

Oil and gas in the Netherlands

Exploration and production 2003



Revised version, September 2004

OIL AND GAS IN THE NETHERLANDS

Annual review 2003 and prognosis 2004 - 2013

A review of oil and gas exploration and production activities during 2003 and a prognosis for the next ten years

This review has been compiled by the Netherlands Institute of Applied Geosciences TNO – *National Geological Survey*, at the request of the Energy Production Directorate of the Directorate General for Competition and Energy of the Dutch Ministry of Economic Affairs. Key data have been provided by the Ministry of Economic Affairs (Dutch acronym: EZ for Ministerie van Economische Zaken), the Netherlands Institute of Applied Geosciences TNO – *National Geological Survey* (Dutch acronym: TNO-NITG for Nederlands Instituut voor Toegepaste Geowetenschappen TNO) and the State Supervision of Mines (Dutch acronym: SodM for Staatstoezicht op de Mijnen).

The following items have been corrected in the September 2004 version of the annual review Oil and gas in the Netherlands:

Page 16 and figure 2:

‘National production limit’ is substituted by ‘production limit’.

Table ‘Gas production Continental Shelf in 2003’ (page 32, 33 and page 34, 35):

The original table contained a number of wrong figures and a number of preliminary production figures. In the present table the corrected figures printed in bold and marked in yellow.

Table ‘Oil production in 2003’ (page 37):

The production from the F2a accumulation for the month October should be 153.9 thousand Sm³ (132.7 thousand tons). As a consequence the totals for the column and row are raised with 17 thousand Sm³ (14.1 thousand tons).

Annex 1:

The gas accumulation Q4-B has been moved from the category Undeveloped accumulations / others to the category Developed accumulations / producing. These corrections have consequences for some of the figures quoted in chapter 1.

Annex 15:

In the original edition the Expected Reserves were quoted in Groningen equivalents. They have been replaced by figures in billion Sm³.

This publication can be found on the following website: <http://www.nitg.tno.nl/oil&gas>

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The Hague, September 2004

Preface

The new Mining Act (Mijnbouwwet) came into force on 1 January 2003. Therefore, as from this year onwards, the annual review ‘Oil and Gas in the Netherlands’ will have a different form. In addition to the usual information, some new topics are included on which the Minister has to report to both Chambers of the Dutch Parliament every two years. This obligation is laid down in article 125 of the Mining Act. In 2002, these topics were reported separately in the publication ‘Gas Supply in the Netherlands’ [Aardgasstromen in Nederland].

Moreover, the layout of the annual report has been modified in several places.

The first section of the report now deals with *developments* in the exploration and production of hydrocarbons in the Netherlands and the Dutch sector of the Continental Shelf during the year 2003. This section first presents details of changes in natural gas and oil resources during 2003 and the way these changes affected the situation as at 1 January 2004.

Subsequently, a number of tables summarise developments during 2003, with respect to licences and exploration efforts (seismic surveys and wells drilled). This section ends with a summary of the volumes of natural gas, condensate and oil that were produced in 2003.

The second section of the annual review comprises a large number of annexes that report on the *current situation* as well as on historical developments during the past decades.

Finally, several maps outline the state of the affairs as at 1 January 2004.

The Hague, June 2004

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In this annual review, natural gas and oil volumes are stated in terms of ‘standard’ m³, usually abbreviated as Sm³.

‘Standard’ relates to the reference conditions: 15° C and 101.325 kPa.

In some cases the natural gas volumes are stated in terms of Groningen Gas Equivalent, which has a gross calorific value of 35.17 MJ/ m³ at 0° C and 101.325 kPa. In such cases this is explicitly stated in the text.

KEY DATA 2003

The summary below briefly outlines data that are detailed elsewhere in this annual review.

Natural gas and oil resources

The natural gas reserves as at 1 January 2004 are estimated at 1207 billion Sm³ for the Groningen accumulation, 150 billion Sm³ for the other onshore accumulations and 258 billion Sm³ for the Continental Shelf. Total reserves add up to 1615 billion Sm³.

Oil reserves add up to 45.4 million Sm³, 20.7 million Sm³ of which are located in the onshore territory and 24.7 million Sm³ on the Continental Shelf.

Licences

In 2003, no new exploration or production licences for the onshore territory were applied for or awarded. The production licence Akkrum lapsed in 2003, after production ceased. Storage licences have been awarded for the three storage facilities that are currently operational. Since the new Mining Act became effective on 1 January 2003, storage licences are compulsory. For the Continental Shelf, one exploration licence was applied for, four lapsed and three exploration licences have been awarded. As for production licences, four production licences have been awarded, one application for a production licence has been submitted and two applications have been withdrawn. One production licence has been subdivided. For details see chapters 3 and 4 and annexes 1 and 2.

Wells

A total of 34 wells have been drilled for oil and gas. That is eight less than in 2002. Of the 10 exploration wells, 7 struck gas, a technical success ratio of 70%. The remaining wells included 4 appraisal wells and 20 production wells. For details see chapter 7 and annex 2.

Gas production

In 2003, total gross production from Dutch gas fields was **68.77** billion Sm³. That is 3.5 % (2.48 billion Sm³) less than in 2002. Onshore gas fields accounted for 45.26 billion Sm³ which is 0.78 billion Sm³ more than in 2002, an increase of 1.8%. Production from the offshore gas fields decreased by **3.26** billion Sm³ to 23.51 billion Sm³, a reduction by **12.2%**. For details see chapter 9.

Oil production

In 2003, a total of **2.74** million Sm³ of oil was produced in the Netherlands, which is **0.06** million Sm³, or **2.2%** more than in 2002. The onshore accumulations produced 0.42 million Sm³, a decrease of 5.2% compared to 2002. Production from offshore oil fields increased by **4.0%** to **2.32** million Sm³. The average oil production over 2003 was approximately 7 500 Sm³ per day, which is equivalent to approximately 47 000 barrels per day. For details see chapter 9.

1. NATURAL GAS RESOURCE AND FUTURE GAS SUPPLY FROM WITHIN THE NETHERLANDS

INTRODUCTION

The natural gas resource represents a major economic asset for the Kingdom of the Netherlands. It is therefore important to be aware of the magnitude of this resource and the rate at which it is being produced. The present chapter first presents estimates of the natural gas resource as at 1 January 2004 and changes compared to 1 January 2003.

The method used for determining the natural gas resource is different from that used in previous years. A short explanation of the new method is given below. Subsequently, this section on the supply of natural gas in the Netherlands presents the national gas production expected for the next ten years.

RESOURCE

The natural gas resource is defined as the volume of natural gas that can be produced from the subsurface of the Netherlands. In this respect, we distinguish *discovered resources* and (as yet) *undiscovered resources*. The *discovered resources* are producible volumes of natural gas that are present in *proven accumulations*, i.e. proven gas fields. Many of these accumulations have been developed already (are producing) and as a result only part of the ‘gas initially in place’ remains. The remaining producible volumes of natural gas in the proven accumulations are defined as the *remaining reserves*.

Not all the gas that is present in the subsurface of the Netherlands has been found as yet. On the basis of geological information, TNO-NITG has prepared an estimate of the additional volume of gas that may statistically be present, this is called the *exploration potential*, also called the ‘prospects’.

Resources include:	The (potential) gas volume is called:
1. Discovered resources / Natural gas volumes present in proven accumulations	Remaining reserve
2. Undiscovered resources	Exploration potential

DISCOVERED RESOURCES

There are 373 proven natural gas accumulations in the Netherlands. These are listed in the table below, sorted by status. At present, the status of 203 of these accumulations is defined as developed, i.e. producing or operational as gas-storage facilities. Of all accumulations that have ever been developed, 40 have ceased production. Of the 130 accumulations that have not been developed as yet, 28 are expected to start producing within 5 years. Whether the remaining 102 accumulations will ever be developed is uncertain.

The map in Figure 1 shows the locations of the proven gas accumulations in the Netherlands as at 1 January 2004. All accumulations are listed in annex 1, sorted by status and stating operator and licence. In accordance with the new Mining Act, production plans or storage plans have been submitted for all developed accumulations. Some of these plans have been approved and some are still under consideration.

Number of proven natural gas accumulations sorted by status as at 1 January 2004

Status of accumulations	Onshore Territory	Continental Shelf	Total
I. Developed			
a. producing	90	110	200
b. gas-storage facility	3	0	3
II. Undeveloped			
a. start of production 2004-2008	12	16	28
b. others	47	55	102
III. Production ceased			
	16	24	40
Total	168	205	373

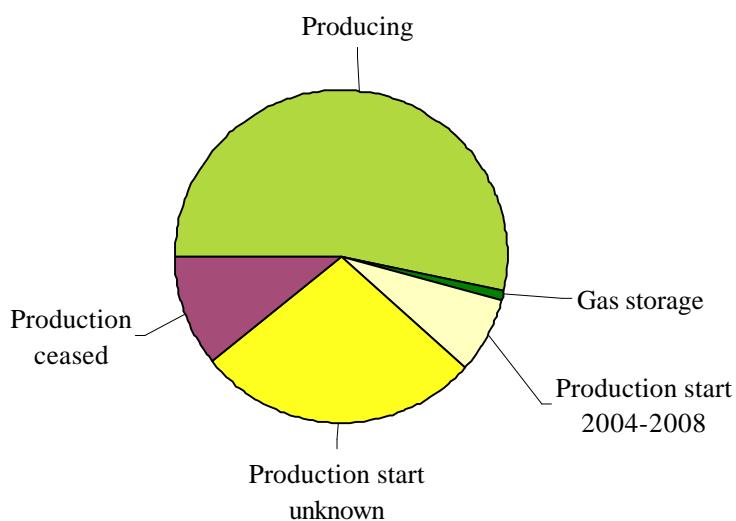
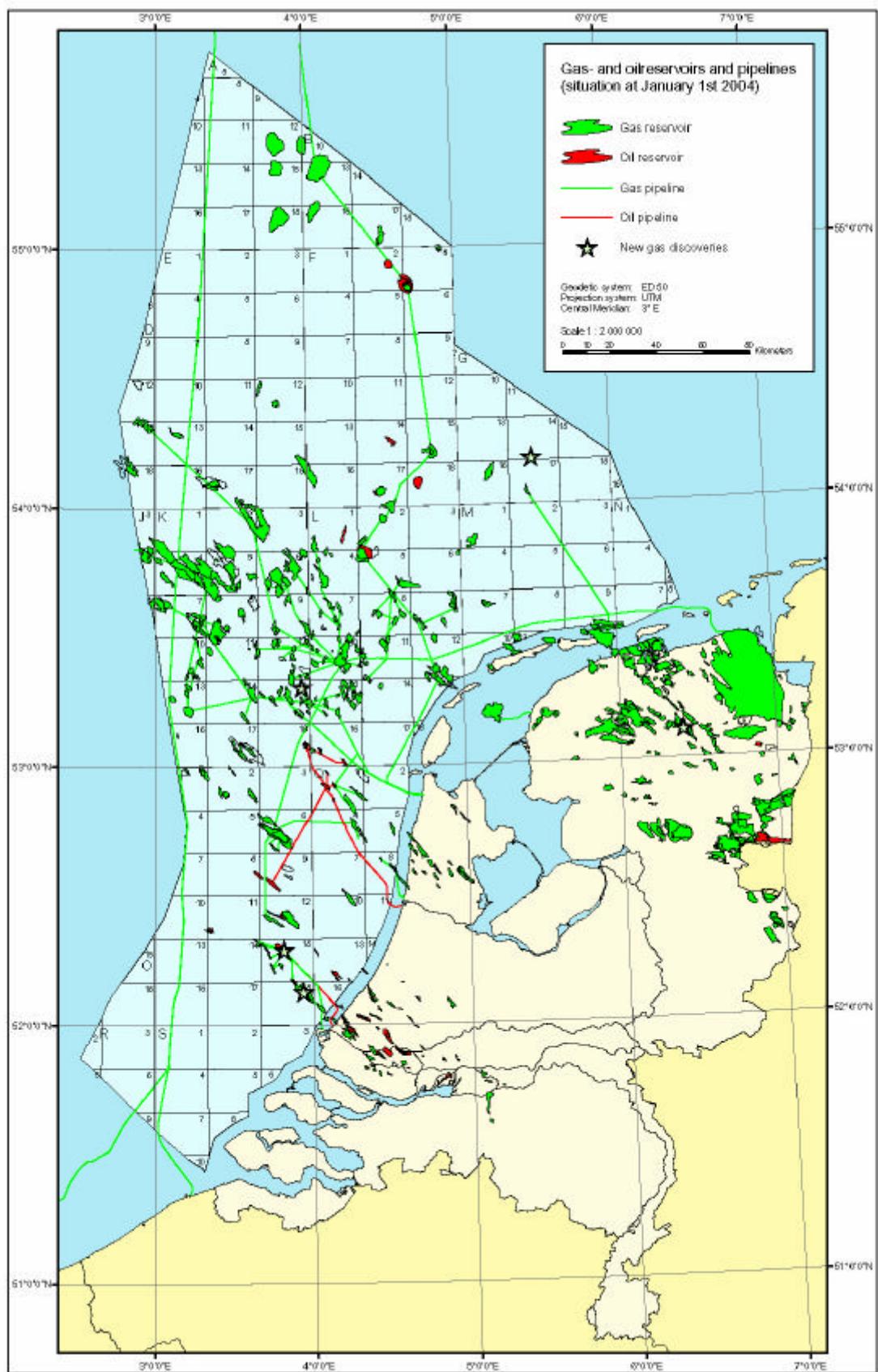


Figure 1. Outline map showing oil and gas accumulations in the Netherlands. The locations of the two finds in blocks P15 and P18 are indicated by asterisks only, in view of the map scale.



NEW APPROACH TO RESOURCE ESTIMATES

The approach and form of reporting resource estimates used in the present annual review, differs in some details from previous years. This was prompted by the following reasons:

- the uncertainties connected with reserves in proven accumulations are increasingly less of a technical nature but are progressively more attributable to uncertainties related to future capital expenditure in maintenance and development of proven accumulations;
- the accessibility of the Dutch gas accumulations for the market should increasingly be taken into account. The accessibility is mainly affected by: infrastructure, environmentally sensitive areas, volumes of gas held in underground gas storage facilities, gas quality and the role of the Groningen field as a swing producer.

For the present annual review, TNO-NITG has used the information that has been made available by the operators in accordance with the provisions of the new Mining Act. The approaches and reserve classifications used by individual operators may differ considerably. Therefore, the present annual report only presents a rough resource classification, related to the status of the individual accumulations.

CORRELATION OF REPORTED PROVEN RESERVES AS AT 1 JANUARY 2003

Up to last year's annual review, a probabilistic approach was used to calculate proven reserves. In this definition, the probability that actual reserves would turn out to be higher than the figure stated used to be estimated at 90%. This type of probabilistic approach focused mainly on technical uncertainties.

The current reserve estimates for developed accumulations are based on the figures and information given by the operators in their production plans and annual reports and submitted in accordance with the new Mining Act. For the other discovered accumulations, of which reserves are not yet included in production plans or annual reports, only preliminary reserve estimates are given. This approach considers the remaining reserves in developed accumulations as the most certain part of the reserves. After all, most of the capital investment necessary to produce these volumes has already been made and there are fairly definite plans for the further incremental development of these accumulations. This does not apply to the predicted production from the Groningen field after 2040, because in order to realise this production, significant capital investment will be necessary.

Although the approach used to calculate reserves differs from that used in previous years, the old and new figures can be correlated if one considers that the reserves calculated on the basis of the operators' production plans in fact are equivalent to the 'remaining proven reserves' of the old approach.

The reserves calculated on the basis of the operators' production plans as at 1 January 2004 total 1103 billion Sm³ for Groningen and 256 billion Sm³ for the other accumulations.

Gas resources in the Netherlands as at 1 January 2004 in billions of Sm³

Accumulations	Developed	Undeveloped		Total
		after 2040		
Groningen	1103	104	-	1207
Others Territory	74	19	57	150
Continental Shelf	182	-	76	258
Total	1359	123	133	1615

For the purpose of equating volumes of natural gas of different qualities in calculations, these volumes have been converted to Groningen Gas Equivalents (Geq) on the basis of calorific value.

Gas resources in the Netherlands as at 1 January 2004 in billions of m³Geq

Accumulations	Developed	Undeveloped	Total
after 2040			
Groningen	1043	99	-
Others Territory	77	20	62
Continental Shelf	193	-	85
Total	1313	119	147
			1579

DEVELOPED ACCUMULATIONS

The figures for remaining reserves in developed accumulations are listed in two columns in the table above. The first column shows the summation of future production reported in the operators' production plans. The second column lists under the heading 'after 2040' the reserves that are not expected to be available for production prior to 2040. This concerns long-term production from the Groningen field (104 billion m³) and the remaining reserves that were still present in the Norg, Grijpskerk and Alkmaar accumulations, prior to these fields being converted to underground gas storage facilities (altogether some 19 billion m³). This 'rest gas' will only be produced once the fields are no longer used as storage facilities. This is not expected to happen prior to 2040.

UNDEVELOPED ACCUMULATIONS

These figures concern proven accumulations, the development of which is deemed probable. This includes those accumulations that are expected to come on stream in the period 2004-2008, as well as some accumulations for which it is uncertain as yet when production will actually start (see listing of natural gas accumulations in annex 1).

Previous annual reviews listed technical reserves, making a special note of volumes that were considered sub-economic. The current approach does not take the sub-economic volumes into consideration, since these, according to current practice, do not contribute anything to the supply of natural gas. These volumes may indeed have some commercial potential, but future materialisation in terms of reserves greatly depends on advances in technology, infrastructure, costs and market prices.

The reserve estimates do not take into account any limitations related to the accessibility of accumulations in connection with environmentally sensitive areas, e.g. the Dutch Wadden Sea area. .

REVISIONS COMPARED TO 1 JANUARY 2003

The table below lists the revisions to the Dutch gas resource, resulting from

- new finds;
- re-evaluations of previously proven accumulations;
- production during 2003.

The net result is a minor reduction of the resource by 4 billion Sm³ compared to 1 January 2003.

Revisions of expected gas resource compared to 1 January 2003*, in billion Sm³

Area	New finds	Re-evaluations	Production	Total
Groningen field	0	117 **	-30	87
Others Territory	1	-73	-15	-87
Continental Shelf	12	7	-23	-4
Total	13	51	-68	-4

* point of reference being the figures in the 2002 annual review, minus the 88 billion Sm³ which were marked sub-economic.

**: of which 104 producible after 2040.

NEW FINDS

The table below lists the gas accumulations that were found during 2003. The locations of the new finds are indicated by asterisks in Figure 1. According to preliminary estimates, these new finds will add 13 billion Sm³ to the Dutch gas resource.

Gas accumulations found in 2003

Name accumulation	Discovery well	Licence area	Operator
Een	Norg-6	Drenthe	NAM
G14-A	G14-2-S1	G14	Gaz de France
K15-L	K15-FG-105	K15	NAM
P15-C	P15-16	P15a	BP
P15-E	P15-17	P15a	BP
P18-Alpha-A	P18-A-6-S1	P18a	BP
P18-6	P18-A-7	P18a	BP

REVISIONS

NAM recently completed an extensive study of the Groningen field, incorporating the most recent data and views. The conclusion is that the final recovery factor will be higher than previously estimated. However, most of the resulting additional reserves will not be recoverable prior to the year 2040, after a significant amount of capital will have been spent on production facilities. This upward revision does not affect short-term supply.

For the other accumulations on the Territory, reserves have been considerably revised downward. Information by operators about the production behaviour of these accumulations indicates that recoverable volumes are lower than previously estimated on volumetric grounds for a large number of accumulations.

UNDISCOVERED ACCUMULATIONS: EXPLORATION POTENTIAL

The exploration potential is the producible volume that may be assumed to be present in as yet undiscovered accumulations in the subsurface of the Netherlands on the basis of geological information. Economic factors are not taken into account in this estimate. In estimating the exploration potential for natural gas, TNO-NITG focuses on evaluating those geological units (so-called *plays*) in the Netherlands, in which geological conditions are favourable for gas accumulations and which have been sufficiently proven by drilling. Within these geological plays, only those prospective structures

(‘prospects’) are considered that have been identified and assessed on the basis of existing data. Prospects of which the volume is very small – in case of success smaller than 0.5 billion Sm³ onshore or smaller than 2 billion Sm³ offshore – are not included in the potential estimate.

The exploration potential that may be present in hypothetical plays, or in not actually identified geological structures, is not taken into account because of its speculative nature. The estimate of the exploration potential includes prospects located in environmentally sensitive areas.

The estimate of the exploration potential is expressed as a numerical range, to stress the inherent highly uncertain nature:

Exploration potential for natural gas (in billion Sm³)

Area	Range
Territory	60 – 170
Continental Shelf	140 – 400

In previous years, the term ‘futures’ has been used in the sense that it represents the future addition to natural gas reserves as a result of exploration. The extent in which these volumes will indeed contribute to future gas production, however, also depends on a number of non-geological factors, such as: mining climate, number of wells drilled, infrastructure and accessibility of the prospects. For that reason the present preferably uses the term ‘exploration potential’, referring to the group of prospects that may yield new gas accumulations. The next section focuses on the extent to which this will add to Dutch gas production.

GAS SUPPLY FROM WITHIN THE NETHERLANDS

This section deals with the developments in the supply of gas from within the Netherlands that can reasonably be expected for the next 10 years, the period from 2004 to 2013. This section of the review is based on data submitted by operators and gas boards. The reference date for the present review is 1 January 2004. All volumes in the present section are quoted in billions of m³ Groningen Gas Equivalent (35.17 MJ/Nm³) abbreviated to m³Geq.

Supply for the period from 2004 to 2013

In accordance with the provisions of the Gas Act, the Minister of Economic Affairs has set an upper limit for the production of natural gas from within the Netherlands. For the period from 2003 to 2007, the average upper production limit is 76 billion m³Geq, while for the period from 2008 to 2012, it is set at an average of 70 billion m³Geq. The period covered in the present annual review extends to 2013; for the final year no upper production limit has been set (as yet).

The estimated supply from fields outside the Groningen accumulation has been prepared on the basis of the following data:

- the total summation of the production profiles of the producing accumulations. These profiles have been submitted by the operators as part of their production plans.

- the summation of the production profiles of the accumulations from which production is expected to start within the period from 2004 to 2008. These reserves have been profiled according to a typical production development, equal volumes being produced each year.
- the summation of the production profiles of a selection of accumulations that will probably be developed, but of which the actual start of production is not yet known. These production profiles have been prepared in the same manner as described above.
- the summation of the production profiles of the accumulations that have not been discovered as yet. These profiles are prepared by using a simulation model; taking into account the number of well that is expected to be drilled, the expected volumes of the prospects and the probability of success.

The maximum volume that can be expected to be supplied from Dutch accumulations during the next ten years has been calculated taking into account the upper production limit. Purely for calculation purposes, the upper production limit for 2013 is assumed to be identical to that for 2012. The resulting supply is 724 billion m³Geq, consisting of 260 billion m³Geq from ‘non-Groningen’ accumulations supplemented by a maximum of 464 billion m³Geq from the Groningen accumulation. In this scenario, the Groningen will continue to act as a swing producer, balancing supply and demand.

Gas supply from within the Netherlands for the period from 2004 – 2013, in billion m³Geq

Supply	2004 – 2008	2009 – 2013
non-Groningen accumulations		
discovered	developed	130
discovered	undeveloped	15
Still to be discovered		5
Subtotal non-Groningen		150
Groningen accumulation*		245
Total supply from within the Netherlands	395	370

* This is the maximum supply from the Groningen accumulation on the basis of the upper production limit and the role of the Groningen accumulation as a swing producer. For calculation purposes, the upper production limit for 2003 has been assumed to be 70 billion m³Geq.

Remarks:

The figure below and the data on the supply of gas from within the Netherlands listed in the table above give rise to the following remarks:

- the total production of natural gas from within the Netherlands is limited to the production limit set by the Minister. This limit has been set at 76 billion m³Geq per year for the first five-year period, decreasing to 70 billion m³Geq for the second five-year period (period for which a upper production limit has been set extends up to and including 2012).
- In 2003 the actually produced volume of natural gas from within the Netherlands is approximately 7 billion m³Geq below the production limit.
- The supply of gas produced from non-Groningen accumulations will show a clearly decreasing trend over next ten years.
- The current prognosis for the production from the non-Groningen accumulations is significantly lower than the prognosis reported in 2002 in the publication ‘Gas Supply in the Netherlands’, prognosis for the period from 2002 to 2011 [Aardgasstromen in Nederland, prognose voor de

periode 2002-2011]. For 2004, production is expected to be almost 10 billion m³Geq less than previously predicted increasing to approximately 20 billion m³Geq less in 2011.

- Total production from non-Groningen accumulations is expected to be approximately 23 billion m³Geq for 2013. Approximately half of this volume will be derived from currently developed accumulations, and the other half from as yet undeveloped accumulations and from still to be discovered accumulations .
- The profiles do not include discovered fields and potential prospects located underneath the Wadden Sea, as exploration and development of these accumulations is currently not permitted.

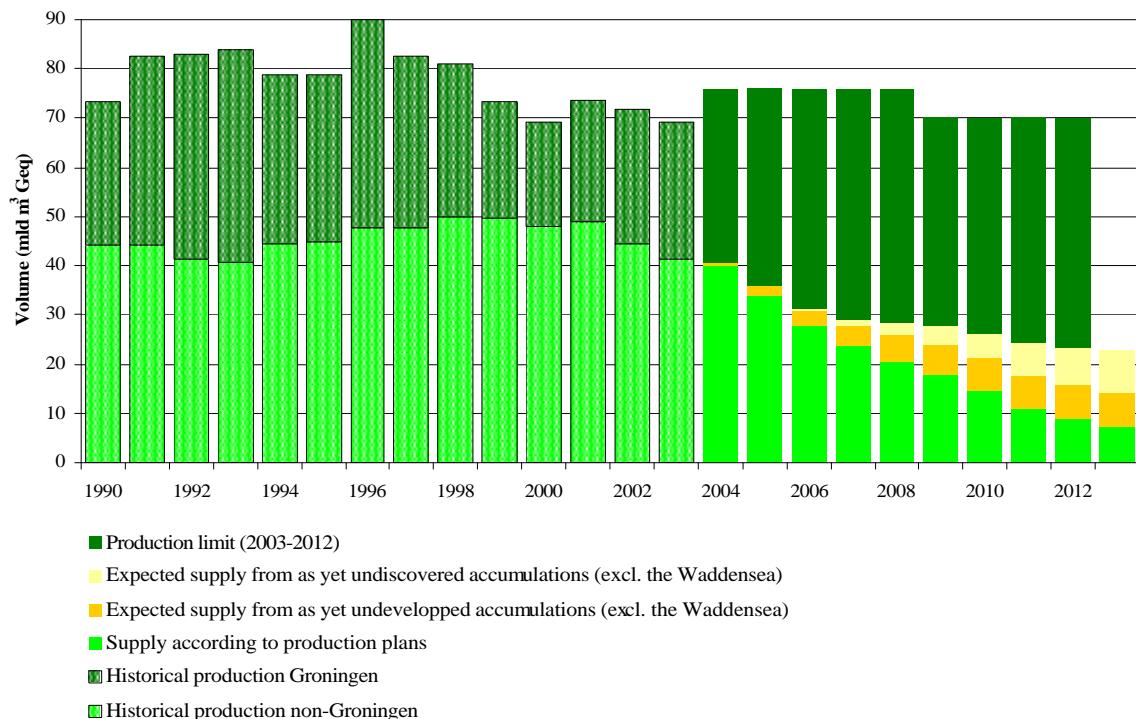


Fig. 2. Historical production of natural gas in the Netherlands from 1990 and production prognosis for the non-Groningen accumulations and for Groningen. For 2013, no production has been attributed to Groningen in this graph.

