Den norske stats oljeselskap a.s/Annual report and accounts 1977



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The main Stato<sup>i</sup>l administration building, Stavanger, Norway.

## Den norske stats oljeselskap a.s

### The Board of Directors

Director Finn Lied, Chairman Professor Ole Myrvoll, Vice Chairman Member of the Storting Aksel Fossen **District Governor Einar H. Moxnes** Manager of the Secretariat Ottar Vollan Secretary Åse Gjerdsjø Economist Hans J. Ødegaard

### **ALTERNATE MEMBERS**

Professor H. J. A. Kreyberg Member of the Storting Kristin Lønningdal **Economist Erik Eik Geophysicist Tore Sund** 

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### Auditor

**Certified Public Accountant** Karl-Johan Endresen

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### **Company General Assembly**

Member of the Storting Egil Aarvik, chairman Managing Director Ronald Bye, vice chairman Lord Mayor Arne Rettedal LO secretary Odd Bakkejord Teacher Grethe Westergaard Bjørlo Housewife Bodil Bjartnes **Construction worker Harald Schjetne** Director Egil Flaatin **Engineer Knut Fosse** Engineer Arne Erichsen Personnel training worker Arnlaug Standal **Engineer Amund Sommerfeldt** 

### **ALTERNATE MEMBERS**

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LO secretary Evy Buverud Pedersen Director of Finance Johannes Andreassen Lord Mayor Asbjørn Jordahl **Geologist Arne Lervik** Chief Accountant Havard Berge **Engineer Atle Thunes** Geophysicist Ingebret Gausland Secretary Solveig Auklend

### Statoil investments

Other investments





Total value of Statoil transactions involving petroleum and petroleum products







## Highlights

Amounts in millions of N.kr.	1977	1976	1975	1974	1973
Sales	1682.6	1298.3	382.3	98.2	
Salaries and social costs	55.3	36.5	20.1	8.0	2.1
Depreciation	47.0	32.8	1.1	0.3	0.2
Financial expenditures	35.6	-4.8	7.9	7.0	7.6
Financial result	—112.1	—134.2-	-62.2	-29.0	-13.7
Investments	1718.6	1889.8	933.1	64.5	238.3
Total assets	5554.8	3660.9	1491.6	502.9	359.6
Share capital issued as of 31 Dec.	1851.5	1551.5	755.0	305.0	155.0
Number of employees as of 31 Dec.	506	401	244	118	54



## **Projects**

Activity	Company/license	Operator	Location	Statoil share	Type of activity
Exploration	Prod. license 038	Statoil	Blocks 6/3, 15/11, 15/12	50 %	Drilling
	Prod. license 044	Statoil	Block 1/9	50 %	Drilling
	Prod. license 045	Statoil	Blocks 24/11, 24/12	50 %	Drilling
	Prod. license 046	Statoil	Blocks 15/8, 15/9	50 %	Drilling
Field development	Prod. license 037 Statfjord/Murchison	Mobil	Blocks 33/9, 33/12	50 %	Oil/gas discovery
	Prod. license 024 Frigg	Elf	Block 25/1	5 %	Gas discovery
	Prod. license 036 Heimdal	Elf	Block 25/4	40 %	Gas discovery
Transportation	Norpipe a.s	Separate adm.	Stavanger	50 %	Pipelines
	Norpipe Petroleum UK Ltd	Separate adm.	Teesside	50 %	Oil/gas conden- sate terminal
Refining and					
Marketing	Rafinor	Separate adm.	Mongstad	30 %	Refinery
	Norsk Olje a.s	Separate adm.	Oslo	15 %	Marketing
	I/S Noretyl	Norsk Hydro	Bamble	33 %	Petrochemicals
	I/S Norpolefin	Saga Petrokjemi a.s & Co.	Bamble	33 1/3 %	Petrochemicals
Service company	A/S Coast Center Base Ltd. & Co.	Separate adm.	Sotra	50 %	Supply base

Scene from the christening of the Statfjord A platform on 22 November 1977. Oddbjørg Kloster presided as godmother.

## **Report of the Board of Directors**

## Statoil reaches a milestone after five years

For the past five years, the Norwegian State through Statoil has been actively involved in commercial activities in the Norwegian petroleum industry. On this occasion, it would be natural to look back at some of the most significant reasons for this involvement, as well as the conditions and goals which from the beginning formed the basis of decisions made by the political authorities, and to what degree Statoil contributed to fulfilling these goals.

★ Statoil implements the business interests of the State in the petroleum industry On several occasions, the Norwegian Parliament has established the goal of Norwegian petroleum policy as the securing of State control of the activities within this sector. The authorities have the opportunity of reacting on the activities through the making of responsible decisions and regulations. In addition to this, the State, through Statoil, can have a direct influence on the commercial decisions in the various concessions.

The insight and know-how gradually built up within Statoil, partially through its own activities and partially in co-operation with other oil companies, is made available to the authorities. Through Statoil, the Norwegian authorities thus receive a thorough, detailed study with commercial insight into projects on the Norwegian continental shelf, during the exploration, development and production phases. In this manner the Norwegian political authorities are supplied with extensive, basic material required for important decisions.

The Board of Directors is of the opinion that this extensive, in-depth business insight which Statoil will have as licensee, will also stimulate and contribute to the activities of the other operators and ensure that experience gained does benefit the new projects and Norwegian society.

The Norwegian Parliament has presumed that Statoil activities should be subject to parliamentary direction and control, because of the significance which the company will have for Norwegian society. Therefore, in 1974, the Norwegian Parliament approved the regulations regarding the administration and control of Statoil. This involves the obligation on the part of the Board of Directors to present all issues of principal significance to the General Meeting, which is the Ministry of Petroleum and Energy in accordance with paragraph 10 of the Articles of Association. For its part, the government

will make an annual presentation to the Parliament of the main trends of its plans for Statoil so that the Norwegian Parliament may express an opinion prior to initiation of these plans. Thus, Statoil is in the unique position as compared with other stateowned companies, that all decisions involving the important phases of company activities are made with the approval of the political authorities.

Within this broad frame of reference imposed by the authorities, one aim has been that Statoil maintain freedom of action in commercial activities. The Board of Directors is of the opinion that on the basis of the above regulations, a reasonable balance has been attained between the need for such commercial freedom and the necessity for political control.

### Statoil implements the increased utilization of Norwegian goods and services and the build-up of Norwegian know-how

It has been presumed since the establishment of the company that Statoil contribute to promotion of Norwegian goods and services. With this in mind, Statoil has given priority to the acquisition of the necessary understanding of Norwegian commercial possibilities for deliveries in the various areas. This insight is utilized to soften up customary supplier-contractor relations and stimulate the foreign operator companies to utilize the possibilities available in Norway in all the areas in which Norwegian business and industry are competitive.

Naturally, the company attempts to promote the use of Norwegian goods has been concentrated on Statfjord development because this is the first field in which Statoil has had a significant share. Statoil influence contributed to a 60 percent share of the deliveries to date to Statfjord, being secured for Norwegian suppliers. The comparable share of Norwegian deliveries is approximately 15 percent for Ekofisk and about 20 percent for Frigg.

The company has contributed to building up and coordinating Norwegian know-how and technical knowledge in several areas. One such example is the build-up of know-how in the area of geophysical data, through the establishment of Statex and later the merger of Statex with Geco. Furthermore, it should be mentioned that Norwegian technical expertise has been assembled through the establishment of the engineering company of Norwegian Petroleum Consultants, comprised of ten major Norwegian corporations.

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### ★ The extent of 5 years of Statoil activities

During the course of these five years the company has become engaged in all areas within the petroleum sector, in accordance with its aims, unanimously approved by the Norwegian Parliament in 1972, and in accordance with and to the extent established by the Norwegian political authorities. This is the case with respect to exploration activities in which Statoil is an independent operator. The activities also include participation in the development of Statfjord and Frigg, in transportation activities through the Norpipe companies, among others, in petrochemical activities at Bamble, in refining at Mongstad, and in marketing of crude oil on the international market and of refined products on a domestic level through Norsk Olje a.s.

### ★ Future perspectives

In the years to come Norwegian society will receive significant income from the petroleum industry. In addition to this, the Norwegian State will gradually dispose of significant amounts of petroleum through its commercial involvement in the petroleum sector. The right to dispose of these resources through the State's own company will give Norway a freedom of action and the possibilities for international cooperation in the areas of energy policy and industrial politics, which can prove to be of major significance.

### Trends in activities in 1977

Continued progress of Statfjord development has also characterized Statoil operations during the fifth year of company activities. In May of 1977, the Statfjord A platform was placed out on the field. Extensive outfitting and assembly work is currently under way and by the end of 1977, approximately 750 persons were working on the platform. The Statfjord A is scheduled to begin production by the end of 1979, and will have a production capacity of 15 million tons annually. From 1980 to 1990, the total production from the Statfjord A will constitute more than the entire Norwegian consumption of crude oil during the decade.

In December of 1977, the Norwegian Petroleum Directorate approved the Statfjord Group solution to the Statfjord B, which was a combined drilling, production and quarters platform. The first building contracts were entered into during the spring of 1978, and the platform is scheduled to be ready for production in 1982. The Statfjord B will have an annual production capacity of about 7.5 million tons of oil.

September 1977 marked the start-up of gas deliveries from the Frigg field through the pipeline to Scotland. This represents the first petroleum production from a field in which Statoil has ownership interests. After the negotiations between the British and the Norwegian authorities, the Norwegian share of the Frigg field was fixed at 60.82 percent. The Statoil share of the total field reserves is approximately three percent.

The gas pipeline from the Ekofisk field to Emden in West Germany first went on stream in September. This pipeline is owned by Norpipe a.s in which Statoil holds a 50 percent ownership interest.

In 1977, drilling was begun on 20 exploration and delineation wells on the Norwegian continental shelf. Statoil held ownership interests in all the blocks where there was drilling. Statoil was responsible as operator for four of the wells, and the company proved new hydrocarbon discoveries on block 1/9 and 15/9.

Total investments in the company projects in 1977 amounted to approximately 1700 million kroner.

The financial results are characterized by development projects, which continue to dominate company activities. The results show a loss of 112 million kroner.

Statoil had approximately 500 employees by the end of 1977.

### **Market prospects**

★ Reserves and production In 1977 the production of oil and gas from the Norwegian continental shelf amounted to 15.9 million tons of oil equivalents, of which the production of crude oil constituted 13.4 million tons, equivalent to production for the previous year. The year 1977 marked the first year of gas production. During the autumn of 1977, the gas produced was equivalent to approximately 2.5 million tons of oil equivalents (Figure 1).

Until full production begins on the Statfjord field, Statoil as licensee will have a small share of the oil from the Norwegian continental shelf. As of the mid-1980's, the Statfjord field could make available to Statoil an annual crude oil supply of 12 to 14 millions tons.

At the end of 1977, the Statoil estimates of the recoverable petroleum reserves on the Norwegian continental shelf in fields under development, amounted to approximately 1200 million tons of oil equivalents. In addition to this, there are the proven reserves of about 300 million tons of oil equivalents in reserves not yet decided to be developed. The Statoil share of the proven reserves amount to about 300 million tons of oil equivalents, and of this about 200 million tons of oil equivalents are found in fields which are currently being developed. Figure 1: Production of petroleum on the Norwegian continental shelf.





Figure 2: Petroleum reserves south of the 62nd parallel



Figure 3: Proven petroleum reserves as of January 1978



Statoil estimates that possible remaining of petroleum and petroleum products reserves south of the 62nd parallel are in the order of magnitude of 2600 million tons of oil equivalents. Threefourths of the reserves are calculated to be at water depths of 200 to 400 meters (Figure 2). The extent to which these estimated reserves could be commercially exploitable depends on further technological developments and the long-range, real price of petroleum. from several sources. Furthermore,

#### The price development \* for petroleum

The total world oil production increased in 1977 by four percent to 2.9 billion tons. Of this, the OPEC share constitued 52 percent. Total proven oil reserves in the world are estimated at approximately 88 billion tons, of which two-thirds are located in the OPEC countries. Considering its dominating position as producer, OPEC will continue to have a significant and determining influence on the price of crude oil (Figure 3).

