



Sunk Costs: The Plan to Dump the Brent Spar

On February 16, 1995, the British Energy Minister, Tim Eggar, approved plans by Royal Dutch Shell to sink their Brent Spar oil storage installation deep in the ocean, 150 miles off the northwest coast of Scotland. It would mark the first time that an offshore oil platform of this kind would be disposed of at sea. A concerted campaign to stop the sinking of the Spar began on April 30 when a group of activists from the ecological pressure group, Greenpeace, scaled the abandoned platform. In less than two months it became a major international flashpoint at the Group of Seven (G7) Economic Summit in Canada. By June 20, the Greenpeace campaign had resulted in a boycott of Shell stations across northern Europe, with politicians, industrialists and trade unionists clamoring to express their indignation. European parliaments debated the issue while the German Police Federation and a big retailer joined in the public boycott.

Despite an impressive array of scientific evidence to support official approval, public perception to the contrary forced Shell into a humiliating recant of its position. Unwilling to risk the continued loss of its dominant market share in its retail gasoline business, Shell bowed to public and political pressure abandoning its plan to sink the floating oil installation. The Spar was towed back to a fjord in Norway. Two months later, Greenpeace held a press conference and admitted to vastly overstating the environmental impact that the Brent Spar sinking would have caused.

North Sea Oil and the Brent Spar

First tapped in 1971, the oil bearing geological structures beneath the North Sea constitute one of the largest proven oil reserves in the world. Divided between Britain, Norway, Denmark and the Netherlands the area produced 5.57 million barrels per day in 1994.

Despite 20 years of production, new reserves of oil have been discovered in the UK sector of the North Sea due to advanced exploration methods. Today, it is estimated that there are over

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21.5 trillion barrels of oil remaining, even while more than 2.6 million barrels are pumped out each day at an average price of \$16.50 per barrel. North Sea oil brought \$6 billion dollars in royalties and taxes to the British Treasury in fiscal 1994-1995 and accounted for about 1.6 percent of the country's total revenue.

Tapping the seabed required varied technology in the form of deep-water installations like the Brent Spar. The Brent Spar was just one of 6,500 offshore rigs worldwide and one of a total of 416 oil platforms in the North Sea. In the British sector there are 219 offshore installations. Fifty three of them are deep water oil platforms due to be decommissioned over the next 10 years in order to comply with International Maritime Organization guidelines which call for complete removal of structures weighing less than 4,000 tons and standing in less than 75 meters of water.¹ Fifteen of these structures have been put forward for immediate UK Government approval for abandonment.

The 462-foot tall, 14,500 ton Brent Spar installation posed unique problems because it was one of the few structures to contain storage tanks which acted as a vital staging post for the export of crude oil from the area via tanker until a pipeline was commissioned in 1978 to take the oil directly to land. These tanks accumulated toxic residues and radioactive waste. Like an iceberg, most of its bulk, mainly the six segmented storage tanks, was beneath the water's surface.

Royal Dutch Shell

The Brent Spar was jointly owned by Shell and Esso UK, the British subsidiary of Exxon Corporation, the largest US oil company.² Royal Dutch Shell has for a long time been considered one of the world's most impressive companies. Operating in 132 countries with 104,000 personnel, it posted a net profit in 1995 of \$6.9 billion dollars on sales of \$109.8 billion dollars, making it the largest company in the world based on profits, and the biggest in Europe based on turnovers and market capitalization. It ranks evenly with the US-based Exxon as the leading oil company in the world.

In spite of the slump in oil prices in the mid-1980s, Shell's return to shareholders over the past 10 years outperformed both the stock market and most of its competitors, including such giants as British Petroleum, Exxon and Texaco. With world energy demands expected to grow as much as 70 percent over the next 30 years, Shell is well placed to remain one of the market leaders. In a June 1995 poll by the *Petroleum Economist Magazine*, Shell was rated as the best managed oil

¹ The UK Offshore Operators Association estimates that the total costs of decommissioning the 53 offshore oil installations will be approximately \$2.25 billion.

² Esso, was deeply bruised in the public's mind by the Exxon *Valdez* oil spill off the coast of Alaska in 1989.

company.³ Alongside two other companies of mixed parentage, Asea Brown Boveri and Unilever, it is often held up as a model for managers of multinationals.

The Royal Dutch/Shell Group of companies grew out of an alliance made in 1907 between The Royal Dutch Petroleum Company in the Netherlands and The Shell Transport and Trading Company, p.l.c. in the United Kingdom, by which the two companies agreed to merge their interests on a 60:40 basis while keeping their separate identities.

Today, these two entities are public companies in their own right which directly or indirectly own shares in the three Group Holding Companies, (Shell Petroleum N.V., Netherlands, The Shell Petroleum Company Ltd., UK, and Shell Petroleum Inc., USA) but are not themselves part of the Group. Eleven group service companies and 132 operating companies in countries around the world report to the management of the Group Holding Companies in the Netherlands and the UK. There are about 295,000 institutional and private shareholders of Royal Dutch and some 300,000 of Shell Transport. Shares of one or both companies are listed and traded on stock exchanges in eight European countries as well as in the US.

Since the 1950s The Royal Dutch/Shell Group had operated under a "matrix" structure invented for it by McKinsey, the management consultancy firm. Each operating company reported to the one boss supervising the region, and to another responsible for explaining global corporate policies on issues such as, the environment, internal codes of conduct and employment practices.

The matrix system encouraged operating companies to make decisions themselves rather than referring them back to the center. By contrast with other oil companies, there was no apparent head. Cornelius A.J. Herkstroter, president of Royal Dutch and chairman of the committee of managing directors, the group's most senior decision making body was considered a "leader among equals." Throughout the senior levels of the company, decision-making followed the same pattern of debate and consensus.

At the stage of the operating companies the reverse was true. Chiefs of operating companies were akin to local barons, free from interference from above. In part, this is because the matrix meant that many decisions could only be taken locally, but it also reflected the fact that Shell stressed the benefits of decentralization to its employees. Regional bosses, it was frequently emphasized, had more knowledge of local regulations and consumer tastes. With oil and gas markets changing from hour to hour, they also needed the freedom to act quickly.

