

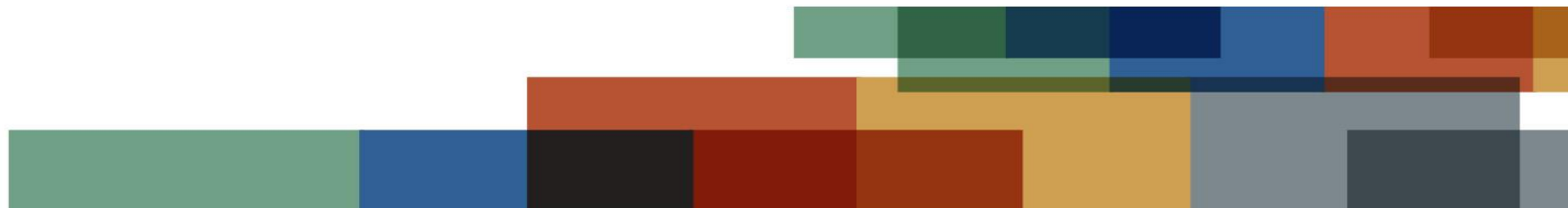


decisions with confidence

The Draft PRMS Update 'Evolution, not Revolution'

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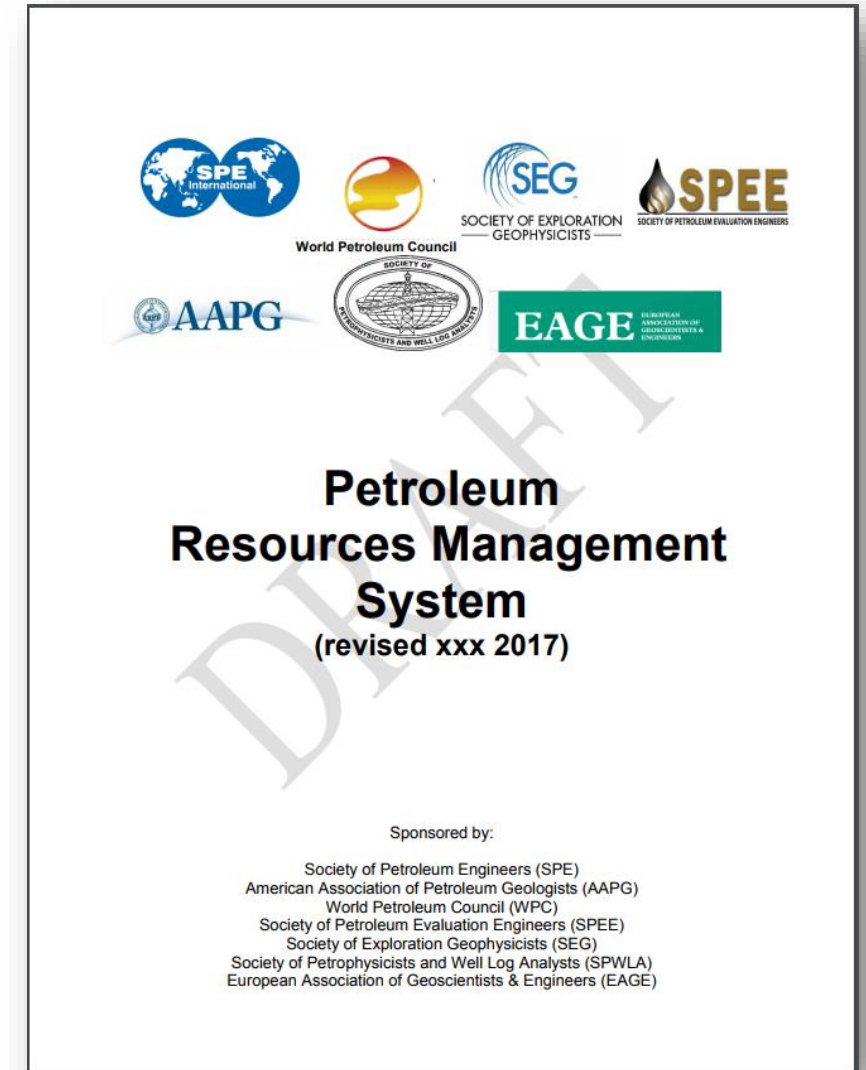
Why are we here?

The Petroleum Reserves Management System (PRMS) categorises petroleum reserves and resources by the certainty of their recoverable volumes, and classifies them by their commercial maturity.

The PRMS is currently under review, with a draft released for comment – this is the first update since original (2007).