In 1977 the OPEC countries utilized an average of 75 percent of their production capacity (Figure 4). The decision at the OPEC meeting in December of 1977 not to increase prices, should be seen in the light of limited utilization of capacity. Furthermore, on a short-term basis, there seems to be no marketing considerations indicating an increase in the real price of oil.

During the past four years, the increase in the official prices of crude oil have been lower than the rate of inflation in the OECD countries. The official price of Arabian light crude oil has thus increased by 16 percent from 1974 to 1978. Hence, measured in 1973 dollars, the real price has been reduced by 15 percent during the same period (Figure 5).

This means that the price of oil has risen relatively less than the prices of other products during the 1974-78 period. Oil imports to OECD countries are not expected to increase to any significant degree in 1978. An important reason for this is the increase in oil production in Alaska and the North Sea. However, in the 1980's an increased exploration of the OPEC countries' oil reserves will constitute the most significant alternative that could cover the growing international demand for crude oil.

On the basis of this, the Board of Directors is of the opinion that the price of petroleum in the long run will show a gradual real increase in comparison with the cost level for alternative sources of energy.

Marketing possibilities for \* Norwegian petroleum Statoil will have significant quantities of crude oil available in the 1980's while the Norwegian consumption of petroleum products is limited. This means that the Statoil production

will for the most part be sold on foreign markets, first and foremost in Scandinavia, Western Europe and also in the USA. Today, these are markets which are heavily dependent on imports from the Middle East. There is reason to believe that these countries will try to reduce their dependency on the Middle East by securing deliveries the oil from the North Sea has qualities which make for a profitable product which is truly in accordance with the demand in the OECD countries. The Board of Directors is of the opinion that there will be good marketing possibilities for the petroleum available to Statoil in the 1980's.

An important future task for the company will be to lay the foundation for a secure and stable realization of income. A vital question in the formulation of this marketing policy will be the alternative levels of treatment chosen for the company crude oil and localization of possible new refinery capacity.

### Exploration

Three new concessions were allocated on the Norwegian continental shelf in 1977. Statoil has a minimum of 50 percent participatory interest in all three of these production licenses.

In general there has been less drilling activity on the Norwegian continental shelf in 1977 than in the two previous years. In 1977, drilling of 20 exploration and delineation wells was begun, as opposed to 23 wells in 1976. However,

Figure 7: Drilling begun in 1977





Figure 4: Production capacity in **OPEC** countries in 1977



Saudi Kuwait Libya Others Iran Iraq Arabia

Figure 5: Price development for crude, light Arabian crude. FOB Ras Tanura





Figure 6: Wells on the Norwegian continental shelf where drilling has started



in the case of Statoil, drilling activities have increased, both with respect to drilling on blocks where Statoil is a participant and to drilling where Statoil is operator (Figures 6 and 7).

Petroleum discoveries were made on blocks 1/9 and 15/9 where Statoil is operator. Oil and gas were also discovered on block 7/12 where Statoil holds ownership interests. In addition, a new reservoir was encountered in a separate structure in the Statfjord area (block 33/9). Only after further drilling is conducted will it be possible to decide whether to develop one or several of these discoveries.

The General Meeting of Statoil has decided that the company shall participate in the development of the Murchison field, presuming that this decision is approved by the Norwegian Parliament, Murchison is a smaller petroleum field just north of the Statfjord field. The field extends over the median line between the Norwegian and the British shelf. Development has been initiated by the licensees on the British side, where the largest portion of the reserves lie. (The preliminary estimate of British reserves is set at 80 to 85 percent.) Statoil holds a 50 percent ownership interest in the Norwegian share of the reserves.

In connection with the fourth round of concessions, the Norwegian Government has submitted a suggestion for the announcement of 15 blocks for allocation south of the 62nd parallel. This allocation is based on consideration of the level of activity on the Norwegian continental shelf.

The concession area on the Norwegian continental shelf has been considerably reduced since 1974, as a result of relinquishments (Figure 9). Furthermore towards the end of the 1980's, production from the fields which have been decided to be developed will decrease. The choice of blocks allocated has partially been made on the basis of a desire to chart in greater detail the resources in the Statfjord area, and has partially been made with the desire to increase the reserve basis for a possible gas trunkline (Figure 8).

The Norwegian Government has submitted a suggestion that block 34/10 just east of the Statfjord field be allocated to Statoil as operator and to Norsk Hydro and Saga as the other licensees. Statoil will be able to start exploration drilling during 1978.

During the summer of 1977, Statoil arranged a geological expedition to Spitsbergen. Most of the planned geological work was conducted despite bad weather conditions. Additional charting is scheduled to be conducted on a new expedition during the summer of 1979.

### Field development

### ★ Statfjord

The Statfjord field was discovered in February of 1974 and was declared commercial in August of the same year. The development of the Statfjord field has since then been the most important Statoil project and will remain so in the years to come. Statoil holds a 50 percent ownership interest in the Norwegian part of the field. Mobil is the operator for field development.

The building of the Statfjord A production platform was begun in Hinnavågen in Stavanger late in 1974. The concrete structure was completed in the spring of 1976. Thereafter, the platform was towed to the Stord Yards to be mated with the steel deck for the outfitting and assembly of modules. In May of 1977, the Statfjord A was towed out and placed on the field. Throughout the rest of the year, installation work was conducted offshore. When petroleum production begins toward the end of 1979, approximately 15 million man-hours will have gone into the planning and building of the Statfjord A. By the end of 1977, approximately 4.3 million man-hours of work remained to be done on the platform, and about 750 men were engaged in the outfitting work on board. About 70 percent of the crew was Norwegian.

According to the Mobil estimate of primo 1978, the Statfjord A platform will cost about 7.5 billion Norwegian kroner when fully equipped (Figure 10). This is considerably more than originally planned when the building work first began. The rise in costs is mostly a result of conditions which have

Figure 8: Blocks suggested for allocation in the fourth round of concessions



Figure 9: Areas on the Norwegian continental shelf where licenses are allocated







Figure 11: The organization of Statfjord development—offshore development

#### Statfjord A



generally influenced construction projects in the North Sea. Furthermore, there are additional special conditions involved in the development of Statfjord. In order to gain time and achieve the earliest possible production start-up on the Statfjord field, the building of the Statfjord A platform was initiated before all construction work on the deck and production equipment was fully specified. Alterations in the plans led to delays in outfitting work; and when the platform was towed out, there remained a considerable amount of outfitting to be done offshore. Delayed production from Statfjord will mean postponement of income. In order to ensure the progress in completion of the Statfjord A platform, Statoil, in cooperation with Mobil, has developed a control system and a method of making the project organization more efficient. Special emphasis has been placed on defining clearer lines of responsibility and conditions of authority between the operator and the technical consultants.

As operator, Mobil is responsible for the development of the Statfjord A. Brown & Root are the main consultants. A Norwegian company, Brownaker, consisting of the Aker Group and Brown & Root (50-50), has been established in order to complete the outfitting work on board the Statfjord A platform (Figure 11).

In 1977, a significant amount of work was completed in order to arrive at a plan for the Statfjord B which would satisfy the stringent safety requirements imposed by the Norwegian Petroleum Directorate. The Statfjord Group has supported the alternative to build an integrated drilling, production and quarters platform with an annual production capacity of about 7.5 million tons oil. The alternative presented was approved by the Norwegian Petroleum Directorate in December 1977. One of the main principles behind the creation of this platform is to establish the greatest possible distance between quarters areas and areas on the platform associated with major risk (i.e. production and drilling area). At the same time, the living quarters are protected by fire-proof and explosion-proof walls. Furthermore, emphasis has been placed on rapid and safe means of evacuation.

The concrete structure and the first equipment components are scheduled to be ordered in the spring of 1978. On the basis of experience gained from work with the Statfjord A, the Statfjord B is scheduled for tow-out to the field when it is fully equipped. According to the planned progress in construction work, production start-up is expected in 1982.

### ★ Frigg

The gas deliveries from the Frigg field to the British Gas Corporation through the British pipeline to Scotland











A model of the Statfjord B platform

Construction of the petrochemical plants at Bamble. went on stream on 13 September 1977. From that point until the end of 1977, nearly one billion cubic meters of gas was transported from the Norwegian part of the Frigg field through this pipeline. The Norwegian pipeline from the Frigg field to St. Fergus in Scotland was ready to go on stream as of the end of 1977 or the beginning of 1978. In 1977 the Statoil share of Frigg sales income constituted just over 20 million kroner.

### The North Sea cost development

During the past few years, the cost increases for development projects in the North Sea have proved to involve a significant inflationary factor. The complexity of the development of North Sea oil and gas fields are in an order of magnitude unknown to the oil industry only a few years ago. The operators, their consultants, and the contractors who have completed work on the project have generally underevaluated the problems in the North Sea. This is the case with the time required for completion of the fully-outfitted installation, as well as with the size of the investments.

Technological, environmental, and safety requirements continue to be made more and more demanding. This has resulted in changes in constructions and system solutions. Alterations such as these require time and lead to increased costs. The time required for and the cost development involved in Ekofisk, Frigg, and Statfjord are indications of this. Comparable developments have taken place on the British continental shelf.

However, the Board of Directors is of the opinion that the practical experience and insight which has gradually been accumulated will contribute to achieving improved planning and carrying out of the major development projects in the North Sea.

### Transportation

The Norpipe gas pipeline from Ekofisk to Emden in West Germany suffered a delay in start-up, but went on stream in September of 1977. The delays were largely due to problems in connection with covering the pipeline, and covering of an additional 50 km of gas pipeline in the Danish sector is planned. The operational regularity of the gas pipeline during the start-up period has been good.

In 1977, approximately 13.4 million tons of oil were transported through the Norpipe pipeline system from Ekofisk to Teeside in England. The volume transported is somewhat less than originally anticipated. This is largely a result of the blow-out on the Ekofisk field, which involved a total halt in operation of the oil pipeline for a three-day period. Furthermore, the Bravo platform was not in production for some time after the accident. However, the transportation Figure 12: Organization of Statfjord development

#### Statfjord B



Figure 13: Oil production from the Statfjord field

Millions of tons



Figure 14: The Statfjord field annual cash flow The Statoil share platforms "A", "B", and "C" In fixed 1978 kroner Constant real price of crude oil Production royalty and taxes Cash flow after royalty and taxes Billions of kroner 5 4



agreement is formulated such that the Norpipe statement of profit and loss was only affected to a minor degree. In 1977 the Statoil returns on the share capital in Norpipe are estimated at 28 million kroner.

In organizing the Statfjord B project, an attempt has been made to apply as much experience gained in work on the Statfjord A as possible. The main consultant for the B platform is a team comprised of the Norwegian engineering company of Norwegian Petroleum Consultants (NPC) and Brown & Root (50-50) (Figure 12). Norwegian Petroleum Consultants is a group consisting of 10 major Norwegian engineering and consultant firms.

Future development plans for the Statfjord field will depend upon the final reserve estimates. Within this year, additional wells will be drilled, and the results of this drilling will be more closely evaluated so as to establish the size and extent of the field. It is realistic to assume that the Statfjord field will be developed with at least one more production platform (Statfjord C), in addition to the two which have already been decided upon (Figure 13).

The choice of an alternative for the permanent transportation of oil and gas from the Statfjord field will be of central significance for further Statfjord development.