Environmental hazards were nothing new to the management of Royal Dutch Shell. Since 1984, Shell Oil, its subsidiary in the US, has been named, along with other co-defendants, in numerous product liability cases, including class actions, involving the failure of plumbing systems

³ *Petroleum Economist Magazine*, UK, September 1995, pp. 12. Royal Dutch Shell received 193 votes, followed by British Petroleum with 151 and Exxon with 121.

in the United States constructed with polybutylene plastic. Shell Oil provided the resin to make this pipe. In addition, Shell Oil is currently also a party to litigation regarding Nemagon, an agricultural chemical containing DBCP (dibromochloropropane) manufactured and sold by it from 1955 to 1977 in pesticides.⁴ In 1995, the United States government and Shell Oil entered into a court approved settlement with respect to environmental claims at the Rocky Mountain Arsenal where Shell Oil engaged in chemical manufacturing from 1952 to 1982.⁵

Greenpeace

Greenpeace was founded in 1971, when a small group of people set sail in a fishing boat from Vancouver, Canada, to express their opposition to US nuclear testing by "bearing witness" at the test site on the Aleutian island of Amchitka. The Greenpeace ethic is derived from the Quaker philosophy not only to personally bear witness to atrocities against life but to take direct action to prevent them. The organizational handbook states: "While action must be direct, it must also be non-violent. We must obstruct a wrong without offering personal violence to its perpetrators. Our greatest strength must be life itself and our commitment to direct our own lives to protect others."⁶

By the early 1990s, Greenpeace operated in 32 countries, linked by e-mail and fax. It had seven ocean going ships, the most noted of which was called the "Rainbow Warrior II."⁷

In 1994, Greenpeace had an annual income of \$130 million dollars from its 3.1 million supporters world-wide, down from the peak of \$179 million dollars and 4.8 million supporters in 1991. It is currently the world's largest environmental non-government organization (NGO) and has earned observer status on 25 international bodies.

Greenpeace lists as its "successes" a number of major campaign issues that have affected public and governmental attitudes. These include:

- Reducing the kills of seal pups to one-tenth of previous levels.
- Ending the dumping of nuclear and toxic waste into the world's oceans.
- Closing loopholes in the Basel Convention banning toxic trade.

⁴ *Royal Dutch Shell 1995 Annual Report*, pp. 50. DBCP was banned in the US in 1977 after being suspected of causing sterility and cancer. In California the claims involve alleged contamination of water wells. In Texas the suits are brought by agricultural workers who alleged harm from exposure to DBCP outside the United States.

⁵ Pursuant to the final settlement, Shell has agreed to pay 50 percent of amounts expended for remedial costs and natural resource damages up to \$500 million; 35 percent of expenditures between \$500 million and \$700 million; and 20 percent of expenditures in excess of \$700 million.

⁶ *Greenpeace New Zealand Handbook 1995*, pp.1.

⁷ The original Rainbow Warrior was sunk in Auckland Harbor in 1985 by French commandos because of Greenpeace's protest of French atomic tests in the South Pacific.

- Stopping nuclear testing by all nations in the Pacific.
- Stopping large-scale drift netting, a practice that threatens dolphins and many other marine creatures.
- The 1991 decision to impose a 50-year ban on mining in Antarctica.
- The signing of the UN Climate Change Convention by 157 countries.⁸

Greenpeace International allocated about half of its \$33 million dollar annual budget and 25 percent of staff time to contingencies such as the Brent Spar campaign. In many ways, Greenpeace's management structure paralleled that of Shell. Most decisions were taken locally. National offices, rather than Greenpeace International's headquarters in Amsterdam, conducted campaigns on national pollution issues and were responsible for building contacts with national politicians and journalists.

Yet when necessary, Greenpeace could act like a centralized organization. At any moment, Greenpeace ships could expect an order from Amsterdam to change course. Although managers of national offices were given relative freedom from Amsterdam, they were never allowed to change Greenpeace's worldwide policy to suit local positions. Greenpeace Norway, for example, is obliged to oppose whaling despite objections from local fishermen.

Greenpeace does not accept any corporate sponsorship or government funding. It is entirely supported by individual donations and volunteer workers. "We live or die by our supporters," said one campaign organizer. "Greenpeace as an entity is more than an organization, it is an organism. When the magic happens, it's because of that."⁹

The early 1990s, however, brought a new and different kind of challenge to Greenpeace. The leadership feared that popular anxiety about environmental threats would never regain the heights of the late 1980s. Peter Wilkinson, a former Greenpeace board member noted, "Greenpeace now has a fleet of ships running around the oceans looking for something to do. Whaling is now subject to an international moratorium. Dumping of toxic waste from cargo ships has been banned; so has the dumping of radioactive waste at sea."¹⁰

Shell's efforts to sink the Brent Spar presented Greenpeace with a much needed and highly visible focus for their endeavors.

⁸ Greenpeace New Zealand pamphlet entitled: "Actions Speak Louder Than Words."

⁹ Stephanie Mill, Greenpeace New Zealand Campaign Director, interview with author, March 27, 1996.

¹⁰ *Financial Times*, June 21, 1995.

The Plan to Sink the Brent Spar

The plan for sinking the Brent Spar in the sea was developed by Aberdeen-based Shell Expro, the North Sea arm of Shell UK, who also carried out four years of quiet negotiations with the British Government for legal approval. The installation had been decommissioned in September 1991 and could not remain where it was indefinitely because it was a danger to shipping.

Shell, which spent over \$1.5 million dollars on environmental impact studies, contended that apart from costing \$18 million dollars, as opposed to \$71 million dollars for disposal on land, deep sea burial avoided the risk of the Brent Spar breaking up in shallow waters on its way back to land. It also avoided the risk to staff from hazardous substances. The same waste, it claimed, posed no danger at sea.¹¹

Shell contended that radioactive waste on the Brent Spar was low-level¹² and that the structure contained only small quantities of heavy metals, such as 8 kg of cadmium and 0.1 kg of mercury. The company estimated that there was a total of 53 tons of oil and oily wax in the Spar. The scientific views of Shell, based on over 30 independent studies which were then reviewed by the University of Aberdeen Research and Industrial Services Department for environmental implications of decommissioning the installation, were contained in a report entitled, *Best Practicable Environmental Option (BPEO) and Impact Hypothesis* and was submitted to the British Government in October 1994, following months of formal consultations with conservation bodies and fishing interests. In that study, Alasdair McIntyre of the University of Aberdeen contended for example, that the level of radioactivity "would have been equivalent to what a person is exposed to in a city with granite buildings."¹³ Their research was supported by other scientists and experts in the industry.

Keith Clayton, professor of environmental science at the University of East Anglia, said the ocean's capacity for dilution of toxic materials increasingly had been eclipsed by sentiments about their role as the "global commons." He said that "although low-level radioactive waste was much less hazardous in the deep sea than on land, it was precisely such sentiments which had prompted an international ban on deep-sea disposal."¹⁴ He added that deep sea volcanoes in the middle of the Atlantic routinely belched highly toxic chemicals such as sulphur into the deep seas. "I would have thought that the Brent Spar's contribution compared to that is not measurable."¹⁵

11 The Shell plan called for sinking the Brent Spar 6,000 feet on to a spot called the North Feni Ridge in the North Atlantic Ocean, 150 miles off the northwest coast of Scotland. Shell claimed that the overall risk of an industrial injury or death during onshore dismantling was six times higher than with deepwater disposal.

12 Shell's scientific reports described the radioactive substance as "Naturally-Occurring Radioactive Material" (NORM) and contended that Low Specific Activity scale was like the "furring" from natural salts in water pipes.

