

# ANNUAL STATEMENT OF RESERVES 2011 DNO INTERNATIONAL ASA

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Oslo, 30 April 2012

# ANNUAL STATEMENT OF RESERVES 2011- DNO INTERNATIONAL ASA

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## 1 Introduction and summary

#### 1.1 Introduction

This report has been prepared in accordance with the Oslo Stock Exchange listing and disclosure requirements, circular no. 9/2009. The report provides the status of hydrocarbon reserves and contingent resources as of 31.12.2011 for DNO International ASA's ("DNO") license portfolio, and the assessment has been carried out by DeGolyer and MacNaughton (D&M) – refer to section 3.4.

The report does not include the assets acquired following the merger with RAK Petroleum PCL's Middle East and North Africa operating subsidiaries as that transaction closed in January 2012.

## 1.2 Summary

As presented in table 1 in the Annex, the reported 2P/P50 reserves for DNO as of 31.12.2011 are 371.9 million barrels of oil equivalents on a working interest basis (exclusive of royalty). This represents an increase of 91.5 % compared to the 194.2 million barrels reported the year before. The main reason for the increase is the upward revision of the estimate for remaining reserves at the Tawke field in the Kurdistan region of Irag.

Total P50 reserves and contingent resources, corresponding to class 1-5 (Norwegian Petroleum Directorate classification) are now 392.1 million barrels, up from 206.7 million barrels at year end 2010.

## 2 Operations Summary 2011

#### 2.1 Production

The average WI production to DNO in 2011 was around 40,000 bopd, an all time high to the Company. The 2011 exit WI production to the Company was around 42,000 bopd.

The monthly production levels during the year are affected by the variable deliveries from the Tawke field in Kurdistan. A maximum monthly WI production to the Company of 51,000 bopd was achieved in May when the Tawke field was producing around 70,000 bopd (gross), its current capacity level.

The production from Yemen has shown a decline as expected, with a 2011 exit WI production to DNO of around 4,000 bopd.

## 2.2 Field development and appraisal

#### 2.2.1 Kurdistan region of Iraq

At the Tawke field, a comprehensive work was undertaken to further enhance the reservoir model based on results from new studies and evaluations, and incorporating more recent production data and information. This work has resulted in a significant increase in the estimated recoverable reserves for the Tawke field.

Towards the end of the year, the well T-16 was spudded with the objective to appraise the Northern flank of the Tawke field. The result from this well was not available at year-end, hence it was not incorporated in the reserve estimates at year end 2011.

In the Erbil license, the Bastora-1/1A was spudded late in 2010 and later side-tracked as the first horizontal well in Kurdistan. The well encountered oil and has been on extended well test since May. A comprehensive study has been initiated to incorporate well information into the reservoir models, to improve the quality of the predictions for the future behaviour of this reservoir.

A declaration of commerciality for the Benenan and Bastora discoveries was filed on 25 June 2011 and a field development plan was submitted in December. The volumes from Bastora have accordingly been reported as a discovery in 2011, and the combined Benenan/Bastora field has been included as reserves in class 3 (under development).

## 2.2.2 Yemen

There was an overall decline in production from Yemen as expected. As a result of the current unrest in the country there was no new infill- or development wells drilled in Yemen during 2011, but the production operations, including workovers in existing wells, continued as normal.

At the Nabrajah field in Block 43, the project to replace the diesel-fuelled generators to gas engines continued and is expected to be completed during the 2nd quarter 2012. This will contribute to future opex cost savings in addition to positive environmental effects.

In Block 47, the Yaalen development project has been delayed. Phase 1 of the development will include local processing facilities with a gross capacity of 5,000 bopd with trucking of the oil to the Nabrajah installations in the neighbouring Block 43 for further export into the existing pipeline system. The revised project schedule suggests that first oil will be exported in the 4th quarter of 2013.

## 2.3 Exploration

#### 2.3.1 Kurdistan region of Iraq

The Summail-1 well in the Dohuk license confirmed gas in the Cretaceous formation and heavy oil in the Jurassic formation. A 3D seismic acquisition programme for the entire structure will be undertaken in 2012 to further appraise these discoveries.

Drilling of the Peskhabir-1 well in the Tawke license commenced on 4 September. The objective of the well is to test the hydrocarbon potential in the Cretaceous, Jurassic and Triassic formations. The results from the well are expected in the second quarter of 2012.