2. OIL RESOURCES

INTRODUCTION

In view of the relatively small volume of the oil resources in the Netherlands only a brief review is presented here.

RESOURCE

The major revision of the oil reserves is prompted by NAM's intention to resume production from the Schoonebeek accumulation. The 'de Ruyter' accumulation is expected to come on stream in the period from 2004 to 2008 operated by Petro-Canada.

Dutch oil reserves in million Sm³ as at 1 January 2004

Area	Reserves
North-eastern Netherlands	16.0
West Netherlands	4.7
Continental Shelf	24.7
Total Netherlands	45.4

Revision of oil reserves compared to 1 January 2003, in million Sm³

Area	Change as a result of:			
	new finds	(re) evaluation	(net) production	total
Territory	-	15.6*	-0.4	15.2
Continental Shelf	-	4.0	-2.3	1.7
Total			19.6	-2.7
				16.9

* The revision of the reserves in the Territory is largely attributable to the Schoonebeek accumulation.

Number of proven oil accumulations as at 1 January 2004

Oil accumulation	Territory	Continental Shelf
Producing	3	9
Closed in	1	-
Start of production between 2004 and 2008	-	1
Start of production unknown	-	-
Production ceased	7	1
Sub-economic	11	14
Total	22	25

3. LICENCES, Netherlands Territory as at 1 January 2004

Changes in the licences for the exploration, production and storage onshore, which took place during 2003 in the onshore Territory, are listed in the tables below. Annexes 2 and 3 in the second section of this annual review present a complete list of both licence applications and licences that are in force in the Territory as at 1 January 2004. Annexes 1 and 2 present maps showing the locations of exploration and production licences as well as any changes in licences that took place during 2003.

Total area	Under licence (km ²)	Under licence (%)
41 785 km ²	18 856 km ²	45.1 %

EXPLORATION LICENCES

There have been no changes during 2003.

PRODUCTION LICENCES

Lapsed

Licence holder	Licence	Lapsed	km ²
Chevron USA Inc. c.s.	Akkrum	31-12-'03	219
Total			219

STORAGE LICENCES

Awarded

Licence holder	Licence	In force as from	km ²
Nederlandse Aardolie Maatschappij B.V.	Grijpskerk	01-04-'03	27
	Norg	01-04-'03	81
BP Nederland Energie B.V.	Alkmaar	01-04-'03	16
Total			124

4. LICENCES, Continental Shelf as at 1 January 2004

Changes in the licences for the exploration and production, which took place during 2003 on the Continental Shelf, are listed in the tables below. Annexes 4 up to and including 7 in the second section of this annual review present a complete list of both licence applications and licences that are in force on the Continental Shelf, as at 1 January 2004. Annexes 1 and 2 present maps showing the locations of exploration and production licences as well as any changes in licences that took place during 2003.

Total area	Under licence (km ²)	Under licence (%)
56 814 km ²	23 628 km ²	41.6 %

EXPLORATION LICENCES, Continental Shelf 2003

Applied for

Block (part)	Publication	Date	Closing date
P11c	Off. Journal of the EC, C214	09-09-'03	09-12-'03
	Netherlands Government Gazette 178	16-09-'03	
	Netherlands Government Gazette 251	30-12-'03	

Awarded

Licence holder	Block (part)	In force as from	km ²
Denerco c.s.	F9	15-03-'03	400
	G7	15-03-'03	122
Wintershall Noordzee B.V. c.s.	L6a	22-08-'03	332
Total			854

Lapsed

Licence holder	Block (part)	km ²
Nederlandse Aardolie Maatschappij B.V.	A18b	39
	K10d	40
	Q16e,f	13
Wintershall Noordzee B.V.	E10b	155
	M2	406
	Q10d	120
Total		773

PRODUCTION LICENCES, Continental Shelf 2003

Withdrawn application

Licence holder	Block (part)	km²
GDF Production Nederland B.V.	P8	419
	Q13	399
		Total 818

Applied for

Applicant	Block (part)	km²
Petro-Canada Netherlands B.V.	P11b	209
	P10	5
		Total 214

Awarded

Licence holder	Block (part)	In force as from	km²
ATP Oil & Gas (Netherlands) B.V.	L6d	07-03-'03	16
Wintershall Noordzee B.V.	L5b	28-06-'03	237
	L6b	01-07-'03	60
Nederlandse Aardolie Maatschappij B.V.	G16b	11-10-'03	54
		Total	367

Subdivided

Licence holder	Block (part)	In force as from	km²
Nederlandse Aardolie Maatschappij B.V.	N7a	23-12-'03	141
GDF Production Nederland B.V.	N7b	23-12-'03	174
		Total	315

5. COMPANY CHANGES, NAME CHANGES AND LEGAL MERGERS in 2003

The tables below list changes which took place during 2003, as a result of mutations in consortiums of companies that participate in licences as well as name changes of participating companies or name changes as a result of legal mergers.

Company changes in exploration licences

Relinquishing company	Acquiring company	Block (part)	In force as from	Netherlands Government Gazette
1. Nederlandse Aardolie Maatschappij B.V. DSM Energie B.V.	ATP Oil & Gas (Netherlands) B.V.	L6d	28-02-'03	45
2. Clyde Petroleum Exploratie B.V.	Wintershall Noordzee B.V.	K16	18-09-'03	181
		M1a	18-09-'03	181
		M1b	18-09-'03	181
		M2	18-09-'03	181
		M4	18-09-'03	181
		P2b	18-09-'03	181
		Q2a	18-09-'03	181
3. --	Petro-Canada Netherlands B.V.	F6b	22-11-'03	248
4. --	GDF Production Nederland B.V.	G14	22-11-'03	248
5. Nederlandse Aardolie Maatschappij B.V.	GDF Production Nederland B.V.	D18a	18-12-'03	248
		E17	18-12-'03	248
6. --	Wintershall Noordzee B.V.	D18a	24-12-'03	252

Company changes in production licences

Relinquishing company	Acquiring company	Block (part)	In force as from	Netherlands Government Gazette
1. Holland Sea Search II B.V.	Holland Sea Search B.V.	J3b/J6	28-02-'03	46
2. Dyas Nederland B.V.	Essent Energy Gas Storage B.V.	Waalwijk	29-04-'03	83
	Dyas B.V.	F2a	07-05-'03	88
		F15a	07-05-'03	88
		F15d	07-05-'03	88
		P2a	07-05-'03	88
		P6	24-06-'03	119
		P12	07-05-'03	88
		P15a/b	07-05-'03	88
		P15c	07-05-'03	88
		Q8	07-05-'03	88

Relinquishing company	Acquiring company	Block (part)	In force as from	Netherlands Government Gazette
3. Goal Olie & Gasexploratie B.V.	--	Q5c/d/e	28-08-'03	167
4. Clyde Petroleum Exploratie B.V.	Wintershall Noordzee B.V.	Waalwijk	18-09-'03	181
		Middelie	18-09-'03	181
		G17c/d	18-09-'03	181
		K8/K11	18-09-'03	181
		K10a	18-09-'03	181
		K10b/c	18-09-'03	181
		K13	18-09-'03	181
		K18a/b	18-09-'03	181
		L8a	18-09-'03	181
		L12a	18-09-'03	181
		L12b/L15b	18-09-'03	181
		L13	18-09-'03	181
		L16a	18-09-'03	181
		M7	18-09-'03	181
		P2a	18-09-'03	181
		P6	18-09-'03	181
		P9a/b	18-09-'03	181
		P9c	18-09-'03	181
		P11a	18-09-'03	181
		P12	18-09-'03	181
		P14a	18-09-'03	181
		P15a/b	18-09-'03	181
		P15c	18-09-'03	181
		Q1	18-09-'03	181
		Q4	18-09-'03	181
		Q5c/d/e	18-09-'03	181
		Q8	18-09-'03	181
5. Petro-Canada Hanze GmbH.	--	F2a	02-10-'03	193
6. --	GDF Participation Nederland B.V.	L10/L11a	11-10-'03	198
7. Nederlandse Aardolie Maatschappij B.V.	GDF Production Nederland B.V.	D12a	22-11-'03	228
		K3a	22-11-'03	228
		D15	18-12-'03	248
8. GDF Production Nederland B.V.	GDF Participation Nederland B.V.	D12a	24-12-'03	3
9. --	EWE Aktiengesellschaft	L8a	24-12-'03	3
10. Rosewood Exploration C.V.	Rosewood Exploration Ltd	K5b	24-12-'03	4
		K9a/9b	24-12-'03	4
		K9c	24-12-'03	4
		K12	24-12-'03	4
		L10/L11a	24-12-'03	4
		L14a	24-12-'03	4
		N7	24-12-'03	4

Relinquishing company	Acquiring company	Block (part)	In force as from	Netherlands Government Gazette
11. Goal Olie & Gasexploratie B.V.	Goal Petroleum (Netherlands) B.V.	E15	29-12-'03	4
		E18	29-12-'03	4
		F13	29-12-'03	4
		K4b/K5a	29-12-'03	4

Name changes

Previous company name	New company name
1. Lasmo Nederland B.V.	Eni Nederland B.V.
2. TotalFinaElf E&P Nederland B.V.	Total E&P Nederland B.V.
3. Vanco Netherlands B.V.	Aceiro Energy B.V.
4. Conoco (UK) Limited	ConocoPhillips (UK) Limited
5. TCPL Netherlands Ltd.	Production North Sea Netherlands Ltd.
6. Holland Sea Search B.V.	Dyas Holland B.V.
7. Goal Olie en Gasexploratie B.V.	Goal Petroleum (Netherlands) B.V.

Legal mergers

Merging companies	New company name
1. Dyas Energy B.V. Dyas Nederland B.V.	Dyas B.V.
2. Clyde Petroleum Exploratie B.V. Wintershall Noordzee B.V.	Wintershall Noordzee B.V.
3. Rosewood Exploration C.V. Rosewood Capital Corporation	Rosewood Exploration Ltd

6. SEISMIC ACQUISITION

All seismic acquisition surveys shot during 2003 are listed in the tables below. Historical summaries can be found in Annex 8.

NETHERLANDS TERRITORY

No 2D or 3D seismic surveys have been acquired onshore in 2003

CONTINENTAL SHELF

2D Seismic surveys

No 2D seismic surveys have been acquired on the Continental Shelf in 2003.

3D Seismic surveys

Location	Company	km²
F11 en F12	Western Geophysical	952
L5	Wintershall	548
L5 West	Wintershall	193
L5 Oost	Wintershall	180
F16	Wintershall	312
	Total	2 185

7. OIL AND GAS WELLS, completed in 2003

The tables below list all wells drilled during 2003, sorted by drilling location: either on the Territory or on the Continental Shelf en subsequently sorted by exploration, appraisal or production wells.

The tables list the name, licence, operator and result for each well. The last table presents an aggregated summary of all drilling operations during 2003. Historical summaries can be found in Annex 9 up to and including 11.

NETHERLANDS TERRITORY

Exploration wells

	Well name	Licence (type*)	Operator	Result
1	Groot-Wijngaarden-01	Gorredijk (pl)	Total	dry
2	Norg-06	Drenthe (pl)	NAM	gas
3	Oude Pekela-03	Groningen (pl)	NAM	dry

Appraisal wells

No appraisal wells have been drilled in 2003

Production wells

	Well name	Production licence	Operator	Result
1	Anjum-05	Noord Friesland	NAM	dry
2	Coevorden-16-sidetrack1	Schoonebeek	NAM	gas
3	Coevorden-17-sidetrack2	Schoonebeek	NAM	gas
4	Emmen-08-sidetrack2	Drenthe	NAM	gas
5	Pernis West-06	Rijswijk	NAM	gas
6	Rotterdam-21	Rijswijk	NAM	oil & gas
7	Sebaldeburen-02	Groningen	NAM	gas

*) el = exploration licence

pl = production licence

CONTINENTAL SHELF

Exploration wells

	Well name	Licence (type*)		Operator	Result
1	G14-02-S1	G14	(el)	Gaz de France	gas
2	K15-FG-105	K15	(pl)	NAM	gas
3	P10-04	P10	(el)	Petro Canada	dry
4	P15-16	P15	(pl)	BP	gas
5	P15-17	P15	(pl)	BP	gas
6	P18-A-06-sidetrack 1	P18a	(pl)	BP	gas
7	P18-A-07	P18a	(pl)	BP	gas

Appraisal wells

	Well name	Licence (type*)		Operator	Result
1	D12-A-02-sidetrack 1	D12a	(pl)	Wintershall	gas
2	G16-06-sidetrack 1	G16	(pl)	NAM	dry
3	L05-10	L05	(pl)	Wintershall	gas
4	Q04-C-02	Q04	(pl)	Wintershall	gas

Production wells

	Well name	Production licence	Operator	Result
1	D15-FA-102-sidetrack 1	D15	NAM	gas
2	K04-BE-03	K04a	Total	gas
3	K05-D-01-sidetrack 1	K05a	Total	gas
4	K06-DN-04-sidetrack 1	K06	Total	gas
5	K07-FB-102	K07	NAM	dry
6	K09-B-03-sidetrack 1	K09	Gaz de France	gas
7	K12-G-05	K12	Gaz de France	gas
8	K12-G-06	K12	Gaz de France	gas
9	K12-G-07	K12	Gaz de France	gas
10	K15-FK-102	K15	NAM	gas
11	L05-B-02	L05	Wintershall	gas
12	L09-FF-108-sidetrack 2	L09a	NAM	gas
13	L10-M-03	L10	Gaz de France	gas

*) el = exploration licence

pl = production licence

DRILLING OPERATIONS in 2003

Summary of drilling operations during 2003

	Type of well	Result				Total
		Gas	Oil	Gas+Oil	Dry	
Netherlands Territory	Exploration	1			2	3
	Appraisal					0
	Production	5		1	1	7
	Sub total	6	0	1	3	10
Continental Shelf	Exploration	6			1	7
	Appraisal	3			1	4
	Production	12			1	13
	Sub total	21	0	0	3	24
Total		27	0	1	6	34

8. PLATFORMS AND PIPELINES

The tables below list all modifications to platforms and pipelines during 2003. For further information, please refer to the annual report of the State Supervision of Mines (Staatstoezicht op de Mijnen). Annexes 12 and 13 present a complete list of all platforms and pipelines.

New platforms, Continental Shelf installed in 2003

Platform	Operator	Number of legs	Gas/Oil*	Function
K 7-FB-1	NAM	4	Gas	satellite
K12-S3	Gaz de France	0	Gas	sub sea completion
L 5-B	Wintershall	4	Gas	satellite
Q 4-C	Wintershall	4	Gas	satellite

See also the annual report of the State Supervision of Mines

Removed platforms, Continental Shelf removed in 2003

Platform	Operator	Number of legs	Gas/Oil*	Function
P15B-DP (RIJN-B)	BP	4	Oil	satellite

See also the annual report of the State Supervision of Mines

New Pipelines, Continental Shelf laid in 2003

Operator	From	To	Diameter (inch)	Length (km)	Carries
Gaz de France	K12-S3	K12-BP	6	3.4	g
Gaz de France	K12-BP	K12-S3	95.5 mm	3.4	c
Maersk	Denmark (Tyra WE)	F3-FB-1P	26	38	g
Maersk	F3-FB-1P	sub sea valve station	4	0.3	c
NAM	K7-FB-1	K7-FD-1	12	17	g
NAM	K8-FA-1	K7-FB-1	4	26	c
NAM	K15-FK-1	K15-FB-1	10	8	g
NAM	K15-FK-1	K15-FB-1	4	8	c
Wintershall	L5-B	L8-P4	10 + 4	6.4	g + c

* = multiple pipeline

gl = glycol

+ = laid separately

m = methanol

c = control cable

ci = corrosion inhibitor

o = oil

l = instrument air

g = gas

(s) = side-tap

co = condensate

def.verl. = abandoned

9. PRODUCTION

The tables below list the aggregated production figures for natural gas, oil and condensate for 2003. Changes in comparison to 2002 are listed in absolute terms and in terms of percentage. The tables on the following pages present the monthly production figures for each production licence. Annexes 14 up to and including 17 present historical gas and oil production figures over many years.

Total production of gas and oil in 2003 and changes compared to 2002

	2003	Changes compared to 2002	
Gas	10^6 Nm^3	10^6 Sm^3	10^6 Sm^3
Netherlands Territory	42 881.1	45 257.1	784.7 1.8%
Continental Shelf	21 926.0	23 140.9	-3 629.2 -13.6%
Total	64 807.0	68 397.9	-2 844.7 -4.0%
Oil		10^3 Sm^3	10^3 Sm^3
Netherlands Territory		416.2	-22.78 -5.2%
Continental Shelf		2 307.7	71.39 3.2%
Total		2 723.9	48.61 1.8%
Average daily oil production (Sm^3)		7 463	133 1.8%
Condensate		10^3 Sm^3	10^3 Sm^3
Netherlands Territory		418.6	23.6 5.3%
Continental Shelf		434.1	242.3 35.8%
Total production		852.7	265.9 23.8%

GAS PRODUCTION, Netherlands Territory in 2003 (in million Sm³)

The production per licence is a summation of the production of all producing wells of which the wellhead is located within the licence area

Licence	Operator	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Beijerland	NAM	0.0	0.0	4.6	10.6	19.7	21.6	22.3	22.6	19.3	17.0	25.8	24.5	188.1
Bergen	BP	44.9	37.0	40.4	32.0	33.0	25.3	23.9	42.8	42.8	35.9	35.5	33.7	427.1
Botlek	NAM	0.0	0.0	4.8	10.3	21.8	13.6	16.5	14.9	10.5	10.6	13.5	12.6	129.2
Drenthe	NAM	143.5	133.8	126.2	70.1	76.8	70.3	73.2	33.2	52.8	116.1	148.0	157.4	1201.5
Gorredijk	Total	25.7	24.0	25.7	18.1	19.8	14.7	10.6	12.5	9.4	18.9	23.8	22.8	226.0
Groningen	NAM	6723.5	6510.8	3508.1	1994.3	649.6	519.9	445.6	561.4	933.1	3151.0	3542.5	5213.3	33753.1
Hardenberg	NAM	2.2	2.0	2.2	2.1	2.1	2.1	2.2	0.6	0.6	2.2	1.6	1.3	21.1
Leeuwarden	Total	10.1	9.8	10.0	6.7	9.1	8.7	6.3	9.7	7.0	12.1	10.1	9.8	109.4
Noord-Friesland	NAM	404.3	344.0	380.5	245.0	201.8	174.6	171.0	132.2	248.5	328.5	326.4	341.7	3298.5
Oosterend	Total	1.2	0.9	1.2	0.8	0.3	0.6	1.0	0.9	0.5	1.3	1.1	1.0	10.7
Rijswijk	NAM	348.4	317.4	226.1	148.8	124.2	106.9	110.8	113.1	167.0	317.9	346.9	369.5	2697.0
Rossum-de Lutte	NAM	12.6	11.2	11.8	12.2	9.8	12.4	11.4	11.3	7.7	8.6	8.0	12.6	129.6
Schoonebeek	NAM	176.9	131.6	108.0	122.3	185.6	154.5	149.0	130.5	115.0	154.4	174.7	175.3	1777.7
Slootdorp	Total	2.6	2.5	2.3	2.4	2.4	2.0	2.8	2.2	1.9	2.0	2.6	2.3	28.0
Steenwijk	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	4.2	6.7	14.7
Tietjerksteradeel	NAM	95.7	84.5	87.1	59.0	67.8	51.9	58.9	70.2	75.5	87.4	84.8	82.6	905.4
Tubbergen	NAM	12.0	10.6	10.6	8.9	9.6	8.5	9.0	10.0	5.4	7.4	5.2	5.1	102.3
Waalwijk	Wintershall	14.4	13.3	14.7	10.1	10.7	9.2	7.3	7.6	11.3	11.5	11.6	12.0	133.9
Zuidwal	Total	9.8	9.9	0.0	9.0	6.1	3.2	7.8	10.3	8.2	12.0	13.8	13.7	103.9
Total		8027.6	7643.1	4564.4	2762.8	1450.2	1200.0	1129.5	1186.2	1716.6	4298.5	4780.1	6498.1	45257.0

GAS PRODUCTION, Continental Shelf in 2003 (in million Sm³)

The production per licence is a summation of the production of all producing wells of which the wellhead is located within the licence area

Licence	Operator	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
D15**	Gaz de France	20.0	18.3	36.1	46.3	42.6	35.9	22.1	21.6	42.2	50.3	42.0	42.4	419.7
F2a	Petro Canada	11.5	10.9	10.9	12.6	12.8	10.4	12.2	12.4	6.3	12.2	12.7	12.4	137.0
F3	NAM	90.3	60.2	81.8	77.5	56.4	75.6	86.0	81.7	28.7	69.4	77.5	72.3	857.4
F15a	Total	44.6	40.5	44.5	36.9	38.7	28.5	26.3	13.5	14.6	15.3	17.7	15.8	336.9
G17c & G17d	Gaz de France	54.0	53.0	51.3	23.3	15.6	17.1	15.7	11.7	24.3	54.4	55.9	58.5	434.8
J3b & J6	Eni	69.3	61.9	69.3	43.4	51.5	8.4	23.4	29.8	60.2	61.8	60.1	59.8	598.9
K1a	Total	38.9	64.0	17.0	44.5	84.7	0.0	67.7	102.1	105.4	110.1	92.9	91.9	819.4
K4a	Total	128.0	114.0	121.5	54.7	49.6	18.1	53.0	58.3	54.0	90.0	82.8	82.7	906.7
K4B & K5a	Total	152.5	136.0	143.1	133.4	139.6	57.9	66.7	140.5	149.9	170.5	160.5	182.7	1633.4
K6 & L7	Total	144.4	132.5	146.7	64.5	66.3	37.1	57.7	119.8	123.5	149.2	149.2	131.2	1322.1
K7	NAM	34.7	38.9	49.7	26.4	17.4	6.8	28.6	27.1	16.4	9.5	10.1	9.1	274.8
K8 & K11	NAM	144.3	113.2	144.7	91.6	63.5	42.3	67.9	88.2	50.0	20.9	59.9	133.1	1019.7
K9a & K9b	Gaz de France	87.3	82.0	85.5	53.4	36.0	46.8	67.8	84.0	85.2	79.9	47.4	62.0	817.3
K9c	Gaz de France	13.3	10.3	11.8	9.5	10.1	7.2	9.9	10.7	10.4	10.3	9.9	9.6	123.2
K10a	Wintershall	4.7	4.3	4.7	4.5	4.5	3.5	4.5	4.3	4.5	2.7	2.5	0.0	44.6
K12	Gaz de France	143.1	127.0	126.2	99.7	72.2	107.0	105.4	61.6	106.2	121.4	152.4	149.2	1371.5
K14	NAM	58.3	45.2	59.6	48.2	47.9	16.0	25.2	44.5	42.3	48.2	47.9	37.1	520.4
K15	NAM	82.7	75.9	98.9	67.5	89.1	37.2	3.3	62.0	164.0	217.6	206.5	272.6	1377.4
K18a & K18b	Wintershall	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*
L2	NAM	2.3	18.1	20.8	13.5	2.9	0.9	0.0	1.1	3.1	15.9	14.9	13.8	107.2
L4a	Total	82.3	72.5	75.7	47.1	40.9	8.7	49.8	42.6	57.3	75.5	71.9	75.4	699.8
L5a	NAM	43.5	54.6	51.6	11.9	3.3	0.0	33.1	50.7	69.2	91.0	87.4	76.0	572.3
L5b	Wintershall	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.9	54.3	61.4	131.6
L8a	Wintershall	20.7	18.6	20.4	16.4	18.8	19.5	15.4	18.6	15.0	18.6	17.4	19.2	218.5
L8b	Wintershall	94.3	84.9	94.7	56.5	75.7	71.4	17.9	21.9	38.5	81.9	83.1	83.1	804.0
L9a & L9b	NAM	384.1	197.1	225.6	149.1	108.4	93.1	63.5	44.7	141.9	230.9	280.8	298.3	2217.6
L10 & L11a	Gaz de France	81.5	72.7	67.9	64.1	84.2	114.1	82.1	97.9	53.9	113.5	122.4	125.1	1079.4

Licence	Operator	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
L11b	Unocal	2.7	2.6	4.7	3.9	4.5	3.4	3.9	3.8	3.9	3.9	3.6	3.9	44.7
L12b & L15b	NAM	29.9	23.7	16.0	38.9	45.0	28.4	15.0	18.8	41.2	49.4	27.6	32.7	366.4
L13	NAM	49.2	44.0	53.3	37.5	37.4	2.3	21.1	44.6	50.5	54.5	49.0	43.8	487.2
L16a	Wintershall	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*
P6	Wintershall	53.2	48.8	49.7	31.8	44.4	37.0	32.6	42.2	41.4	44.8	48.7	50.0	524.8
P9c	Unocal	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	4.6
P12	Wintershall	7.5	6.6	7.4	5.3	5.1	3.5	3.4	4.6	6.1	6.8	7.0	7.2	70.4
P14a	Wintershall	17.3	14.6	16.5	14.3	14.4	11.0	5.8	7.5	10.7	12.3	9.7	8.8	142.8
P15a & P15b	BP	53.1	44.9	51.7	34.9	36.3	24.3	34.7	25.0	40.9	43.1	40.7	57.0	486.6
P15c	BP	5.0	4.4	4.7	3.2	3.0	3.2	2.7	2.2	3.1	2.9	9.7	2.3	46.5
P18a	BP	96.6	66.9	90.0	54.5	58.0	32.7	53.4	61.1	57.5	106.5	100.8	102.6	880.6
Q1	Unocal	7.9	6.8	10.9	10.3	9.1	7.0	8.9	9.8	8.8	103.8	122.4	128.1	433.7
Q4	Wintershall	65.2	56.3	63.1	44.5	36.8	49.8	54.2	60.1	62.2	56.8	55.7	62.0	666.7
Q8	Wintershall	7.4	7.2	7.9	5.5	4.8	4.6	3.5	1.8	1.7	1.8	1.7	2.1	50.0
Q16a	NAM	44.4	28.0	42.2	39.3	37.3	33.5	34.4	26.8	43.7	42.5	41.2	43.9	457.3
Total Continental Shelf		2470.6	2061.4	2278.8	1621.0	1569.2	1104.5	1279.3	1559.9	1839.1	2466.4	2538.3	2719.5	23508.0

* this concerns production of associated gas, rounding off results in zero production

** NAM was operator until december 2003

GAS PRODUCTION, Netherlands Territory in 2003 (in million Nm³)

The production per licence is a summation of the production of all producing wells of which the wellhead is located within the licence area