Statoil is responsible for conducting the research project which aims at answering basic technical and financial questions in connection with the laying of a possible oil pipeline from the Statfjord field to Sotra. The results of this work, first begun in 1976, will be submitted to the Norwegian authorities in the autumn of 1978. Parallel with work on the pipeline project, the Statoil/Mobil Group is evaluating another alternative for a permanent transportation system: offshore loading from single point mooring buoys into tankers. Furthermore, a separate study has been initiated to analyze marketing and transportation possibilities for gas production from the Statfjord field. Thus, the Statoil/Mobil Group plans to present extensive background material to the authorities before the Norwegian Parliament makes its choice of a transportation alternative for petroleum from Statfjord field.

The postponement in Statfjord development has led to the situation whereby the need for a fully-developed transportation system from the Statfjord field will not arise before 1983 or 1984. Until this time, crude oil will be transported via loading into tankships on the field. Principle agreement has been reached between the partners in the Statfjord Group on the establishment of a separate transportation company in order to fulfill this purpose. Statoil will hold a 44.44 percent interest in and be operator for this transportation company. An agreement has been entered into with a Norwegian shipping company regarding the rental of two speciallyequipped vessels for this purpose. These ships are scheduled to be delivered in November of 1978 and February of 1979, respectively.

The investments in the Statfjord field will have a turnover which is essentially greater than can be expected from other Norwegian industrial activities. In addition, the field will offer major royalty and tax income to the Norwegian State. Thus, the Board of Directors has evaluated the Statfjord field as being a very good project (Figure 14).

### **Refining and marketing**

★ Refining and marketing In 1977, Statoil had at its disposal 1.5. million tons of royalty oil from the Ekofisk field. Of this, one million toris was delivered to the Mongstad refinery in order to cover the Statoil and the Norsk Olje low sulfur crude requirement. The use of Ekofisk royalty oil for this purpose was financially advantageous. The remaining quantity was sold at the norm price to foreign buyers. In 1977, Statoil was also responsible for the purchase of 1.5 million tons of medium sulfur crude from the Middle East and destined for the Mongstad refinery. Hence, the total quantity of crude oil marketed by the company in 1977 amounted to 3.0 million tons (Figures 15 and 16).

The technical operation of the Mongstad refinery progressed satisfactorily and at nearly full capacity. In 1977, the Statoil share of the production of refined products from the Mongstad refinery was also largely marketed through Norsk Olje a.s. In 1977, the refining and the sale of refined products gave an unsatisfactory statement of profit and loss. This is largely due to the low prices of refined products and the high capital costs associated with the relatively newly constructed refinery at Mongstad.

★ Petrochemical activities Statoil is engaged in petrochemicals through its ownership interests in the limited partnership companies of Noretyl and Norpolefin in Bamble.

According to original plans, production start-up at the ethylene plant was scheduled for mid-1977, based on gas condensates as the raw material, and production at Noretyl is diminished by the Norsk Hydro and Norpolefin downstream plants. The Phillips Group has reported that the start-up of gas condensate deliveries from Teeside can not be expected before late in the autumn of 1978. This is two years later than originally scheduled. In the intervening period, the ethylene plant will have to operate with purchased propane as raw material. The purchased propane will result in significant increases in raw material costs. The owners of



Figure 17: Contracts entered into for Statfjord A

1976

1975

0

1977



. The concrete structure and assembly

- 2. Engineering services and management
- 3. Supply services
- 4. Single point mooring buoy and pipeline
- 5. Production equipment
- 6. Offshore installation work
- 7. Other

1974

Total

Noretyl have contacted the Phillips Group in order to arrive at a compensation for the increased costs resulting from the delay in gas condensate deliveries.

The operator for I/S Norpolefin, Saga Petrokjemi, has reported delays in plant progress. The polypropylene and light polyethylene plants, planned for production start-up at the end of 1977, will not go on stream before mid-1978.

The market for Norpolefin products is characterized by low prices as a result of over-capacity and of weakened demand. The Board of Directors is of the opinion that the market situation for I/S Norpolefin will be difficult during the next few years.

## Cooperation with Norwegian businesses

Petroleum activities have presented Norwegian industry with new opportunities for development. Under the current financial situation, North Sea activities offer special possibilities for strengthening of the Norwegian business sector. The Board of Directors views this as a significant task; that is, to contribute to securing deliveries for Norwegian industry to the petroleum activities in the North Sea.

Frigg and Ekofisk field development are nearly completed, and most of the major contracts associated with development have been entered into already. When considering deliveries, it is therefore of greater importance to direct company interest toward the development of the Statfjord and Valhall fields.

Through its participation in Statfjord development, Statoil has attempted to contribute to establishing favorable conditions for deliveries from Norwegian industry. Nearly all the contracts in connection with the first phase of development, including the Statfjord A platform and the single point mooring buoy, have already been placed. Agreements have been entered into with 235 Norwegian companies. These firms are located all over the country, as far north as Narvik; and the agreements with these companies have resulted in a long series of subcontracts for other Norwegian companies on the local level. By the end of 1977, the contracts with Norwegian companies were valued at approximately four billion Norwegian kroner. There have been significant Norwegian deliveries in connection with the concrete structure and the assembly work, deck, modules, computer systems, electrical installation, processing equipment, supply services, and engineering services (Figure 17).

Statoil heads the project for the preliminary studies of a possible pipeline from Statfjord to Sotra. In connection with the project, Statoil has drawn Norwegian consultant firms into the project and has awarded them work for approximately 50 million kroner.

Major foreign companies have held very strong positions as traditional suppliers of equipment to the oil companies. By ensuring that the bidding has been divided into smaller packages, smaller and medium-sized Norwegian firms could be included in the bidding and given the opportunity to be truly competitive. The alteration in the organization of the Statfjord project has also contributed to greater Norwegian influence.

In connection with the Statfjord-Sotra pipeline and terminal project, development projects have been contracted with 47 Norwegian companies. By the end of 1977, these contracts were valued at about 116 million Norwegian kroner, of which the Norwegian share was 43 percent.

In the years to come, petroleum activities on the Norwegian continental shelf will also be characterized by technological challenges, largely because new deposits of oil and gas will be found at greater and greater water depths.

Upon the transition from development to operational phases, the deliveries of goods and services will be altered. However, the accumulated operational costs accrued during the lifetime of a field can be comparable to the original investments.

In the years to come, there will be opportunities for delivery of Norwegian goods and services to the North Sea activities, with regard to exploration, development, and operations. A great degree of cooperation will be required of Norwegian industrial firms with respect to participation in major development projects.

### Safety and environmental control

Throughout the year Statoil has continued to reinforce the company's human resources and know-how within the fields of safety, environmental protection, and quality control. This effort has aimed at building up administrative systems for the total company efforts in these areas, follow-up of concrete projects in which Statoil is engaged, as well as the further development of individual competency.

Together with Mobil, the operator, Statoil has been engaged in the safety aspects associated with the development of the Statfjord field.

Statoil has participated in the establishment of the Norwegian Offshore Clean Sea Association. The tasks of NOCSA are to build up and to operate a joint petroleum contingency plan in the North Sea. All the licensees on the Norwegian shelf are represented through the operator companies. Along with the other major operator companies, Statoil is represented on the Board of Directors of NOCSA. On behalf of the other companies, Statoil has been responsible for the purchasing and the follow-up of the equipment deliveries for the joint petroleum contingency plans for preparedness for oil spills south of the 62nd parallel.

Statoil has been required by the authorities to prepare and develop the contingency plans for oil spills north of the 62nd parallel. In this connection, the company exercises its influence on the development of improved pollution-control equipment, and in 1977 Statoil conducted tests of this type of equipment. Furthermore, the company is preparing a contingency plan for pollution-control in Northern Norway. In this case, evaluations are being made of a program involving close cooperation with the Coast Guard, in order to utilize the resources represented by the Norwegian fishing fleet, its seaworthy vessels, and its experienced crew.

Though Statoil is not participating in the development and operation of the fields in the Ekofisk complex, the company has emphasized the charting and careful study of the experience gained from the Bravo blow-out. The purpose of this is to utilize the Bravo experience in Statoil safety work and contingency plans, and also to form a foundation for the evaluation and development of pollution-control equipment. Despite the work conducted in connection with safety and environmental control, there was an accident during work on the Statfjord A platform on 25 February 1978 in which five persons lost their lives. The Board of Directors expresses its regret concerning this tragic accident.

### Personnel and organization

Work in this sphere continues for the purpose of developing the company human resources and the administrative organization within Statoil. Emphasis is placed on recruiting qualified staff members to the demanding company tasks in the development and operational projects in which Statoil is engaged. Furthermore, the development of know-how within the company is viewed as a significant project.

A separate department of personnel and organization has been built up in order to handle these tasks. During the course of the year, the company has also built up its own staff department for safety and quality control. As a part of the Statoil contingency plans, a contingency program has been established involving organization in an emergency. On short notice this organization can be set in motion, in case a critical situation should arise, such as emergencies or spills in connection with the petroleum activities. The Board of Directors is of the opinion that the company is now well-equipped for the existing tasks as well as for future eventualities.





1) The first phase of construction of the Statoil administration building at Forus, on the outskirts of Stavanger.

2) Testing of oil booms.

3) The Statoil base area and district office for Northern Norway, in Harstad.

4) Lloyds of London which holds most of the insurance coverage for the Statfjord A.





Even before the new "Law on labor protection and labor environment" was approved, Statoil had established in March of 1977 a Labor Environment Committee within the company. This committee consists of three representatives from the company management and three representatives elected from among the employees.

During the course of the year, environmental conditions have been studied at all the Statoil office locations. Safety grievance officers and members of the Labor Environment Commitee have been trained in accordance with the guidelines set forth in the new labor environment law.

By the end of the year, there were 506 employees at Statoil. The company administration is located at six different offices in Stavanger. Practical disadvantages arise as a result of this situation. Statoil plans to assemble the administration at Forus, on the outskirts of Stavanger. The work on the first construction phase has started, and the first phase is expected to be ready for occupancy at the end of 1978 or the beginning of 1979. The Board of Directors wishes to express its recognition of the extensive efforts made on the part of the employees. The staff has also, through its influence in the various cooperative organizations, made valuable contributions to the company activities.

### Financing and insurance

#### ★ Financing

The company share capital was expanded by 300 million kroner in 1977. At the end of 1977, the Statoil share capital amounted to 1851.5 million Norwegian kroner. In 1977 the Norwegian Parliament decided to increase Statoil share capital for 1978 by 400 million kroner.

The long-term company loan increased by 1,469 million kroner, of which 1,100 million kroner represented new loans from the Norwegian State. The total loans from the State of Norway as of 31 December 1977 were 2,052 million kroner.

In December of 1977, the Norwegian Parliament resolved that the Statoil loan requirement in 1978 be covered by the company itself raising loans abroad. The loans would carry a

Norwegian State guarantee. At the same time, the Norwegian Parliament resolved to offer a state guaranty authorization amounting to two billion kroner.

#### ★ Insurance

Because of the significant value concentrations involved in Statoil activities, a relatively extensive insurance coverage has been taken out for material damages, pollution and liability.

As of March 1978, the Statfjord A plat-form was insured for just over 3,900 million kroner, which at this time represented the capacity on the world market for this type of risk. A smaller uncovered amount remains in addition to this. The operator, in cooperation with the other partners, is working on the possibility of obtaining additional insurance coverage for the Statfjord A.

### The accounts for 1977

★ The statement of profit and loss The Statoil statement of profit and loss for 1977 is characterized by the fact that the most important areas of company activities continue to be in a phase of development. The loss of 112 million kroner for 1977 is better than originally budgetted, and less than the 1976 loss of just over 134 million Norwegian kroner.

The 1977 turnover amounted to nearly 1,700 million kroner, an increase of about 30 percent compared with 1976. The turnover includes the sale of crude oil, the crude oil supply to the Statoil and the Norsk Olje shares of the Mongstad refinery, the sale of refined products, and the sale of gas.

