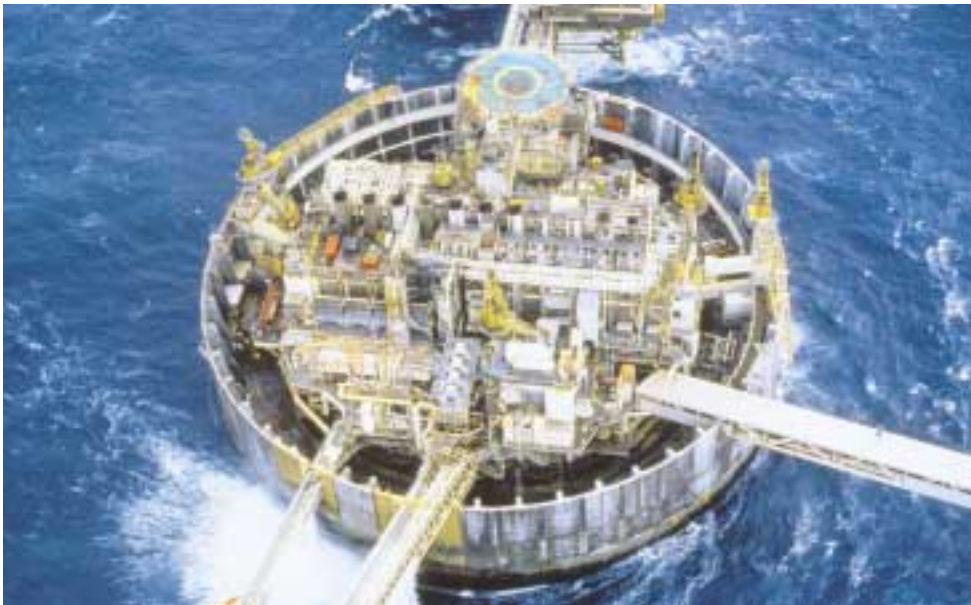


EPÖKKE


ConocoPhillips

Information on the Ekofisk I Cessation project
www.phillips66.no/cessation No. 12 - October 2002



Parliament approves in-place disposal of the Ekofisk Tank

The Norwegian Parliament unanimously endorsed the Government proposal for in-place disposal of the Ekofisk Tank, which means that the entire Ekofisk I Cessation Plan is now approved by Norwegian authorities.

In-place disposal of the buried pipelines, the removal of 14 steel platforms and the Ekofisk Tank topsides for onshore disposal – and leave in-place of drill cuttings have previously been given the green light. Nine of the platforms will be removed by the end of 2013, whereas

the Ekofisk Tank topsides and preparations for in-place disposal will be completed by 2008. The final useful lives of the Ekofisk 2/4 H, 2/4 Q, 2/4 A, 2/4 B and 2/4 FTP platforms are not known at this stage. The time schedule for the removal of these platforms will

be agreed with the Ministry of Petroleum and Energy when the shutdown date is decided.

– It definitely feels good to establish that the planning phase of this special project, which is perhaps the biggest offshore cessation project in the world so far, is finally completed, say Kjell O Jørgensen and Kari Amundsen, who have supervised this extensive work. ConocoPhillips has gained support for all of its suggested disposal solutions. The work started, on a small scale, in connection with the Plan for Development and Operation of Ekofisk II in 1993. In 1997/98 the work intensified through a number of studies and consultations, culminating in the submission of the Cessation Plan in October 1999. Since then, preparations for the implementation of the plan have taken place parallel with administrative coordination and decision-making processes in governmental bodies. The in-place disposal of the Ekofisk Tank and the protective barrier wall was also subject to a consultation process among the OSPAR (Oslo-Paris Convention for the Protection of the Marine Environment of the North-East Atlantic) member countries.