Licence	Operator	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Beijerland	NAM	0.0	0.0	4.4	10.1	18.6	20.4	21.2	21.4	18.3	16.1	24.5	23.2	178.2
Bergen	BP	42.5	35.0	38.3	30.4	31.3	24.0	22.6	40.5	40.5	34.0	33.6	32.0	404.7
Botlek	NAM	0.0	0.0	4.6	9.8	20.7	12.9	15.6	14.1	9.9	10.1	12.8	11.9	122.4
Drenthe	NAM	136.0	126.8	119.6	66.4	72.8	66.6	69.4	31.5	50.1	110.0	140.3	149.1	1138.4
Gorredijk	Total	24.3	22.8	24.4	17.1	18.8	13.9	10.0	11.8	8.9	17.9	22.6	21.6	214.1
Groningen	NAM	6370.5	6168.9	3323.9	1889.6	615.5	492.6	422.2	532.0	884.1	2985.6	3356.6	4939.6	31981.0
Hardenberg	NAM	2.0	1.9	2.1	2.0	2.0	2.0	2.1	0.6	0.5	2.0	1.5	1.2	20.0
Leeuwarden	Total	9.5	9.3	9.4	6.4	8.7	8.3	5.9	9.2	6.6	11.4	9.6	9.3	103.6
Noord-Friesland	NAM	383.1	326.0	360.6	232.2	191.2	165.4	162.0	125.3	235.4	311.2	309.2	323.7	3125.3
Oosterend	Total	1.2	0.8	1.2	0.8	0.3	0.5	0.9	0.8	0.5	1.2	1.0	1.0	10.2
Rijswijk	NAM	330.1	300.7	214.2	141.0	117.7	101.2	105.0	107.2	158.3	301.2	328.7	350.1	2555.4
Rossum-de Lutte	NAM	11.9	10.7	11.2	11.6	9.3	11.8	10.8	10.7	7.3	8.1	7.5	12.0	122.8
Schoonebeek	NAM	167.6	124.7	102.3	115.9	175.8	146.4	141.1	123.6	109.0	146.3	165.5	166.1	1684.4
Slootdorp	Total	2.5	2.3	2.2	2.2	2.2	1.9	2.7	2.1	1.8	1.9	2.5	2.2	26.5
Steenwijk	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	4.0	6.4	13.9
Tietjerksteradeel	NAM	90.7	80.0	82.6	55.9	64.2	49.2	55.8	66.5	71.6	82.9	80.4	78.3	857.9
Tubbergen	NAM	11.3	10.0	10.0	8.5	9.1	8.0	8.5	9.5	5.1	7.0	4.9	4.8	97.0
Waalwijk	Wintershall	13.6	12.6	14.0	9.6	10.1	8.7	7.0	7.2	10.7	10.9	10.9	11.4	126.8
Zuidwal	Total	9.3	9.3	0.0	8.5	5.8	3.0	7.3	9.8	7.8	11.4	13.1	13.0	98.4
Total		7606.1	7241.8	4324.8	2617.7	1374.1	1137.0	1070.2	1123.9	1626.5	4072.8	4529.1	6156.9	42881.1

GAS PRODUCTION, Continental Shelf in 2003 (in million Nm³)

The production per licence is a summation of the production of all producing wells of which the wellhead is located within the licence area

Licence	Operator	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
D15**	Gaz de France	18.9	17.3	34.2	43.9	40.4	34.0	21.0	20.5	40.0	47.6	39.8	40.2	397.7
F15a	Total	10.9	10.3	10.3	11.9	12.1	9.9	11.6	11.7	5.9	11.6	12.0	11.7	129.8
F2a	Petro Canada	85.6	57.0	77.5	73.4	53.4	71.7	81.5	77.4	27.2	65.8	73.4	68.5	812.3
F3	NAM	42.3	38.4	42.1	34.9	36.7	27.0	24.9	12.8	13.9	14.5	16.8	14.9	319.2
G17c & G17d	Gaz de France	51.2	50.2	48.6	22.1	14.8	16.2	14.9	11.1	23.0	51.5	53.0	55.4	412.0
J3b & J6	Eni	65.7	58.6	65.7	41.1	48.8	8.0	22.2	28.3	57.0	58.5	57.0	56.7	567.5
K1a	Total	36.9	60.7	16.1	42.1	80.2	0.0	64.2	96.8	99.9	104.3	88.1	87.1	776.4
K4a	Total	121.3	108.0	115.2	51.9	47.0	17.1	50.2	55.2	51.2	85.3	78.4	78.3	859.1
K4B & K5a	Total	144.5	128.9	135.6	126.4	132.3	54.8	63.2	133.1	142.0	161.6	152.0	173.1	1547.6
K6 & L7	Total	136.8	125.5	139.0	61.1	62.9	35.1	54.6	113.5	117.0	141.4	141.4	124.4	1252.7
K7	NAM	32.9	36.9	47.1	25.0	16.5	6.4	27.1	25.7	15.6	9.0	9.5	8.7	260.4
K8 & K11	NAM	136.7	107.2	137.1	86.8	60.2	40.1	64.3	83.6	47.4	19.8	56.8	126.2	966.1
K9a & K9b	Gaz de France	82.7	77.7	81.0	50.6	34.1	44.3	64.3	79.6	80.7	75.7	44.9	58.7	774.4
K9c	Gaz de France	12.6	9.8	11.2	9.0	9.6	6.8	9.4	10.1	9.9	9.8	9.4	9.1	116.7
K10a	Wintershall	4.5	4.1	4.4	4.3	4.3	3.3	4.2	4.1	4.2	2.5	2.4	0.0	42.2
K12	Gaz de France	135.6	120.3	119.6	94.5	68.4	101.4	99.9	58.4	100.6	115.0	144.4	141.4	1299.5
K14	NAM	55.3	42.8	56.5	45.7	45.4	15.2	23.8	42.2	40.1	45.7	45.4	35.2	493.1
K15	NAM	78.4	71.9	93.7	64.0	84.4	35.2	3.1	58.7	155.4	206.2	195.6	258.3	1305.0
K18a & K18b	Wintershall	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
L2	NAM	2.2	17.1	19.7	12.8	2.7	0.8	0.0	1.1	2.9	15.0	14.2	13.1	101.6
L4a	Total	78.0	68.7	71.7	44.7	38.8	8.2	47.2	40.3	54.3	71.6	68.1	71.5	663.1
L5a	NAM	41.2	51.7	48.9	11.3	3.1	0.0	31.4	48.1	65.6	86.3	82.8	72.1	542.3
L5b	Wintershall	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	51.4	58.2	124.7
L8a	Wintershall	19.6	17.6	19.3	15.6	17.8	18.5	14.6	17.6	14.3	17.6	16.5	18.1	207.0
L8b	Wintershall	89.3	80.5	89.7	53.5	71.8	67.7	16.9	20.8	36.5	77.6	78.7	78.7	761.8
L9a & L9b	NAM	363.9	186.8	213.8	141.3	102.7	88.2	60.2	42.4	134.5	218.8	266.1	282.6	2101.2
L10 & L11a	Gaz de France	77.2	68.9	64.3	60.7	79.8	108.1	77.8	92.8	51.1	107.5	116.0	118.5	1022.7

Licence	Operator	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
L11b	Unocal	2.6	2.4	4.5	3.7	4.2	3.2	3.7	3.6	3.7	3.7	3.4	3.7	42.3
L12b & L15b	NAM	28.3	22.4	15.1	36.8	42.6	26.9	14.2	17.8	39.0	46.8	26.2	30.9	347.2
L13	NAM	46.6	41.7	50.5	35.6	35.4	2.2	20.0	42.2	47.8	51.7	46.4	41.5	461.6
L16a	Wintershall	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
P6	Wintershall	50.5	46.2	47.1	30.2	42.1	35.0	30.9	40.0	39.2	42.4	46.2	47.3	497.2
P9c	Unocal	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	4.4
P12	Wintershall	7.1	6.2	7.0	5.0	4.9	3.3	3.2	4.3	5.8	6.5	6.6	6.8	66.7
P14a	Wintershall	16.3	13.9	15.6	13.5	13.6	10.5	5.5	7.1	10.1	11.6	9.2	8.3	135.3
P15a & P15b	BP	50.3	42.5	49.0	33.0	34.4	23.0	32.9	23.7	38.7	40.8	38.5	54.0	461.0
P15c	BP	4.8	4.2	4.5	3.1	2.8	3.0	2.6	2.1	3.0	2.8	9.2	2.2	44.0
P18a	BP	91.5	63.4	85.3	51.6	55.0	31.0	50.6	57.9	54.4	100.9	95.5	97.3	834.4
Q1	Unocal	7.5	6.5	10.3	9.8	8.6	6.7	8.4	9.2	8.3	98.3	116.0	121.4	411.0
Q4	Wintershall	61.8	53.3	59.8	42.2	34.8	47.2	51.3	57.0	59.0	53.8	52.8	58.8	631.7
Q8	Wintershall	7.0	6.8	7.5	5.2	4.6	4.3	3.4	1.7	1.6	1.7	1.6	2.0	47.4
Q16a	NAM	42.1	26.5	40.0	37.2	35.3	31.7	32.6	25.4	41.4	40.3	39.1	41.6	433.3
Total Continental Shelf		2340.9	1953.2	2159.1	1535.9	1486.8	1046.5	1212.1	1478.0	1742.6	2336.9	2405.0	2576.8	22273.8

* this concerns production of associated gas. rounding off results in zero production

** NAM was operator until december

OIL PRODUCTION in 2003, (x 1000 ton)

The production per licence is a summation of the production of all producing wells of which the wellhead is located within the licence area

Licence	Operator	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Rijswijk	NAM	36.1	29.8	31.1	31.1	29.5	27.6	29.6	30.5	29.6	29.4	30.7	31.1	366.3
F 2a	Petro-Canada	118.4	115.7	120.5	132.3	134.2	109.6	124.6	128.3	64.5	127.7	132.3	130.6	1438.7
F 3	NAM	14.1	9.2	13.2	12.3	7.9	11.8	13.0	12.2	4.0	10.1	11.7	10.9	130.4
K18a & K18b	Wintershall	6.2	4.7	5.7	5.1	5.1	4.3	4.8	4.5	4.6	4.3	2.1	2.5	53.8
L16a	Wintershall	3.9	3.6	4.0	4.1	4.2	3.3	3.9	3.2	4.0	3.7	3.8	4.0	45.6
P9c	Unocal	6.4	5.7	6.2	5.6	5.3	5.6	5.6	5.6	5.6	5.9	5.6	5.7	68.7
Q1	Unocal	16.6	15.0	16.2	15.8	16.2	15.3	15.3	15.7	15.9	16.1	15.4	16.0	189.6
Total		201.8	183.7	197.0	206.2	202.4	177.5	196.7	200.1	128.3	197.2	201.5	200.7	2293.0

OIL PRODUCTION in 2003, (x 1000 Sm³)

The production per licence is a summation of the production of all producing wells of which the wellhead is located within the licence area

Licence	Operator	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Rijswijk	NAM	41.0	33.9	35.3	35.4	33.6	31.4	33.7	34.7	33.6	33.4	34.8	35.4	416.2
F 2a	Petro-Canada	142.7	139.4	145.2	159.4	161.6	132.0	150.1	154.6	77.7	153.9	159.4	157.4	1733.4
F 3	NAM	20.0	13.1	18.7	17.4	11.3	16.8	18.4	17.4	5.7	14.3	16.7	15.5	185.3
K18a & K18b	Wintershall	7.2	5.4	6.6	5.8	5.9	4.9	5.5	5.2	5.3	5.0	2.4	2.9	62.0
L16a	Wintershall	4.5	4.2	4.7	4.7	4.9	3.8	4.5	3.7	4.7	4.4	4.4	4.6	53.1
P9c	Unocal	7.4	6.6	7.3	6.5	6.2	6.5	6.6	6.5	6.6	6.8	6.5	6.6	80.2
Q1	Unocal	18.5	16.6	18.1	17.5	18.0	17.0	17.0	17.5	17.7	17.9	17.1	17.7	210.6
Total		241.4	219.3	235.9	246.8	241.4	212.5	235.8	239.5	151.3	235.7	241.3	240.0	2740.8

CONDENSATE* PRODUCTION in 2003, (x 1000 Sm³)

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Netherlands Territory	51.5	47.8	41.6	27.6	24.0	17.0	17.2	17.6	28.4	44.7	49.0	52.4	418.6
Continental Shelf	48.1	34.3	42.6	29.7	29.2	18.8	27.1	30.3	34.2	42.3	47.5	50.0	434.1
Total	99.6	82.1	84.3	57.2	53.1	35.8	44.3	47.9	62.6	87.0	96.5	102.4	852.7

* Condensate is a liquid that is recovered as a by-product during the production of natural gas. This liquid is also referred to as natural gasoline or natural gas liquids (NGL).

ANNEXES

NATURAL GAS ACCUMULATIONS ORDERED BY STATUS

I. DEVELOPED ACCUMULATIONS

a) Producing

Accumulation*	Company	Licence name**
Ameland East	NAM	Noord-Friesland
Ameland Westgat	NAM	Noord-Friesland
Anjum	NAM	Noord-Friesland
Annerveen	NAM	Drenthe
Appelscha	NAM	Drenthe
Barendrecht	NAM	Rijswijk
Barendrecht-Ziedewij	NAM	Rijswijk
Bedum	NAM	Groningen
Bergen	BP	Bergen
Bergermeer	BP	Bergen
Blija-Ferwerderadeel	NAM	Noord-Friesland
Blija-Zuidoost	NAM	Noord-Friesland
Blijham	NAM	Groningen
Boerakker	NAM	Groningen
Botlek	NAM	Botlek
Bozum	Total	Oosterend
Castricum Zee	Wintershall	Q8
Coevorden	NAM	Schoonebeek
Collendoornerveen	NAM	Schoonebeek
Dalen	NAM	Drenthe
De Blesse	Total	Steenwijk
De Wijk	NAM	Schoonebeek
Den Velde	NAM	Hardenberg
Eleveld	NAM	Drenthe
Emmen-Nieuw Amsterdam	NAM	Drenthe
Emmen	NAM	Drenthe
Ezumazijl	NAM	Noord-Friesland
Feerwerd	NAM	Groningen
Franeker	Total	Leeuwarden
Friesland	Total	Leeuwarden
Gaag	NAM	Rijswijk
Groet	BP	Bergen
Groningen	NAM	Groningen
Groote gast	NAM	Groningen
Hardenberg	NAM	Schoonebeek
Harlingen-Vlieland	Total	Leeuwarden
Hoogenweg	NAM	Hardenberg
Houwerzijl	NAM	Groningen

Lula	NAM	Groningen
Kollum-Noord	NAM	Noord-Friesland
Kollumerland	NAM	Tietjerksteradeel
Kommerzijl	NAM	de Marne
Leens	NAM	Groningen
Loon op Zand	Wintershall	Waalwijk
Maasdijk	NAM	Rijswijk
Marum	NAM	Groningen
Metslawier	NAM	Noord-Friesland
Middelburen	Total	Leeuwarden
Molenpolder	NAM	Groningen
Monster	NAM	Rijswijk
Munnekezijl	NAM	de Marne
Nijega	Total	Leeuwarden
Nijensleek	NAM	Drenthe
Noordwolde	Total	Gorredijk
Norg-Zuid	NAM	Drenthe
Oldehamer	Total	Gorredijk
Oldenzaal	NAM	Rossum-de Lutte
Oosterhesselen	NAM	Drenthe
Opende-Oost	NAM	Groningen
Oud Beijerland Zuid	NAM	Botlek
Oude Pekela	NAM	Groningen
Pasop	NAM	Groningen
Pernis	NAM	Rijswijk
Pernis-West	NAM	Rijswijk
Reedijk	NAM	Botlek
Ried	Total	Leeuwarden
Roden	NAM	Drenthe
Rossum-Weerselo	NAM	Rossum-de Lutte
Roswinkel	NAM	Drenthe
's Gravenzande	NAM	Rijswijk
Saaksum	NAM	Groningen
Schermer	BP	Bergen
Schoonebeek	NAM	Schoonebeek
Sebaldeburen	NAM	Groningen
Slootdorp	Total	Slootdorp
Spijkenisse Oost	NAM	Botlek
Sprang	Wintershall	Waalwijk
Starnmeer	BP	Bergen
Suawoude	NAM	Tietjerksteradeel
Tietjerksteradeel	NAM	Tietjerksteradeel
Tubbergen-Mander	NAM	Tubbergen
Tubbergen	NAM	Tubbergen
Ureterp	NAM	Tietjerksteradeel
Vries	NAM	Drenthe

Waalwijk-Noord	Wintershall	Waalwijk
Wanneperveen	NAM	Schoonebeek
Warffum	NAM	Groningen
Weststellingwerf	Total	Gorredijk
Zuid Schermer	BP	Bergen
Zuidwal	Total	Zuidwal
D15-A	Gaz de France	D15
F2a-Hanze ***	Petro Canada	F2a
F3-FB ***	NAM	F3
F15-A	Total	F15a
F15-B	Total	F15a
G17cd-A	Gaz de France	G17d
J3-C Unit	Total	J3a
J6-Markham	ENI	J6
K1-A Unit	Total	K1a
K4-A Unit	Total	K4a/b
K4a-D	Total	K4a
K4-E	Total	K4a
K4-N	Total	K4b
K5a-A	Total	K5a
K5a-B	Total	K5a
K5-C Unit	Total	K5b
K5a-D	Total	K5a
K5a-EN	Total	K5a
K5a-Es	Total	K5a
K6-A	Total	K6
K6-C	Total	K6
K6-D	Total	K6
K6-DN	Total	K6
K6-G	Total	K6
K6-N	Total	K6
K6-T	Total	K6
K7-FA	NAM	K7
K7-FB	NAM	K7
K7-FC	NAM	K7
K7-FD	NAM	K7
K7-FE	NAM	K7
K8-FA	NAM	K8
K9ab-A	Gaz de France	K9b
K9ab-B	Gaz de France	K9a
K9c-A	Gaz de France	K9c
K12-A	Gaz de France	K12
K12-B	Gaz de France	K12
K12-C	Gaz de France	K12
K12-D	Gaz de France	K12

K12-S1	Gaz de France	K12
K12-G	Gaz de France	K12
K12-S2	Gaz de France	K12
K14-FA	NAM	K14
K14-FB	NAM	K14
K15-FA	NAM	K15
K15-FB	NAM	K15
K15-FC	NAM	K15
K15-FG	NAM	K15
K15-FK	NAM	K15
K15-FL	NAM	K15
L1-A	Total	L1a
L2-FA	NAM	L2
L4-A	Total	L4a
L4-F	Total	L4a
L4-I	Total	L4a
L5-FA	NAM	L5a
L5-B	Wintershall	L5b
L7-B	Total	L7
L7-C	Total	L7
L7-G	Total	L7
L7-H	Total	L7
L7-HSE	Total	L7
L7-N	Total	L7
L8-A	Wintershall	L8a
L8-A-West	Wintershall	L8b
L8-G	Wintershall	L8a
L8-H	Wintershall	L8a
L8-P	Wintershall	L8b
L9-FC	NAM	L9b
L9-FD	NAM	L9a
L9-FF	NAM	L9a
L9-FI	NAM	L9a
L10-CDA	Gaz de France	L10
L10-S2	Gaz de France	L10
L10-S3	Gaz de France	L10
L10-S4	Gaz de France	L10
L10-F	Gaz de France	L10
L10-G	Gaz de France	L10
L10-M	Gaz de France	L10
L11b-A	Unocal	L11b
L13-FC	NAM	L13
L13-FD	NAM	L13
L13-FE	NAM	L13
L13-FG	NAM	L13
L13-FH	NAM	L13

L15-FA	NAM	L15b
P6-South	Wintershall	P6
P6-Main	Wintershall	P6
P6-D	Wintershall	P6
P12-SW	Wintershall	P12
P14-A	Wintershall	P14a
P15-9	BP	P15a
P15-10	BP	P15c
P15-11	BP	P15a
P15-12	BP	P15a
P15-13	BP	P15a
P15-14	BP	P15c
P15-15	BP	P15a
P15-C	BP	P15a
P16-E	BP	P15a
P18-2	BP	P18a
P18-4	BP	P18a
P18-alpha-A	BP	P18a
P18-6	BP	P18a
Q1-Halfweg	Unocal	Q1
Q1-B	Wintershall	Q1
Q4-B	Wintershall	Q4
Q4-A	Wintershall	Q4
Q8-A	Wintershall	Q8
Q16-FA	NAM	Q16a

b) Underground Gas Storage

Alkmaar PGI	BP	Bergen
Grijpskerk	NAM	Groningen
Norg	NAM	Drenthe

II. UNDEVELOPED ACCUMULATIONS**a) start of production expected between 2004 – 2008**

Accumulation*	Company	Licence name**	Type of licence
Ameland Noord	NAM	Noord-Friesland	pl
Assen	NAM	Drenthe	pl
Een	NAM	Groningen	pl
Hekelingen	NAM	Botlek	pl
Langebrug	NAM	Groningen	pl
Marumerlage	NAM	Groningen	pl
Rammelbeek	NAM	Twenthe	pl
Spijkernisse Oost	NAM	Beijerland	pl
Spijkernisse West	NAM	Beijerland	pl

Surhuisterveen	NAM	Groningen	pl
Usquert	NAM	Groningen	pl
West Beemster	NAM	Middelie	pl
D12-Andalusiet West	Wintershall	D12	pl
F16-A	Wintershall	F16	pl
G14-A	Gaz de France	G14	pla
G14-B	Gaz de France	G14	pla
G16-FA	NAM	G16a	pl
G17-B	Gaz de France	G17d	pla
K2-FA	NAM	K2	pl
K12-S3	Gaz de France	K12	pl
K17-FA	NAM	K17	pl
L2-FB	NAM	L2	pl
L4-G	Total	L4	pl
L5-C	Wintershall	L5b	pl
L6-FA	ATP	L6d	pl
N7-FA	NAM	N7	pl
P11-De Ruyter ***	PetroCanada	P11	pl
Q5-2	Wintershall	Q5c	pl
b) Others			
Andel	NAM	Andel II	el
Beerta	NAM	Groningen	pl
Blesdijke	Total	Steenwijk	pl
Brakel	NAM	Andel II	el
Buma	NAM	Drenthe	pl
Burum	NAM	Noord-Friesland	pl
Collendoorn	NAM	Schoonebeek	pl
Den Velde	NAM	Hardenberg	pl
Deurningen	NAM	Twenthe	pl
Egmond Binnen	NAM	Middelie	pl
Engwierum	NAM	Noord-Friesland	pl
Exloo	NAM	Drenthe	pl
Gasselternijveen	NAM	Drenthe	pl
Geesbrug	NAM	Drenthe	pl
Grolloo	NAM	Drenthe	pl
Harkema	NAM	Groningen	pl
Heiloo	BP	Bergen	pl
Hollum Ameland	NAM	Noord-Friesland	pl
Kerkwijk			open
Kijkduin zee	NAM	Rijswijk	pl
Kollum	NAM	Tietjerksteradeel	pl
Lauwersoog Central	NAM	Noord-Friesland	pl
Lauwersoog East	NAM	Noord-Friesland	pl

Lauwersoog West	NAM	Noord-Friesland	pl
Midlaren	NAM	Drenthe	pl
Moddergat	NAM	Noord-Friesland	pl
Nes	NAM	Noord-Friesland	pl
Nes Noord	NAM	Noord-Friesland	pl
Nieuweschans	NAM	Groningen	pl
Noorderdam	NAM	Rijswijk	pl
Oosterwolde	NAM	Oosterwolde	el
Oostrum	NAM	Noord-Friesland	pl
Oppenhuizen	NAM	Zuid-Friesland II	el
Papekop			open
Rodewolt	NAM	Groningen	pl
Rustenburg	NAM	Middelie	pl
Schiermonnikoog Wad	NAM	Noord-Friesland	pl
Ternaard	NAM	Noord-Friesland	pl
Terschelling Noord	NAM	Terschelling	pla
Terschelling West			open
Valthermond	NAM	Drenthe	pl
Vierhuizen	NAM	Noord-Friesland	pl
Vlagtwedde	NAM	Groningen	pl
Wassenaar Diep	NAM	Rijswijk	pl
Werkendam Diep	NAM	Rijswijk	pl
Witten	NAM	Groningen	pl
Zevenhuizen	NAM	Groningen	pl
A12-FA	NAM	A12a	el
A15-A	Wintershall	A15	el
A18-FA	NAM	A18a	pla
B10-FA	NAM	A12b	pla
B13-FA	NAM	B13a	pla
B16-FA	NAM	B16a	pla
D18-FA	Gaz de France	D18	el
E17-FA	Gaz de France	E17	pla
F3-FA	NAM	F3	pl
K4a-B	Total	K4a	pl
K4a-Z	Total	K4a	pl
K5-FW	Total	K5a	pl
K5-U	Total	K5a	pl
K8-FB	NAM	K8	pl
K8-FC	NAM	K8	pl
K8-FD	NAM	K8	pl
K15-FD	NAM	K15	pl
K15-FE	NAM	K15	pl
K15-FF	NAM	K15	pl
K15-FH	NAM	K15	pl
K15-FI	NAM	K15	pl

K15-FJ	NAM	K15	pl
K16-5	Wintershall	K16	el
K17-FB	NAM	K17	pl
L2-FC	NAM	L2	pl
L4-D	Total	L4a	pl
L7-F	Total	L7	pl
L7-D	Total	L7	pl
L9-FA	NAM	L9a	pl
L9-FB	NAM	L9a	pl
L9-FG	NAM	L9a	pl
L9-FH	NAM	L9a	pl
L9-FJ	NAM	L9a	pl
L10-19	Gaz de France	L10	pl
L10-6	Gaz de France	L10	pl
L11-1	Gaz de France	L11a	pl
L11-7	Gaz de France	L11a	pl
L12-FA	NAM	L12a	pl
L12-FB	NAM	L12a	pl
L12-FC	NAM	L12b	pl
L12-FD	NAM	L12a	pl
L13-FA	NAM	L13	pl
L13-FI	NAM	L13	pl
L13-FJ	NAM	L13	pl
L13-FK	NAM	L13	pl
L16-Alpha	Wintershall	L16a	pl
L16-Bravo	Wintershall	L16a	pl
L16-FA	Wintershall	L16a	pl
M1-FA	Wintershall	M1a	el
M7-FA	Wintershall	M7	pl
M9-FA	NAM	Noord-Friesland	pl
M9-FB	NAM	Noord-Friesland	pl
P2-1	Wintershall	P2b	el
P2-5	Wintershall	P2a	pl
P2-E	Wintershall	P2a	pl

III. PRODUCTION CEASED

Accumulation*	Company	Licence name**	Type of licence
Akkrum 1	Chevron	Akkrum	pl
Akkrum 3	Chevron	Akkrum	pl
Akkrum 11	Chevron	Akkrum	pl
Akkrum 13	Chevron	Akkrum	pl
De Lier	NAM	Rijswijk	pl
De Lutte	NAM	Twenthe	pl
Donkerbroek	NAM	Donkerbroek	pl

De Wijk	NAM	Schoonebeek	pl
Emshoern	NAM	Groningen	pl
Harlingen chalk	Total	Leeuwarden	pl
Leeuwarden 101 Rotliegend	Total	Leeuwarden	pl
Leidschendam	NAM	Rijswijk	pl
Middelie	NAM	Middelie	pl
Middenmeer	Total	Slootdorp	pl
Sleen	NAM	Drenthe	pl
Wimmenum Egmond	NAM	Middelie	pl
K10-B	Wintershall	K10a	pl
K10-C	Wintershall	K10a	pl
K10-V	Wintershall	K10a	pl
K11-B	NAM	K11	pl
K11-FA	NAM	K11	pl
K11-C	NAM	K11	pl
K12-E	Gaz de France	K12	pl
K13-A	Wintershall	K13	pl
K13-B	Wintershall	K13	pl
K13-CF	Wintershall	K13	pl
K13-DE	Wintershall	K13	pl
L4-B	Total	L4	pl
L7-A	Total	L7	pl
L10-K	Gaz de France	L10	pl
L10-S1	Gaz de France	L10	pl
L11-Lark	Gaz de France	L11a	pl
L11-A	Gaz de France	L11a	pl
L13-FB	NAM	L13	pl
L13-FF	NAM	L13	pl
L14-S		L14b	open
P2-NE	Wintershall	P2	pl
P2-SE	Wintershall	P2a	pl
P12-C Bunter	Wintershall	P12	pl
Q8-B	Wintershall	Q8	pl

* Name of the accumulation is conform the name used in the production licence application.