The sale of gas, amounting to 20 million kroner, is associated with the Statoil share of the Frigg field and is the first income from the petroleum fields in which Statoil holds ownership interests.

The statement of profit and loss from the sale of refined products was not satisfactory in 1977. This sale of refined products from the Mongstad refinery through Norsk Olje a.s did however show an improvement as compared with the statement for 1976.

Administration and operational costs amounted to 87.5 million kroner, which was somewhat less than in 1976. In

Figure 18: Annual Statement of profit and loss for Statoil

Millions of kroner



1977, salaries and other reimbursements to the Board of Representatives (in existence until 24 May 1977) was 19,500 Norwegian kroner; to the Company Assembly, the amount was 20,000 kroner; to the Board of Directors, 99,800 kroner; and to the President, 299,500 kroner.

Depreciations increased from 32.8 million kroner in 1976 to approximately 47 million kroner in 1977. The increase is largely a result of the depreciations on the Frigg field.

The net financial costs have increased to 35.6 million kroner in 1977. This increase in interest costs associated with operations is linked to increased financing through foreign capital. Share capital financing has been reduced from 36 percent in 1976 to 27 percent of total financing in 1977.

The Board of Directors suggests that the loss of 112.1 million kroner be transferred to the 1978 accounts.

For further details, see the Accounts with comments.

#### ★ Future prospects

During the next few years, the statement of profit and loss will continue to indicate a loss. As of 1981, company activities as a whole are expected to show a profit.

Stavanger, 3 March 1978 The Board of Den norske stats oljeselskap a.s

ied Clubner

Finn Lied

Chairman

Ole Myrvoll Vice-Chairman

tossen Aksel Fossen

Einar H. Moxnes

(with)

Ottar Vollan

mormes Ase Gjerdsjø Ollan baceant Ham J. Hans J. Ødegaard

18

Åse Gjerdsjø

## Statement of profit and loss for the year 1977

Operating income and operating costs	1977 amounts in 1000 N.Kr.		1976 amounts in 1000 N.Kr.	
Income from sales(1) Direct costs		1 682 641 1 675 838 6 803		1 298 398 <u>1 325 078</u> — 26 680
Other income(2)		<u>50 734</u> 57 537		<u>13 412</u> — 13 268
Salaries and social costs	55 309 32 226	87 535	36 543 57 776	94 319
Loss before depreciation Depreciation Operating loss		29 998 47 012 77 010		107 587 <u>32 830</u> 140 417
Financial income and financial costs Dividends received	8 515 11 737 55 847	<u>35 595</u> 112 605	2 771 17 735 15 687	<u>4 819</u> 135 598
Extraordinary income and costs Various extraordinary income(5) Cost of share capital increase	100 3 000	2 900	14 892 7 965	6 927
Loss before taxes		115 505 3 419 ,112 086		128 671 5 576 134 247

## **Balance sheet as of 31 December 1977**

Assets		1977 amounts in 1000 N.Kr.	19 amout 1000	76 nts in N.Kr.
CURRENT ASSETS				
Cash (7)				
Cash in hand	123		76	
Deposits in Norwegian banks	202 124		111 367	
Deposits in foreign banks	20 058	222 305	7 403	118 846
Short-term receivables				
Accounts receivable(8)	391 232		278 764	
Interest earned but not due	- 5		53	
Share capital outstanding(16)	18 000	409 237	60 600	339 417
Inventories				
Crude oil	64 552		44 100	
Products and equipment for sale	95 821	160 373	67 298	111 398
INVESTMENT CAPITAL				
Long-term receivables and investments				
Various long-term receivables	7 746		8 982	
Shares in Norwegian companies	449 527		387 678	
Shares in foreign companies(10)	77 003	534 276	57 373	454 033
Fixed assets (11)				
Transportation equipment	2 3 2 4		2 503	
Furniture and fixtures	24 839		15 043	
Installations under construction	961 446		526 010	
Construction projects on shore	463 930		446 858	
Participation in fields(12)	2 748 686		1 617 050	
Real estate	27 380	4 228 605	29 749	2 637 213
		5 554 796		3 660 907

Stavanger,

Finn Lied Chairman Ole Myrvoll Vice-Chairman Aksel Fossen

Åse Gjerdsjø

Liabilities and shareholders' equi	ty			
	1977 amounts in 1000 N.Kr.		19 amou 1000	076 Ints in N.Kr.
Current liabilities			150 704	
Accounts payable	683 363		452 724	
Interest payable	12 584	005 0 17	2717	150 00
Provision for taxes		695 947	3 643	459 084
l ong term debt				
Other long-term debt (13)	456 997		318 689	
Loan from the State of Norway (14)	2 051 832		951 832	
Bank and mortgage loans	681 402		527 878	
Export credits	164 468	3 354 699	87 188	1 885 587
Currency risk fund(15)		3 975	1.00	3 975
Shareholders' equity			1.00	
Share capital(16)	1 851 500		1 551 500	
(18 515 000 shares of N.kr. 100 each)			Electronic and a second	
Less accumulated loss as per 1.1	239 239		104 992	
Net loss of the year	112 086	1 500 175	134 247	1 312 261
Joint liability N.kr. 58 107 000(17)				
		5 554 796		3 660 907
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 000 00

31 December 1977 3 March 1978

Einar H. Moxnes

Ottar Vollan

Hans J. Ødegaard

Arve Johnsen President

## **Comments to financial statements** 31 **Desember 1977**

### Accounting policies

### Items charged to the profit and loss account

- Expenditures relating to the build-up and operation of the company, including registration fees in connection
  with increase in share capital.
- All expenditures relating to the purchase, collection and processing of seismic data (except those concerning commercial fields).

### **Capitalized items**

- · Expenditures concerning commercial fields where Statoil has exercised its option to participate.
- Interest expenditures in connection with development projects.

### Depreciation

Fixed assets have been depreciated according to rates recommended by Norwegian tax authorities.

### **Conversion principles for foreign currency**

Foreign currency is converted into Norwegian kroner according to the following principles:

- Expenditures/income are entered according to the prevailing exchange rate at the time of payment.
- Current assets and current liabilities are converted at the exchange rate prevailing as of 31 December 1977.
- Investments and long-term receivables and fixed assets are entered at the exchange rate prevailing at the
- time of procurement.
  Long-term debts are converted at the exchange rate prevailing when the loans were drawn.

Currency losses and gains based on these principles are included in the statement of profit and loss.

### Shares in Norwegian and foreign companies

Shares in Norwegian and foreign companies (none quoted on the stock exchange) have been valued at purchase price.

### Partnerships and limited partnerships

The Statoil share of the results and balance figures in partnerships and limited partnerships is included in the statement of profit and loss and in the balance sheet respectively. For 1977 this includes ownership in the Frigg, Heimdal and Statfjord fields, the partnerships Noretyl and Norpolefin, as well as the limited partnerships Rafinor A/S & Co. and A/S Coast Center Base LTD. & Co.

### Inventories

In the balance sheet, the inventories of equipment, crude oil and products are assessed at the lesser of the purchase/production cost or the sale price.

### Notes to financial statements

1. Sales income includes sale of the State royalty oil from the Ekofisk field, sale to Norsk Olje a.s of other purchased crude oil and the Statoil share of the products refined at Mongstad, and the sale of gas in connection with the Statoil ownership interest in the Frigg field.

1974 Amounts in 1000 N.Kr. 1977 1976 1975 Norway 771 960 683 136 Crude oil ..... 126 646 Gas ..... 30 606 439 32 000 Refined products ..... 531 218 158 454 Exports Crude oil ..... 283 982 65 262 23 415 20 230 Gas ... Refined products ..... 18 782 73 777 66 152 1 682 641 1 298 398 382 292 98 152

The sales income is distributed as follows:

The sale of gas from Frigg has made a positive contribution. (The sale of gas in Norway involves the gas condensate from the Frigg field, which is sold to Norwegian buyers). In connection with sale of products to Norsk Olje a.s, Statoil has taken a loss on its share of the production at the Mongstad refinery. Export of crude oil has resulted in less of a surplus.

2. Other income includes sale of seismic data, etc.

3. Dividends received relate to returns received in 1977 on the shares in Norpipe a.s for the year 1976.

<ol><li>Interest costs relation</li></ol>	ite to costs of financing	associated with th	e operations. The to	otal interest expenses are
distributed as foll	ows:		CORRESPONDENCES DE L'ANDRESSE	

Total interest expenses in 1977	198.0 million N.Kr.
Less capitalized interest expenses on development projects	142.2 million N.Kr.
Interest costs for operation	55.8 million N.Kr.

5. Various extraordinary income relates to return on the sale of shares in Statex A/S.

- 6. For the 1976 income year, a provision of 3.6 million N.kr. was made to cover the estimated capital tax. The final assessed tax for 1976 amounted to just over 1.3 million N.kr. For the 1975 income year, the tax was reduced by 1.1 million N.kr.
- 7. Cash amounts to 222.3 million N.kr. Of this amount 24.2 million N.kr. is deposits in foreign currency which is converted at the prevailing rate as of 31 December 1977. The balance of the current assets must be viewed in the context of the current liabilities.
- 8. N.kr. 2.3 million of the accounts receivables is short-term financing for employee housing.
- 9. Purchase of shares in Norwegian companies this year includes share capital increases in Norpipe a.s. The sale of shares in Statex has resulted in a reduction by one million N.kr. of the share holdings.

Amounts in 1000 N.kr.	31 Dec 1977	Nominal value	Number of shares	Ownership	Total share- capital
Norpipe a.s	355 000	355 000	3 550 000	50%	710 000
Norsk Olie a.s	91 500	13 500	13 500	15%	90 000
Rafinor a.s	3 000	3 000	3 000	30%	10 000
A/S CCB Ltd.	27	27	110	50%	55
	449 527	371 527			

The company shares are booked at their purchased value. This is also applied for Norsk Olje, which as of 31 December 1977 showed a booked negative shareholders' equity in their accounts.

10. Shares in foreign companies include Statoil's 50 percent of the equity capital in Norpipe Petroleum U.K. Ltd., which is entered at the purchased cost of 77 million N.kr. The equity capital in Norpipe Petroleum U.K. Ltd. was increased in 1976 by £ 4 000 000 and totalled for Norpipe Petroleum U.K. Ltd. £ 13 415 228 as of 31 December 1977.

### 11. Fixed assets

Amount in millions of N.kr.	Transpor- tation equipment	Furniture and fixtures	Installations under construction	Construc- tion projects	Interest in fields	Real estate	Total
Purchased in 1973 and previously	0.1	1.8	1000 10		5.6	0.3	7.8
1974	0.2	1.8	28.4	the second of the	26.8	6.6	63.8
1975	0.2	3.2	195.6	15.2	660.7	-0.5	874.4
1976	2.5	10.5	302.0	463.1	924.0	23.4	1725.5
1977	0.3	12.0	435.4	51.4	1141.4	-2.2	1638.3
Purchased as of 31 Dec. 1977	3.3	29.3	961.4	529.7	2758.5	27.6	4309.8
Depreciated as of 1 Jan. 1977	0.5	2.3		31.4		0.1	34.3
Depreciated 1977	0.4	2.2		34.4	9.8	0.2	47.0
Depreciated as of 31 Dec. 1977	0.9	4.5		65.8	9.8	0.3	81.3
Net book value as of 31 Dec. 1977	2.4	24.8	961.4	463.9	2748.7	27.3	4228.5

For offshore installations in operation, maximum rates based on the petroleum tax law are utilized. Thus, in 1977, 9.8 million N.kr. was depreciated for the Frigg field, which is comparable to 16 2/3 percent per annum of the investment capital in operation at the time of production start-up in September of 1977.

