska (*"In the alternative Alaska contends that it is entitled to the resources of Dinkum Sands formation and the submerged lands within a three mile radius for such periods as the formation is determined to possess a line of ordinary low-water"*).

77 See e.g. the early definition of a low-tide elevation at the 1930 Hague Codification Conference (Basis of Discussion No. 14) where there is no mention of a necessity of submergence at **high-tide**: C.74.M.39 (1929) V. p. 52.

78 Prescott, 1988a: 191.

79 *Ibid*.

80 See Burmester, 1982: 321, 341. Here there was *"room for argument"* during negotiations over` whether certain features *"actually amounted to islands in international law"*. Accordingly, Article 2 (2) of the treaty seems to fossilise insular status in one stated area, whereas Article 2 (3) (b) thereof is (*ibid*: 341/2) said to be *"ambiguous about the position of future features that may emerge"* and the future ambulatory effect.

Franco-British Western Approaches Case, the Eddystone rocks, *quoad France*, were **in effect** treated as an island by the Court even though they were arguably (in their naturally-formed parts) not permanently above sea level.[81] This doctrine may also apply in a federal context where international law governs. See also *US v Alaska*, where Alaska alleged that the US federal official view in the pre-litigation period had been to treat a formation (Dinkum Sands) as an island.[82]

Likewise, it is possible for it to be bilaterally agreed (e.g., by treaty) that otherwise **viable** insular formations shall be deprived of such status, as for example, in the case of low-tide elevations being treated as part of the seabed.[83]

Conversely, refusal by other States to recognise insular status to an apparently non-qualifying formation can have important effects in depriving that formation of any regime. It may be observed that apart from isolated instances of States attempting to artificially conserve an erstwhile island by building it up or attempting to create insular characteristics (where none existed before) for maritime zone enlargement purposes, it has been very rare for a State to claim maritime zones from a **permanently submerged** feature - for example a shallower part of the seabed.[84]

Such a claim would be a *"contradiction"* in both geographical as well as a legal terms;[85] but such States as make such illegal claims may possibly treat such underwater formations as if they were *"pre-emptive islands"*: for example, in the case of rapidly-growing coral reefs as islands in the making[86] just in the same way as a State claiming a straight baseline system independent of the low-water line (as in a delta situation) may *"have anticipated the emergence above sea-level of the submerged delta in the form of accretions to the mainland, islands or low-tide elevations"*.[87] However, this is a spurious legal justification; and it is significant that even where one State has claimed such insular status for a non-qualifying formation, other States have invariably refused to accept such status when fixing their own zones.[88] Furthermore the Law of the Sea always remains the ultimate criterion of international legality, whatever a particular domestic decree may provide.[89]

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81 This was due to past French conduct in respect of the rocks by which they were found to have impliedly recognised the rocks as possessing a baseline: see *infra* Cf Fitzmaurice, 1959: 8: 73, 85 (*"**in the absence of any** **special agreement to the contrary**, any natural formation permanently visible...at all states of the tide, generates a territorial sea"* (i.e. is a true island) (emphasis added).

82 *Supra* footnote 8. See *Reply Brief:* 8, 10, 44, 53.

83 Cf the 1978 Australia-Papua New Guinea Delimitation Agreement. See Burmester *supra* footnote 80: 341.

84 See e.g. the Chinese claim from Macclesfield Bank. Here there are 24 shoals, three reefs and two banks - *"all of which are under water"*:Choon Ho Park, 1983: 203, 255.

85 See e.g. Shalowitz, 1964: 172 ("*a contradiction"* to call a piece of land " *covered with one or two feet of water*" an *"island*").

86 As in the case of the Macclesfield Bank claim *supra*: see Choon Ho Park, 1983: 255 who points out that the underwater formations appear to be growing upwards at a rate of some 10 centimetres a year.

87 Jayewardene, 1990: 75.

88 Note e.g., the New Zealand attitude to the Minerva Reefs which it does not recognise *"as a land* formation": Ridings, 1978: 261, 266. Prescott indicates that in fact there is "*no evidence*" that Tonga has "*contemplated using Minerva as basepoints*", but adds that, "*it seems certain that any attempt to do so would result in very strong opposition from New Zealand and Fiji*":Johnston and Saunders (eds.), 1988: 268, 300.

89 See the famous dictum of Lord McNair in the *Anglo-Norwegian Fisheries Case* (1951) ICJ Rep: 116, 132.

6. Analysis of the Above-Tide Requirement in International Law

6.1 Vagueness of Existing Treaty Definitions

There are many examples of geographers, hydrographers and non-international lawyers defining islands (and other technical aspects of the sea[90]) as necessarily having some permanence of appearance above high water. Some such definitions have a tidal datum supplied for the most critical hallmark of an island. This aspect is particularly evident in US definitions where US practice generally follows the *"mean high-tide"* criterion. But, as will be seen, many other States adopt different criteria;[91] and many legal commentators have pointed out that Article 10 of the TSC (and now Article 121(1) of the LOSC[92]) - is vague as to the meaning of *"above water at high-tide"*. There is an additional problem in polar areas that can arise on this issue; namely, does the fact that a formation is covered by pack-ice (i.e. simply frozen sea-water) for most of the year (often for at least nine months), in itself disqualify insularity?[93] Despite such vagueness, it has been argued that Article 10 of the TSC now represents customary international law,[94] or parts at least of the definition have this status.[95]

Such vagueness equally affects the definition of low-tide elevations, which under Article 11 of the TSC - now Article 13 of the LOSC - are to be *"above water at low-tide but submerged at high-tide"*. Here there is no tidal datum supplied in the case of **either** eventuality.[96] Furthermore, it may be noted parenthetically that in Article 7(4) of the LOSC where low-tide elevations may qualify, as seen, as basepoints for straight baselines where artificial constructions have been built on them, the requisite artificial installations on them *"must be* ***permanently above sea level****"* (emphasis added) - a change in super-surface terminology as well as evidencing again no tidal datum except that which can be implied from the word *"permanently"*.[97]

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90 See e.g. Alexander, 1987: 287. Shalowitz, 1964: 227, defines an island (at least for US mapping and charting purposes) as a *"body of land extending above and completely surrounded by water at the mean high water stage"*. See also Hodgson, 1973: 150 (*"above mean high water"*); Cf. Boggs, 1951: 240 - *"island"* is *"land which is not wholly submerged at high-tide"*

91 Cf the French practice *infra* footnote 156.

92 See e.g. Dipla, 1984: 32;Oppenheim, *International Law*. 9th ed. Jennings, R. and Watts, A., London: Longmans:104/5 (*"It is nowhere said what is meant by high-tide"*).

93 This very point arose in *US v Alaska supra.*

94 See, e.g., the Greek argument in the *Aegean Sea Continental Shelf Case* (VR, C.R. 76/1:34). *Contra* Pazarci, 1982: 52-57.