The planning of the preparations for the in-place disposal of the Ekofisk Tank and protective barrier is well underway. The main purpose of the preparation is to leave the structures in a condition that



The independent Scientific Review Group at Ekofisk. From left: Jacob de Boer, Netherland Institute for Fishery Research, Eileen Arctander Vik, Aquateam, Paul E. Kingston, Herriot-Watt University, Günter F. Clauss, Berlin University of Technology, Torgeir Bakke, NIVA.

does not harm the environment. No complete criteria or requirements for the cleaning conditions exist today. Based on the Norwegian State Pollution Control's guidelines for the classification of environmental quality in fjords and waters close to the coast, ConocoPhillips has found an approach to this complex task. In performing this job, the company will work closely with governmental authorities and technical expertise. The work will be revised and updated, as some of the equipment to be used for the task does not exist as of today. The work must be performed under water. The water level in the Ekofisk Tank cannot be significantly reduced as this may threaten the integrity of the structure. "The possibility that other solutions may seem more rational as the preparations progress therefore cannot be ruled out", as the parliamentary bill reads. The chosen solution involves oil and waste removal from the nine storage cells. The pollution in the bottom sediments in the storage cells will then be removed, and reinjected into the reservoir from a Ekofisk platform. The sediments accompanying the oil stream from the

reservoir were deposited at the bottom of the Tank both when it was used as an oil storage tank – and later, when it was used for separating oil and water. Furthermore, there are two annuli in this structure, an inner annulus between the storage cells and the breakwater wall of the original Ekofisk Tank, and an outer annulus between the Ekofisk Tank and

the protective barrier installed in 1989. Some seabed sediments have entered these annuli – and minor discharges of pollution may also have taken place during the structure's installation on the field. These sediments will be covered to prevent contact with the external environment and to ensure that they do not represent any environmental risk.

A special company will be assigned the job of verifying the preparatory work. Furthermore, ConocoPhillips has appointed an independent international scientific group that will monitor the preparation of the Ekofisk Tank and participate in the preliminary work. The team members are experts on maritime environmental issues.

For a detailed summary of the content of the Ekofisk Tank, the document submitted to OSPAR for the non-conformance process and the White Paper on in-place disposal of the Ekofisk Tank, please visit our website at www.phillips66.no/cessation



Kari Amundsen and Kjell O. Jørgensen with a model of the Ekofisk Tank. They have headed up the planning work with the Ekofisk I Cessation Plan.

Single-lift technology:

Development contracts awarded to seven companies

The development contracts for single-lift technology are awarded to a total of seven companies. The contracts are awarded after a thorough pre-qualification process where a number of potential suppliers had reported their interest.

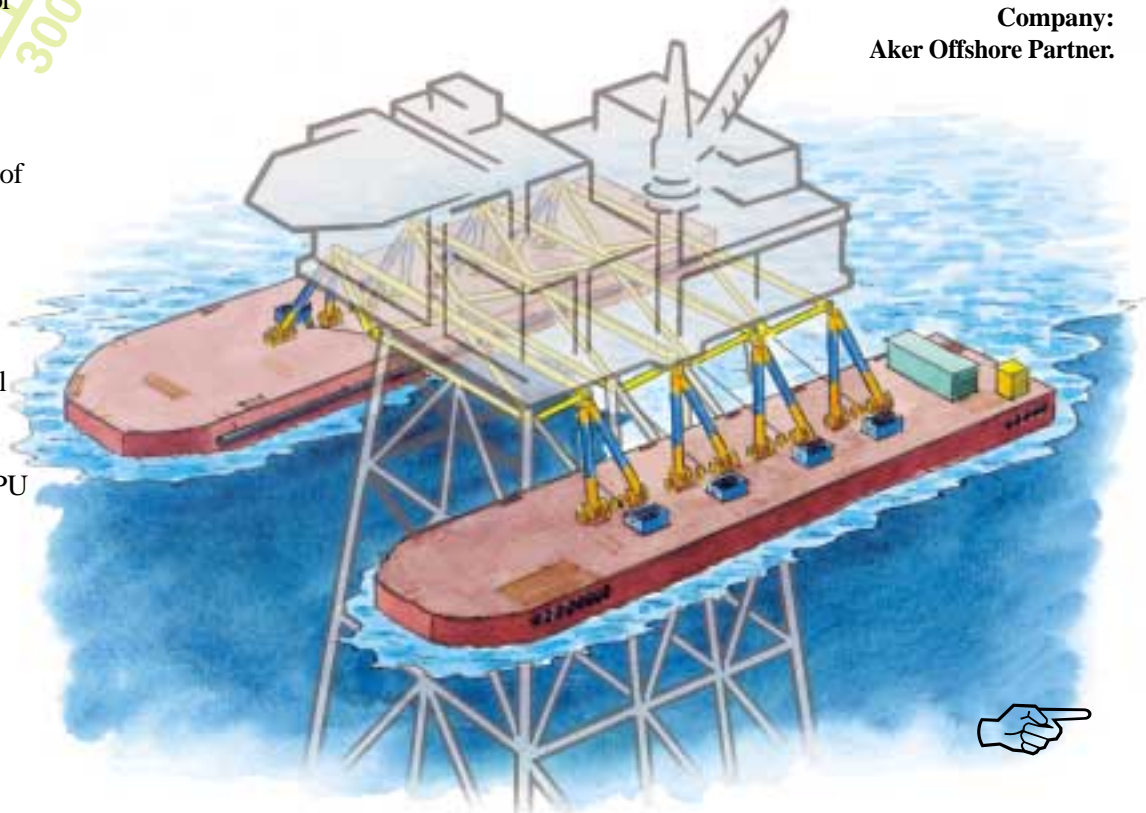
Some withdrew their applications during the pre-qualification process, and ConocoPhillips made a thorough evaluation of the remaining concepts and companies. The contracts to the seven companies apply to participation in a development phase that also qualifies them for the bidders list for the removal contracts for the two platforms Norpipe 36/22 A and 37/4 A. These removal contracts are scheduled to be awarded at end of 2003.

