LISTING AND DISCLOSURE REQUIREMENTS FOR OIL AND NATURAL GAS COMPANIES

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1. Introduction

1.1 General

Oslo Børs hereby publishes a revised set of guidelines and requirements for oil and natural gas companies, replacing Circular 2/2007. The Circular covers:

1) the specific listing requirements for oil and natural gas companies applying for listing on Oslo Børs or Oslo Axess;
2) an amended interpretation of the rules regarding deferred disclosure of inside information in connection with publication of exploration drilling results; and
3) the disclosure requirements and guidelines of exploration drilling, hydrocarbon reserves and contingent resources for oil and natural gas companies currently listed on Oslo Børs or on Oslo Axess.

A draft version of the Circular was distributed to oil and natural gas companies listed on Oslo Børs or on Oslo Axess and other interested parties 16 June 2009 as part of a consultation process. We received written responses from the following companies:

- StatoilHydro ASA
- PA Resources AB
- Det norske oljeselskap ASA
- DNO ASA
- Aker Exploration ASA
- Norse Energy Corporation ASA
- Oljedirektoratet (the Norwegian Petroleum Directorate)
- PwC
- Deloitte

Following the Executive Summary set out in Section 1.2, the companies covered by the Circular are defined in Section 1.3. In Section 1.4, the important distinction between reserves and resources is presented. The main responses received in the consultation process are discussed in Section 1.5.

With effect from 1 January 2008, natural oil and gas companies applying for listing on Oslo Børs or on Oslo Axess must prepare reserve reports as further specified in the Listing Rules and Oslo Axess Listing Rules (the Listing Rules)[1]. In Section 2 below, some explanatory comments to these requirements are provided, and some minor adjustments to be implemented in the Listing Rules as from 1 January 2010 are presented.

In Section 3, the Circular briefly discusses the application of the general disclosure requirements for inside information set out in the Norwegian Securities Trading Act[2] (STA) to oil and natural gas companies, and deferred disclosure of exploration drilling in particular.

In Section 4, specific guidelines are laid down for the listed companies' reporting of reserves and resources. The guidelines will become mandatory requirements with effect from 1 January 2010.

For Oslo Børs the emphasis throughout 2010 will be on providing advice and guidance for the companies in the implementation phase, and less so on the enforcement of the requirements. Oslo Børs may also grant exemptions from the expert report-requirements.

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[1] Rules for the admission of shares to stock exchange listing and Rules for the admission of shares to listing on Oslo Axess, available at http://www.oslobors.no/ob_eng/Oslo-Boers/Regulations/The-Issuer-Rules

[2] Act of 29 June 2007 No 75, available at http://www.oslobors.no/ob_eng/Oslo-Boers/Regulations/The-Issuer-Rules

The framework drawn up in the Circular is envisaged to hold benefits for both issuers and investors. Not only may increased comparability of reserves data be of great value to investors, but increased accessibility of reserves data (and its inherent value and bearing on the share price) and a more widespread understanding of relevant technical information might also attract more investors and liquidity to individual issuers and to the sector as a whole.

The Executive Summary in the next section (section 1.2) presents the main features of the Circular.

1.2 Executive summary

This Circular deals with oil and natural gas companies as defined in Section 1.3.

In Section 2 the Circular presents the specific reserve report requirements that the company must fulfil in order to be listed on either Oslo Børs or Oslo Axess (these criteria are identical for both markets). The requirements apply for all mineral companies and are basically in line with the reserve report requirements set out in the prospectus rules. With effect from 1 January 2010 the requirements will be made applicable also to *exploration companies*. Such reserve reporting should be confirmed by independent third party experts, with an expert report.

The general ongoing obligation to disclose inside information for listed companies and companies applying for listing, together with certain questions related to oil and natural gas companies are discussed in Section 3. The *result of drilling of exploration and appraisal wells* is a special feature for the oil industry. Such results very often constitute inside information, and an important question is whether any obligation to await pre-clearance of press statements from the Norwegian Petroleum Directorate may entitle the companies to choose deferred disclosure of inside information. Oslo Børs has changed its prior position communicated in Circular 2/2007, and assumes that the company may not necessarily defer disclosure in such situations.

Specific reserve reporting requirements for listed companies are set out in Section 4. Until now, such reserve reporting has only been a recommendation as set out in Circular 2/2007. With effect from 1 January 2010 it will be a *mandatory requirement* that oil and natural gas companies report their reserves annually as a continuing obligation. Reporting of any *contingent resources* is optional in the ASR. Thus, the status of the reserves and contingent resources (optional) per yearend 2009 will have to be published in 2010.

Listed companies should report the reserves and contingent resources (optional) in an *Annual Statement of Reserves* ("ASR"). The ASR should be published at the latest simultaneously with publication of the annual report, or alternatively at such date specified in the reserve reporting regulations that the company is subject to on another exchange or marketplace.[3] The ASR should include *reserves* in a table, while *resources* should not be presented in a table format. *Contingent* resources may however be quantified (optional) in the management discussion and analysis (the MD&A, see below) if this is relevant. For prospects, leads, resources under evaluation and resources whose development is considered unlikely based on current conditions, no *quantitative* information should be disclosed.

The ASR should furthermore include *a narrative* (management discussion and analysis, the MD&A) with key assumptions, and a confirmation from an *independent* expert as the main rule. The ASR should be signed by the CEO of the company. Should the company's own reserve estimate for a field differ substantially from the reserve estimates made public by the operator of the field, the deviation should be explained to the extent possible.

[3] The ASR should be published under category "Petroleum Reserves".

Companies being subject to reserves reporting obligations on other exchanges or regulated marketplaces where their securities are listed, such as companies filing reserves estimates in accordance with SEC requirements in the US, may publish the relevant reports as a substitute for the ASR.

When discussing reserves and resources in its on-going communication with the market (e.g. in news releases and presentation material) listed companies should always *incorporate a reference* to the most recently filed ASR.

Annex I explains - in an educational way - the rationale for classifying reserves and resources, and compares the main classification systems that currently are applied worldwide. Annex II deals - in more technical terms - with the estimation of reserves and resources, and the handling of uncertainties. Annex III provides the reporting format of reserves, to be applied in the annual statement of reserve reporting. Annex IV provides definitions, abbreviations, units and conversion factors for the industry. Note that especially annex I should help new investors understand the basics of the classification of reserves and resources.

Exploration companies should prepare an ASR to the extent it is relevant according to this Circular.

Finally, it should be noted that new definitions from Society of Petroleum Engineers (SPE) were approved by SPE in March 2007. The full set of the SPE definitions (the SPE/WPC/AAPG/SPEE *Petroleum Resources Management System document,* now referred to as the "SPE PRMS") is incorporated only by reference (see Annex I). In this Circular the SPE PRMS definitions are used as a point of reference when discussing reserves, resources and other key concepts, but this does not preclude the use of other classification systems by the companies.

1.3 Application of the Circular

This Circular applies to oil and natural gas companies with shares listed on Oslo Børs or Oslo Axess and to companies which have applied for such listing as further specified in Section 2, 3 and 4.

Please note, however, that the amendment in the Listing Rules set out in Section 2 below, will cover both oil and natural gas companies and other mineral companies.

References to 'Oslo Børs' or 'the stock exchange' should be read as references to both Oslo Børs and Oslo Axess. The requirements in this Circular are the same irrespective of whether the company is listed on Oslo Børs or Oslo Axess.

Oil and natural gas companies are those companies whose principal activity is or is planned to be the exploration and/or production of hydrocarbons.[4]

Reporting obligations for companies involved in the exploration and extraction of minerals other than hydrocarbons will be covered by a circular for mining companies which is presently under preparation.

The Circular applies without regard to whether the company has Norway as its home or host state, cf. Section 5-4 of the STA and Section 13 of the Continuing Obligations. The Circular also applies both to primary and secondary listed companies.

1.4 Reserves and resources – the rationale for drawing a clear line

The defining criteria for 'reserves' is that this volume of oil and gas – while still being in the ground – can technically as well as commercially be recovered and sold with a profit. 'Resources' on the other hand might not be recovered due to technical and/or

[4] See however the remarks made for the listing requirements in Section 2. Note that subsequently in this Circular the term "companies" would mean such companies as defined in section 1.3 unless the context otherwise requires.

commercial reasons, and will as such not be turned into a profit for the company. It is therefore not surprising that a company's "reserves" is one of the very key figures determining the value of the enterprise. Likewise is the company's "reserve replacement ratio" highly important, is the company adding new reserves faster (via exploration and/or acquisitions) than what is produced? Thus, what the company has of reserves is of outmost importance for the investors.

Resources[5] should only be of interest to the investors to the degree it is likely that these would be – at some stage – upgraded into reserves. This can happen via technical improvements, higher oil prices, or regulatory approvals. The outcome of any prospects and leads the company might have, is however highly uncertain due to the high risk of not discovering any hydrocarbons that could be commercially or technically extracted under current conditions.

Transparent and verified disclosure of reserves - and to some extent resources - is therefore important, both with regard to the initial listing of a company, and subsequent to listing.

The Circular does not establish any new or revised set of definitions and/or classification criteria for reserves and resources, but prescribes the application of classification systems widely recognised and in use throughout the oil and gas industry internationally. These classification systems are listed in section 2 below, and also discussed in section 4.6.1.

1.5 Responses received in the consultation process

1.5.1 General

Below, the main responses received in the consultation process are briefly discussed.

1.5.2 International Accounting Standards Board (IASB)

Several of the respondents pointed out that IASB is presently working on an accounting standard related to reserve reporting obligations and that Oslo Børs should not impose requirements that deviate from such international standards. Oslo Børs is aware of the IASB process and other relevant initiatives with regard to mineral companies and reserve reporting and agree that our rules to the extent possible should be aligned with the outcome of these initiatives. On the other hand, it is difficult to foresee when such processes will be finalised, and they should not in the meantime postpone the implementation of adequate reporting obligations by Oslo Børs. However, we emphasise that the requirements and guidance set out in this Circular may – if needed - in the relatively near future be adjusted and amended to reflect new international rules and recommendations.

1.5.3 Probable/possible reserves – companies subject to SEC regulations

In the guidelines set out in Circular 2/2007 oil companies reporting only *proven* reserves in accordance with the US Securities and Exchange Commission ("SEC") standards (and other acknowledged standards), are allowed to limit their reporting to Oslo Børs correspondingly.

However, under new regulations issued by SEC, companies will be allowed to report also *probable* and *possible* reserves on an optional basis.

Some respondents pointed out that as the draft Circular required the companies to report proved and probable reserves to Oslo Børs, it would force companies subject to the SEC regulations to make use of the option set out above.

[5] *"Contingent" resources* – sub-commercial resources - could be reported by the company in the ASR, while "*prospective" resources* should not be the subject of any form of quantified discussion in the MD&A, see sections 4.6.4, 4.6.6 and 4.6.7.