95 E.g., *"naturally-formed"*: Dipla, 1984: 28.

96 See Alexander, 1987: 273; and Aurrocoechea and Pethick, 1986: 1, 29, 38 (there is no definition in the TSC of the *"lower tidal limit"*).

97 See *supra* footnote 38 and accompanying text.

6.2 Past State Practice

6.2.1 The position prior to UNCLOS I

There is evidence as far back as 1804 - *Soult v. Africaine*[98] - in US case law that a submerged shoal could not be considered an 'island' so as to generate a maritime zone. This was reinforced by the later US case of *US v. Henning*[99] in 1925 which effectively ruled out a permanently-submerged shallow reef on which an above-water beacon had been erected as being an island. Not surprisingly, the *Soult* case has been described as initiating a trend *"towards the exclusion of features other than permanently dry features when calculating the territorial sea"*.[100] Likewise in the famous *Anna* case in the last century which involved an international legal dimension (the law of prize), the mention of an element of *"permanence"* arises in respect of insular definition. For as the captors of the ship there argued in the case of a capture within 3 miles of a Mississippi 'mudlump' (a form of mud elevation - but more than 3 miles from the mainland coast) such *"outlines of territory"* should *"form a visible part"* of the State to which they belong.[101]

It seems clear, then, from an early stage that state practice ruled out underwater features, or features artificially raised above high-tide level by installations thereon, as having any insular qualities. And this was generally reflected in State practice prior to UNCLOS I as is today.[102]

Not so clear in the past[103] was whether natural formations which appear above surface at low-tide only - what are now known in legal parlance as low-tide elevations - were equivalent to 'islands'. British practice showed some equivocation here: on the one hand in the Australian context it was stated by the Law Officers in the last century (1875), that *"land not submerged at ordinary high-tides, however small in extent, is an island"* and that *"reefs detached from any islands and dry at low-water only are not islands"*.[104] It may be noted in passing that at this early date no tidal datum is given and the epithet *"ordinary"* begs many questions. Later British opinions concerning reefs in the West Indies, however - e.g., the Bahamas Banks - tend to indicate that low-tide formations in the proximity of land **did** have insular qualities.[105] Such latter authority can, however, be explained away on the grounds

98 (1804) 22 Fed.Cas.:805.

99 (1925) 7 F. 2nd:488.

100 O'Connell and Shearer, 1982: 1: 170.

101 165 *E.R.*: 809, 811.

102 See e.g. the isolated viewpoint of Rumania in 1929 at the Hague Codification Conference, an "island" was a land surface "covered or not by water... over which it is impossible to navigate": Rosenne (ed), 1930: 271. Cf the present Chinese claim over Macclesfield Bank supra footnote 84.

103 It is rare today to find instances in maritime legislation where a State has defined an *"island"* in blanket (rather than qualified) terms which also comprises of a low-tide elevation. Egypt **has** been one such State, *"any islet, reef rock, bar or permanent artificial structure not submerged at lowest tide"*: see El Hakim, 1979: 8. This practice is not reflected in other Arabic legislation: see Jayewardene, 1990:73. The Egyptian straight baselines were changed in 1990: see *UN Law of the Sea Bulletin*, No.16: 5.

104 Opinions, No.4 and 5: McNair, P., *Legal Opinions*, Vol. 1: 369.

105 See Symmons, 1979: 42.

that then it was believed such formations (coral ridges etc) were normally above water,[106] or that they were not then seen as *"autonomous entities"* in their own right;[107] and that they preluded the idea today that such **intra-territorial sea** low-tide elevations may constitute baselines even though not being 'islands'.

Significantly, the 1875 Law Officers' opinion for Australia has been viewed as anticipating the 1958 regime that *"land not submerged at ordinary high-tide...is an island"*.[108] Added to this, legal conferences in the period prior to the 1930 Hague Codification Conference began to draw a clear division between islands proper and other formations such as low-tide elevations,[109] though confusion over terminology still persisted into the 1930s, such as that an 'island' could include *"land exposed only at some stage of the tide"*; and such views were also evident in some replies to the Questionnaire of 1929 prior to the 1930 Hague Codification Conference.[110]

The viewpoint of the UK and other common law States (excluding the US) at the 1930 Conference required 'islands' to be permanently above sea-level.[111] This was reinforced by later definitions from the same sources at the 1930 Conference stressing that islands should *"in normal circumstances"* be *"permanently above water"*. The different replies at the 1930 Conference can be explained by the looseness of terminology then apparent.[112] But in the final *"observations"*, it is clearly stated that an 'island' can have its own territorial sea only *"if above water at high-tide"*; and at its conclusion, this influential Conference defined an 'island' as a formation **permanently** above sea level - *"an area of land, surrounded by water, which is* ***permanently above high-water mark****"* (emphasis added).[113]

6.2.2 UNCLOS I

At UNCLOS I in the late '50s, the above-mentioned definition was initially reproduced by the International Law Commission (ILC).[114] As a result of suggested amendments (by the British ILC delegate, Lauterpacht), this definition was then amended to take in the phrase *"in normal circumstances"* before *"permanently above sea level"*, so that *"exceptional cases could be covered",*[115] though some delegates thought this unnecessary as they viewed

106 See the British explanation in the *Anglo-Norwegian Fisheries Case*, *Pleadings*: 531.

107 O'Connell and Shearer, 1982: 189.

108 O'Connell, D.P., *International Law in Australia*:: 271.

109 See e.g. the 1894 report of the Institut de Droit International: *Annuaire Abridgment*, Vol. III: 460.

110 E.g. that of the USA: *"It would seem that any naturally-formed part of the earth's surface,* projecting above the level of the sea at low-tide... should be considered an island", C.74M.39 (1929) V:53.

111 Indeed, as early as 1923, the view from the British Empire was that islands included *"all portions of territory permanently above high water in normal circumstances"* - a definition which would not beout of place today. See the Report of the Inter-departmental Committee on the Limits of Territorial waters at the 1926 Imperial Conference.

112 As a US delegate at the 1930 Hague Conference admitted, *"we have talked of...islands without at times being sure of the definition of our terms"* see Rosenne, 1930, Vol. IV: 1349. See also McDougal and Burke 1962: 391, 392.

113 *Acts of the Hague Conference*, 1930, Vol.. III: 219.

114 See Bowett, 1979: 6.

115 *ILC Yearbook*, 1954: Vol.1: 92.