13 *The Economist*, June 24, 1995.

14 *Financial Times*, June 20, 1995.

15 *Ibid.*

Dismantling the platform on land would mean dealing with pollutants in a much more sensitive environment. During the long process workers would be exposed to them, as well as to all the other hazards attendant on any complicated piece of demolition work. The pollutants would, in all likelihood, end up as landfill unless, that is, the elderly buoy broke up while being brought to shore. If that happened, the pollutants would end up in shallow coastal waters, probably the worst place for them.

The National Environmental Research Council, the publicly funded national research group, which included some of Britain's top marine centers, submitted a report to the House of Commons which described the deep oceans as a resilient and remote environment. They said the plan to sink the Brent Spar contained considerable merit. "Operationally this option would be straightforward and the direct impact on the environment would be small, since at these depths animal life is sparse and only loosely connected to the food chain."¹⁶

British authorities said that the disposal was fully in line with the 1991 Oslo and Paris Convention (OSPAR) of internationally agreed guidelines for the disposal of offshore installations at sea. The British Energy Minister, Tim Eggar, publicly announced on February 16 his intention to approve Royal Dutch Shell's plan to sink the Brent Spar in the ocean, calling it the "best practicable environmental option," (BPEO).¹⁷ At the same time, the British Government also notified the other 12 European governments who were signatories to OSPAR. A few days later, the management of Shell UK signed off on the plan, with little more than nominal consultation with the international board of the parent company in the Hague, where no objection were raised.

Greenpeace Takes Action

Representatives from Greenpeace however, rejected Shell's scientific conclusions. They said it was impossible for scientists to say exactly how seabed organisms would be affected, as no toxicity tests had been carried out. Greenpeace argued that sinking the Spar would release heavy metals, oil, and radioactive materials into the sea, and that it would set a precedent for others to do the same. In their view, the government's BPEO was clearly not the best plan.

Oil companies, having tapped the earth's crust for a fuel, which could end up ruining the world's climate, start out with a handicap in the environmental-friendliness stakes. "The idea of

¹⁶ *Financial Times*, August 15, 1995.

¹⁷ *Financial Times*, June 21, 1991. The UK government formally granted a disposal licence to Shell on May 5, 1995. Prior to the granting of the formal licence, none of the other OSPAR countries raised objections. The BPEO has been defined by the UK's Royal Commission on Environmental Pollution as "the option that provides the most benefit or least damage to the environment as a whole, at acceptable cost, in the long term as well as the short term." A BPEO is based on the comparative assessment of technical feasibility, environmental impacts to atmosphere, land and water, risks to health and safety of the workforce, public acceptability and economics, and sets the regulatory standard against which all licences for decommissioning oil installations are judged by the UK government.

Royal Dutch Shell, the world's biggest private oil company, sullyng the ocean with hundreds of tons of steel, sludge and, radioactive waste was too much for the green imagination to bear," said a spokesman for Greenpeace. Even some oil companies were angry at Shell's decision to put the Brent Spar at the front of the abandonment queue. They felt that Shell should have realized that the Spar's toxic residues, accumulated during the many years of service as an offshore storage installation, would attract environmental concern.

It finally did. On the evening of April 29, 1995, the "Moby Dick," an old fishing vessel restored by Greenpeace, sailed from Lerwick in the Shetland Islands just before sunset with a crew of 20. The 118 mile journey was made in 15 hours. As they arrived at mid-day on April 30, they were met by the MS Embla, a chartered vessel with Greenpeace activists from Germany.

With military precision and the dexterity of commandos, inflatable speed boats were put in the water and took four climbers to the platform. Within minutes they had scaled 28 meters by rope to the top of the tower and unfurled a banner which read, "Save the North Sea."

Greenpeace organizer Tim Birch announced to reporters on board the "Moby Dick" that "Greenpeace will remain on the Brent Spar until the UK government or Shell come to their senses and revokes the decision to dump it."¹⁸

At the same time as the occupation of the Spar was underway, Greenpeace officials in London released a report entitled, *No Grounds for Dumping: The Decommissioning and Abandonment of Offshore Oil and Gas Platforms*. It was presented to the waiting media as an analysis of the decommissioning options available to the UK government. The report concluded that, "total removal is not only the best environmental option but also the most cost-effective, feasible, and job-saving."¹⁹

The Greenpeace action was designed to draw public attention to the fact that the British Government was due to license Shell to sink the Brent Spar just one month before North Sea Ministers were due to meet in Denmark to discuss solutions to toxic environmental problems affecting the North Sea. The British government had previously blocked multi-lateral measures regarding environmental protection in its highly lucrative off-shore oil fields.

Shell countered the Greenpeace action with a series of civil court cases for trespassing. On May 12, the Court of Sessions in Edinburgh, Scotland, ordered the protesters off the platform but the ruling did not empower any law enforcement officers to carry out the eviction. The lawyers for Shell returned to court a week later and were granted a modified order which allowed Sheriff's officers to forcibly remove the people occupying the Spar. At dawn on May 23, police and Shell personnel re-occupied the Brent Spar.

18 Greenpeace Press Release, April 30, 1995.

19 Ibid.

British Broadcasting Corporation (BBC) News Editor, Richard Sambrook, noted that Greenpeace was perceived by the media as "David taking on Goliath." He pointed to Greenpeace's ability to outspend television companies in shooting footage of its protests, which was given to broadcasters. Stating that "this particular David isn't armed with a slingshot so much as AK47," Sambrook estimated that Greenpeace spent \$2 million dollars on the Brent Spar campaign, of which some \$540,000 was spent on TV equipment and feeds.²⁰

Greenpeace's media operation was headed by Richard Titchen, an ex-BBC journalist who was Greenpeace International's Director of Communication and one of seven executive directors. He worked with a staff of 29 and an annual budget of \$1.5 million (about 4.5 percent of the organization's total budget). Titchen organized a group of freelance photographers and cameramen dotted around the world. Their photographs and video footage could be transmitted back to London from remote places by satellite. Greenpeace was particularly proud of its three year-old "squisher," an expensive device to convert video footage into a stream of digital signals which can be sent rapidly by satellite telephone link to headquarters at significantly less cost than other satellite transmissions. Once in London, the pictures were delivered free of charge to television stations, print news agencies, and the press offices of its individual country organization.²¹

In addition to the video feeds supplied by protesters, independent journalists covering the incident at sea were "forced" to report from the Greenpeace ship, as it was the only available point of access. Shell never offered to supply journalists with either ships or aircraft.