On this background, Oslo Børs has clarified in the Circular that only companies making use of the option to report probable (and possible) reserves under SEC regulations are required to report such information to Oslo Børs.

1.5.4 Deadlines for reporting of the ASR

In the draft Circular, Oslo Børs proposed that the ASR should be published simultaneously with publication of the Q4 accounts. Many respondents believed that this stricter deadline would be difficult to achieve, and argued that the current deadlines (the date of publication of the annual report) should not be amended.

Oslo Børs appreciates the views brought forward by the respondents and has decided to keep the current publication deadline unchanged. Thus, the ASR should be published at the latest simultaneously with publication of the annual report or at such date specified in the reserve reporting regulations that the company is subject to on another exchange or marketplace, cf. Section 4.7 below.

1.5.5 Requirements for independent expert and format of expert report

Some respondents pointed out that the Circular did not give precise and detailed requirements for the qualifications of the independent expert, nor for the format of the expert report.

There is currently no global standard setting out the qualifications or the processes that is the basis for such an expert report. However, some reporting standards have specific requirements, and if the company has chosen any such acknowledged reporting standard (like NI 51-101) that particular standard's requirements are to be followed. Nonetheless, Oslo Børs agrees that more detailed requirements should be set, cf. section 4.4.

1.5.6 Prospective resources

The Circular sets out that prospective resources are not to be quantified in the ASR. The same 'conservative' approach was chosen both in Circular 2/2007 and in the consultation draft Circular as such figures are highly uncertain. Some respondents point out that for some companies the prospective resources are nonetheless a substantial part of the valuation of the company, and that it should be an option to quantify such resources.

Oslo Børs will in the relatively near future invite the companies (and other parties) to provide their views on this topic. Based on the response from the companies Oslo Børs would consider if reporting of prospective resources (estimates) should be an option, and if so make any appropriate changes to future, updated Circulars.

1.5.7 Other amendments

Oslo Børs has furthermore updated the Circular with many other minor changes, based on the valuable response from the respondents.

2. Listing Requirements

In addition to the general requirements for listing on Oslo Børs set out in the Listing Rules, a specific mandatory listing requirement for mineral companies is set out in Section 2.2.6, cf. Section 3.4 third subsection no 31 of the Listing Rules[6], which reads:

> *"Companies that meet the definition of "mineral companies" in the CESR's recommendation on prospectuses must provide the information mentioned in Paragraph 132 and Paragraph 133 (c) of the recommendation. A report of reserves prepared in accordance with the guidelines issued by Oslo Børs will be assumed to satisfy the requirements of Paragraph 132. Oslo Børs may consent to the use of a report on reserves prepared in accordance with other guidelines."*

[6] Corresponding provisions are set out in Section 2.2.6, cf. Section 3.4 third subsection no 30 of the Oslo Axess Listing Rules.

The information required by the provision is an independent expert's report of the company's reserves. Based on the CESR recommendations referred to in the provision,[7] the same reserve report requirements will as a starting point apply to the company's listing prospectus, provided that the company has been a mineral company for less than three years. Please note, however, that the requirement of the Listing Rules applies irrespectively of whether or not the company has been traded as a mineral company for more than three years. Accordingly, mineral companies will be required to prepare a reserve report as part of the listing process on Oslo Børs or Oslo Axess without regard to whether such report is required in the listing prospectus.

Under the present Listing Rules, the specific requirements as quoted above apply only to *mineral companies* as defined in the CESR recommendations, which leaves out companies involved only in the *exploration* of hydrocarbons (or other mineral resources). As set out in Section 1.3, this Circular applies however to all companies whose principal activity is or is planned to be the exploration and/or production of hydrocarbons.

Accordingly, with effect from 1 January 2010, the Listing Rules will be amended so that *all oil and natural gas companies* as defined in this Circular will be subject to the reserve report obligation. The amendment will cover also companies involved only in the exploration of other mineral resources than hydrocarbons.

The new provision reads (the sentence added to the provision presently in force is underlined):

> *"Companies that meet the definition of "mineral companies" in the CESR's recommendation on prospectuses must provide the information mentioned in Paragraph 132 and Paragraph 133 (c) of the recommendation. <u>The same applies to companies that are involved only in the exploration of mineral resources.</u> A report of reserves prepared in accordance with the guidelines issued by Oslo Børs will be assumed to satisfy the requirements of Paragraph 132. Oslo Børs may consent to the use of a report on reserves prepared in accordance with other guidelines."*

An Annual Statement of Reserves prepared in accordance with the requirements set out in Section 4 will be assumed to satisfy the requirements of Paragraph 132 in the CESR recommendation for oil and natural gas companies. The principles set out in Section 4.4 will apply correspondingly to the expert report to be prepared in connection with listing of the company on Oslo Børs. Please note, however, that the option to present a report prepared by *internal* experts does not apply in connection with the *listing* of the company.

Oslo Børs is prescribing the use of classification systems widely recognised and in use throughout the Oil and Gas industry internationally, for the reporting of reserves and resources. The following classification systems are pre-approved[8]:

1) the SPE PRMS classification system (the SPE/WPC/AAPG/SPEE *Petroleum Resources Management System document*)
2) SEC (ie reporting in line with the US Securities and Exchanges Commissions requirements)[9]
3) NPD (ie reporting in line with the Norwegian Petroleum Directorate's requirements)
4) NI 51-101 (reporting in line with Canadian National Instrument 51-101)

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[7] CESR's recommendations for the consistent implementation of the European Commission's Regulation on Prospectuses no 809/2004 (CESR/05-054b), available at http://www.oslobors.no/ob_eng/Oslo-Boers/Regulations/Prospectus-sources-of-law-and-cross-reference-lists.

[8] The reporting should be based on the most recently approved classification system and definitions, and reference should be made to this fact.

[9] SEC has recently proposed a thorough revision to its oil and gas company reporting requirements; see additional information in Annex I.

Companies considering to list on Oslo Børs or Oslo Axess and that have a classification system different from the standards set out above, should consult Oslo Børs prior to the listing process being initiated, for any approval of the classification system in accordance with the Listing Rules.

The statement of reserves should be prepared and dated no more than six months prior to the date of the introductory report, cf. Section 3.1 third subsection of the Listing Rules.

3. Disclosure requirements in general and deferred disclosure of exploration drilling in particular

3.1 Disclosure of inside information - topics of relevance for the oil sector

Section 5-2 first subsection of the Securities Trading Act reads:

> *"An issuer shall without delay and on its own initiative publicly disclose inside information which concerns the issuer directly, cf. section 3–2 subsections (1) to (3)".*

Section 3-2 of the Securities Trading Act defines inside information as:

> *"… any information of a precise nature relating to the financial instruments, the issuers thereof or other circumstances which has not been made public and is not commonly known in the market and which is likely to have a significant effect on the price of those financial instruments or of related financial instruments".*

The provisions apply to companies listed on a regulated market and companies which have applied for such listing, and are implemented into Section 3.1.1 of the Continuing Obligations.[10] For comprehensive guidelines on inside information and disclosure requirements in general, please refer to the Financial Supervisory Authority of Norway (Finanstilsynet) and Oslo Børs' Circulars as mentioned in the explanatory notes to Section 3.1.1 of the Continuing Obligations.

Oil and natural gas companies may find disclosure requirements in general to require a rather difficult balancing act, especially in relation to the timeliness of disclosure. Furthermore, the information in question is often at a stage where no definitive or quantitative conclusions may be drawn, and perhaps more importantly, the information is often of a highly technical nature and may not be easily communicated to nor interpreted by the market at large.

The duty of real-time continuous disclosure will, in its practical implementation, in some respects vary depending on the individual and industrial characteristics of the issuer. In the case of oil and gas companies, the calculation, disclosure and reporting of reserves data may at times constitute *inside information*, and is in many cases considered information of the most critical value to the financial markets in their efforts to analyse, value and compare the past, present and prospective performance of E & P (exploration and production) companies, as well as when making comparisons between companies and their relative performance and valuation.

For the preliminary results of exploration efforts such as seismic surveys or drilling, the point in time at which such data or information must be considered *inside information* might vary with its relative importance to the company, i.e. results from a single well might be of crucial importance to the share price of a junior E & P company, and thus even preliminary indications might constitute *inside information*. On the other hand, for a large international integrated oil and gas company, even the final results from a single

[10] Continuing Obligations of stock exchange listed companies, available at http://www.oslobors.no/ob_eng/Oslo-Boers/Regulations/The-Issuer-Rules .

well might be considered not to be price sensitive, thus not representing *inside information,* and would therefore not necessarily trigger any required disclosure.

When any such information has been deemed inside information, such information has to be disclosed publicly without delay and on the company's own initiative, cf. Section 5-2 of the Securities Trading Act as quoted above.

Updated reserve figures prepared in connection with the year-end accounting may constitute inside information and are thereby subject to the publication obligations set out in Chapter 5 of the STA.

3.2 The exemption to the main rule; deferred disclosure

Companies may be subjected to reporting procedures or restrictions to disclosure as imposed by government agencies, commercial partners or license terms. In such instances the company may find itself in a situation of *deferred disclosure,* and must consequently observe the ensuing additional requirements of Section 5-3 of the Securities Trading Act (STA). The first subsection of the provision sets out:

> *"An issuer may delay the public disclosure of information as mentioned in section 5-2 subsection (1) such as not to prejudice his legitimate interests, provided that such omission does not mislead the public and provided that the issuer ensures the confidentiality of that information, cf section 3-4."*

Consequently, deferred disclosure is allowed only if all the following three criteria are met;

1) A public disclosure would harm the company's legitimate interests
2) A deferred disclosure would not mislead the public
3) Confidentiality is maintained

The company must promptly notify Oslo Børs of deferred disclosure, cf. Section 3.1.2 third subsection of the Continuing Obligations, cf. Section 5-1 of the Securities Regulation.

Such instances can typically be ongoing negotiations and refinancing, where oil and natural gas companies are faced with the same considerations as all other ordinary companies.

However, *exploration drilling* in the oil industry is faced with certain unique challenges in this respect. This is covered in the next section.

3.3 Exploration drilling and deferred disclosure

3.3.1 Disclosure of exploration drilling results

The application of deferred disclosure raises some special issues in relation to the E & P companies' drilling of exploration and appraisal wells on the Norwegian Continental Shelf (NCS).

The backdrop is that the Norwegian Industry and Trade department - by administrative orders[11] dated 23 August 1973 - specified that press releases with results from exploration and appraisal drilling on the NCS should be prepared by the Norwegian Petroleum Directorate (NPD) in cooperation with the E & P company, and be published by NPD no later than the same information being released by the company.

[11] "Distribution of press releases pertaining to drilling on the Norwegian Continental Shelf". Later updated with administrative orders dated 10 September 2007; "Press releases pertaining to exploration and appraisal drilling which has indicated new discoveries".