#### 2.3.2 Yemen

In Block 47, the Alsaiq-1 exploration well was spudded in March. Oil shows were encountered and tested but did not show hydrocarbons to the surface. The well has been plugged and abandoned as a dry well.

In Block 72, Total farmed in to the license in and took over as operator. The exploration well Gabdain-1 tested oil early 2011, and further evaluation is undertaken to define additional possible targets for further exploration or appraisal drilling.

#### 2.3.3 Mozambique

The Inhaminga High-1 exploration well commenced in February and was tested in a possible hydrocarbon interval. However, no flow was achieved during the test, and the well was abandonded as a dry well. The license has now been relinquished and DNO has closed down its operations in the country.

#### 3 MD&A

#### 3.1 Disclaimer

This Management's Discussion and Analysis ("MD&A") includes and is based, inter alia, on forward-looking information and statements that are subject to risks and uncertainties. We wish to caution that this information and these statements and estimates are only predictions. The actual events or results may differ materially. These statements and this MD&A are based on current expectations, estimates, and projections about technical, geological, geotechnical and economic assumptions on which the reserve and resource estimates are based as well as global economic conditions, the economic conditions of the regions and industries that are major markets for DNO (including subsidiaries and affiliates) and its lines of business. These expectations, estimates and projections are generally identifiable by statements containing words such as "expects", "believes", "estimates" or similar expressions. Important factors that could cause actual results to differ materially from those expectations include, among others, technical, geological and geotechnical conditions, economic and market conditions in the geographic areas and industries that are or will be major markets for DNO's businesses, oil prices, market acceptance of new products and services, changes in governmental regulations, interest rates, fluctuations in currency exchange rates and other such factors that may be discussed from time to time in the MD&A. Although DNO believes that its expectations and this MD&A are based upon reasonable assumptions, the company can however give no assurance that those expectations will be achieved or that these actual results will be as set out in the MD&A. DNO makes no representation or warranty, expressed or implied, as to the accuracy, reliability or completeness of the MD&A, and neither DNO nor any of its directors, officers or employees will have any liability to the readers of this MD&A.

#### 3.2 Assumptions and methodology

DNO reserve updates are done in accordance with standard guidelines advised by the Society of Petroleum Engineers (SPE)<sup>1</sup>,<sup>2</sup> and comply with the Oslo Stock Exchange disclosure requirements, circular no. 9/2009.

In general, the estimation and auditing of reserves are undertaken in accordance with generally accepted engineering and evaluation principles. However, it should be noted that reserves information is imprecise due to inherent uncertainties in, and the limited nature of data upon which the reserves are predicated.

Accordingly, DNO has set up an independent Reserve Board, consisting of competent professional geoscientists, engineers and economists to facilitate the reserve process and ensure compliance with standards and procedures. The Reserve Board collects and coordinates all technical data in connection with the updates, and reports the total portfolio of reserves and resources to the Managing Director and the Board for review and approval. The procedure set forth in the estimating and auditing of the reserves is based on internal corporate procedures. The procedures describe the work process with clearly defined roles and responsibilities, including the use of external auditors when deemed necessary.

For 2011 reporting, DeGolyer and MacNaugthon were appointed to carry out the reserve assessment for DNO's assets. Based on their input for the technical reserves, economic parameters like PSA/PSC terms and oil price forecast has been included to calculate the economical recoverable reserves.

<sup>&</sup>lt;sup>1</sup> For a full description of these guidelines and definitions, see www.spe.org

<sup>&</sup>lt;sup>2</sup> http://www.spe.org/industry/reserves/docs/Reserves\_Audit\_Standards\_2007

The reserves are restricted to those volumes that are expected to be economically recovered prior to the expiry date of the licenses.

All fields in production have been classified as "developed assets". For the Yemen assets we have included short term investments in future production wells. For the Tawke field, which has an expected lifetime up to 2031, we have also made an assumption on future investments in facilities, pipelines and wells in order to recover the volumes reported.

#### 3.3 Oil price

The forward curve for Brent blend as of 31.12.2011 adjusted for quality differences has been used for economic evaluation of the reserves, and calculation of net entitlement reserves.

For fields in the decline phase, with relatively limited remaining field life, fluctuations in the oil price could have a significant impact on the profitability and hence the economic cut-off time for production from such fields.

Oil from the Tawke field that is being sold domestically achieves a price considerably lower than the international crude oil price. Oil export through the Iraqi pipeline system is delivered to the international market.