"normal circumstances" as being implied in the original draft.[116] However this added qualification to the international above-water requirement did not survive the 1958 Geneva conference, where the US successfully advocated not just the deletion of this phrase, but also the word *"permanently"* because:

> *"The requirements of the ILC definition of an island that it should be above high water mark 'in normal circumstances' and 'permanently' are conflicting, and since there is no established State practice regarding the effect of subnormal or abnormal or seasonal tidal action on the status of islands, these terms should be omitted"*.[117]

As there was so little discussion on this vital aspect of insular definition - both at the Conference and before - this US commentary forms a vital part of the *"travaux préparatoires"* to the TSC and indicates that the US amendment was caused essentially for **drafting** purposes and only secondarily because of a perceived lack of international agreement on tidal data affecting the appropriate high water criterion. For example, the ILC's commentary in 1954 merely stated that the *"permanence"* of the above-water aspect was subject only to *"abnormal circumstances"*.[118]

In the light of the above, it is submitted that, from an interpretative point of view, the dropping of the word *"permanently"* from the finalised TSC text does not mean that this epithet is not still **implied** in the resultant definition in 1958 given above, which taken literally (*"**is** above water at high-tide"* (emphasis added)) arguably implies permanence of above-high-tide status from the very word *"is"*, and necessarily suggests continuing existence above the sea surface.[119]

Likewise it is arguable that the omission of the *"normal circumstances"* qualification does not rule this factor out of insular definition. So that a formation still retains its true insular characteristics (albeit implicitly) when in exceptional conditions - as mentioned above - the water level is significantly (but temporarily) raised; or equally importantly - and this is an aspect often neglected - where a formation itself is **temporarily reduced in height** by such natural and exceptional forces.[120]

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116 See Symmons, 1979: 42.

117 UN Doc.A/Conf.13/C.1/L. 116: *Official Records*, Vol. III, p. 242.

118 See, e.g., Symmons, 1979: 42-5.

119 See the US *Post Trial Memorandum* (17, 27) in *US v. Alaska (supra).*

120 This was an important factor in respect of the disputed '*Dinkum Sands*' formation in *US v .Alaska (supra* foor note 8). The question arises whether international law may, in this regard, impose any duty on States to monitor, on a *continuous* basis, such suspect formations. At least one geographer has suggested that there is no such legal duty to *"engage in periodical surveys"*: see Prescott, 1981: 488, 493. He points out (*ibid*: 490) that many rocks and cays on the Australian Great Barrier Reef can be *"expected to be temporary features"*, being formed by accumulation of coral debris which may be *"destroyed by exceptional storm surges or unusually high-tides"*, as e.g. rocks being rolled into channels by strong waves. And he concludes that *"*[u]*nfortunately, there is no way of predicting which features might be considered to be temporary"*; and (493) that *"new surveys will have to be made at intervals to take account of features which have been freshly created **or recently destroyed***" (emphasis added).

6.2.3 UNCLOS III

Significantly at UNCLOS III there was little evidence of a move to diminish the clear pre-existing distinction between islands and low-tide elevations - for example, to downgrade **insignificant** above-high-tide features into the same legal category as low-tide elevations.[121] And it may be argued that the retention of the identical definition from the TSC of 'island' (and indeed low-tide elevation) in the LOSC, reinforces the **pre-existing** essential criteria of an island.[122] Indeed it has been argued rightly by an a eminent maritime geographer that the *"long tradition"* of State practice over islands was *"accepted at the 1930 Conference"* and *"enshrined in both the 1958 and 1982 Conventions"*.[123]

6.2.4 Analogies with the tidal datum rule as to baselines

A similar lack of definition applies to the meaning of the *"normal baseline"* (see Article 5 of the LOSC) which is the *"low-water line along the coast as marked on large-scale charts officially recognised by the coastal state"*. Note here that no tidal datum is given; and in practice many States use different criteria for establishing such a *"low-water line"*; for example the US uses **mean low-water**; whereas the UK (in the past at least) has used **mean low-water springs.**[124] And the latter criterion was also suggested at the 1930 Hague Codification Conference.[125]

Several commentators point out the manifold possibilities here as to tidal datum[126] - for example, lowest astronomical tide,[127] mean low-water spring tide, mean low-water, neap tide, mean sea level, mean lower low-water.[128] An added complication in hydrographic terms is that even in one and the same State, different tidal data has been used for **different coastlines**, as in the US, where, for example, the qualifying height for a *"bare rock"* on one of its seaboards, the Atlantic, is different from that on another, the Pacific.

With the substitution of **high-tide criteria** any of these tests could be theoretically applied to insular definition, so in hydrographic terms, it might be possible to apply such baseline tidal data **by analogy** to the meaning of *"above water"* at *"high-tide"* in Article 10 of the TSC on the meaning of island. Thus the same problem of multiple choice arises here; and in any event, some commentators have maintained that such analogies cannot be made, as it cannot

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121 See the Draft African Articles on *"Regime of Islands"*: UN Doc A CONF62/C2/L55.

122 See e.g. Dipla, 1984: 29.

123 Prescott, 1985: 9.

124 See the Territorial Waters Order in Council, 1964, Article 5(1).

125 See Symmons, 1979: 45.

126 See e.g. O, Connell, and Shearer, 1982: 173.

127 Cf e.g. Australia's updated legislation (*infra* footnote 144) and Algeria's legislation *"shore of the* sea which is covered by water by the highest tide of the year in normal atmospheric conditions" : Algerian Ordinance 96-80 of 23/10/1976.

128 See Dipla, 1984: 33, who cites 6 possible levels according to Pearcy, 1959: Vol.49: 6. See also Read, 1957: 12-13; and Aurrocoechea and Pethick, 1986: 31, 34. For another variation in practice, see that of Belgium (*infra* footnote 192 and accompanying text) (*"lower low-water spring tide)*.

be assumed that *"the same tidal datum is to be used* [for determining insularity] *as in the case of measurement from the coast"*.[129] On the other hand, as the present writer opined in the *US v Alaska* case,[130] those States which specify a criterion for the low-tide mark baseline generally also use the **same type of (high-tide) tidal datum to determine insular status.**[131]

6.2.5 The current state of ambiguity on the legal criterion for above-surface status

Given the lack of clarity on this vital definitional issue, what is the true **international** rule? Or must one take the pessimistic view that there is, effectively, no international rule because there is no international agreement regarding the appropriate water level datum.[132] Various possibilities have been suggested as reflected in current state practice. These will now be looked at.

Certainly, as has been seen, the early definition of islands in State practice, gives little guidance in the matter.[133] Curiously also, even in US domestic caselaw, there is little precedent on insular definition, though US Federal caselaw has been influential on more general baseline issues,[134] and certainly until *US v Alaska*, no case had reflected **international law** as such on the definition of islands,[135] though US domestic cases do reflect similar problems relating to insular formations in rivers.[136]

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129 O'Connell, and Shearer, 1982: 184.

130 See *Report supra* footnote 8: 39.

131 See e.g. the *New Zealand Territorial Sea and Exclusive Economic Zone Act*, 1977, which uses *"mean high-water spring tides"* in defining both islands and low-tide elevations; and the new practice of Australia, infra footnote 145.

132 This was the contention of Alaska in *US v Alaska* in its *Reply Brief*: 8.

133 See the above-mentioned 1895 Law Officers' Opinion (*"not submerged at ordinary high-tides"*) which begs the questions as to what *"ordinary"* means; and e.g. (in an 1893 Russian decree), mention of various formations *"showing above the sea"* (at what state of tide?): Fauchille, 1925: 200. Likewise in some early Scandinavian practice mention was made of islets or rocks *"not constantly submerged"* (early examples of low-tide elevations?).

