



Capacity Trading Platform - Design

Reference Group Briefing:

23 February 2018



Capacity Trading Platform



The capacity trading platform will form part of the GSH trading exchange and provide for:

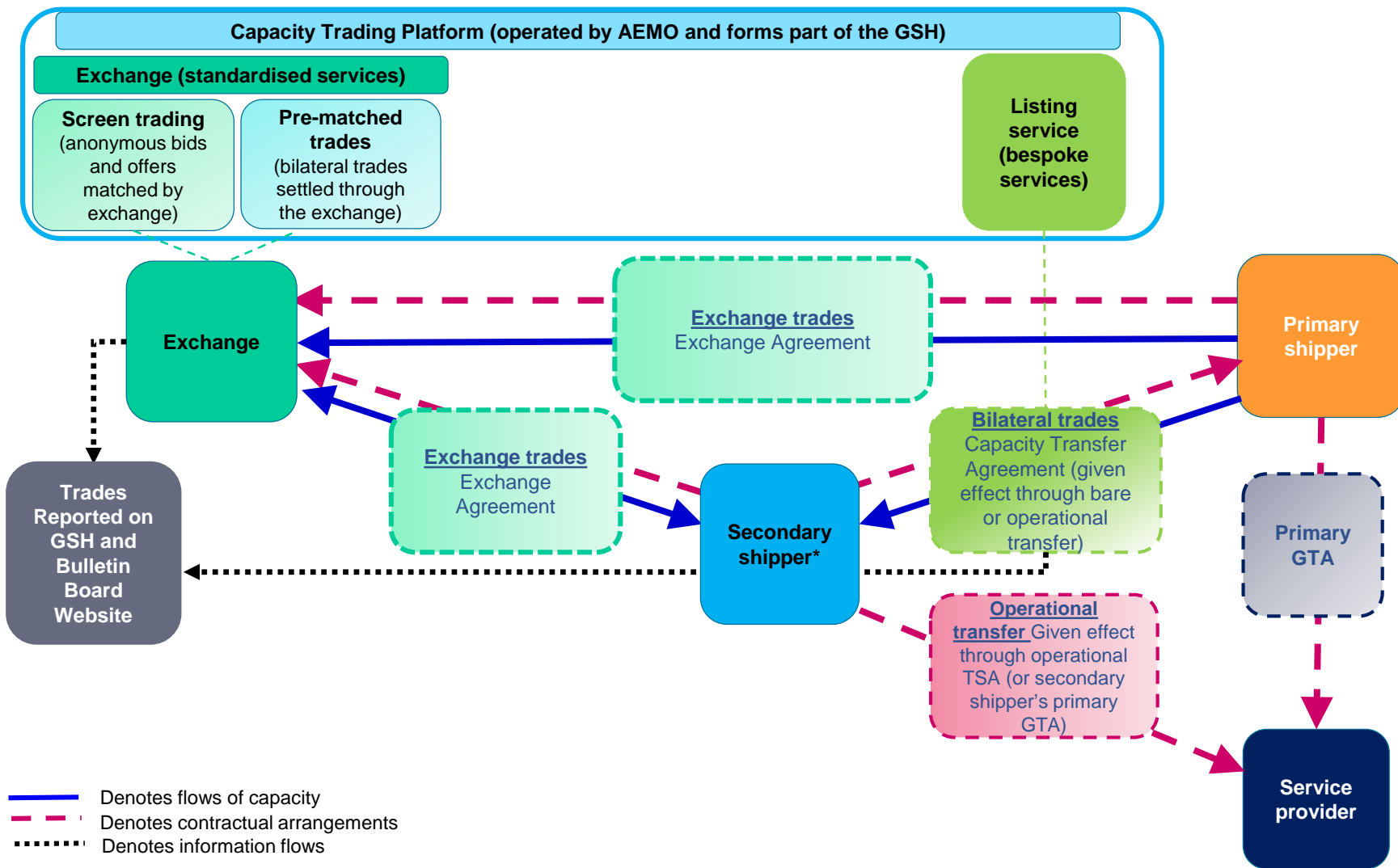
- **Exchange-based trading** of commonly traded transportation (pipeline and compression) products, which can be conducted through either:
 - the screen trade service (participants place anonymous bids or offers for standardised products that are automatically matched); or
 - the pre-matched trade service (i.e. participants bring a bilateral trade in one of the products to the exchange for settlement).
- **A listing service** shippers can use to list more bespoke products and imbalance trades. Participants will be able to use the exchange to procure:
 - firm forward haul services on all major transmission pipelines (in both directions on bi-directional pipelines (or parts of pipelines));
 - firm compression services at Moomba and Wallumbilla; and
 - firm park (storage) services on all the major transmission pipelines.