#### 3.4 Ownership

DNO's operations in Yemen and the Kurdistan region of Iraq are regulated by the governments through Production Sharing Agreements (PSAs) and Production Sharing Contracts (PSCs) respectively. Under these agreements/contracts, the ownership to unexploited petroleum resources remains with the government, whereas exploration and production is carried out by international oil companies. The PSA/PSC typically is a contract between an oil producing company and the host government which governs the rights and duties of both parties in respect of the operations of a producing block/area, and in particular governs how the revenues from oil produced are shared between the government and the contracting oil companies.

Under the PSAs/PSCs, DNO along with other working interest holders typically bear all risks and costs of exploration, development and production. In return, if exploration is successful, DNO recovers the investments and operating costs from the Cost Oil terms of the PSA/PSC which is a percentage of the produced and sold quantities after deduction of royalty. DNO is also entitled to receive a share of the produced quantities in addition to the Cost Oil element, which is referred to as Profit Oil or Production Sharing Oil. The Profit Oil is shared between the paying partners and the government according to the PSA/PSC.

The sum of the Cost Oil entitlement (which may be equal to DNO's working interest, but can also include the working interests of other parties if such other parties have their costs carried by DNO) and the Profit Oil entitlement attributable to DNO's working interest represent the total entitlement to DNO of the oil produced under a PSA/PSC. The government typically is entitled to its share of oil produced firstly by a Royalty percentage, and then by its share of the Profit Oil after the Cost Oil entitlement to the paying partners is deducted from the produced oil. In certain cases the government may have a working interest of a PSA/PSC (typically Carried Interest) through a government controlled enterprise, and in which case the government will receive its share of the Profit Oil in line with the other interest holders of the PSA. The sum of Royalty, government share of Profit Oil, and government controlled enterprise share of Profit Oil (if any), represents the "government take" of oil produced under a PSA/PSC.

In Kurdistan, DNO's participating interest in the Tawke PSC is 55% and DNO also funds a carried government interest of 20%. The paying interest share for DNO is therefore 75%.

DNO's share of the profit oil to the paying partners is 68,75%, and hence DNO's working interest share will change over time due to the variation in cost oil/profit oil ratio. In table 1 and 3, the working interest estimates for the Yemen and the Kurdistan fields include DNO's share of cost oil resulting from carried interest. The net entitlement volumes in table 2 are based on economic evaluations of the PSAs/PSCs regulating DNO's operations, and include a volume related to the notional tax paid on behalf of the contractors by the government.

DNO is of the opinion that working interest volumes are better for comparison of hydrocarbon reserves across countries and regions which have different tax regulations or tax regimes. The reserve development volumes shown in table 3 are therefore based on working interest. Net entitlement volumes are based on forecasts concerning cost oil and profit oil, therefore these volumes are more impacted by estimates related to future costs and oil prices. The net entitlement volumes will therefore fluctuate over time, without any changes in the underlying reserve figures (discoveries, revisions and production).

#### 3.5 Independent expert assessment of reserves

As a part of the process in preparation for the merger of RAK Petroleum MENA assets into DNO, D&M was contracted to undertake a 'competent person's report' (CPR) both for DNO assets as well as the RAK MENA assets, as of 30.06.2011. The total remaining 2P/P50 reserves related to DNO's assets were estimated by D&M as of this date at 354.5 million barrels of oil equivalents on working interest basis. Similarly the total remaining 2P/P50 reserves related to the RAK MENA assets were estimated by D&M as of this date at 52.0 million barrels of oil equivalents on a working interest basis.

D&M was then contracted to undertake the yearly reserve assessment for all DNO assets as of 31.12.2011. The total remaining 2P/P50 reserves to DNO at year-end 2011 are by D&M estimated at 371.9 million barrels of oil equivalents, on a working interest basis (exclusive of royalty). This is an increase of 91.5 % from the year before.

The reason for the increase in the reserve estimates during 2011 is the higher estimated reserves in the Tawke field in Kurdistan region of Iraq, and in section 3.5.1 below the development in the reserve estimates since year-end 2010 for the Tawke field is presented.

The assets acquired by DNO following the merger with RAK Petroleum PCL's Middle East and North Africa operating subsidiaries were transferred in January 2012, and are therefore not included in this report. The Company has now commissioned D&M to prepare an updated evaluation of these assets. D&M will also undertake a further revision of the Tawke reserves incorporating the latest results from the Tawke-16 appraisal well and other drilling and testing currently underway.