134 Here *Borax Consolidated Ltd v Los Angeles* (1935) US 10, 22, is generally seen as laying down a *"mean high-water"* test (*"the mean of all the high-tides"*) though it is not clear that this represents US practice in an international setting.
For example, in the leading State/Federal case of *US v California* (1964) 381 US: 139, 176, the Federal side argued that the meaning of the ordinary low-water mark was the average of all low-tides. As seen, tidal datum for baseline purposes may differ from that applicable to definition of islands in one and the same State.

136 Such US cases relating to alleged islands in **rivers** (where flooding conditions create special problems as to permanence as compared with maritime *"islands")* do emphasise, albeit solely for ***municipal law purposes***, the necessity for a degree of ***permanence***. Such cases as *McBride v. Steinweden* (83 Pac. 822, 824 [Kann. 1906]) and *Hammonds v. Ingram Industries Inc* (716 F. 2nd 365[1983]) were cited **for international legal purposes** in *US v. Alaska*: *contra* the Alaska *Reply Brief*: 31 (*"From the foregoing it is clear that the US has never taken the position that an island must manifest either a permanent location or a permanent elevation above water datum to qualify as an island for **either international or domestic purposes"**(emphasis added).* Cf the problem of shifting *"islands"* in a river or estuary in determining an **international** boundary as in the Orange River in respect of the South Africa-Namibia boundary, where e.g., sandbanks which are *"permanentstructures"* above the water line are inundated only during ***very high river floods,*** but where such *"extraordinary"* floods *"display no fixed pattern"*; see Erasmus and Hannam, 1987-1988: 49, 52-53, 55. They point out that *"sandbars"* at the **mouth** of a river are of a *"particular nature"* because of their **maritime** provenance.

The lack of clarity[137] in international law on insular definition has already led to judicial complaint in the domestic sphere. For example, in a UK case which touched on the problem, *Post Office v Estuary Radio* (albeit in the context of low-tide elevation definition), it was judicially stated:

> *"Upon these definitions* [i.e. both municipal and by treaty - as in the TSC] *interesting and difficult questions arise as to whether a 'low-tide elevation' must be above water at all low-tides, at mean low-water spring tides, at admiralty datum, at the lowest tides experienced from time to time (if so, how often?) in the course of a year, or at lowest astronomical tides. Someday some court, municipal or international, may have to decide this".*[138]

6.2.6 Recent delimitation practice

In recent times, the diversity of view on tidal requirements for insular definition has even been **explicitly** acknowledged in maritime delimitation treaties and a compromise sought. This, for example, has happened in the recent Franco-Belgian delimitation agreements in 1990/91 wherein Article 2 (dealing with the respective territorial seas) makes reference to taking *"into account* ***low-tide elevations close to the Belgian and French coasts****"* in the form of three sandbanks exposed at low-water. But as Article 2 goes on to say: *"The application by Belgium and France of* ***different methods for calculating heights*** *had led to two distinct dividing lines"* (emphasis added). For as has been commented:

> *"Belgium used as its chart datum the* ***mean low-water spring tide****, calculated over the internationally recognised period of 18 ⅔ years, while the French used the* ***lowest astronomical tide*** *(which is lower than the Belgium mean by about 30 centimetres). This difference in datums led to a further difference in that Belgium charts did not show Banc Breedt as [a low-tide elevation], whereas French (and British) charts did. In other words, Banc Breedt* ***dries only at exceptionally low-tides. It does not satisfy the tests for a low-tide elevation according to widely used chart datum, but just qualifies according to another.*** (*Banc Breedt is about 10 centimetres above the French datum, but always below that of Belgium). Applying the two different datums, two dividing lines, both based on the equidistance method, were thus produced..."* .[139] (emphasis added).

It seems clear from this recent precedent involving definition of insular formations that even in **neighbouring** continental European States, practice can vary as to their perceived definition in international law and so add to maritime jurisdiction problems.

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137 Not all commentators, though, seem to have taken this view; see e.g. Herman *supra* footnote 26:188 *"this terminology* [i.e. the definition of islands in Article 10 of the TSC] *is reasonably clear and simple* [sic]*, and, for the most part, ... should offer few practical difficulties in application"*.

138 Per Diplock, L. J. (1968) *Post Office v. Estuary Radio*, 2 Q.B.: 740, 761. Cf Phillips, 1971: 129, 134, *"a low-tide elevation* ***in terms of the Geneva Convention*** *is a land feature that is* ***bare at any stage of the tide between the low-water datum and the plane of mean highwater"*** [emphasis added]).

139 Anderson, 1992: 414, 416. In the end, it was agreed (see Article 2) that "*the area lying between the two dividing lines should be divided into two equal parts, thus taking some account of each side's position over the datum*" (*ibid*: 416).

7. The Optimal Tidal Level Choices for Insular Definition

7.1 Two Basic Tests

As will be seen, in the one opportunity in recent years for objective clarification of the appropriate legal rule - in an international arbitral context, in the *Franco-British Western Approaches* case this definitional issue was skilfully evaded (in the case of the status of the Eddystone rocks[140]). So that as O'Connell states, the *"general issue of tidal datum"* still *"remains unsettled"*.[141] Furthermore, the legislation of many States fails to give a definition of an 'island',[142] or it may just repeat the substance of the Article 10 definition (in so many words or by direct reference thereto),[143] or it may spell out a criterion of its own (see below). So here there is a role for the international jurist to analyse the various choices and to suggest the appropriate rule.[144] For, despite the lack of uniformity in State practice, it may be argued that there are two basic types of test for determining insularity in international law - one seemingly maximalist (apparent **absolute** permanence above water) and the other more moderate based on a **mean** criterion - usually either on a **mean** tide or a **mean spring tide** test. It follows from this that if a State chooses suddenly to change its tidal criterion from, for example, a mean to an astronomical tidal test (as has happened in recent years[145]), this may have important repercussions on its maritime limits by possibly throwing up **further qualifying insular formations** as far as low-tide elevations are concerned, whilst at the same time, if the same type of test is consistently applied to the **high-tide** aspect, possibly eliminating some erstwhile islands.

140 *Decision of the Court of Arbitration*, 30 June, 1977.

141 O'Connnell, and Shearer, 1982: 184.

142 E.g. that in the USA and Canada.

143 See, e.g., Democratic Yemen, Ireland, Micronesia, Japan. For early comment on the varying practice on insular definition, see Pearcy, 1957: 1, 8.

144 See, e.g., Article 38(1)(d) of the Statute of the International Court of Justice (*"teachings of the most highly qualified publicists"*)

145 See e.g. Prescott, 1985: 50 "*It is quite possible that* reliance[by Australia] *on the* ***lowest astronomical tide*** *will expose a number of low-tide elevations, within three miles of the coast, which were* ***formerly covered at mean low-water"*** [emphasis added]). In similar fashion an extension of territorial seas to **12** miles throughout the world has led to more **low-tide** elevations being qualified to constitute baselines, and this has caused problems for the UK in the context of affecting past EEC foreign fishery in such instances: see Symmons, 1994: 21.