** Licence stands for the licence effective at the time the accumulation was discovered, however, an accumulation can straddle more than one licence (these are not indicated in this table).

*** Oilfield, the gas production from which makes up a significant part of the total gas production in the Netherlands.
el = exploration licence, pla = production licence application, pl = production licence.

EXPLORATION LICENCES, Netherlands Territory as at 1 January 2004

Licence holder	Licence	km ²	In force as from	Netherlands Government Gazette	
1 Nederlandse Aardolie Maatschappij B.V - Chevron U.S.A. Inc. - Dyas B.V. - Petro-Canada Netherlands B.V. - R.D.S. Netherlands International Inc. - Total E&P Nederland B.V.	Zuid-Friesland II	727	30-06-'79	202	*
2 Nederlandse Aardolie Maatschappij B.V	IJsselmeer	875	02-07-'86	148	*
	Markerwaard	572	20-04-'89	87	*
	Andel II	301	21-03-'02	137	
	Schagen	576	04-11-'02	219	
3 Total E&P Nederland B.V. - Dyas B.V. - Lundin Netherlands B.V	Lemmer-Marknesse	633	09-03-'98	62	
	Total	3 684			

* Not yet in force because of legal procedure.

PRODUCTION LICENCES, Netherlands Territory as at 1 January 2004

Licence holder	Licence	km²	Awarded	Netherlands Government Gazette
1 BP Nederland Energie B.V. - Dyas B.V. - Petro-Canada Netherlands B.V.	Bergen	252	01-05-'69	94
2 Nederlandse Aardolie Maatschappij B.V.	Schoonebeek	930	03-05-'48	110
	Tubbergen	177	11-03-'53	80
	Rijswijk	2 090	03-01-'55	21
	Rossum-de Lutte	46	12-05-'61	116
	Groningen	2 970	30-05-'63	126
	Drenthe	2 284	04-11-'68	234
	Tietjerksteradeel	411	17-02-'69	47
	Twenthe	276	27-01-'77	26
	Hardenberg	161	19-07-'90	149
	Botlek	235	03-07-'91	141
	Beijerland	140	11-12-'96	243
3 Nederlandse Aardolie Maatschappij B.V. - Mobil Producing Netherlands Inc.	Noord-Friesland	1 593	17-02-'69	47
	De Marne	7	05-09-'94	189
4 Nederlandse Aardolie Maatschappij B.V. - Wintershall Noordzee B.V. - Dyas B.V.	Middelie	946	01-05-'69	94
5 Nederlandse Aardolie Maatschappij B.V. - Bula Oil Netherlands B.V. - Lepco Oil & Gas Netherlands B.V.	Donkerbroek	70	20-03-'95	66
6 Total E&P Nederland B.V. - Lundin Netherlands B.V.	Leeuwarden	614	17-02-'69	46
	Slootdorp	162	01-05-'69	94
	Zuidwal	225	28-08-'84	190
7 Total E&P Nederland B.V. - Lundin Netherlands B.V.	Oosterend	92	23-03-'85	84
	Gorredijk	629	10-07-'89	145
8 Total E&P Nederland B.V.	Steenwijk	99	05-09-'94	177
9 Wintershall Noordzee B.V. - Essent Energy Gas Storage B.V. - Petro-Canada Netherlands B.V.	Waalwijk	765	17-07-'89	154
	Total	15 172		

EXPLORATION LICENCES, Netherlands Continental Shelf as at 1 January 2004

	Licence holder	Block	km²	In force as from/ relinquishment	Date licence expires	Netherlands Government Gazette
1	Denerco Oil A/S Intrepid Energy North Sea Ltd	F9 G7	400 122	15-03-'03 15-03-'03	26-04-'09 26-04-'09	54 54
2	GDF Production Nederland B.V.	G17a	275	12-11-'01	30-10-'08	233
3	GDF Production Nederland B.V. Nederlandse Aardolie Maatschappij B.V. DSM Energie B.V.	G14	403	16-12-'96	07-12-'04	2
4	GDF Production Nederland B.V. ConocoPhillips (U.K.) Limited DSM Energie B.V. Wintershall Noordzee B.V.	D18a	58	08-06-'79/'85	08-06-'89*	117/106
5	GDF Production Nederland B.V. Lundin Netherlands B.V. Total E&P Nederland B.V.	E17a,E17b	114	09-03-'93/'99	09-03-'03*	54/39
6	Nederlandse Aardolie Maatschappij B.V. Petro-Canada Netherlands B.V.	F6b	390		03-01-'06	224
7	Nederlandse Aardolie Maatschappij B.V. DSM Energie B.V.	A12a A12b,B10a A18a B13a B16a	195 125 229 206 67	20-12-'78/'84 12-01-'90/'96 11-12-'72/'82 12-01-'90/'96 11-05-'87/'01	20-12-'88* 12-01-'00* 11-12-'87* 12-01-'00* 11-05-'97*	4/46 25/35 250/244 25/35 127/233
8	Petro-Canada Netherlands B.V.	P10 P11b	355 210	18-03-'99 11-02-'93/'98	24-02-'06* 11-02-'03*	64 50/162
9	Total E&P Nederland B.V. Lundin Netherlands B.V.	F12	401	01-11-'01	30-10-'08	219
10	Wintershall Noordzee B.V.	M1a M1b M4 P2b	213 193 408 200	09-04-'91/'97 19-07-'01 26-06-'01 05-12-'01	09-04-'01* 19-07-'06 26-06-'06 08-01-'06	93/99 143 134 1
11	Wintershall Noordzee B.V. Petro-Canada Netherlands B.V.	L6a	332	22-08-'03	03-10-'10	162

Licence holder	Block	km²	In force as from/ relinquishment	Date licence expires	Netherlands Government Gazette
12 Wintershall Noordzee B.V. Dyas B.V. Petro-Canada Netherlands B.V.	K16	267	25-01-'99	30-12-'04	44
13 Wintershall Noordzee B.V. EWE Aktiengesellschaft	Q2a	332	04-09-'01	26-09-'06	183
14 Wintershall Noordzee B.V. Dana Petroleum (E&P) Ltd Marathon Exploratie Nederland B.V.	A15	393	23-02-'99	24-02-'07	44
15 Wintershall Noordzee B.V. Dana Petroleum (E&P) Ltd DSM Energie B.V. Petro-Canada Netherlands B.V.	B17a	80	02-06-'87/'93	02-07-'97*	127/101
16 Wintershall Noordzee B.V. CLAM Petroleum B.V. GDF Production Nederland B.V.	F13b	399	01-01-'03	31-12-'09	223
Total		6 367			

* licence holder has filed an application for a production licence

PRODUCTION LICENCES, Netherlands Continental Shelf as at 1 January 2004

	Licence holder	Block	km²	In force as from	Date licence expires	Netherlands Government Gazette
1	ATP Oil & Gas (Netherlands) B.V.	L6d	16	07-03-'03	19-4-'13	48
2	BP Nederland Energie B.V. Wintershall Noordzee B.V. DSM Energie B.V. Dyas B.V. Oranje-Nassau Energie B.V. Van Dyke Netherlands Inc. Petro-Canada Netherlands B.V.	P15a & P15b	220	12-07-'84	12-7-'24	150
3	BP Nederland Energie B.V. Wintershall Noordzee B.V. DSM Energie B.V. Dyas B.V. Oranje-Nassau Energie B.V. Petro-Canada Netherlands B.V.	P15c	202	07-05-'92	07-05-'32	114
4	BP Nederland Energie B.V.	P18a	105	30-04-'92	30-04-'32	96
5	BP Nederland Energie B.V. Dyas B.V. Petro-Canada Netherlands B.V.	P18c	6	02-06-'92	02-06-'32	113
6	Eni Nederland B.V. Total E&P Nederland B.V. Dyas Holland B.V.	J3b & J6	125	06-11-'92	06-11-'32	231
7	GDF Production Nederland B.V. ConocoPhillips (U.K.) Limited Wintershall Noordzee B.V.	D15	247	06-09-'96	06-09-'21	180
8	GDF Production Nederland B.V. Wintershall Noordzee B.V.	G17c,G17d	130	10-11-'00	10-11-'25	14
9	GDF Production Nederland B.V.	K3a	83	24-08-'98	24-08-'23	165
10	GDF Production Nederland B.V. EWE Aktiengesellschaft HPI Netherlands Ltd Rosewood Exploration Ltd.	K9a & K9b K9c	211 199	11-08-'86 18-12-'87	11-08-'26 18-12-'27	163 21

Licence holder	Block	km²	In force as from	Date licence expires	Netherlands Government Gazette
11 GDF Production Nederland B.V. EWE Aktiengesellschaft HPI Netherlands Ltd Rosewood Exploration Ltd. GDF Participation Nederland B.V.	L10 & L11a	596	13-01-'71	13-01-'11	20
12 GDF Production Nederland B.V. EWE Aktiengesellschaft HPI Netherlands Ltd Rosewood Exploration Ltd Production North Sea Netherlands Ltd	K12	411	18-02-'83	18-02-'23	53
13 GDF Production Nederland B.V. EWE Aktiengesellschaft Rosewood Exploration Ltd.	L14a	21	19-11-'90	19-11-'30	240
14 GDF Production Nederland B.V. HPI Netherlands Ltd Rosewood Exploration Ltd.	N7b	174 (23-12-'03)	10-03-'94 24-08-'23	10-03-'34 08-07-'21	88 252
15 Nederlandse Aardolie Maatschappij B.V. B18a F17c G16a G16b K2a & K2b K7 K14 K15 K17 L2 L4c L5a L9a L9b L15c N7a	40 18 224 5 137 408 413 413 414 406 12 163 209 201 4 141	10-10-'85 04-12-'96 06-01-'92 11-10-'03 24-08-'98 08-07-'81 16-01-'75 14-10-'77 19-01-'89 15-03-'91 07-01-'94 15-03-'91 09-05-'95 09-05-'95 07-09-'90 10-03-'94 (23-12-'03)	10-10-'25 04-12-'11 06-01-'32 06-01-'32 24-08-'23 08-07-'21 16-01-'15 14-10-'17 19-01-'29 15-03-'31 07-01-'34 15-03-'31 09-05-'35 09-05-'35 07-09-'30 10-03-'34 252	10-10-'25 04-12-'11 06-01-'32 06-01-'32 24-08-'23 08-07-'21 16-01-'15 14-10-'17 19-01-'29 15-03-'31 07-01-'34 15-03-'31 09-05-'35 09-05-'35 07-09-'30 10-03-'34 252	224 240 13 198 165 140 18 214 42 75 15 77 113 114 199 88 252
16 Nederlandse Aardolie Maatschappij B.V. DSM Energie B.V.	F3	397	09-09-'82	09-09-'22	215

Licence holder	Block	km²	In force as from	Date licence expires	Netherlands Government Gazette
17 Nederlandse Aardolie Maatschappij B.V. Clam Petroleum B.V. Wintershall Noordzee B.V. Oranje-Nassau Energie B.V.	K8 & K11 L12a L13	821 344 413	26-10-'77 14-03-'90 26-10-'77	26-10-'17 14-03-'30 26-10-'17	223 63 223
18 Nederlandse Aardolie Maatschappij B.V. Clam Petroleum B.V. Wintershall Noordzee B.V.	L12b & L15b	184	12-03-'90	12-03-'30	63/199
19 Nederlandse Aardolie Maatschappij B.V. Mobil Producing Netherlands Inc.	M9a	213	10-04-'90	10-04-'30	81
20 Nederlandse Aardolie Maatschappij B.V. Lundin Netherlands B.V. Total E & P Nederland B.V.	Q16a	85	29-12-'92	29-12-'32	6
21 Petro-Canada Netherlands B.V. DSM Energie B.V. Dyas B.V. EDC (Europe) Ltd. Oranje-Nassau Energie B.V.	F2a	307	24-08-'82	24-08-'22	215
22 Total E&P Nederland B.V. Lundin Netherlands B.V. DSM Energie B.V.	F6a	8	09-09-'82	09-09-'22	215
23 Total E&P Nederland B.V. Lundin Netherlands B.V. Dyas Nederland B.V. Oranje-Nassau Energie B.V.	F15a F15d	234 4	06-05-'91 15-06-'92	06-05-'31 15-06-'32	95 148
24 Total E&P Nederland B.V. Nederlandse Aardolie Maatschappij B.V.	J3a K1a	72 83	12-01-'96 10-02-'97	12-01-'36 10-02-'22	22 46
25 Total E&P Nederland B.V. Lundin Netherlands B.V.	K3b K3d K6 & L7 L1e L4a L1f	7 26 818 12 313 17	30-01-'01 01-04-'99 20-06-'75 13-11-'96 30-12-'81 01-01-'03	30-01-'21 01-04-'24 20-06-'15 13-11-'11 30-12-'21 16-01-'33	29 76 126 226 82('82) 235
26 Total E&P Nederland B.V.	K4a L1d	307 7	29-12-'93 13-11-'96	29-12-'33 13-11-'16	5 225

Licence holder	Block	km²	In force as from	Date licence expires	Netherlands Government Gazette
27 Total E&P Nederland B.V. Lundin Netherlands B.V. Dyas B.V. Goal Petroleum (Netherlands) B.V.	K4b & K5a	305	01-06-'93	01-06-'33	114
28 Total E&P Nederland B.V. Goal Petroleum (Netherlands) B.V. Rosewood Exploration Ltd.	K5b	204	07-11-'96	07-11-'21	225
29 Total E&P Nederland B.V. Van Dyke Netherlands Inc.	L1a	30	12-09-'96	12-09-'16	187
30 Unocal Netherlands B.V. DSM Energie B.V. GDF Production Nederland B.V. Petro-Canada Netherlands B.V.	L11b	47	15-06-'84	15-06-'24	130
31 Unocal Netherlands B.V. Wintershall Noordzee B.V. DSM Energie B.V. Dyas B.V. Dyas Holland B.V. Aceiro Netherlands B.V. Petro-Canada Netherlands B.V.	P9a & P9b	126	16-08-'93	16-08-'33	160
32 Unocal Netherlands B.V. Wintershall Noordzee B.V. DSM Energie B.V. Dyas B.V. Dyas Holland B.V. Petro-Canada Netherlands B.V.	P9c	267	16-08-'93	16-08-'33	160
33 Unocal Netherlands B.V. DSM Energie B.V. Wintershall Noordzee B.V.	Q1	416	11-07-'80	11-07-'20	138
34 Unocal Netherlands B.V. DSM Energie B.V. Dyas B.V.	Q2c	32	14-07-'94	14-07-'34	150
35 Wintershall Noordzee B.V. GDF Participation Nederland B.V.	D12a	214	06-09-'96	06-09-'21	180

Licence holder	Block	km²	In force as from	Date licence expires	Netherlands Government Gazette
36 Wintershall Noordzee B.V. Clam Petroleum B.V. Dana Petroleum (E & P) Limited GDF Production Nederland B.V. Goal Petroleum (Netherlands) B.V.	E15a E18a F13a	39 212 4	04-10-'02 04-10-'02 04-10-'02	24-09-'32 24-09-'32 24-09-'32	199 199 199
37 Wintershall Noordzee B.V. GDF Production Nederland B.V.	F16	405	04-10-'02	24-09-'32	199
38 Wintershall Noordzee B.V. Petro-Canada Netherlands B.V.	K10a K10b,K10c	195 94	26-01-'83 22-04-'93	26-01-'23 22-04-'33	28 84
39 Wintershall Noordzee B.V.	K13 P11a P14a	324 2 317	03-10-'73 23-06-'92 23-06-'92	03-10-'13 23-06-'32 23-06-'32	203 148 148
40 Wintershall Noordzee B.V. Dyas B.V. Nederlandse Aardolie Maatschappij B.V. Petro-Canada Netherlands B.V.	K18a & K18b L16a	191 238	09-05-'83 12-06-'84	09-05-'23 12-06-'24	103 130
41 Wintershall Noordzee B.V. Petro-Canada Netherlands B.V.	L5c L8b L5b L6b	8 181 237 60	03-12-'96 17-05-'93 28-06-'03 01-07-'03	03-12-'16 17-05-'33 12-08-'38 11-08-'38	19 105 134 134
42 Wintershall Noordzee B.V. EWE Aktiengesellschaft	L8a	213	18-08-'88	18-08-'28	171
43 Wintershall Noordzee B.V. DSM Energie B.V. Nederlandse Aardolie Maatschappij B.V.	M7	410	22-03-'01	22-03-'21	66
44 Wintershall Noordzee B.V. Dyas B.V. Oranje-Nassau Energie B.V. Van Dyke Netherlands Inc.	P2a	216	23-07-'96	23-07-'16	146
45 Wintershall Noordzee B.V. Dyas Holland B.V. Dyas B.V. Petro-Canada Netherlands B.V.	P6	417	14-04-'82	14-04-22	83

Licence holder	Block	km²	In force as from	Date licence expires	Netherlands Government Gazette
46 Wintershall Noordzee B.V. Dyas B.V. Dyas Holland B.V.	P12	421	08-03-'90	08-03-'30	78
47 Wintershall Noordzee B.V. Clam Petroleum B.V. Dyas B.V.	Q4	417	02-12-'99	02-12-'19	2
48 Wintershall Noordzee B.V. Clam Petroleum B.V. Dyas B.V.	Q5c, Q5d & Q5e	146	15-02-'01	15-02-'21	46
49 Wintershall Noordzee B.V. Dyas B.V.	Q8	247	15-09-'86	15-09-'26	187
Total		17 275			

**PRODUCTION LICENCE APPLICATIONS, Netherlands Continental Shelf as at
1 January 2004**

Licence applicant	Block/ part of block	Date of publication	Netherlands Government Gazette
NAM	A18a	06-01-'88	3
NAM	part of A18	06-01-'88	3
	part of A18 (modification)	03-02-'00	24
NAM cs	A12a	30-12-'88	254
NAM cs	part of A12	30-12-'88	254
NAM	B16a	08-06-'93	105
	part of B16 (modification)	30-11-'01	233
Wintershall cs	B17a	09-06-'97	106
GDF Production Ned. cs	D18a	24-07-'97	139
NAM cs	B13a	01-02-'00	22
NAM cs	A12b, B10a	01-02-'00	22
Wintershall cs	M1a	11-05-'01	91
NAM cs	part of E16	12-11-'01	219
GDF Production Ned. cs	parts of E17	12-11-'01	219
TotalFinaElf cs	part of K2	04-07-'02	125
Petro-Canada Netherlands	P11b		
	part of P10		

LIST OF BLOCKS, Netherlands Continental Shelf as at 1 January 2004

Block/ Part of block	Area not in licence (km²)	Area in licence (km²)	Type*	Licence holder
A 4	<0,5			
A 5	91			
A 7	47			
A 8	382			
A 9	141			
A 10	129			
A 11	392			
A 12a		195	el	NAM cs
A 12b		31	el	NAM cs
A 12c	164			
A 13	211			
A 14	393			
A 15		393	el	Wintershall cs
A 16	294			
A 17	395			
A 18a		229	el	NAM cs
A 18b	166			
B 10a		94	el	NAM cs
B 10b	84			
B 13a		206	el	NAM cs
B 13b	187			
B 14	199			
B 16a		67	el	NAM cs
B 16b	328			
B 17a		80	el	Wintershall cs
B 17b	315			
B 18a		40	pl	NAM
B 18b	159			
D 3	2			
D 6	60			
D 9	149			
D 12a		214	pl	Wintershall cs
D 12b	40			
D 15		247	pl	GDF Production cs
D 18a		58	el	GDF Production cs
D 18b	140			
E 1	374			
E 2	397			

Block/ Part of block	Area not in licence (km²)	Area in licence (km²)	Type*	Licence holder
E 3	397			
E 4	398			
E 5	398			
E 6	398			
E 7	400			
E 8	400			
E 9	400			
E 10a	105			
E 10b	155			
E 10c	141			
E 11	401			
E 12	401			
E 13	403			
E 14	403			
E 15a		39	pl	Wintershall cs
E 15b	364			
E 16	405			
E 17a		87	el	GDF Production cs
E 17b		27	el	GDF Production cs
E 17c	291			
E 18a		212	pl	Wintershall cs
E 18b	193			
F 1	397			
F 2a		307	pl	Petro-Canada Neth. cs
F 2b	90			
F 3		397	pl	NAM cs
F 4	398			
F 5	398			
F 6a		8	pl	Total cs
F 6b		390	el	NAM
F 7		400	el	Denerco cs
F 8	400			
F 9				
F 10	401			
F 11	401			
F 12		401	el	Total cs
F 13a		4	pl	Wintershall cs
F 13b		399	el	Wintershall cs
F 14	403			
F 15a		234	pl	Total cs
F 15b	72			
F 15c	93			
F 15d		4	pl	Total cs

Block/ Part of block	Area not in licence (km²)	Area in licence (km²)	Type*	Licence holder
F 16		405	pl	Wintershall cs
F 17a	387			
F 17c		18	pl	NAM
F 18	405			
G 7		122	el	Denerco cs
G 10	397			
G 11	174			
G 13	403			
G 14		403	el	GDF Production cs
G 15	226			
G 16a		224	pl	NAM
G 16b	230	5	pl	NAM
G 16c	127			
G 17a		275	el	GDF Production cs
G 17c		34	pl	GDF Production cs
G 17d		96	pl	GDF Production cs
G 18	405			
H 13	1			
H 16	72			
J 3a		72	pl	Total cs
J 3b		42	pl	Eni cs
J 3c	31			
J 6		83	pl	Eni cs
J 9	18			
K 1a		83	pl	Total cs
K 1b	323			
K 2a		27	pl	NAM
K 2b		110	pl	NAM
K 2c	269			
K 3a		83	pl	GDF Production cs
K 3b		7	pl	Totalcs
K 3c	290			
K 3d		26	pl	Totalcs
K 4a		307	pl	Total
K 4b		101	pl	Total cs
K 5a		204	pl	Total cs
K 5b		204	pl	Total cs
K 6		408	pl	Total cs
K 7		408	pl	NAM
K 8		410	pl	NAM cs

Block/ Part of block	Area not in licence (km²)	Area in licence (km²)	Type*	Licence holder
K 9a		150	pl	GDF Production cs
K 9b		61	pl	GDF Production cs
K 9c		199	pl	GDF Production cs
K 10a		195	pl	Wintershall cs
K 10b		68	pl	Wintershall cs
K 10c		26	pl	Wintershall cs
K 10d	86			
K 11		411	pl	NAM cs
K 12		411	pl	GDF Production cs
K 13		324	pl	Wintershall
K 14		413	pl	NAM
K 15		413	pl	NAM
K 16		267	el	Wintershall cs
K 17		414	pl	NAM
K 18a		36	pl	Wintershall cs
K 18b		155	pl	Wintershall cs
K 18c	223			
L 1a		30	pl	Total cs
L 1b	340			
L 1d		7	pl	Total
L 1e		12	pl	Total cs
L 1f		17	pl	Total cs
L 2		406	pl	NAM
L 3	406			
L 4a		313	pl	Total cs
L 4b	83			
L 4c		12	pl	NAM
L 5a		163	pl	NAM
L 5b		237	el	Wintershall cs
L 5c		8	pl	Wintershall cs
L 6a		332	el	Wintershall cs
L 6b		60	pl	Wintershall cs
L 6d		16	pl	ATP Oil & Gas
L 7		410	pl	Total cs
L 8a		213	pl	Wintershall cs
L 8b		181	pl	Wintershall cs
L 8c	16			
L 9a		209	pl	NAM
L 9b		201	pl	NAM
L 10		411	pl	GDF Production cs
L 11a		185	pl	GDF Production cs
L 11b		47	pl	Unocal cs
L 11c	179			

Block/ Part of block	Area not in licence (km²)	Area in licence (km²)	Type*	Licence holder
L 12a		344	pl	NAM cs
L 12b		67	pl	NAM cs
L 13		413	pl	NAM cs
L 14a		21	pl	GDF Production cs
L 14b	392			
L 15a	81			
L 15b		117	pl	NAM cs
L 15c		4	pl	NAM
L 16a		238	pl	Wintershall cs
L 16b	90			
L 16c	86			
L 17	394			
L 18	13			
M 1a		213	el	Wintershall
M 1b		193	el	Wintershall
M 2	406			
M 3	406			
M 4		408	el	Wintershall
M 5	408			
M 6	408			
M 7		410	pl	Wintershall cs
M 8	405			
M 9a		213	pl	NAM cs
M 9b	158			
M 10	222			
M 11	28			
N 1	217			
N 4	381			
N 5	14			
N 7 a		141	pl	NAM
N 7 b		174	pl	GDF Production cs
N 8	34			
O 12	2			
O 15	143			
O 17	2			
O 18	367			
P 1	209			
P 2a		216	pl	Wintershall cs
P 2b		200	el	Wintershall
P 3	416			

Block/ Part of block	Area not in licence (km²)	Area in licence (km²)	Type*	Licence holder
P 4	170			
P 5	417			
P 6		417	pl	Wintershall cs
P 7	222			
P 8	419			
P 9a		59	pl	Unocal cs
P 9b		67	pl	Unocal cs
P 9c		267	pl	Unocal cs
P 9d	26			
P 10		355	el	Petro-Canada Neth.
P 11a		2	pl	Wintershall
P 11b		210	el	Petro-Canada Neth.
P 11c	209			
P 12		421	pl	Wintershall cs
P 13	422			
P 14a		317	pl	Wintershall
P 14b	105			
P 15a		203	pl	BP Ned. Energie cs
P 15b		17	pl	BP Ned. Energie cs
P 15c		202	pl	BP Ned. Energie cs
P 16	424			
P 17	424			
P 18a		105	pl	BP Ned. Energie
P 18b	313			
P 18c		6	pl	BP Ned. Energie cs
Q 1		416	pl	Unocal cs
Q 2a		332	el	Wintershall cs
Q 2c		32	pl	Unocal cs
Q 4		417	pl	Wintershall cs
Q 5a	<0,5			
Q 5b	104			
Q 5c		98	pl	Wintershall cs
Q 5d		44	pl	Wintershall cs
Q 5e		4	pl	Wintershall cs
Q 5f	48			
Q 5i	<0,5			
Q 7	419			
Q 8		247	pl	Wintershall cs
Q 10a	261			
Q 10b	19			
Q 10d	120			
Q 10e	21			
Q 11	162			