The results of these additional reserve revisions undertaken by D&M are expected to be available in the near future, and will subsequently be disclosed to the market.

#### 3.5.1 Development in Tawke reserve estimates during 2011

The increase in reserves in the Tawke field from 2010 to 2011 is based on a new reservoir model incorporating updated geological and reservoir technical information and evaluations. This includes enhanced seismic interpretation, extensive pressure monitoring in individual wells and new evaluation of previously collected log – and core data. Also, more recent production data has been incorporated in the new reservoir model to produce revised forecasts of the future behavior of the field, where more proactive reservoir management measures have been accounted for particularly with respect to recompletion of wells and shut-off of water producing zones. The combined effects of this new and extensive work have resulted in an increase in the estimated recovery factor for the Tawke field.

Following the release of the ASR for 2010, DNO contracted BeicipFranlab (BF) to undertake an intermediate update of the reserves in the Tawke field based on the results from this new work. Based on the intermediate assessment undertaken by BF the gross ultimate P50 reserves in the Tawke field were estimated at 636 million barrels, which was reported to the market in July 2011.

In the CPR prepared by D&M as of 30.06.2011 the gross ultimate 2P/P50 reserves in the Tawke field was placed at 545 million barrels.

Further the gross ultimate 2P/P50 reserves in the Tawke field were estimated by D&M at 615 million barrels at 31.12.2011.

None of these reserve estimates include the effects of increased oil recovery methods. DNO has initiated external studies to evaluate the potential for further improvement of the recovery of oil from the Tawke field.

In the table below the development in the gross ultimate 2P/P50 reserve estimates for the Tawke field since year-end 2010 is presented.

Tawke gross ultimate reserves (P50)	ASR	Int. review	CPR	ASR
	2010	July 2011	Sep 2011	2011
	BF	BF	D&M	D&M
Million boe	306	636	545	615

## 4 Reserves per field

Volumes classified as reserves are those quantities of petroleum, which are anticipated to be commercially recovered from known accumulations from a given date forward to the end of the field life and within the license period.

A summary of the remaining proved and probable reserves per field as of 31.12.2011 is given in the Annex, where table 1 is on working interest basis and table 2 is on net entitlement basis. Table 3 shows a reconciliation of the changes in the working interest reserves from 31.12.2010. All working interest and net entitlement volumes stated are net of royalty.

### 4.1 Kurdistan region of Iraq

#### 4.1.1 Tawke PSC

The estimated gross ultimate 2P/P50 reserves for the Tawke field at year-end 2011 is 615 million barrels, compared to 306 million barrels last year. The year-end 2011 figure include 25 million barrels produced beyond 2031 (the expiry of the Tawke PSC. These volumes are currently classified as contingent resources (class 4). However, necessary wells are expected to be drilled to produce these volumes within the license period.

The produced volumes from the Tawke field in 2011 were 19 million barrels and aggregated gross production at year end 2011 is 32 million barrels. Remaining gross ultimate reserves are consequently 558 million barrels (including royalty) and 502 million barrels (excluding royalty). Similarly DNO's working interest share of the remaining reserves (excluding royalty and within the license period) are estimated at 346 million barrels.

There are plans to build additional facilities at the Tawke field and to drill additional development wells required to build production capacity and to achieve optimal drainage of the reservoir.

#### 4.1.2 Erbil PSC

The Bastora and Benenan discoveries both carry large oil volumes in place, however the heavy oil and tight formation yields low recovery factor. The successful testing of the horizontal well Bastora-1A has however proven that high rates and sustainable oil production can be achieved. In order to optimize the drainage, DNO will start the development with drilling of two horizontal wells and thus gain vital information of well placement and drainage efficiency.

Gross ultimate reserves are estimated to 35 million barrels by D&M at year-end 2011, and DNO's working interest share of the remaining reserves (excluding royalty) are estimated to 16 million barrels.

#### 4.2 Yemen

In Yemen, DNO currently holds interests in 5 licenses, 3 of which as operator. Currently, five fields in three blocks are in production. All of the producing fields have experienced reduced production in 2011 compared to 2010, but the observed decline is slightly lower than anticipated. Due to civil unrest in Yemen during 2011, the drilling operations were put on hold, so no new wells came on production during 2011.

#### 4.2.1 Block 32

#### **Tasour**

In the DNO operated block 32, the Tasour field has been producing since November 2000. Several new appraisal and development wells have been drilled over the years resulting in increased reserves and production. The remaining gross reserves are estimated at 2.0 million barrels of oil, which is a slight increase from the year before, mainly because of the inclusion of one new well to be drilled in 2012. DNO's WI share is estimated to 0.8 million barrels.