Distribution of net book value in partnerships and other assets:

0.5	0.3		19.6	-	1.4	21.8
1.5	1.5	1.9	439.2		8.3	452.4
		533.7				533.7
		394.1				394.1
0.4	23.0	31.7	5.1	2748.7	17.6	2826.5
2.4	24.8	961.4	463.9	2748.7	27.3	4228.5
	0.5 1.5 0.4 2.4	0.5 0.3 1.5 1.5 0.4 23.0 2.4 24.8	0.5 0.3 1.5 1.5 1.9 533.7 394.1 0.4 23.0 31.7 2.4 24.8 961.4	0.5 0.3 19.6 1.5 1.5 1.9 439.2 533.7 394.1 0.4 23.0 31.7 5.1 2.4 24.8 961.4 463.9	0.5         0.3         19.6           1.5         1.5         1.9         439.2           533.7         394.1         394.1           0.4         23.0         31.7         5.1         2748.7           2.4         24.8         961.4         463.9         2748.7	0.5         0.3         19.6         1.4           1.5         1.5         1.9         439.2         8.3           533.7         394.1         394.1         1.6         1.6           0.4         23.0         31.7         5.1         2748.7         17.6           2.4         24.8         961.4         463.9         2748.7         27.3

Specification of net book value of interest in fields:

Amount in millions of N.kr.	As of 31 Dec. 77	Depreciation	Increase in 1977	As of 1 Jan. 77	Ownership
Statfjord Frigg Heimdal Production license 045	2 282.1 417.5 49.0 0.1	9.8	1 000.0 138.7 2.6 0.1	As of 1 Jan. 77 1 282.1 288.6 46.4 — 1 617.1	44.4423% 3.0410% 40.0000% 50.0000%
	2 748.7	9.8	1 141.4	1 617.1	

In the partnerships in which Statoil holds participation interest, the company has, according to the accounting agreements, the right to audit the operator's accounts within two years after the end of the financial year. The company has used the right and will continue to do so in the future. Possible corrections resulting from such audits might change the net book value which is based on the accounting reports of the operators.

### 12. Interests in fields

### Statfjord

Statoil owns 44.4423 percent of the Statfjord field which extends over the median line between the British and the Norwegian sectors. The capitalized amount of 2,282.1 million N.kr. represents the Statoil share of the accumulated expenditures after the field was declared commercial. This amount also includes accumulated interest expenses totalling 118.5 million N.kr.

### Frigg

Statoil owns 5 percent of the Frigg field located on the Norwegian side of the median line, and the same share in one of the two pipelines from the Frigg field to St. Fergus in Scotland. The final distribution of field reserves between Norway and the U.K. have now been approved by the authorities of the two countries. Accordingly, 60.82 percent of the field is located in the Norwegian sector. Thus, Statoil owns 3.041 percent of the total field. The capitalized amount of 417.5 million kroner represents the estimated Statoil share of the accumulated expenses, including capitalized interest, but after deduction of 9.8 million N.kr. for depreciations in 1977.

According to the State participation agreement the Petronord Group finances Statoil's share in full, including interest charges. The amount is entered as long-term debt on the balance sheet. Repayment of the debt is made by crediting future production income to the Petronord Group.

Production on the field began on 13 September 1977, and the income from the 1977 production, after deduction of direct expenses has therefore been utilized for repayment of the debt. Income and costs related to this production are included in the statement of profit and loss.

If the repayment of the debt in connection with the financing of the Frigg field is not repaid before the production license expires, then the outstanding debt will be cancelled. Statoil has the option to prepay the debt.

#### Heimdal

Statoil owns 40 percent of the Heimdal field. The capitalized amount of 49 million N.kr. represents the estimated Statoil share of the accumulated expenditures for this field, including interest.

The other partners in the Group finance the Statoil share of the expenditures accumulated before the option to participate was exercised. This amount is estimated at 30.1 million N.kr. and is also entered as long-term debt.

### Production License 045

Statoil has a 50 percent ownership interest in Production License 045, but according to the operating agreement pays 7.5 percent of the exploration expenses. The exploration expenses are capitalized until drilling has proven that a commercial find is discovered. In 1977 the Statoil share amounted to 0.1 million kroner. Should exploration drilling not prove petroleum discoveries considered commercial, then the capitalized amount will be expensed.

## 13. Miscellaneous long-term debt includes financing contributed by the partners in the Frigg and Heimdal fields to Statoil. (Cfr. note 12).

Specification of this debt:

Amount in millions of N.kr.	Debt as of 31 Dec. 1977	Downpayment in 1977	Increase in 1977	Debt as of 1 Jan. 1977	
Heimdal Frigg	30.1 426.9	12.6	151.0	30.1 288.5	
	457.0	12.6	151.0	318.6	

14. The total loan from the Norwegian State as of 31 December 1977 amounts to 2,051.8 million N.kr. Of the appropriation for 1977 amounting to 1,500 million N.kr., 778 million remains. In 1978 Statoil itself will borrow, by raising the necessary loans, backed by the Norwegian State guarantees, on the international capital markets.

15. The provision to the currency risk fund has not been altered as of 31 December 1977 due to the fact that the relevant rates of exchange as of 31 December 1977 are lower than the rates of exchange entered for the long-term debt in the accounts. If the entire long-term debt is paid according to the current rate of exchange, the company would gain approximately 24.8 million N.kr. Possible gains will only be entered as income when it is realized as repayment of the debt is gradually made.

As a result of the devaluation of the Norwegian kroner after the closing date, the value of the long-term debt has increased by approximately 20.2 million N.kr., which involves an equivalent reduction of the afore-mentioned unrealized gain.

16. In the State budget for 1977, 300 million N.kr. was appropriated as increase in share capital of the company. The amount has been paid in full.

 The total registered share capital as of 31 December 1977 is:

 Share capital as of 1. January 1977

 Increased in 1977 by

 Share capital as of 31 December 1977

 Share capital as of 31 December 1977

 Share capital as of 31 December 1977

 Share capital as of 31 December 1977

In connection with the State's transfer to Statoil, of its interests in Rafinor A/S and Rafinor A/S & Co. which the State had acquired from Norsk Hydro, the share capital in 1976 was increased by 275 million N.kr., equivalent to the calculated value for these ownership interests. The parties are now in agreement that the final value of take-over will be 257 million N.kr. The difference amounting to 18 million N.kr. is therefore entered as share capital outstanding. This 18 million N.kr. was set off when the share capital for 1978 was increased at an extraordinary General Assembly meeting on 27 January 1978.

17. Statoil is, together with the other partners in the partnership companies Noretyl and Norpolefin, liable for debt incurred in the partnership companies' name. This mainly involves current liabilities.

### Liability

In connection with activities on the continental shelf, including transportation systems, the Ministry of Petroleum & Energy can decide that a licensee should post a guarantee for possible liability which might be incurred in connection with this activity (Royal Decree of 8 Dec. 1972, § 52). Statoil has, as all other license holders an unlimited liability for possible indemnity damages exceeding those covered by insurance agreements.

### Charter agreements

Statoil has an agreement with the Sandefjord company Ross Drilling Co. A/S for the charter of the drilling rig "Ross Rig" for a period of up to five years, from June 1975.

Reference is made to the report of the Board of Directors concerning chartering of vessels for the transportation of crude oil from the Statfjord field.

## Source and application of funds

Amount in 1000 N.kr.	1977	1976	1975	1974 and previously	Accumulated as of 31 Dec. 1977
Source of funds					
Increase in share capital	300 000	796 500	450 000	305 000	1851 500
Less net loss	-112 086	-134 247	-62 221	- 42 771	- 351 325
Plus depreciation	47 012	32 830	1 048	478	81 368
Total internal financing	234 926	695 083	388 827	262 707	1581 543
Increase in long-term debt	1469 112	1343 247	321 328	221 012	3354 699
Currency risk fund			3 369	606	3 975
TOTAL SOURCE OF FUNDS	1704 038	2038 330	713 524	484 325	4940 217
Application of funds	1000 101	1705 170	074 440	71.055	1000.072
Increase in fixed assets	1638 404	1/25 4/2	874 442	/1 655	4309 973
and investments	80 243	164 295	58 678	231 060	534 276
Total capital expenditures	1718 647	1889 767	933 120	302 715	4844 249
Change in working capital	- 14 609	148 563	-219 596	181 610	95 968
TOTAL APPLICATION OF FUNDS	1704 038	2038 330	713 524	484 325	4940 217

Concrete has experienced a rapid development during the past few years, as a material used in offshore constructions. Norway has assumed a leading position in this area of industrial techology through the development and building of the Condeeptype platform.

The first red-letter day for the Statfjord A was the tow-out from dry-dock at Hinnavågen in Stavanger on 19 May 1975.

While the building of the concrete structure was under way in Stavanger, the deck was being constructed in a fitting-out dock at the Stord Yards. At the same time, service modules were being constructed at various locations in Norway, including Sandnessjøen, Bodø, and Kristiansund in the north. The flare boom was built in Eydehavn, while parts of the single point mooring buoy were produced in Egersund. Modules were also produced in Great Britain, France, and the Netherlands.

The tow-out of the Statfjord A to Stord began on 3 May 1977. Five tugboats with a total of 79,000 Horsepower towed the platform to its destination, a distance of approximately 350 kilometers.

On 19 May the platform was placed on the field, 15 meters from the desired site, only 0.6° from the planned northsouth positioning. Of the 16 days which had passed from the time the platform left Stord, five were devoted to towing, two were devoted to the actual placement, while nine days were required in order to fill in cement under the platform base.

The pipeline linking the single point mooring buoy and the platform was welded together at Risavika near Stavanger. At the end of May it was towed out in one continuous length; that is, two km long. Prior to tow-out, a 50-ton trenching machine had ploughed up a trench in preparation for laying of the pipeline. June 1977 marked start-up of the offshore installation work. A total of 32 major module-lifting operations were scheduled for the summer. However, preparatory work was necessary on the platform before modules could be received onboard, and this required more time than originally allocated. Furthermore, certain lifting operations had to be postponed until 1978 because of bad weather. At the time the lifting operations were under way, the crew and work force had to be expanded gradually in order to complete outfitting and assembly work. The labor force is expected to reach a peak of about 900 construction workers who will be engaged in these projects. In addition, the operator's own employees and other supporting personnel should bring the total labor force on the field to approximately 1350 workers. Today, Norwegians constitute nearly 75 percent of the offshore labor force, and it is estimated that the Norwegian share will increase to nearly 90 percent before

the platform is completed.

Two semi-summersible rigs will serve as quarters platforms for about one thousand persons. Furthermore, the crane barge Sea Troll has been chartered. This will, in addition to conducting lifting and construction operations, also cover the housing requirement for an additional 200 persons.

The Statfjord A was officially christened on 22 November 1977. Oddbjørg Kloster presided over the ceremony which took place out on the field. On the basis of the progress reports available today, production start-up for the Statfjord A is planned for the second half of 1979. In order to ensure progress in the completion of the

platform and its single point mooring buoy, Statoil in cooperation with the operator, has worked out an organizational reinforcement of the project. During welding work on 25 February 1978, a fire broke out in the utility shaft of the platform. Five persons died in this tragic accident. The extent of the damage caused by the fire has still not been fixed, and it is difficult to say what the consequences of the fire will be on progress. The Statfjord Group and the Norwegian Petroleum Directorate are evaluating whether the accident should result in alterations in construction of the Statfjord A platform.



The excavation area for the first phase of construction of the Statfjord B platform, Stavanger.



### The next phases of field development

Plans for the Statfjord field, as approved by the Norwegian Parliament in 1976, presuppose that field development take place in two phases. Phase I consists of the Statfjord A platform with a single point mooring buoy for offshore loading into tankers. The Statfjord A will have a maximum production capacity of 15 million tons annually. According to the original plans, Phase II should have consisted of two platforms of the same type and production capacity as the Statfjord A. Prior to the choice of the final transportation alternative, the condition was set that there be a more detailed study of the possibility of transporting the oil through a pipeline to Norway.

