United Kingdom of Great Britain and Northern Ireland recommendation - UK (ECS ID-1100)

Ascension Region

Ascension Island, a UK overseas sovereign territory, is the sub-aerial expression of a volcanic seamount located in the central Atlantic Ocean, between the Ascension and Bode Verde Fracture Zones (Figure 1). The island sits on 7 Ma oceanic lithosphere that was created at the axis of the MAR by seafloor spreading. It appears that the volcanism that formed the island started near the spreading centre. The sea floor slopes away from the top of the MAR about 0.1-0.2°towards the Brazilian Abyssal Plain in the west and the Guinea Seamount Chain in the east. These gradients are consistent with normal cooling and subsidence of oceanic lithosphere.

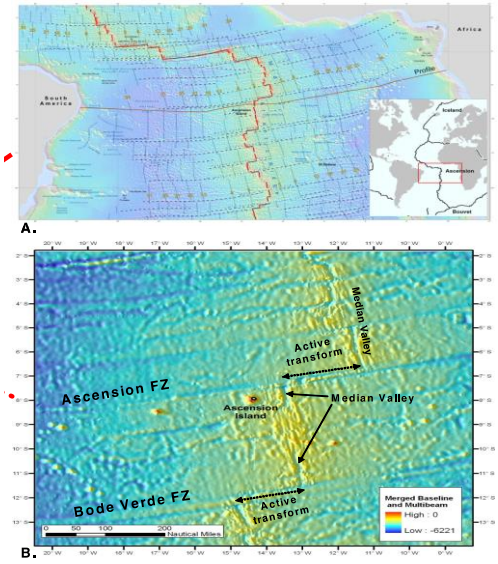

Figure 1. Locality map of the Ascension Island region. A. Bathymetric map of the South Atlantic Ocean showing principal physiographic features, major tectonic and geophysical elements.

The UK relied on the application of natural prolongation to support the delineation of an extended continental shelf. The state did not consider the natural prolongation could be defined according to article 76 rather could only be determined through full analyses including geology, geophysics, and morphology. The state also used contextual information from article 76 paragraph 7.2.8, “Some ridges (including active spreading ridges) may have islands on them. In such cases it would be difficult to consider that those parts of the ridge belong to the deep ocean floor”. With this evidence an argument was made that Ascension Island is located in a region that can be classified as a submarine ridge or submarine elevation and not part of the deep ocean floor.

The sub-commission agreed that Ascension Island cannot be considered part of the deep ocean floor and its natural prolongation extends to and along the MAR. The sub-

commission also agreed that the region does not form a typical continental margin. The sub-commission also agreed that the crustal structure of Ascension Island differed from the surrounding ocean floor although the volcanism was associated with the spreading center, the main phases of construction of the island occurred at a substantial offset from the ridge.

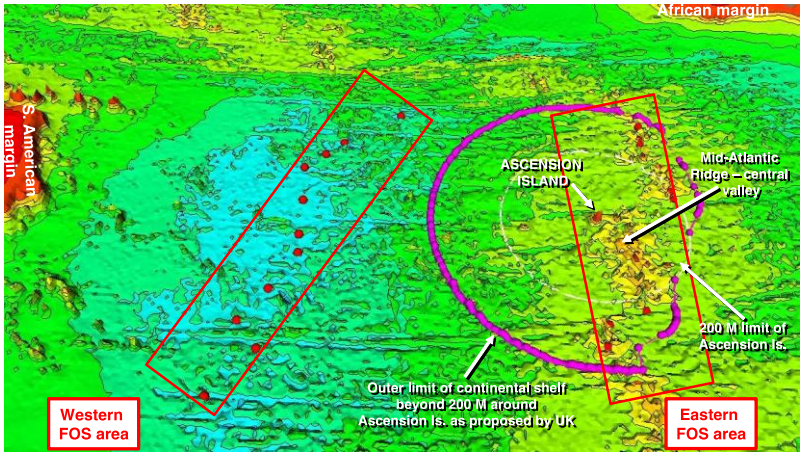

Figure 2. FOS points - red spheres on the ocean basin floor to the west of the Mid-Atlantic Ridge (MAR) and within the central valley of the MAR to the east of Ascension Island. While 200 M limit line around Ascension Island and the outer limit of the continental shelf beyond 200 M shown as magenta spheres and lines.

Foot of Slope Points

The UK located the FOS points in the western region where the westward-dipping seafloor meets the deep abyssal plain of the South Atlantic Ocean - ~600M from the baseline of Ascension Island. In the eastern region the FOS are were located on the western edge of the axial rift, based on geological and morphological evidence. Thus, the UK considered Ascension Island to be an integral component of the MAR and that its natural prolongation extended along the MAR – see FOS points in Figure 2. However, the Commission did not agree on the state's approach to determining the base of slope and therefore the region did not satisfy the test of appurtenance. The Commission declared that Ascension Island sits directly on the deep ocean floor and therefore the FOS points should be located at the base of the volcanic edifice of the island. FOS points there would not generate any ECS. No FOS points suggested by the UK were accepted and as a result, no ECS was recommended.

Issues

The Commission took the view that both the MAR (with its central valley, rift shoulders and flanks that dip at 0.1 – 0.2 degrees away from the central spreading axis) and the adjacent ocean basin belong to the deep ocean floor of the Atlantic Ocean and not the continental shelf of Ascension Island.