

ANNEX XII

OFF-SHORE PLATFORMS

- I Dismantling an oil or gas platform is fairly simple**
- II But is a long, costly process**

Annex XII

Off-shore platforms

This annex sets out to present some elements of thought on the issue of dismantling industrial facilities, and to draw lessons from this reflection which could be applied to the demolition of ships which have reached the end of their operating lives.

The outcome of our visits is that, in Europe, most demolition sites dismantle industrial facilities as well as conducting ship demolition, and often the former activity accounts for a greater proportion of their operations since there is a shortage of ships to be broken up.

There are several reasons for this:

- merchant ships are dismantled outside OECD countries mainly for cost reasons: the Asian dismantling sites which hold more than 90% of the market in this sector of activity are without doubt the least expensive, even if they do not always pay heed to the environment or to the safety and health of workers on their sites;
- the number of naval ships to be dismantled is low, and their demolition does not warrant the heavy investments which would be required to make this activity profitable; also it would appear that the navies in all the OECD countries are facing difficulties in planning the withdrawal from active service of government-owned ships, which does not allow for a rational management of the ship dismantling activity;
- finally, it is to be recalled that the dismantling of ships requires fairly expansive sites which are hardly attractive, compelling dismantlers to choose sites far away from populated areas to avoid the discontent of local residents.

The dismantling of platforms is less complex but more costly than for ships; it cannot therefore be similarly organised.

I. Dismantling an oil or gas platform is fairly simple

The chief problem lies in transport. A ship can be towed since it is generally still able to navigate, whereas a platform remains on site: its parts must therefore be removed one by one which assumes the use of special barges of which some are highly expensive (\$100 000/day). The platform pillars have to be cut at sea, which is also a costly operation.

On the other hand, the parts to be dismantled are generally fairly clean, only containing oil residues (gas being volatile by nature) which can be cleaned on site.

Finally the superstructures of the platforms, consisting of crew accommodation and pump installations, are brought back to shore for sale, demolishment or recycling.

II. But is a long, costly process

In addition to transport costs using special barges mentioned above, oil and gas companies must maintain a good trade mark image which compels them to pay strict heed to international and local regulations for the protection of the environment and the safety of personnel working on the dismantling of production facilities; also they generally have their platforms demolished in OECD countries.

Oil companies attach particular importance to their image and fear the reaction of public opinion which may go as far as boycotting their products, as was the case when SHELL initially planned to leave its "BRENT SPAR" platform to drift, and was then compelled to have it properly dismantled when confronted by the hostility of environmental protection NGOs which had threatened to launch an appeal to boycott this company's products.

In addition, the choice of sites in countries which pay particular heed to standards for protection of the environment and the health and safety of workers, means that dismantling times are lengthened even further in order to observe local working time regulations: in Norway, it took nearly one year to dismantle the Stord site and to recycle 30 000 tonnes of scrap.

Under these conditions, the costs incurred are extremely high and out of reach for governments or maritime operators: for example TOTAL has entered into a 10-year contract with the Norwegian dismantling site AKER KVAERNER to demolish the gas production platforms at the FRIGG natural gas field, which has now run dry, for the total sum of \$500 million which no State other than the USA or Japan is prepared to lay out.

To summarise, the dismantling of industrial platforms is an activity which is similar to ship demolition, the equipment, techniques and methods often being the same: it cannot be excluded therefore that a platform dismantling company could also handle ships should the need arise.