The results of such drilling will often be considered as inside information pursuant to Section 5-2 of the STA. The question has therefore arisen whether the E & P companies listed on Oslo Børs may defer the disclosure of the drilling results until NPD had released the information, cf. Section 5-3 of the STA.

Oslo Børs assumed in Circular 2/2007 that E & P companies in such circumstances would have legitimate reasons to defer the disclosure, and thus would be permitted to defer the announcement pending the release from NPD. This would be on the condition – and to the extent – that the information had not leaked to the market.

This interpretation is unsatisfactory based on the desire to have a correct pricing in the market and a reduced risk of insider trading. After further deliberations, including a dialogue with the E & P companies and the NPD, Oslo Børs has concluded that NPD's disclosure procedures regarding the results from exploration drilling on the NCS does not in itself constitute a legitimate interest that could warrant deferred disclosure pursuant to Section 5-3 of the STA. The conclusion has been reconciled with the NPD and will be the basis for Oslo Børs' future application of the disclosure rules.

The drilling results should be announced according to the general principles for preparation of stock exchange disclosures to the market.

Disclosure of the drilling results pursuant to Section 5-2 of the STA is the company's sole responsibility. NPD's responsibility on the other hand, is to provide in due time a qualified and professional assessment of the drilling results in cooperation with the operator of the exploration license.

3.3.2 Individual obligations and restrictions

It is recommended by Oslo Børs that all personnel, internal *and* external to the company, that is involved in exploration activities or the evaluation of exploration results, be treated as if they have or may have access to *inside information* concerning the issuer.

When issuing minimum disclosure notices, companies should avoid the use of forward-looking statements, in particular those regarding the potential for development and commercial production that may or may not be inferred from the results.

4. Disclosure requirements for reserves and resources

4.1 Introduction

In Oslo Børs' Circular 2/2007, Oslo Børs introduced certain recommendations with regard to annual reserve reporting for oil and natural gas companies.

With effect from 1 January 2010, annual reserve reporting is introduced as a mandatory obligation for such companies by the inclusion of the following provision in the Continuing Obligations (Section 3.8):

> ***3.8 Annual Statement of Reserves***
>
> (1) *Companies whose principal activity is or is planned to be the exploration and/or production of hydrocarbons (oil and natural gas companies) should annually publish updated reserve figures and an Annual Statement of Reserves in accordance with guidelines set out by the exchange.*
>
> *(2) The Annual Statement of Reserves should be published at the latest simultaneously with publication of the annual report or at such date specified in the reserve reporting regulations that the company is subject to on another exchange or marketplace.*

In this Section 4, the reporting obligations are described in more detail.

In addition to setting out the mandatory reporting obligations, this section also sets out what the companies can opt to report of additional information (marked "Optional"), and what information the companies should not report.

4.2 Background

The disclosure and reporting of reserves is, for reasons highlighted in Section 1.4 above, required by companies who have their shares listed on exchanges or regulated markets, and considered equally critical by each market's regulatory authority.

Levels of disclosure do however vary worldwide. Certain foreign regulatory entities prohibit the additional disclosure of *unproved* reserves (i.e. *Probable* and *Possible*) as well as contingent and prospective resources. It is the opinion of Oslo Børs as regulator that an overly conservative approach to reserves reporting may be just as misleading as an overly optimistic one, if the result is that the market at large does not have the ability to analyse the less conservative but perhaps more relevant data which to a greater extent forms the basis for the company's internal evaluation and actual decision making.

One of the most basic motives behind the presence of disclosure requirements is to ensure that the economic value of the event or information in question – and equally important; the probability of it being realised – is shared with the market. If too strict a requirement is applied to the probability aspect resulting in the information being withheld, the consequence is that the market at large is denied the opportunity to value this information properly. As long as the underlying framework of definitions and classification criteria is widely known, the expected outcome (the probability-weighted sum of alternative outcomes associated with various probabilities) and thereby the estimated economic value of the relevant information, is generally for the buyers and sellers of financial instruments to decide within the dynamics of a liquid, efficient and regulated market.

The hydrocarbon reserves of an upstream oil and/or gas company are of critical importance to the valuation of such a company, and therefore to the trading in its shares and other related financial instruments. Investors relate to reserves as an approximation to a company's long-term value and thus any material change in a company's reported reserves will have a profound effect on the share price.

Today, reserves are typically accounted for by an unaudited note to the financial statements. On an ongoing and ad-hoc basis, reserves are addressed under the issuer's general and continuous disclosure requirements. Furthermore, the fundamentals of reserve estimations have an indirect, but nonetheless notable impact on the company's financial statements as the capitalized exploration and investments in the balance sheet are normally depreciated quarterly based on the "unit-of-production method"[12].

4.3 Mandatory reporting of the Annual Statement of Reserves

Oslo Børs will introduce an obligation for oil and natural gas companies to publish annually a report called the company's *Annual Statement of Reserves* ("ASR").

The reporting period for reserves balance, production volumes etc. should as a starting point be the calendar year, but if the date of the underlying reserves estimation falls outside of the fourth quarter, this date may also be used as the (annual) start/end of the reporting period. The date of the underlying reserves estimation should be stated throughout the ASR wherever relevant.

Companies which are subject to similar reporting requirements on other exchanges or regulated marketplaces where their securities are listed may publish the relevant report as a substitute for the ASR. If such report constitutes a full annual report the company must procure that the relevant chapters are extracted to form the substitute document. Alternatively, if the full report is published the company should simultaneously disclose

[12] The unit of production method is defined in Annex IV, in "Main definitions".

detailed and precise references to where the contents substituting the ASR may be found.

Exploration companies should prepare an ASR to the extent it is relevant according to this Circular.

The ASR, or the relevant substitute document, shall be published and filed in accordance with the Continuing Obligations.[13]

4.4 Expert report of reserves and resources

4.4.1 General

An independent third party expert should provide a report on the reserve and resource figures in the ASR. The expert's report should be an integrated part of the ASR.

4.4.2 Qualifications of the independent expert

The expert should possess the required competency requirements as prescribed by the chosen reporting standards. If such requirements are not prescribed by the reporting standard then the expert should fulfil the following requirements:

(i) Be professionally qualified and a member in good standing of an appropriate recognised professional association, institution or body relevant to the activity being undertaken, and who is subject to the enforceable rules of conduct;

(ii) Have at least five years' relevant professional experience in the estimation, assessment and evaluation of hydrocarbons being or to be exploited by the company and to the activity which that person is undertaking.

In addition, the expert should be independent of the company, its directors, senior management and its other advisers, and does not have an equity interest in the company.

Oslo Børs may grant exemptions from the requirements set out above.

4.4.3 Format of the expert report

The format of the independent expert report should be in line with the chosen reporting standard. If the company has chosen a classification system without any such format requirements, the expert report should set out what work (the scope) has been performed by the expert (or by the company), that he is independent of the company, its directors, senior management and its other advisers, and whether he has an equity interest in the company. Furthermore that the reserve and resource figures reported in the ASR are as defined by the chosen classification system.

4.4.4 Scope of work

For companies that have chosen a reporting standard with no specific requirements regulating the expert report, the following is accepted by Oslo Børs:

(i) The independent expert can report on (in line with the format of the expert report as set out above) figures *which have been prepared by the company*.

(ii) The independent expert can also *both prepare and report on* the figures.

[13] See Section 5.1, 5.2 and – for companies with Norway as their host state - Section 13.2.2 and 13.3.3 of the Continuing Obligations. The ASR should be stored/filed under the disclosure category "Petroleum Reserves". The same category should be used if the company only has exploration licenses and/or only resources and is still preparing an ASR.

While the alternative set out in (ii) might raise questions about the independence of the expert, Oslo Børs nonetheless believes that the expert would be sufficiently independent. In any case the process (the scope of work) should be set out in the expert report itself.

The company should obtain and keep documentation supporting the company's view that the expert is sufficiently qualified and independent, and provide it to Oslo Børs upon request.

4.4.5 Possible reserves and resources

Reporting of *possible reserves* and *contingent resources* is optional, see section 4.6.2 and 4.6.3. Should the company decide to include such figures in the ASR, the independent expert (or the internal organisation) should provide a report on these figures.

4.4.6 Alternatively, an internal organisation is responsible

Alternatively, if the company has set up an adequate internal organisation responsible for the preparation of reserves data as well as the relevant supervisory body and/or control systems on a corporate level, it is sufficient that the qualifications for the internal expert confirming the figures is presented, together with a description of the internal organisation.

4.5 Reporting deadline for the Reserves and the ASR

The ASR should be published at the latest simultaneously with publication of the annual report or at such date specified in the reserve reporting regulations that the company is subject to on another exchange or marketplace, cf. Section 4.7 below.

4.6 Contents of the Annual Statement of Reserves

4.6.1 General

The ASR should contain a brief description of the classification system applied and relevant references thereto, as well as definitions of reserves and contingent resources covered by the ASR. Definitions and classification criteria are to a certain extent subject to interpretation, and the ASR should also provide information on such interpretations and how these have been applied. Any reporting should be based on the most recently approved classification system and definitions, and reference should be made to this fact.

Should a company after listing on Oslo Børs opt for a classification system/reporting standard different from what was applied per date of listing, the company should clearly state that this new standard is different from the standard used per entry for listing. The reasons for the change of system should be explained in the ASR. Such a classification system has – in any case - to be widely recognised and in use throughout the oil and gas industry internationally.

Furthermore, the ASR should provide investors with a variety of qualitative and quantitative information,[14] including but not limited to the items set out in section 4.6.2 to 4.6.7 below.

4.6.2 Quantitative information concerning Reserves

The ASR should contain quantitative information covering the following areas:

Reserves: Reserves segmented in a way that the company considers most appropriate, i.e. reserves per geographical region, asset, project or field. Data should be presented for both developed and undeveloped reserves, and for each category a conservative estimate (i.e. *P90* or *Proved*)[15] and a best estimate (i.e. *P50* or *Proved plus Probable*) should be presented.

[14] Please refer to Annex III for a reporting format for quantitative information.

[15] Please see Annex II herein for an explanation of categories and terminology such as P90, P50, P10, Proved or 1P, Proved+Probable or 2P and Proved+Probable+Possible or 3P.

Reporting of *possible* reserves is optional.

Reserves development: How reserves have developed throughout the calendar year, including an opening balance, produced volumes, acquisitions, additions, new developments and revisions of previous estimates given; as well as a closing balance at year end.

Reserves and reserve development should be presented in table formats (see Annex III).

Should the company decide not to present reserves in table formats, the specific reasons for this should be detailed.

Section 4.9 below provides further details regarding the principles for reporting of reserves.

4.6.3 Quantitative information concerning Contingent Resources (optional)

Format: Resources should not be presented in table format. Contingent resources may however be quantified in the MD&A wherever relevant to the discussion of existing reserves. Resources should be presented on a P50 or Best Estimate basis.