Based on the safety requirements set by the Norwegian Petroleum Directorate in the fall of 1976, it was however decided that the plans for Phase II be re-evaluated. In this connection, the Statfjord Group evaluated several designs throughout 1977, giving special attention to technical, safety, and financial aspects of the platform concepts. This study was characterized by constant contact between Mobil and the Norwegian Petroleum Directorate in order to ensure an informal dialogue at an early stage, especially with regard to the significant safety and technical questions involved. On the basis of the analyses conducted and the evalua-

tions made, the Statfjord Group concentrated its efforts on a combined drilling, production, and guarters platform with a reduced production capacity, as compared with the Statfjord A. At the same time, it was decided that the B platform be placed on the southern part of the field as opposed to the originally planned northern site. This decision was a result of greater familiarity with the reservoir in the southern part of the field.

The detailed plans of the Statfjord B were designed during the autumn of 1977. Annual production capacity was fixed at approximately 7.5 million tons of oil. In order to ensure the best possible operational regularity, the Statfjord B will incorporate a significant storage capacity for oil. One of the main principles behind the creation of this platform is to allow for the greatest possible distance between the quarters areas and areas on the platform associated with major risks (the drilling and production area). At the same time, the housing area is protected by fire-proof and explosionproof walls. Furthermore, a new and improved evalcuation system is currently being developed.

On 19 December 1977, the Norwegian Petroleum Directorate gave its approval in principle to the suggested platform design. Then, on 2 February 1978, the Statfjord Group decided to initiate the building of the Statfjord B platform. On 21 February 1978, the group entered into a contract with the firm of Norwe-

gian Contractors for the building of the Condeep structure. The work began immediately thereafter at Hinnavågen, Stavanger. At peak activity, there is expected to be a maximum of 800 persons involved in building the concrete structure. The tow-out from dry-dock is scheduled for the summer of 1979.

Brown & Root and the Norwegian engineering company of Norwegian Petroleum Consultants are the major consultants for the engineering work and project management (Engineering Management Consultant, EMC). The major consultant has built up a staff of about five hundred in Oslo and London. Project work on the bidding documents for the deck, for the assembly of the deck, and for the outfitting of the concrete shafts will be conducted through the spring of 1978. The contracts are expected to be entered into during the autumn of 1978, while start-up for building of the steel deck is planned for November of the same year.

The concrete structure of the Statfjord B will be the largest built in Norway. It will be capable of bearing approximately 35,000 tons during the tow-out operation. Thus, it will be possible to fully equip the platform before tow-out to the Statfjord field. According to available plans, the tow-out will take place during the third quarter of 1981, while production start-up is scheduled for 1982, if all goes on schedule.

The single point mooring buoy for the Statfjord A being built at Kværner Brug A/S in Egersund.



## Drilling on blocks where Statoil held interests in 1977

Operator	Drilling platform	1st q	1st quarter   2nd quarter   3rd qu			arter 4th quarter	
STATOIL	ROSS RIGG	1/9-1	15/9-1 •	1/9-2		1/9-4	
STATOIL	DYVI GAMMA				1/9	9-3	
NORSK HYDRO	POLYGLOMAR DRILLE	R 30/7-4	30/7-6		25/2	2-6	
NORSK HYDRO	TREASURE SEEKER						15/5-1
BP/CONOCO	NORSKALD		7/12-	3 7/12-3/	A	7/12-4	2/1-2
CONOCO/MOBIL	BORGNY DOLPHIN			24/9-2	33/9	9	
UNION	NORJARL			8/4-1			
SAGA	DEEP SEA SAGA			9	14-4		
AMOCO	DYVI BETA					2/11-3	2/11-3/
ESSO	DRILL MASTER					15/6-5	

## **Articles of Association**

Art. 1 The corporate purpose of Statoil is either by itself, or in participation or cooperation with other companies, to carry out exploration, production, transportation, refining and marketing of petroleum and petroleum-derived products, as well as other activities reasonably related thereto.

Art. 2 The registered seat of the Company is in Stavanger.

Art. 3 The share capital of the Company is N.kr. 2 233 500 000 divided into 22 335 000 shares of N.kr. 100 each.

Art. 4 The Board of Directors shall be composed of seven Directors. Five of the directors, including Chairman and Vice-Chairman, are elected by the General Meeting. Two of the Directors are elected by and among the employees in accordance with regulations made under provisions of the Companies Act concerning the rights of employees to be represented on the Board of Directors and in the Company Assembly. Four alternate Directors shall be elected in respect of the two Directors elected by and among the employees, and these alternates shall be summoned in the order in which they are elected. Two alternate Directors shall be elected in respect of the other Directors, one first alternate and one second alternate. The normal term of office for the Directors is two years.

Art. 5 Any two Directors jointly may sign on behalf of the Company. The Board may grant power of procuration.

Art. 6 The Board shall appoint the Company's President and stipulate his salary.

Art. 7 Statoil shall have a Company Assembly consisting of 12 members. Members and alternates shall be elected for two years at a time. The General Meeting shall elect eight members and three alternate members for these eight. Four members and alternates for these four are to be elected by and among the employees of the Company in accordance with regulations made under provisions of the Companies Act concerning the rights of employees to be represented on the Board of Directors and in the Company Assembly.

The Company Assembly elects a chairman and a vice-chairman from among its members.

The Company Assembly shall hold at least two meetings annually.

Art. 8 The ordinary General Meeting shall be held each year before the end of May. General Meetings are held in Stavanger or in Oslo.

Extraordinary General Meetings shall be summoned whenever so demanded by the shareholder, the Board, or two members of the Company Assembly.

Art. 9 The ordinary General Meeting shall consider:

- a) The annual report, annual accounts and the auditor's report.
- b) The question of adopting the annual accounts.
- c) The appropriation of profit.
- d) The election of the Company's officers and alternate officers, and their remuneration.
- e) The election of the auditor and his remuneration.
- f) Any other matters that are specified in the agenda accompanying the notice of meeting or that are taken up pursuant to the Companies Act, Section 18-4, second paragraph.

Art. 10 The Board shall submit to the General Meeting, ordinary or extraordinary, all matters which are presumed to involve significant political questions or questions of principle and/or which may have important effects on the nation and its economy.

Such matters shall be deemed to include, inter alia:

- a) Plans for the next following year with economic surveys, including plans to cooperate with other companies.
- b) Essential changes of such plans as mentioned in a) above.
- c) Plans for future activities, including participation in activities of major importance in other companies or joint ventures in which the Company participates or plans to participate.
- Matters which seem to necessitate additional appropriation of Government funds.
- Plans for establishing new types of activity and localization of important elements of the Company operations.
- Plans to participate in the exploration for petroleum resourses in or outside Norway, including the exercise of state participation option rights.
- g) Semi-annual reports on the Company's activities, including activities of subsidiaries and important joint ventures with other companies.

Matters which the Board submits to the General Meeting pursuant to this Article and, if possible, matters which the Ministry has announced that it wishes to consider at such a General Meeting, shall, if possible, be presented in writing and delivered to the Ministry in good time prior to the General Meeting.

If there has been no opportunity to submit the above mentioned matters in advance to the General Meeting, the General Meeting shall promptly be notified of the Board's resolution.

Whenever possible, matters as mentioned in a) and g) above should be submitted to the Company Assembly for comments.

The General Meeting decides whether to take note of the Board's proposals under this Article, to approve them or to alter them.

Art. 11 The provisions of the Companies Act shall be supplementary to these Articles of Association.

# Survey of Statoil interests in licenses allocated as of 10 Jan. 1978

### NORWEGIAN CONTINENTAL SHELF

005         1965         7/3         Union         10 %         (1)         8/4-1           0198.1967         7/12         BP         12,5 %-(1)         Oil/gas           0198.1977         7/12, 2/1         BP         50 %         -(1)         72 %         7/12-3, 7/12-3, 7/12-4, 2/1-2           020         1965         16/8         BP         12,5 %-(1)         Gas         Development not yet decided           021         1965         2/3, 3/5         Gulf         11 %         -(1)         Gas         Development not yet decided           023         1969         25/1         Elf         5 %         -(2)         Gas         East Frigg           025         1969         25/2         Elf         5 %         -(2)         Gas         Development not yet decided           028         1969         25/10         Esso         17,5 %-(3)         Gas         Development not yet decided           028         1969         25/10         Esso         17,5 %-(3)         Gas         Odin - Development not yet decided           030         1969         2/10         Phillips         17,5 %-(2)         Development not yet         decided           031         1969         2/11	Production license an year allo- cated	d Blocks	Operator	The Statoil share and type of agreement	Max. part.	Туре	Drilling begun in 1977	Comments
019A.1965         7/12         BP         12,5 %-(1)         Oil/gas           019B.1977         7/12, 2/1         BP         50 % - (1)         72 %         7/12-3, 7/12-3, 7/12-4, 2/1-2           020         1965         16/8         BP         12,5 %-(1)         Gas         Development not yet decided           023         1969         3/7         Elf         5 % - (2)         Gas         Frigg           024         1969         25/1         Elf         5 % - (2)         Gas         Est Frigg, Southeast Frigg           025         1969         25/2         Elf         5 % - (2)         Gas         Development not yet decided           027         1969         25/8         Esso         17,5 %-(3)         Development not yet decided           028         1969         25/6         Esso         17,5 %-(3)         Gas         Odin - Development not yet decided           024         1969         21/0         Esso         17,5 %-(2)         Development not yet decided           028         1969         25/6         Esso         17,5 %-(2)         Development not yet decided           033         1969         21/1         Amoco         10 % - (5)         Gas         Heimdal - Development not yet decided	005 -1965	7/3	Union	10 % -(1)			8/4-1	
0198-1977       7/12, 2/1       BP       50 % -(1)       72 %       7/12-3, 7/12-3, 7/12-4, 2/1-2         020       -1965       16/8       BP       12,5 % -(1)           021       -1965       2/3, 3/5       Guif       11 % -(1)       Gas       Development not yet decided         023       -1969       3/7       Elf       5 % -(2)           024       -1969       25/1       Elf       5 % -(2)       Gas       25/2-6       East Frigg, Southeast Frigg         025       -1969       25/2       Elf       5 % -(2)       Gas       25/2-6       East Frigg, Southeast Frigg         027       -1969       25/8       Esso       17,5 % -(3)       Gas       15/6-5       Development not yet decided         028       -1969       25/10       Esso       17,5 % -(3)       Gas       15/6-5       Development not yet decided         030       -1969       2/10       Phillips       17,5 % -(2)         -       -       -         033       -1969       2/10       Phillips       17,5 % -(2)         -       -       -       -       -       -       -       -       -       <	019A-1965	7/12	BP	12,5 %-(1)		Oil/gas		
020         -1965         16/8         BP         12,5 % -(1)           022         -1965         2/3,3/5         Gulf         11 % -(1)         Gas         Development not yet decided           023         -1969         3/7         Elf         5 % -(2)	019B-1977	7/12, 2/1	BP	50 % -(1)	72 %		7/12-3, 7/12-3A 7	7/12-4, 2/1-2
022         :1965         2/3, 3/5         Gulf         11 %         -(1)         Gas         Development not yet decided           023         :1969         3/7         Elf         5 %         -(2)	020 -1965	16/8	BP	12,5 %-(1)				
023       -1969       3/7       Elf       5 % - (2)         024       -1969       25/1       Elf       5 % - (2)       15/3-2         026       -1969       25/2       Elf       5 % - (2)       Gas       25/2-6       East Frigg, Southeast Frigg         027       -1969       25/1       Esso       17,5 % - (3)       Development not yet decided         028       -1969       25/10       Esso       17,5 % - (3)       Gas       Development not yet decided         029       -1969       30/10       Esso       17,5 % - (3)       Gas       Odin - Development not yet decided         030       -1969       2/10       Phillips       17,5 % - (3)       Gas       Odin - Development not yet decided         031       -1969       2/10       Phillips       17,5 % - (3)       Gas       Development not yet decided         032       -1969       2/11       Amoco       10 % - (3)       Oil/gas       2/11-3, 2/11-3A       Valhall/Hod         033       -1969       2/11       Amoco       10 % - (3)       Oil/gas       3/9-9       Statfjord and Murchison         033       -1974       6/3, 15/11 15/12 Statoil       50 % - (1)       75 %       Oil/gas       3/9-9       Statf	022 -1965	2/3, 3/5	Gulf	11 % -(1)		Gas		Development not yet decided
024         -1969         25/1         Elf         5 %         -(4)         Gas         Frigg           025         -1969         15/3         Elf         6 %         -(2)         Gas         25/2         East Frigg, Southeast Frigg           027         -1969         25/2         Elf         5 %         -(2)         Gas         25/2-6         East Frigg, Southeast Frigg           028         -1969         25/10         Esso         17,5 %-(3)         Development not yet decided           029         -1969         15/6         Esso         17,5 %-(3)         Gas         Odin - Development not yet decided           030         -1969         30/10         Esso         17,5 %-(2)	023 -1969	3/7	Elf	5 % -(2)				
025       -1969       15/3       Elf       6 %       -(2)       Gas       25/2         026       -1969       25/2       Elf       5 %       -(2)       Gas       25/2-6       East Frigg, Southeast Frigg         027       -1969       25/10       Esso       17,5 %-(3)       Development not yet decided         028       -1969       25/10       Esso       17,5 %-(3)       Gas       15/6-5       Development not yet decided         030       -1969       30/10       Esso       17,5 %-(3)       Gas       Odin - Development not yet decided         031       -1969       2/10       Phillips       17,5 %-(2)       decided	024 -1969	25/1	Elf	5 % -(4)		Gas		Frigg
O26         -1969         25/2         Elf         5 % -(2)         Gas         25/2-6         East Frigg, Southeast Frigg           O27         -1969         25/8         Esso         17,5 %-(3)         Development not yet decided           O28         -1969         15/6         Esso         17,5 %-(3)         Gas         15/6-5         Development not yet decided           O29         -1969         30/10         Esso         17,5 %-(3)         Gas         Odin - Development not yet decided           O30         -1969         2/10         Phillips         17,5 %-(3)         Gas         Odin - Development not yet decided           O31         -1969         2/10         Phillips         17,5 %-(2)         Odin - Development not yet           O32         -1969         2/9         Amoco         10 % -(3)         Oil/gas         2/11-3, 2/11-3A         Valhall/Hod           O33         -1969         2/11         Amoco         10 % -(5)         Gas         Heimdal - Development not yet           O33         -1969         2/11         Amoco         10 % -(5)         Gas         Heimdal - Development not yet           O33         -1974         6/3, 15/11 15/12 Statoil         50 % -(1)         75 %         Oil/gas         3/3/9	025 -1969	15/3	Elf	6 % -(2)			15/3-2	
027         ·1969         25/8         Esso         17,5 %-(3)         Development not yet decided           028         ·1969         15/6         Esso         17,5 %-(3)         Gas         Development not yet decided           029         ·1969         15/6         Esso         17,5 %-(3)         Gas         Odin - Development not yet decided           030         ·1969         30/10         Esso         17,5 %-(2)         Gas         Odin - Development not yet decided           031         ·1969         2/10         Phillips         17,5 %-(2)         decided         decided           033         ·1969         2/11         Amoco         10 %         -(3)         Oil/gas         2/11-3, 2/11-3A         Valhall/Hod           036         ·1971         25/4         Elf         40 %         -(5)         Gas         Heimdal - Development not yet decided           037         ·1973         33/9         33/12         Mobil         50 %         -(1)         75 %         Q4/9-2           040         ·1974         24/9         Conoco         50 %         -(1)         75 %         24/9-2           041         ·1974         35/3         Saga         50 %         -(1)         70 %	026 -1969	25/2	Elf	5 % -(2)		Gas	25/2-6	East Frigg, Southeast Frigg
028       ·1969       25/10       Esso       17,5 %-(3)       Gas       15/6-5       Development not yet decided         030       ·1969       30/10       Esso       17,5 %-(3)       Gas       Odin - Development not yet decided         031       ·1969       2/10       Phillips       17,5 %-(2)       decided         032       ·1969       2/9       Amoco       10 % -(3)       Oill/gas       2/11-3, 2/11-3A       Valhall/Hod         036       ·1971       25/4       Elf       40 % -(5)       Gas       Heimdal - Development not yet decided         037       ·1973       33/9       33/12       Mobil       50 % -(6)       Oill/gas       33/9-9       Statfjord and Murchison         038       ·1974       6/3, 15/11 15/12 Statoil       50 % -(1)       75 %       24/9-2       Odecided         040       ·1974       24/9       Conoco       50 % -(1)       70 %       04/9-2       Odecided       04/	027 -1969	25/8	Esso	17,5 %-(3)				Development not yet decided
029         ·1969         15/6         Esso         17,5 %-(3)         Gas         15/6-5         Development not yet decided           030         ·1969         30/10         Esso         17,5 %-(3)         Gas         Odin - Development not yet decided           031         ·1969         2/10         Phillips         17,5 %-(2)         decided           032         ·1969         2/9         Amoco         10 %         ·(3)         Oil/gas         2/11-3, 2/11-3A         Valhall/Hod           033         ·1969         2/11         Amoco         10 %         ·(3)         Oil/gas         2/11-3, 2/11-3A         Valhall/Hod           036         ·1971         25/4         Elf         40 %         ·(5)         Gas         Heimdal - Development not yet decided           037         ·1973         33/9         33/12         Mobil         50 %         ·(1)         75 %         Oil/gas         33/9-9         Statfjord and Murchison           039         ·1974         24/9         Conoco         50 %         ·(1)         75 %         Oil/gas         33/9-9         Statfjord and Murchison           041         ·1974         36/3         Saga         50 %         ·(1)         70 %         Odenada ada ada	028 -1969	25/10	Esso	17,5 %-(3)				11
030         -1969         30/10         Esso         17,5 %-(3)         Gas         Odin - Development not yet decided           031         -1969         2/10         Phillips         17,5 %-(2)         decided           032         -1969         2/9         Amoco         10 %         -(3)           033         -1969         2/9         Amoco         10 %         -(3)           033         -1969         2/11         Amoco         10 %         -(3)           036         -1971         25/4         Elf         40 %         -(5)         Gas         Heimdal - Development not yet decided           037         -1973         33/9         33/12         Mobil         50 %         -(1)         75 %         Oil/gas         33/9-9         Statfjord and Murchison           039         -1974         24/9         Conoco         50 %         -(1)         75 %         24/9-2           040         -1974         29/9, 30/7         Norsk Hydro50 %         -(1)         70 %           042         -1974         36/1         Amoco         55 %         -(1)         70 %           043         -1976         29/6, 30/4         BP         50 %         -(1)         75 % </td <td>029 -1969</td> <td>15/6</td> <td>Esso</td> <td>17,5 %-(3)</td> <td></td> <td>Gas</td> <td>15/6-5</td> <td>Development not yet decided</td>	029 -1969	15/6	Esso	17,5 %-(3)		Gas	15/6-5	Development not yet decided
decided           031         ·1969         2/10         Phillips         17,5 %-(2)           032         ·1969         2/9         Amoco         10 %         -(3)           033         ·1969         2/11         Amoco         10 %         -(3)           033         ·1969         2/11         Amoco         10 %         -(3)         Oil/gas         2/11-3, 2/11-3A         Valhall/Hod           036         ·1971         25/4         Elf         40 %         -(5)         Gas         Heimdal - Development not yet           038         ·1974         6/3, 15/11         15/12         Statoil         50 %         -(1)         75 %         Oil/gas         33/9-9         Statfjord and Murchison           039         ·1974         24/9         Conoco         50 %         -(1)         75 %         24/9-2           040         ·1974         35/3         Saga         50 %         -(1)         70 %           041         ·1974         36/1         Amoco         55 %         -(1)         70 %           042         ·1974         36/1         Amoco         55 %         -(1)         75 %           044         ·1976         1/9	030 -1969	30/10	Esso	17,5 %-(3)		Gas		Odin - Development not yet
031       -1969       2/10       Phillips       17,5 %-(2)         032       -1969       2/9       Amoco       10 % -(3)       Oil/gas       2/11-3, 2/11-3A       Valhall/Hod         036       -1971       25/4       Elf       40 % -(5)       Gas       Heimdal - Development not yet decided         037       -1973       33/9       33/12       Mobil       50 % -(6)       Gas       Heimdal - Development not yet decided         038       -1974       6/3, 15/11       15/12       Statoil       50 % -(1)       75 %       Oil/gas       33/9-9       Statfjord and Murchison         039       -1974       24/9       Conoco       50 % -(1)       75 %       24/9-2         040       -1974       35/3       Saga       50 % -(1)       70 %         041       -1974       35/3       Saga       50 % -(1)       70 %         042       -1974       36/1       Amoco       55 % -(1)       70 %         043       -1976       2/9       Statoil       50 % -(1)       75 %         044       -1976       1/9       Statoil       50 % -(1)       75 %         045       -1976       24/11, 24/12       Statoil       50 % -(1)       7								decided
032         -1969         2/9         Amoco         10 %         -(3)           033         -1969         2/11         Amoco         10 %         -(3)         Oil/gas         2/11-3, 2/11-3A         Valhall/Hod           036         -1971         25/4         Elf         40 %         -(5)         Gas         Heimdal - Development not yet decided           037         -1973         33/9         33/12         Mobil         50 %         -(6)         Gas         Heimdal - Development not yet decided           038         -1974         6/3, 15/11         15/12         Statoil         50 %         -(1)         75 %         Oil/gas         33/9-9         Statfjord and Murchison           039         -1974         24/9         Conoco         50 %         -(1)         75 %         24/9-2           040         -1974         36/1         Amoco         55 %         -(1)         70 %           042         -1974         36/1         Amoco         55 %         -(1)         70 %           043         -1976         1/9         Statoil         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %<	031 -1969	2/10	Phillips	17,5 %-(2)				
033         -1969         2/11         Amoco         10 %         -(3)         Oil/gas         2/11-3, 2/11-3A         Valhall/Hod           036         -1971         25/4         Elf         40 %         -(5)         Gas         Heimdal - Development not yet decided           037         -1973         33/9         33/12         Mobil         50 %         -(6)         Gas         Heimdal - Development not yet decided           038         -1974         6/3, 15/11         15/12         Statoil         50 %         -(1)         75 %         Oil/gas         33/9-9         Statfjord and Murchison           039         -1974         24/9         Conoco         50 %         -(1)         75 %         24/9-2           040         -1974         35/3         Saga         50 %         -(1)         70 %           041         -1974         35/3         Saga         50 %         -(1)         70 %           043         -1976         29/6, 30/4         BP         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           045         -1976         24/11, 24/12         Statoil         50 %	032 -1969	2/9	Amoco	10 % -(3)				
036         -1971         25/4         Elf         40 %         -(5)         Gas         Heimdal - Development not yet decided           037         -1973         33/9         33/12         Mobil         50 %         -(6)	033 -1969	2/11	Amoco	10 % -(3)		Oil/gas	2/11-3, 2/11-3A	Valhall/Hod
decided           037         -1973         33/9         33/12         Mobil         50 %         -(6)           038         -1974         6/3, 15/11         15/12         Statoil         50 %         -(1)         75 %         Oil/gas         33/9-9         Statfjord and Murchison           039         -1974         24/9         Conoco         50 %         -(1)         75 %         24/9-2           040         -1974         29/9, 30/7         Norsk Hydro50 %         -(1)         66 %         30/7-5, 30/7-6           041         -1974         35/3         Saga         50 %         -(1)         70 %           042         -1974         36/1         Amoco         55 %         -(1)         70 %           043         -1976         29/6, 30/4         BP         50 %         -(1)         75 %         Gas/con-         1/9-2, 1/9-3 1/9-4         Development not yet decided           044         -1976         1/9         Statoil         50 %         -(1)         75 %         Gas         15/9-1         Development not yet decided           045         -1976         15/8, 15/9         Statoil         50 %         -(1)         75 %         Gas         15/9-1         Develo	036 -1971	25/4	Elf	40 % -(5)		Gas		Heimdal - Development not yet
037         -1973         33/9         33/12         Mobil         50 %         -(6)           038         -1974         6/3, 15/11         15/12         Statoil         50 %         -(1)         75 %         Oil/gas         33/9-9         Statfjord and Murchison           039         -1974         24/9         Conoco         50 %         -(1)         75 %         24/9-2           040         -1974         29/9, 30/7         Norsk Hydro50 %         -(1)         66 %         30/7-5, 30/7-6           041         -1974         35/3         Saga         50 %         -(1)         70 %           042         -1974         36/1         Amoco         55 %         -(1)         70 %           043         -1976         29/6, 30/4         BP         50 %         -(1)         75 %         Gas/con-         1/9-2, 1/9-3 1/9-4         Development not yet decided           044         -1976         1/9         Statoil         50 %         -(1)         75 %         Gas/con-         1/9-2, 1/9-3 1/9-4         Development not yet decided           045         -1976         24/11, 24/12         Statoil         50 %         -(1)         75 %         Gas         15/9-1         Development not yet decided <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>decided</td>								decided
038         -1974         6/3, 15/11 15/12 Statoil         50 %         -(1)         75 %         Oil/gas         33/9-9         Statfjord and Murchison           039         -1974         24/9         Conoco         50 %         -(1)         75 %         24/9-2           040         -1974         29/9, 30/7         Norsk Hydro50 %         -(1)         66 %         30/7-5, 30/7-6           041         -1974         35/3         Saga         50 %         -(1)         70 %           042         -1974         36/1         Amoco         55 %         -(1)         70 %           043         -1976         29/6, 30/4         BP         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           044         -1976         24/11, 24/12         Statoil         50 %         -(1)         75 %           045         -1976         24/11, 24/12         Statoil         50 %         -(1)         75 %           046         -1976         15/8, 15/9         Statoil         50 %         -(1)         75 %           048         -1977         15/2, 15/5         Norsk Hydro50 %         -(1)	037 -1973	33/9 33/12	Mobil	50 % -(6)				
039         -1974         24/9         Conoco         50 %         -(1)         75 %         24/9-2           040         -1974         29/9, 30/7         Norsk Hydro50 %         -(1)         66 %         30/7-5, 30/7-6           041         -1974         35/3         Saga         50 %         -(1)         70 %           042         -1974         36/1         Amoco         55 %         -(1)         70 %           043         -1976         29/6, 30/4         BP         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           045         -1976         24/11, 24/12         Statoil         50 %         -(1)         75 %           046         -1976         15/8, 15/9         Statoil         50 %         -(1)         75 %           048         -1977         15/2, 33/5         Norsk Hydro50 %         -(1)         75 %           048         -1977         <	038 -1974	6/3, 15/11 15/12	Statoil	50 % -(1)	75 %	Oil/gas	33/9-9	Statfjord and Murchison
040         -1974         29/9, 30/7         Norsk Hydro50 %         -(1)         66 %         30/7-5, 30/7-6           041         -1974         35/3         Saga         50 %         -(1)         70 %           042         -1974         36/1         Amoco         55 %         -(1)         70 %           043         -1976         29/6, 30/4         BP         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           045         -1976         24/11, 24/12         Statoil         50 %         -(1)         75 %           046         -1976         15/8, 15/9         Statoil         50 %         -(1)         75 %           048         -1977         33/2, 33/5         Norsk Hydro 50 %         -(1)         75 %           048         -1977         15/2, 15/5         Norsk Hydro 50 %         -(1)         75 %           049         -1977         33/6         Agip         50 %         -(1)         75 %	039 -1974	24/9	Conoco	50 % -(1)	75 %		24/9-2	
041         -1974         35/3         Saga         50 %         -(1)         70 %           042         -1974         36/1         Amoco         55 %         -(1)         70 %           043         -1976         29/6, 30/4         BP         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           045         -1976         24/11, 24/12         Statoil         50 %         -(1)         75 %           046         -1976         15/8, 15/9         Statoil         50 %         -(1)         75 %           046         -1977         33/2, 33/5         Norsk Hydro 50 %         -(1)         75 %           048         -1977         15/2, 15/5         Norsk Hydro 50 %         -(1)         75 %           049         -1977         33/6         Agip         50 %         -(1)         70 %	040 -1974	29/9, 30/7	Norsk Hydro	050 % -(1)	66 %		30/7-5, 30/7-6	
042         -1974         36/1         Amoco         55 %         -(1)         70 %           043         -1976         29/6, 30/4         BP         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %           045         -1976         24/11, 24/12         Statoil         50 %         75 %           046         -1976         15/8, 15/9         Statoil         50 %         -(1)         75 %           046         -1977         33/2, 33/5         Norsk Hydro 50 %         -(1)         75 %           048         -1977         15/2, 15/5         Norsk Hydro 50 %         -(1)         75 %           049         -1977         33/6         Agip         50 %         -(1)         75 %	041 -1974	35/3	Saga	50 % -(1)	70 %			
043         -1976         29/6, 30/4         BP         50 %         -(1)         75 %           044         -1976         1/9         Statoil         50 %         -(1)         75 %         Gas/con-         1/9-2, 1/9-3 1/9-4 Development not yet decided           044         -1976         24/11, 24/12         Statoil         50 %         -(1)         75 %           045         -1976         24/11, 24/12         Statoil         50 %         -(1)         75 %           046         -1976         15/8, 15/9         Statoil         50 %         -(1)         75 %           046         -1977         33/2, 33/5         Norsk Hydro 50 %         -(1)         75 %           048         -1977         15/2, 15/5         Norsk Hydro 50 %         -(1)         75 %           049         -1977         33/6         Agip         50 %         -(1)         70 %	042 -1974	36/1	Amoco	55 % -(1)	70 %			
044         -1976         1/9         Statoil         50 %         -(1)         75 %         Gas/con-         1/9-2, 1/9-3 1/9-4 Development not yet decided densate           045         -1976         24/11, 24/12         Statoil         50 %         75 %            046         -1976         15/8, 15/9         Statoil         50 %         -(1)         75 %         Gas         15/9-1         Development not yet decided           047         -1977         33/2, 33/5         Norsk Hydro 50 %         -(1)         75 %             048         -1977         15/2, 15/5         Norsk Hydro 50 %         -(1)         75 %             049         -1977         33/6         Agip         50 %         -(1)         70 %	043 -1976	29/6, 30/4	BP	50 % -(1)	75 %			
densate           045         -1976         24/11, 24/12         Statoil         50 %         75 %           046         -1976         15/8, 15/9         Statoil         50 %         -(1)         75 %         Gas         15/9-1         Development not yet decided           047         -1977         33/2, 33/5         Norsk Hydro 50 %         -(1)         75 %         048         -1977         15/2, 15/5         Norsk Hydro 50 %         -(1)         75 %         049         -1977         33/6         Agip         50 %         -(1)         70 %         049         -1977         33/6         Agip         50 %         -(1)         70 %         049         -1977         -0         0	044 -1976	1/9	Statoil	50 % -(1)	75 %	Gas/con-	1/9-2, 1/9-3 1/9-4	Development not yet decided
045         -1976         24/11, 24/12         Statoil         50 %         75 %           046         -1976         15/8, 15/9         Statoil         50 %         -(1)         75 %         Gas         15/9-1         Development not yet decided           047         -1977         33/2, 33/5         Norsk Hydro 50 %         -(1)         75 %         048         -1977         15/2, 15/5         Norsk Hydro 50 %         -(1)         75 %         049         -1977         33/6         Agip         50 %         -(1)         70 %         049         -1977         33/6         Agip         50 %         -(1)         70 %         049         -1977         33/6         Agip         50 %         -(1)         70 %         049         -1977         33/6         Agip         50 %         -(1)         70 %         049         -1977         -10 %         049         -10 %         049         -10 %         049         -10 %         049         -10 %         049         -10 %         049         -10 %         049         -10 %         049         -10 %         049         -10 %         049         -10 %         049         -10 %         049         -10 %         049         -10 %         040         040						densate		
046         -1976         15/8,         15/9         Statoil         50 %         -(1)         75 %         Gas         15/9-1         Development not yet decided           047         -1977         33/2,         33/5         Norsk Hydro 50 %         -(1)         75 %           048         -1977         15/2,         15/5         Norsk Hydro 50 %         -(1)         75 %           049         -1977         33/6         Agip         50 %         -(1)         70 %	045 -1976	24/11, 24/12	Statoil	50 %	75 %			
047         -1977         33/2, 33/5         Norsk Hydro 50 %         -(1)         75 %           048         -1977         15/2, 15/5         Norsk Hydro 50 %         -(1)         75 %           049         -1977         33/6         Agip         50 %         -(1)         70 %	046 -1976	15/8, 15/9	Statoil	50 % -(1)	75 %	Gas	15/9-1	Development not yet decided
048 -1977 15/2, 15/5 Norsk Hydro50 % -(1) 75 % 049 -1977 33/6 Agip 50 % -(1) 70 %	047 -1977	33/2, 33/5	Norsk Hydro	50 % -(1)	75 %			
049 -1977 33/6 Agip 50 % -(1) 70 %	048 -1977	15/2, 15/5	Norsk Hydro	050 % -(1)	75 %			
	049 -1977	33/6	Agip	50 % -(1)	70 %			