The seven companies are Aker Offshore Partner (Versatruss), Norway/USA, Excalibur Engineering bv, Holland, Global Maritime AS, Norway, Marine Shuttle Operations, Norway, Master Marine AS, Norway, MPU Enterprise AS, Norway and Seametric International AS, Norway.

Versatruss

This concept is based on a two-barge catamaran solution. Multiple booms mounted on pinned connections that are positioned along the centerline of each barge are attached to a retrofitted lift truss under the deck. Lifting of the topsides occur when winches mounted on each barge pull the barges together. This is the only concept that has proven its capabilities through use for several projects in the Gulf of Mexico and Venezuela. The concept also includes a jacket lifting frame. Concept owner is Versatruss Americas

Company:
Aker Offshore Partner.



The original plan was to award six contracts, but due to very tight competition the Ekofisk owners decided to increase this number to seven. The pre-qualification criteria have mainly been based on the technical concept that the bidders have presented.

Started in June, the development phase will last until December. In this period the companies will develop and detail their concepts for the removal of the two platforms until the entire scope of each concept is known, and can be agreed upon in a general bid document. In addition cost estimates for the removal assignments shall be established for each concept. After the development phase is completed in December the bid documents will be developed. They are planned to be completed in the first quarter of 2003, with contract award at the end of 2003.

Technology emphasized

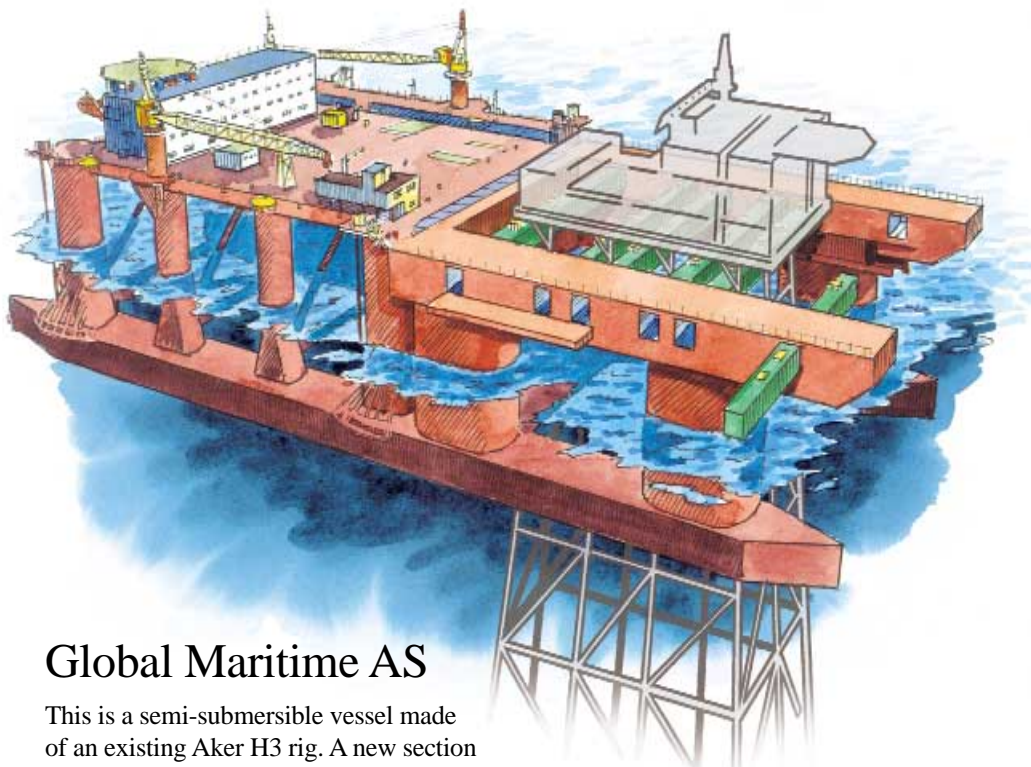
Based on previously performed studies, the single-lift companies were expected to be relatively recently established companies without experience, and without the required vessel to perform the removal operations. In most cases, this must be built first. The evaluation process for participation in the development phase must therefore be based on other criteria than those normally used in such competition, focusing in particular on the technical removal method. All of the seven companies represent single-lift technology, and have in the pre-qualification process, through results from analyses and model tests, substantiated that they will be able to remove both the two Norpipe platforms – and the other Ekofisk I platforms that are part of the cessation project. Only one of these



