

Capacity Trading Reform Package

Summary of Recommendations

February 2018





1. Background

The capacity trading reform package, which relates to transmission pipelines and compression services operating under the contract carriage model (jointly referred to as ‘transportation services’), provides for the implementation of:

- a capacity trading platform that will form part of the gas trading exchange (**Gas Supply Hub**) and provides for exchange-based trading of commonly traded transportation products and a listing service for other more bespoke products;
- a day-ahead auction of contracted but un-nominated capacity, which will be conducted each day shortly after nomination cut-off and subject to a reserve price of zero (with compressor fuel provided in-kind by shippers);
- standardised operational transportation service agreements (the **Operational TSA**, also sometimes referred to as the Operational **GTA**), which will establish the contractual terms between service providers and shippers for capacity procured through the capacity trading platform, day-ahead auction or bilaterally if an operational transfer is used;
- a number of measures to reduce other barriers to secondary capacity trading;
- a reporting framework for secondary capacity trades, which will require the publication of the price and other related information in all bilateral and exchange-based secondary trades; and
- harmonised gas day start time across the east coast and a common nomination cut-off time for pipelines and compressors that are listed on the capacity trading platform and/or subject to the day-ahead auction.

Achieving these outcomes will require a legislative and regulatory package including changes to the National Gas Law (**NGL**), regulations made under the NGL (**Regulations**) and the National Gas Rules (**NGR** or **Rules**), new AEMO procedures (**Capacity Transfer and Auction Procedures**), a new Operational Transportation Service Code (**Code**)¹ and a new Auction Agreement.

In addition, to accommodate the capacity trading platform, AEMO will need to make amendments to the Exchange Agreement applicable to the GSH, the Short Term Trading Market (**STTM**) Procedures and the Procedures applicable to the Declared Wholesale Gas Market (**DWGM**).

Figure 1.1 shows how the regulatory instruments will interrelate once the package is implemented, while Figure 1.2 shows the contractual framework under which service providers and shippers will transfer and use transportation services. The tables that follow provide a summary of the GMRG’s final recommendations, which were endorsed by the COAG Energy Council in November 2017 and January 2018.

¹ An instrument to provide for the publication by service providers of the terms on which service providers and shippers give effect to operational transfers, covering:

- an agreement between the selling shipper and the service provider to release the capacity from the primary GTA (Operational CTSA); and
- an agreement between the buying shipper and the service provider to use the capacity (Operational TSA). The Operational TSA will also be used as the terms on which the buying shipper uses capacity bought in day-ahead auctions.