Resource categories: Reporting and/or discussion of contingent resources should be limited to discovered volumes that are considered recoverable; that are considered commercial (or sub-commercial based on regulatory approval); and where either development of such resources is considered likely and this assumption is justified from an economic, technical and regulatory point of view, or planning towards commercial development of such resources has been decided and initiated. Resources that would otherwise qualify as *probable reserves* or that are classified within NPD category 4 or 5 would normally meet the above criteria.

Supplementary information: If contingent resources are discussed and/or in any way quantified, key supplementary information should also be presented in the MD&A. Please refer to Annex III, Notes required to Table 1, for a description of supplementary information required.

4.6.4 Quantitative information not to be included

Quantitative information should not be disclosed anywhere in the ASR for prospects, leads, resources under evaluation, and resources whose development is considered unlikely based on current conditions.

4.6.5 Future production and investment horizon (optional)

In addition to the quantitative information as outlined above, Oslo Børs recommends that quantitative information regarding the company's future production and investments should be included in the ASR. This information, although not directly related to reserves estimation, will provide investors and the market at large with information of high analytical value to the estimation of the present value of existing reserves.

Companies which opt to include such information, are encouraged to provide data covering the previous two calendar years, current year estimate, and subsequent years for which estimates exist. Actual figures and estimates should be presented for production (of actual products and/or, as a minimum, production in *mboe*), and for significant CAPEX (major investments, excluding working capital) and work commitments.

4.6.6 MD&A

The ASR should contain a Management's Discussion and Analysis (MD&A) of the figures presented, including a comprehensive discussion covering the technical and economic assumptions on which the reserve estimates are made. Section 4.9 sets out additional details regarding reserves.

The MD&A should include an introductory statement of responsibility clearly identifying the third party experts that has supervised and reviewed the reserves data, or alternatively; the internal organisation responsible for the preparation of reserves data as well as the relevant supervisory body and/or control systems on a corporate level. The MD&A should in any case be signed by the company's Chief Executive Officer.

The ASR should contain a minimum of "forward-looking statements" and/or contingencies, but the MD&A should nonetheless contain a general disclaimer regarding such statements, also covering all assumptions made in the estimates presented.

Prospective resources, un-risked resource potential, prospects or leads should not be the subject of any form of quantified discussion in the MD&A.

Should the Chief Executive Officer decide not sign the ASR, the ASR should be signed by another member of the management and the reasons for this should be set out in the ASR.

4.6.7 Prudent disclosure

Should any such information discussed in the above sections meet the criteria of 'inside information' as set out in Section 3.1, such information would nonetheless have to be disclosed in accordance with the Securities Trading Act[16] regardless of what is discussed in this section.

4.7 Special considerations for issuers listed on other exchanges

Companies being subject to reserves reporting obligations on other exchanges or regulated marketplaces where their securities are listed, such as companies filing reserves estimates in accordance with SEC requirements in the US, may publish the relevant reports as a substitute for the ASR.

4.8 Reporting units

The following units are most commonly used as reporting units:

- Liquids: mmbbl (million barrels)
- Gas: bcm/bcf (billion cubic metres/feet)
- Oil equivalents: mmboe (million barrels of oil equivalents)

Barrels (bbl) should be equivalent to Stock Tank Barrels (stb), i.e. barrels of oil at surface pressure and otherwise standard conditions. LPG should be converted into o.e. by price equivalent

Oil equivalents (o.e.) should be used when quantities of oil, gas, NGL and condensate resources are to be added up. Such summation may take place by employing a common property, energy. The term "oil equivalents" is linked with the amount of energy liberated by combustion of the various kinds of petroleum.

In the case of non-conventional hydrocarbons, these should be reported in units of mboe, and be based on the same general principles and requirements as set out herein.

Please see Annex IV for a list of abbreviations and conversion factors.

4.9 Reporting of reserves, detailed requirements

Based on the general requirements for the ASR set out in the preceding sections, we will in the following discuss in more detail certain issues relating to reporting of reserves.

- **Economic requirements**: Reserves (of any category) may be assigned only to those volumes that are economically recoverable. The economic, fiscal and financial conditions under which these estimates are prepared should preferably and generally

[16] See the Securities Trading Act section 5-1, 5-2 and 5-3.

be those which are considered to be a reasonable outlook on the future.

The use of management's best estimate for the price is recommended, as this would align the calculations for reserves more in line with both the management's view and the SPE PRMS system. The chosen alternative should be clearly stated. If actual commodity price hedging or other relevant hedging is in place or to be applied, the effects of hedging may be taken into account, providing that information about such hedging (including its effect on price assumptions) should be provided in notes and/or in the MD&A.

If required by securities regulators or other agencies, other prices and costs also may be used. In any event, the fiscal assumptions used in the preparation of reserves estimates must be disclosed.

If some or all of the future production has been sold forward/hedged for a certain price, the price and volume should be disclosed.

- **Development stage and commitment:** Reserves may be assigned only to those volumes where a Plan for Development and Operation (PDO) has at least been filed (but not necessarily approved) by relevant authorities (or where similar development approval has been granted by relevant authorities, cf. "Regulatory considerations below"). If the approval of a PDO may be anticipated with reasonable certainty and within a predictable lead time of its filing, reserves *may* be assigned to the volumes in question prior to the filing of a PDO, providing the licence holder or partners have decided upon and committed financial resources towards the commercial development of the volumes in question.

- **Operator's reserve estimate:** Should the company's own reserve estimate for a field differ substantially from the disclosed reserve estimates made public by the operator of the field, the deviation should be explained in the ASR to the extent possible.

- **Relative ownership, entitlement or working interest**: As a general principle all reporting should include information as to the reporting company's rights in respect of the asset or licence in question. Reserves figures should be stated as net or gross, always with accompanying information about the company's corresponding working interest. Reserves covered by a Production Sharing Contracts (PSCs or PSAs), as well as other forms of contract regimes, should be calculated on an entitlement basis.

- **Drilling requirements**: Reserves (of any category) may be assigned only to known accumulations that have been proven by drilling and penetration, or otherwise fulfil requirements for classification as reserves.

- **Testing requirements**: Confirmation of commercial productivity of an accumulation by production or a formation test has in the past been required for classification of reserves as *Proved*. However, new SEC regulations allow the use of "reliable technology" other than well penetrations to establish oil and gas reserves as proved. Furthermore, an accumulation can be one continuous reservoir, or several reservoir sections where reservoir- and/or pressure continuity has been tested and established. In the absence of such confirmation from production or formation testing, (alternatively the use of "reliable technology" as outlined by SEC), *Probable* and/or *Possible* reserves may be assigned to an accumulation on the basis of well logs and/or core analysis that indicate that the zone is hydrocarbon bearing and is analogues to other reservoirs in the immediate area that have demonstrated commercial productivity by actual production or formation testing.

- **Regulatory considerations**: In general, reserves may be assigned only in instances where production or development of those reserves is not prohibited by governmental regulation. This provision would, for instance, preclude the assignment of reserves in designated environmentally sensitive areas. Reserves may be assigned in instances

where regulatory restraints may be removed subject to satisfaction of minor conditions. In such cases, the classification of such reserves should reflect the risk associated with the project approval.

- **Disclosure of key assumptions:** All main quantitative input, including key assumptions made in the process of reserves calculation, should be disclosed as notes to tables and, where appropriate, in the MD&A.

4.10 Interim updates of reserve and resource up/downgrades

In the event of acquisitions and disposals resulting in material changes to the company's reserves, it is the view of Oslo Børs that this will be adequately covered by general on-going disclosure requirements, providing that news releases issued in conjunction with such events include the necessary reserves data and refer to the previously filed ASR. wherever relevant.

4.11 Requirements for subsequent and continuing disclosure

When discussing reserves and resources in its on-going communication with the market (e.g. in news releases and presentation material) listed companies should always incorporate a reference to the most recently filed ASR.

The term *reserves* should not be used in relation to un-risked quantities or estimates, nor when referring to quantities of a sub economic, sub commercial and/or undiscovered nature. When referring to such quantities, terms such as *contingent/sub commercial* or *prospective/potential resources* should be applied, and a brief disclaimer should point investors to the current ASR as previously filed with Oslo Børs.[17]

As a general principle, Oslo Børs advocates the use of resource estimates that are risked (adjusted for risks and uncertainties) according to industry standards. The quantification of un-risked volumes can be viewed as being optimistic beyond reason, and may thus be potentially misleading.

P50, *Mean* or *Proved plus Probable* reserves as well as *P90* or *Proved* may be referred to and discussed on a stand-alone basis. However, when referring to P10 reserves, contingent resources or upside potential of any category, related to a field or project where *P90* or *Proved* reserves has been calculated, information about the latter should be included in brackets or in the discussion itself.

Disclosure regarding reserves, resources and/or resource potential should always clearly distinguish between new and previously issued information.

[17] Available at www.newsweb.no.

Reserves and Resources – the basics

It is the intention of Oslo Børs, and of this Circular, not to establish any new or revised set of definitions and/or classification criteria, but to prescribe the application of definitions and criteria widely recognised and in use throughout the Oil and Gas industry internationally, and to ensure the uniform adoption of reporting standards according to the principles set out herein.

This annex sets out the various classification systems, which are compared for the benefit of the investors.

It is however useful to have the SPE/WPC/AAPG/SPEE definitions (the SPE PRMS document, approved by the SPE Board in March 2007) as an initial point of reference, as this classification system is widely applied.

On a general level, investors should therefore be able to relate to the various terminologies used in describing Resources and Reserves referring to the following definitions in accordance with the SPE PRMS framework (*in Italic*):

> ***Reserves***
> *RESERVES are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions. Reserves must further satisfy four criteria: they must be discovered, recoverable, commercial, and remaining (as of the evaluation date) based on the development project(s) applied. Reserves are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by development and production status.*

All reserve estimates involve some degree of uncertainty. The uncertainty depends chiefly on the amount of reliable geologic and engineering data available at the time of the estimate and the interpretation of these data. The relative degree of uncertainty may be conveyed by placing reserves into one of two principal classifications, either proved or unproved. Unproved reserves are less certain to be recovered than proved reserves and may be further sub-classified as probable and possible reserves to denote progressively increasing uncertainty in their recoverability. Estimated recoverable quantities from known accumulations which do not fulfil the requirement of commerciality should be classified as Contingent Resources, as defined below.

Depending on the resource and reserves classification system used, reserves may be divided into sub-classes as follows: Reserves may be sub-divided into *developed* and *undeveloped* depending on the presence of infrastructure (pipelines or other installations) required for commercial production. *Reserves* may also be subdivided into *producing* and *non-producing*, depending on their production status; and (as required by the SEC) into *commercial* and *non-commercial* depending on production permitting status.