Pieter Schelte

This is a catamaran concept built from two large existing sister tankers connected from midship to the rear end. This vessel is the largest of all the single lift concepts proposed so far. The vessel will be designed for harsh environmental conditions, enabling use worldwide.

Company: Excalibur Engineering.



Global Maritime AS

This is a semi-submersible vessel made of an existing Aker H3 rig. A new section is located in the front, representing the hull carrying the lifted platform. The hull is made of steel and developed by Global Maritime AS on behalf of Prosafe.

Company: Global Maritime

companies, Versatruss, can boast former experience in other waters.

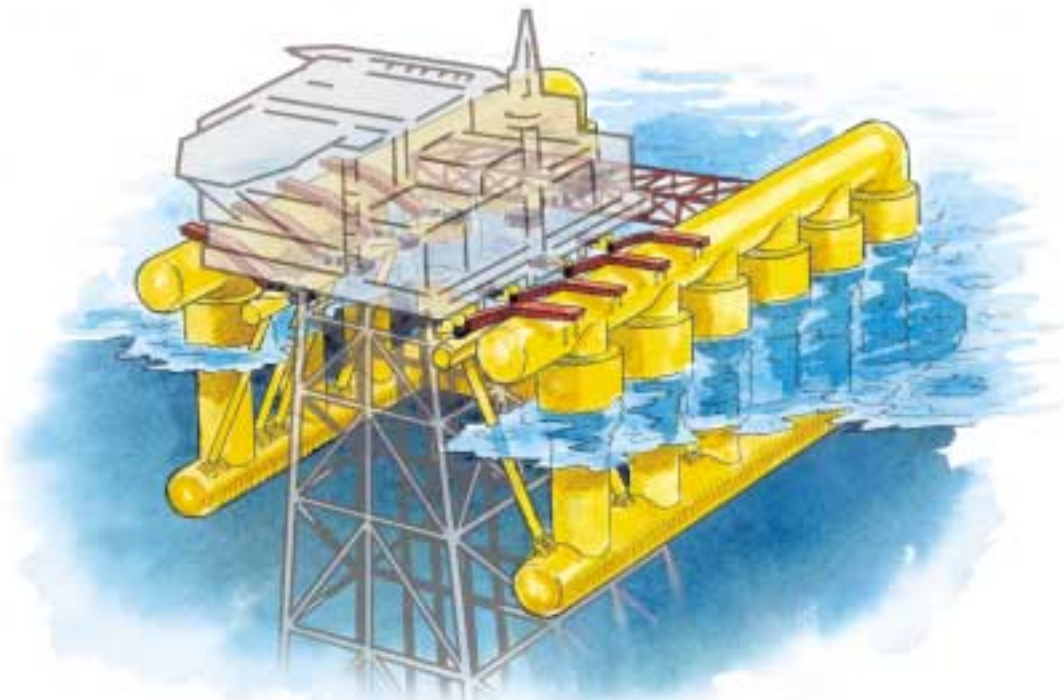
The development phase

In the development phase the companies are expected to familiarize themselves with the platforms and identify all work operations needed in order to implement the removal with their own vessel. The companies shall on this basis help develop the bid invitations for the removal contracts. This will ensure that all information about the platforms that the various vessels need in order to perform the removal operation, transportation onshore and cutting is included in the bid invitation. Furthermore, the removal contractors will establish a cost estimate for the entire implementation related to their own removal concept.