Block/ Part of block	Area not in licence (km²)	Area in licence (km²)	Type*	Licence holder
Q 13	399			
Q 14	25			
Q 16a		85	pl	NAM cs
Q 16b	80			
R 2	103			
R 3	425			
R 5	7			
R 6	311			
R 9	28			
S 1	425			
S 2	425			
S 3	340			
S 4	427			
S 5	378			
S 6	45			
S 7	360			
S 8	129			
S 10	36			
S 11	<0,5			
T 1	1			
Total	33 221	23 593		

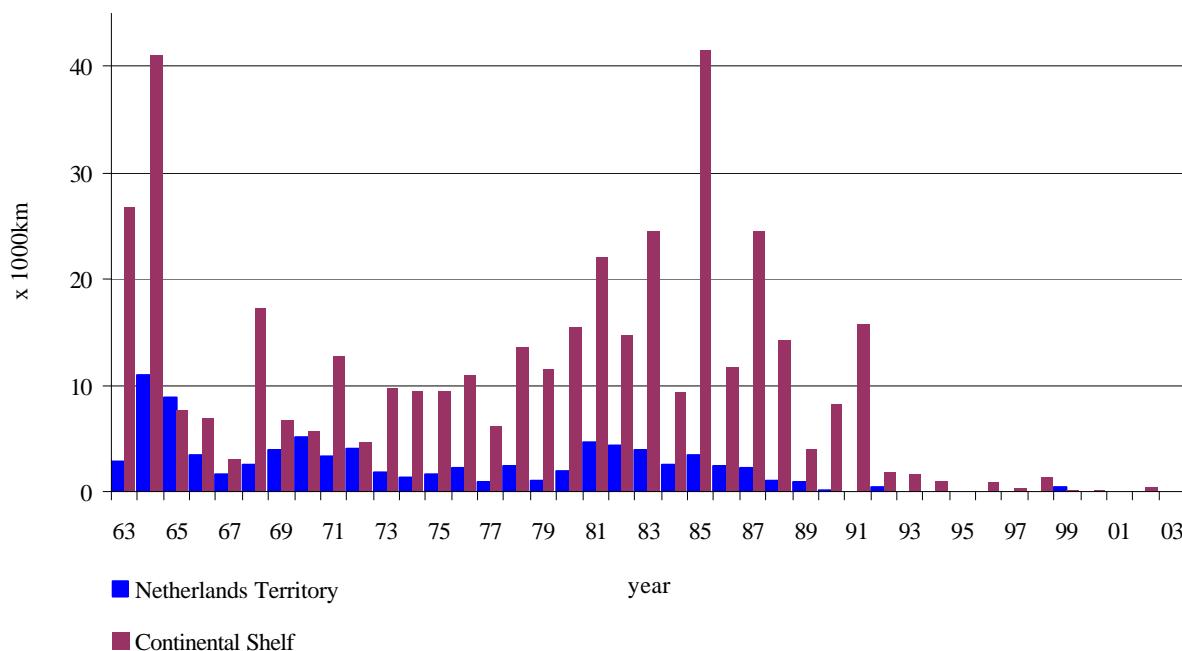
*) el = exploration licence

pl = production licence

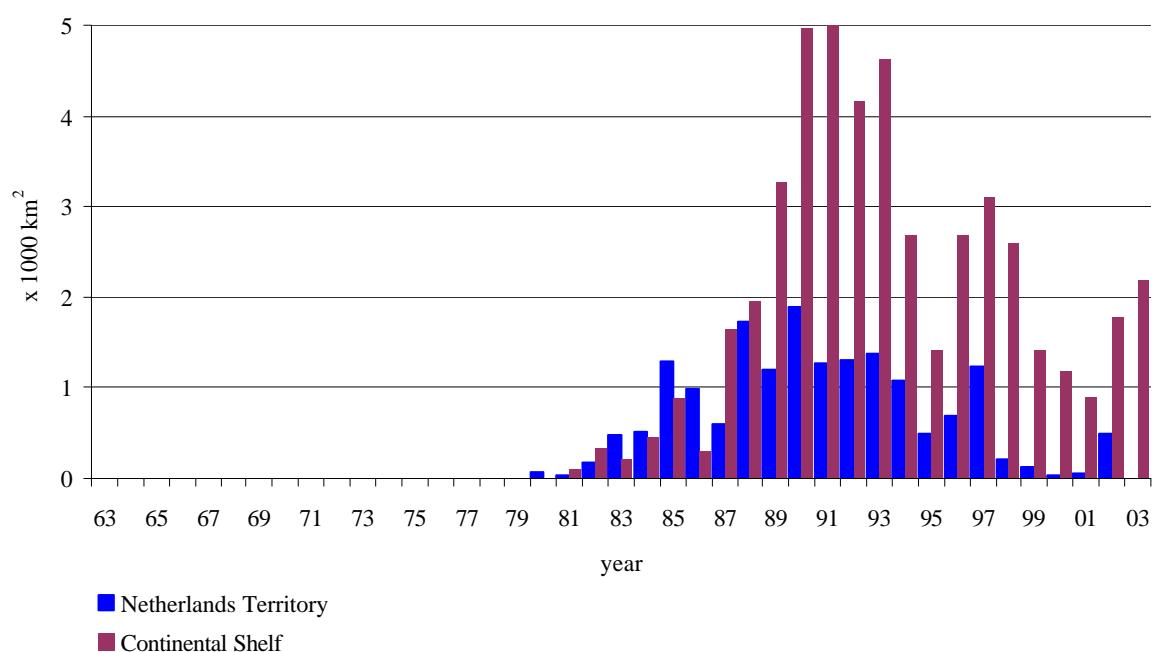
SEISMIC SURVEYS

Year	Netherlands Territory		Continental Shelf	
	2 D line km	3 D area in km ²	2 D line km	3 D area in km ²
63	2 860	-	26 778	-
64	10 992	-	41 136	-
1965	8 885	-	7 707	-
66	3 510	-	6 939	-
67	1 673	-	3 034	-
68	2 541	-	17 349	-
69	3 857	-	6 846	-
1970	5 113	-	5 780	-
71	3 252	-	12 849	-
72	4 034	-	4 716	-
73	1 783	-	9 708	-
74	1 422	-	9 536	-
1975	1 706	-	9 413	-
76	2 318	-	10 963	-
77	948	-	6 184	-
78	2 466	-	13 568	-
79	986	-	11 575	-
1980	2 017	76	15 497	-
81	4 627	37	22 192	110
82	4 363	170	14 791	337
83	3 980	478	24 498	208
84	2 523	512	9 314	455
1985	3 480	1 282	41 593	892
86	2 386	993	11 795	296
87	2 243	601	24 592	1 637
88	1 103	1 726	14 356	1 958
89	828	1 206	4 033	3 264
1990	160	1 889	8 288	4 972
91	-	1 268	15 853	5 002
92	388	1 307	1 799	4 173
93	-	1 382	1 591	4 637
94	-	1 074	1 089	2 694
1995	-	491	-	1 408
96	-	689	892	2 686
97	-	1 236	260	3 101
98	-	214	1 383	2 603
99	43	124	181	1 409
2000	-	33	160	1 189
01	5	47	-	898
02	-	-	495	1 778
03	-	-	-	2 185

2D Seismic surveys 1963 - 2003



3D Seismic surveys 1963 - 2003



OIL AND GAS WELLS, number of wells Netherlands Territory

Year	Exploration					Appraisal					Production	
	O	G	G&O	D	à	O	G	G&O	D	à	à	
Up to 1967	2	26	-	61	89	-	8	-	4	12	278	
1968	-	3	-	4	7	-	2	-	2	4	23	
1969	-	2	-	11	13	-	2	-	1	3	27	
1970	-	3	-	11	14	-	1	-	-	1	25	
1971	-	3	-	9	12	-	3	-	1	4	55	
1972	-	3	-	7	10	-	-	-	2	2	64	
1973	-	2	-	2	4	-	1	-	-	1	46	
1974	-	-	-	2	2	-	4	-	1	5	50	
1975	-	3	-	5	8	-	-	-	2	2	48	
1976	-	2	-	5	7	-	12	-	-	12	37	
1977	-	3	-	4	7	2	10	-	1	13	14	
1978	-	2	-	4	6	-	20	-	-	20	36	
1979	-	4	-	2	6	2	11	-	2	15	42	
1980	1	2	-	2	5	2	16	-	4	22	33	
1981	2	2	-	11	15	5	7	-	2	14	23	
1982	-	5	-	9	14	-	8	-	2	10	14	
1983	-	4	-	4	8	1	13	-	1	15	8	
1984	1	6	-	7	14	4	8	-	4	16	32	
1985	1	5	-	9	15	2	10	-	-	12	34	
1986	-	2	-	10	12	-	3	-	-	3	35	
1987	-	1	2	6	9	-	1	-	-	1	22	
1988	-	5	1	2	8	1	4	-	-	5	17	
1989	-	2	1	6	9	2	5	-	-	7	11	
1990	-	3	1	4	8	-	3	1	1	5	17	
1991	-	7	1	3	11	-	3	-	1	4	11	
1992	-	5	2	4	11	-	1	-	-	1	12	
1993	-	8	-	2	10	-	-	-	-	-	11	
1994	-	4	-	1	5	2	2	-	1	5	4	
1995	-	3	-	10	13	-	3	-	-	3	14	
1996	-	2	-	3	5	2	3	-	2	7	30	
1997	-	8	-	3	11	-	6	-	-	6	12	
1998	-	7	-	4	11	-	7	-	-	7	8	
1999	-	2	-	3	5	-	3	-	-	3	7	
2000	-	2	-	-	2	-	2	-	-	2	5	
2001	-	2	-	1	3	-	-	-	-	-	6	
2002	-	1	-	3	4	-	1	-	-	1	5	
2003	1		2	3		-	-	-	-	-	7	
Total:	7	145	8	236	396	25	184	1	34	243	1 123	

D = dry

G = gas

G&O = gas and oil

O = oil

Σ = total

OIL AND GAS WELLS, number of wells Netherlands Continental Shelf

Year	Exploration					Appraisal					Production	
	O	G	G&O	D	à	O	G	G&O	D	à	à	
Up to 1967	-	-	-	3	3	-	-	-	-	-	-	
1968	-	2	-	5	7	-	-	-	-	-	-	
1969	-	2	-	13	15	-	-	-	1	1	-	
1970	-	6	-	7	14	-	-	-	-	-	-	
1971	1	3	-	15	18	1	-	-	-	1	-	
1972	-	10	-	6	16	-	-	-	1	1	-	
1973	-	4	-	13	17	-	1	-	1	2	2	
1974	-	7	-	8	16	-	1	-	-	1	9	
1975	1	6	-	9	15	-	1	-	2	3	2	
1976	-	5	-	11	16	1	2	-	-	3	4	
1977	-	3	-	20	23	1	3	-	1	5	18	
1978	-	4	-	14	18	1	2	-	2	5	14	
1979	-	7	-	9	17	-	3	-	1	4	9	
1980	1	6	-	16	26	2	2	-	1	5	7	
1981	4	3	-	11	15	6	5	-	6	17	5	
1982	1	6	-	22	35	1	6	-	3	10	20	
1983	7	3	-	27	31	1	2	-	9	12	15	
1984	1	6	-	19	26	3	1	-	3	7	24	
1985	1	9	-	24	36	2	4	-	1	7	35	
1986	3	9	-	14	25	2	2	-	1	5	15	
1987	2	9	1	12	22	1	2	1	1	5	13	
1988	-	12	1	8	21	-	4	-	1	5	21	
1989	-	10	-	13	23	-	4	-	1	5	17	
1990	-	8	-	21	29	-	6	-	-	6	14	
1991	-	15	-	26	43	-	2	-	-	2	18	
1992	2	8	-	11	19	-	-	-	1	1	15	
1993	-	3	-	10	13	-	1	-	-	1	17	
1994	-	4	-	5	10	1	1	-	-	2	10	
1995	1	2	-	3	5	-	1	1	1	3	16	
1996	-	10	1	12	24	-	5	-	-	5	6	
1997	1	7	-	13	21	1	8	-	1	10	13	
1998	1	9	-	8	17	1	1	-	1	3	13	
1999	-	7	-	5	12	-	1	-	1	2	6	
2000	-	4	-	2	6	-	6	-	-	6	9	
2001	-	9	-	6	15	-	2	-	2	4	12	
2002	-	6	-	10	16	-	1	-	2	3	13	
2003	-	6	-	1	7	-	3	-	1	4	13	
	-	-	-	-	-	-	-	-	-	-	-	
Total:	27	229	3	432	691	25	82	2	46	155	427	

D = dry

G = gas

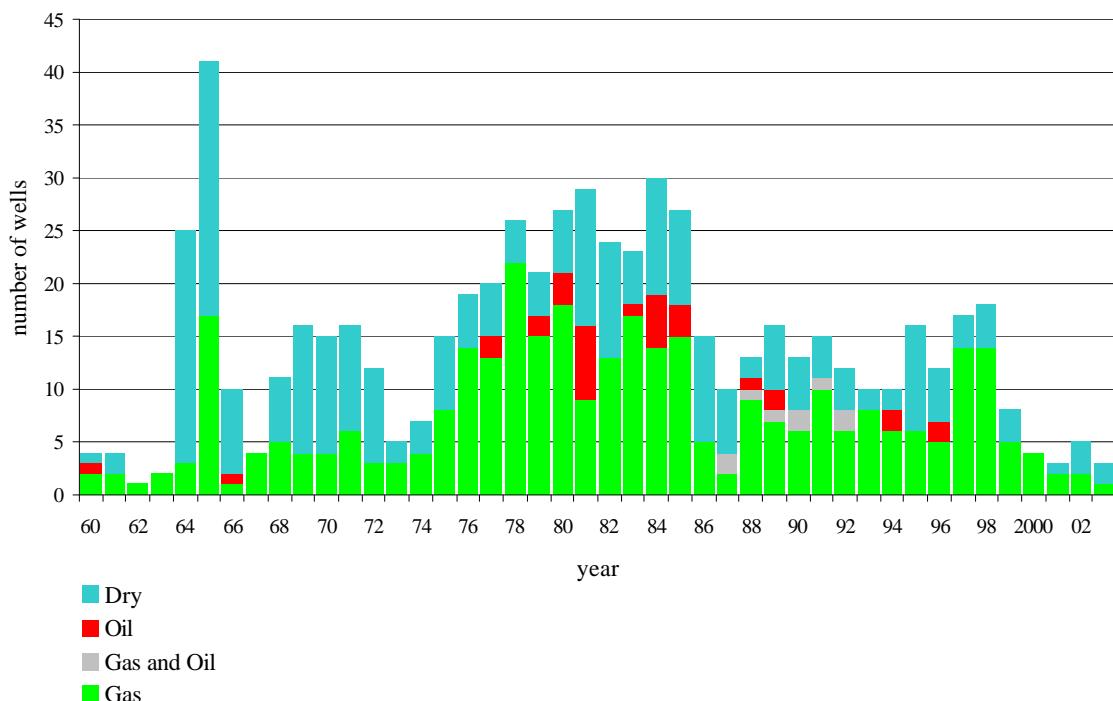
G&O = gas and oil

O = oil

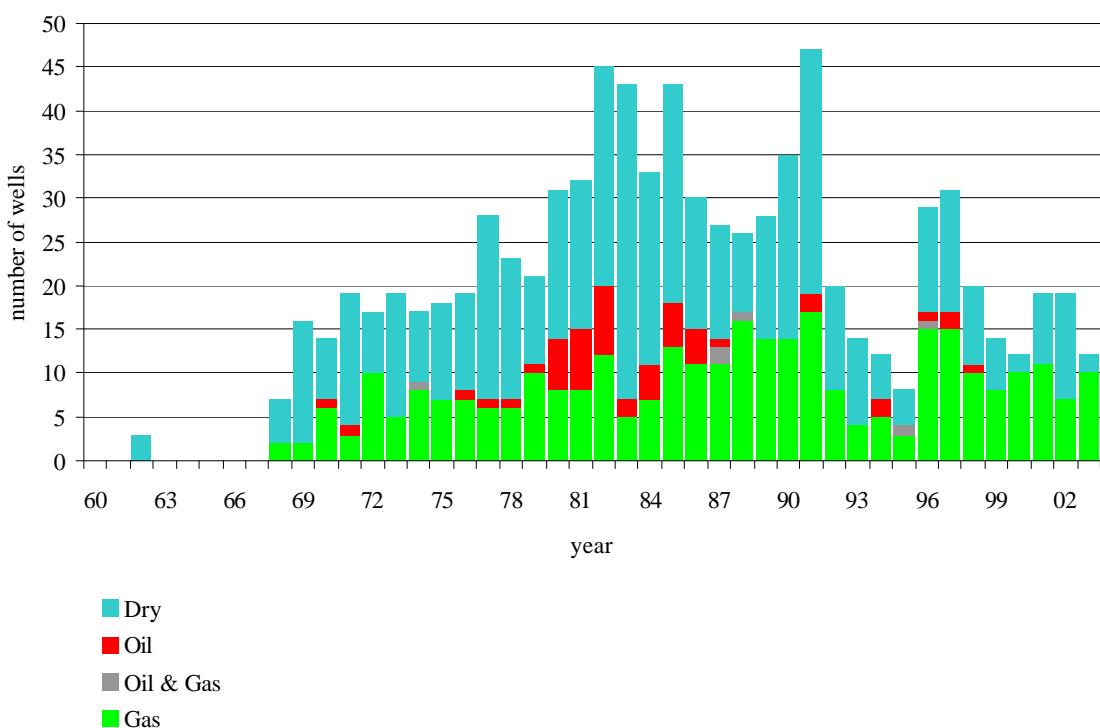
Σ = total

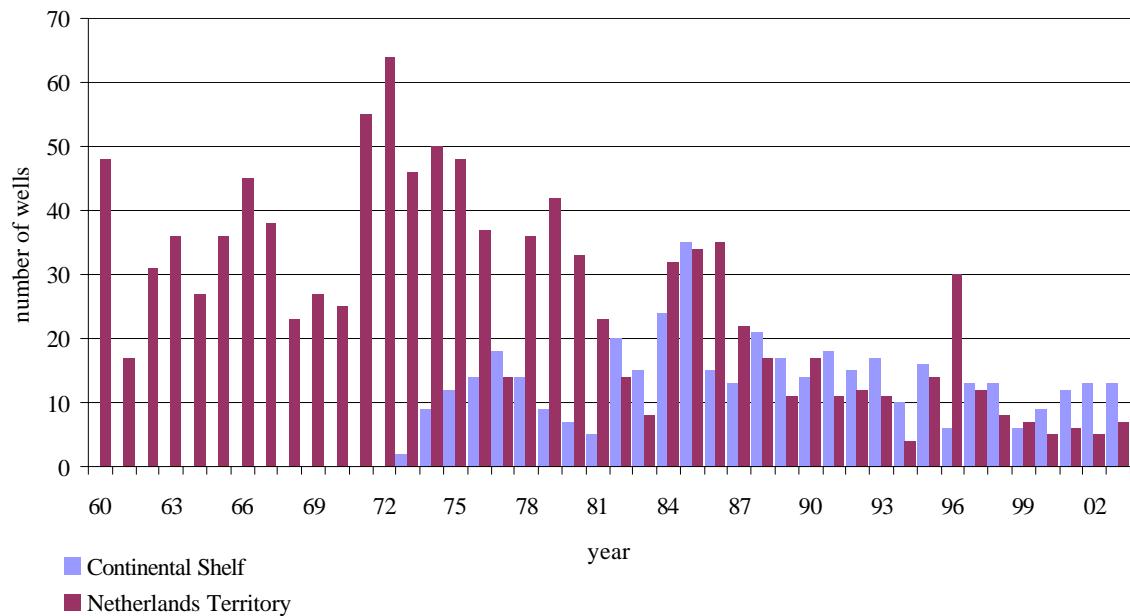
NUMBER OF WELLS (GRAPHS), Netherlands Territory and Continental Shelf

Exploration and appraisal wells, Netherlands Territory 1960 – 2003



Exploration and appraisal wells, Continental Shelf 1960 – 2003



Production wells 1960 - 2003

PLATFORMS, Netherlands Continental Shelf as at 1 January 2004

Platform	Operator	Year of installation	Number of legs	G* / O*	Function
K13-A	Wintershall	1974	8	G	production/compression
K13-A	Wintershall	1974	4	G	wellhead
L10-A	Gaz de France	1974	8	G	production
L10-A	Gaz de France	1974	10	G	wellhead/compression
L10-A	Gaz de France	1974	4	G	riser
L10-B	Gaz de France	1974	4	G	satellite
L10-C	Gaz de France	1974	4	G	satellite
K14-FA-1	NAM	1975	10	G	integrated
L7-B	Total	1975	4	G	integrated
K15-FA-1	NAM	1977	10	G	integrated
K8-FA-1	NAM	1977	10	G	integrated
K8-FA-2	NAM	1977	4	G	satellite
L10-D	Gaz de France	1977	4	G	satellite
L10-E	Gaz de France	1977	4	G	satellite
L7-C(C)	Total	1977	4	G	wellhead
L7-C(P)	Total	1977	8	G	production
L7-C(Q)	Total	1977	4	--	accommodation
K15-FB-1	NAM	1978	10	G	integrated
L7-BB	Total	1978	4	G	wellhead
K7-FA-1	NAM	1980	4	G	wellhead
L10-BB	Gaz de France	1980	3	G	wellhead
L10-F	Gaz de France	1980	4	G	satellite
K10-B	Wintershall	1981	6	G	production
K10-B	Wintershall	1981	6	G	wellhead
L4-A(PA)	Total	1981	8	G	integrated
Q1-HELM	Unocal	1981	6	O	production
Q1-HELM	Unocal	1981	4	O	wellhead
K7-FA-1	NAM	1982	6	G	production
P6-A	Wintershall	1982	8	G	integrated
Q1-HELDER-A	Unocal	1982	6	O	production
Q1-HELDER-A	Unocal	1982	4	O	wellhead
K12-A	Gaz de France	1983	4	G	satellite
L7-C(PK)	Total	1983	4	G	compression
Q1-HOORN	Unocal	1983	6	O	production
Q1-HOORN	Unocal	1983	4	O	wellhead
K12-C	Gaz de France	1984	4	G	satellite
K18-KOTTER	Wintershall	1984	8	O	production
K18-KOTTER	Wintershall	1984	6	O	wellhead
K8-FA-3	NAM	1984	6	G	satellite
L10-EE	Gaz de France	1984	3	G	wellhead
L10-G	Gaz de France	1984	4	G	satellite
L4-B	Total	1984	4	G	wellhead
L7-A	Total	1984	4	G	satellite

Platform	Operator	Year of installation	Number of legs	G* / O*	Function
AWG-1	NAM	1985	3	G	riser
AWG-1P	NAM	1985	6	G	production
AWG-1W	NAM	1985	4	G	wellhead
K12-D	Gaz de France	1985	4	G	satellite
K14-FA-1C	NAM	1985	8	G	compression
L16-LOGGER	Wintershall	1985	4	O	production
L16-LOGGER	Wintershall	1985	4	O	wellhead
P15-RIJN-A	BP	1985	4	O	wellhead
P15-RIJN-C	BP	1985	6	O	production
P6-B	Wintershall	1985	4	G	satellite
K12-E	Gaz de France	1986	4	G	satellite
L11b-A	Unocal	1986	4	G	integrated
L13-FC-1	NAM	1986	4	G	wellhead
L13-FC-1	NAM	1986	6	G	production
Q8-A	Wintershall	1986	3	G	wellhead
K12-BD	Gaz de France	1987	4	G	wellhead
K12-BP	Gaz de France	1987	8	G	production
K9ab-A	Gaz de France	1987	4	G	integrated
K9c-A	Gaz de France	1987	4	G	integrated
L10-AC	Gaz de France	1987	4	G	compression
Zuidwal	Total	1987	8	G	wellhead
K12-CC	Gaz de France	1988	4	G	compression
L10-L	Gaz de France	1988	4	G	satellite
L10-S-1	Gaz de France	1988	-	G	sub sea completion
L13-FD-1	NAM	1988	4	G	satellite
L7-N	Total	1988	4	G	satellite
L8-A	Wintershall	1988	4	G	satellite
L8-G	Wintershall	1988	6	G	integrated
L8-H	Wintershall	1988	4	G	satellite
K15-FC-1	NAM	1989	4	G	satellite
L13-FE-1	NAM	1989	4	G	satellite
L7-H	Total	1989	4	G	satellite
Q1-HAVEN-A	Unocal	1989	1	O	satellite
K15-FG-1	NAM	1990	4	G	satellite
L11a-A	Gaz de France	1990	4	--	jacket
P12-SW	Wintershall	1990	4	G	satellite
AME-2	NAM	1991	4	G	wellhead
AME-2	NAM	1991	4	G	production
K12-S1	Gaz de France	1991	-	G	sub sea completion
K6-D	Total	1991	4	G	wellhead
K6-P	Total	1991	4	G	production
L2-FA-1	NAM	1991	6	G	integrated
F15-A	Total	1992	6	G	integrated
F3-FB-1P	NAM	1992	3+GBS	G+O	integrated
J6-A	ENI	1992	6	G	integrated
K6-C	Total	1992	4	G	wellhead/riser

Platform	Operator	Year of installation	Number of legs	G* / O*	Function
K6-DN	Total	1992	4	G	satellite
L5-FA-1	NAM	1992	6	G	integrated
P15-10S	BP	1992	-	G	sub sea completion
P15-12S	BP	1992	-	G	sub sea completion
P15-14S	BP	1992	-	G	sub sea completion
F3-FB-AP	NAM	1993	3	G+O	accommodation
F3-OLT	NAM	1993	1	O	offshore loading tower
K10-V	Wintershall	1993	4	G	satellite
K6-N	Total	1993	4	G	satellite
L15-FA-1	NAM	1993	6	G	integrated
P14-A	Wintershall	1993	4	G	satellite
P15-D	BP	1993	6	G	production
P15-E	BP	1993	4	G	satellite
P15-F	BP	1993	4	G	satellite
P15-G	BP	1993	4	G	satellite
P18-A	BP	1993	4	G	satellite
P9-Horizon	Unocal	1993	4	O	integrated
P9-Seafox-1	Unocal	1993	4	O	accommodation
K5-A	Total	1994	4	G	wellhead
K5-D	Total	1994	4	G	satellite
K5-P	Total	1994	4	G	production
L8-P	Wintershall	1994	4	G	satellite
Q8-B	Wintershall	1994	4	G	satellite
K11-B	Gaz de France	1995	4	G	satellite
K5-B	Total	1995	4	G	satellite
L13-FH-1	NAM	1995	-	G	sub sea completion
Q1-Halfweg	Unocal	1995	4+GBS	G	satellite
K14-FB-1	NAM	1997	4	G	satellite
K4a-D	Total	1997	-	G	sub sea completion
K5-EN/C	Total	1997	4	G	satellite
L10-S-2	Gaz de France	1997	-	G	sub sea completion
L10-S-3	Gaz de France	1997	-	G	sub sea completion
L10-S-4	Gaz de France	1997	-	G	sub sea completion
N7-FA-SP	NAM	1997	1	G	satellite
P2-NE	Wintershall	1997	4	G	satellite
P6-S	Wintershall	1997	4	G	satellite
K4-A	Total	1998	4	G	satellite
K6-GT	Total	1998	4	G	satellite
K7-FD-1	NAM	1998	4	G	satellite
L9-FF-1P	NAM	1998	6	G	production
L9-FF-1W	NAM	1998	4	G	wellhead
Q16-FA-1	NAM	1998	-	G	sub sea completion
D15-FA-1	NAM	1999	6	G	integrated
K9ab-B	Gaz de France	1999	4	G	satellite
L4-PN	Total	1999	4	G	satellite
F2-A-Hanze	Petro-Canada	2000	GBS	G+O	integrated