Figure 1.1: Regulatory instruments

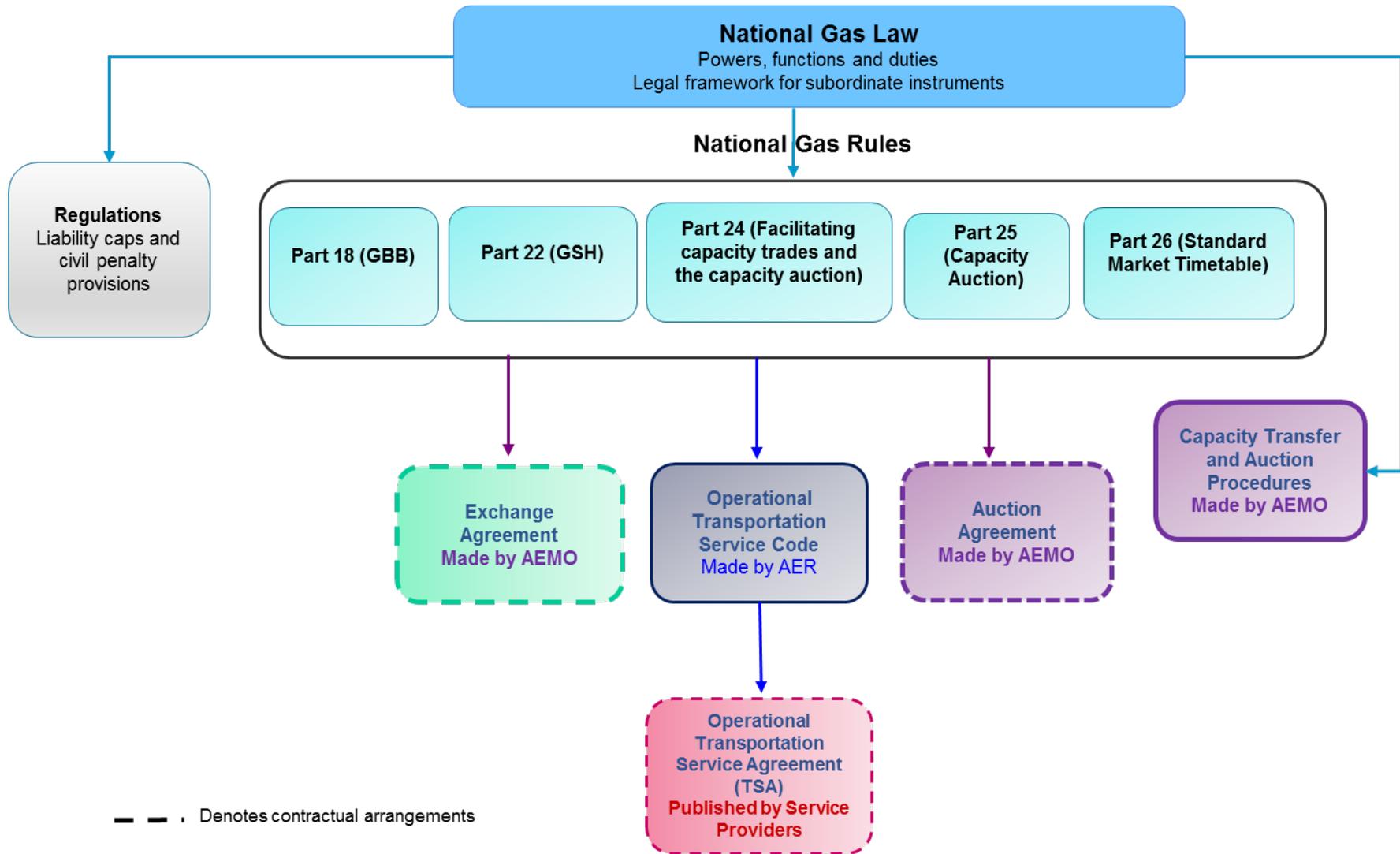




Figure 1.2: Contractual architecture