The contract value for the development phase is NOK 2 million per participant.

The bidding process

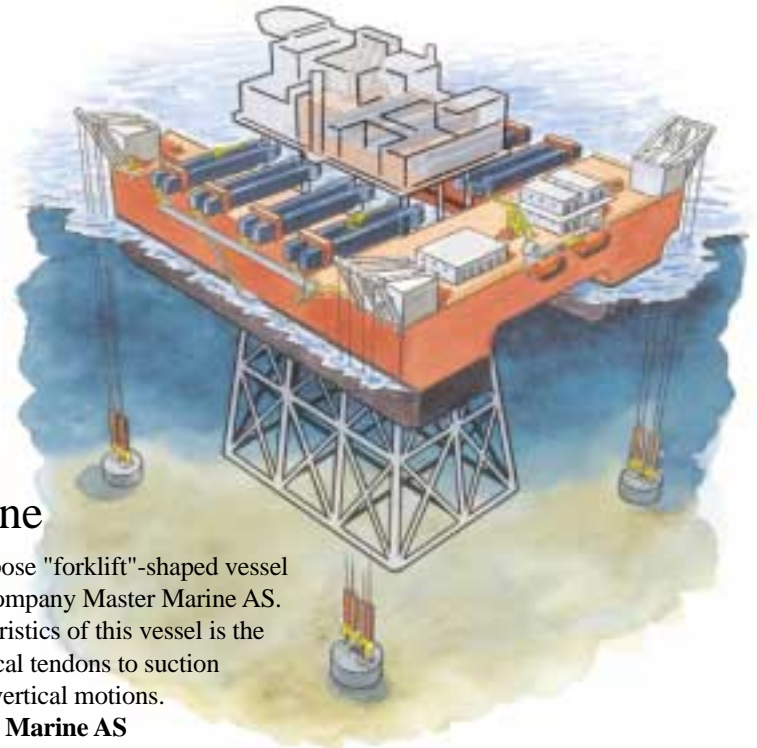
The bidding invitations for the removal contracts for the Norpipe platforms is planned to be submitted late in the first quarter of 2003. They will only be submitted to the seven companies that have participated in the development phase. The evaluation of these bids will be based on a technical as well as a commercial part. ConocoPhillips initially wants to award two contracts, one for each platform. This strategy will be changed if the competition for the jobs proves inadequate. Concerning the award of contracts, the following criteria are established: The bids must be commercially competitive in relation to traditional removal methods, the technical risk



Offshore Shuttle

The Offshore Shuttle is built around a semi-submersible hull. It is unconventional as the hull is made of large diameter steel tubular sections with patented through nodes which together with diaphragms in the columns form watertight compartments which allow flexibility in the ballasting operations. The vessel is designed for multipurpose.

Company: Marine Shuttle Operations



SeaFork One

This is a multi-purpose "forklift"-shaped vessel developed by the company Master Marine AS. One of the characteristics of this vessel is the application of vertical tendons to suction anchors to control vertical motions.

Company: Master Marine AS

must be acceptable - and the removal must be done by means of single-lift technology.

If these conditions are not met, Phillips will revise the strategy.

Technology development

After the two Norpipe platforms are removed the bidding process for the remaining Ekofisk I platforms will start. This process will be completely open, and all interested parties will thus be able to participate with any technology whatsoever.

The reason for ConocoPhillips' desire to go for single-lift technology is that this is assumed to save costs. This technology allows much disassembly work to be moved from offshore to onshore – at the same time as the possibility of reuse increases since both the topsides and substructure will be brought ashore. In addition it is desirable to increase the competition in the removal market.