These products will have a minimum contract size of 500 GJ and will be available as:

- A day-ahead product
- A daily product (available on a 6-day rolling basis)
- A weekly product (available on a 4 week rolling basis)
- A monthly product (available on a 3 month rolling basis).

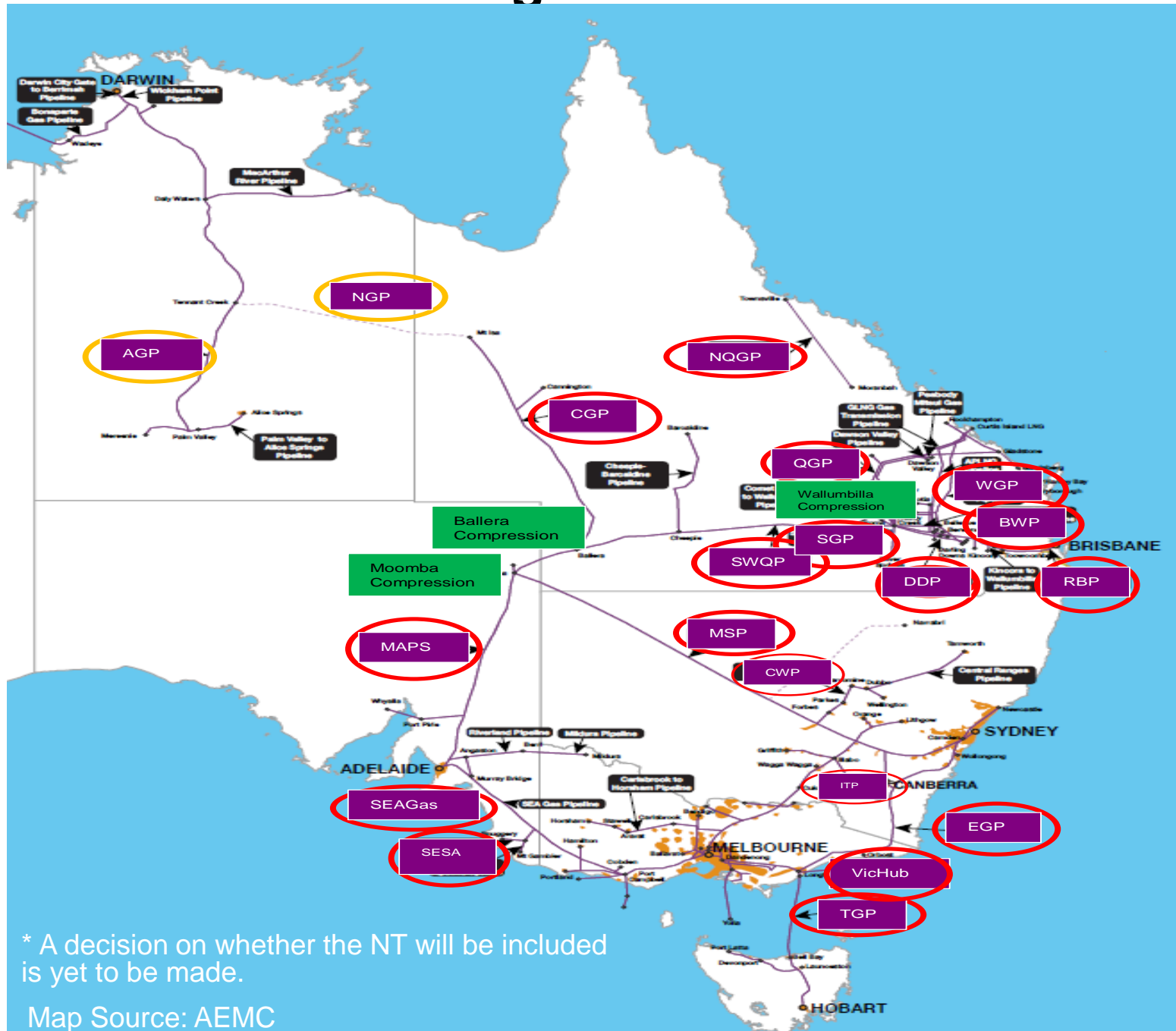


Key elements of the platform and contractual arrangements



Notes: * A secondary shipper may also be a primary shipper and that trades can occur between secondary shippers.

Indicative Coverage of the CTP and DAA



* A decision on whether the NT will be included is yet to be made.

Map Source: AEMC

To maximise the pool of prospective buyers and sellers of capacity, forward haul transportation products will be traded using the zonal model. Under this model:

- primary shippers will be able to sell point-to-point capacity on a zone-to-zone basis
- secondary shippers will be able to acquire capacity on a zone-to-zone basis and will have secondary firm rights at all the receipt and delivery points within each zone (i.e. their rights at points will rank below that of primary capacity holders but above all others).

The secondary firm rights concept is required under the zonal model, because the capacity sold by the primary shipper may be released from a different receipt or delivery point in the zone to the receipt or delivery point the secondary shipper intends to use in that zone.

To implement this model, receipt and delivery point zones will need to be established on each pipeline. The same zones will be used for the day-ahead auction and reporting framework.

Initial zonal development process

- **5 Feb - 29 March:** Service providers will develop the proposed zones and conduct any modelling that may be required.
- **6 April – 27 April:** Public consultation on the proposed zones
- **14 May:** GMRG's final recommendations on zonal definitions

The zones will form part of the Capacity Transfer Procedures and subsequent changes (which can be proposed by anyone) will be subject to the standard procedure change process



Participation in Capacity Trading



- The capacity trading platform will be implemented on the existing Gas Supply Hub (GSH).
- Existing GSH members will have automatic access to the new capacity products.