Most of the changes are well founded and aimed at resolving uncertainties in resource evaluations.

All stakeholders will need to understand the changes and apply them correctly.



Why are we here?

Today's 'Metro' Newspaper



Yesterday's OGA Statement

Reserves	2P
Reserves	5.7
Contingent Resources	2C
Producing fields	2.3
Proposed new developments	1.9
Other discoveries	3.2
Prospective resources	Central
Prospective resources	6.0

Total Reserves, Contingent and Prospective Resources	19.1
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1. No booking of uneconomic 1P

Reserves classifications are based on the 2P forecasts

- There is only one Project, ie the same for 1P, 2P and 3P.
- The status of reserves is based on the 2P 'commerciality test' only.
- 1P and 3P are viewed as sensitivities, used when considering project risk (1P) and upside opportunity (3P).

	Low	Mid	High
Economic?	Y	Y	Y
Commercial?	Y	Y	Y
Reserves?	1P	2P	3P

	Low	Mid	High
Economic?	Y	Y	Y
Commercial?	N	Y	Y
Reserves?	1P	2P	3P

	Low	Mid	High
Economic?	N	Y	Y
Commercial?	N	Y	Y
Reserves?	zero	2P	3P

- 'Split Classifications' are not allowed. A Project cannot have both Contingent Resources and Reserves, for instance as 1C, 2P and 3P.
- 'Split Conditions' are not allowed. The same criteria (eg oil price) must be applied to 1P, 2P, 3P.

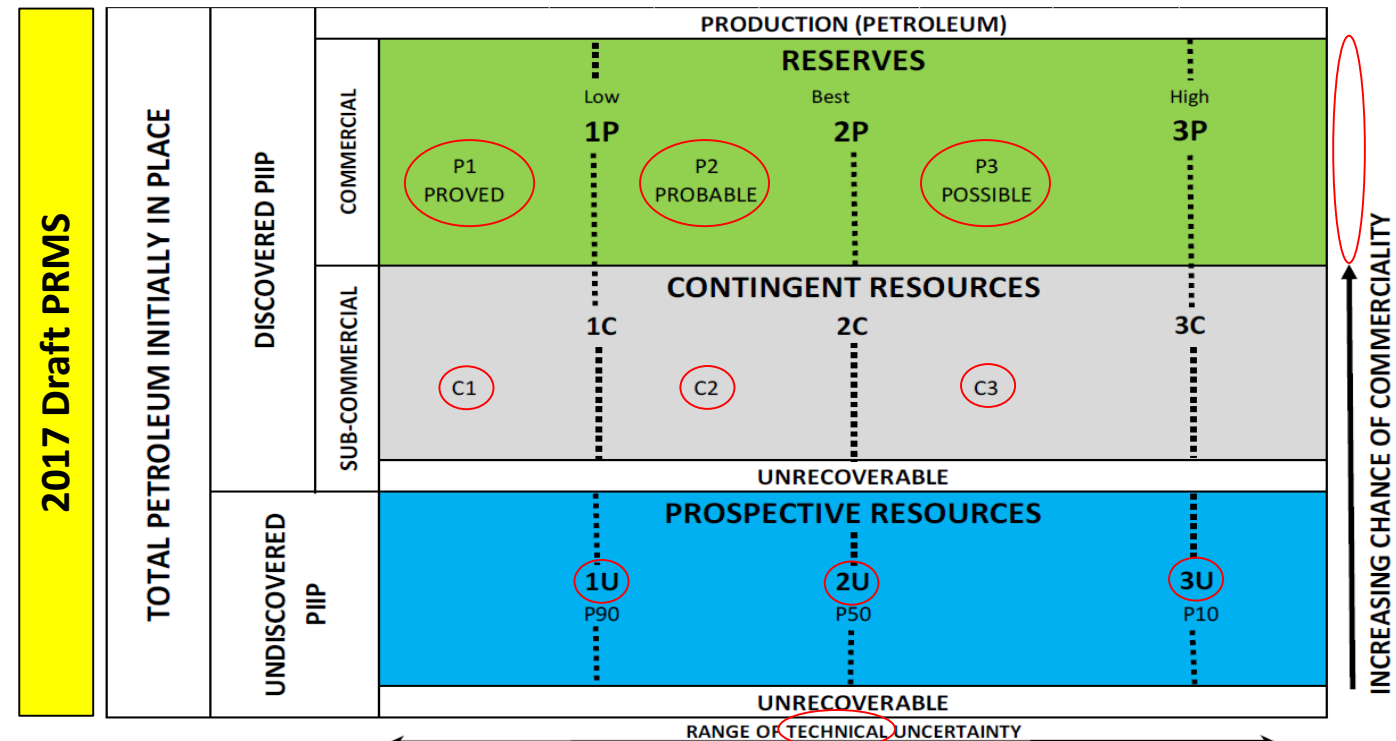
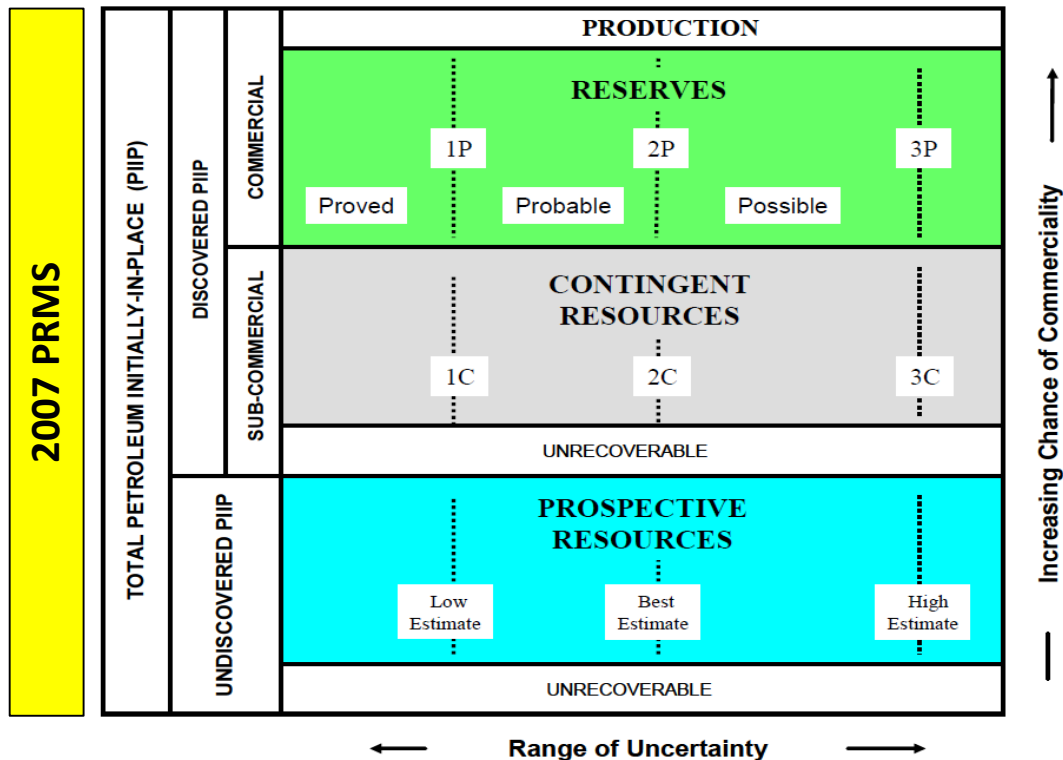
Potential Impact:

- No more reserves conferences asking 'Can you have 2P without 1P?'
- What if fewer wells would be drilled in the 1P case?

2. Minor updates to framework

The PRMS framework has small changes

- The X-axis is now called “Range of Technical Uncertainty” compared to the older “Range of Uncertainty”.
 - Emphasises that only technical uncertainties are considered on the X axis - NOT commercial uncertainties.
- New terms 1U, 2U and 3U for prospective (Undiscovered) resources.
- New incremental terms P1, P2, P3, C1, C2, C3, U1, U2, U3.



3. Fuel can be included as reserves?!

Fuel gas volumes are called 'Consumed in Operations' (CiO)

- These volumes are currently allowed as reserves IF the country's regulator (eg SEC) allowed it. Now this rule is open for all assets.
- Seems in conflict with the fundamental requirement of resources being sales products at a Reference Point.
- These CiO reserves volumes need to be stated and recorded separately.

Potential Impact:

- Creates confusion if companies add the CiO to the other reserves volumes.

4. Improved definitions of analogues

Analogues now need to include analogous geology AND development plans

- Aspects of the Development Plan (eg well spacing, well type etc) are important considerations that may not have been previously considered.

Potential Impact:

- Better use of analogues.
- However analogues will be harder to find, so experience and data on regional analogues will be more important.