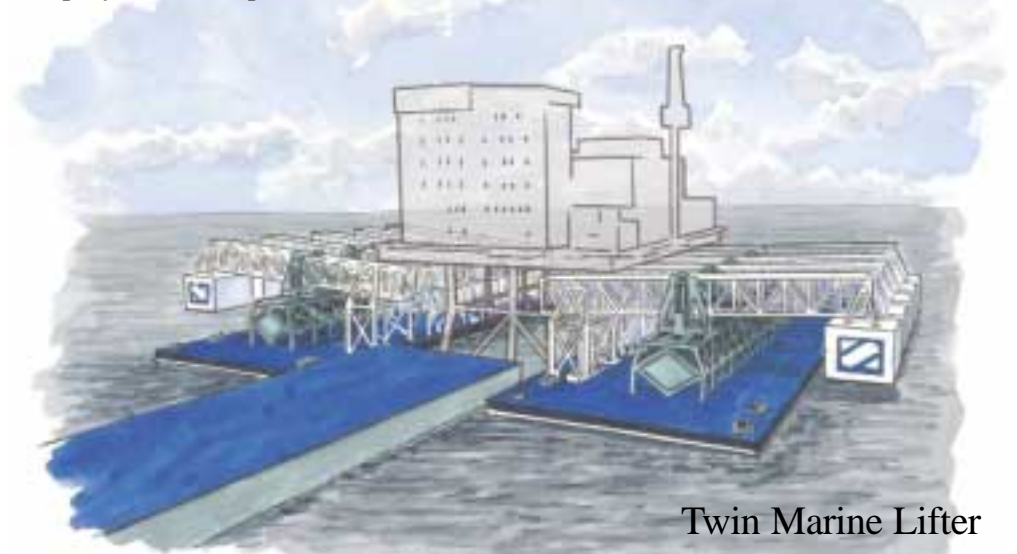
The Ekofisk owners, however, admits there are uncertainties associated with this technological development. This particularly applies to the financing of the new vessels, the construction time and the testing to prove that they work as intended.



MPU Heavy Lifter

This is a semi-submersible concrete vessel. It is a U-shaped, Multi Purpose Unit (MPU) vessel. The concept was initially developed by the company Dr. techn. Olav Olsen a.s. The hull is intended to be made in reinforced concrete and only the load-transfer frames are made of steel. There are a total of eight drop tanks for rapid water discharge, two in each of the concrete columns.

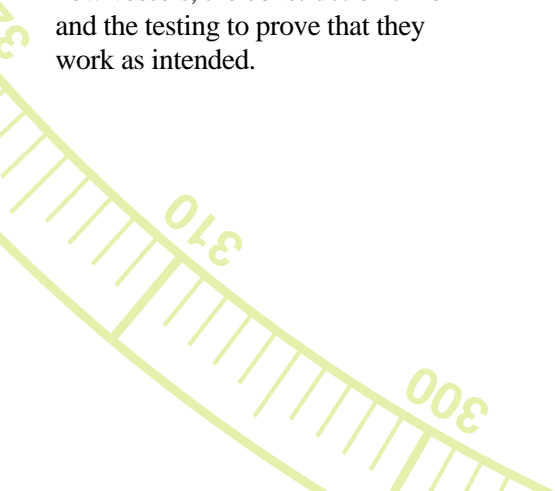
Company: MPU Enterprise



Twin Marine Lifter

This concept is based on a two-barge catamaran solution. Lifting arms supported onboard the barges provide the lift-effect through their function as balanced lever arms. Each lifting arm is hinged to a supporting structure at the centre of the barge, and equipped with a buoyancy tank on the inside (between the barge and the platform) and a ballast tank on the outside. The basic idea of the concept is to create the power for the lift by deballasting the buoyancy tanks at the same time as the ballasting tanks are filled with water. The balanced lever arm principle provides an inherent environmental force compensating system.

Company: Seametric International, Stavanger



Tank topsides removal:

Six companies participate in the development phase

Six companies are awarded development contracts for the removal of the 24,000 tonne Ekofisk Tank topsides. The six companies are also qualified for the bidding list for the removal assignment. This assignment is scheduled to be awarded in late 2003. The Ekofisk Tank will be ready for a left in-place condition by the end of 2008.

The six successful companies in the pre-qualification process for development contracts are Aker Offshore Partner (Stavanger), ABB (Haugesund), Doris Engineering (Paris), Global Maritime (Stavanger), AF Spesialprosjekt (Oslo) and Wood GMC (Stavanger). A number of companies reported that they were interested in this assignment and replied to the pre-qualification form and thus participated in the process. The selection criteria for the development contracts have primarily been based on the method for removal, work organization, former experience, and health, environment, safety and quality. Starting in June, the development phase will last until December 2002. During this period the various companies will describe the methods to be used for topsides removal, and submit a cost estimate. The companies will get NOK two million each in compensation for their participation in the development phase. According to plan ConocoPhillips will then submit bidding documents in the first quarter of 2003. The final contract for the removal job is planned to be signed at the end of 2003.

