

Framework for the consistent reporting of natural gas reserves and resources – Consultation Paper

Attachment 1: Response template

Stakeholder name: Geoscience Australia

Geoscience Australia is Australia's pre-eminent public sector geoscience organisation. It is part of the Commonwealth's Resources and Northern Australia portfolio, in the Department of Industry, Innovation and Science. Geoscience Australia applies science and technology to describe and understand the geology and geography for the benefit of Australia. As part of this role, Geoscience Australia supports the Australian Government, industry and the community by providing advice and data to support decision making and the development of policies and programs related to energy resources.

Part of the ACCC Gas Inquiry 2017–2020 is to examine the volumes of gas supplied or available for current or future supply, including natural gas extracted or produced in Australia, or imported into Australia.

Geoscience Australia produces annual national petroleum resources inventories through compiling federal government, state government and industry gas (and liquids) data, and quality controlling, interpreting and archiving that data. Geoscience Australia is the only government agency positioned to produce a national inventory as data owners and regulators do not provide a national perspective. To provide this information, Geoscience Australia currently has no authority to compel reporting of this data from the various owners and regulators. With limited scope to obtain this data, Geoscience Australia and therefore the Federal Government has an incomplete understanding of the national petroleum inventory.

This national petroleum inventory dataset is published at a variety of scales (national, state, basin and field). Geoscience Australia's publications include the <u>Australian Energy Resources Assessment</u>, the 'Gas resources in Australia' <u>report</u> to the COAG Energy Council and other publications as required (e.g. the <u>Offshore South East Australia Future Gas Supply Study</u>). This national petroleum resource data also underpins Geoscience Australia's advice function to federal and state government, industry, academia and other stakeholders. Geoscience Australia's petroleum resources work is supported by, amongst other activities, the agency's geological, spatial positioning, maritime boundaries, and environment work.

Geoscience Australia can assist the ACCC on matters relating to the finalisation and implementation of this Framework.

Geoscience Australia's recommendations focus on ensuring the robustness of the Framework and transparency of resource and reserve data as a means of:



- 1. enabling an integrated understanding of short- medium- and long-term supply to the East Coast Gas Market within the broader context of the national gas market; and
- 2. ensuring that data generated by the Framework is trusted and useable for different stakeholders and end-uses both now and in the future.

	Questions	Feedback
Box 2	2.2 Questions on categories of reserves	
1.	 Do you agree that producers should be required to report on their 1P, 2P and 3P reserves estimates? (a) If so, please explain how you would use this information and the benefit it would provide. (b) If not, please explain why. 	 Reporting of at least 2P Reserves should be mandatory as a base-level to inform energy markets. The inclusion of 1P data would be most useful for exporters/end users and Government in evaluating how realistic short- to medium-term contracted volumes are. Reserves are typically calculated at the reservoir level within a field and then compiled for full field representation. Ensuring reservoir-level Reserve data are captured would be useful as individual reservoir units may require different development techniques (different gas compositions, different development costs etc.). Reporting 3P Reserve estimates would provide information for Government and energy market longer-term outlooks.
2.	Do you agree that producers should be required to break down their 1P, 2P and 3P reserves into developed and undeveloped reserves?(a) If so, please explain how you would use this information and the benefit it would provide.(b) If not, please explain why.	Reporting Reserves as developed and undeveloped could provide useful insight into how close a Reserve is to being produced. However, careful definitions as to what is regarded as 'developed' should be implemented. This reporting would reduce uncertainty for Government and energy markets around supply outlooks, as it is not just the quantity of oil and/or gas available which is important, but when it is likely to be made available to the market.
3.	Should it be mandatory for producers to develop 3P reserves estimates, or should the reporting of this information be optional as it is under the ASX Listing Rules and in other jurisdictions?	3P Reserves data could be useful in understanding any potential Reserve 'upsides'. However, it is noted that it is rare for petroleum producers to <i>underestimate</i> their Reserves, and that any perceived upside could be overly optimistic.