Contingent Resources
CONTINGENT RESOURCES are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, but the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies. Contingent Resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

Prospective Resources
PROSPECTIVE RESOURCES are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective Resources have both an associated chance of discovery and a chance of development. Prospective Resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity.

Note that prospective resources, un-risked resource potential, prospects or leads should not be the subject of any form of quantified discussion in the MD&A, see section 4.6.6.

General classification approach

There are a number of different classification systems in use in various parts of the world, and there are different classification systems for (other) mineral resources than for hydrocarbon resources. Nearly all of these systems, however, do have many common features in their approach to classification of resources and reserves. The diagram below is a graphical presentation of the basic fundamentals these systems have in common, by way of a (modified) McKelvey[18] box:

[18] Most resource classification systems relate in some way or another to the general recommendations published by V.E. McKelvey in 1972 for the classification of subsurface natural resources.

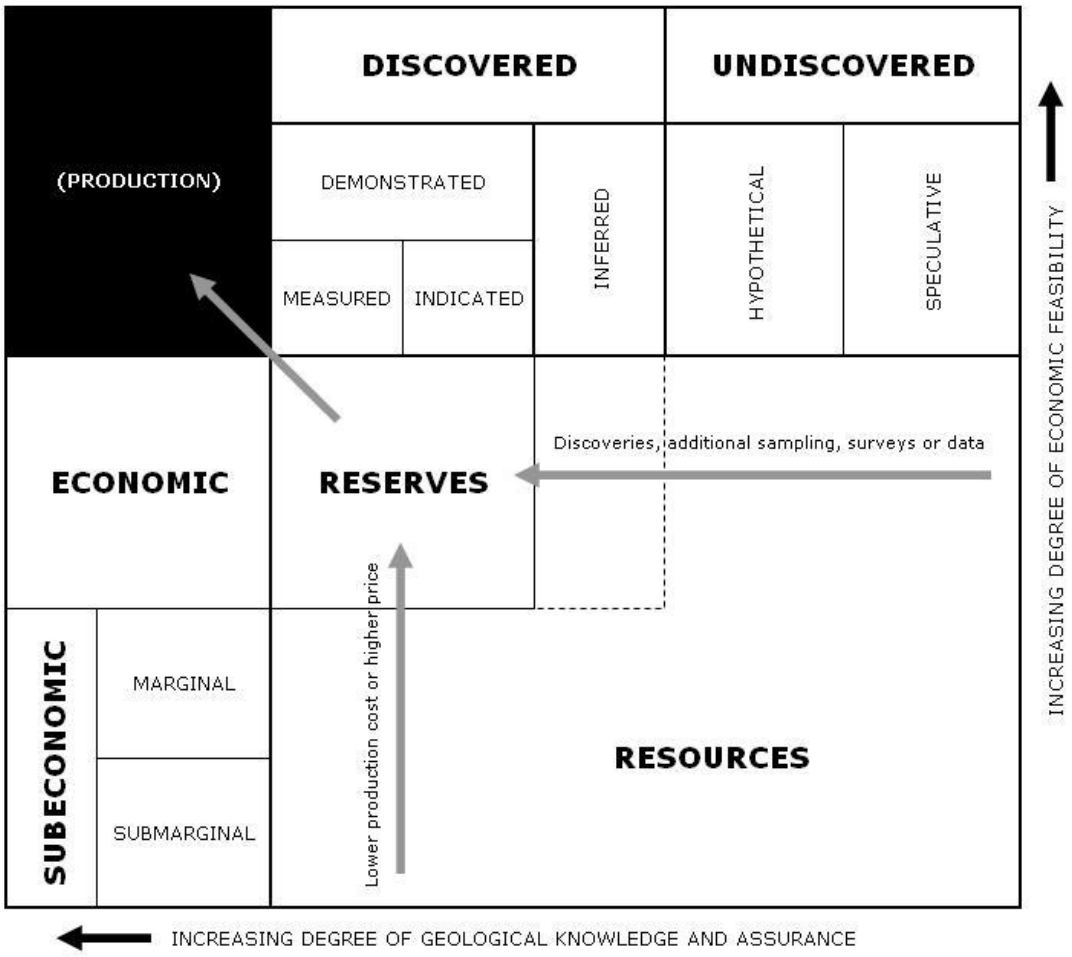

Fig. 1 – Illustrative McKelvey box

The key features of this approach is that resources are categorised along two axes, one related to economic feasibility (i.e. from sub-economic *resources* to demonstrably economic *reserves*) and one related to geological and technical uncertainty (e.g. from *undiscovered* via *Possible* and *Probable* to *Proved reserves*).

Resources may be categorised as a product of their position relative to the two axes, e.g. *demonstrated* (but still) *sub-economic*, or *hypothetical* (but) *economic* (if present*).* The subset of *resources* that can be geologically estimated with a reasonable degree of certainty, and that holds the greatest potential for economically feasible extraction/production with current technology and prices, is the portion of *resources* we refer to as *reserves*. (Note that the concepts "demonstrated", "measured", "indicated" and "inferred" relates to the mining sector, and not to the oil sector).

The main classification systems (NPD, SPE and SEC) compared

Several classification systems have been developed over the years. The main classification systems are compared below.

In 1997, the Society of Petroleum Engineers (SPE) and the World Petroleum Council (WPC) published its Reserves Definitions. In February 2000, the SPE and the WPC together with the American Association of Petroleum Geologists (AAPG) published resources definitions that cover the full range of petroleum reserves and resources.

A revised classification system and definitions – the "Petroleum Resources Management System" (SPE PRMS) – was approved by the SPE Board in March 2007. This revised system for defining reserves and resources was developed over more than two years, with SPE working with World Petroleum Council (WPC), American Association of Petroleum Geologists (AAPG) and Society of Petroleum Evaluation

Engineers (SPEE). These SPE PRMS definitions provide a useful point of reference in terms of widely recognised and commonly applied definitions and classification criteria. Please refer to the SPE website for further guidance of the Petroleum Resources Management System: http://www.spe.org/spe-app/spe/industry/reserves/prms.htm.

In its classification system SPE is now also emphasising the "project approach" to development of reserves and resources. The "project approach" aligns the SPE PRMS system with the NPD classification system, see description of the NPD system below.

The SPE PRMS provides valuable and in-depth definitions of key concepts of the oil industry, like reserves, contingent resources, prospective resources, unrecoverable petroleum, prospects, lead, play etc.

The figure below is a graphical representation of the SPE/WPC/AAPG/SPEE resources classification system. The system defines the major recoverable resources classes: Production, Reserves, Contingent Resources, and Prospective Resources, as well as Unrecoverable petroleum.

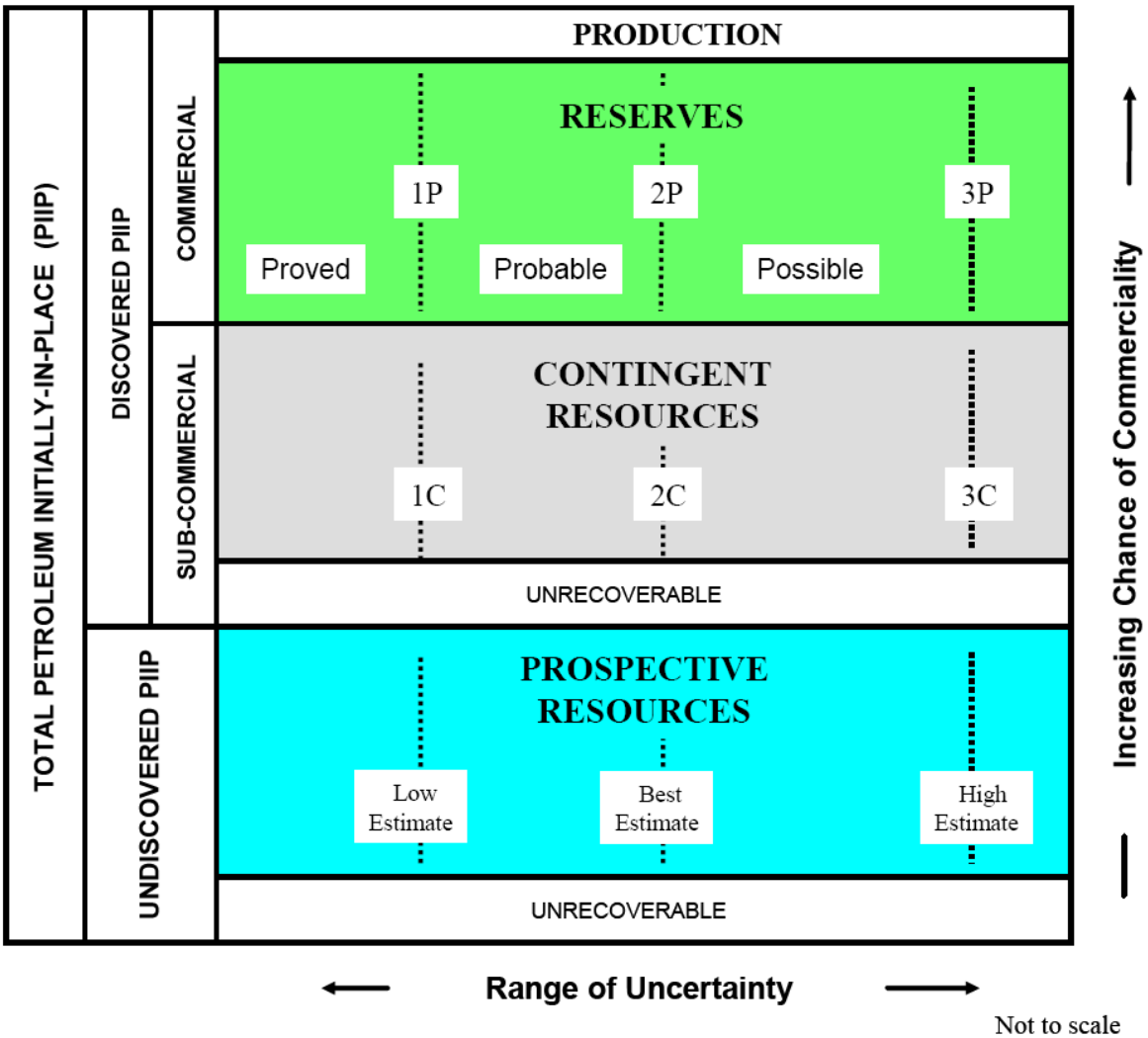

Fig. 2 – Overview major classes of the SPE PRMS system

For Reserves, the general cumulative terms low/best/high estimates are denoted as 1P/2P/3P, respectively. The associated incremental quantities are termed Proved, Probable and Possible. Reserves are a subset of, and must be viewed within context of, the complete resources classification system. While the categorization criteria are proposed specifically for Reserves, in most cases, they can be equally applied to

Contingent and Prospective Resources conditional upon their satisfying the criteria for discovery and/or development. For Contingent Resources, the general cumulative terms low/best/high estimates are denoted as 1C/2C/3C respectively. For Prospective Resources, the general cumulative terms low/best/high estimates apply. No specific terms are defined for incremental quantities within Contingent and Prospective Resources.

