PCT Reference Group Meeting

13 June 2018

Agenda

1. Status Update
2. Procedures and Agreements
    1. Comments
    2. Examples
    3. Next steps
3. Market Systems Overview
4. Industry Readiness Overview

Status Update

Update on legal and regulatory framework

The consultation period for the legal and regulatory framework required to give effect to the capacity trading reform package closed on 27 April.

In total 24 submissions were received in response to the consultation paper. These submissions focused on both:

- the proposed refinements to the design of the reform package; and

- the drafting of the National Gas Law (NGL), National Gas Rules (NGR), Regulations and the Operational Transportation Service Code (Code).

The feedback provided through these submissions has informed the GMRG's final recommendations on the legal and regulatory framework, which will be submitted to the Energy Council later this week.

A decision by the Energy Council is expected in late June.

If the Energy Council approves the framework, the following will occur:

Changes to the NGL are tabled in SA Parliament and proclaimed.

Changes to the NGR and Regulations and the initial Code are made

Publication of:
- NGL, NGR, Regulations and initial Code
- Explanatory Note that will provide further detail on the legal and regulatory framework

Consistent with the approach that is usually employed when changes of this nature need to be made to the NGR, NGR and Regulations, the proposed changes to these instruments will **<u>not</u>** be published when the Energy Council makes its decision. They will only be published when the instruments are made.

The GMRG does, however, intend to publish an Information Paper when the Energy Council makes its decision. The Information Paper will set out the final design of the reform package and key dates for the various obligations service providers and market participants will be subject to.

Timing

At this stage, the legal and regulatory framework is expected to be in place by the end of October, but this depends on the time associated with the passage of the Bill through the SA Parliament.

If there are any delays in this process then the following will occur:

- If the legal and regulatory framework is implemented **on or before** 1 December 2018 then the 1 March 2019 commencement date will be maintained; or

- If the legal and regulatory framework is implemented **after** 1 December 2018 then the auction and capacity trading platform will commence 60 business days after the rules are made.

Next steps

Date	Responsibility	Process
June 2018	Energy Council	Consideration of proposed changes to the NGL, NGR, Regulations and Code.
July – Nov 2018	SA Minister	Amendments to the NGL progressed through SA Parliament and once NGL changes are proclaimed, the amendments to the Regulations and the NGR, and the initial Code will be made.
July	AEMO and GMRG	Consultation on zones to be used in the capacity trading platform and day-ahead auction
Aug – Sep 2018	AEMO	Formal consultation on the Capacity Transfer and Auction Procedures, the Auction Agreement, changes to the Exchange Agreement and some amendments to the Bulletin Board (BB) Procedures.
Oct – Nov 2018	AEMO	Formal consultation on amendments to the Short Term Trading Market (STTM) and Declared Wholesale Gas Market (DWGM) Procedures and the remaining amendments to the BB Procedures.
On or before 1 Dec 2018	AEMO	AEMO to make the Capacity Transfer and Auction Procedures and Auction Agreement and amend the Exchange Agreement and other AEMO-made Procedures.

Procedures and Agreements

Feedback

Zones

Zone change proposals (s3.2)

- Comments:
  - Proposals should outline reasons for change, be made public
  - AEMO should have right to reject frivolous proposals, minimum time period must elapse before reconsidering a similar proposal.
- Response: AEMO agrees that some right should be provided for, looking into how it could be amended.

Zone transfer information (s3.3)

- Comment:
  - Concern raised about proposed content for zone transfer information.
  - Query raise relating to how operators and AEMO could provide reporting across a week that provides a realistic outlook and high quality information.
- Response: The information is not an outlook, rather it is ex post reporting to aid participant understanding of firmness and nominations. Reporting of rejected nominations by exception has been identified by service providers as the preferred approach for this information, which will be further explored.

Participation

- **Comment:**
  - What is the driver for separation of GSH trading participant and Capacity trading participant?
  - Are there varying fee structures for each?

- **Response:**
  - Proposal is for GSH trading participant to have access to commodity and capacity trading products. No change to fixed fee is proposed.
  - Capacity trading participant will be new class of GSH participant that will have access to capacity products only. It is proposed that this new registration type will have a lower fixed fee.

Contract Reference Information

S5   **contract information** means, for a *facility agreement*:

(A) each *transportation facility user* who is a party to the *facility agreement*, using the participant ID in the register;

(B) each *Part 24 facility* to which the *facility agreement* relates;

(C) the *facility operator's* contract reference ID for the *facility agreement*; and

(D) if the *facility agreement* allows delivery to a *hub* (as defined in Part 20 of the NGR), the identifier of the *registered facility service*;

- **Comment:** Query raised relating to how contract information provided will apply if a participant purchases capacity on the CTP and then wants to on-sell this capacity.

- **Response:** Prior to transfer, AEMO will net offsetting buy and sell transactions and communicate the net position to the service provider, with the contract reference supplied prior to trading. Example provided later in pack.

- **Comment:**
  - Suggestions to add additional fields, such as date range, flow direction, and to report via service reference (rather than contract reference).
  - Query regarding whether multi-asset TSAs will be provided by pipeline service?

- **Response:**
  - Expect information to be provided by facility.
  - Date range will be added to the required fields.
  - In general, the reference information provided is a matter for service providers. Service level information could be provided as the identifier - other service providers may wish to provide contract level information. The reference should be understandable to the shipper so as to aid their selection of the correct service.

Service Provider Validation of Transfers

Validation (8.4)

- **Comment:** Query raised regarding what buyer delivery fault refers to, how it will be treated, and what restrictions will apply to participation. (For example, in the case the buyer does not have a valid contract)

- **Response:**
  - Buyer delivery default refers to the rejection of a capacity transfer due to the inability for the service provider to transfer capacity to the buyer (for example, if the buyer has specified points to which they do not have access).
  - Participants will need to specify a contract reference prior to submitting an order on the CTP or bid on the DAA.
  - In the event of a buyer delivery fault, the affected buyer to attempt to resolve the issue directly with the service provider and ahead of further transfers.
  - Clause 8.4 is under further consideration by AEMO. In particular, the position with respect to the buyer where a validation failure is due to the buyer's fault is to be confirmed.

Primary facility termination

Primary facility termination (10)

- **Comments:** Will termination only affect the parties who hold the 'traded capacity' under the terminated contract?

- **Response:**
  - This clause relates to the termination of a primary contract, against which secondary transactions on the CTP have been made.
  - There is no termination of any transfers already made.
  - The seller's net transaction position is terminated. For transfers on foot within the 14 das delivery window the buyer's payments are received and passed to the service provider.

Communication matters

Communication of delays (14.3) and cancellations (17c)

- **Comment:**
  - Is the CTP the most appropriate mechanism to communicate?

- **Response:** Report (similar to STTM notice) to be generated and issued if delay triggered, or auction facility excluded.
  - Participants will also be able to subscribe to the report through publishing direct.

Auction bids

Maximum bid quantity

- **Comments:** Maximum bid quantity of 10,000 GJ could be a constraint. A better fit might be 25,000 GJ if a cap is required at all.
- **Response:** AEMO propose a change to the parameters such that the maximum quantity in a bid is limited to 500TJ is aggregate (rather than a limit on the capacity for each individual step - see examples section).

Minimum bid quantity

- **Comments:** Raise minimum quantity to 1TJ
- **Response:**
  - Building a minimum quantity into the solver as it could lead to less efficient / uncleared parcels and it would add complexity.
  - A minimum quantity on the bidding interface (say 100GJ or 200GJ), but the auction could still allocate smaller parcels. As such, it doesn't effectively address the concern of the service providers (they'll have to deal with that in their contracts) and all it would achieve would be a participation hurdle.

Auction

Mathematical formulation document

- AEMO will be permitted to release the document on request.

Auction price publication

- **Comments:**
  - Is the service provider price report by each point to point leg per facility or per zone or by each combinatorial service?
  - What does AEMO mean by price sensitivities?

- **Response:** the price reported to a service provider (and to an auction participant) will be the price for a specific auction service (point-to-point) purchased by the auction participant on the facility.

- AEMO will also release a public report with the prices for each product component.

- The public report will contain price sensitivities.

STTM and DWGM adjustments

- 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.

Division 3, Section 9 of the CT&A Procedures provides for AEMO to make the adjustments in the respective market systems on the rights notified by the participant before making a trade in the respective products.

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.

STTM integration

- The work to date on zones suggests that on some pipelines the STTM hub definition doesn't perfectly align with zonal definitions.
- Three potential variations include:
  - *Discrete zone:* where the pipeline zone and STTM hub definition align.
  - *Mixed zone:* where there is a mix of STTM and non-STTM delivery points in the same zone, or
  - *Split zones:* where an STTM hub is split across more than one pipeline zone.
- Proposed approach for integration of STTM capacity trades:
  - AEMO will automatically reduce the capacity of the seller's contract (CRN) capacity (and trading right capacity), and increase the contract capacity of the buyer.
- Where there is a *mixed zone* it is proposed that there will be the following capacity products on the CTP:
  - Integrated product – will automatically adjust buyer's and seller's STTM contract capacity.
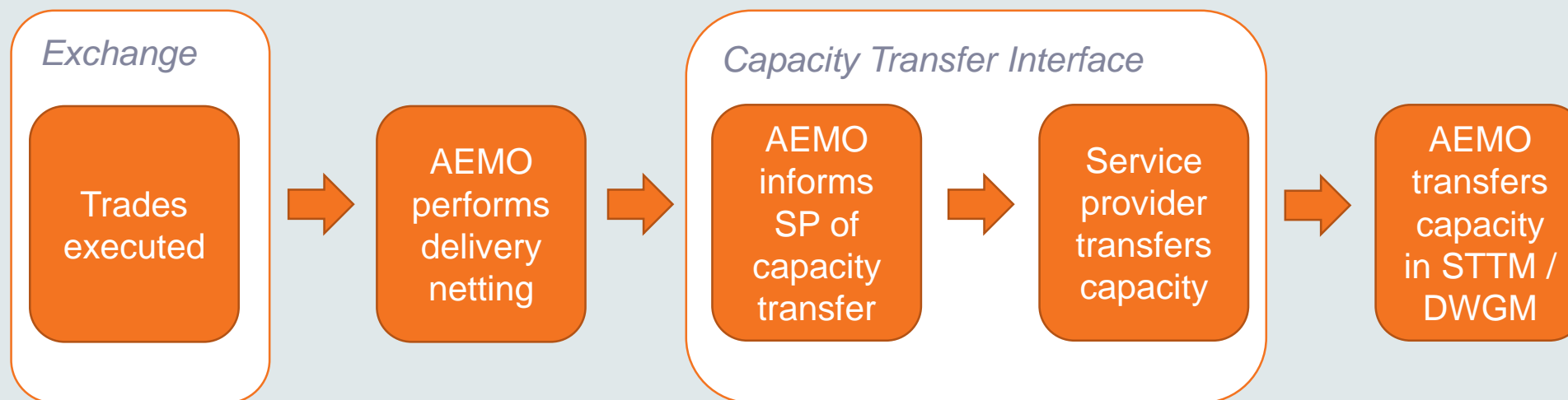 - Non integrated product – no adjustments made to STTM contracts.

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DWGM Integration

- DWGM transfer points (e.g. Culcairn, VicHub, TasHub, SEAGas, etc…) will be included in zones for trading on the Capacity Trading Platform and Day Ahead Auction.

- **Integration -** Confirmed capacity transfers at a DWGM transfer point will result in an automatic change to the maximum hourly flow bid constraint in the DWGM.

- DWGM bidding and scheduling processes will remain unchanged.
  - A participant who acquires capacity at a transfer point will still need to bid and be scheduled in the DWGM.
  - They will also need to nominate to their service provider under their contracts

Treatment of capacity at DWGM points

- Similar to the options for the STTM, mixed zones or discrete zones could be used.

- Proposed approach for integration interface point capacity:
  - One-sided changes to bid accreditation constraints will be permitted where a buyer or seller nominates to use a DWGM interface point as a transfer from buyer to seller is not required. This will permit the use of mixed zones where applicable.
  - Note that capacity released through the auction will not reduce a participants' MHQ as the firm holder of the capacity can still use it on the gas day.

- In accordance with the AMDQ Procedures, participants should adjust their AMDQ at SWPs on interconnect facilities (currently only Culcairn) to reflect the firm capacity they hold at the SWP e.g. to account for any sales.
  - Changes to AMDQ to be done as per existing process no automation proposed

Examples

Trade and transfer process on the CTP

Exchange

Trades executed → AEMO performs delivery netting →

Capacity Transfer Interface

AEMO informs SP of capacity transfer → Service provider transfers capacity →

AEMO transfers capacity in STTM / DWGM

Submission of orders on the exchange:

- 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.
- Trading participants will need to specify receipt and delivery points in their order.

Provision of contract reference information

EXAMPLE:

- Shipper A has 2 contracts or services on which they hold capacity with the facility operator
  - Prim001A for 20 TJ
  - Prim002A for 40 TJ

- Shipper B has signed up to an OTSA with the facility operator
  - OTSA001B

Service provider will give the following information to AEMO for all participants registered in the CTP and DAA that have a contract on their facility:

Facility	Participant	SP Reference
Pipeline X	Shipper A	Pri001A
Pipeline X	Shipper A	Pri002A
Pipeline X	Shipper B	OTSA001B

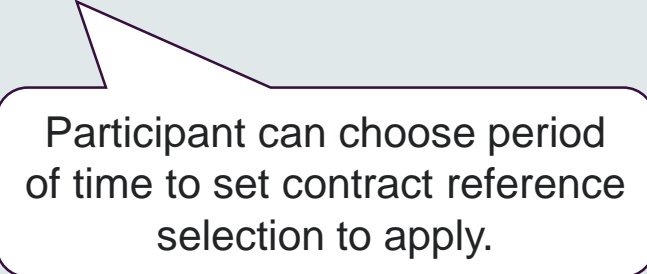AEMO will not receive information regarding quantity

Selection of contract reference information

Each shipper will need to log in to AEMO Markets Portal and select which of their contracts they wish to be adjusted when they trade each product.

For product 'RZ1 to DZ1 on Pipeline X' over a period of time:

Shipper A nominates:

- First 10 TJ they sell to be taken from Pri001A
- Remaining from Pri002A

Shipper B only has the OTSA, so they select OTSA001B.

Participant can choose period of time to set contract reference selection to apply.

Trading on the exchange

Product: RZ1 to DZ1 on Pipeline X

R1 R2   D1 D2 D3

RZ1   *DZ1*

Trade date: 13 June 2018
Tenor: Weekly, 2 July to 8 July
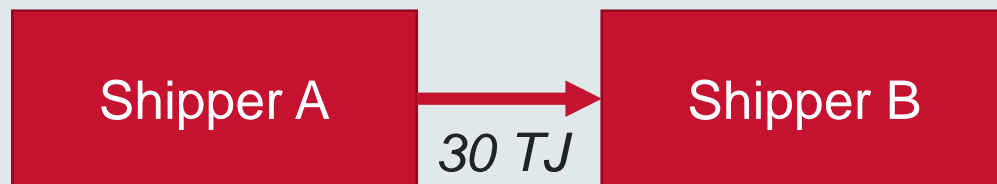
Shipper A	30 TJ →	Shipper B
RZP: R1		RZP: R2
DZP: D1		DZP: D1

Select receipt and delivery points in order

Prior to submitting an order, shippers will specify a receipt and delivery point.

The system will check:

- Participant has sufficient collateral.
- Participant has nominated a contract which they wish to be adjusted should they trade

Delivery Netting and Transfer

1. 14 days ahead of the gas day, AEMO will net the shippers' trade position for that gas day.

2. AEMO will then apply the information provided by the shipper to the net position.
   1. Contract reference selected in Market Portal
   2. Receipt and delivery points selected in the order.

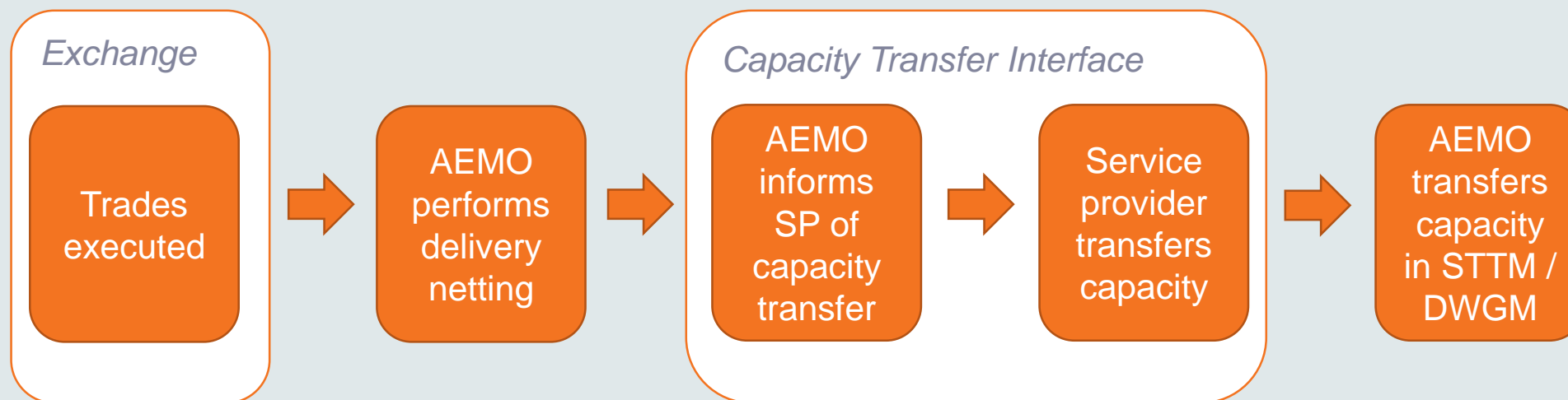3. AEMO will send this file to the facility operator to make the transfer.

Net and transfer information per gas day

Points selected in order

Contract selected prior to trading

Facility	Participant	Gas day	Quantity	Receipt Point	Delivery Point	Contract
Pipeline X	Shipper A	2 July 2018	-10	R1	D1	Pri001A
Pipeline X	Shipper A	2 July 2018	-20	R1	D1	Pri002A
Pipeline X	Shipper B	2 July 2018	30	R2	D1	OTSA001B

Trade and transfer process on the CTP

Exchange

Trades executed → AEMO performs delivery netting →

Capacity Transfer Interface

AEMO informs SP of capacity transfer → Service provider transfers capacity →

AEMO transfers capacity in STTM / DWGM

Transfers in STTM / DWGM:

- Similarly, participants will use the contract selection module to select which STTM or DWGM right they want to be adjusted when they trade, prior to making any orders.

- When AEMO receives confirmation from the service provider that the transfer has gone through, AEMO will make the adjustments on this information.

Auction products recap

The day ahead auction will facilitate forward haul, compression and backhaul products. Each product is on a single facility. Each product is between a receipt point and a delivery point
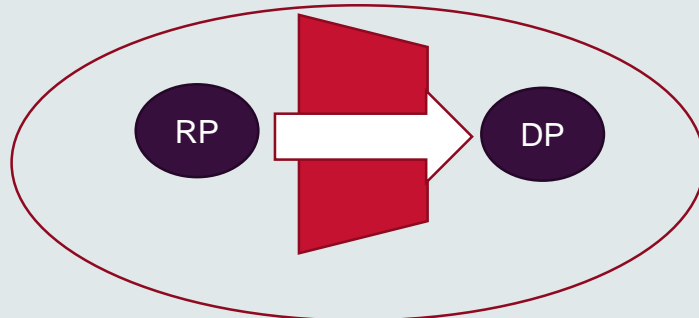
Forward Haul Product
A product for a transportation service of gas on a pipeline between a forward haul receipt point and forward haul delivery.
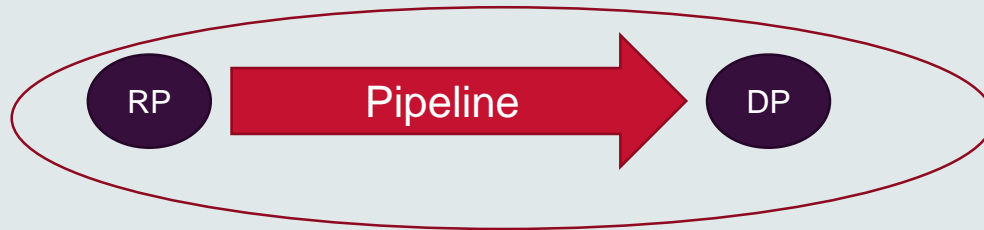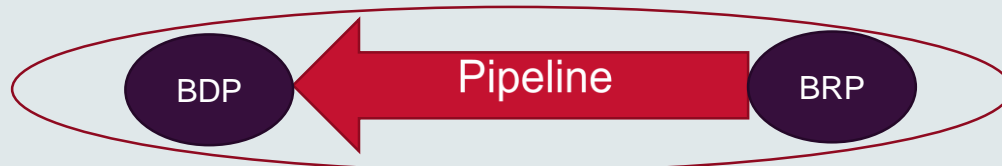

Compression Product
A product for a service to compress gas bad between one or more compression points.

Backhaul Product
A backhaul product is for a transportation service between a backhaul receipt and backhaul delivery point

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Auction Quantity Limits – Forward Haul services

Bidding for capacity on the DAA

Forward-haul product:

1. Submit quantity and price for bid
   - Start and end date (could be single day)
     - Bids can cover multiple gas days.
     - Bids can be submitted up to 15 days into the future.
   - Quantity and Price (up to 10 steps per bid)
2. Select points relevant to bid
   - Single point-to-point bid on a facility
   - Linked bid for multiple point-to-point combinations on the same or different facilities
     - The latest bid for a gas day & auction product (specific receipt point and delivery point combination) will be used in the auction.
3. Nominate contract/rights that should increase for auction capacity
   - Contract with service provider that allows auction service
   - DWGM accreditation right
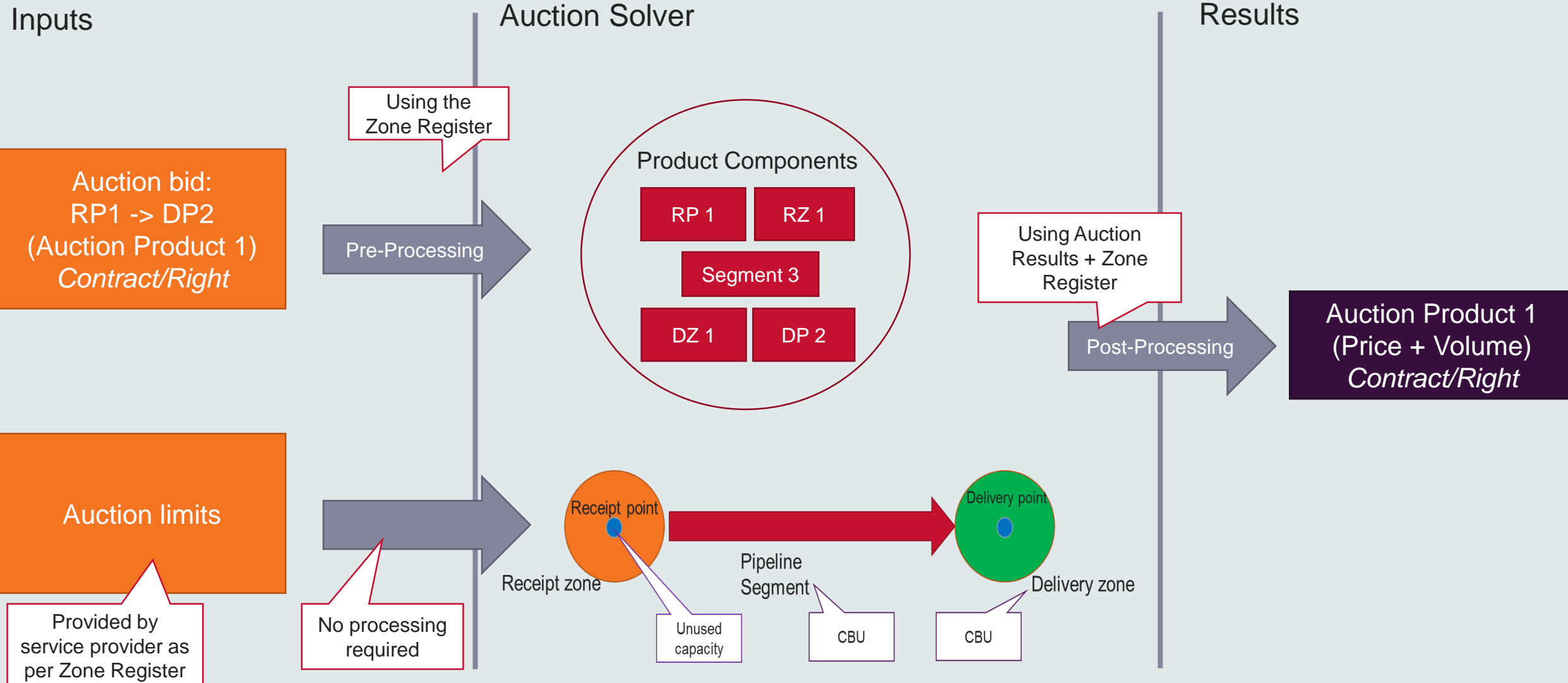
Bids example

- