

# **Europe Upstream Insights**

December 2004

# Norway's APA 2004 Licence Awards: Continuing the Momentum

# **Executive Summary**

On 6 December 2004, the Norwegian Ministry of Petroleum and Energy (MPE) announced the results of the Awards in Predefined Areas (APA) 2004, which was the largest award of mature acreage since the creation of annual licensing rounds in 1999. The awards to 21 companies involved 28 licences, comprising 55 blocks or part blocks. The total acreage awarded was 10,800 square kilometres, which has risen from 8,400 square kilometres awarded in the APA 2003.

The APA 2004 focussed on the more mature areas of the North Sea and the Norwegian Sea where infrastructure can be easily utilised. The North Sea remains the focal point of the round with 17 licences being awarded in this sector, however, the Norwegian Sea has seen a growing interest with 10 licences awarded compared with only three during the APA 2003. In addition, acreage in the south of the Barents Sea was awarded for the first time since the area was closed to petroleum activity in 2001 owing to environmental concerns. Following an Environmental Impact Assessment (EIA) looking into all-year drilling activity in the area, the Government decided in December 2003 to re-open the Barents excluding certain especially valuable areas to the fishing industry and the environment. Meanwhile, more rigorous environmental conditions associated with operating in this part of the Norwegian Continental Shelf (NCS) were simultaneously introduced.

In terms of net acreage, Statoil gained 2,137 square kilometres or 20% of that made available in the APA 2004. The second placed company, Talisman, was awarded 1,236 square kilometres, some 12% of the total net acreage on offer. Marathon was close behind in third place with 1,103 square kilometres or 10% of the net acreage awarded. Furthermore, Statoil was awarded the most operatorships with eight (29%) of those made available in the APA 2004.

During the APA 2003, there was no direct state participation in any of the awarded licences as acreage available was not adjacent to current fields where Petoro has an equity share nor was it thought to contain large prospects. However, in the APA 2004, both of these criteria were met and accordingly, acreage was taken in block 2/2 (PL331) owing to the anticipated upside and in acreage neighbouring Njord (PL347 and PL348), Snøhvit (PL354) and within the Tampen Area (PL345). This will ensure that such business units will grow around existing fields with the same, or similar, participation.

Further changes to the terms and conditions of APA licences have been introduced. These changes, mostly to ensure against fallow acreage, reflect a subtle refinement to the significant modifications made during the introduction of the APA in 2003.

This Insight demonstrates that the round has been successful in helping to create an attractive sector to invest in. Through the APA approach, the Government has enticed exploration players with serious intentions. As with the APA 2003 and the 18<sup>th</sup> round, the Government remains determined to mandate 'rapid and efficient exploration' on the NCS and appears, at least at this early stage, to be delivering upon its own expectations.

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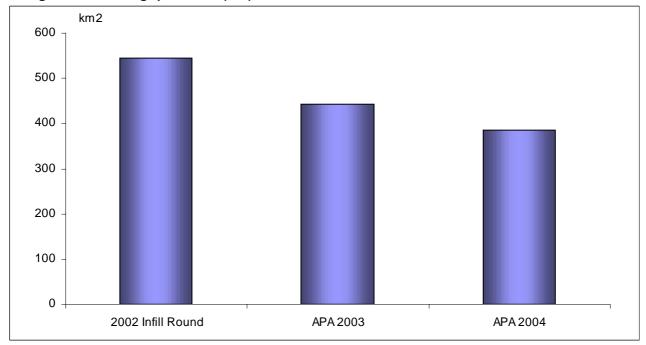
## Introduction

On 6 December 2004, the Norwegian Ministry of Petroleum and Energy (MPE) announced the results of the Awards in Predefined Areas (APA) 2004. The awards to 21 companies involve 28 licences, comprising 55 blocks or part blocks. The total acreage awarded was 10,800 square kilometres, which has risen from 8,400 square kilometres awarded in the APA 2003. The APA 2004 is also the largest award of mature acreage, in terms of the number of companies, licenses, blocks and acreage, since the creation of annual awards in 1999.

Following the acceptance of the awarded licences by successful participants on 13 December and the formal award of the new licences by the King in Council on 17 December, this Insight examines the results of the round and comments on the main features of the awards.

# New Terms for APA 2004 Licences

Following the introduction of new licence conditions in the APA 2003 round (See Wood Mackenzie's Insight *Norwegian Licensing: Awards in Predefined Areas 2003*), the terms and conditions for licences awarded in APA 2004 show further enhancement to reinforce further the Government's goal of rapid and efficient exploration on the NCS. To reflect this, the APA 2004 contained a proviso that companies would only be offered those blocks or parts of blocks where opportunities were identified and where a plan for continued exploration existed. The intention is to ensure the development of prospects, leads or plays on the NCS and to avoid fallow acreage. In practice, this means that if a company had knowledge of a prospect in 50% of a particular block, then the Ministry would only award the applicable part to the licensee. This more stringent approach to the awards is shown by a fall in the average awarded acreage per licence from 442 square kilometres in 2003 to 386 square kilometres in 2004. This reduction continues a trend over recent years.



#### Average awarded acreage per licence (km<sup>2</sup>)

Additionally, all acreage relinquished within the predefined area between the date of the announcement to the submission deadline for applications was effectively treated as 'announced' acreage for the APA 2004. Accordingly, such acreage is being quickly made available for further exploration. This innovative move will see a quicker turnover of acreage to allow for more efficient exploration in predefined areas. Examples of this during the round have been blocks 33/6A and 33/9A (PL344) and blocks 6608/7 and 6608/8 (PL352).

The Government had also restated its expectation that, following the expiry of the initial period of the licence, the authorities expect the operator and partners to relinquish the licence at the earliest opportunity if they decide that there is not, or not likely to be, a commercial hydrocarbon discovery. This would normally be expected to closely follow the completion of the required commitment wells and other explicit exploration requirements.

Other changes in this round include making work commitments available to the public at a licence level. The authorities' aim is to facilitate transparency to both new and future entrants to the NCS through the provision of as much information as possible within the limits of commercial sensitivity. This is to ensure a more open and predictable process of awards.

Following an Environmental Impact Assessment (EIA) looking into all year round drilling activity in the area, the Government decided in December 2003 to re-open the Barents Sea (except for certain especially valuable areas to the fishing industry and the environment). Following this decision, one licence was awarded to the current participants of Snøhvit adjacent to the field. This will help to improve the economics of the LNG project if prospects in the area are developed and tied-in to the infrastructure being developed. The inclusion of Barents Sea acreage has brought more stringent operational conditions specifically for licences in this sector of the NCS. For example, along with fisheries consultation when planning drilling or seismic activities, the Government expects, in normal operating conditions, reinjection of produced water and either re-injection or on-land disposal of mid and bottom-hole drill cuttings and associated drilling chemicals.

Finally, to raise the profile of opportunities on the NCS, the Government made geological play models publicly available on the Norwegian Petroleum Directorate's (NPD) website. Although play models have been published before, they were neither as accessible nor available to this geographic extent. This move was performed simultaneously with the announcement of the acreage in January 2004. These models will assist new or less established players on the NCS.

### Results

In the APA 2004, 28 licences, comprising 55 blocks or part blocks, were formally awarded to a total of 21 companies. The number of participants is substantially more than in the APA 2003 when 13 companies where awarded acreage and indeed has not been higher since the creation of the annual licensing awards in 1999. Originally 22 companies had applied for the APA 2004. However, Altinex Oil's application for pre-qualification as a player on the NCS was delayed, which therefore caused the company to be withdrawn from the round. For details of the specific awards refer to the tables and maps in the appendix.

Following the success of the APA 2003, which itself saw a dramatic increase in interest by the industry compared with the final annual North Sea Awards in 2002, the results of the APA 2004 once again show evidence of Norway's attractiveness to upstream players. The North Sea remains the focal point of the round with 17 licences being awarded in this sector, however, the Norwegian Sea has seen a growing interest with 10 licences awarded compared with only three during the APA 2003. Awards in the Barents Sea are limited to an area to the east of Snøhvit within comfortable distance of infrastructure tie-ins. It is expected that acreage released in the Barents and Norwegian Seas will play an increasingly important role in future APA rounds.

The announced work commitments for the 28 licences include three firm commitment wells. This is marginally up from the APA 2003 where only two licences had one commitment well in each. With the exception of two one year licences in the Norwegian Sea, the remaining licences require seismic work and its interpretation as a minimum.

In recognition by the Government that the cost of re-unitisation of fields is high, during this round, two licences, PL122C and PL073B, were awarded that contain minor extensions of existing discoveries (Marulk and Tyrihans) into the neighbouring licences. No work commitments were required, as these have already been fulfilled in the neighbouring licences.

#### Hot Blocks

Some of the most hotly contested areas were those in the south of the North Sea sector in quadrants 2 and 7. Quadrant 2 is to the east of Gyda and contains several small sized technical reserves ranging from 35 to 40 bcf of gas and 3 to 15 mmbbl of oil. As competition for block 2/2 was intense, the Ministry of Petroleum and Energy (MPE) decided to split the subsurface above and below the base Jurassic layer. As shown in the APA 2003, and indeed the 18<sup>th</sup> round, stratigraphic licences are currently a favoured way for the authorities to deal with demand for the most intensely contested blocks.

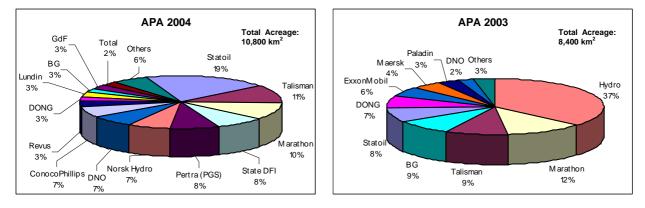
To the east of the Lomond and Everest gas fields in the UK sector lie blocks 7/4, 7/5, 7/7 and 7/10 which were also highly contested in this round. Indeed, a feature of the APA 2004 has been the number of awards adjacent to the UK/Norwegian median line. For example, out of the 17 North Sea licence awards, seven were directly adjacent to the border.

This outcome is partly in reaction to the ongoing work between the UK and Norwegian authorities aimed at simplifying the process of developing cross-border fields. Companies that are active in the adjacent UK sector have knowledge of the geological plays that cross into the NCS and cross-border tie-backs could provide economic development solutions for marginal discoveries. The award of several median line licenses will please the Norwegian authorities who are keen to exploit the significant reserves adjacent to the border.

#### **Corporate Positions**

Of the 21 companies that were awarded acreage, 11 companies (some 52%) were awarded operatorships. The following pie charts illustrate the net acreage by company in both the 2003 and 2004 APA rounds. As can be seen, there is a more even split of acreage in 2004 as the top three players received 58% of the total available acreage in 2003 versus 42% in 2004.

#### Net acreage awarded by company (%)



Statoil was awarded the most net acreage in 2004 with some 2,137 square kilometres or 20% of the area made available. The second and third placed companies, Talisman and Marathon, were awarded 1,236 square kilometres (12%) and 1,103 square kilometres (10%) of the net acreage awarded respectively. Furthermore, Statoil was awarded the most operatorships with eight (29%) of those made available in the APA 2004.

In terms of net acreage, Shell, ExxonMobil and Eni were awarded a relatively small percentage of the NCS available in the round. Given all three were in the top six in the 18<sup>th</sup> round based on their net acreage position, this reinforces the view that their focus in Norway remains principally on 'frontier' acreage where larger discoveries are likely to be made.

Together with the participation of the anticipated major players on the NCS such as Statoil and Norsk Hydro, the APA 2004 was characterised not only by the higher number of companies involved, but also by the growing contingent of smaller players in Norway. For example, Talisman, DNO, Revus, Lundin, Paladin, BG, DONG, Pertra (PGS), Endeavour Energy/OER, E.ON Ruhrgas, RWE Dea and Gaz de France all gained acreage in the round.

The average equity share awarded in the APA 2004 was 35%, compared with 56% in the APA 2003 round licences. This reverses a trend seen in recent years towards higher equity stakes and is partly due to the lower number of licences with only a sole participant.

In terms of company type, Norwegian companies (excluding the State DFI) account for 49% of the total net acreage awarded, European Union headquartered companies account for 19%, US companies account for 20% and Canadian companies (Talisman) 12%. This is comparable with 49%, 24%, 18% and 9% respectively in the APA 2003.

Although many companies were involved, the notable exceptions were BP and ChevronTexaco. The decision by BP not to participate in the APA 2004 was predictable, as the company has recently reduced its exposure to the NCS.

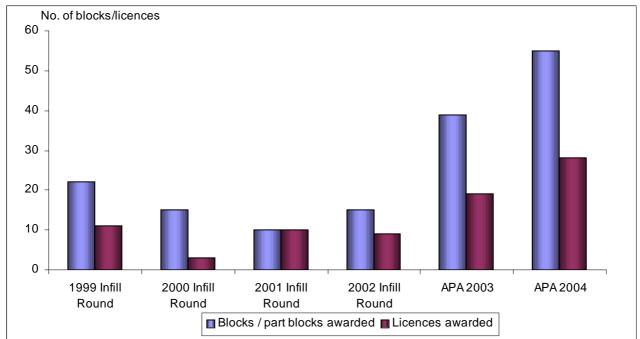
#### **State Participation**

During the APA 2003, there was no direct state participation in any of the awarded licences as acreage available was not adjacent to current fields where Petoro has an equity share nor was it thought to contain large prospects.

In 2004, however, both of these criteria were met and accordingly, acreage was taken in block 2/2 (PL331) owing to the anticipated upside and in acreage neighbouring Njord (PL347 and PL348)), Snøhvit (PL354) and within the Tampen Area (PL345). This will ensure that such business units will grow around existing fields with the same, or similar, participation.

The bulk of the State's acreage was picked up from a 20% share of PL331, which extends over some 1,694 square kilometres in the hotly contested Quadrant 2 of the North Sea, and from acreage in the Barents Sea adjacent to Snøhvit.

The State remains a significant player in licensing awards, with five non-operated licence interests. In terms of gross acreage, it also sits in second place amongst the company participants, meanwhile, by net acreage it slips to fourth position.



#### Number of licences and blocks awarded in annual mature concession rounds

# Conclusions

In the APA 2004, the Norwegian authorities have continued to facilitate a growth of interest in the NCS. Following its introduction in 2003, the APA model has been refined during this latest round and appears to continue to strike the correct balance between Government and corporate aspirations and, in doing so, has seen further improvements in the key statistics of the round. For example, the number of companies, licences and blocks awarded make the APA 2004 the most successful annual 'mature' concession round since its creation in 1999.

In the run-up to the announcement of acreage, a number of positive developments for the industry were evident that whet the appetite of players. For example, the reopening of the Barents Sea to exploration activities since its closure in 2001 and the political activities aiming to solve UK/Norwegian cross-border issues. This latter point has encouraged a number of companies to apply for licences along the median line between the UK and Norway. Interestingly, although the Norwegian Sea appears to be gaining favour with industry in terms of the growing proportion of awards, the North Sea continues to receive the greatest interest. This is perhaps unsurprising given the APA focus on more mature acreage on the NCS, however, the belief that this acreage can still deliver strong commercial upside is helping to fuel the renewed interest in Norway.

The Government quite rightly considers this round a success. Notwithstanding the continued surging interest in recent licensing awards, it has successfully introduced further steps to its imaginative APA licensing concept to encourage "rapid and efficient exploration". Of particular note is the decision to control more actively the level of fallow or dormant acreage. For example, the authorities are increasingly less likely to award acreage where there is no evidence for either prospects or leads. This conscience effort to award more focused acreage has seen a fall in the average size of licences awarded in this round.

The results of the APA 2004 again show that the NCS remains an attractive sector in which to invest. Indeed, a feature of this round has been the continued growth of a number of relatively small players in Norway, helping to fill a potential vacuum as the supermajors concentrate on more lucrative high risk/reward 'frontier' acreage.

The APA style of awards continues to capture the imagination of licensees and the 2004 round has undeniably been successful in attracting interest. In the interests of the NCS, it is hoped that the success of the APA 2004 will help to reverse the disappointing results from exploration over recent years.

# Appendix

#### Production Licences Awarded in APA 2004

Blocks	Licence	Participants	Interest (%)
2/2 & 3; 8/10A & 11A	PL331 <sup>+</sup>	ConocoPhillips* Statoil* State DFI	40 40 20
2/2S	PL332⁺	Talisman* DNO Pertra (PGS)	50 30 20
2/4E	PL333	Norsk Hydro* Statoil Total	44.5 33.3 22.2
7/4B & 5	PL334	Talisman* DNO	60 40
7/4C, 7B & 10	PL335	BG* Lundin Paladin RWE Dea	52 18 18 12
7/12B	PL336	Talisman* DONG	60 40
15/11, 12C; 16/10A	PL337	Pertra (PGS)* Marathon BG	45 30 25
16/1F	PL338	Lundin*	100
16/4A	PL339	Statoil* ExxonMobil	70 30
24/9E	PL305 B	DNO* Revus Talisman	40 30 30
24/9B	PL340	Marathon* ConocoPhillips Lundin	65 20 15
24/9D, 11 & 12	PL341	DNO* Revus Talisman	40 30 30
25/1 & 2E	PL342	Norsk Hydro*	100
29/9B; 30/7B & 10B	PL343	Marathon* Pertra (PGS)	65 35
31/2B	PL311 B	Marathon* Gaz de France	75 25
33/9A & 6A; 34/4D	PL344	Statoil* Revus	21.875 78.125
34/7C & 8B	PL345	Statoil* State DFI	70 30
6406/3E	PL073B	Statoil* Total Norsk Hydro	46.8336 26.6664 12.0000

6407/5B	PL346	Eni ExxonMobil Shell* DONG	7.9000 6.6000 70 30
6407/7C, 8B, 10B & 11B	PL347	Norsk Hydro* Gaz de France E.ON Ruhrgas Paladin Endeavour Energy / OER State DFI	30 20 17.5 17.5 7.5 7.5
6407/8C & 9E	PL348	Norsk Hydro* Gaz de France E.ON Ruhrgas Paladin Endeavour Energy / OER State DFI	30 20 17.5 17.5 7.5 7.5
6407/11C & 12B	PL349	Marathon* State DFI	65 35
6507/6D	PL350	Statoil* Norsk Hydro E.ON Ruhrgas	55 35 10
6508/1D & 2A	PL351	Statoil* Norsk Hydro	60 40
6607/12C	PL122 C	Eni* Statoil DONG	20 50 30
6608/7A & 8A	PL352	Statoil* DONG	70 30
6608/10C	PL353	Hydro*	100
7121/6A, 8A, 9A; 7122/4A, 5A & 6	PL354	Statoil*	33.53
*0=====		Total Gaz de France Amerada RWE Dea State DFI	18.40 12.00 3.26 2.81 30.00

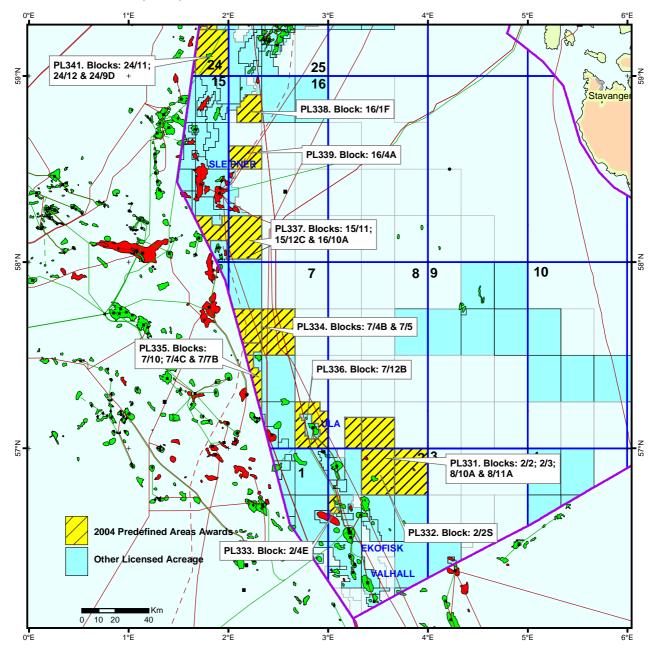
\*Operator

+Stratigraphic licence

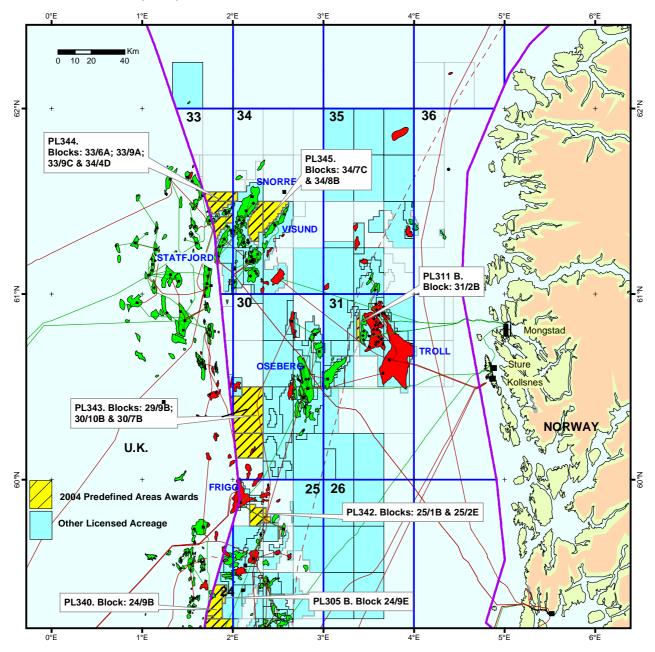
Company	No. of Licence Operatorships	No. of Non-Op'd Licence Interests	Total No. of Licence Interests	Gross Acreage Awarded (km <sup>2</sup> )	Net Acreage Awarded (km <sup>2</sup> )	% of Total Net Acreage Awarded
Statoil	8	3	11	4,794	2,137	19.8
Talisman	3	2	5	2,432	1,236	11.5
Marathon	4	1	5	2,055	1,103	10.2
State DFI	-	5	5	3,871	867	8.0
Pertra (PGS)	1	3	4	2,428	832	7.7
Norsk Hydro	5	3	8	1,584	757	7.0
DNO	2	2	4	1,972	732	6.8
ConocoPhillips	1	1	2	1,859	711	6.6
Revus	-	3	3	815	370	3.4
DONG	-	4	4	1,276	320	3.0
Lundin	1	2	3	590	280	2.6
BG	1	1	2	882	277	2.6
Gaz de France	-	4	4	1,900	276	2.6
Total	-	3	3	1,399	261	2.4
Shell	1	-	1	575	149	1.4
Paladin	-	3	3	761	134	1.2
E.ON Ruhrgas	-	3	3	818	123	1.1
ExxonMobil	-	2	2	286	82	0.8
RWE Dea	-	2	2	1,524	62	0.6
Amerada Hess	-	1	1	1,317	43	0.4
Endeavor Energy / OER	-	2	2	554	41	0.4
Eni	1	1	2	22	2	<0.1
Total	28	-	-	33,717	10,797	100

#### **Company Positions and State Participation**

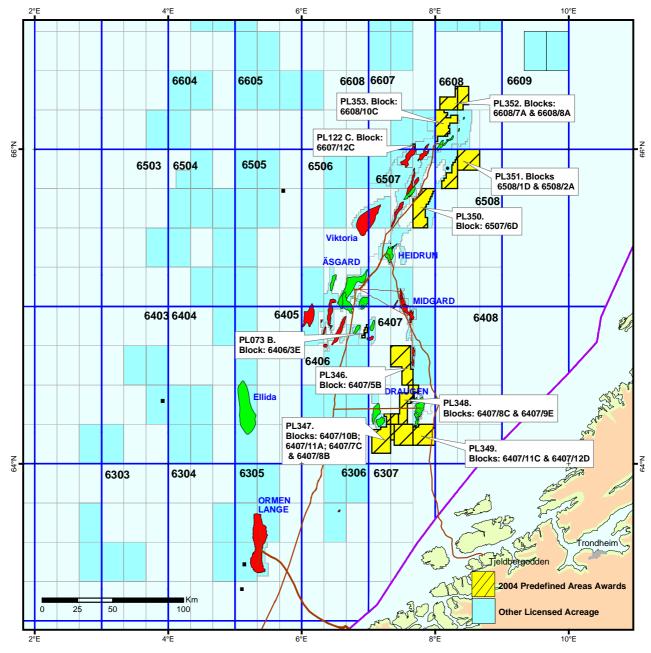
APA 2004 - North Sea (South)



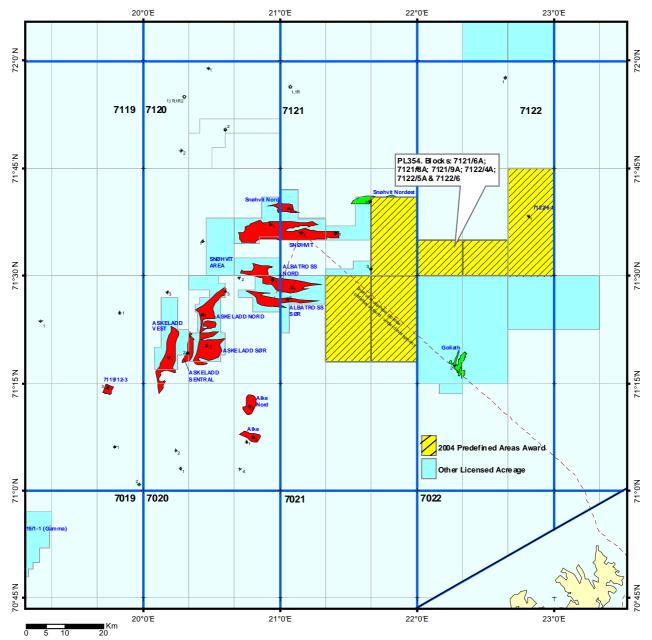
APA 2004 - North Sea (North)



APA 2004 - Norwegian Sea



#### APA 2004 – Barents Sea



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