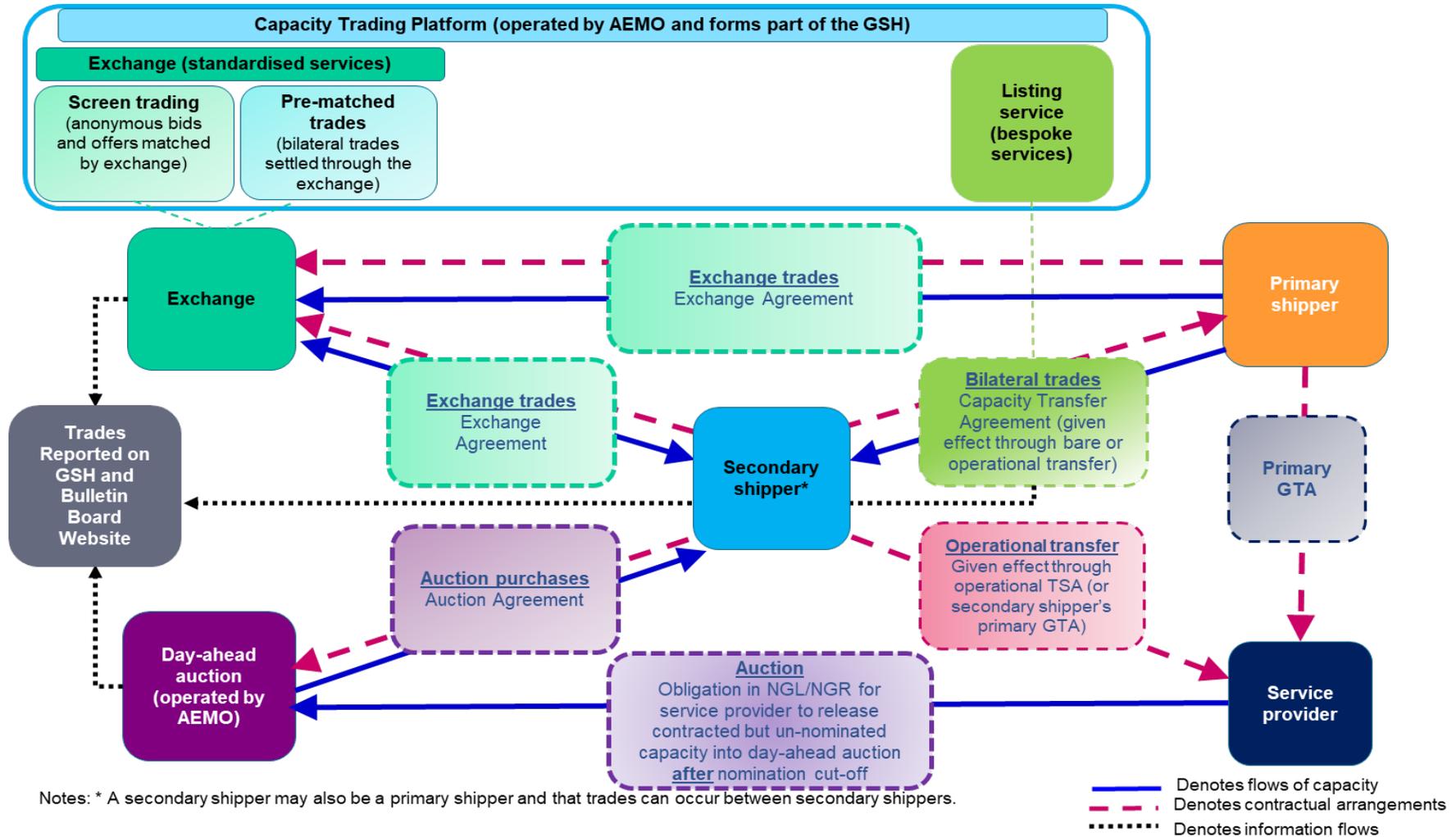




Table 1: Summary of the GMRG’s final recommendations on the day-ahead auction design