- New members can join as a:
 - New **trading participant** – providing access to both capacity and commodity products (same as existing GSH members)

OR

- **Capacity trading participant** – providing access to capacity products only.
- Service providers will also need to register for the Capacity Trading Platform.
- *Participation in the auction will require separate registration*



Key times on gas day D and D-1



Time	Activity
06:00*	Gas day start (D-1)
09:00	Exchange open for trading
12:30*	Trade close for day ahead products (ie. for capacity applicable to gas day D)
12:30-14:30*	Capacity for day ahead products transferred in systems and confirmed to shippers by 14:30. Note, as this is after the STTM ex ante schedule has been published, no adjustments will be made in STTM systems for capacity purchased on a day ahead basis for an STTM hub. Adjustments will be made to associated DWGM accreditation rights.
15:00*	Nomination cut off time for gas day D
19:00	Exchange closed
19:00-22:00	Capacity for all products other than day ahead products transferred in systems and confirmed to shippers by 22:00 (Forward Trade transfer). This process will also involve AEMO adjusting contract rights in the STTM and DWGM markets.
06:00*	Gas day start (D)

*The times listed are those in effect after the commencement of gas day harmonisation. Prior to these rules coming into effect, gas day start time and nomination time will be facility specific, with trading to close for day ahead products at 11:00 to account for capacity being transferred in systems in time for earlier nomination cut-off times.



Trading Platform



- Exchange trading of capacity products will occur through the GSH.
- It is proposed that operating hours of GSH to change to 9am to 7pm.
- Trading platform will operate 7 days a week.
- Market support functions of GSH (settlement, prudential, reporting) will be available for capacity trades
- Submission of orders:
 - Trading participants will need to provide contract reference information prior to trading.
 - AEMO will validate that the trading participant has selected a valid contract reference and that they have sufficient trading margin.
 - A trading participant will need to specify receipt and delivery points in their order.