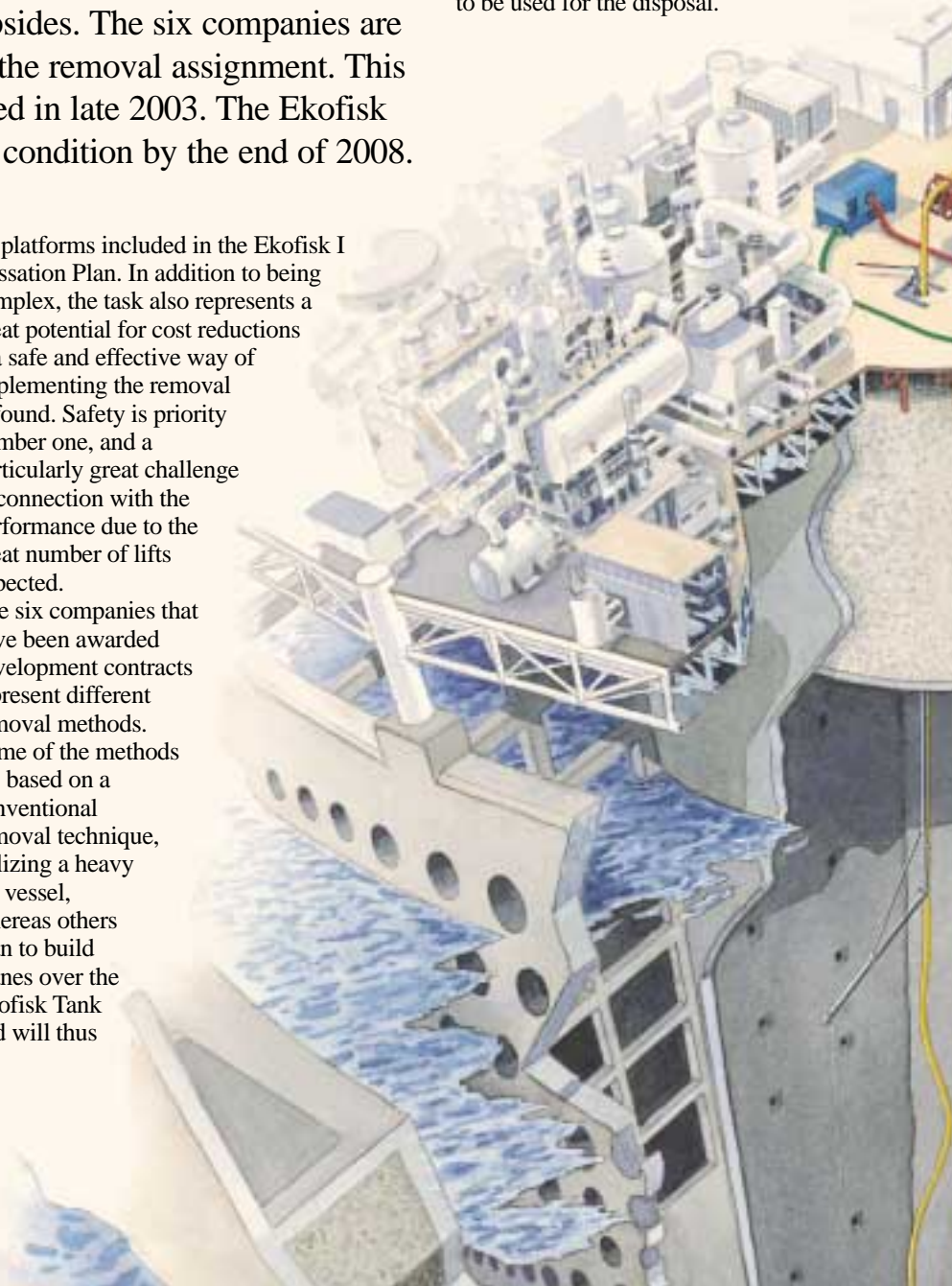
Consisting of 82 different modules, partly built in-place, the Ekofisk Tank topsides represent a complex structure. This is the biggest single removal assignment for topsides among the

15 platforms included in the Ekofisk I Cessation Plan. In addition to being complex, the task also represents a great potential for cost reductions if a safe and effective way of implementing the removal is found. Safety is priority number one, and a particularly great challenge in connection with the performance due to the great number of lifts expected.