### **Dutch continental Shelf**

L/16-B 1968	K/18, L/16	Cities Service 7.5 % -(1)	L/16-3 now	Indications of gas in
			being drilled	earlier wells

1) - Exempt from exploration costs 2) - Option for direct participation 3) - Division of surplus

4) - Option exercised, Frigg field 5) - Option exercised, Heimdal field 6) - Option exercised, Statfjord field





59°

45.

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## **Administration**

Arve Johnsen - President Henrik Ager-Hanssen - Executive Vice President \*\* Kåre Frank - Senior Vice President \* Jacob Øxnevad - Senior Vice Precident Martin Bekkeheien - Manager, Personnel and Organization Olav K. Christiansen - Manager, Offshore Project Development Hans M. Daastøl - Manager, Procurement Tor Espedal - Manager, Finance and Economic Planning Stein A. Halse - Manager, Engineering Philip H. Halstead - Manager, Exploration Arne H. Halvorsen - Manager, Public Affairs and Information Christian Halvorsen - Manager, Administration Jose A. C. Kauffmann - Manager, Production Kai Killerud - Manager, Safety and Quality Assurance Jon Rud - Manager, Legal Affairs Erik Schanche - Manager, Marketing and Marine Transportation Helge Skinnemoen - Manager, Refining and Petrochemicals \* begins on 24 April 1978

\*\* begins on 1 June 1978



The Board of Den norske stats oljeselskap a.s: From left to right — Einar H. Moxnes, Åse Gjerdsjø, Hans J. Ødegaard, Finn Lied (Chairman), Ole Myrvoll(Vice Chairman), Ottar Vollan, and Aksel Fossen.

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