7.2 An Island Must Have Absolute Permanence Above High-Tide, or at least Satisfy the Highest Astronomical Tide Criterion

7.2.1 Academic and other evidence favouring this test

Several academic commentators have suggested this extreme position. For example, writing after the 1958 Conference, one legal commentator effectively required a true island (however small) to be *"permanently (even if only just) visible* ***at all states of the tide****"* [146] (emphasis added). Such a visibility requirement (for navigational and bearing-fixing purposes) would seem to be particularly important in relation to insular formations used in **straight** baseline systems.[147] This viewpoint has also been very evident in the leading French legal commentators.[148] The editors of the new volume of the most authoritative treatises on international law - Oppenheim - also state that it is *"arguable that* [high-tide] *should mean the highest astronomical tide, i.e. the highest tide which can be predicted under average meteorological conditions and under any combination of meteorological conditions"* and which has a twice-a-year appearance.[149]

Some analogous interpretative guidance can be gleaned from the other side to the insular coin, i.e. the definition in the TSC (now repeated in the LOSC) of a **low-tide elevation**. Here, where the formation is legally required to be *"above water at low-tide"* but to be *"submerged at high-tide"*, there seemingly was **never** any attempt, as in the case of 'islands', to add the epithet *"permanently"* to **either** of these tidal requirements. Nonetheless, the wording can be interpreted to imply a regular pattern of low-tide surfacing, and likewise, though less importantly, that they are submerged at least one half of every 24 hours.[150] Indeed, in a British domestic decision involving such alleged elevations in the Thames Estuary - *PO v Estuary Radio* (1968) - the defendants argued (it is submitted correctly) on appeal that the meaning of *"low-tide elevations"* in the relevant statutory instrument

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146 Fitzmaurice, 1959: 73, 85.

147 See Jayewardene, 1990: 71.

148 See Gidel, 1934, an elevation which exists *"d'une maniere permanente audessu de la maree haute*" ('of a permanent appearance above high-tide'); and that "*emersion permanente*" ('permanent coverage') "la disticntion essentielle" ('the distinguishing feature') of an island; Fauchille, 1925, Tomes 1 [author's translation]. In at least one river boundary agreement (of 1938 - that concerning Tanzania-Mozambique), the insular formations to be taken into account were carefully defined in terms of "highest high-tide": see Dipla, 1985: 589, 616, who comments that this may reflect a high degree of permanence as in the Article 10 TSC definition.

149 Op.cit.: 603, footnote 2. Even this definition allows some latitude for unforeseeable (and exceptional conditions). As the editors go on to say *".... it may be presumed not to mean the highest possible* tide allowing for the effect of storm surges or other unpredictable phenomena". See further footnote 166 *infra*.

150 See the comment of the British delegate at UNCLOS I: *Official Records*, Vol.II, p.186. Exceptionally, States have specified a time-scale for low-tide elevation surfacing. See, e.g., the Finnish legislation *"above sea level more than one half day per year on the average, at low-water level during the 10 year period preceding when this law takes effect"*. The writer argued in the *US v. Alaska* case (*supra*) that the *submergence* requirement was less vital then the *emergence* requirement. Indeed, were this not so, it would lead to the necessity for international law to create a *third* hybridised type of insular formation. But cf the recent Belize definition of a low-tide elevation: (an *"area of drying land"* [no tidal datum] which is *"below water at mean high-water spring tides"* [tidal datum]). For previous reference to the Belize legislation, see *supra* footnote 71.

(purporting to apply the TSC regime into UK law) implied that the above-surface requirement was for *"land which comes up regularly in the cycle of tides"*.[151]

At UNCLOS I a lengthy US Memorandum made the point that the lack of tidal datum in Article 11 of the TSC, and in the ILC commentary, left *"unresolved questions"*, like whether elevations which appear above sea level at *"spring low-tide"* but *"not neap low-tide"* qualify as low-tide elevations.[152]

The early ILC travaux préparatoires which defined an island in terms of being *"permanently above high-water mark"*, after the *"Lauterpacht"* amendment, also, as seen, brought in the qualifying phrase *"in normal circumstances"*, so clearly making some allowance for exceptional circumstances; but strangely no further information on what this phrase might mean is given. Significantly, though, the commentary to the US amendment (which finally got this phrase deleted from the definition of an island), did point out, as seen, that because *"there is no established State practice regarding the effect of subnormal or abnormal seasonal tidal action"*, the apparently conflicting phrases (*"in normal circumstances"* and *"permanently"*) should be omitted.[153] Note that the US comment does not relate **directly** to *"normality"* of tidal datum, merely to *"abnormality"*. In the recent *US v Alaska* litigation, Alaska argued that *"permanency related to elevation"* (i.e. whether a feature must be *"permanently dry"* above the ***"higher high-water mark")***, although included in the draft convention at the 1930 Hague Conference, *"never attained the status of traditional and customary law"* because in the 1950s (at UNCLOS I), *"this more limited notion of permanency was deleted from the Convention's definition of an island"*.[154]

The alleged lack of *"established State practice"* on insular tidal datum[155] applies, ***ex hypoyhesi*, equally** to the question of normal tidal conditions. This factor perhaps explains why several States take a **maximalist** approach to the high-tide datum requirement in insular definition (and likewise to the definition baselines generally), as it has an aura of practicality attached to it.

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151 See *supra* footnote 138, at p. 747. But cf Gidel: 701, who indicates that such an elevation need only emerge *"aux plus basses mers de niveau"* ('at the lowest low-tide') rather than *"a chaque basse mer"* ('at each low-tide'); and the strange view of Dipla, 1984: 45, apparently derived from the literal phraseology, that *"Il suffit donc qu'elles decouvrent a la maree* ***la plus basse, pourvu qu'elles restent decouvertes meme si ce n'est que tres peu"*** ('It suffices that they are exposed at the lowest tide, as long as part of them remains uncovered, even if it's very little'); but then she later adds the qualifying phrase *"au moins de temps en temps"* ('at least from time to time')! (*ibid*: 49) [emphasis added, and author's translation]).

152 US Memorandom, 1957: 23, 24. Cf the UK view regarding Bell Rock which is exposed at *neap* low tides, and so not considered an island to generate territorial waters. See Fulton, 1911: 642.

153 *Official* Records, Vol. III, p. 242.