In 2001, the Norwegian Petroleum Directorate (NPD) published a comprehensive classification system for resources and reserves to be applied to all reporting by operators and licence holders on the Norwegian Continental Shelf (NCS). The NPD classification system and definitions follows the main structure of the SPE PRMS definitions and classification criteria. In general, the NPD classification system is based on categories that differentiate projects aimed to produce petroleum based on their maturity towards full production status. These categories may also be viewed as qualitative measures of commercial risk or chance of reaching commercial production.

How the SPE PRMS and the NPD classification systems correlate is illustrated in figure 3 below. Note that the NPD *reserves* categories (category 1 through 3) are categorised by project maturity (towards commercial production), and that a low (P90) and a high (P10) value could be presented for each reserves category in addition to the base estimate, as required by NPD for the annual reporting to NPD of reserves and contingent resources. SPE PRMS *reserves* are split into categories[19] referred to as 1P (*P90*), 2P (*P50*) and 3P (*P10*) quantities; but no sub-division is made relative to project maturity. In the revised definitions approved in March 2007 the SPE incorporated an additional subdivision to align it with the project maturity division that is currently in use by NPD (described above).

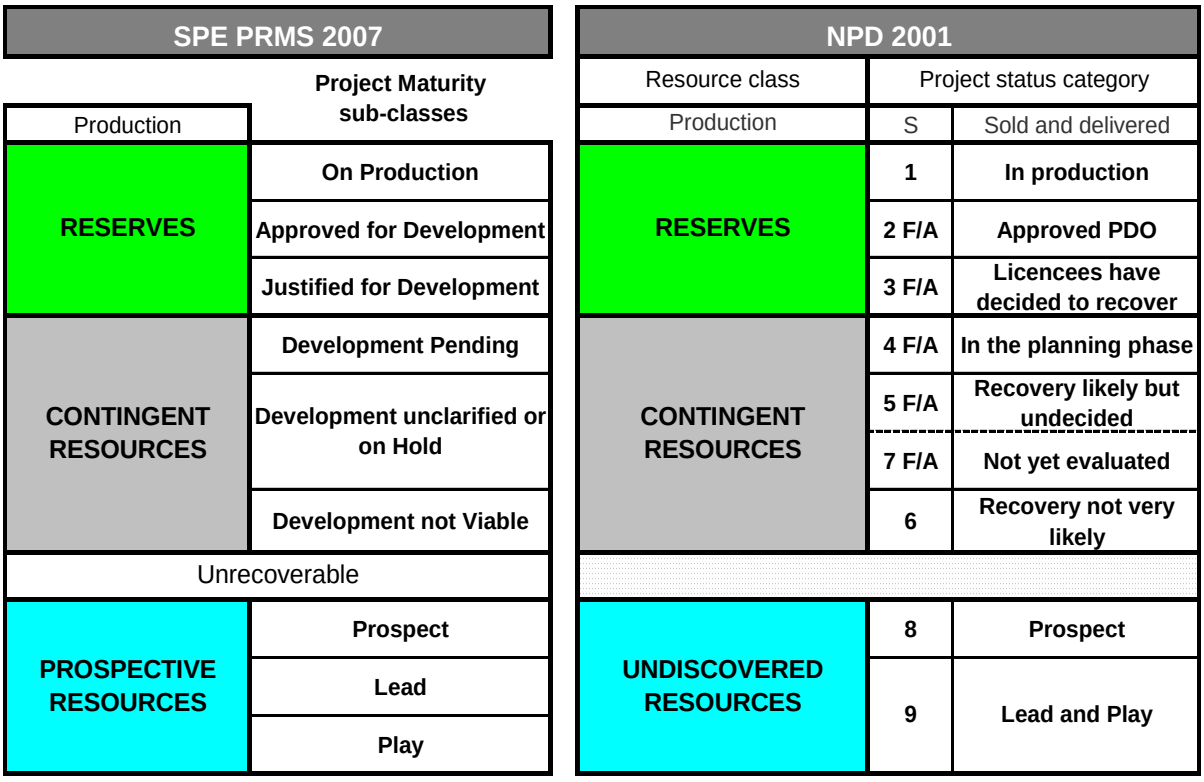

Fig. 3 – SPE and NPD classification systems compared

[19] 1P (reserves) is an abbreviation of *Proved* reserves, and represents the conservative estimate. Please see Annex II herein for an explanation of categories and terminology such as P90, P50, P10, Proved or 1P, Proved+Probable or 2P and Proved+Probable+Possible or 3P.

Public reporting to the US Securities and Exchanges Commission (SEC) is based on the initial SPE/WPC system, but has up until recently only allowed reporting of proven reserves (1P)[20]. Since unproved reserves and contingent resources were not disclosed, vast quantities of hydrocarbon resources were currently not recognized by the SEC system. Also, SEC *Proved* reserves were not necessarily the same as SPE PRMS *Proved* reserves because SPE PRMS allows potential use of a broader range of technologies to verify *Proved* reserves and allows use of average prices rather than the price on the last day of the year for year-end reporting purposes. The SPE PRMS thus presented a more complete picture of the future than the SEC system. However, SEC announced on December 29, 2008 new regulations that would modernize their reporting requirements. As far as we understand, SEC will now allow companies to disclose their probable and possible reserves to investors. Furthermore, SEC will permit the use of new technologies to determine proved reserves if those technologies have been demonstrated empirically to lead to reliable conclusions about reserves volumes. The new SEC disclosure principles also require companies to report the independence and qualifications of a reserves preparer or auditor, to file reports when a third party is relied upon to prepare reserves estimates or conduct a reserves audit; and to report oil and gas reserves using an average price based upon the prior 12-month period rather than year-end prices. The use of the average price will – according to SEC - maximize the comparability of reserves estimates among companies and mitigate the distortion of the estimates that arises when using a single pricing date. – The announcement from SEC did not set out a date for when the new SEC requirements would take effect. Oslo Børs emphasizes that the above description is based on our external understanding of the documents published by SEC and should not be relied upon as advice as to the contents of the new SEC reporting requirements.

There are also differences related to the permitting processes between the NCS and the US. Recoverable volumes that would be classified as non-commercial reserves by the SEC in the absence of government and regulatory approval (upon the granting of which the volumes would be commercial) would be classified as reserves (category 3) by the NPD when the decision and commitment to develop is made by the operator/licence holder. For the NCS, the subsequent government approval is merely related to the alignment of interests and not a question of whether the company will be allowed to develop the discovery, as the licences granted covers both exploration and production. Please refer to the NPD website[21] for the complete classification system including definitions.

Furthermore, there are differences in the classification criteria for reserves. The NPD system allows for the base estimate[22] to be calculated either by deterministic[23] or by stochastic[24] method, and if the latter approach is applied, the base value should correspond to the mean value. Regardless of which approach has been used to arrive at the base estimate, a high estimate and a low estimate may be calculated, applying either NPD or SPE definitions and corresponding classification criteria.

Other classification systems and future developments

Worldwide quite a few classification systems exist, both for the classification of hydrocarbons and for minerals (ore, gold, silver, coal etc).

In 2000, the SPE and the WPC jointly published a document addressing the need for an international standard for the oil industry. In 2004, the SPE developed its vision for such a standard, stating that the goal was "*To have a set of reserves and resource definitions (and associated set of estimating guidelines, which are current best practices) universally adopted by the oil industry, international financial organisations and regulatory reporting*

[20] Note however that SEC is revising their reporting requirements, please see section 4.7.

[21] Please see http://www.npd.no for the NPD classification system, and for general information.

[22] NPD *base estimate* corresponds with SPE *best estimate.*

[23] Please see Annex II

[24] Please see Annex II

bodies." The SPE subsequently established two subcommittees, the Definitions Subcommittee and the Mapping Subcommittee, for the purpose of clarifying and/or revising the existing SPE Reserves and Resources definitions from 1997. The Mapping Subcommittee completed its study of reserves/resource classification systems in October 2005. The study included the mapping of the relative correlation of status categories, as well as the correlation of certainty classes for discovered volumes. The following classification systems and international agencies were the subject of the study:

- US Security and Exchange Commission (SEC - 1978)
- UK Statement of Recommended Practices (SORP -2001)
- Canadian Security Administrators (CSA -2002)
- Russian Ministry of Natural Resources (RF - 2005)
- China Petroleum Reserves Office (PRO – 2005)
- Norwegian Petroleum Directorate (NPD – 2001)
- United States Geological Survey (USGS - 1980)
- United Nations Framework Classification (UNFC - 2004)

A revised SPE/WPC/AAPG/SPEE classification system and definitions – the "Petroleum Resources Management System" (SPE PRMS) – was approved by the SPE Board in March 2007. This revised system for defining reserves and resources was developed over more than two years, with SPE working with World Petroleum Council (WPC), American Association of Petroleum Geologists (AAPG) and Society of Petroleum Evaluation Engineers (SPEE).

Most classification systems are based on the two main axis of the McKelvey box, while the UNFC (United Nations Framework Classification for Fossil Energy and Mineral Resources) system is based on three-dimensional classification of resources/reserves along three distinct axis of Economy (current commercial viability or potential for economic recovery), Feasibility (current project stage or level of technical feasibility) and Geology (level of detail in current exploration data and geological knowledge), respectively.

For companies with hydrocarbon reserves and licences in jurisdictions where reserves and resources would typically be classified by neither the SEC nor the NPD system, please refer to the SPE website for the Final Report by the Mapping Subcommittee of the SPE Oil and Gas Reserves Committee, for a detailed discussion of the idiosyncrasies of the various systems, and their relative correlation and comparability.

In the past years a process has been initiated to establish a classification system encompassing both the petroleum and mining sectors. This work has been undertaken by the United Nations Economic Commission for Europe (UNECE) through the Ad Hoc Group of Experts on the harmonization of Reserves/Resources Terminology (AHGE) who developed the UN Framework Classification. In 2004 the United Nations Economic and Social Council (ECOSOC), which is at the same level as UN Security Council, endorsed and recommended to the UN member countries and international organizations to use the UNFC system. The UNFC serves the needs for classification at a global level (for energy and mineral supply studies), for governments (resources management and policy formulation), for industry (business process management) and for financial reporting.

The project has been assisted by several professional organizations, like SPE, AAPG, CRIRSCO, IVSC and others.