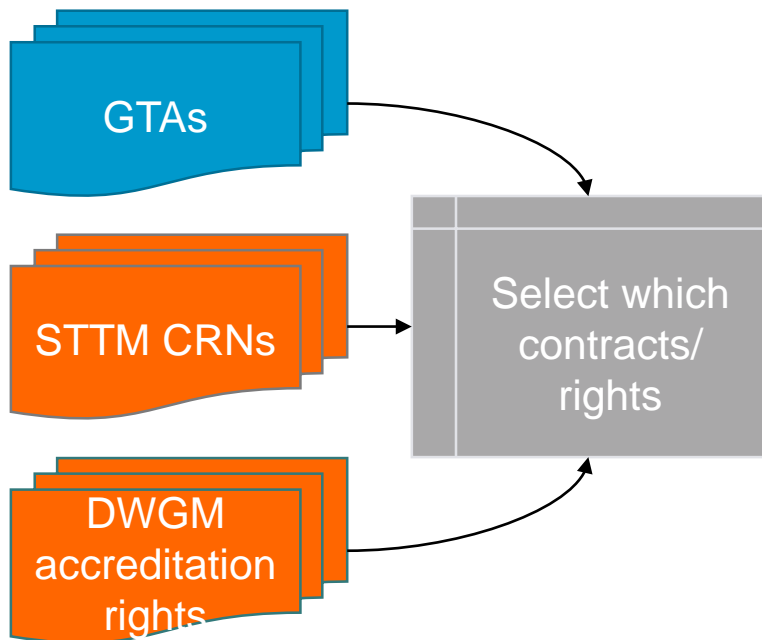


Contract reference information

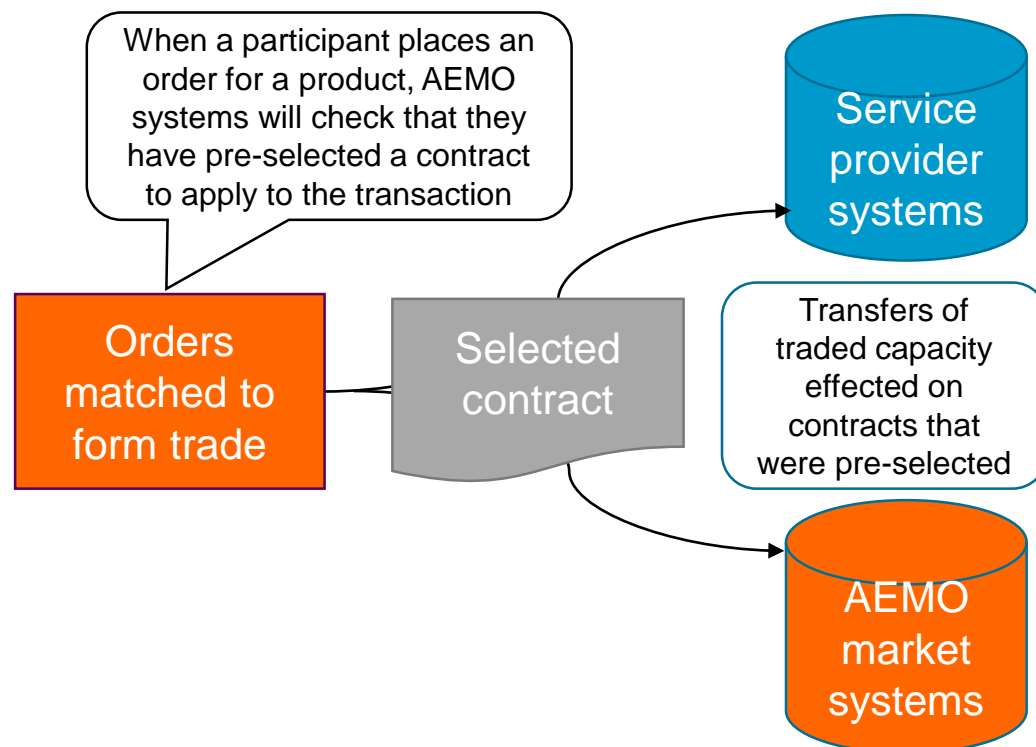


In order to implement the capacity trading platform on an *automatic* and *anonymous* basis, and integrate with the other market systems, exchange participants on the CTP will need to supply *contract references* information to AEMO and service providers to be able to effect the capacity transfers.