"I'm left with the feeling that Greenpeace pulled us by the nose through too much of the campaign. In spite of our best efforts, we never put enough distance between ourselves and the participants. The provision of pictures, facilities and information, be it from Greenpeace or anyone else, is a Trojan horse for editorial and political spin," said Sambrook.²² David Lloyd, a senior editor for the commercial network Channel Four News confirmed that view. "We were bounced. By the time broadcasters tried to introduce scientific argument into the narrative, the story had long since been spun far, far in Greenpeace's direction."²³

Such coordination under Greenpeace Executive Director Steve D'Esposito, served the NGO well during the Brent Spar episode. For months leading up to the crisis, the organization had been divided between those who believed Greenpeace should become more analytical (publishing research to counter the arguments of governments and companies), and those who feared relinquishing their eye-catching, high-profile methods. As a former Greenpeace campaigner said:

20 *Financial Times*, September 6, 1995.

21 Video footage is first edited into a video news release, a sequence of moving images with an accompanying script and voice-over, often in a country's own language. The entire raw footage shot is appended to the end, so that a TV news agency could do its own editing, should it want to.

22 *Financial Times*, August 28, 1995.

23 *The Independent*, August 30, 1995.

"There had been differences between those who came in with doctorates and those who still like to put on rubber suits. In the battle with Shell, the rubber suits won."²⁴

As public outrage grew over Shell's plans, D'Esposito decided to run the show himself. The speed of the operation reflected the financial and technological strength of the group while hiding behind its public face of bearded "green" activists. D'Esposito sent a 22-page report to the Shell UK board on June 10 and published it publicly on June 19. The report claimed that the platform's sinking would carry radioactive waste, heavy metals and 5,550 tons of oily sludge into the sea with unpredictable consequences for the environment. Greenpeace based its calculations on measurements taken by the protesters on board the Spar who recorded oil over sea water levels from several six inch diameter vent pipes on the platform which they claimed were linked to two of the Spar's six storage tanks. The NGO's findings were over a hundred times more than Shell's previously published estimates.

"It is much more responsible to bring the thing on land in conditions where you can monitor and control what is going on," said Paul Horseman, Greenpeace's Political Director. Adding, "We don't know that will happen at sea, but dealing with these kinds of waste on land is nothing new."²⁵

Reactions in Europe

In Germany, publicity over Shell's plans drew an immediate public reaction. "We couldn't believe the response," said Jochen Vorfelder, one of Greenpeace's main German coordinators. "These ordinary people said they wanted to do something."²⁶

Greenpeace Germany organized a grassroots protest movement involving churches, trade unions, and local politicians to boycott Shell's 1,711 gasoline stations. The boycott gained momentum when Germany's main political parties put aside their differences to unite in opposition to the dumping of the Brent Spar.

According to the Hamburg-based Vorfelder, "The reason for this campaign against Shell, is that it was Shell in the first place which asked permission to sink the platform, not Esso. We are not against Shell or Esso as such. We are against any dumping of the Brent Spar. But since Shell is responsible for making the decision to sink it, the campaign is against them."²⁷

In the UK, Greenpeace took out advertisements in the national newspapers on June 19, demanding that Shell accept its corporate responsibility to the public at-large. "The day Shell sinks

24 *Financial Times*, June 21, 1995.

25 *Financial Times*, June 20, 1995.

26 *Ibid.*

27 *Ibid.*

the Brent Spar, Shell's reputation sinks with it," the ads stated. The next day, a UK government official at the Department of Trade and Industry responded caustically, "If we have accepted this as the best option from the environmental point of view, what are people asking us to do, go for the worst one?" Environment Minister Eggar accused Greenpeace of "grossly exaggerating" the disposal problem. He said disposal on land would cause "very significant environmental damage."²⁸

In the British House of Commons, Prime Minister John Major stated that Shell's plans for sea disposal had his full support. He said it was incredible that Greenpeace had proposed to dispose of it on land. Major was very firm in rebutting German Chancellor Helmut Kohl's criticism at the G7 meeting in Halifax, Nova Scotia, earlier in the week, insisting that burial at sea was the best possible environmental solution to the problem of disposing redundant oil platforms.

As the head of one of Europe's most environmentally-conscious countries, Kohl faced a battery of legislation designed to combat pollution and encourage recycling. The car, paper, publishing, and chemical industries had invested heavily in introducing environmentally friendly products. One environmental analyst advising a large German company explained the German reaction saying, "Shell was trying to undo everything we have tried to do over the years. Huge efforts have been made by industry to persuade their customers to switch over to products which help protect the environment. German industry felt angry with Shell."²⁹

Major's political opposition in Britain then tried to capitalize on the crisis. The opposition Labor Party's environment spokesman, Frank Dobson, called on UK motorists to join the filling station boycott now taking place on the Continent. His call was echoed by Matthew Taylor, the Liberal Democrat Party environment spokesman, who said he was "delighted to see motorists across Europe avoiding Shell stations and hoped those in the UK would follow their example."³⁰

The call for a boycott of Shell products won wide support from German consumers. In Berlin, Shell service stations reported a 30 percent fall in sales in the first two weeks of June. German mothers sent Shell hundreds of letters with pictures of their babies urging them to stop the planned sinking. The British Department of Trade and Industry even received cash contributions from individual Germans to help pay for the land disposal.

On June 16, a Shell station in Hamburg (the corporate home of Shell Germany), was firebombed in the middle of the night. For the first time, the threat that someone might be killed entered the equation. In a space of six days, a total of 50 Shell stations were damaged, two were fire-bombed and one was raked with bullets. The intensive coverage of the German boycott

28 *Financial Times*, June 21, 1995.

29 *Financial Times*, June 17, 1995.

30 *Financial Times*, June 19, 1995.

threatened to spark similar actions in neighboring Holland where Shell has a 25 percent market share.

Reactions at Shell

At Shell, the matrix structure which bound its multinational operations was beginning to show signs of strain. Company officers in other countries bemoaned the troubles unleashed by their UK colleagues. In Germany, some senior Shell officials voiced bitterness about their British sister company, and distaste for the UK Government's seemingly arrogant attitude to the whole affair.

It also appeared that Shell did not give its employees the warning that could have provided them a firmer grip on events. In an interview with *Der Spiegel*, the German weekly news magazine, Peter Duncan, chairman of Shell Germany, said he first heard about the planned sinking of the Brent, "more or less from the television."³¹

Senior Shell figures outside the UK spoke publicly of their surprise and concern about the plan. Managers in Germany, the Netherlands, Belgium and Scandinavia, found themselves under immense pressure from their own governments. The head of Shell Austria described the plan to sink the Brent Spar as "intolerable."³²

The harm to Shell's pride and image proved too much to bear. A spokesman for Shell UK which operated the Brent Spar conceded: "The European companies of Royal Dutch Shell Group find themselves in an untenable position and feel that it is not possible to continue (with the sinking) without wider support from (their) governments."³³ The growing intensity of the publicity firestorm forced Shell to postpone the much acclaimed "Better Britain Environmental Awards" which it sponsored because of an "inappropriate atmosphere" in which to celebrate the award's environmental achievements.