The six companies that have been awarded development contracts represent different removal methods. Some of the methods are based on a conventional removal technique, utilizing a heavy lift vessel, whereas others plan to build cranes over the Ekofisk Tank and will thus

be independent of heavy lift vessels. This is a method that reverses the construction and installation of several of the platforms on the Frigg field. Furthermore, some intend to use piece small technology. This is a method used for the demolition of the Sola refinery at Stavanger. Several of the participants are also considering various combinations of these methods.

ConocoPhillips will establish general requirements for onshore disposal. The removal bidders will use these requirements for qualifying the plants to be used for the disposal.



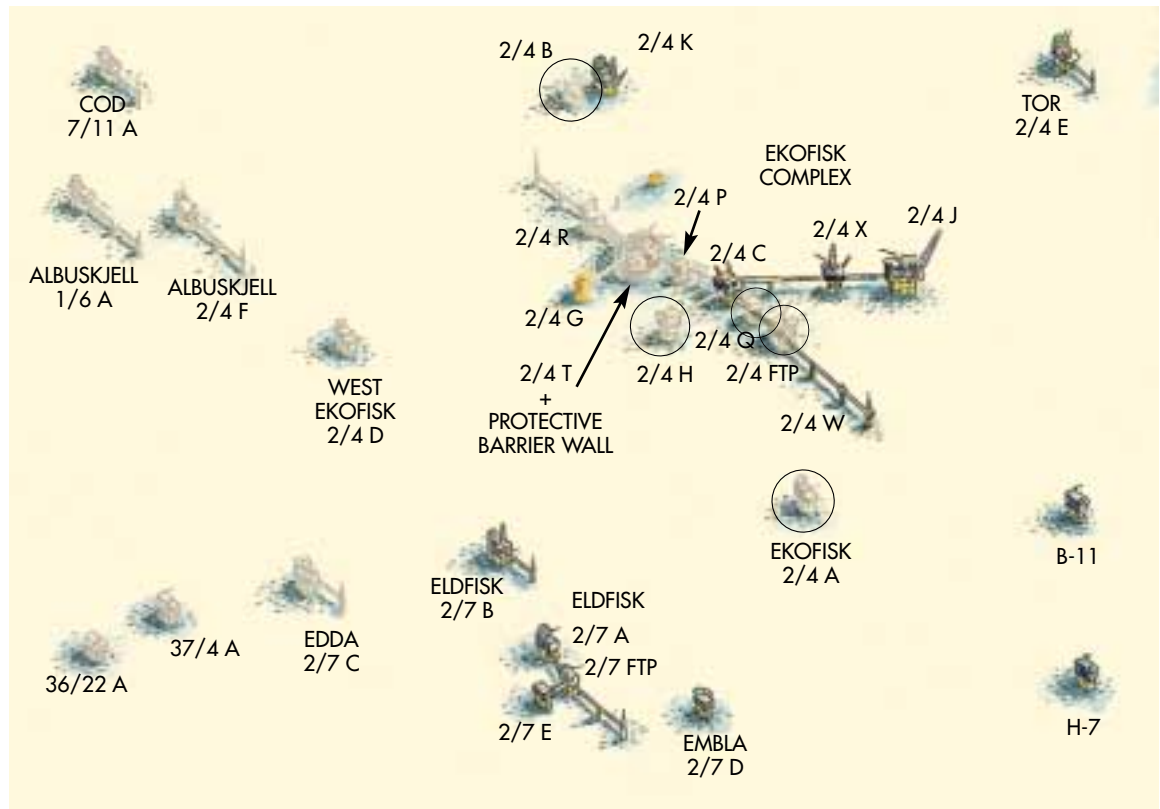
Techno-logical facilitator contract

The company Lund, Mohr & Giæver-Enger Maritim AS (LMG) in Bergen has been awarded the contract as technical facilitator of the development of bid documents for the removal of the topsides of the Ekofisk Tank, as well as the two platforms Norpipe 36/22 A and 37/4 A. The sub-contractors are Bergen Engineering (structural skills) and DNV, Bergen (HES skills). Lasting to the end of 2003, the contract has an estimated value of slightly more than NOK 15 million. Four companies participated in the bidding competi-



Norpipe 36/22 A

The Greater Ekofisk Area



Platform in use



Platform to be disposed



Platform still in operation



3 part platform

Time table