Pre-trading



Trading Platform

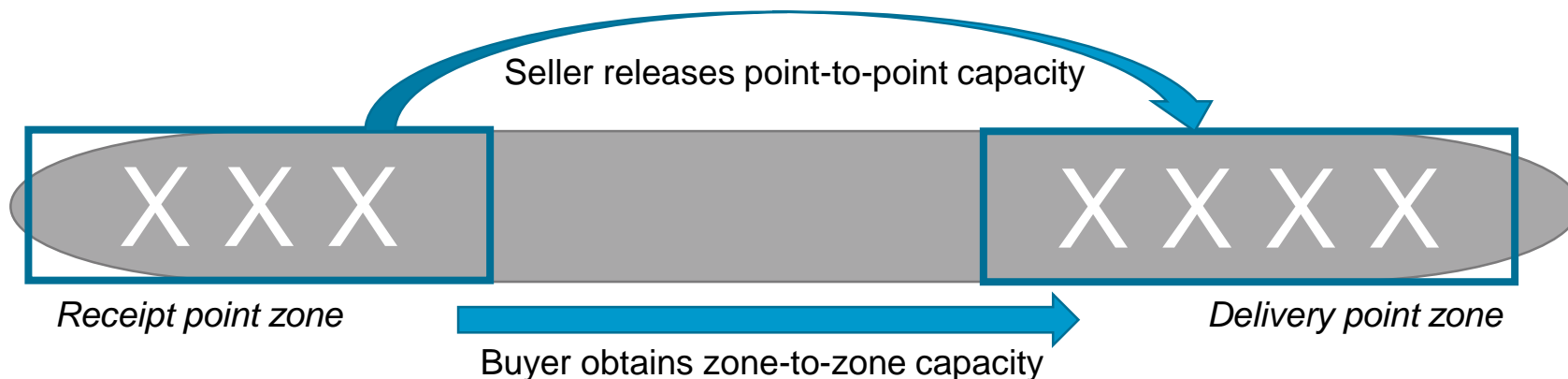




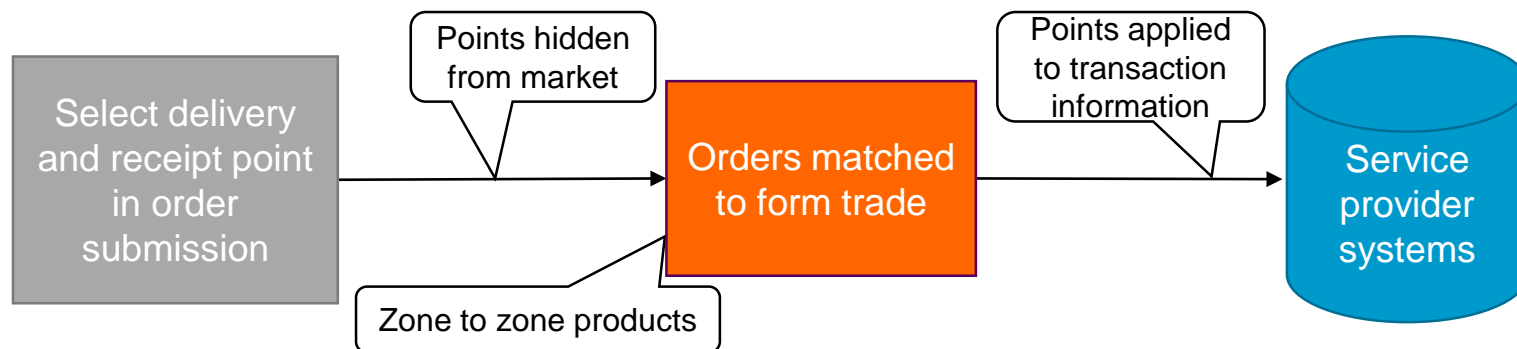
Receipt and delivery point information



Products on the exchange will be receipt zone to delivery zone on a facility.



Service providers need to know which points to reduce the capacity on for the seller, and have indicated that it would be beneficial to have an understanding of which points the buyer intends to use to be able to set up their facility and systems.