The International Accounting Standards Board (IASB), in considering the development of a new Accounting Standard for the Extractive Activities as part of its International Financial Reporting Standards (IFRS), in 2006 challenged CRIRSCO and the SPE Oil and Gas Reserves Committee (SPE OGRC) to converge their definitions of reserves to ease the financial reporting. The CRIRSCO and SPE OGRC mapped the CRIRSCO Template and the SPE PRMS to each other providing a result for further convergence. CRIRSCO and SPE OGRC continue to work together to assist the UNECE AHGE through MoU to interpret the needs of the two industries and to establish the main points of similarity for potential future convergence.

It is expected that IASB at some point would come up with International Financial Reporting Standards (IFSR) setting out the specific accounting and reporting requirements for the combined mining and the hydrocarbon industries. Per date of this Circular the requirements of any such future IFRS have not been determined.

In any case, the UNECE AHGE, in 2007 established a Mapping Task Force with the mandate to map the UNFC with the CRIRSCO Template, SPE PRMS and the Russian Federation Classification and to propose measures to ensure highest degree of compliance between the systems. The CRIRSCO and SPE convergence mapping formed basis for this mapping to UNFC and both CRIRSCO and SPE OGRC participated in the Mapping Task Force. This very comprehensive mapping, between the different systems, resulted in proposal to change definitions of categories in the UNFC making them brief and generic. As a result definitions of categories in petroleum and minerals are identical. Classes of commodities (minerals and petroleum), reflecting classes in established classifications, are defined by combinations of categories. A Revision Task Force is currently in its final stage in developing a revised UNFC, taking into consideration comments to the draft revised UNFC that have been received after a public hearing period. A proposal to developing specifications and guidelines to the UNFC, based upon commodity specific guidelines already developed or in the making by CRIRSCO and SPE OGRC, will also be made by the RTF.

General

This annex sets out the mathematical approaches to estimating the reserves and resources, and how uncertainties are taken into account. It is important that listed companies communicate as explicit and intelligible as possible how reported estimates have been derived and calculated.

Deterministic vs. Probabilistic

There are several approaches to the estimation of resources and reserves. These approaches are usually referred to as either *deterministic* or *probabilistic*, or a combination of the two.

The method of estimation of reserves or resources is called ***deterministic*** when discrete values for a set of input parameters is used in an estimation model which produces discrete outcomes for a set of output parameters.

The method of estimation is called ***probabilistic*** or ***stochastic*** when continuous distributions are used to represent the inherent uncertainty of each input parameter, and a statistical simulation process is used to calculate resulting distributions for each output parameter (as opposed to discrete outcomes).

The intricacy of the chosen estimation process may vary from simple appraisals (qualitative) to more complex processes and systems of mathematical equations (quantitative).

Reserve estimates – whether calculated through probabilistic or deterministic estimation – involve varying degrees of uncertainty depending largely on the amount and interpretation of reliable geological and engineering data available. The relative degree of uncertainty for the deterministic approach can be conveyed by broadly placing reserve estimates into three categories, ranging from a conservative estimate to an optimistic estimate of economically recoverable quantities:

- 1P ("*Proved* reserves"; low estimate),
- 2P ("*Proved plus Probable* reserves"; base estimate or best estimate) and
- 3P ("*Proved plus Probable plus Possible* reserves"; high estimate).

The base estimate exceeds and includes the low estimate, and the high estimate exceeds and includes the low and the base estimate, hence these reserve categories are commonly referred to as 1P (*Proved*), 2P (*Proved* + *Probable*) and 3P (*Proved* + *Probable* + *Possible*). The "P" in 1P refers not to probability, but to the fact that the estimate contains only one of the three categories, in this case only the low estimate.

Proved reserves are those reserves which geological and engineering data demonstrate with reasonable certainty to be recoverable in futures years from known reservoirs under existing economic and operating conditions. *Probable* reserves and *Possible* reserves are also based on geological and engineering data, but are considered less certain to be recovered than Proved reserves due to regulations, technical, contractual and economic considerations precluding such reserves from being classified as Proved. *Probable* reserves are estimates of reserves which analysis of geological and engineering data suggests are more likely than not to be recoverable. *Possible* reserves are estimates of reserves which analysis of geological and engineering data suggest are less likely to be recovered than *Probable* reserves.

The relative degree of uncertainty for the probabilistic approach may also be conveyed by broadly placing reserve estimates into three categories:

- P90 (low estimate),
- P50 (base estimate) and
- P10 (high estimate).

These estimates denote that there should be at least 90%, 50% and 10% probability that the actual reserves that will be economically recoverable will equal or exceed the *P90, P50* and *P10* estimates, respectively. In other words, *P50* means that the probability that the actual quantities recoverable will exceed the estimate, or fall short of the estimate, is equal. The "P" in this instance refers to the statistical probability, or degree of certainty, assigned to the estimate.

Aggregation of quantities and associated probabilities

When calculating and reporting aggregate reserve estimates on a field or regional level, there are a few issues that any investor relying on such information should be aware of.

Regardless of which estimation method is used for the individual reserves estimate – deterministic or probabilistic - arithmetical aggregation of reserve estimates reduces the initial degree of certainty. For example: Adding P90 reserves from a number of individual fields will not produce an aggregate P90 reserve figure, but will result in a higher probability factor (i.e. an even *more conservative* estimate) for the aggregate. How much the P-factor will increase, depends on the number of fields to be aggregated, and the statistical distributions of the individual field. The only case when arithmetic aggregating across fields/regions would produce an aggregate figure with the P-factor intact is when calculating an aggregate *P50* or *base estimate* for fields whose reserves distributions are symmetric (which is highly unlikely).

The same principle applies when aggregating *Proved* reserves: The inherent probability associated with *Proved* reserves will increase if quantities are aggregated arithmetically, or alternatively, if the inherent probability factor is to be maintained in the aggregate, the aggregate quantity will normally be greater than the arithmetic sum of the parts.

One way of managing the aggregation issues described above is employing a *probabilistic* approach, similar to the process used for estimating reserves, as described above. This method samples input distributions (e.g. recoverable volumes of hydrocarbons for each field) to generate results distributions (e.g. aggregated volumes across fields). The statistical properties of the result distribution provide estimates such as *mean* (expected outcome), *mode* (most likely outcome), variance, P90 (low estimate), *P50* (base estimate) and P10 (high estimate) etc.

Uncertainties associated with reserves estimates may thus be addressed using either a *probabilistic* or *deterministic* approach to data analysis and reserves estimation. The SPE recognizes that deterministic estimates, although they are qualitative in nature, also contain some sort of inferred probability. Calibration tests using both methods of calculation and estimation are recommended by the SPE in order to ensure that the quantities assigned to each reserve class (at project or field level) are adequately similar regardless of method and approach.

Probabilistic aggregation level for reporting purposes

Although full, portfolio-level, probabilistic aggregation might be considered most appropriate in terms of internal management of a company's reserves and asset portfolio, it may not be equally appropriate for the purpose of external reporting and reserves disclosure.

Oslo Børs considers the project or field level to be the most relevant and perhaps optimal reporting level, even if the presentation of reserves by major geographical region may be the typical choice of major oil companies. Regardless of reporting

level, it is important that listed companies communicate as explicit and intelligible as possible how reported estimates have been derived and calculated.

ANNEX III – Reporting format

This annex sets out a format (see tables 1, 2 and 3 below) for the disclosure of reserves.

Table 1 – Reserves by geographical region, project, field or asset

Table 1

Reserves										
Developed assets										
As of DDMMYY (date of report/estimate)	**1P / P90**					**2P / P50**				
	Liquids (mbbl)	Gas (bcm)	mboe	Interest %	Net mboe	Liquids (mbbl)	Gas (bcm)	mboe	Interest %	Net mboe
Field/region										
Field/region										
Field/region										
Total										
Under development (Transitional assets)										
As of DDMMYY	**1P / P90**					**2P / P50**				
	Liquids (mbbl)	Gas (bcm)	mboe	Interest %	Net mboe	Liquids (mbbl)	Gas (bcm)	mboe	Interest %	Net mboe
Field/region										
Field/region										
Field/region										
Total										
Non-developed assets										
As of DDMMYY	**1P / P90**					**2P / P50**				
	Liquids (mbbl)	Gas (bcm)	mboe	Interest %	Net mboe	Liquids (mbbl)	Gas (bcm)	mboe	Interest %	Net mboe
Field/region										
Field/region										
Field/region										
Total										

Notes (may also refer to information found in the MD&A):

- The source of reserve figures, i.e. in-house expertise or 3rd party consultants.
- Any royalties etc. included in net figures.
- Joint Venture and/or PSC/PSA key details summarized.
- Key quantitative input and assumptions made.

Reporting of *possible* reserves is optional.

Table 2 – Aggregate reserves, production, developments and adjustments

Table 2

Reserves development						
Net attributable mboe. Calendar years, reporting as of year end.	Developed assets		Under development (Transitional assets)		Non-developed assets	
	1P / P90	2P / P50	1P / P90	2P / P50	1P / P90	2P / P50
Balance (previous ASR) as of year end last full year						
Production						
Aqcuisitions/disposals						
Extentions and discoveries						
New developments						
Revisions of previous estimates						
Balance (current ASR or interim update) as of DDMMYY						

Notes (may also refer to information found in the MD&A):

- Comments on any adjustments (i.e. acquisitions/disposals, extensions, developments and (especially) revisions), made since previous ASR.
- Basis for adjustments, i.e change in operator's, JV partner's, or own estimates.

The category "Under development" is not applied by some classification systems, and is therefore optional. It should be applied in relation to classification systems where this category is defined. Furthermore, this category might be defined differently in the various classification systems. Thus, a definition of the category should be provided in the ASR.

ANNEX IV – Definitions, abbreviations, units and conversion factors

This annex sets out various definitions, abbreviations, units and conversion factors widely used by the industry.

Abbreviations of oil and gas units

Oil and Natural Gas Liquids

bbl	Barrel(s)
mbbl	Thousand barrels
mmbbl	Million barrels
bpd	barrels per day
NGL	natural gas liquids
LPG	Liquid petroleum gas
LNG	Liquefied natural gas

Natural Gas units

mmcf	million cubic feet
bcf	billion cubic feet
bcm	billion cubic metres
mcf/d	thousand cubic feet per day
mmcf/d	million cubic feet per day
mBTU	million British Thermal Units
Bcf	billion cubic feet

Conversion factors

The following table sets forth certain standard conversions from Standard Imperial Units to the International System of Units (or metric units). Conversion factors are approximations.