Platform	Operator	Year of installation	Number of legs	G* / O*	Function
K4-BE	Total	2000	4	G	satellite
L10-M	Gaz de France	2000	4	G	satellite
L8-A-west	Wintershall	2000	-	G	sub sea completion
L8-P4	Wintershall	2000	4	G	satellite
Q4-A	Wintershall	2000	4	G	satellite
P6-D	Wintershall	2001	4	G	satellite
K12-G	Gaz de France	2001	4	G	satellite
G17d-A	Gaz de France	2001	4	G	jacket
K8-FA-1P	NAM	2001	4	--	accommodation
K1-A	Total	2001	4	G	satellite
G17d-A	Gaz de France	2002	4	G	satellite
K12-S2	Gaz de France	2002	-	G	sub sea completion
K15-FK-1	NAM	2002	4	G	satellite
K5-PK	Total	2002	4	G	satellite
Q4-B	Wintershall	2002	4	G	satellite
K 7-FB-1	NAM	2003		G	satellite
K12-S3	Gaz de France	2003		G	sub sea completion
L 5-B	Wintershall	2003		G	satellite
Q 4-C	Wintershall	2003		G	satellite

G* = Gas

O* = Oil

GBS = Gravity Based Structure

PIPELINES, Netherlands Continental Shelf as at 1 January 2004

Operator	From	To	Diameter (inches)	Laid (year)	Length (km)	Carries
Gaz de France	L10-C	L10-AP	10.75 * 2.375	1974	1.1	g + m
Gaz de France	L10-B	L10-AP	10.75 * 2.375	1974	7.4	g + m
NGT	L10-AR	Uithuizen	36	1975	179.0	g
Wintershall	K13-AP	Callantsoog	36	1975	120.5	g
Gaz de France	L10-D	L10-AP	10.75 * 2.375	1977	1.1	g + m
Gaz de France	L10-E	L10-AP	10.75 * 2.375	1977	4.0	g + m
NAM	K8-FA-1	K14-FA-1P	24	1977	30.9	g
NAM	K14-FA-1P	WGT-pipe (s)	24	1977	0.1	g + co
TotalFinaElf	L7-B	L7-P	12.75+4.5+3.5	1977	7.9	g + w + g
TotalFinaElf	L7-P	L10-AR	16	1977	15.8	g
Wintershall	K13-B	K13-AP	10 * 2	1977	9.2	def.verl.
NAM	K11-FA-1	K8-FA-1	6.625	1978	6.0	def.verl.
NAM	K8-FA-1	K8-FA-2	3	1978	4.0	c
NAM	K8-FA-2	K8-FA-1	10.75	1978	3.8	g + co
NAM	K15-FA-1	WGT-pipe (s)	24	1978	0.1	co
Wintershall	K13-D	K13-C	10 * 2	1978	3.5	def.verl.
Wintershall	K13-C (Bypass)	K13-AP	20	1978	10.2	g
Gaz de France	L10-F	L10-AP	10.75 * 2.375	1980	4.3	g + m
TotalFinaElf	L4-A	L7-P	12.75 + 3.5	1981	22.8	g + gl
NAM	K7-FA-1P	K8-FA-1	18	1982	9.4	g + co
Unocal	Q1-Helder-AW	Q1-Helm-AP	20	1982	6.2	o
Unocal	Q1-Helm-AP	IJmuiden	20	1982	56.7	o
Wintershall	K10-C (Bypass)	K10-B	10 * 2	1982	5.2	g + m
Wintershall	K10-B	K13-C (Bypass)	20	1982	7.4	g
Gaz de France	K12-A	L10-AP	14 * 2.375	1983	29.2	g + m
NAM	K15-FB-1	Callantsoog	24	1983	74.3	g + co
Unocal	Q1-Hoorn-AP	Q1-Helder-AW	10.75	1983	3.5	o
Wintershall	P6-A	L10-AR	20	1983	78.7	g
Gaz de France	L10-G	L10-B / L10-A (s)	10.75 * 2.375	1984	4.7	g + m
Gaz de France	L10-K	L10-B / L10-A (s)	10.75 * 2.375	1984	5.5	def.verl.
Gaz de France	L10-B	L10-AD	14	1984	6.8	g
Gaz de France	L10-EE	L10-B / L10-A (s)	10	1984	0.2	g
Gaz de France	K12-C	K12-A / L10-A (s)	10 * 2	1984	0.4	g + m
Wintershall	K18-Kotter-P	Q1-Helder-A	12	1984	20.2	o
BP	P15-C	Hoek v. Holland	10	1985	42.6	o
BP	P15-B	P15-C	10	1985	3.4	def.verl.
BP	P15-B	P15-C	6	1985	3.4	def.verl.
BP	P15-C	P15-B	6	1985	3.4	def.verl.
BP	P15-B	P15-C	4	1985	3.4	def.verl.
Gaz de France	K12-D	K12-C	10.75 * 2.375	1985	4.3	g + m
NAM	AWG-1R	NGT-pipe (s)	20	1985	7.1	g + co +ci
NAM	AME-1	AWG-1R	20	1985	4.2	g + co
TotalFinaElf	L4-B	L7-A	10.75 + 3.5	1985	10.1	g + gl

Operator	From	To	Diameter (inches)	Laid (year)	Length (km)	Carries
TotalFinaElf	L7-A	L7-P	10.75+ 3.5	1985	10.4	g + gl
Wintershall	L16-Logger-P	K18-Kotter-P	8	1985	18.9	o
Wintershall	K18-Kotter-P	L16-Logger-P	6	1985	18.9	w
Wintershall	P6-B	P6-A	12 * 3	1985	3.9	g + gl
Wintershall	P6-C (future .plf)	P6-B	12 * 3	1985	2.9	g + gl
Gaz de France	K12-A/ L10-A (s)	K12-E	2.375	1986	3.9	m
Gaz de France	K12-E	K12-C	10.75	1986	6.3	g
NAM	L13-FC-1P	K15-FA-1	18	1986	15.4	g + co
NAM	K8-FA-3	K7-FA-1P	12.75	1986	8.9	g
NGT	L11b-A	NGT-pipe (s)	14	1986	6.8	g
Unocal	Q1-Helder-B	Q1-Helder-AW	8.625	1986	1.8	def.verl.
Wintershall	Q8-A	Wijk aan Zee	10	1986	13.7	g
NAM	K15-FA-1	K14-FA-1C	18	1987	24.2	g + co
NGT	K12-BP	L10-AR	18	1987	21.4	g
NGT	K9c-A	L10-AR	16	1987	36.6	g
NGT	K9c-A/L10-AR(s)	K9ab-A	16	1987	0.1	g
TotalFinaElf	Zuidwal	Harlingen TC	20 + 3 + 3	1987	20.3	g + gl + c
Gaz de France	K12-A	K12-CC	10.75	1988	8.3	g
Gaz de France	L10-L	L10-AP	10.75 * 2.375	1988	2.2	g + m
Gaz de France	L10-S1	L10-AP	6.625 * 2.375	1988	11.5	def.verl.
Gaz de France	K12-E	L10-S1	90 mm	1988	4.6	def.verl.
NGT	L8-G	L11b-A	14	1988	14.4	g
TotalFinaElf	L7-P	L7-N	10.75 * 3.5	1988	4.2	g + gl
Wintershall	L8-H	L8-A / L8-G(s)	8	1988	0.2	g
Wintershall	K13-C (Bypass)	K10-B / K13-A (s)	20	1988	2.5	g
Wintershall	L8-A	L8-G	8	1988	10.0	g
NAM	L13-FD-1	L13-FC-1P	10	1989	3.7	g + co
NAM	L13-FC-1P	L13-FD-1	3.6	1989	3.6	c
NAM	K8-FA-2	K8-FA-1	10.75	1989	4.0	g + co +ci
TotalFinaElf	L7-H	L7-N	10.75 * 3.5	1989	10.4	g + gl
Unocal	Q1-Haven-A	Q1-Helder-AW	8.625	1989	5.8	def.verl.
Gaz de France	L14-S1	L11a-A	6.625 * 2.375	1990	6.0	def.verl.
Gaz de France	K12-B	K12-S1	3.5	1990	4.9	c
NAM	K15-FC-1	K15-FB-1	10.75	1990	7.9	g + co
NAM	K15-FB-1	K15-FC-1	4.03	1990	7.9	c
NAM	K15-FG-1	K15-FA-1	14.3	1990	7.0	g + co
NAM	K15-FA-1	K15-FG-1	4.03	1990	7.0	c
NAM	L13-FE-1	L13-FC-1P	12.98	1990	4.3	g + co
NAM	L13-FC-1P	L13-FE-1	3.76	1990	4.3	c
NGT	L11a-A	NGT-pipe (s)	10.75	1990	11.8	g
Wintershall	P12-C	P12-SW	8 * 3	1990	6.9	def.verl.
Wintershall	P12-SW	P6-A	12 * 3	1990	42.0	g + gl
Gaz de France	K12-S1	K12-BP	6.625 * 2.375	1991	4.9	g + m
NAM	AME-2	AWG-1R	13.6	1991	5.2	g + co
NAM	AWG-1R	AME-2	4.02	1991	5.2	c
NAM	F3-FB-1P	L2-FA-1	24	1991	108.1	g + co

Operator	From	To	Diameter (inches)	Laid (year)	Length (km)	Carries
NAM	L2-FA-1	Callantsoog	36	1991	144.2	g + co
NAM	L5-FA-1	NOGAT-pipe (s)	16	1991	0.4	g + co
NAM	L15-FA-1	NOGAT-pipe (s)	16	1991	0.4	g + co
NAM	F15-A	NOGAT-pipe (s)	16	1991	0.3	g + co
NGT	K6-C	K9c-A	16	1991	5.2	g
TotalFinaElf	K6-D	K6-C	10.75 * 3.5	1991	3.8	g + gl
TotalFinaElf	K6-DN	K6-C	12.75 * 3.5	1992	5.4	g + gl
Wintershall	J6-A	K13-AW	24	1992	85.8	g
BP	P15-D	Maasvlakte	26	1993	40.1	g
BP	P15-E	P15-D	10 * 2	1993	13.9	g + m
BP	P15-F	P15-D	12 * 3	1993	9.1	g + m
BP	P15-G	P15-D	12 * 3	1993	9.1	g + m
BP	P15-10S	P15-D	4 * 2	1993	3.9	g + m
BP	P15-D	P15-10S	90 mm	1993	3.9	c
BP	P15-12S	P15-D	4 * 2	1993	6.1	g + m
BP	P15-D	P15-12S	90 mm	1993	6.1	c
BP	P15-14S	P15-G	4 * 2	1993	3.7	g + m
BP	P15-D	P15-14S	90 mm	1993	8.0	c
BP	P18-A	P15-D	16 * 3	1993	20.8	g + m
NAM	F3-FB-1P	F3-OLT	16	1993	2.0	o
NAM	F3-FB-1P	F3-OLT	3.21	1993	2.0	c
TotalFinaElf	K6-N	K6-C	12.75 * 3.5	1993	8.5	g + gl
Unocal	P9-Horizon-A	Q1-Helder-AW	10.75	1993	4.8	o + w
Wintershall	K10-V	K10-C (Bypass)	10 * 2	1993	10.3	g + m
Wintershall	P14-A	P15-D	10 * 2	1993	12.6	g + m
Lasmo	ST-I	J6-A	12 * 2	1994	5.5	g + m
TotalFinaElf	K5-D	K5-A	12.75 * 3.6	1994	10.6	g + gl
Wintershall	Q8-B	Q8-A	8 * 2	1994	8.3	g + m
Wintershall	K5-A	J6-A / K13-AW (s)	18	1994	0.3	g
Wintershall	L8-P	L8-G	8 * 2	1994	7.5	g + m
Gaz de France	K11-B	K12-C	14 * 2.375	1995	16.1	g + m
NAM	L13-FH-1	K15-FA-1	6.625	1995	9.4	g + co + m+ ci
NAM	K15-FA-1	L13-FH-1	2.98	1995	9.4	c
TotalFinaElf	K5-B	K5-A	346 mm	1995	6.4	g
TotalFinaElf	K5-A	K5-B	3.5	1995	6.4	m + c
Unocal	Q1-Halfweg	Q1-Hoorn-AP	12.75 * 2.375	1995	12.4	g + co + m
Unocal	Q1-Hoorn-AP	Q1-Halfweg	70.9 mm	1995	12.4	c
Unocal	Q1-Hoorn-AP	WGT-pipe (s)	12.75	1995	17.2	g + co
Unocal	Q1-Haven-A	Q1-Helder-AW	8.625	1995	5.8	o + w
Wintershall	P2-NE	P6-A	10	1996	38.2	g
Wintershall	P6-S	P6-B	203 mm	1996	6.5	g
Gaz de France	L10-S2	L10-AP	6.625 * 2.375	1997	6.3	g + m
Gaz de France	L10-AP	L10-S2	84 mm	1997	7.0	c
Gaz de France	L10-S3	L10-AP	6.625 * 2.375	1997	1.9	g + gl
Gaz de France	K12-E	L10-S3	3.5	1997	4.5	c

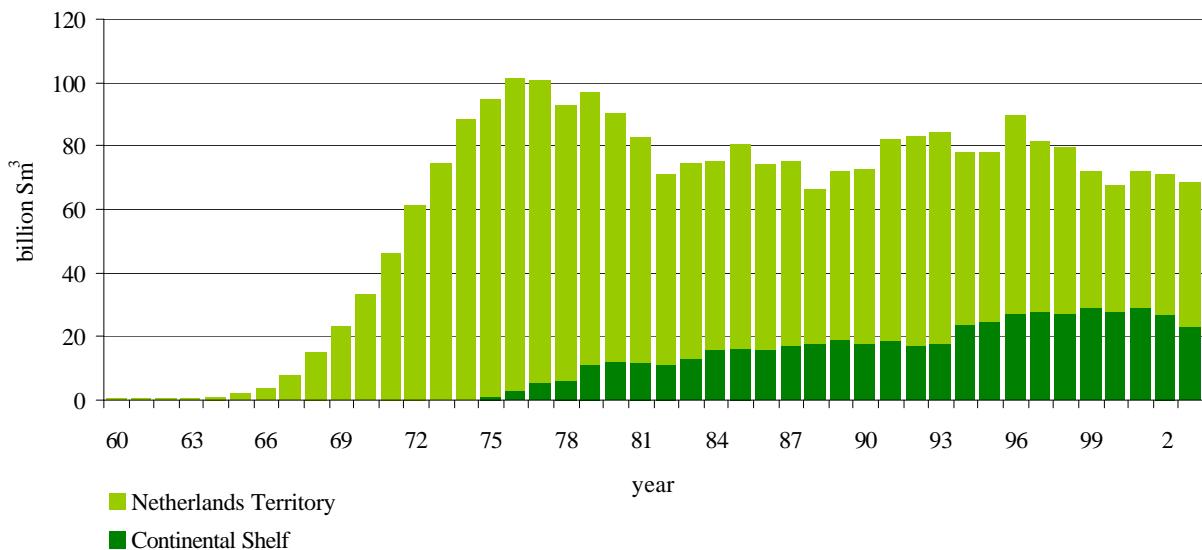
Operator	From	To	Diameter (inches)	Laid (year)	Length (km)	Carries
Gaz de France	L10-S4	L10-AP	6.625 * 2.375	1997	8.3	g + m
Gaz de France	L10-AP	L10-S4	84 mm	1997	8.4	c
NAM	K14-FA-1P	K15-FB-1	16	1997	16.6	g
NAM	K14-FB-1	K14-FA-1P	10.75	1997	9.2	g + co
NAM	K14-FA-1P	K14-FB-1	3.65	1997	9.2	c
NAM	L9-FF-1P	NOGAT-pipe (s)	24	1997	19.3	g + co
TotalFinaElf	K4a-D	J6-A	183 mm	1997	7.3	g
TotalFinaElf	J6-A	K4a-D	2.5	1997	7.4	m + c
TotalFinaElf	K5-EN/C	K5-D	303 mm	1997	2.7	def.verl.
TotalFinaElf	K5-D	K5-EN/C	2.5	1997	2.7	gl
TotalFinaElf	K5-B	K5-EN/C	70 mm	1997	6.2	c
NAM	K7-FD-1	K8-FA-1	12	1998	9.4	g + co
NAM	K7-FD-1	K8-FA-1	3.4	1998	9.4	c
NAM	K8-FA-1	K14-FA-1C	24	1998	30.9	g
NAM	Q16-FA-1	P18-A	8.625	1998	10.3	g + co
NAM	P18-A	Q16-FA-1	2.375	1998	10.3	m
NAM	Q16-FA-1	P18-A	3.4	1998	10.3	c
TotalFinaElf	K4-A	K5-A	12 * 3	1998	6.9	g + gl
TotalFinaElf	K6-GT	L4-B	10 * 3	1998	10.7	g + gl
TotalFinaElf	K4-A	K5-A	2.5	1998	6.7	c
Gaz de France	K9ab-B	D15-FA-1 / L10-A (s)	10	1999	0.1	g
NGT	D15-FA-1	L10-AC	36	1999	140.7	g
TotalFinaElf	L4-PN	L4-A	10	1999	11.4	g
TotalFinaElf	L4-A	L4-PN	4	1999	11.4	gl
Gaz de France	L10-M	L10-AP	10.75 * 2.375	2000	11.9	g + m
Petro-Canada	F2-A-Hanze	TMLS	16	2000	1.5	o
TotalFinaElf	K4-BE	K4-A	9.5	2000	8.0	def.verl.
TotalFinaElf	K4-A	K4-BE	2.5	2000	8.0	gl
Wintershall	Q4-A	P6-A	14	2000	35.2	g + co
Wintershall	Germany (A6)	F3-FB-1P	20 + 4	2000	119.0	g + co
Wintershall	L8-A-West	L8-P4	6	2000	10.2	g + co
Wintershall	L8-P4	L8-A-West	82 mm	2000	10.2	c
Wintershall	L8-P	L8-P4	12	2000	2.8	g
Wintershall	L8-P4	NGT-pipe (s)	16	2000	28.0	g + co
Gaz de France	K12-G	L10-AP	14 + 2	2001	15.6	g + m
NGT	G17d-A	NGT-pipe (s)	18	2001	64.5	g
Petro-Canada	F2-A-Hanze	A6 / B4 (s)	4	2001	0.1	g
Petro-Canada	F2-A-Hanze	A6 / B4 (s)	62.1 mm	2001	0.1	c
Petro-Canada	F2-A-Hanze	TMLS	62.1 mm	2001	1.5	c
TotalFinaElf	K5-EN/C	K5-D	10.75	2001	2.8	g
TotalFinaElf	K1-A	J6-A	14.75 * 3.5	2001	9.2	g + m
Wintershall	P6-D	P6-B	12	2001	6.8	g
Gaz de France	K12-S2	K12-C	6.625	2002	6.9	g
Gaz de France	K12-S2	K12-C	95.5 mm	2002	6.9	c
Wintershall	Q4-B	Q4-A	10.75	2002	7.3	g
Wintershall	Q4-C	Q1-Hoorn	16 * 2	2002	14.3	g + gl

Operator	From	To	Diameter (inches)	Laid (year)	Length (km)	Carries
Gaz de France	K12-S3	K12-BP	6	2003	3.4	g
Gaz de France	K12-BP	K12-S3	95.5 mm	2003	3.4	c
Maersk	Denmark Tyra WE	F3-FB-1P	26	2003	38	g
Maersk	F3-FB-1P	Sub sea valve station	4	2003	0.3	c
NAM	K7-FB-1	K7-FD-1	12	2003	17	g
NAM	K8-FA-1	K7-FB-1	4	2003	26	c
NAM	K15-FK-1	K15-FB-1	10	2003	8	g
NAM	K15-FK-1	K15-FB-1	4	2003	8	c
Wintershall	L5-B	L8-P4	10 + 4	2003	6.4	g + c

* = multiple pipeline gl = glycol
 + = laid separately m = methanol
 c = control cable ci = corrosion inhibitor
 o = oil l = instrument air
 g = gas (s) = side-tap
 co = condensate def.verl. = abandoned

GAS PRODUCTION in million Sm³

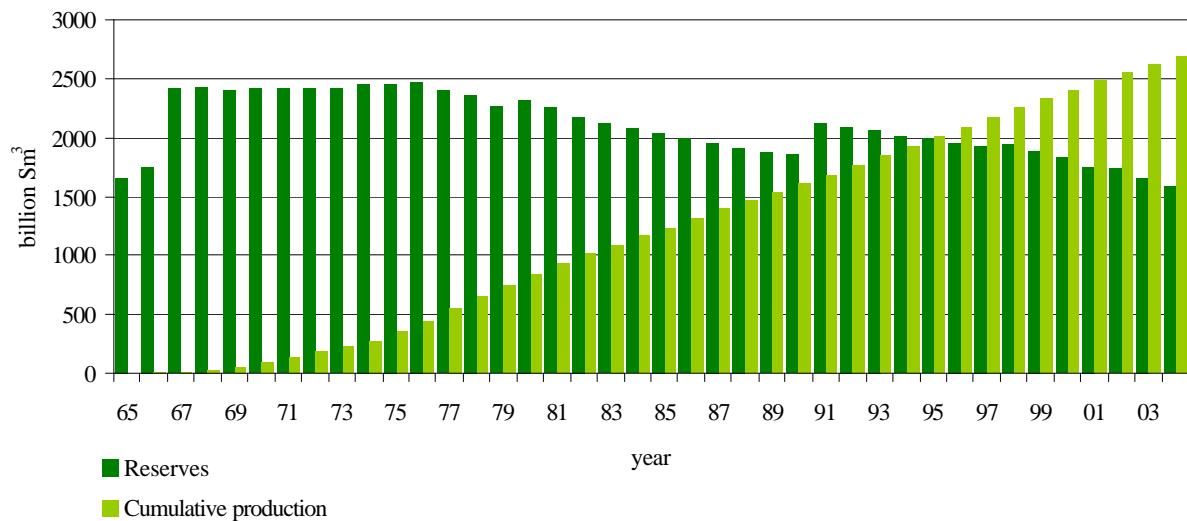
Year	Territory	Continental Shelf	Total
1960	384.0	0	384.0
61	476.0	0	476.0
62	538.0	0	538.0
63	603.0	0	603.0
64	876.0	0	876.0
1965	1 818.0	0	1 818.0
66	3 564.0	0	3 564.0
67	7 423.0	0	7 423.0
68	14 889.0	0	14 889.0
69	23 097.0	0	23 097.0
1970	33 417.8	7.9	33 425.7
71	46 248.3	2.4	46 250.7
72	61 661.1	1.4	61 662.5
73	74 765.9	7.8	74 773.7
74	88 358.7	14.6	88 373.3
1975	93 924.0	963.3	94 887.3
76	98 307.4	3 092.7	101 400.1
77	95 603.2	5 479.6	101 082.8
78	86 475.0	6 298.5	92 773.5
79	85 861.9	10 925.5	96 787.4
1980	78 208.9	12 102.0	90 310.9
81	70 928.3	11 798.3	82 726.6
82	60 004.3	11 073.3	71 077.6
83	61 533.0	13 172.2	74 705.2
84	59 351.6	15 787.3	75 138.9
1985	64 573.4	16 070.9	80 644.3
86	58 479.5	15 549.0	74 028.5
87	58 088.8	17 271.4	75 360.2
88	49 092.4	17 591.2	66 683.6
89	52 569.6	19 300.0	71 869.6
1990	54 585.4	17 856.0	72 441.4
91	63 724.1	18 686.3	82 410.4
92	65 701.6	17 279.0	82 980.6
93	66 154.0	17 851.4	84 005.4
94	54 863.3	23 536.9	78 400.2
1995	53 643.0	24 706.9	78 349.9
96	62 295.2	27 350.6	89 645.8
97	54 261.2	27 581.1	81 842.3
98	52 764.2	27 141.2	79 905.4
99	42 823.3	29 206.9	72 030.2
2000	40 320.2	27 473.9	67 794.1
01	43 220.8	29 043.1	72 263.9
02	44 472.4	26 770.1	70 714.8
03	45 257.1	23 508.0	68 765.1
Total	2 176 652,0	514 500,7	2 689 180,0

Gas production 1960-2003

GAS RESERVES AND GROSS CUMULATIVE PRODUCTION in billion Sm³

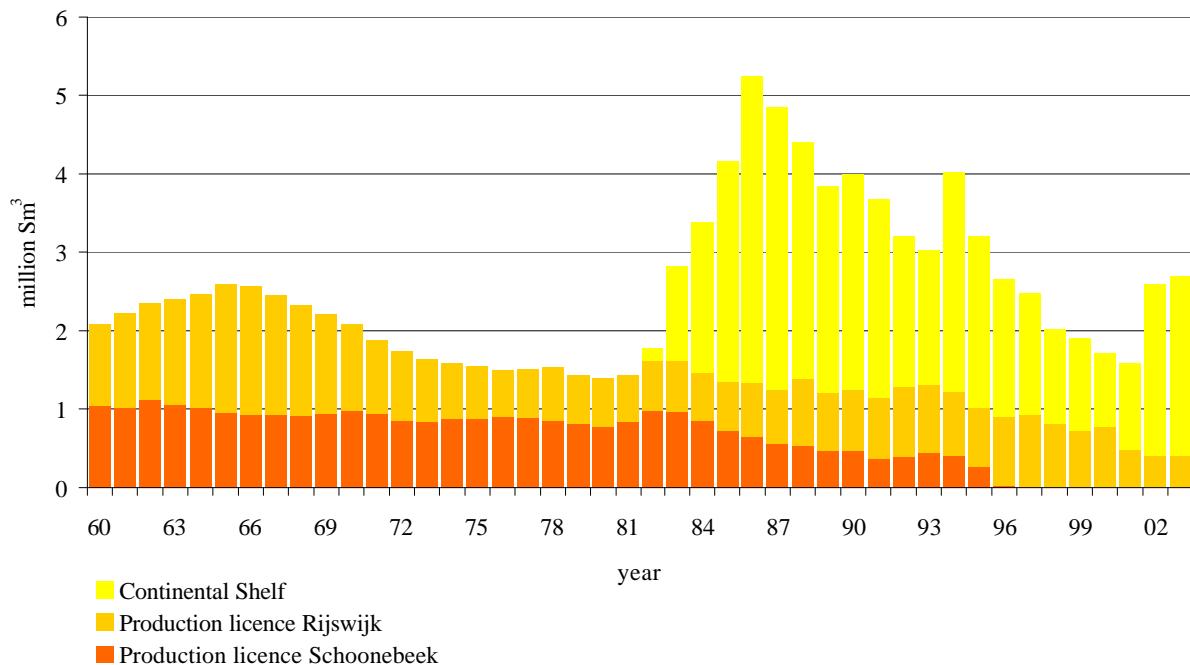
Year	Territory		Continental Shelf		Total	
	as at 1 January	expected reserves	cumulative production	expected reserves	cumulative production	expected reserves
1974	2 243	271.2	211	0.0	2 454	271.2
1975	-	359.6	-	0.0	-	359.6
76	2 137	453.5	340	1.0	2 477	454.5
77	2 030	551.8	367	4.1	2 397	555.9
78	1 996	646.9	363	9.6	2 359	656.5
79	1 928	732.9	343	15.9	2 271	748.8
1980	2 023	818.3	304	26.8	2 327	845.1
81	1 953	896.5	298	38.9	2 251	935.4
82	1 899	967.4	275	50.7	2 174	1 018.1
83	1 845	1 027.4	272	61.8	2 117	1 089.2
84	1 809	1 088.9	271	74.9	2 080	1 163.8
1985	1 754	1 148.3	281	90.7	2 035	1 239.0
86	1 704	1 121.9	290	106.8	1 994	1 319.7
87	1 655	1 271.3	300	122.3	1 955	1 393.6
88	1 607	1 330.8	303	139.6	1 910	1 470.4
89	1 557	1 380.0	320	157.2	1 877	1 537.2
1990	1 524	1 432.6	341	176.5	1 865	1 609.1
91	1 780	1 487.1	333	194.4	2 113	1 681.5
92	1 739	1 550.9	347	213.0	2 086	1 763.9
93	1 705	1 616.6	356	230.3	2 061	1 846.9
94	1 658	1 682.7	352	248.2	2 010	1 930.9
1995	1 663	1 737.6	334	271.7	1 997	2 009.3
96	1 631	1 791.2	321	296.4	1 952	2 087.7
97	1 587	1 853.5	343	323.8	1 930	2 177.3
98	1 574	1 907.7	373	351.4	1 947	2 259.1
99	1 533	1 960.6	360	378.5	1 893	2 339.0
2000	1 499	2 001.3	337	407.7	1 836	2 409.0
01	1 447	2 043.7	330	435.1	1 777	2 478.8
02	1 406	2 086.9	333	464.2	1 738	2 551.0
03	1 362	2 131.4	327	491.0	1 689	2 622.3
04	1 357	2 176.7	258	514.1	1 615	2 690.7