On the night of June 16, approximately at the same time as the Shell service station fire-bombing in Hamburg, two Greenpeace activists re-boarded the Brent Spar by helicopter as it was being towed out to the open sea. They claimed that they were going to chain themselves to the platform to stop the controversial sinking. Meanwhile, Greenpeace's director in Amsterdam set the stage for a further confrontation by dispatching one of its ocean-going tugs to intercept the Spar as it neared the dump site.

On Tuesday, June 20, Shell's directors in the Hague argued over the fate of the obsolete oil platform which would soon be in position for its planned sinking in the deep Atlantic. By the end

31 *Financial Times*, June 20, 1995.

32 *Ibid.*

33 *Financial Times*, June 21, 1995.

of the three-hour meeting, the management of Shell decided to abandon its plans to sink the Brent Spar.

With the board's final decision in hand, Shell's UK Chairman and Chief Executive, Dr. Chris Fay, flew to London on the corporate jet that afternoon to inform the UK government, which had strongly supported Shell, that the plan had been abandoned. He went straight from the Royal Air Force base at Northolt in North London, where his arrival was kept secret from the press, to the Department of Trade and Industry headquarters, where he was ushered into the office of Tim Eggar.

Eggar had become increasingly worried about Shell's determination to go ahead with the plan. He feared that the increasingly unpopular Conservative Government would be further embarrassed and its environmental policy would be increasingly tattered – this time by one of its main constituents – if the disposal plan was not carried out as approved. There was little discussion between the two men. Fay merely informed the Minister that a press release announcing Shell's decision would be published within the hour.

Fay said, that Shell was in an "untenable position" because of its failure to convince other governments around the North Sea that dumping was the best way of disposing the installation. He added that Shell would now have to dispose of the Brent Spar onshore, which would be more expensive.³⁴

Shell's decision to back down was greeted with relief across Europe. Hans Wijers, Dutch Minister for Economic Affairs said that the Netherlands had promised Shell it would do its very best to find a temporary place to "park" the Brent Spar in Europe while it decided how to dispose of the platform.³⁵ The structure was towed and moored in the deep Norwegian waters of Erfjord, close to Stravanger.

Aftermath

Reactions to Shell's decision were predictably mixed. Heinz Rothermund, managing director of Shell (UK) Exploration said, "this affair was an embarrassment for the whole of the decision-making process in the European environment."³⁶ But Germany's liberal Free Democrats (FDP), the junior partner in Kohl's governing coalition, described Shell's decision as "a victory for the environment."³⁷

34 Ibid.

35 Ibid.

36 Ibid.

37 Ibid.

A week after Shell abandoned its plan to sink the Brent Spar, OSPAR commissioners voted 11-2 for a moratorium on disposal at sea of decommissioned offshore installations in the North East Atlantic, including the North Sea. Britain and Norway voted against the ban. Under the terms of the convention, the suspension is not legally binding in those two countries.

Amidst all the accolades for Greenpeace and its environmental victory, a British scientific magazine, *Nature*, quietly noted on June 29, that the episode had exposed the "shallowness of Greenpeace's arguments on scientific issues."³⁸ After a detailed analysis comparing the metallic elements contained in the structure with those commonly found on the ocean floor, the article by two scientists from the University of London concluded, "that in deeper seas where the planned disposal of the Brent Spar was to have occurred, localized off-ridge venting and local bottom conditions may occasionally be metal rich. As a result, the environmental damage from the disposal of the Brent Spar in this setting would probably be minimal."³⁹

A little more than two months later, on September 7, Greenpeace publicly acknowledged that it overstated its case with incorrect data which it calculated from measurements taken from two of the six storage tanks. "Greenpeace scientists who analyzed the samples were given the wrong information regarding the depths that the samples were taken," said Sue Mayer, Greenpeace UK Science Director. "Instead of the depths being measured at the top of the storage tanks, they were taken from the top of vent pipes that gave access to the tanks." Despite the error, Mayer defiantly justified her group's actions: "Although regrettable, Greenpeace does not consider the misunderstandings in our calculations to be of primary importance. It does not deflect from the strength of our case against sea dumping."⁴⁰

Throughout the episode, Greenpeace had demanded that Shell carry out an independent assessment of the likely pollution damaged resulting from sinking the Spar. After it had abandoned its plans to sink the buoy and having towed it instead to a fjord in Norway, Shell commissioned the Oslo-based environmental consulting firm of Det Norske Veritas (DNV), to carry out a full investigation.

The full extent of the exaggerated environmentalist view became known on October 18 when the DNV report concluded that Greenpeace had "grossly overestimated" the amount of oil left on board. The two month, \$300,000 survey, under the direction of DNV Vice President Ole-Andres Hafnor, estimated that between 74 and 103 tons of oil remained, compared with Greenpeace's figure of 5,550 tons. DNV, one of the world's leading ship certification bodies, said that Shell's assessment of the quantities of oil, radioactivity, and toxic metals in the Spar, were broadly correct. "It slightly underestimated some and overestimated others," said the report.⁴¹

38 *Nature*, September 29, 1995, vol.375 pp. 715.

39 *Ibid.*

40 Greenpeace Press Release, September 5, 1995.

41 *The Guardian*, October 19, 1995.

Following Greenpeace's admission and the DNV report, Fay concluded, "that the episode highlighted how difficult it could be for big companies and governments to fight an issue on a factual and scientific basis when organizations such as Greenpeace based their campaign on mischievous misinformation. It was populist sound bites versus reasoned arguments. How were we supposed to counter that?"⁴²

⁴² *Financial Times*, September 6, 1995.