154 Alaska *Reply Brief*: 26.

155 See O'Connell and Shearer, 1982: 85 *("the general issue of tidal datum"* relating to islands is *"unsettled"*).

7.2.2 The *Franco-British Arbitration* Case

In the only truly international litigation[156] which has involved the meaning of 'island' in recent years, the *Franco-British Arbitration* Case, the matter of insular tidal datum was aired in an arbitral setting, but (as mentioned above) not expressly pronounced upon. There the UK had argued that *"mean high-water springs"* determined insularity, whilst at the same time conceding that interpretations other than that of *"mean springs"* were possible to determine the appropriate high-tide level. But the UK alleged that its criterion was the *"only precise one"*.[157] The French contention, on the other hand, was that an island was defined with reference to the level of the **highest annual tide mark**, i.e. the equinoctial tide.[158]

The criticality of the tidal datum in the *Western Approaches* Case was evidenced by the fact that if the French argument prevailed, the highest **natural** part[159] of the Eddystone Rocks was only at most a marginal island, i.e. 0.2 feet above the highest astronomical tide; whereas on the British *"mean high springs"* criterion, it was about 2 feet above high-water.[160] Thus in the French contention the rocks were no more than *"low-tide elevations"*; and there was no difference in customary law between **types of tide** in distinguishing between an island and a low-tide elevation. Unfortunately the Arbitration Court found it unnecessary to determine which view accorded with international law, as it found that France had **recognised** the rock as having a baseline for territorial sea purposes.[161] As shown above, it is always possible for a state to recognise (e.g. by treaty) an otherwise non-conforming entity as an island or, by implication, be found to have to have done so by the doctrine of estoppel. Thus all the Court would say was that it need not determine *"the legal status of the Eddystone Rocks **as an island**"*.[162]

7.3 Mean High-Water Spring Tide, or Mean High-Tide

In the above-mentioned *Western Approaches* Case, the UK maintained that *"mean high-water spring tides"* was the *"practice of many other States"*[163] for insular definition purposes. The *Decision* itself does not give any State survey on this, but certainly it appears

156 Note that a maritime dispute in a federal context such as *US v Alaska (supra)* is almost equivalent to a true *inter-State* dispute insofar as international law governs the legal issues. The latter has been held to be so in the US context in respect of State/Federal claims to seabed under the *Submerged Lands Act* since *US v.California* (1965) 381 US:139, 165.

157 Paragraph 127.

158 *Ibid*, at paragraphs 125, 128. It may be noted in the *Aegean Continental Shelf* Case, Greece argued in similar fashion that an island under Article 10 of the TSC had to be *"dry **at all tides**"*: (VR, CR 76/1:36) (emphasis added).

159 In the last century some of the natural rock had been cut off to make foundations for lighthouses there. This also meant that there were difficulties in determining where the natural rock ceased and the artificial construction began.

160 Paragraph 124.

161 Paragraph 139.

162 Emphasis added. Cf Fusillo, 1978: 47, 51 footnote 9.

163 *Ibid* at paragraph 127.

to be a significant practice amongst English-speaking nations with a common law heritage to adopt this norm.[164]

The US, on the other hand, uses the mean high-water line test, i.e. an *"average height of all the high-water"* at a particular location over a considerable period of time, preferably of 18/19 years.[165] At least one other State directly uses the *"mean high-water"* criterion for insular definition - Kuwait.[166]

7.4 A Suggested Solution

As has been seen from the above, the silence on the issue of tidal datum for insular definition in the relevant international conventions, as well as the diversity of State practice, make it difficult to detect any definite conventional or customary rule on this vital issue. However, it is at least clear that an island must have a sufficient degree of *"permanence"* above high-water in just the same way that a low-tide elevation must have the same status at low-tide. On the other hand, it appears, as seen, that even those States which require apparent absolute permanence of a formation above the most stringent tidal datum - highest astronomical tide - might make allowance for exceptional tidal or atmospheric or barometric conditions[167] - most obviously hurricane, cyclone or seismic conditions - e.g., the tidal wave of Krakatoan proportions - which may temporarily cause an island to fall below high-water. It is implicit, however, in the French argument in the *Western Approaches* Case (above) that an equinoctial tidal level **alone** could not be regarded as *"exceptional"*.

Likewise, those States using the least stringent tidal criterion such as *"mean"* high-water implicitly and necessarily from the very nature of the test, make allowance for similar

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164 See, e.g., the legislation of Micronesia, Ireland, New Zealand Cook Islands, Papua New Guinea, Fiji, and, most recently Belize (UN *Law of the Sea Bulletin*, No. 21, 3) where *"island"* is defined as being *"above water at mean high-water spring tides"*. Australian practice seems inconsistent: *cf* its 1970 legislation with its 1983 Proclamation under section 7 of the *Seas and Submerged Lands Act*, 1973 (fixing new Australian baselines: Commonwealth Gazette, No. 52, 4/2/1983) where in clause 1, the term *"low-tide elevation"* is to have *"the same meaning as in the* [1958] *Convention, but, 'low water'* (and indeed, "low-tide") *is to mean 'lowest astronomical tide'"*. One geographer has criticised this datum (i.e., *"the lowest* [or highest] *level to which tides fall* [or rise] *in a full cycle of 18.6 years under normal atmospheric conditions"*) as a *"difficult datum to find"* and one, for example, that most Australian charts do not use (Prescott, 1988b: 276). And see recently Namibia's practice: UN *Law of the Sea Bulletin*, No. 16, Dec 1990: 18, (low-water line is *"line of lowest astronomical tide"*).

165 See Shalowitz, 1964: 173-4 (Vol.2). The US Coast Survey uses mean high-water as one of its principal tidal datums, but also recognises *"mean higher high-water"*. Note, however, that the leading **domestic** US case - the **Borax** Case *supra* footnote 119 - did not concern application of this test to an **island** in international law.

166 By a decree of December 1967: *"above water at mean high-tides"*.

167 For it seems clear that such a datum presupposes *normal atmospheric conditions* (as Prescott states above *loc. cit*, footnote 163) and so does not take in the *"most extreme levels which may be reached"* as e.g., through storm surges: see O'Connell and Shearer, 1982: 173. For a useful analysis see Wemelsfelder, 1971: 115, 122, who lists such regional and local influences including winds, barometric pressure, storm surges, tectonic movements, sea bed slopes and coastal works. After a cyclone in the Bay of Bengal in 1985, a tidal bore some 15 feet high swamped a former "*island*" which was five feet above high-tide (*The Times*, 29/5/1985). Cyclones can similarly affect small islands in the Pacific; for example, in Tokelau, in 1991, waves swept over an atoll normally a few feet above water; furthermore, the Pacific islands may be the first to disappear if the effects of global warming become severe: see *The Times*,31/7/1991.

exceptional conditions which lead to an abnormal tide in this evening-out process or even to abnormal and temporary erosion **of the formation itself** which causes it to drop (exceptionally) below mean high-tide. This test, however, has a built-in element of impracticality in that a careful 18-19 year cycle statistical survey is (ideally) required and many States may not have this information to hand when a dispute arises. Added problems, of course, arise where it is the variation in **land** height, rather than **tidal** height, that is in question.[168]

It may be argued, therefore, that the two most extreme tests to be found in State practice (**equinoctial** on the one hand, **mean** on the other) may not be so much different in substance as in form; and that consequently, an **intermediate** test, such as mean high spring tide level has much to commend it.