Gas reserves and cumulative production (end of year), 1965 - 2004



OIL PRODUCTION in 1 000 Sm³

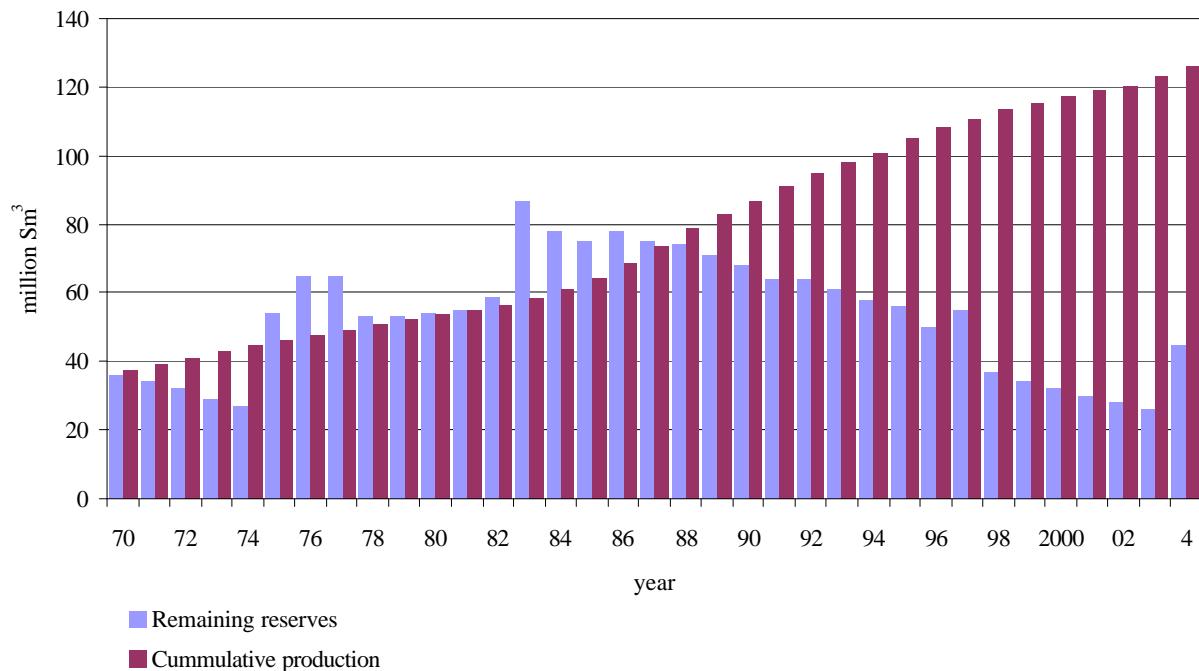
Year	Production licence Schoonebeek	Production licence Rijswijk	Continental Shelf	Total
Up to 1969	21 662.8	15 587.2	--	37 250.0
1970	976.0	1 112.2	--	2 088.2
71	940.7	926.8	--	1 867.5
72	856.3	883.1	--	1 739.4
73	838.2	787.4	--	1 625.6
74	878.0	715.5	--	1 593.5
1975	877.0	671.5	--	1 548.5
76	891.9	605.2	--	1 497.1
77	890.8	617.8	--	1 508.6
78	862.3	667.8	--	1 530.1
79	820.4	615.6	--	1 436.0
1980	778.9	617.7	--	1 396.6
81	839.2	596.5	--	1 435.7
82	987.9	625.3	159.7	1 772.9
83	960.0	655.6	1 209.1	2 824.7
84	846.9	615.6	1 921.7	3 384.2
1985	734.5	602.8	2 825.4	4 162.7
86	658.9	688.8	3 889.7	5 237.4
87	556.4	692.5	3 607.8	4 856.7
88	536.0	844.9	3 032.9	4 413.8
89	464.3	731.6	2 634.5	3 830.4
1990	463.0	784.9	2 744.5	3 992.4
91	366.0	777.3	2 527.9	3 671.2
92	379.3	907.3	1 920.7	3 207.3
93	454.0	849.0	1 709.8	3 012.8
94	406.4	811.4	2 804.8	4 022.6
1995	268.3	760.9	2 182.1	3 209.3
96	23.2	856.5	1 767.2	2 647.0
97	-	917.6	1 556.8	2 474.4
98	-	810.4	1 218.9	2 029.3
99	-	714.6	1 173.2	1 887.8
2000	-	776.1	936.4	1 712.5
01	-	542.2	1 085.4	1 627.6
02	-	439.0	2 236.4	2 675.4
03	-	416.2	2 324.6	2 740.0
Total	40 217.6	40 224.8	45 469.5	125 911.9

Oil production, 1960 - 2003

OIL RESERVES AND CUMULATIVE PRODUCTION in million Sm³

Year	Territory		Continental Shelf		Total		
	as at 1 January	expected reserves	cumulative production	expected reserves	cumulative production	expected reserves	cumulative production
1970		36	37.3	-	-	36	37.3
71		34	39.3	-	-	34	39.3
72		32	41.2	-	-	32	41.2
73		29	42.9	-	-	29	42.9
74		27	44.6	-	-	27	44.6
1975		40	46.2	14	-	54	46.2
76		51	47.7	14	-	65	47.7
77		49	49.2	16	-	65	49.2
78		46	50.7	7	-	53	50.7
79		44	52.2	9	-	53	52.2
1980		43	53.7	11	-	54	53.7
81		41	55.1	14	-	55	55.1
82		39	56.5	20	-	59	56.5
83		38	58.1	49	0.2	87	58.3
84		37	59.7	41	1.4	78	61.1
1985		41	61.2	34	3.3	75	64.5
86		42	62.5	36	6.1	78	68.6
87		40	63.9	35	10.0	75	73.9
88		41	65.1	33	13.6	74	78.7
89		39	66.5	32	16.6	71	83.1
1990		41	67.7	27	19.3	68	87.0
91		40	69.0	24	22.0	64	91.0
92		38	70.1	26	24.6	64	94.7
93		37	71.4	24	26.5	61	97.9
94		35	72.7	23	28.2	58	100.9
1995		34	73.9	22	31.0	56	104.9
96		33	75.0	17	33.2	50	108.1
97		33	75.8	22	34.9	55	110.8
98		12	76.7	25	36.5	37	113.2
99		8	77.5	26	37.7	34	115.2
2000		7	78.2	25	38.9	32	117.1
01		6	79.0	24	39.8	30	118.8
02		5	79.5	23	40.9	28	120.4
03		5	79.9	23	43.1	28	123.0
04		20	80.3	25	45.4	45	125.7

Oil reserves and cumulative production in million Sm³ 1970 - 2004

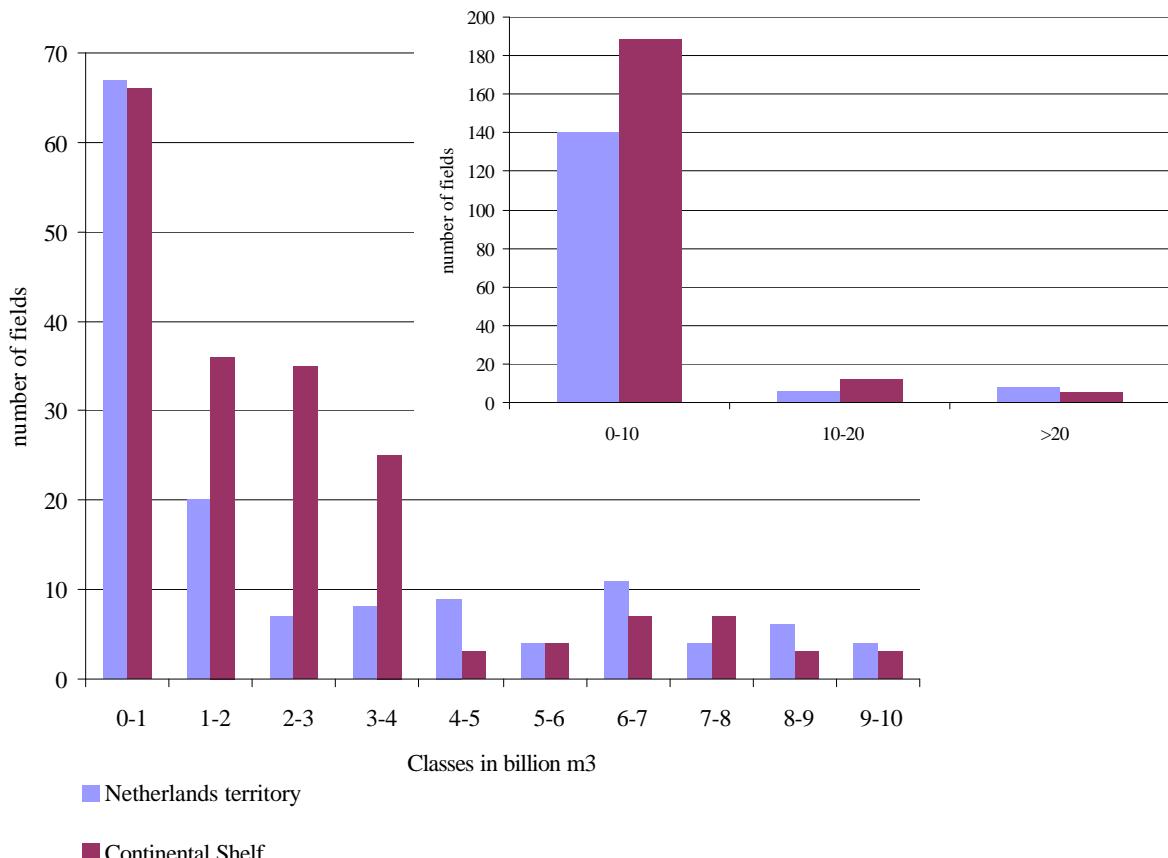


FIELD SIZE DISTRIBUTION OF GAS FIELDS

Based on expected initial reserves in billion Sm³

Class	Netherlands territory	Continental Shelf	Total
0 tot 1	67	66	133
1 tot 2	20	36	56
2 tot 3	7	35	42
3 tot 4	8	25	33
4 tot 5	9	3	12
5 tot 6	4	4	8
6 tot 7	11	7	18
7 tot 8	4	7	11
8 tot 9	6	3	9
9 tot 10	4	3	7
10 tot 20	6	12	18
= 20	8	5	13
Total	154	196	349

* including Groningen gas accumulation (more than 100 billion Sm³)



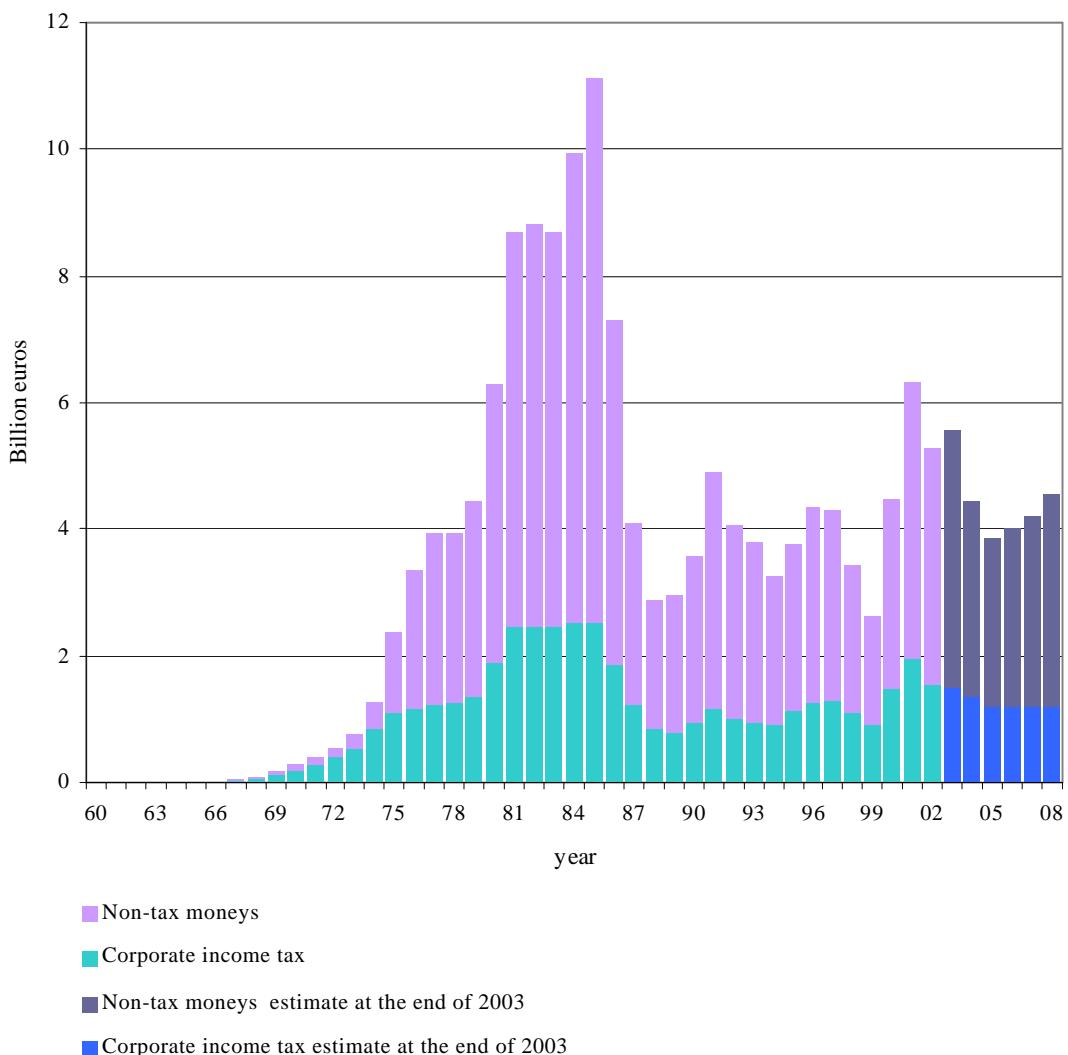
NATURAL GAS REVENUES 1960 – 2008

Year	Non-tax moneys* (10⁶ €)	Corporate income tax (10⁶ €)	Total (10⁶ €)
1960	0	0	0
61	0	0	0
62	0	0	0
63	0	0	0
64	0	0	0
1965	0	0	0
66	0	0.01	0.01
67	0.01	0.04	0.05
68	0.02	0.07	0.09
69	0.05	0.14	0.19
1970	0.09	0.18	0.27
71	0.14	0.27	0.41
72	0.14	0.41	0.55
73	0.23	0.54	0.77
74	0.41	0.86	1.27
1975	1.27	1.09	2.36
76	2.18	1.18	3.36
77	2.72	1.23	3.95
78	2.68	1.27	3.95
79	3.09	1.36	4.45
1980	4.36	1.91	6.27
81	6.22	2.45	8.67
82	6.35	2.45	8.8
83	6.22	2.45	8.67
84	7.40	2.54	9.94
1985	8.58	2.54	11.12
86	5.45	1.86	7.31
87	2.86	1.23	4.09
88	2.00	0.86	2.86
89	2.18	0.78	2.96
1990	2.61	0.96	3.57
91	3.72	1.17	4.89
92	3.04	1.02	4.06
93	2.83	0.95	3.78
94	2.34	0.91	3.25
1995	2.64	1.13	3.77
96	3.10	1.26	4.36
97	3.01	1.30	4.31
98	2.33	1.12	3.45
99	1.69	0.92	2.61
2000	3.02	1.47	4.49
01	4.36	1.97	6.33
02	3.72	1.55	5.27
03	4.06	1.49	5.55

04	3.10	1.35	4.45
2005	2.65	1.20	3.85
06	2.80	1.20	4.00
07	3.00	1.20	4.20
08	3.35	1.20	4.55

* Non-tax moneys consist of: bonus, surface rentals, royalties, the State profit share, the special payments to the State on production from the Groningen field and the profit distributed by Energie Beheer Nederland B.V., the participant in the production on behalf of the State.

Natural gas revenues, 1960 – 2008



AUTHORITIES CONCERNED WITH MINING OPERATIONS

Ministry of Economic Affairs, Energy Production Directorate

Aims at ...

- Reliable, efficient, cleaner production and conversion of energy in the Netherlands
 - Optimal development of the natural resources available in the Netherlands
 - Sustainable use of the deep subsurface

Trough ...

- Mutual co-ordination of energy-production and environmental and town-and-country-planning policies
 - Ensuring a good business climate, in both national and international terms
 - Ensuring a stable mining climate
 - Production and optimal use of available natural resources
 - Effective and efficient implementation of mining legislation
 - Ensuring payments from production of minerals are received
 - Research and development in the fields of nuclear energy and radioactive waste
 - Balanced conditions for production and conversion of energy
 - Stimulating the application of renewable energy sources, e.g. by supporting research, development and exhibitions
 - Removal of administrative impediments to the application of renewable energy

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Netherlands Institute of Applied Geoscience - National Geological Survey (TNO-NITG)

The task of TNO-NITG is to advise the Minister on geological matters, in particular those relating to exploration for and production of natural resources. TNO-NITG also maintains, interprets and processes the data that become available during the exploration for and production of natural resources or otherwise.

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State Supervision of Mines (Staatstoezicht op de Mijnen) (a department of the Ministry of Economic Affairs)

The State Supervision of Mines supervises reconnaissance surveys, exploration and production activities concerning natural resources and geothermal energy and underground storage. In addition, the State Supervision of Mines advises on mining operations and licences and is entrusted with enforcing part of the mining legislation

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DEFINITIONS OF SELECTED TERMS

Territory or Netherlands territory:

in this review, territory and Netherlands territory denotes: the Netherlands mainland and that part of the Netherlands territorial waters located on the landward side of the line referred to in article 1, sub c, of the Mining Act.

Continental Shelf:

in this review, Continental Shelf denotes: that part of the Continental Shelf over which the Kingdom of the Netherlands has sovereign rights and which is located on the seaward side of the line referred to in article 1, sub c, of the Mining Act.

Reconnaissance licence:

a licence to carry out a reconnaissance survey on the Continental Shelf; as from the 1 January 2003 a reconnaissance survey is only required for certain areas.

Exploration licence:

a licence to carry out exploration for the mineral resources specified in the licence.

Production licence:

a licence to produce the mineral resources specified in the licence, and also to carry out exploration for these mineral resources.

Seismic surveying:

this review differentiates between 2D and 3D seismic techniques. Two-dimensional seismic surveying has a long tradition in the oil industry. This seismic technique is based on vibrations that are generated along a line on the earth's surface. These vibrations penetrate the earth's crust and are reflected by the layers within the crust. Geophones or hydrophones record the reflections. Because the vibrations do not always propagate solely in the vertical plane underneath the recording line, the representations of geological structures in 2D seismic sections only approximate the real situation. This approximation is far better for a 3D seismic survey, in which a large number of recording lines are positioned close together in a relatively small surface area. Modern electronic data processing makes it possible to correct for deviations of the wave fronts that are not in the vertical plane underneath an individual recording line, and thus permits generating an accurate model of the geological structures at any desired location.

Wells:

- exploration well (or wildcat): a well to explore a prospective underground accumulation of oil and/or gas
- appraisal well: a well drilled in order to establish the volume and extent of a reservoir after an exploration well has found hydrocarbons;
- development well: a well drilled in order to produce the reservoir;

Gas field/oil field:

A natural, isolated accumulation of gas and/or oil in a subsurface reservoir consisting of a porous rock that is capped or enclosed by an impermeable rock. In this review, the terms reservoir, field and accumulation are used as synonyms.

Reserves (categories and definitions):

In the following definitions, natural gas and oil are referred to collectively as hydrocarbons.

1 Gas/Oil Initially in Place

The total volume of hydrocarbons in a reservoir that is initially (originally) present in a reservoir. This volume is calculated on the basis of the mean values of the parameters used in the calculations.

2 Expected Initial Reserves

The total volume of hydrocarbons in a reservoir that is estimated to be ultimately recoverable. This volume is calculated on the basis of the mean values of the parameters used in the calculations.

3 Proven Initial Reserves

The volume of hydrocarbons in a reservoir that is estimated to be ultimately recoverable, with an expectation-curve probability of 90%.

4 Remaining Expected Reserves

That part of the expected initial reserves remaining after subtraction of the cumulative production, i.e. the total volume of hydrocarbons produced from the reservoir concerned by the end of the year under review.

5 Remaining Proven Reserves

The volume - based on the 90% expectation-curve value - of hydrocarbons that can still be extracted from a reservoir. This volume is calculated by subtracting the cumulative production from the Proven Initial Reserves.

The term 'expected' in the definitions above should be interpreted in the statistical sense of the word. The stated figure represents the expected value. The following explanation may be useful.

All data that are used for the purpose of calculating volumes have an intrinsic uncertainty. By processing these uncertainties statistically, an expectation curve can be determined for each accumulation. This is a cumulative probability distribution curve, i.e. a graph in which reserve values are plotted against the associated probabilities that these values will be achieved or exceeded. As production from a hydrocarbon reservoir progresses, several uncertainties decrease and the expected value will deviate less and less from the 50% value on the cumulative probability distribution curve. In practice, the stated reserves of a given field are the expected values. This is the most realistic estimate available of the volume of hydrocarbons actually present in a reservoir.

The recoverability of hydrocarbons from an accumulation is determined by the geological and reservoir characteristics of that accumulation, the recovery techniques available at the reporting date, and the economic conditions prevailing at that time.

Probabilistic summation of the proven reserves:

In this method, the probability distributions of the reserves of the individual fields are combined. This way, the uncertainties inherent to all reserve estimates are accounted for. The result of applying the

probabilistic summation method is that the total figure obtained for the proven reserves according to the definition, now indeed represents the proven proportion of total Dutch reserves in a statistically more reliable manner. In other words, there is a 90% probability that reserves will actually exceed the value stated.

Units:

Standard m³: Natural gas and oil reserves are expressed in m³ at a pressure of 101.325 kPa (or 1.01325 bar) and 15°C. This m³ is defined as Standard m³ in Standard no. 5024-1976(E) of the International Organization for Standardization (ISO), and is normally abbreviated to Sm³.

Groningen gas equivalent: For the purpose of performing calculations with volumes of natural gas of varying qualities, these are converted to a Groningen gas equivalent. This is achieved by converting a volume of gas from an accumulation that produces a different quality of gas, to a (fictitious) volume of gas of the quality of the Groningen accumulation (35.17 Megajoules upper value per m³ of 0°C and 101.325 kPa, or 1.01325 bar).

One Nm³ gas that has a calorific value of 36.5 MJ equals 36.5/35.17 m³ Groningen gas equivalent (Geq)

The term Groningen gas equivalent is also commonly used by the N.V. Nederlandse Gasunie.

Figures stated in Groningen gas equivalent can be converted simply into equivalents for other fuels, such as Tons Oil Equivalent (TOE) and Coal Equivalent (CE).

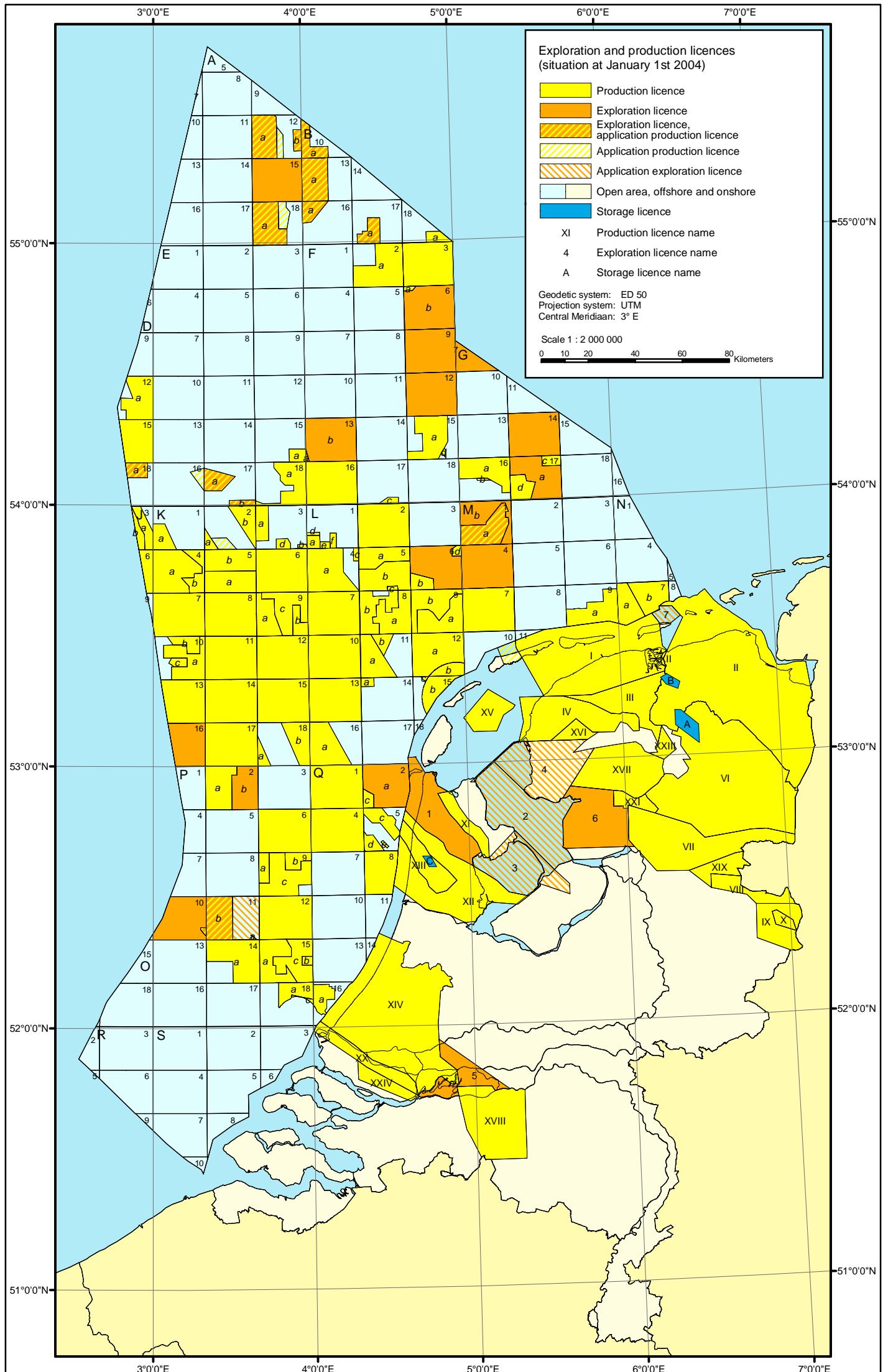
Fuel name	Expressed in	Giga Joules	Giga calories	Oil equiv. tonnes	Oil equiv. barrels	Coal equivalent tonnes	Natural Gas equivalent 1,000 m ³
Firewood (dry)	tonnes	13.51	3.23	0.32	2.36	0.46	0.43
Coal	tonnes	29.30	7.00	0.70	5.11	1.00	0.93
Lignite	tonnes	17.00	4.06	0.41	2.96	0.58	0.54
Cokes	tonnes	28.50	6.81	0.68	4.97	0.97	0.90
Cokes oven gas	1,000 m ³	17.60	4.20	0.42	3.07	0.60	0.56
Blast furnace gas	1,000 m ³	3.80	0.91	0.09	0.66	0.13	0.12
Crude oil	tonnes	42.70	10.20	1.02	7.45	1.46	1.35
Oil equivalent	tonnes	41.87	10.00	1.00	7.30	1.43	1.32
Refinery gas	1,000 m ³	46.10	11.01	1.10	8.04	1.57	1.46
LPG	1,000 m ³	45.20	10.79	1.08	7.88	1.54	1.43
Naphtha	tonnes	44.00	10.51	1.05	7.67	1.50	1.39
Jet fuel	tonnes	43.49	10.39	1.04	7.58	1.48	1.37
Gasoline	tonnes	44.00	10.51	1.05	7.67	1.50	1.39
Kerosene	tonnes	43.11	10.29	1.03	7.52	1.47	1.36
Light fuel oil	tonnes	42.70	10.20	1.02	7.45	1.46	1.35
Heavy fuel oil	tonnes	41.00	9.79	0.98	7.15	1.40	1.30
Petroleum cokes	tonnes	35.20	8.41	0.84	6.14	1.20	1.11
Natural gas	1,000 m ³	31.65	7.56	0.76	5.52	1.08	1.00
Electricity *	MWh	3.60	0.86	0.09	0.63	0.12	0.11

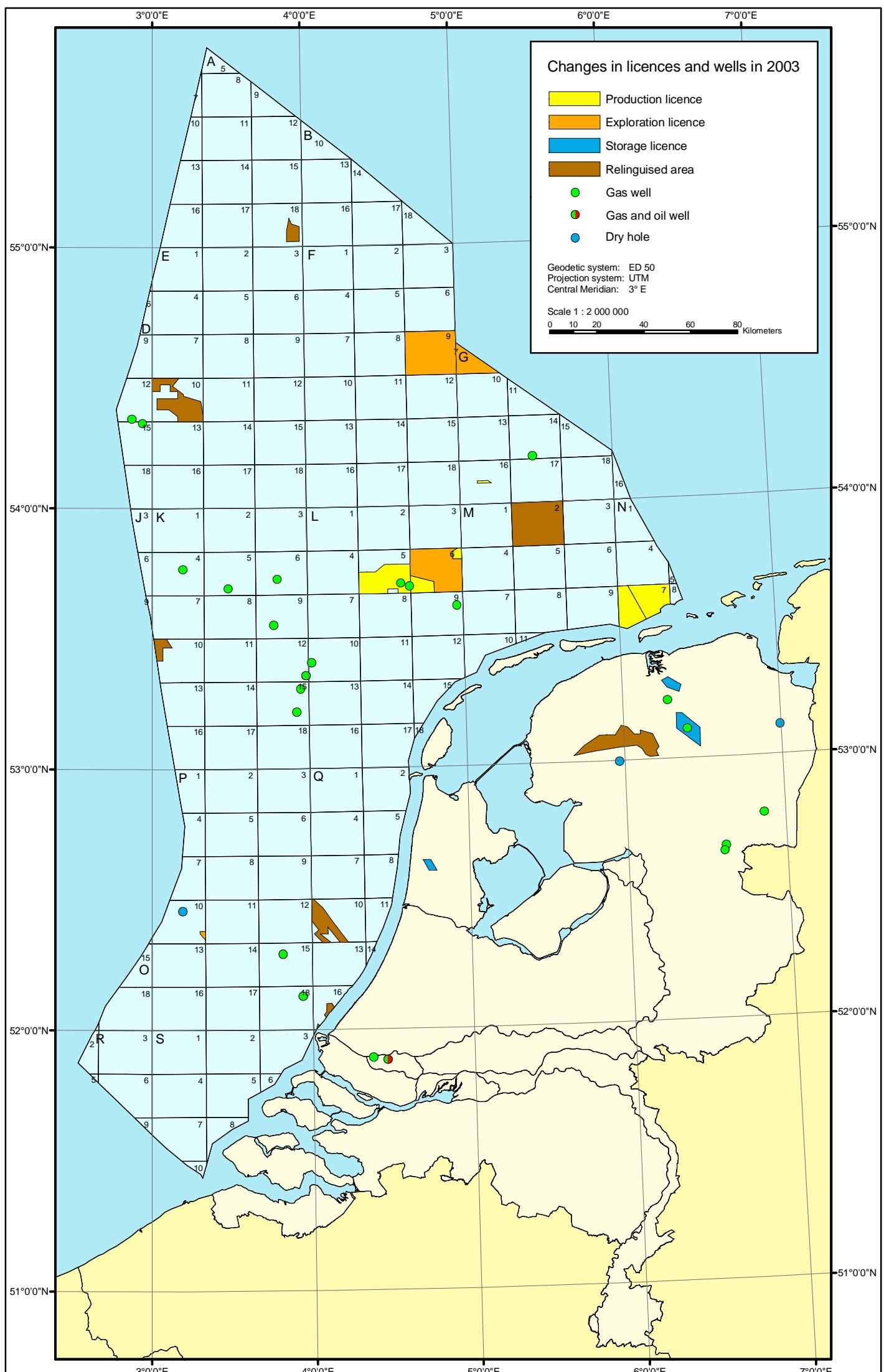
*In this energy conversion table, the energy value of an MWh electricity is to be understood as the energy content of a generated unit of electricity. In order to produce this unit of energy, more energy is necessary. The amount of energy required depends on the efficiency of the conversion.

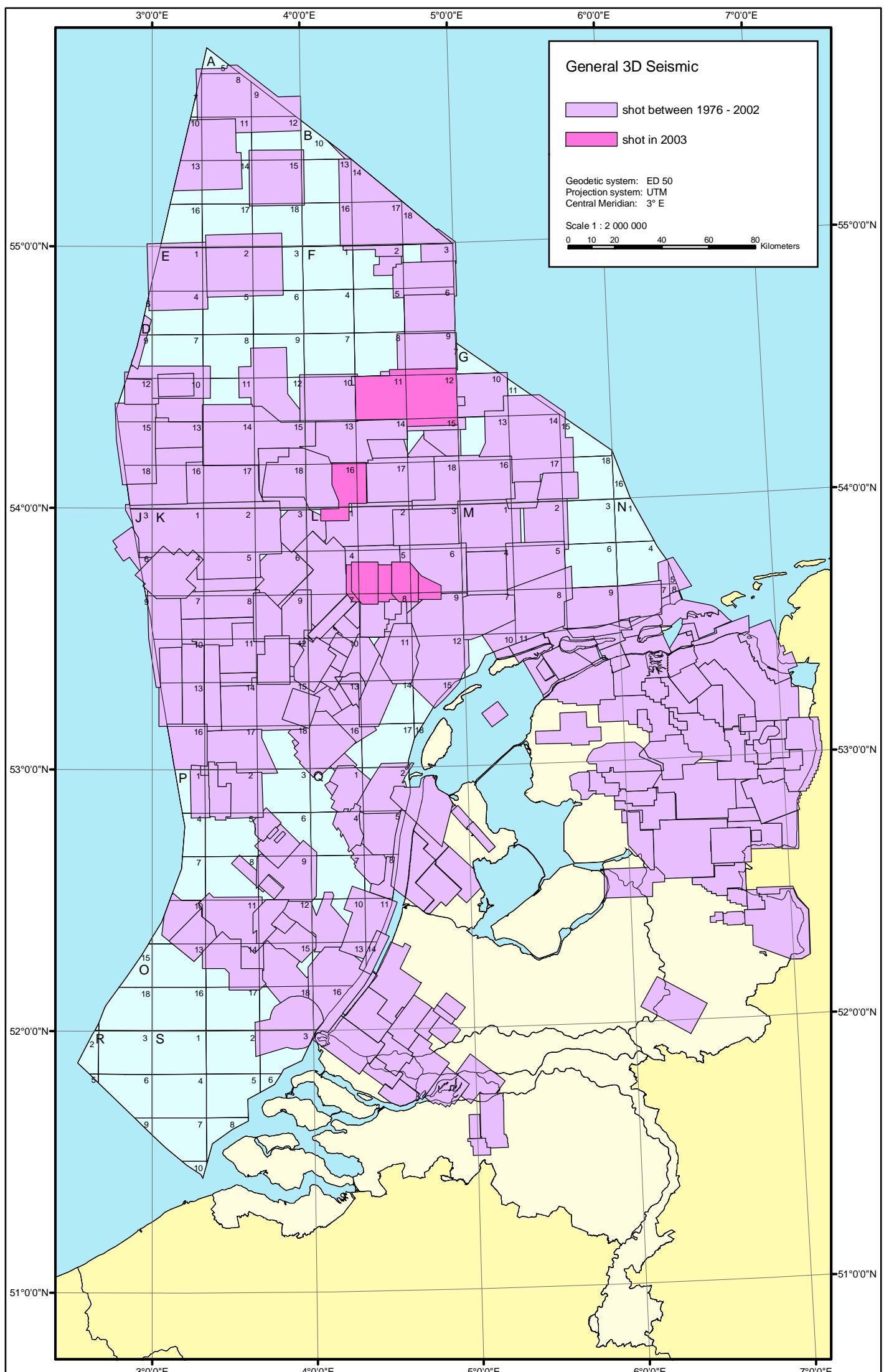
APPENDICES

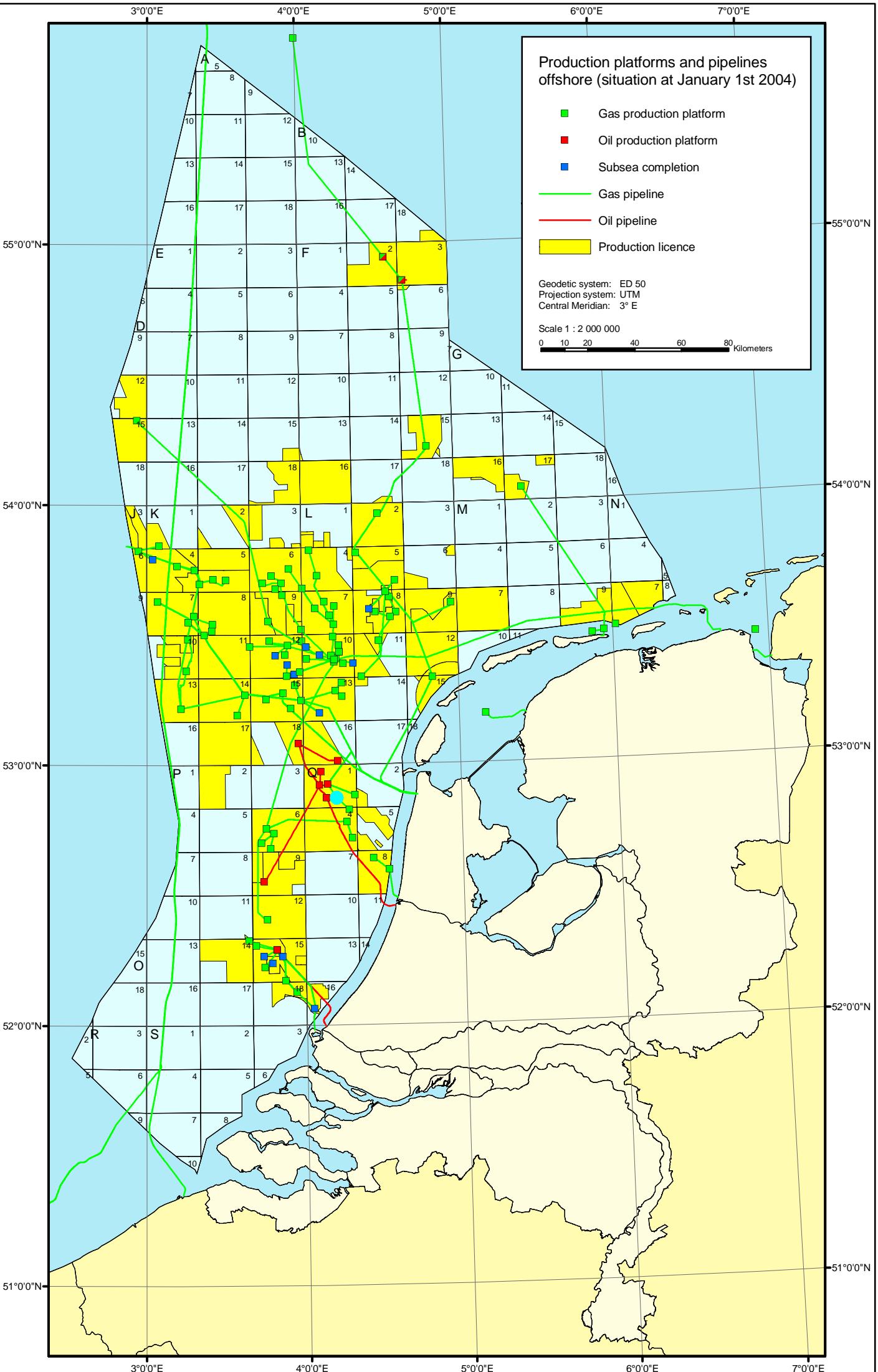
Appendix 1. Names of the exploration, production and storage licences, Netherlands Territory, as indicated on the map on opposite page.

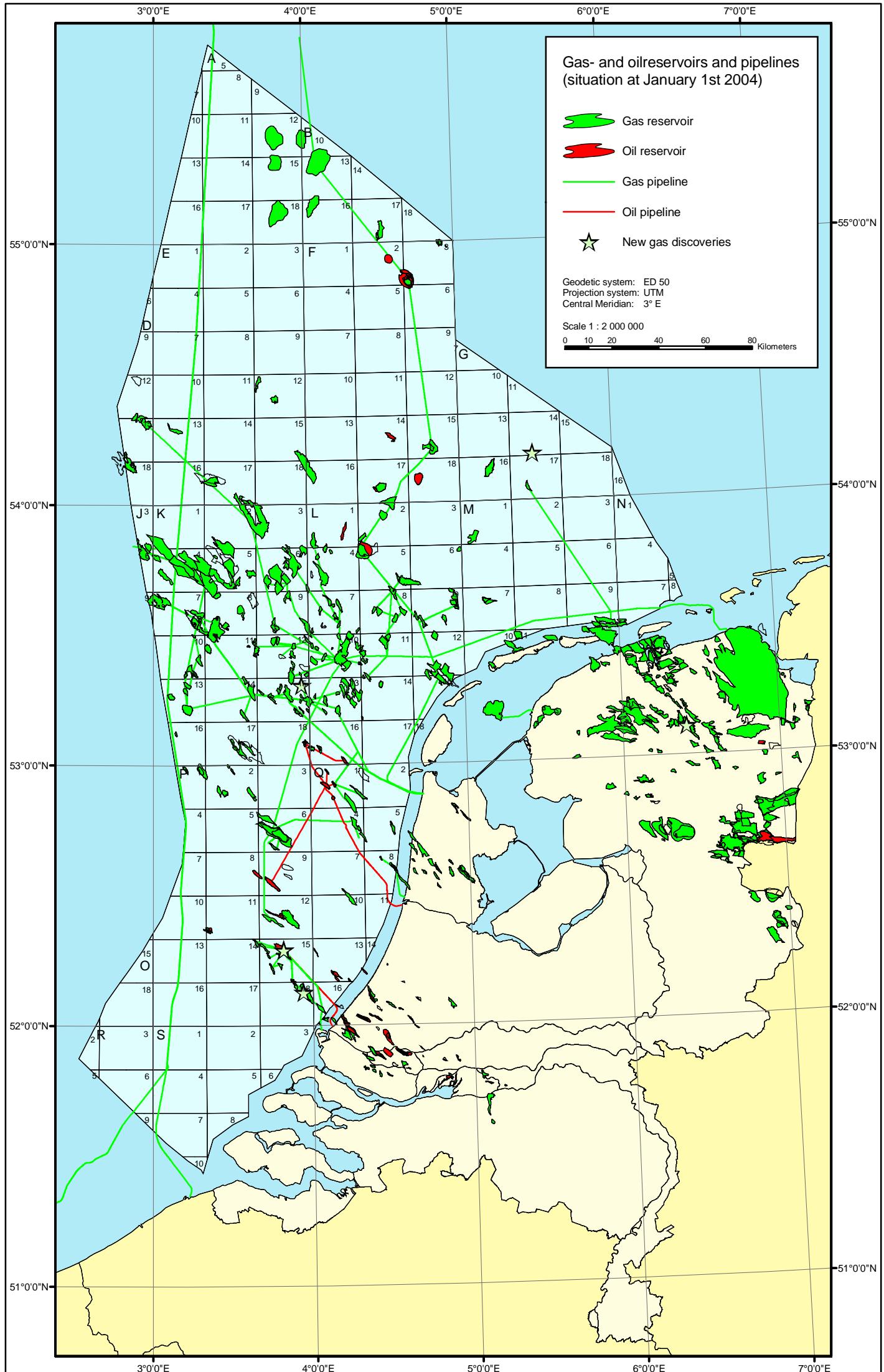
Exploration licence	Production licence
1 Schagen	I Noord-Friesland
2 IJsselmeer	II Groningen
3 Markerwaard	III Tietjerksteradeel
4 Zuid-Friesland II	IV Leeuwarden
5 Andel II	VI Drenthe
6 Lemmer-Marknesse	VII Schoonebeek
	VIII Tubbergen
	IX Twenthe
	X Rossum-de Lutte
	XI Slootdorp
	XII Middelie
	XIII Bergen
	XIV Rijswijk
	XV Zuidwal
	XVI Oosterend
	XVII Gorredijk
	XVIII Waalwijk
	XIX Hardenberg
	XX Botlek
	XXI Steenwijk
	XXII De Marne
	XXIII Donkerbroek
	XXIV Beijerland
Application for exploration licence	Application for production licence
7 Schiermonnikoog-Noord	XXV Terschelling
Storage licence	
A Norg	
B Grijpskerk	
C Alkmaar	





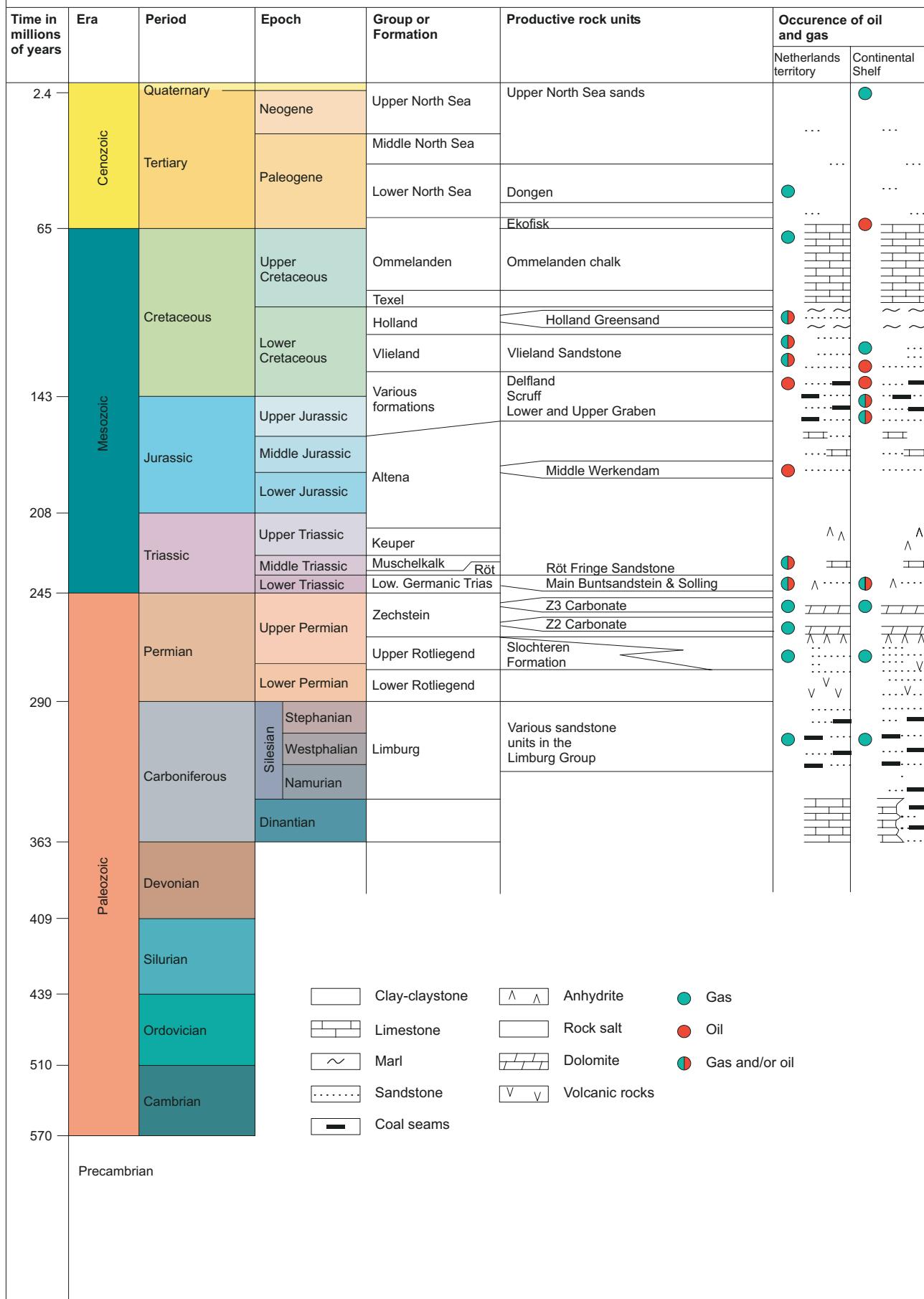


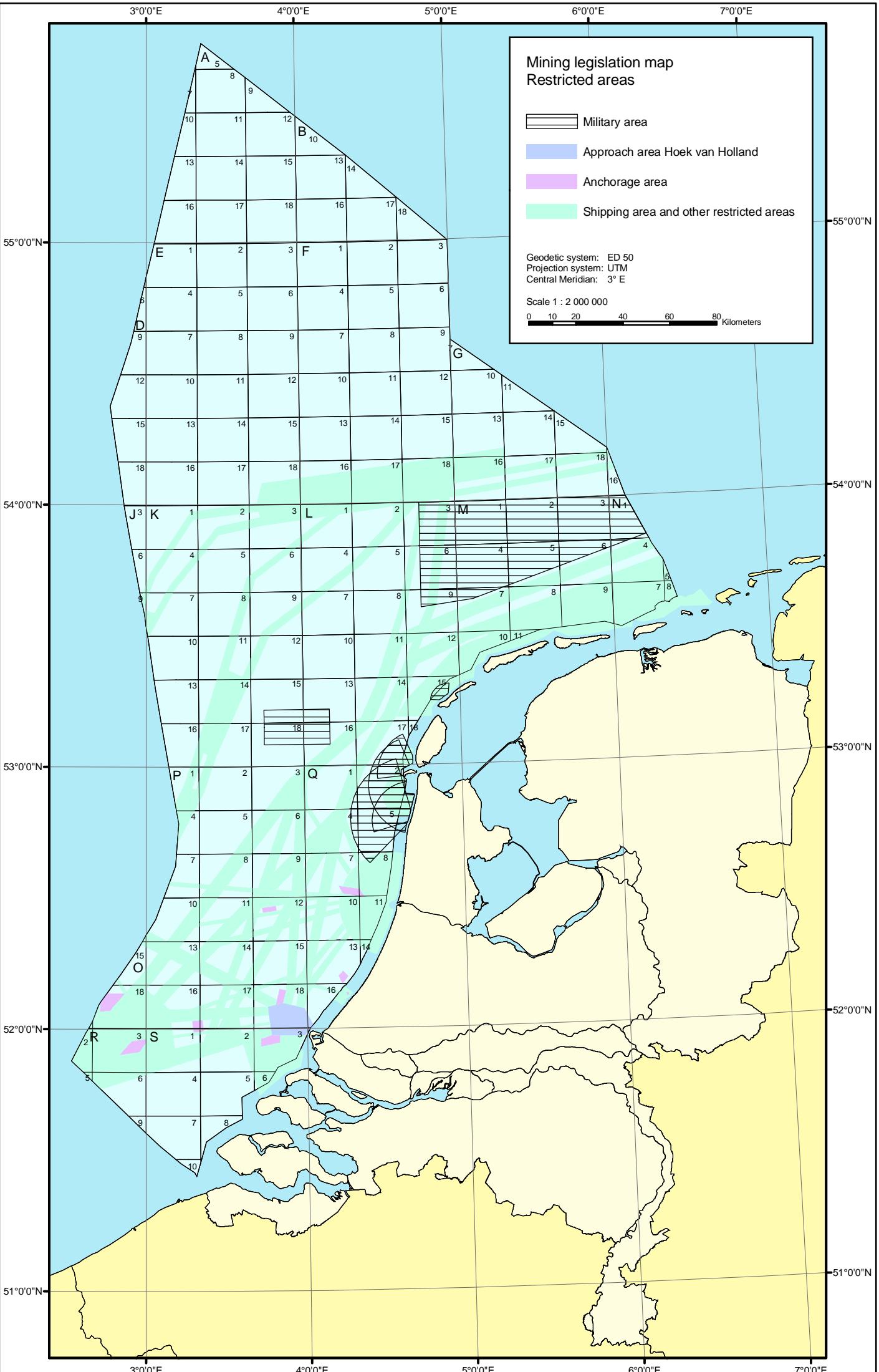




Geological time scale

with composite stratigraphic column
of the Netherlands and the Continental Shelf







Ministry of Economic Affairs
Directorate-General for Competition and Energy
Revised version, September 2004