#### Godah

The Godah field was discovered in the first quarter of 2006, and two appraisal wells were drilled later the same year. The field was put on production in October 2006. Since the production start, eight more wells were drilled into the reservoir and put on production, while two wells have been shut in due to excessive water-cut. The remaining economic gross reserves are 1.6 million barrels of oil, which is a slight reduction from last year. DNO's WI share is estimated to 0.7 million barrels. No new wells have been assumed for the Godah field.

## 4.2.2 Block 43

### Nabrajah

Block 43 is operated by DNO. The Nabrajah field has been in production since July 2005. Oil is produced both from the Qishn formation sandstone reservoirs and from the deeper Shuqra formation fractured carbonates and fractured basement. Nabrajah-5 is the only well producing from the deep reservoirs. After drilling of Nabrajah-10 in 2009/2010, it was concluded that more work is needed to map and understand the complex deeper formations in Nabrajah. The remaining economic gross reserves in the Nabrajah field are now estimated to 3.6 million barrels, with DNO's WI share 2.4 million barrels.

## 4.2.3 Block 47

#### Yaalen/Sharnah

The Yaalen field was first drilled in 2008, and confirmed as a commercial discovery by Yaalen-3 in 2010. The license partners committed to a phase 1 development in December 2010, and in March 2011, a Notice of Commercial Discovery was submitted to the authorities. The gross

ultimate recoverable reserves for the Yaalen phase 1 development are estimated to 7.4 million barrels, with DNO's WI share 3.7 million barrels. A phase 2 development, including Sharnah, has been included as contingent resources – refer to section 5.

#### 4.2.4 Block 53

#### **Sharyoof**

Block 53 is operated by Dove Energy Ltd. The Sharyoof field production started in December 2001. The field development plan was based on an initial gross reserve estimate of 25 million barrels of oil from the Qishn reservoir. Successful appraisal and development drilling has contributed to increased production and reserves since the start of production, gross ultimate recovery is currently estimated at 48 million barrels of oil. No new wells were drilled at the Sharyoof field in 2011. Remaining economic gross reserves as of 31.12.2011 were 2.5 million barrels of oil, with DNO's WI share 0.8 million barrels.

#### **Bayoot**

South of the Sharyoof field, oil was discovered in fractured basement and Madbi sandstones and carbonates by the three exploration wells Bayoot SW-2, Hekma-1 and Bayoot S-1. Oil production commenced September 2006. The wells Bayoot-7, 8, 9 and -10 were put on production during 2010. After drilling of Bayoot-10 there has been a pause in the drilling activities in the license. The plan is to resume drilling in the 1<sup>st</sup> half of 2012. The remaining gross reserves per 31.12.2011 are 3.3 million barrels, assuming two more wells to be drilled during 2012. DNO's WI share is estimated to 1.1 million barrels. The estimate is significantly lower than reported by the operator, who reports 7.3 million barrels for the Bayoot field, due to different expectations of future drilling success.

## **5** Contingent Resources

Contingent resources are those quantities of petroleum, which are estimated, on a given date, to be potentially recoverable from known accumulations, but which are not currently considered to be commercially recoverable, or where a development plan has not yet been submitted. DNO's reported contingent resources are included as resources class 4 (in planning phase) and class 5 (development likely) under NPD's classification system.

D&M has in their evaluation of the Tawke reserves indicated a gross volume of 25 million barrels to be produced after 2031, which is the end of the license period. These volumes have been included in contingent resources, class 4. The Euphrates formation at the Tawke field contains additional marginal resources to the main field, and is expected to be developed at a later stage. These volumes are also included in contingent resources, class 4.

In Block 47 in Yemen, the second phase development of the Yaalen field is planned to include the Sharnah discovery which was made in 2008. There has been no change in the estimated gross recoverable volumes in Sharnah during 2011. The volumes have been classified as contingent resources, class 5.

The Venus discovery in Block P in Equatorial Guinea is estimated to hold 30 million barrels gross, with DNO's WI share of 1.5 million. The volumes are classified as contingent resources class 5 with a field development plan being prepared by the new operator. At the time of reporting, DNO has signed a sales agreement for divestment of its share in Block P.