	Questions	Feedback
Box 2	2.3 Questions on categories of resources	
4.	 Do you agree that 1C and 2C contingent resources should be reported? (a) If so, please explain how you would use this information and the benefit it would provide. (b) If not, please explain why. 	Yes, Geoscience Australia supports including 1C and 2C resources in the reporting framework. This data is internationally used by jurisdictions and industry as a yardstick for measuring future supply trends. Contingent Resources data allows for a longer-term perspective on in-ground gas resources, regardless of whether they are deemed to be sub-commercial at any given time. 2C resources are currently included in both the Upstream Petroleum Resources Working Group and Australian Energy Resources Assessment reports.
5.	Do you think it should be mandatory for producers to develop 1C and 2C contingent resource estimates, or should the reporting of this information be optional as it is under the ASX Listing Rules and in other jurisdictions?	Reporting of at least 2C Contingent Resources should be mandatory. This data is internationally used as a primary yardstick for measuring future supply trends.
6.	Do you think any other resource categories (e.g. 3C contingent resources or prospective resources) should be reported? If so, please explain how you would use this information and the benefit it would provide.	The exclusion of Prospective Resources from the proposed Framework would reduce end-users ability to evaluate Australia's long-term potential gas resources. While there is less certainty associated with these estimates, they do provide a long-term indication of the resources that may possibly come online (as opposed to 2P and 2C numbers, which give a shorter-term perspective). Prospective resource estimates are also typically conducted at a more regional scale and hence provide a better understanding of the regional hydrocarbon prospectivity (as opposed to just the currently permitted areas). The large spatial scale, and long-term outlook of these estimates increases Australia's attractiveness as an exploration investment destination which provides the investment required to upgrade resources from prospective to contingent status, and provides useful information for major infrastructure planning purposes.
Box 2	2.4 Questions on gas field information	
7.	Do you agree that information on the field's stage of development, the type of gas and the nature of the gas field should be reported?	Understanding when supply may be available to the market is as important as understanding how much oil and/or gas may be available in any given area.



	Questions	Feedback
	(a) If so, please explain how you would use this information and the benefit it would provide.(b) If not, please explain why.	Stage of development data could be useful, but users would need to be aware that fields can be in the various stages of development for long periods of time – just because a Reserve is 'approved for development' does not mean production is imminent. We suggest creating a stock list of 'stages' for producers to report with as a lot of descriptive free text make this data less useable.
8.	Do you agree with the categories that have been proposed for the field's stage of development, the type of gas and/or the nature of the gas field? If not, please explain why and what alternatives you would suggest.	The 'type of gas contained within a field' phrase is a bit of a misnomer in this context. It appears that the ACCC is seeking to differentiate between play types (shale, tight, conventional etc.). The 'type of gas contained' within all of those different plays could be identical – it is the <i>reservoir</i> that is different. Geoscience Australia suggests tightening up terminology.
		Irrespective of the terminology used —yes, play type is crucial information to capture as this information is directly related to the Reserve development methodology (and the flow on implications for production costs, requirements for policy development etc.).
9.	Is there any other gas field information that you think should be reported? If so, please explain why you think this is consistent with the objectives of the reporting framework.	Some suggestions regarding how field information data collection could be improved:
		• There is no definition of what constitutes a 'tight' field within the proposed Framework currently. As 'conventional' and 'tight' reservoirs exist on a continuum, the formal definition of where a reservoir transitions from one play type into the other needs to be included in the Framework, or the tight Reserves/Resources etc. data categories will become meaningless. Ensuring that play type information is systematically defined and recorded will enable better tracking of gas sector development (and in particular unconventional gas) in Australia and provide better information for policy decision makers and investors.
		• There is currently no mention of deep coal gas (as found in the Cooper Basin), or basin centred gas, syngas (e.g. Leigh Creek) or hybrid play types (to name just a few) in the proposed Framework. How will these unconventional reservoir types be dealt with for reporting purposes? As with tight gas mentioned above, definitions for each unconventional play type should be



	Questions	Feedback
		provided to describe these (e.g. deep coal gas is found at depths greater than 2000 m etc.).
		• The example data tables provided do not include any data enabling the spatial location of gas resources data. For example: state, permit numbers, latitude and longitude, field discovery well etc. Including (and preferably making their provision mandatory) these spatially-enabling data in the Framework would greatly enhance the useability of the compiled data.
		• There is currently no requirement in the Framework for producers to define what <i>area</i> their Reserve/Resource estimates cover (i.e. a permit, and/or an area in kilometres squared). As Reserves are revised through time, the area they cover may also vary. If this data is not captured it will not reflect the relative quality of fields, for example 100 Tcf of gas over 10,000 km ² vs. 100 Tcf of gas over 100 km ² are very different development prospects (and should be priced accordingly).
Box	2.5 Questions on movement in 2P reserves	
10.		Yes, reporting annual movements in Reserves should be mandatory; doing so would assist in achieving the transparency objective of the proposed Framework.
	Do you agree that annual movements in 2P reserves should be reported?	These data allow the calculation of 'remaining Reserves' which indicates how much readily-accessible gas is left in the ground and identifies potential supply shortfalls.
	(a) If so, please explain how you would use this information and the benefit it would provide.(b) If not, please explain why.	As suggested with regards to capturing reservoir level Reserve data previously— the same approach to capturing production data (in particular) could be employed here, especially for fields with hybrid play types. For example if a single field held conventional and shale gas reservoirs, and the gas price was low – the shale gas reservoirs may never get developed and that part of the Reserve will sit in the ground, whereas the conventional (usually cheaper to produce) reservoir will likely be developed and produced. Being able to differentiate which Reserves are being produced would allow a better understanding of medium- and long-term gas supply.



	Questions	Feedback
11.	Do you agree with the categories that have been proposed for the breakdown of movements in 2P reserves? If not, please explain why.	Yes, the provided categories appear to cover the common reasons why Reserves might alter over the course of a year.
12.	 Do you think there would be value in also requiring producers to report on annual movements in 2C resources? (a) If so, please explain how you would use this information and the benefit it would provide. (b) If not, please explain why. 	 Over the course of a year a 2C resource could potentially be upgraded to become a Reserve; this would (presumably) already be captured as a 'material change to Reserves' event, and so there would be little benefit to capturing these Reserve-upgrade-related changes to 2C resources. Contingent Resources would not typically be produced either, and so tracking in this category would not be required. For the other resource-movement categories (discoveries, acquisitions, divestments and extensions), reporting annual changes in 2C resources could be beneficial. This data is considered to be a primary yardstick for measuring future supply trends.
Box	2.6 Questions on contracted 2P reserves	·
13.	 Do you agree that if the ACCC and GMRG's recommendation on contracted 2P reserves is implemented that: (a) producers should be required to report the total quantity of 2P reserves that they are contracted to supply as total contract quantities under GSAs at a basin level? If not, please explain why. (b) AEMO should be required to further aggregate the information if there are less than three producers operating in the basin? If not, please explain why. 	 Yes, mandatory provision of contracted Reserves at the basin level would improve transparency around potential supply shortfalls. Careful definition of what actually constitutes a 'basin' (preferably with a series of standardised definitions embedded within the Framework) would be required to implement this. Knowing how Reserves are going to be drawn down is an important part of predicting the potential of an area to provide supply to market. The suggested reporting for contracted Reserves is on an annual basis. How will short (sub-one year supply) contracts or spot sales data be captured? Yes, steps should be taken to aggregate information to protect individual producers' commercially sensitive information. However, care will be needed to further evaluate the definition of 'producer' for this purpose. Would multiple subsidiaries of one parent company be regarded effectively as one 'joint producer' for this purpose? Or would they be recognised as separate entities?



	Questions	Feedback
Box	2.7 Questions on other information	
14.	 Is there any other information that you think should form part of the reporting framework? If so, please set out: (a) what the information is (b) how you would use the information and the benefit it would provide (c) why you think the inclusion of this information would be consistent with the objectives of the reporting framework. 	 All data within the Framework is currently requested to be reported in petajoules (PJ). In the first instance, gas data should be reported in the industry-standard trillions of cubic feet (Tcf); conversion to PJs can be done later if desired. The reverse conversion (from PJ back to Tcf) should not occur as there are numerous conversion factors that can (and should) be applied to the calculation depending on the nature of the gas from an individual reservoir/field. Changing the base reporting units to Tcf will ensure accurate, useable data for a range of purposes. Alternatively, and by far the less-preferred suggestion is to make specific conversion factors mandatory, or, to make the reporting of producer-chosen conversion factors mandatory.
Box	2.8 Questions on reporting standard	
15.	Do you agree that the PRMS classification system should be used in the proposed reporting framework? If not, please explain why.	Yes, Geoscience Australia supports the use of the PRMS classification as the basis for this Framework as it is an internationally recognised classification, and would ensure consistency of reporting both within Australia, and for international companies operating here, potentially across their international gas portfolios.
16.	Do you agree that the PRMS definitions set out in Box 2.1 should be used in the proposed reporting framework? If not, please explain why.	Geoscience Australia supports the use of the PRMS definitions.
17.	Are there any other reporting standards or definitions that you think should be reflected in the reporting framework?	 The proposed reporting Framework is designed to capture data specific to the East Coast Gas Market – what is the geographic or geological demarcation that describes which basins or company permits will be subject to these reporting requirements? As mentioned in response to Box 2.4 – standard definitions of 'field types' should be included in the Framework to ensure all producers define them the same way. This suggestion is particularly relevant for tight fields, but also applies to other play types.



	Questions	Feedback
		As referred to in Box 2.6, the term 'basin' needs to be spatially defined for each basin that will be covered by the proposed Framework. This will ensure long-term data integrity and that any aggregation processes hinging on this definition are completed systematically over time. Note that in many cases, the under-and over-lying nature of geological basins mean that the spatial definition of a basin is not a simple 2D question.
Box 2	2.9 Questions on quantities and analytical methods	
18.	Do you agree that reserves and resources should be reported on the basis of sales quantities? If not, please explain why.	Yes, Geoscience Australia supports reporting Reserves and Resources on the basis of sales gas volumes. It ensures that high CO ₂ fields (for example) don't over-represent their saleable gas Reserves.
		Better understanding the characteristics of existing reservoirs will provide useful information when exploring for resources in those basins in the future.
		As such, it would be useful to see both sales volumes and production losses (i.e. a column for non-hydrocarbon gases, one for flared gas etc.) reported to better understand the geological and production characteristics (and the associated processing requirements) of different fields.
19.	Do you agree that reserves and resources should be reported on a net revenue basis? If not, please explain why.	Splitting Reserves and Resources reporting data so that individual producers report their share of net revenue interest only will make it difficult to compile field level data if no other data is provided. Fields can be owned by complex joint ventures (JV) with many participants. Furthermore the percentage interest held by any one partner in a given project can change through time. Unless this information is readily available in conjunction with the data presented on the Bulletin Board, it is going to be very difficult to compile field level data, and even more so to do field-level data time series work.
		The addition of a reporting requirement that includes a description of the JV structure at the time the Reserve/Resource estimations are provided would ensure that field-level data can be compiled easily and accurately. This would also provide a simple check on how complete the reporting for a given field is/has been by ensuring whoever QC's the incoming data for the Bulletin Board understands how many companies should be reporting for each field. An



	Questions	Feedback
		example of this reporting might look like "as at 31 December 2019 Field X Reserves were held 50% by Company A and 50% by Company B". Even more powerful would be to have a pair of columns for each JV partner associated with a Reserve; one for company name and one for percentage interest.
20.	Do you agree that producers should be required to disclose the analytical method they have used to estimate their reserves and resources? If not, please explain why.	Yes, the estimation method should be provided to ensure complete transparency. As the estimation method used materially reflects the limitations associated with the provided estimate, this will ensure that the different types of Reserve estimations are treated appropriately by the end-user.
Вох	2.10 Questions on reserves and resources reporting level	
21.	 Do you agree that the reserves and resources information set out in sections 2.2.1-2.2.4 should be reported at a field level? (a) If so, please explain how you would use this information and the benefit it would provide. (b) If not, please explain why and set out what reporting level you think should be adopted. 	Currently the Framework stipulates that Reserves and Resources data are to be reported as one aggregate number per field. As different reservoirs within a field often perform differently, and may have different economics associated with their development (e.g. stacked conventional and unconventional reservoirs), Reserve estimates (and sometimes Contingent Resource estimates) are typically calculated for each individual reservoir, then summed to produce field-level estimates. Considering producers are typically producing reservoir-level estimates already, it shouldn't be an overly onerous task to report their estimates in this fashion. Collecting data by reservoir would enable more detailed estimates of Reserve/Contingent Resource-related parameters e.g. Reserve life. This is especially the case where reservoirs within fields perform differently and is therefore an important step in providing transparency to the market.
Вох	2.11 Questions on the frequency and timing of reporting	
22.	Do you agree that the frequency of reporting should be annual? If not, please explain why.	Yes, annual baseline reporting is adequate.
23.	Do you agree that producers should also be required to report on any material changes in reserves and resources estimates that occur within the year?	Yes, material changes should also be reported, particularly for Reserves and Resources. This could also be useful for production or development status changes (i.e. moving from in-development, to production).
	(a) If so:	allow producers to delay releasing data until such time as they think it is



	Questions	Feedback
	 i. do you think there should be any limitation on the requirement to report changes (for example, should the requirement be limited to changes in reserves and resources that are advised to the ASX and/or government agencies, or should it be limited to material changes in reserves and resources)? ii. do you think the threshold for material changes should be set at +/-10% or do you think another threshold would be more appropriate? (b) If not, please explain why. 	 advantageous to release it. This could limit the flow of data into the public domain and further reduce transparency. An alternate solution would be to require the reporting of data as soon as they are delivered to the company/compiled (i.e. within 30 days). This would ensure that <i>all</i> data is released into the public domain in a timely fashion. The efficacy of this suggestion would hinge on the proposed frequency of data releases to the Bulletin Board (see additional recommendation three below). If enacted as proposed in the Framework currently (i.e. limited to those data also supplied to the ASX, government etc.), ensure that all foreign stock exchanges are also included in that list, otherwise foreign-listed producers won't ever have to report their data. Entirely unlisted (privately owned) companies are much rarer, but the Framework also needs to ensure that data from these entities are also captured. The definition of a 'material change' of ±10% seems sufficient.
24.	Do you think that all producers should be required to report their reserves and resources as at a fixed date? If not, please explain why and the option you believe should be employed.	Setting a fixed reporting date could potentially result in new estimates 'just missing' that date, in which case that data wouldn't be reported for another year which would impede the timely delivery of data to the Bulletin Board. However, if the 'material changes' reporting suggestion is implemented as mandatory, most of these 'out of cycle' resource estimates would likely have to be reported anyway. In short, it shouldn't make a significant difference either way, provided that the material changes reporting requirement is implemented and made mandatory.
Box 2.12 Questions on evaluation requirements		
25.	Do you agree that reserve and resource estimates should be required to be prepared by, or under the supervision of, an independent qualified evaluator? If not, please explain why.	Yes, it should be mandatory for Reserve and Resource estimates to be prepared/overseen by independent and qualified evaluators (as outlined in the PRMS). In addition, the identity of the independent assessors should be recorded alongside the provided estimates in to ensure full transparency.



	Questions	Feedback
26.	Do you think that any other evaluation requirements (e.g. a requirement to obtain an independent audit) should be implemented?	Additional evaluation or auditing processes should not be required routinely as the PRMS classification already states that resource estimates must be completed by an independent qualified evaluator. However, Geoscience Australia would support the introduction of a peer review panel to oversee the independent evaluators to ensure that the estimates being produced are in fact both independent and qualified. However, this change should be implemented <i>nationally</i> , not just for the East Coast Gas Market. This would add a further degree of robustness in Resource and Reserve reporting and therefore build trust supporting the operation of the market. In addition, enshrining within the Framework the option for the Bulletin Board regulators to commission at their discretion random audits, or targeted audits of a company's data (i.e. if any irregularities are found) would provide an additional reporting compliance incentive.
Box 2	2.13 Questions on compliance costs	
27.	What incremental costs do producers expect to incur in complying with the reporting requirements proposed in sections 2.3 and 2.4?	Geoscience Australia cannot comment on the compliance costs to producers associated with the proposed Framework.
28.	Do you think there are any refinements that could be made to the proposed reporting requirements in sections 2.3 and 2.4 to further reduce compliance costs or the regulatory burden, whilst also ensuring the requirements are fit for purpose and achieves the objectives set out in section 1?	Where producers are already reporting data equivalent (in part or full) to that proposed in this Framework to other agencies (NOPTA etc.), it should be evaluated if those agencies can be legislatively enabled to provide said data directly to the Bulletin Board on the producers' behalf. This would reduce the number of individual reporting requirements producers must meet. In many instances, it may be possible to automate this agency- Bulletin Board data delivery via careful implementation of digital data delivery systems.



	Questions	Feedback
Box :	3.1 Questions on the manner in which reserves are to be estimated	
29.	Do you agree that producers should be required to estimate their reserves on the basis of forecast economic conditions? If not, please explain why.	Yes, provided a standardised forecast period is used. Geoscience Australia would typically assume that a Reserves estimate should hold true (barring major unpredictable market changes) for a maximum of five years. If many different forecast periods are used (even if disclosed), this makes it difficult to compare one Reserve with another over time.
		Unless the forecast economic conditions are stipulated (e.g. by AEMO), the forecast economic conditions used in any Reserve estimation must be provided by the company to ensure market transparency.
Box :	3.3 Questions on gas price assumptions to be used for uncontracted r	eserves
	Do you think that:	
	(a) Producers should be responsible for determining the forecast gas prices they will assume when estimating uncontracted reserves and required to disclose these assumptions (i.e. Option 2)?	Producers should define the gas prices used in their Reserves estimations, and they should have to disclose those prices (and any other assumptions material to the definition of that Reserve) to ensure transparency. Producers have a vested interest in applying accurate price assumptions, and so should be able to self-regulate appropriately on this matter. For transparency, all price assumptions must be disclosed.
	i. If so, please explain why.	
	ii. If not, please explain why.	
30.	(b) Producers should be required to use a mandated common gas price assumption when estimating uncontracted reserves (i.e. Option 1)?	
	i. If so, please explain why and set out:	
	 a. the benefits you think this would provide over the producer-determined assumptions? 	
	b. how you think the forecast common gas price assumption should be determined?	
	ii. If not, please explain why.	



	Questions	Feedback
	(c) Producers should be responsible for determining the forecast gas prices they will assume when estimating uncontracted reserves and not required to disclose their assumptions (i.e. Option 3)?	
	i. If so, please explain why and set out how do you think this option would address the concerns outlined in section 3.1?	
	ii. If not, please explain why.	
31.	 If Option 2 is implemented, do you think that the disclosure requirements in section 3.6 will impose sufficient discipline on producers, or do you think the gas price assumptions used by producers should be required to satisfy a test that would be overseen by the AER? If you think the gas price assumptions should be subject to a test, please set out: (a) what form you think the test should take and if the test should apply to the gas price assumptions or the method used to determine the gas price assumptions (b) how you think the test should be enforced by the AER (for example, should the AER have the power to require producers to re-estimate their reserves using an alternative price assumption). 	Yes, producers should be able to self-regulate appropriately. If a price-appropriateness test was implemented, it could be something as simple as having to be within X% of an independent experts opinion of what a 'reasonable' price assumption for that field should be. A possible fourth option would be to mandate that Producers provide a range of Reserve estimates using both their own price assumptions, and whichever standardised value is regarded as appropriate. This would ensure both absolute comparability between Reserve estimates (at least with regards to the gas price assumption), and that producers can apply gas prices of their choice. If there are significant discrepancies between the values, producers could address these through the provision of additional background information.
Box :	3.4 Questions on gas price assumptions to be used for contracted res	erves
32.	Do you agree that the gas price assumptions underpinning contracted reserves should be based on the prices specified in the relevant GSAs? If not, please explain why.	Yes, contracted Reserves estimations should be based on the prices specified in their Gas Supply Agreement. This would ensure any shortfalls between in-ground Reserves and contracted supply volumes can be easily identified.
	Do you agree with the ACCC's proposal to allow producers to account for the operation of:	
33.	(a) price escalation mechanisms when determining the prices to apply under the relevant GSAs over the forecast period? If not, please explain why.	The operation of price escalation mechanisms and extension provisions are outside of Geoscience Australia's remit.
	 (b) contract extension provisions if the GSAs are likely to be extended and the prices (or pricing mechanisms) to apply in this 	



	Questions	Feedback	
	period have already been determined? If not, please explain why.		
Box 3.5 Questions on the disclosure requirements for gas price assumptions			
34.	Do you agree that producers should be required to disclose the following information when reporting their reserves estimates?		
	(a) The gas price range within which there would be no material change in the 2P reserves estimates, which is to be reported at a basin level for each of the following five years and generally for subsequent periods (with the range to be based on the price assumptions used to estimate uncontracted reserves).		
	(b) The sensitivity of the 2P reserves estimates to a +/-10% change in the gas price range reported under (a).	Geoscience Australia advocates for full disclosure of the assumptions underlying Reserves estimates.	
	(c) A description of the method used to determine the gas price range and any other assumptions that have been made when determining the price range.		
	(d) An explanation of any changes that have been made to the gas price assumptions from the previous year and why the changes were made.		
	If not, please explain why.		
35.	Do you agree with the proposal to require producers to report the gas price range:		
	 (a) for each year over a five year period and generally thereafter? If not, please explain why. 		
	(b) for uncontracted reserves only? If not, please explain why.		
	(c) at a basin level? If not, please explain why.		
36.	If producers are required to report the gas price range within which there would be no material change in 2P reserves, what materiality threshold do you think should be adopted for this purpose and why?		



	Questions	Feedback	
37.	Do you agree that the threshold for measuring the sensitivity of the reserves estimates should be 10%? If not, please explain why and what alternative threshold you think should be applied.		
38.	Is there any other information that you think should be disclosed about the gas price assumptions? If so, please explain what the information is and why it is required to meet the objectives set out in section 1.		
Box 3.6 Questions on compliance costs			
39.	What incremental costs do producers expect to incur in complying with the proposed reporting requirements set out in sections 3.4-3.6?	Geoscience Australia cannot comment on the compliance costs to producers associated with proposed Framework.	
40.	Do you think there are any refinements that could be made to the proposed reporting requirements in sections 3.4-3.6 to further reduce compliance costs or the regulatory burden, whilst also ensuring they are fit for purpose and achieves the objectives set out in section 1?		

Additional recommendations:

- 1. There are several references to condensate (gas liquids) currently in the draft Framework text. For example, in Section 2.3.3 'the nature of the field' describes field options where fields that are 'mainly condensates or liquid hydrocarbons' are included. This seems to suggest that condensate is within the purview of the Framework. The Framework must provide clarity on reporting requirements in order to provide certainty to the market. Geoscience Australia suggests clarification as to the inclusion/exclusion of condensate data reporting within the Framework.
- 2. Geoscience Australia suggests including a provision for different levels of 'end-user' for the data reported under the auspices of the proposed Framework. This provision would recognise that different users will want to use the data captured for different purposes. In practice this might mean that a Federal Government user might be able to access entirely un-aggregated data, whereas the public or commercial users might be only able to access aggregated data. Ideally these varying levels of data access would be managed through different levels of logins to the Bulletin Board, rather than through submitting data-provision requests to the regulator. Geoscience Australia provides advice to government on gas resources, and our ability to provide authoritative advice is dependent on having access to reliable and relevant data. Geoscience Australia regards this as being in the industry's best interests, in the same way that the market having access to data and therefore having confidence is in the industry's best interests.



- 3. Geoscience Australia recommends including details of the proposed data release mechanism within the Framework. For example:
 - To what schedule will the Bulletin Board be updated?
 - Will all data from a given year be withheld until a full cohort of data is acquired, or, will data be released incrementally?
 - If data is going to be released incrementally, what mechanisms will be in place to tell users what proportion of data for a field/basin/state/field type etc. has been acquired and is represented on the Bulletin Board at any given time?
- 4. Geoscience Australia recommends including further information around data archiving and pre-release procedures within the Framework. This is important for providing assurance to the market that data is reliable and traceable. Questions arising already include:
 - What are going to be the legislated data archiving, quality checking, appropriate data aggregation, and reporting requirements the eventual regulator of the Bulletin Board has to meet?
 - What are the full terms around legislative enforceability, i.e. what recourse does the AER have to compel producers to provide appropriate data? There was minor mention made of this in Footnote 7, but more information is required.
- 5. While there is a footnote specifically articulating an approach to protect company interests in the event of a pseudo-monopoly in a basin with regards to 'contracted Reserves' (Footnote 16), there has been no equivalent management approaches stated for Reserves and Contingent Resources (and related) data. While Geoscience Australia supports a 'maximum transparency' approach, ensuring producers commerciality is protected is equally important. As such, we suggest the inclusion of protections for producers with regards to all reported data in the event of a pseudo-monopoly at the basin level.
- 6. Geoscience Australia suggests a slight rewording of the following statement: 'The ACCC proposes that producers be required to develop 1C and 2C contingent resource *estimates* and to report this information to AEMO for publication on the Bulletin Board.' (p15).