Design Element		Recommendation
Coverage of auction	Coverage	The GMRG recommends that the following facilities be subject to the day-ahead auction: <ul style="list-style-type: none"> ▪ all transmission pipelines with a capacity rating of 10 TJ/day and above that are providing third party access and servicing more than one facility; and ▪ the Moomba and Wallumbilla compression facilities currently operated by APA.
	Exemptions	The GMRG recommends that exemptions be available to transmission pipelines that have a nameplate capacity rating of less than 10 TJ/day; are not providing third party access; or are servicing a single facility.
Product design	Products to be auctioned	The GMRG recommends that the following products be auctioned: <ul style="list-style-type: none"> ▪ Forward haul transportation services (with separate products offered in both directions on bi-directional pipelines). ▪ Compression services provided by the Moomba and Wallumbilla compression facilities. ▪ Interruptible backhaul services on single direction pipelines.
	Prioritisation of the forward haul and compression auction products	The GMRG recommends that: <ul style="list-style-type: none"> ▪ The forward haul and compression auction product be classified as a <i>second priority firm service</i>, which in relation to the contracted but un-nominated capacity will rank below firm transportation rights and the renomination rights (firm and reasonable endeavours) of firm capacity holders, but above all the other transportation rights from a scheduling, curtailment and renomination rights perspective. ▪ Transitional arrangements be put in place to accommodate any existing as available or authorised overrun services, where the service provider would be in breach of existing contractual commitments if it scheduled those services after the forward haul and compression auction products. <p>The GMRG also recommends that as part of the 2020 <i>Biennial Review</i>, the AEMC consider whether:</p> <ul style="list-style-type: none"> ▪ the second priority firm service prioritisation is providing firm capacity holders with a sufficient incentive to trade their capacity before the auction and encouraging participation in the auction, or if the priority should be increased; and ▪ an intra-day auction(s) should be introduced, or other measures implemented to facilitate intra-day trading, to enable capacity on the gas day to flow to those that value it most.
	Other features of the auction product	The GMRG recommends that the specification of the auction product provide for: <ul style="list-style-type: none"> ▪ a maximum hourly quantity (MHQ) factor that is equal to the MHQ factor set out in the service provider's operational Gas Transportation Agreement (operational GTA), which will also apply to capacity purchased through the capacity trading platform; and ▪ a reasonable endeavours renomination right. <p>The auction product will not, however, include an imbalance allowance but measures will be put in place to facilitate trading of imbalance allowances.</p>
	Contract path specification	The GMRG recommends that: <ul style="list-style-type: none"> ▪ a case-by-case approach be adopted, which could involve a combination of point-to-point and zonal approaches; ▪ further work be carried out in early 2018, in conjunction with AEMO, service providers and other stakeholders, to specify the contract paths on each pipeline that will be subject to the auction. <p>The GMRG also recommends that measures be implemented to ensure that information on the contracted but un-nominated capacity at delivery points does not directly or indirectly disclose a nomination made by a market generating unit as defined in the National Electricity Rules.</p>
	Other	The GMRG recommends that: <ul style="list-style-type: none"> ▪ as available and interruptible services not be phased out, but in relation to contracted but un-nominated capacity, these products will (subject to the transitional arrangements outlined above) be scheduled after the auction product, so they do not compete with auction products; ▪ during the gas day service providers will be able to sell on an interruptible basis any unutilised contracted but un-nominated capacity with such capacity to rank after the auction product in the priority order; and ▪ market conduct rules be implemented to deal with the risks associated with renominations by both firm capacity holders and auction winners.



Design Element		Recommendation
Auction format	Auction quantity	The GMRG recommends that service providers have some discretion to determine the methodology to be used to calculate the contracted but un-nominated capacity on their respective pipelines, but in developing this methodology they will be required to have regard to principles in the NGR and any procedures that may be developed by AEMO. The methodology will also need to be approved by AEMO and published on either the National Gas Services Bulletin Board (BB) or the auction platform. The AER will also be able to monitor service providers' compliance with the approved methodology.
	Auction format	The GMRG recommends that a partial combinatorial auction format be adopted and include the static backhaul optional feature. This auction design will enable shippers to procure capacity across multiple pipelines and the Moomba and Wallumbilla compressors, irrespective of location or pipeline ownership. The GMRG also recommends that at market start the minimum requirement and XOR bidding optional features not be included, but that this be re-considered in the future if there is sufficient demand for these features and benefits of their inclusion in the auction format outweigh the costs.
	Reserve price	The GMRG recommends that a zero reserve price be adopted with compressor fuel either provided by shippers in-kind, or by the service provider with the costs then recovered through the operational GTA.
	Pricing rule	The GMRG recommends the adoption of a pay-as-cleared pricing rule, which will be determined by the lowest accepted bids in the auction and that auction winners be determined using the profit-maximising combination of bids.
	Auction residue	The GMRG recommends that the auction residue be allocated to service providers based on the revenues achieved by the products owned by each service provider. This allocation method will ensure that scarcity is remunerated and acts as a signal for further investment.
	Curtailement	Because the auction product will not be a firm product, additional measures are required to deal with the risk of curtailement, which could occur as a result of renominations by firm capacity holders or technical constraints. The GMRG recommends that this risk be addressed as follows: <ul style="list-style-type: none"> ▪ auction winners should be able to try and avoid curtailement by procuring primary capacity from the service provider of the asset that is experiencing the curtailement if such capacity is available and, if they are unable to do so, should have the option to choose whether they are only curtailed on that asset; or curtailed by the same amount across all products included in the winning bid; and ▪ if curtailement is required, it should occur on a pro-rata basis and auction winners should receive their money back for the curtailed capacity.
	Information provided to bidders	The GMRG recommends that: <ul style="list-style-type: none"> ▪ before the auction, auction participants be told what products are available in the auction and the auction quantity; and ▪ after the auction, auction participants be provided with information on their own winning bids, including the quantities of each product procured and the price of all products in the auction. The GMRG also recommends that the bid-stack not be published until sufficient liquidity develops in this market, but as an interim measure AEMO publish information on the aggregate demand for each segment and the high, low and average surplus ² for each segment on the BB.
Cost recovery	AEMO	The GMRG recommends that the costs AEMO incurs in implementing and operating the auction be recovered from auction and capacity trading platform participants and that AEMO have discretion to extend the recovery mechanism to all gas supply hub (GSH) trading participants if necessary. The GMRG also recommends that AEMO be required to consult with auction and capacity trading platform participants on the structure, introduction and determination of fees.
	Service providers	The GMRG recommends that the incremental costs that service providers incur as a result of the auction, be recovered from the auction proceeds and if these are insufficient, service providers should have an opportunity to recover these costs from shippers, subject to the caveat that the charges are cost reflective and, so far as practical, reflect the outcomes of a workably competitive market. To impose some constraint on the charges levied by service providers, the AER will have the power to conduct a review of these charges and require amendments if they do not comply with the pricing principle outlined above.

² The surplus is measured as the bid price less the price of all segments included in the bid.



Table 1: Summary of the GMRG's final recommendations on the standardisation related reforms

Design Element	Recommendation
Capacity transfer mechanisms to be used for secondary trading	<p>Consistent with the AEMC's recommendations, the GMRG recommends that:</p> <ul style="list-style-type: none"> ▪ Operational transfers be used to give effect to capacity purchased through the capacity trading platform, the day-ahead auction and bilateral trades where the buyer elects to use an operational transfer. ▪ Bare transfers be allowed in cases where capacity is purchased through bilateral trades, subject to the caveat that the sellers of secondary capacity offers the buyer the option of using an operational transfer. <p>Under both types of transfers, the primary shipper's capacity rights (or part thereof) are temporarily transferred to the secondary shipper and the obligation to pay the service provider remains with the primary shipper. The main difference between the two mechanisms is that under an operational transfer, the secondary shipper is responsible for making nominations directly to the service provider (rather than via the primary capacity holder) and complying with the terms and conditions of access set out in the operational GTA it enters into with the service provider.</p>
Contract standardisation	<p>Standardisation of operational GTAs</p> <p>The GMRG recommends that priority be given to standardising operational GTAs, given these contracts will be used to give effect to trades conducted through the capacity trading platform and the day-ahead auction, and will also have to be offered under bilateral trades.</p> <p>The standardised operational GTA will operate like a master agreement between the service provider and secondary shipper, and set out the terms and conditions on which the secondary shipper can utilise the service provider's services if it procures secondary capacity via an operational transfer.</p> <p>It will be mandatory for service providers that provide third party access to publish a standard form operational GTA on their website and to offer to enter into this agreement with secondary shippers (subject to some limited qualifications and exemptions). The NGL and NGR will not, however, prohibit service providers and shippers agreeing to vary the terms, include other services in the agreement, or include the transfer mechanism in a primary GTA.</p> <p><i>The terms on which capacity is sold through the capacity trading exchange or day-ahead auction will be set out in the Exchange Agreement and the Auction Agreement. For bilateral trades, the shippers buying and selling capacity will agree terms between themselves in Capacity Trading Agreements (CTAs).</i></p> <hr/> <p>Content of the standardised Operational GTA and level of standardisation</p> <p>The standardised operational GTA will consist of a set of:</p> <ul style="list-style-type: none"> ▪ standard operational, prudential and other legal terms governing the relationship between the secondary shipper and the service provider that will apply to all facilities; and ▪ facility specific terms, which may differ across facilities due to differences in operational or contractual arrangements. <p>While service providers will have some discretion in relation to the facility specific terms, these terms will need to comply with a number of principles that will be set out in the NGR, the requirements set out in the Operational GTA Code (a new regulatory instrument that will set out the standard terms to be adopted by all service providers and the requirements for facility specific terms) and will also be subject to oversight by the AER.</p> <p>The GMRG has developed an initial draft of the Operational GTA Code, which stakeholders have provided some feedback on. The initial draft did not, however, make provision for the day-ahead auction product because the design of the auction had not been settled. The GMRG intends therefore to release another draft of the Operational GTA Code for consultation in early 2018.</p> <hr/> <p>Service provider costs</p> <p>The capacity trading reform package will impose a number of incremental establishment and capacity trading costs on service providers. The GMRG recommends that service providers have an opportunity to recover these costs, subject to the caveat that the charges are cost reflective and, so far as practical, reflect the outcomes of a workably competitive market. To impose some constraint on the charges levied by service providers, the GMRG also recommends that the AER be given the power to:</p> <ul style="list-style-type: none"> ▪ conduct a review of a service provider's charges if it has concerns about their level (or if concerns are raised by an interested party); and ▪ require amendments to the charges if it finds that they do not comply with the pricing principle outlined above.



Design Element	Recommendation
	<p>Governance arrangements</p> <p>The standard terms and requirements for the facility specific terms will be set out in an Operational GTA Code, which will be a new regulatory instrument developed under the NGL/NGR. Once the initial Code is made it will be subject to a hybrid governance model, which will involve the following:</p> <ul style="list-style-type: none"> ▪ AEMO will be responsible for establishing an Industry Panel to consider changes to the Operational GTA Code and provide secretariat services to the panel. AEMO will also be responsible for carrying out consultation on behalf of the Industry Panel and requesting input from the AEMC, where required. ▪ Changes recommended by the Industry Panel will only take effect if approved by the AER. In deciding whether to approve the changes, the AER will be required to take into account the panel's recommendation (but will not be bound by it), the NGO and principles in the NGR. <p>The AER is considered the most appropriate body to take on this role, because it is consistent with its current role in relation to approving the terms and conditions of access to covered pipelines and is not subject to the same types of conflicts that AEMO or the AEMC would be subject to.</p> <p>Under the proposed governance framework, the AER will also:</p> <ul style="list-style-type: none"> ▪ be responsible for monitoring service providers' compliance with the obligation to publish the standard operational GTA and that the facility specific terms and charges levied by service providers for entering into these arrangements, are consistent with the Operational GTA Code and NGR principles; ▪ have the power to exempt a facility from the requirement to publish a standardised operational GTA (e.g. if it is not providing third party access).
<p>Other measures to reduce barriers to secondary trading and participation in the auction</p>	<p>Allocation arrangements</p> <p>To reduce the opaqueness currently surrounding allocation agreements, information on the allocation agents a secondary shipper would need to contact to become a party to an allocation agreement at all the relevant points should be published on the Natural Gas Services Bulletin Board (BB).</p> <p>The GMRG also recommends that further work be carried out by the GMRG, in consultation with AEMO and industry, in early 2018 to address the allocation issues at Moomba and determine whether additional reforms are required to reduce the other barriers to trade posed by allocation arrangements. The GMRG will also work with the ACCC to determine whether any additional transparency measures are required in relation to allocation agreements.</p> <p>Contractual limitations on capacity trading in primary GTAs</p> <p>There are a number of provisions in primary GTAs that may prevent or impede secondary trading. To ensure these do not act as a barrier to secondary capacity trading, the GMRG recommends that:</p> <ul style="list-style-type: none"> ▪ Provisions that prohibit primary shippers from trading capacity, or require primary shippers to obtain a service provider's consent before they can trade capacity, be addressed through provisions that will require service providers to allow users to transfer contracted capacity to another party, without the service provider's consent, if the user remains liable for capacity payments and the transferee has an operational GTA. ▪ Provisions that prohibit primary shippers from requesting changes to receipt and delivery points, or limit the number of changes that can be requested, be addressed through provisions detailing the rights shippers have to seek changes to receipt or delivery points; the timeframes within which service providers must respond; and the pricing principle to apply to charges levied by the service provider for these changes (i.e. charges should be cost reflective and reflect the outcomes of a workably competitive market). <p>The provisions are expected to draw on the approach in rules 105(2) and 106(1) of the NGR, which apply in relation to scheme pipelines.</p> <p>Harmonisation of gas day start times and nomination cut-off times</p> <p>To remove the barriers to trade posed by differences in gas day start times and nomination cut-off times, the GMRG recommends that changes be made to the NGL/NGR to require the adoption of:</p> <ul style="list-style-type: none"> ▪ a common gas day start time of 6 am (AEST) across the east coast (and the Northern Territory once it becomes connected) and apply to the operators of all production, pipeline, compressor and storage facilities; and ▪ a common nomination cut-off time of 3 pm (AEST) for pipelines and other facilities that will be subject to the capacity trading reforms. <p>The GMRG recommends these changes take effect by 1 October 2019.</p>



Table 2: Summary of the GMRG's final recommendations on the capacity trading platform

Design Element	Recommendation
Operation of the capacity trading platform	<p>The GMRG recommends that the capacity trading platform, which will be operated by AEMO and form part of the GSH trading exchange, provide for both:</p> <ul style="list-style-type: none"> ▪ Exchange-based trading of commonly traded transportation (pipeline and compression) products, which can be conducted through either: <ul style="list-style-type: none"> – the screen trade service, which allows participants to place anonymous bids or offers for standardised products that are automatically matched; or – the pre-matched trade service, which allows participants to bring a bilateral trade in one of the GSH products to the exchange for settlement. <p>The screen trade service will operate on a fully anonymous basis (i.e. the names of counterparties will not be revealed pre-or post-transaction), with AEMO informing the relevant service provider of the trade once it has been executed. The service provider will then confirm the trade with each counterparty separately, maintaining the anonymity of the trading parties through this process.</p> <ul style="list-style-type: none"> ▪ A listing service that shippers can use to list more bespoke transportation products and imbalance trades. <p>Trades conducted through the exchange will utilise the existing GSH settlement, prudential and reporting frameworks, which means participants will receive one settlement statement for all traded products and be able to aggregate prudential requirements across gas and secondary capacity products.</p>
Initial set of services to be listed on the exchange	<p>The GMRG recommends that the initial set of standardised products to be sold on the exchange include:</p> <ul style="list-style-type: none"> ▪ firm forward haul services on all major transmission pipelines (if the pipeline is bi-directional, services will be available in both directions); ▪ firm compression services at Moomba and Wallumbilla; and ▪ firm park (storage) services on all the major transmission pipelines. <p>These products will be available as day-ahead, daily (available on a 6-day rolling basis), weekly (available on a 4 week rolling basis) and monthly (available on a 3 month rolling basis) products and will have a minimum contract size of 500 GJ/day. The terms and conditions on which the buyer can use these products will be set out in the Operational GTA, which, amongst other things, will specify the maximum hourly flexibility the buyer will have and provide the buyer with a reasonable endeavours renomination right.</p>
Zonal model	<p>The GMRG recommends that a zonal model with secondary firm rights at receipt and delivery points be used to maximise the pool of prospective buyers and sellers of firm forward haul services through the capacity trading platform. To implement this model, receipt and delivery point zones will need to be established on each pipeline that will be listed on the exchange and will need to reflect the technical pipeline requirements and market requirements.</p>
Management of financial and delivery default risks	<p>There are two key risks that buyers will be exposed to under the proposed design of the capacity trading platform:</p> <ul style="list-style-type: none"> ▪ The seller's primary GTA is terminated by the service provider: In this case, the GMRG recommends that the service provider be obliged to honour the transaction for up to two weeks after the primary GTA is terminated and receive the price established through the exchange in return for doing so. The GMRG believes this approach is necessary because the buyer will not know the seller's identity so will be unable to carry out its own assessment of the financial viability of its counterparty prior to entering into the trade. By keeping the trade on foot for two weeks, buyers will have time to find alternative arrangements, which will promote an orderly transition and minimise the impact of default on the gas market. ▪ The seller short-sells capacity: In this case, the GMRG recommends that service providers give the seller an hour to rectify the short position and if it can't be rectified, the trade be cancelled and the buyer(s) compensated. Because individual counterparties will not be known, if a trade is cancelled all secondary shippers' capacity would be pro-rated down.
Governance arrangements	<p>The GMRG recommends that the governance framework that currently applies to the GSH be maintained, but the necessary changes be made to the NGR, the Exchange Agreement and procedures to accommodate capacity trading and the recommendations set out above.</p> <p>In relation to the zonal model, the GMRG recommends that any proposal to change the zones be submitted to the Industry Panel for consideration and approved by the AER. Principles will be included in the NGR to guide this process and enable any person to make a request to change the zone.</p>



Table 3: Summary of the GMRG's final recommendations on the reporting framework for secondary capacity trades

Design Element	Recommendation
Trades subject to reporting	<p>The GMRG recommends that the reporting framework apply to:</p> <ul style="list-style-type: none"> ▪ all screen and pre-matched trades carried out through the capacity trading platform; and ▪ bilateral trades of capacity involving forward haul, backhaul, park, park and loan and/or compression services. <p>Capacity purchased through the auction will also need to be reported but the reporting framework will be slightly different. The GMRG's recommendations on the day-ahead auction reporting framework will be made to the Energy Council in December.</p>
Information to be reported	<p>The GMRG recommends that the reporting framework require the following information to be reported:</p> <ul style="list-style-type: none"> ▪ the date of the trade and the start and end dates for the trade; ▪ the type of trade (e.g. exchange traded or bilateral) and how it is given effect (e.g. operational GTA, primary GTA or bare transfer); ▪ the type of service procured (i.e. forward haul, backhaul, park, park and loan, compression), the firmness of the service and service priority; ▪ the pipeline or compression facility the trade relates to and, in the case of pipeline services, the direction of the service and zones between which gas is transported (zones will be used to, the extent practicable, protect the anonymity of counterparties); ▪ the amount of capacity procured (expressed on a maximum daily quantity (MDQ) and maximum hourly quantity (MHQ) basis); and ▪ the price paid for the capacity (including, where relevant, details of the price structure and price escalation mechanism for bilateral trades).
Responsibility for reporting	<p>The GMRG recommends that:</p> <ul style="list-style-type: none"> ▪ AEMO be accorded responsibility for reporting trades carried out through the capacity trading platform; and ▪ sellers be accorded responsibility for reporting bilateral trades.
Where and when information is to be reported and published	<p>The GMRG recommends that trades carried out:</p> <ul style="list-style-type: none"> ▪ through the capacity trading platform be reported on the GSH by AEMO as soon as practicable after the trade occurs (consistent with what currently applies for commodity) and published on the BB website by the end of the gas day; and ▪ bilaterally be reported to AEMO by the earlier of one day after the trade is executed, and the day prior to the trade commencing (D-1) and published on the BB website by AEMO by the end of the gas day.
Requirement to advertise bilateral trades	<p>The GMRG has some concerns about the workability of the proposal to require bilateral trades be advertised on the listing service ahead of time. As an alternative, the GMRG is recommending that these trades be subject to the reporting framework, with the prices and other key terms struck in these trades published on an ex post basis. The publication of this information is intended to discourage parties from engaging in any form of discriminatory behaviour, but if the reported information reveals this type of behaviour is occurring, the AEMC could recommend further changes as part of its biennial review of liquidity in the wholesale gas and pipeline capacity trading markets.</p>
Governance arrangements	<p>A number of changes will need to be made to the NGL and NGR to give effect to this reporting framework.</p> <p>Changes to the NGL will be required to impose an obligation on sellers to provide AEMO with information about bilateral trades and permit AEMO to publish information on these trades and trades carried out through the capacity trading platform, in accordance with the NGR and applicable procedures.</p> <p>Changes will also need to be made to the NGR to set out the specific obligations that:</p> <ul style="list-style-type: none"> ▪ sellers have to report information to AEMO, including the types of trades to be reported, the information that must be reported and the timing for reporting; and ▪ AEMO has to report the trade information on the GSH and BB website. <p>Secondary trading reporting procedures will also need to be developed by AEMO.</p> <p>The AER will be responsible for monitoring and enforcing compliance with these obligations using its existing powers in the NGL.</p>