## 6 Annex

## Table 1 - Remaining working interest reserves per field as of 31.12.2011

Reserves						
	Proved (1P)			Proved + Probable (2P)		
Region; License; Field	Oil Gross	Interest	Net Oil	Oil Gross	Interest	Net Oil
	(mmstb)	(%)	(mmstb)	(mmstb)	(%)	(mmstb)
Developed Assets Kurdistan						
Kurdistan Tawke PSC Tawke	152,7	68,9%	105,3	502,3	68,9%	346,3
Kurdistan Erbil PSC Bastora				15,2	51,8%	7,9
Total Developed Kurdistan			105,3			354,1
Under Development Assets						
Kurdistan Erbil PSC Benenan	6,09	51,8%	3,2	15,9	51,8%	8,2
Kurdistan Total Developed						
+Under development			108,4			362,3
Developed Assets Yemen						
Yemen Block32 Tasour	1,68	41,0%	0,7	2,0	41,0%	0,8
Yemen Block32 Godah	1,00	41,0%	0,4	1,6	41,0%	0,7
Yemen Block43 Nabrajah Qishn	1,75	66,7%	1,2	3,6	66,7%	2,4
Yemen Block53 Sharyoof	1,49	32,6%	0,5	2,5	32,6%	0,8
Yemen Block53 Bayoot	2,26	32,6%	0,7	3,4	32,6%	1,1
Total Developed Yemen			3,5			5,8
Under Development Assets						
Yemen Block47 Yaalen	2,92	50,0%	1,5	7,4	50,0%	3,7
Yemen Total Developed						
+Under development			4,9			9,5
DNO International ASA			113,4			371,9

- 1) All volumes represent pre-tax share after royalty.

  Net figures to DNO include DNO's share of cost oil resulting from carried interest.
- 2) At the Tawke field the working interest share varies over time.

Table 2 - Remaining reserves per field as of 31.12.2011 - net entitlement

Reserves 2P (P50 estima	ite)				
Developed assets					
	Oil Gross	Gas	Oil Gross		
	(mbbl)	(bcm)	Mbbl	Interest %	Net mbbl
Block 32 Tasour	1.4		1.4	41.00 %	0.6
Block 32 Godah	1.1		1.1	41.00 %	0.5
Block 43 Nabrajah	2.2		2.2	66.67 %	1.5
Block 53 Sharyoof	1.4		1.4	32.60 %	0.4
Block 53 Bayoot	1.8		1.8	32.60 %	0.6
Tawke	128.8		128.8	68.93%	88.8
Total developed					92.3
Under development					
	Oil Gross	Gas	Oil Gross		
	(mbbl)	(bcm)	Mbbl	Interest %	Net mbbl
Block 47 Yaalen	4.7		4.7	50.00 %	2.3
Benenan/Bastora	14.5		14.5	51.75%	7.5
Total under development					9.8
	Oil Gross	Gas	Oil Gross		
	(mbbl)	(bcm)	mbbl	Interest %	Net mbbl
Total all fields					102.1

All volumes represent pre-tax share excluding royalty.

The net entitlement reserves in Yemen and Kurdistan region of Iraq are based on economic evaluation of the Production Sharing Agreements/Contracts and include a volume related to the notional tax paid on behalf of the contractors by the Government. The estimates include DNO's share of cost oil resulting from carried interest.

For Tawke, DNO's share is 88.8 mbbl and includes 100% cost oil to DNO until cumulative gross revenues from the field reach USD 484 million (USD 290 million to DNO), thereafter standard PSC terms apply.

Table 3 - Reserve development (working interest)

Million barrels	Developed Assets			evelopment onal assets)	TOTAL	
	1P/P90	2P/P50	1P/P90	2P/P50	1P/P90	2P/P50
Balance as of 31.12.2010	106.2	190.8	1.3	3.4	107.5	194.2
Discovery			+ 3.2	+ 7.9	+ 3.2	+ 7.9
Production	- 14.6	- 14.6	-	-	- 14.6	- 14.6
Revision of previous estimates	+17.3	+ 184.4		-	+ 17.3	+ 184.4
Balance as of 31.12.2011	108.9	360.6	4.5	11.3	113.4	371.9

The revision of developed assets is related to a new model simulation for the Tawke field in Kurdistan region of Iraq. Revisions have also been made on all producing fields in Yemen, with no significant effects.

The estimates are DNO's share pre-tax excluding royalty, and include DNO's share of cost oil resulting from carried interest (reference is made to section 3.2 and table on page 11).