It is clearly impermissible for a State to claim insular status in international law for a formation which is intermittently covered at the appropriate tide (high or low) **by dint of foreseeable and regular conditions, including seasonal ones**;[169] and in this regard it may not be sufficient to monitor just the tidal levels, as in some situations the **horizontal plane** of the so-called island (or low-tide elevation) may also predictably vary, and so seasonally go up (as, e.g., through *"ice push"* in the Arctic[170]) or **down** (just as **tidal** norms may go up and down). It was for such reasons that the phrase *"in normal circumstances"* entered the insular definition as early as the 1930 Hague Codification Conference.[171]

Likewise, where the components of the **alleged above-water aspect of a formation** have obviously temporary (or dubiously terrestrial) surface features - e.g., random boulders or even tall natural vegetation such as a coconut palm[172] - or the formation's height above high-tide is only **boosted in its above-surface appearance by non-terrestrial components lower down** in its structure, e.g., frozen sea ice in polar areas,[173] the formation is not an island in international legal terms.

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168 This was part of the problem in determining the insular status of *"Dinkum Sands"* in *US v. Alaska (supra)*. In that case the joint Alaskan-Federal survey of 'Dinkum Sands' had to telescope the relevant tidal data into a short period and so to incorporate an *"error band"* which Alaska subsequently disputed.

169 See Symmons, *Report*, 1985 (*supra* footnote 8): 43; also Alaska's *Opening Brief* in *US v. Alaska*, where it was admitted that because sea levels in the Arctic were so much higher in the summer season (because of thermal expansion and currents), the disputed formation of 'Dinkum Sands' could be completely submerged in this season, yet still be above mean high-water. If this assertion is correct, it manifests possible defects in a liberal *"mean"* high-tide test.

170 See, e.g., Alaska's Post Trial Brief in US v. Alaska: 22 ("Ice can literally bulldoze or push sediments from below the sea surface to a higher elevation"). Similar processes in the Arctic occur from "*ice rafting*" and sediment crossing shore-fast ice.

171 See Lauterpacht's explanation at UNCLOS I *supra* footnote 115.

172 See Shalowitz, 1964: Vol. II: 176, who mentions the problem of *"marshes"* where grass may rise above the water surface when the ground on which it grows is below the plane of the low-water.

173 Cf the problem over 'Dinkum Sands' in US v. Alaska (supra footnote 8). Sea ice has usually been "assimilated to sea water for the purposes of international law". See Boyd, 1984: 98, 100.

8. The Importance of Locational Permanence of an Island

8.1 The General Rule

The element of *"permanence"* which relates to the above-water (or horizontal) aspect of insular definition may also be said to be applicable in a **locational** (or vertical) sense, i.e., to require that any above-water aspect **remains in the same situation and does not move around**. For it seems clear that whereas baselines may have an **ambulatory element** in them and so change according to natural regressions and progressions of the coastline, the same does not apply to 'islands' in the **definitional sense** (even if it may apply to low-tide elevations which, by definition, are **jurisdictionally linked to such coastline**). For in principle it may be argued that any change in the mainland (or insular) low-water line is never likely to be so dramatic as the total centripetal movement of an 'island' from its original position in respect of generation of maritime zones.[174] So that there is arguably no such thing as an *"ambulatory"* or *"occasional"* island in international law, allowing its owner to use it as a point for jurisdictional purposes whenever and **wherever** it appears at random.

8.2. Analogies with 'Horizontal' Impermanence

As has been seen, it would appear not to be legally permissible for a State to continue to use an erstwhile 'island' as a basepoint once it has finally disappeared under the surface of the sea.[175] There is, however, at least one precedent of a State opportunistically claiming a suddenly-formed 'volcanic' island (a sort intrinsically prone, geologically speaking, to rapid erosion) as a basepoint for a straight baseline system[176]. Such isolated practice **might** indicate that *"the length of time that an 'island' has been in existance may be irrelevant to insular status";*[177] but in such a case there must arguably be a clear prospect of **future** above-surface continuance.[178]

There may be isolated exceptions to this; for example, in the case of features as anchoring points for straight baselines under the new provision in Article 7(4) of the LOSC, which in allowing continued use *"where the drawing of baselines has received general international recognition"*, could apply to a *"lapsed"* islands.[179] But this provision presupposes an element of prior longevity and continuity. This feature would not, for example, be associated

174 See Beazley, 1978: 2: 149.

175 Cf the Alaskan claim in *US v. Alaska*, that the disputed formation, 'Dinkum Sands', was an *"island"* under the TSC *"at all relevant times"*.

176 Iceland in the case of Surtsey: see (1975) 14 *International Legal Materials*: 1282.

177 See Symmons, 1979: 23, 24.

178 *Ibid*: 24. Cf Beazley, 1971: 143, 149 who opines that it would be *"unsatisfactory"* to have unstable formations as basepoints in a straight baseline system, which may *"move considerable distances or disappear entirely as drying features"*. Some new *"islands"* can, of course, keep on growing higher. For example, after the eruption of Krakatoa in 1883 (and its subsequent tidal wave 135 feet high), no less than four islands emerged from its collapsed crater, of which one named Arak *("child of Krakatoa"*, which emerged in 1930) is now 600 feet high and steadily growing: see *The Times*, 16/3/1988.

179 But this provision more probably refers to low-tide elevations with no qualifying installations on them: see Jayewardene, 1990: 74.

with estuarial 'islands' which, like volcanic islands, may come and go at regular periods, as in the Ganges Delta where a number of *"temporary islands"* (*chars*) as well as permanent islands exist.[180] Such new islands tend to form after monsoons in the Bay of Bengal - e.g., South Talpatty/New Moore/Purbasha[181] - may initially have been low-tide elevations;[182] and the horizontal and vertical permanence problem may here be conflated. For example, it is unclear whether the above-mentioned dispute between India and Bangladesh concerns a 'recycled' formation or an entirely new one.[183] New volcanic islets may behave in a similarly volatile manner.[184]

In general terms, it is evident from the new wording (in Article 7 of the LOSC) that an evanescent or vanished insular basepoint cannot be retained indefinitely, at least in a straight baseline system; for Paragraph(2) thereof decrees that where a coastline is *"highly unstable"* because of the presence of a *"delta"* or *"other natural conditions"*, the appropriate points may be selected along the *"furthest seaward extent of the low-water line"* and *"notwithstanding subsequent regression of the low-water line**, the straight baselines shall remain effective until changed by the coastal State**"* in accordance with the Convention (emphasis added). This could apply to unstable off-shore **islands** such as deltaic islands or even such features as off-shore coral reefs where above-surface features may often disappear,[185] and **implies an eventual duty to revert to an acceptable basepoint if such insular disappearance occurs**. By analogy, it can be argued that Article 10 of the TSC (and the corresponding article of the LOSC) *a fortiori* requires locational permanence in the case of an 'island' not part of a straight baseline system,[186] and a feature that is *"here today and gone tomorrow"* hardly satisfies the test of permanence whether in a horizontal or vertical plane.

