

not, the average per capita income in Spain is only about £270 in spite of a fairly fast economic growth for several years now. So far, the attempts to suppress these committees have served to unify their members, whose sympathies range from Christian socialism to Trotskyite communism and anarchism.

CONTINENTAL SHELVES

More Coast—More Sea Bed?

By eleven votes to six, the International Court of Justice at the Hague has recognized that West Germany's concave coastline puts her at a disadvantage compared with the Netherlands and Denmark when the North Sea continental shelf is divided up geometrically, according to principles defined at the 1958 Geneva Convention, and has ruled that the boundaries should be redrawn by agreement between the countries, taking into account factors such as the length of the coastlines.

The dispute between Germany and her neighbours has been simmering since 1958 when the Geneva Convention made a ruling that lines drawn perpendicular to the coast should delimit the areas of continental shelf belonging to each country. As the map shows, this kind of division is unfavourable to Germany, and the International Court, delivering judgment on Germany's claim for a bigger area, held that such geometrical division is not a rule of customary international law and that the area must be partitioned according to "equitable" principles. Each country has "an original right to those areas of the continental shelves which constitute the natural prolongation of each nation's territory into and under the sea", but other factors such as usage of the ocean and the capability of a country to exploit the sea bed should be considered.

As well as establishing an interesting legal precedent—this is the first case of its kind to be brought before the International Court—this decision may have industrial repercussions. International oil and gas exploration companies operating in the United Kingdom sector and with concessions in the Dutch area may be affected by the pending boundary changes. British Petroleum Ltd has two blocks almost on the median

line dividing the German and Dutch sectors, and this may cause some argument, although concessions that have already been granted in transferred areas are usually automatically recognized. The verdict is also likely to initiate litigation in other offshore oil and gas exploration areas, such as the Persian Gulf where the boundaries are in dispute.

Although the law of the continental shelf has to some extent been clarified by the Geneva Convention, which is intended to be a declaration of customary international law on the subject, it is still, like the law of outer space, somewhat breathlessly trying to keep pace with technology. The continental shelf, for example, has been defined as the sea bed adjacent to the coast to a depth of 200 metres or "to where the depth of the superadjacent water admits the exploitation of the natural resources of such areas" so that lawyers are now trying to get international agreement on a law for the exploitation of the deep seas to avoid a situation where the world's oceans are divided up between countries with the technological expertise to explore the sea bed at progressively deeper levels.

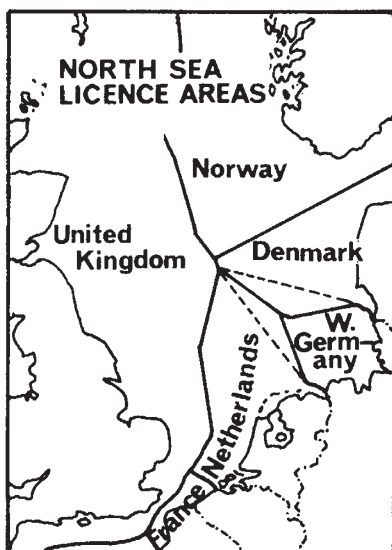
Since the General Assembly in 1967, when the Maltese delegation first suggested that the sea bed beyond the limits of national jurisdiction should be reserved for peaceful purposes and its resources used in the interests of all mankind, the United Nations has been considering the problems involved. A committee was set up in 1967 to consider whether the ocean floor should be reserved for peaceful activities and what exactly the resources of the ocean floor may be, and this reported to the General Assembly last year. A permanent committee has now been set up to consider the report and to discuss, among other things, the possibility of setting up a permanent international body with complete jurisdiction over the sea floor.

ENERGY

Last Hope for Coal

THE British coal industry has the very best of incentives for technological change. Without it, it is doomed to play the part of a poor relation, supplanted by the glamour of nuclear power, oil and even gas. One of the more substantial straws at which the industry has been clutching is provided by a new method of burning coal which is under development in a number of centres in Britain and the United States. The new method offers better heat efficiency at a much lower cost than conventional coal boilers, and it is by no means hard to see it as coal's last chance of retaining a part of the electricity generation market.

Instead of burning coal in a solid grate, the new method makes use of a bed of ash, turned into a fluid by air flowing upwards through it. (The principle is exactly that demonstrated to generations of schoolchildren at the Royal Institution by Sir Lawrence Bragg. A rubber duck is immersed in a barrel of sand, while a steel ball-bearing rests on the surface; air is blown through the sand, giving it the properties of a fluid, and the ball-bearing sinks while the duck floats to the surface.) Into the bed of ash is injected finely divided coal, which disperses rapidly through the bed as it burns in the stream of air. The heat generated is extracted by boiler tubes which pass through the bed itself, an arrangement which gives very high heat extraction rates and keeps the temperature down to



Dotted lines show possible extension of German zone.