From	To	Multiply By
Mcf	Cubic metres	28.317
Cubic metres	Cubic feet	35.315
Bbls	Cubic metres	0.159
Cubic metres	Bbls oil	6.290
Feet	Metres	0.305
Metres	Feet	3.281
Miles	Kilometres	1.609
Kilometres	Miles	0.621
Acres	Hectares	0.405
Hectares	Acres	2.471

Main definitions

1C	Denotes low estimate scenario of Contingent Resources.
2C	Denotes best estimate scenario of Contingent Resources.
3C	Denotes high estimate scenario of Contingent Resources.
1P	Taken to be equivalent to Proved Reserves; denotes low estimate scenario of Reserves.
2P	Taken to be equivalent to the sum of Proved plus Probable Reserves; denotes best estimate scenario of Reserves.
3P	Taken to be equivalent to the sum of Proved plus Probable plus Possible Reserves; denotes high estimate scenario of reserves.
Accumulation	An individual body of naturally occurring petroleum in a reservoir.
AAPG	the American Association of Petroleum Geologists.
°API	an indication of the specific gravity of crude oil measured on the API gravity scale. Liquid petroleum with a specified. gravity of 28° API or higher is generally referred to as light crude oil.
Appraisal well	A well drilled to confirm the size or quality (commercial potential) of a hydrocarbon discovery. Before development, a discovery is likely to need at least two or three such wells (see delineation well and exploration well).
ASR	Annual Statement of Reserves, report to be filed annually to the Oslo Stock Exchange.
CAPEX	Capital expenses.
CAD	Canadian Dollar.
boe	barrel of oil equivalent of natural gas and crude oil on the basis of 1 BOE for 6 (unless otherwise stated) Mcf of natural gas (this conversion factor is an industry accepted norm and is not based on either energy content or current prices).
boe/d	barrel of oil equivalent per day.
Contingent Resources	Those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development projects but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingent Resources are a class of discovered recoverable resources.
Deterministic Estimate	The method of estimation of Reserves or Resources is called deterministic if a discrete estimate(s) is made based on known geoscience, engineering, and economic data.
E & P	Exploration and production.
Entitlement	That portion of future production (and thus resources) legally accruing to a lessee or contractor under the terms of the development and production contract with a lessor.
Exploration	Prospecting for undiscovered petroleum.
Exploration well	A well drilled to test a potential but unproven hydrocarbon trap or structure where good reservoir rock and a seal or closure combine with a potential source of hydrocarbons (see appraisal well and delineation well).
Field	An area consisting of a single reservoir or multiple reservoirs all grouped on, or related to, the same individual geological structural feature and/or stratigraphic condition. There may be two or more reservoirs in a field that are separated vertically by intervening impermeable rock, laterally by local geologic barriers, or both. The term

	may be defined differently by individual regulatory authorities.
Flow Test	An operation on a well designed to demonstrate the existence of moveable petroleum in a reservoir by establishing flow to the surface and/or to provide an indication of the potential productivity of that reservoir (such as a wireline formation test).
Form 20-F	annual filing required of non-US listed companies, including reserve information, filed to the US Security Commission (SEC).
Form 10-K	annual filing required of US listed companies, including reserve information, filed to the US Security Commission (SEC).
Form NI 51-101	report detailing reserves for Canadian listed companies, filed annually to the Canadian Security Commission report detailing reserves for Canadian listed companies, filed annually to the Canadian Security Commission.
GJ	Gigajoule.
High Estimate	With respect to resource categorization, this is considered to be an optimistic estimate of the quantity that will actually be recovered from an accumulation by a project. If probabilistic methods are used, there should be at least a 10% probability (P10) that the quantities actually recovered will equal or exceed the high estimate.
Hydrocarbons	Hydrocarbons are chemical compounds consisting wholly of hydrogen and carbon.
Known Accumulation	An accumulation is an individual body of petroleum-in-place. The key requirement to consider an accumulation as "known," and hence containing Reserves or Contingent Resources, is that it must have been discovered, that is, penetrated by a well that has established through testing, sampling, or logging the existence of a significant quantity of recoverable hydrocarbons.
Lead	A project associated with a potential accumulation that is currently poorly defined and requires more data acquisition and/or evaluation in order to be classified as a prospect. A project maturity sub-class that reflects the actions required to move a project toward commercial production.
Low Estimate	With respect to resource categorization, this is considered to be a conservative estimate of the quantity that will actually be recovered from the accumulation by a project. If probabilistic methods are used, there should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the low estimate.
m^3	cubic metres.
MBOE	Millions of Barrels of Oil Equivalent.
MD&A	Management Discussion and Analysis.
	NCS the Norwegian Continental Shelf.
Net-Back	Linkage of input resource to the market price of the refined products.
NOK	Norwegian Kroner.
NPD	the Norwegian Petroleum Directorate.
NPV	Net Present Value.
OIP	oil in place.
GIP	gas in place.
OGRC	Oil and Gas Reserves Committee.

Petroleum Initially-in-Place	Petroleum Initially-in-Place is the total quantity of petroleum that is estimated to exist originally in naturally occurring reservoirs. Crude Oil-in-place, Natural Gasin-place and Natural Bitumen-in-place are defined in the same manner (see Resources). (Also referred as Total Resource Base or Hydrocarbon Endowment).
PIIP	See Petroleum Initially-in-Place.
Play	A project associated with a prospective trend of potential prospects, but which requires more data acquisition and/or evaluation in order to define specific leads or prospects. A project maturity sub-class that reflects the actions required to move a project toward commercial production.
Possible Reserves	An incremental category of estimated recoverable volumes associated with a defined degree of uncertainty. Possible Reserves are those additional reserves which analysis of geoscience and engineering data suggest are less likely to be recoverable than Probable Reserves. The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P), which is equivalent to the high estimate scenario. When probabilistic methods are used, there should be at least a 10% probability that the actual quantities recovered will equal or exceed the 3P estimate.
Probable Reserves	An incremental category of estimated recoverable volumes associated with a defined degree of uncertainty. Probable Reserves are those additional Reserves that are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate.
Production	Production is the cumulative quantity of petroleum that has been actually recovered over a defined time period. While all recoverable resource estimates and production are reported in terms of the sales product specifications, raw production quantities (sales and non-sales, including non-hydrocarbons) are also measured to support engineering analyses requiring reservoir voidage calculations.
Production-Sharing Contract	In a production-sharing contract between a contractor and a host government, the contractor typically bears all risk and costs for exploration, development, and production. In return, if exploration is successful, the contractor is given the opportunity to recover the incurred investment from production, subject to specific limits and terms. Ownership is retained by the host government; however, the contractor normally receives title to the prescribed share of the volumes as they are produced.
Profit Split	Under a typical production-sharing agreement, the contractor is responsible for the field development and all exploration and development expenses. In return, the contractor is entitled to a share of the remaining profit oil or gas. The contractor receives payment in oil or gas

	production and is exposed to both technical and market risks.
Project	Represents the link between the petroleum accumulation and the decisionmaking process, including budget allocation. A project may, for example, constitute the development of a single reservoir or field, or an incremental development in a producing field, or the integrated development of a group of several fields and associated facilities with a common ownership. In general, an individual project will represent a specific maturity level at which a decision is made on whether or not to proceed (i.e., spend money), and there should be an associated range of estimate.
Prospect	A project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target. A project maturity sub-class that reflects the actions required to move a project toward commercial production.
Prospective Resources	Those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.
Proved Reserves	An incremental category of estimated recoverable volumes associated with a defined degree of uncertainty Proved Reserves are those quantities of petroleum which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations. If deterministic methods are used, the term reasonable certainty is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate. Often referred to as 1P, also as "Proven."
PDO	Plan for Development and Operation.
Recovery factor	(RF) the ratio between the volumes of hydrocarbons produced and produceable from a reservoir, and the hydrocarbons originally in place.
Recoverable Resources	Those quantities of hydrocarbons that are estimated to be producible from discovered or undiscovered accumulations.
Reserve Replacement Ratio	The RRR is one measure of oil company performance. It shows the ratio of new reserves added to the inventory (from exploration/upgrading from resources/acquisitions) compared to oil produced. Ideally this ratio should be greater than 100 percent. Less than 100 % implies that the company is not able to replace what it is producing.
Reserves	Reserves are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions. Reserves must further satisfy four criteria: They must be discovered, recoverable, commercial, and remaining (as of

	a given date) based on the development project(s) applied.
Reservoir	A subsurface rock formation containing an individual and separate natural accumulation of moveable petroleum that is confined by impermeable rocks/formations and is characterized by a single-pressure system.
Resources	The term "resources" as used herein is intended to encompass all quantities of petroleum (recoverable and unrecoverable) naturally occurring on or within the Earth's crust, discovered and undiscovered, plus those quantities already produced. Further, it includes all types of petroleum whether currently considered "conventional" or "unconventional" (see Total Petroleum Initially-in-Place).
Resources Categories	Subdivisions of estimates of resources to be recovered by a project(s) to indicate the associated degrees of uncertainty. Categories reflect uncertainties in the total petroleum remaining within the accumulation (in-place resources), that portion of the in-place petroleum that can be recovered by applying a defined development project or projects, and variations in the conditions that may impact commercial development (e.g., market availability, contractual changes).
Resources Classes	Subdivisions of Resources that indicate the relative maturity of the development projects being applied to yield the recoverable quantity estimates. Project maturity may be indicated qualitatively by allocation to classes and sub-classes and/or quantitatively by associating a project's estimated chance of reaching producing status.
Royalty	Royalty refers to payments that are due to the host government or mineral owner (lessor) in return for depletion of the reservoirs and the producer (lessee/contractor) for having access to the petroleum resources. Many agreements allow for the producer to lift the royalty volumes, sell them on behalf of the royalty owner, and pay the proceeds to the owner. Some agreements provide for the royalty to be taken only in kind by the royalty owner.
SEC	the US Securities and Exchange Commission. The primary US regulatory agency for the securities industry.
SPE	the Society of Petroleum Engineers.
Securities and Trading Act	The Norwegian Act on Securities Trading entered into force partly on November 1, 2007 and partly on January 1, 2008.
Stochastic	Adjective defining a process involving or containing a random variable or variables or involving chance or probability such as a stochastic stimulation.
Sub-Commercial	A project is Sub-Commercial if the degree of commitment is such that the accumulation is not expected to be developed and placed on production within a reasonable time frame. While 5 years is recommended as a benchmark, a longer time frame could be applied where, for example, development of economic projects are deferred at the option of the producer for, among other things, market-related reasons, or to meet contractual or strategic objectives. Discovered sub-commercial projects are classified as Contingent Resources.
UNCF	UN Framework Classification.

Unit-of-production Method	Producing assets should be depreciated over their expected total production using a unit of production basis. The-unit of production-basis is the most appropriate amortisation method because it reflects the pattern of consumption of the economic benefits of the reserves. The units-of-production method determines the useful life of an asset based on the units of production. Each period, the units of production determine the depreciation expense, generally speaking. Has 10 % of the reserves been produced during the year, the unit of production method requires a depreciation of 10 % of the remaining book value of the investments/capitalised costs.
USD	US Dollar.
Working Interest	A company's equity interest in a project before reduction for royalties or production share owed to others under the applicable fiscal terms.
WPC	World Petroleum Council (WPC).

Many of the definitions given above are fetched from the SPE PRMS classification system. See additional definitions in www.spe.org.