Exhibit 1

The Shell Management Matrix

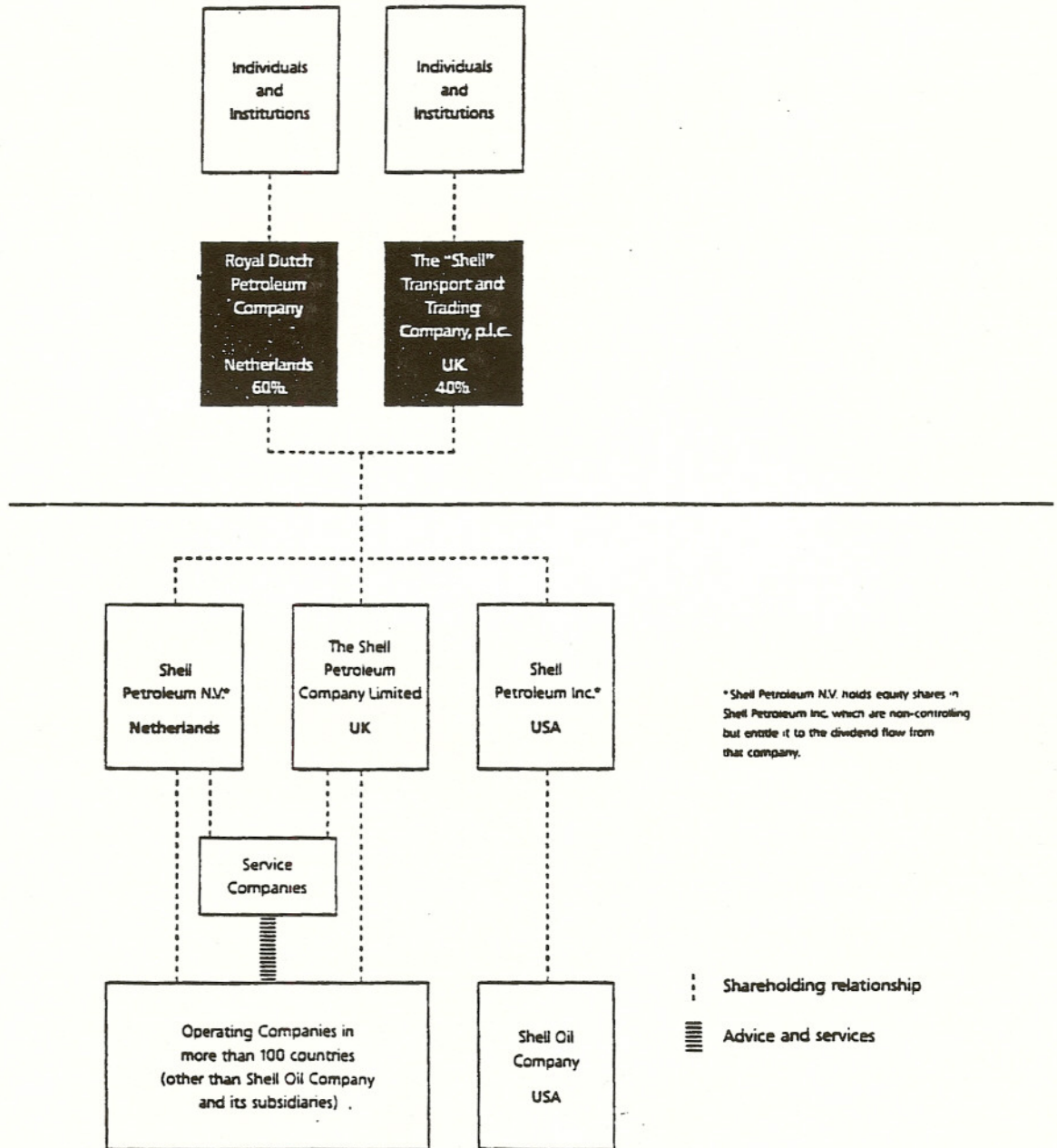
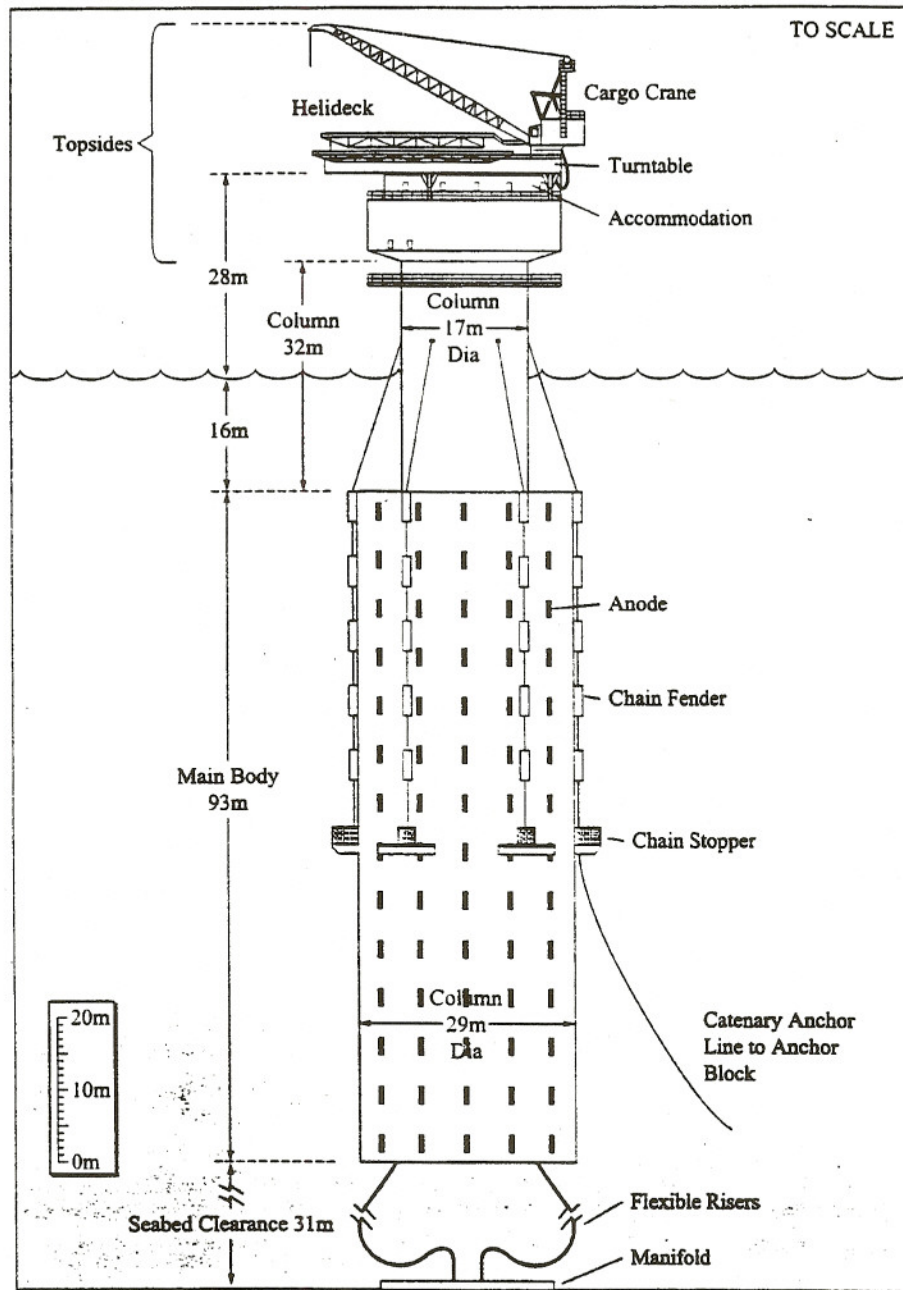