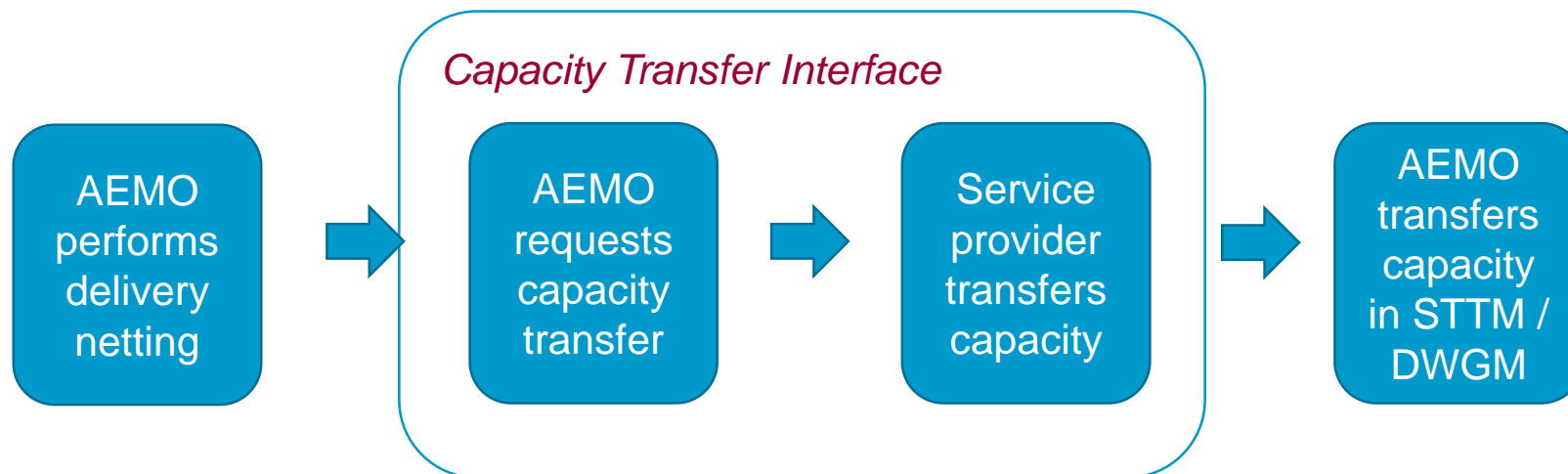




Delivery process for capacity trades



- Delivery of capacity trades will be automatic and fully anonymous.



- AEMO will notify shipper that capacity has been transferred.
- Once capacity has been transferred the transaction has been *delivered*.
- Shipper will make nominations directly to the pipeline operator to utilise the capacity they have procured.