8.3 Visibility to the Mariner

Several authorities emphasise the necessity for **visibility** of a formation to create navigational certainty. And this principle applies with equal force to locational impermanence.[187] Indeed, where horizontal and vertical impermanence go in tandem, practical considerations relating to navigation seem to be influential on the international legal rule in allowing certainty for mariners fixing in fixing their bearings. For were the rule otherwise, there would be no

180 Rahman, 1991: 270.

181 *Ibid*: 273.

182 *Ibid*: 278.

183 *Ibid*: 280, 281.

184 See Fredricksson, 1975: 26, 29, 31, where he points out that parallel with the eruption on the (Icelandic) island of Surtsey, *other* volcanic activities took place in the area from 1963 to 1966, leading to the formation of no less than two temporary *"islands",* neither of which could stand up to the North Atlantic waves; so that now the latter formations are some 20 to 40 metres beneath the surface.

185 See Prescott 1981: 492. Cf the Alaskan "fall-back" argument in US v. Alaska No. 5 of the Joint Statement of Questions Presented and Contentions of the Parties (1979: 14), *"Alternatively... Alaska claims that it is entitled to the resources of the Dinkum Sands formation... for such periods as the formation is determined to be above the level of mean high-water"*.

186 See Johnsnon, 1951: 203, 214; and Symmons, 1979: 23, 24.

187 US Reply Brief in *US v. Alaska*:7. But note that Alaska cited the *Anna* case as indicating in the US context that *"the ephemeral islands and mudlumps off-shore the Missippi Delta have been recognised for both international and domestic boundary purposes"* despite the fact that they can be called *"moving islands"* and *"frequently disappear only to emerge elsewhere"*.

knowing whether it is the same or a different formation (or formations) which is/are moving around[188] - a matter which has also been a problem in municipal law cases.[189]

It seems therefore that there is no such thing as an *"ambulatory island"* in international law. There must be a sufficient degree of horizontal and vertical permanence.

9. Conclusion

What does appear clearly from the above brief (and admittedly selective) survey on insular definition is that international law does here require permanence as to the horizontal plane (i.e., above-tide) elevation and also (but more arguably) as to the vertical plane aspect (i.e., position on the seabed). So that, for example, if a formation loses either (or both) aspects of such permanence, it can no longer legally qualify as an 'island' (or, probably, as the case may be, as a low-tide elevation). The first element in this two-pronged requirement of permanence should be gauged not simply, as seen, in terms of tidal datum, but also in terms of the **formation's** changing height in the light of natural forces which cause it to **lose (or gain) elevation**. Because, in turn, of this possible two-fold consideration, it may be necessary in the monitoring cycle not just to gauge the tidal situation in the area of the elevation, but also of the latter's vital **above-surface** terrestrial characteristics.

On the tidal datum aspect, one attitude of commentators has been to conclude that, in the light of lack of clarification from caselaw or State practice, one must conclude that the solution has been *"abandoned by international law"* to the free appreciation of States.[190] Such a view is a prescription for international anarchy. International law should have a rule. As it seems contrary to the general principle of *"permanence"* that a formation which is covered by sea with **any degree of foreseeability and regularity** should merit consideration for generating maritime zones, there is, no doubt, some case to be made for a maximalist type of test for islands - such as seen in French practice - which categorises insular qualities according to the highest tidal criteria (astronomical tides) (and likewise a minimalist test for low-tide elevations); but this in turn has elements of impracticality attached to it.[191] It seems clear from what little past practice and commentary there has been on this issue, that such a 'maximalist' test has some inherent flexibility, and would make allowances for **exceptional natural conditions**, most obviously freakish atmospheric conditions as mentioned above. ***A fortiori***, such a qualification would be built into a less extreme (or 'minimalist') insular test such as **mean** high-tide datum, though here the 18-19 year monitoring aspect leaves scope for subjective analysis (and may, as in *US v Alaska*, have to be telescoped into a far shorter period).

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188 US *Post Trial Memorandum* in *US v. Alaska*: 28.

189 See, e.g., *Randolph v Hinck* (1917) 115 NE Reporter: 182 where it was held that the plaintiff did not lose title to an island by the mere fact that it was totally submerged at one time where the island *reappeared and was capable of identification by its original description*.

190 As translated from Dipla, 1984: 48. Similarly it has been suggested that for **baseline** purposes, Article 5 of the LOSC *"avoids a direct definition of the low-water mark"* and that this *"merely places responsibility for low-water definition on the accepted practice of each maritime State"*, Aurrocoechea and Pethick, 1986: 29.

191 See Prescott, 1981: 276 (*"a difficult tidal datum to find"*).

In light of the above, there is much to be said for choosing an intermediate tidal datum test, such as that of **mean spring tide**, as the international rule. Such a test appears to take on aspects of both more polarised tests. The latter, because of the provisos attaching to each, may arguably differ less in substance when applied to particular cases. Indeed, there are some signs in recent State practice that States with such opposing tidal criteria may in any case be inclined to **compromise on this issue** by applying an equitable solution to a dubious above-water formation so as to reflect, **in part** at any rate, **both** disputants' viewpoints.[192]

It follows from this brief survey that, as argued above, even a formation which may formerly have had the requisite permanence, on the basis of whatever test is applied, may lose this; so that at the critical time for deciding its maritime zones - or even thereafter - such **definite** loss[193] for the future (e.g., through weather or tidal conditions), will **then** necessarily disqualify it from having any (further) jurisdictional effect for the owning State unless, as seen above, there is mutual agreement - explicitly or implicitly - to the contrary with other affected States in the matter. For there is no such thing as an occasional (or peripatetic) 'island' in international law. Recent State practice supports this viewpoint on acceptance of geographical realities. For example, when during UK-Belgian talks on basepoints for maritime delimitation in the English Channel, a routine survey found that the British-claimed basepoint of Shipwash Sands *"had been eroded by the sea to the extent that they no longer counted as* [low-tide elevations]",these were *"formally abandoned"* by the UK.[194] Thus the temporal factor relating to insular status may, for example, be critical in maritime delimitation by treaty because applicable *"geographical features"* such as islands may only be taken into account **as they exist at the time on inter-State negotiations**, with the result that any changes thereafter will not be taken into account in fixing a maritime boundary.[195]

192 As in the case of the twin Belgium-France agreements on delimitation of (respectively) territorial sea and continental shelf signed on 8/10/1990: see Anderson, 1992: 416, where (in the first territorial sea delimitation agreement) by application of the two different datums, two initial dividing lines were produced, both based on the equidistance method, and where (as Article 2 thereof states), "[it] *was agreed that the area lying between the two dividing lines should be divided into two equal parts"*. A compromise was also reached on this matter in the second (continental shelf delimitation) agreement; see Anerson ,1992: 417.

193 See Symmons, 1979: 24.

194 Anderson, 1992: 418.

195 *Ibid*: 421.

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