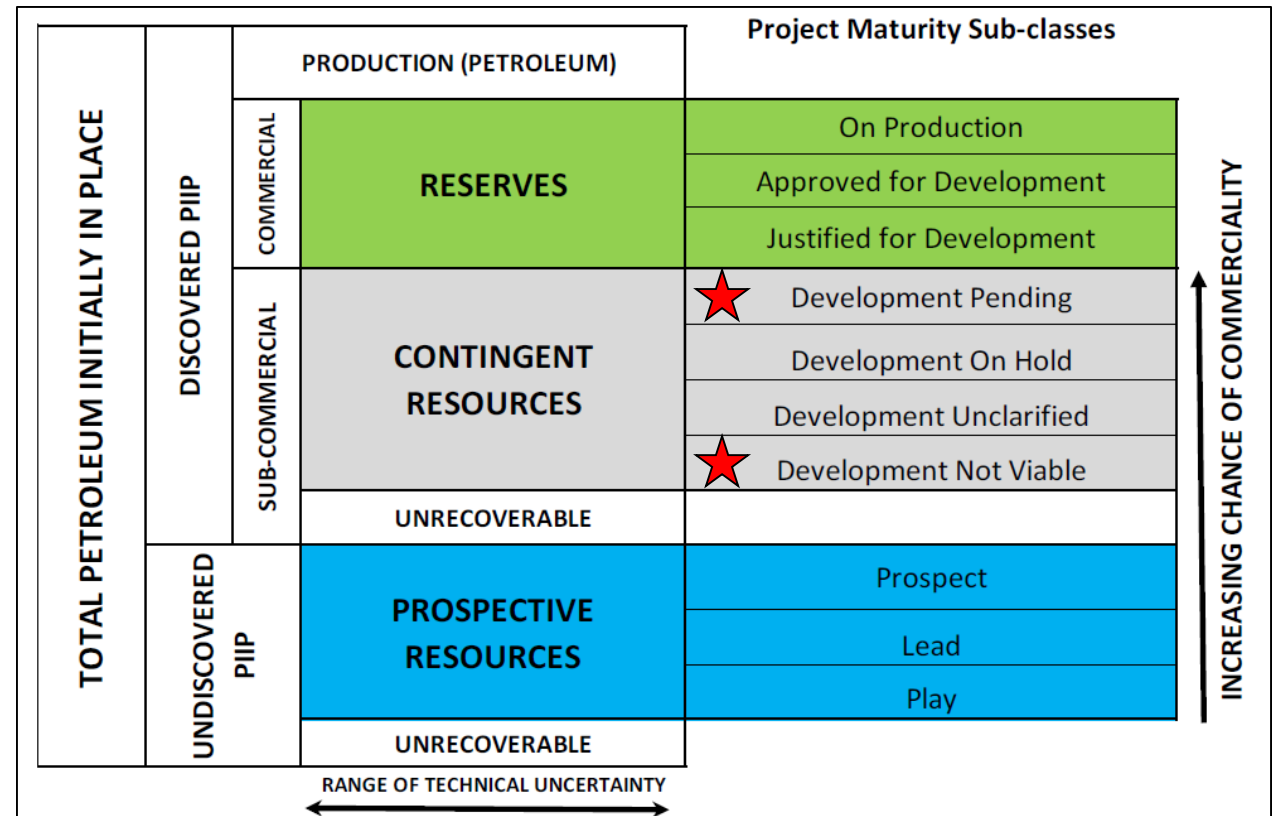
5. Not all resources are created equal

Companies now 'should' disclose the reserves and resources sub-classes

- These sub-classes have always existed but they are seldom used.
- Currently, an economic North Sea project awaiting Board approval has the same class (Contingent Resources) as an uneconomic unconventional discovery offshore Antarctica.

Potential Impact:

- Clearer and more transparent reporting.



6. More stringent discovery tests

Comparison of 2007 and 2017 PRMS wording on discovery

2007 PRMS	2017 Draft PRMS
A discovery is ... one or several exploratory wells have established through testing, sampling, and/or logging the existence of a significant quantity of potentially moveable hydrocarbons.	In the absence of a flow test or sampling , the discovery determination requires confidence in the presence of hydrocarbons and evidence of producibility which may be supportable by suitable producing analogs

Potential Impact:

- Some assets will find it harder to meet the Discovery test.

What's next for the Draft PRMS?

There are still 2 weeks left of the public comment period.

- The comments will be used to create revisions, with a final version expected in 2018.



Following this, work will start on updating the Application Guidelines. This is the 222 page document covering how these rules are to be interpreted.

- Until these guidelines are released there will be uncertainty in how to apply a revised PRMS.
- In the interim, resource owners will need the most guidance!



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