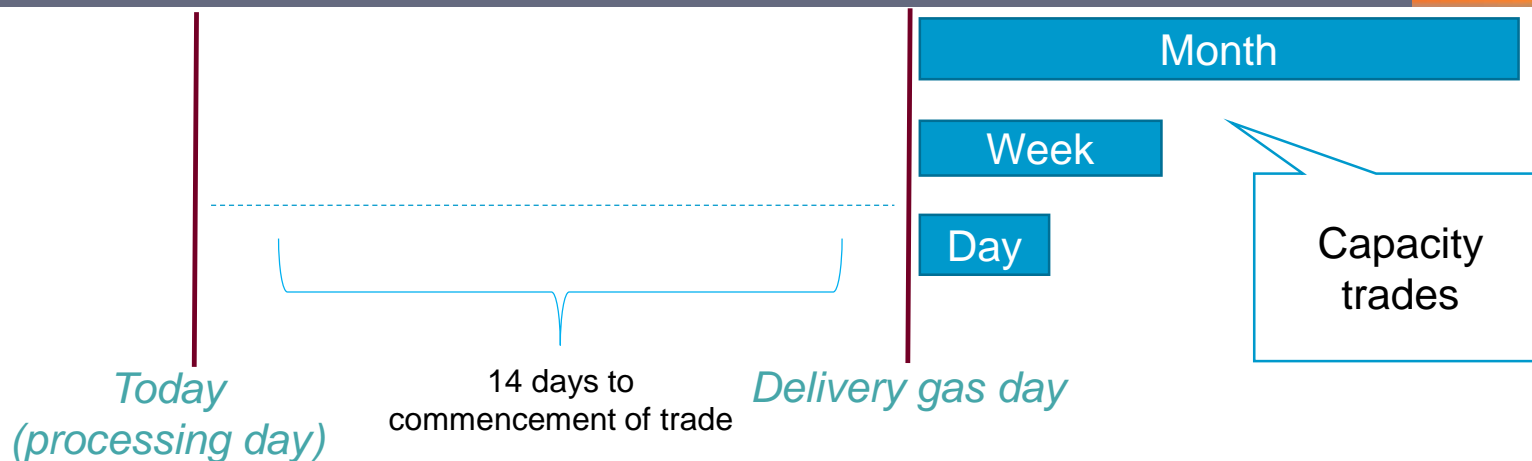
Delivery Netting



- The final recommendations outlined a proposal to carry out netting of capacity trades on a **trading day** basis.
- Under this approach, the delivery netting process runs at the end of each trading day (with an additional DA process during the day) that collects trades since the previous day's netting run.
- Under the proposed legal framework, once capacity has been transferred by the service provider the trade has been delivered.
 - At this point in time the Buyer has an obligation to pay for the capacity transferred.
 - This means that the Buyer would be required to have enough collateral to cover 100% of the value of the capacity trade.
- This approach could result in relatively high levels of collateral requirements for the market. As a consequence, a **gas day** approach to the transfer of capacity trades has been developed.



Delivery Netting – Gas Day Approach



- Under a **gas day** approach the netting process occurs a defined number of days prior to the 'delivery' gas day.
 - 14 days has been selected to align with the period for which a transfer must stay on foot if the seller defaults on a primary GTA.
- Prior to a capacity transfer:
 - The default (and suspension) of a Buyer or Seller would result in the close out of transaction and payment of compensation to non-defaulting party.
 - Buyer and Seller provide collateral to cover 25% of transaction value.
- Following the transfer of capacity:
 - If Buyer or Seller defaults in the market, transaction and transfer would stay on foot.
 - Buyer provides collateral to cover 100% of transaction value.



Capacity Transfer Interface



- The capacity trading platform will operate under an automatic and fully anonymous approach to effecting capacity transfers and integrating with other facilitated markets.
- A data interchange will be established (on the GBB link) to facilitate the transfer of information between AEMO and pipeline operators.
 - shippers do not need to know who their counterparty is (anonymous) and the transfer of capacity occurs within the pipeline operators systems without further information required from shippers (automatic):
- The capacity transfer interface will allow:
 - AEMO to send a capacity transfer request to service providers.
 - Service providers will transfer the capacity between shippers in their systems to effect the trade. Service providers will then confirm back to AEMO that the capacity transfer has been completed.



Market integration



- Following confirmation of a capacity transfer by a service provider, AEMO will make any capacity transfers required for the STTM and DWGM.
- For the trades on the Capacity Trading Platform, updates to capacity rights in the STTM and DWGM will be automated.
 - Service providers will not be required to confirm updates to capacity rights
- If the Seller does not have sufficient capacity to meet the trade then it will be rejected.

STTM

- Buyer must register contract in the STTM prior to trading.
 - If the contract is an operational service then it will initially have 0 capacity.
- AEMO automatically amends contract and trading right capacity.

DWGM

- Buyer must register accreditation right in the DWGM prior to trading.
- AEMO automatically amends accreditation rights.



Settlements and Prudential



- Centralised settlement and prudential model.
- Settlement of capacity trades (and auction transactions) will occur through the GSH
 - **Single monthly invoice** and (net) payment for commodity (existing GSH) and capacity (CTP) trades, and day ahead auction (DAA) transactions.
 - Collateral and prudential monitoring common across the markets.
 - Prudential exposure will be calculated across CTP, DAA and commodity trades. Amounts owed to a participant in one market will offset amount owed by the participant in another market.
- When participants place an order on the exchange (for either a commodity or capacity product) AEMO systems will check that the participant has provided sufficient collateral if the order transacts (the existing **check on trading limit**).