

# **ANNEX III**

## **DISMANTLING SITES IN EUROPE AND THE OECD**

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### Dismantling sites in Europe and the OECD

#### I. Sites in activity.

##### Van Heyghen – Gand – Belgium:

This site is located in Gand port and is accessible for large-size vessels (10 to 12m draught) navigating from the Escaut river, and then the Gand canal through the Terneuzen sea lock. It usually dismantles small river or sea vessels (fishing vessels and ships up to 5000 tonnes) but is capable of handling larger ships. The site has 600 m of quayside and is set up in a metal recycling unit belonging to the same group (Galoo) providing it with the benefit of on-hand skills, treatment equipment (cutting, handling equipment,...) and with shipment and marketing facilities for the scrap produced. It has long held all necessary licences and permits from the Belgian State for ship dismantling and recycling.

The total workforce on the site is approximately 40 persons. It has the capacity to treat a maximum quantity of 120 000 ship lightweight tonnes per year. It holds ISO 9001 certification and meets the requirements of regulations governing facilities subject to environmental protection. In the past this site took part in the dismantling of the “Tricolor” ship.

##### Scheepssloperij – s’Gravendeel – The Netherlands:

This site lies on a sea canal around twenty kilometres south of the port of Rotterdam and is accessible from the sea with no lock, for draughts of no more than 10 to 12 m. It is located close to industrial and port facilities of the Rotterdam conurbation. The ship demolition site shares its industrial premises with HKS, a metal recycling company which directly treats all products derived from the s’Gravendeel shipyard in addition to its own production of land scrap. The demolition site holds all Dutch State permits to conduct ship dismantling and recycling operations. Its permits are renewed periodically and the site comes under the supervision of the Dutch authorities, in particular the river authorities. It meets equivalent regulations in the Netherlands for facilities subject to environmental protection. It usually handles small sea or river vessels, but in 2005 and 2006 dismantled two frigates of the Dutch royal navy.

In collaboration with two other partner sites in Belgium and the Netherlands, the management of the Scheepssloperij site claims it is able to treat 120 000 tonnes of ships per year. It is a highly mechanised site using synergies with the demolition yard which recycles land scrap. Operations start with prior removal of a maximum quantity of pollutants from the ship, then proceed by cutting in successive layers, with the ship afloat, assisted by highly mechanised equipment. The bottom shell of the ship used to collect effluent throughout the cutting operations is then drawn up onto a metal slipway and drained before being devoured from the front end by hydraulic ripping machines.

##### Danish sites

Denmark has two permanent dismantling sites for small merchant or naval ships and large fishing vessels. These are the Fornæs site in the port of Grenaa which can handle ships up to 100 m in length, and the Smedegaarden site in the port of Esberg which is compatible with vessels up to 160 m in length.

The Fornæs site has treated a substantial supply of around 600 ships of different sizes since 1993. This site is associated with a metal recycling site located close to the ship dismantling site. On average it handles approximately forty ships per year.

The Smedegaarden site treats an average of fifteen or so merchant vessels or offshore units per year.

These two sites have a continuous dismantling activity and hold all permits and authorisations to treat generated pollutants and waste. Aside from the recycling of structural metal from these ships, these sites have specialised in the resale of second-hand power generating, propelling and handling equipment towards the European market but especially to South-East Asia.

Subare - Klaipeda - Lithuania:

This is the only company which carries out the dismantling of ships of all tonnages in Lithuania. For some dismantling contracts it hires floating docks. It is currently in charge of dismantling several Russian warships. Dismantling is conducted paying heed to environmental protection rules. The treatment of asbestos is delegated to a certified Lithuanian company. Most of the scrap produced is exported after being crushed.

ESCO Marine Inc. and International Shipbreaking Ltd –Brownsville –Texas – USA:

Out of the nine sites initially certified by the American authorities (7 by MARAD and 2 by the US navy) to dismantle government-owned ships, only seven are still in activity. The two leading qualified sites which dismantle combat ships are located in Brownsville in Texas, either side of a large sea canal opening into the Gulf of Mexico. These two sites lie close to the Mexican border which accounts for the origin of a substantial part of the workforce. Each breaking yard in Brownsville employs around 200 persons. These sites have average mechanisation and frequently dismantle ships exceeding 20 000 tonnes in compliance with the environmental and industrial employment rules in the State of Texas.

Aliaga shipbreaking yards – Turkey:

The Aliaga site, lying on the coast of the Aegean Sea north-west of Izmir, is the site on which all the Turkish shipbreaking facilities are concentrated. Around thirty breaking yards on this site belonging to twenty companies dismantle naval and merchant ships. The maximum annual production of all the facilities combined is apparently in the region of 650 000 tonnes which are easily absorbed by nearby steelworks which engulf over 6 million tonnes of land scrap every year. These shipbreaking yards have true skills and capabilities to treat large complex vessels as well as smaller ships.

By comparison with European shipbreaking yards, the Turkish sites are less mechanised. Standards of organisation, heed of the environment and worker safety are not uniform throughout these dismantling sites. Some breaking yards are making great efforts for improvement and already hold certifications such as ISO 9001, ISO 14001 and OHSAS 18001. The worksites are supervised by the Turkish maritime authorities and are equipped to take in charge PCBs and asbestos.

## **II. Potential dismantling sites**

Simont – Naples – Italy:

Located in the port of Naples, this breaking yard rents the quaysides or port docks for its dismantling activity. At the end of the 90s this site dismantled Italian warships having a displacement of up to 6000 tonnes. Since this date, as the Italian navy has not scrapped any ships, it has not dismantled any naval ships. However this company, which continues its factory and infrastructure dismantling operations, says it is capable of resuming shipbreaking activities whenever needed, as it has maintained intact the necessary skills and equipment.

The Italian navy is expected to dismantle several naval ships in the near future which could be awarded to this company. The Simont site has ISO 9001 (2000) certification for ship dismantling operations.

#### Swan Hunter – Newcastle – United Kingdom:

The chief activity of this company was initially the building and conversion of civilian and naval ships and of oil platforms. It started taking an interest in the dismantling of North Sea platforms from 1996 onwards. The company applied for and obtained a first permit for this new activity from the relevant British authorities.

#### Harland and Wolff – Belfast – United Kingdom:

This naval and offshore shipbuilding facility has gigantic equipment and infrastructure and very extensive skills, making it compatible with a very broad range of related maritime activities including ship dismantling. Following after a substantial fall in the workload of its shipbuilding activities in recent years, this company *inter alia* has started investigating the market for ship and oil platform dismantling. It has applied for a licence from the British authorities.

#### Able UK – Hartlepool -Teesside – United Kingdom:

Historically this company was engaged in shipbuilding and the construction of oil platforms before it entered into the sector of offshore platform dismantling which it conducted up until the end of the 90s. Faced with a drop in this activity in the United Kingdom it then attempted to focus on the dismantling of ships. This led to applying for a new licence which caused the company to lose its initial dismantling licence for the site in Hartlepool. A new licence application was made by this site to the British authorities but has so far not been successful. In autumn 2006 it received an unfavourable reply from the local authorities for this licence. It is to be noted that the company has a recycling contract with the American administration for thirteen ships, of which the four first ships arrived on the site in 2004.

#### Aker Kvaerner –Stord – Norway:

The offshore oil platform building and conversion site belonging to Aker Yards in Stord Norway has extended its activities in recent years to the dismantling of oil platforms. Its operations in progress cover the dismantling of several ten thousand tonnes of metal installations over a three year period. Although this site does not currently conduct ship dismantling operations, the skills and equipment needed for ship dismantling are identical to those already deployed by this site for offshore oil platforms.

#### Ecodock – The Netherlands:

Plans for a shipbreaking facility called Ecodock have existed in The Netherlands for several years for the purpose of setting up their own, highly mechanised ship dismantling site while keeping to acceptable production costs. These plans have apparently already received financing from the Dutch authorities and from the European community, but nothing has materialised so far. No industrial site has been determined for the time being.

#### Spanish shipbreaking facilities:

In the past several Spanish sites have recycled ships of generally limited size, both on the Mediterranean coast (Cartagena region) and Atlantic coast (in Gijon and Ferrol in particular). However this activity is related to the short-term economy and is essentially based on the existence of naval ships to be dismantled or the unseaworthiness of small merchant or fishing vessels. These breaking yards can be reactivated at fairly short notice.