Exhibit 2⁴³

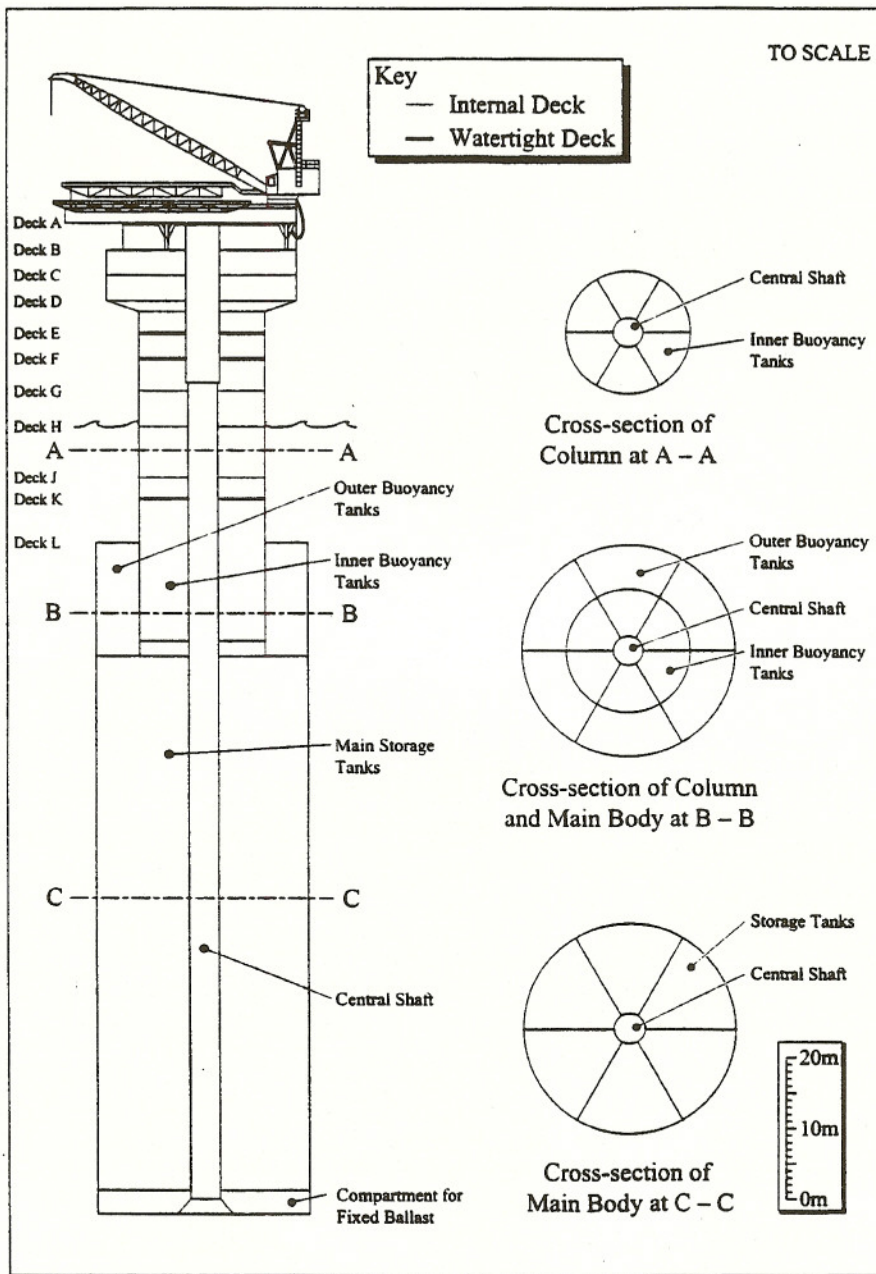
The Main Components of Brent Spar



43 Source: "Removal and Disposal of Brent Spar: A Safety and Environmental Assessment of the Options," The University of Aberdeen.

Exhibit 3⁴⁴

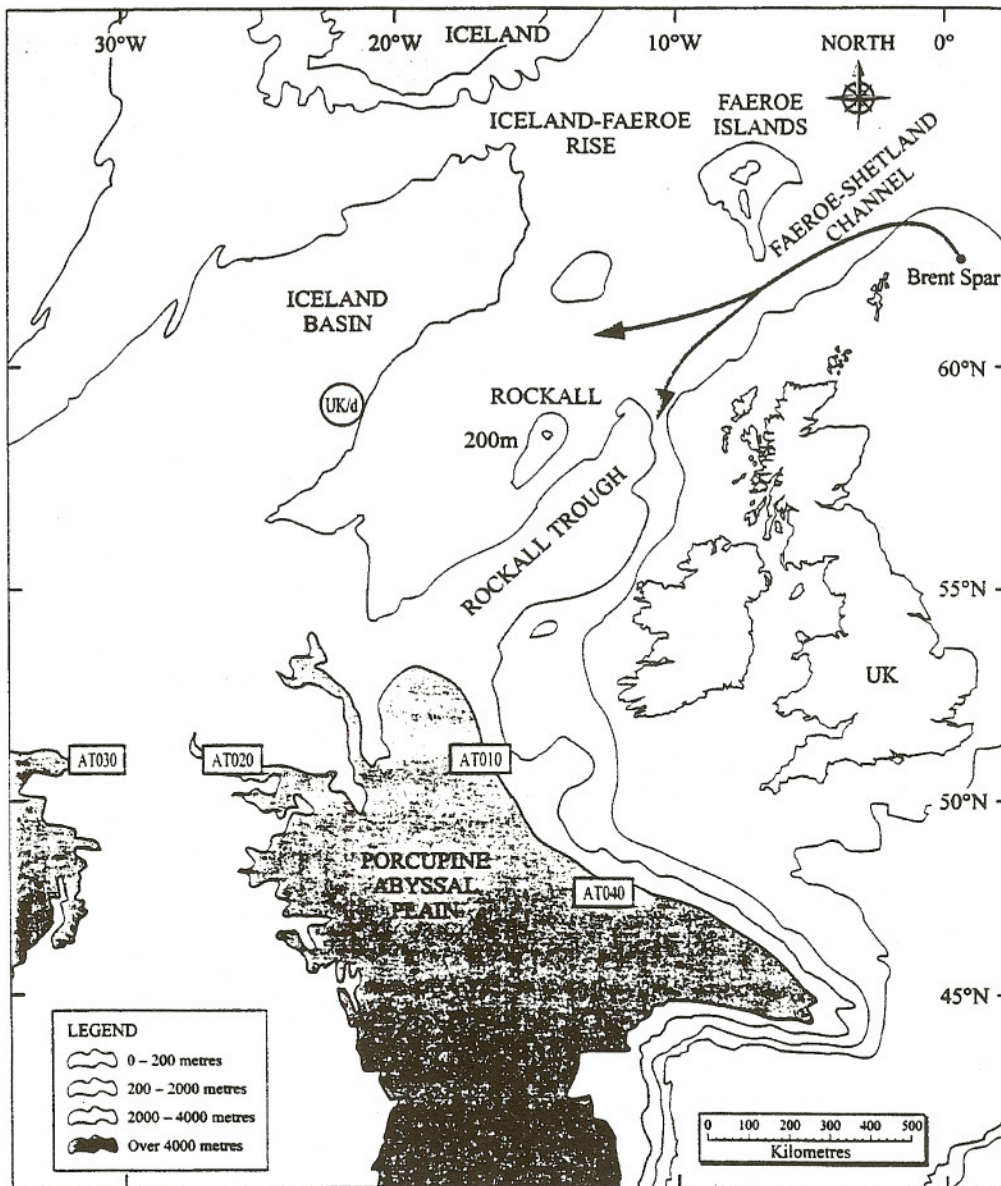
Schematic Diagram Showing the General Arrangement of the Bouyancy and Storage Tanks in Brent Spar



44 Source: "Removal and Disposal of Brent Spar: A Safety and Environmental Assessment of the Options," The University of Aberdeen.

Exhibit 4⁴⁵

Locations of Five UK Atlantic Dump Sites and the Likely Route for Brent Spar from Its Present Site to the Northeast Atlantic Ocean



45 Source: "Removal and Disposal of Brent Spar: A Safety and Environmental Assessment of the Options," The University of Aberdeen.



Sunk Costs: The Plan to Dump the Brent Spar Epilogue

Shortly after the decision to abandon the plan to sink the Brent Spar in June 1995, the Royal Dutch Shell Group changed its matrix management structure. Although the restructuring had been planned almost two years previously, the incident clarified the company's need to re-examine its crisis management capabilities.

Under the new organization, regional directors were eliminated and country managers now report directly to the five man Committee of Managing Directors (CMD), who have assumed more direct accountability. Cornelius A.J. Herkstroter, president of Royal Dutch Petroleum and chairman of the CMD has, among his other duties, assumed overall responsibility for public affairs and legal matters.¹

In September 1995, Dr. Chris Fay, Chairman of Shell UK, invited Greenpeace to be one of a number of representative bodies to be consulted on the best practicable environmental options for disposing of the Spar before it seeks relicensing from the British Government.

In March 1996, Shell set up a world-wide web page on the Internet with a debate button, allowing anyone to contribute ideas about the disposal of the Brent Spar.²

Shell now wishes to "engage, not enrage" the public, said Heinz Rothermund, Managing Director of Shell UK Exploration and Products. "Our aim is to capture public opinion in the broadest sense."³

¹ Don Cannon, general manager, New York office, Shell Oil Company, interview with author, July 1, 1996.

² www.brentspar.com

³ *International Herald Tribune*, July 17, 1996.

This case was written by Samuel Passow, research associate at the Center for Business and Government for Michael D. Watkins, Associate Professor of Public Policy, and sponsored by Gary Orren, Professor of Public Policy, John F. Kennedy School of Government, Harvard University. (0297)

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To date, Shell has received hundreds of offers and ideas, most of them unsolicited, ranging from proposals to turn the platform into a hotel or casino to plans to use it as a harbor breakwater.

In July 1996, Shell announced a list of 21 contractors who will compete to find the best way of disposing of the platform.⁴ Approval and completion of the project is expected by 1999.

Under existing legislation most of the platforms in the North Sea will have to be removed and dismantled on land. However, the law does not prohibit disposal at sea for 75 large, deep water platforms. Several of these are due for decommissioning in the near future, including North West Hutton, operated by Amoco, and Heather, operated by Unocal, another US firm.

As it did with Shell, Greenpeace continues to warn the other oil companies that they can anticipate an equally angry public response if their platforms are dumped at sea. While the oil firms contend that each decommissioning should be considered case-by-case, none have yet dared to propose sinking one of their platforms to the ocean floor as a more cost-effective, and arguably environmentally safer option. A cautious community of oil executives is anxiously awaiting to see who will come up with the first viable plan. It seems, as Richard Le Coyte, an executive of Greenpeace notes, "there is a race to come in second."⁵

⁴ Most of the 21 contractors' plans called for the Spar to be towed to harbors in the UK, Norway, the Netherlands and Newfoundland. Others called for the upper portion of the platform to be reused as a fixed onshore platform and training facility and for the storage tanks to be reused elsewhere. One proposal called for turning the platform into an eco-friendly floating power station off Scotland, equipped with three 3MW windmills.

⁵ *The Economist*, July 20, 1996.

Exhibit 1

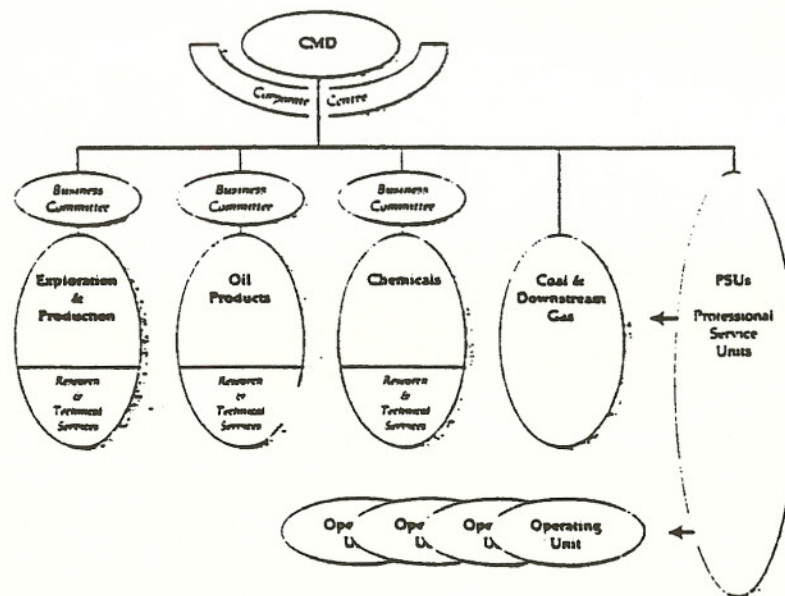
The overall reorganisation of the Shell Service Companies

Overall, the Royal Dutch/Shell Group of Companies consists of;

- Parent and holding companies, which have not changed;
- Service Companies established in London and The Hague, which have been reorganised;
- Laboratories in various countries, which have been fully integrated with the businesses that they serve, and
- Operating Units (OUs) (previously called Operating Companies or Opcos), which remain the prime independent legal and business entities in countries all over the world, where the Group's products are produced, manufactured, transported and sold. As will be detailed later, these Operating Units remain essentially unchanged. Also, New Venture Operating Units (NVOs) are set-up as necessary to initiate activities in areas without an existing suitable OU.

The reorganised Service Companies and the existing independent Operating Units, can be seen as follows:

The Committee of Managing Directors, the CMD, consists of the four senior Group Managing Directors. They are supported by the Corporate Centre who provide overall strategy management and maintain Group cohesion through common policies.



The four Businesses for Exploration and Production, Oil Products, Chemicals and Coal & Downstream Gas are responsible for all aspects of their respective activities, now including research and development and transporting, trading and selling their products as applicable. They liaise with each other where operations from different businesses take place in the same geographical area.

The Professional Services Units (PSUs) provide specific services to the Corporate Centre, the Businesses and the Operating Units, such as financial, legal and intellectual property, procurement and IT support.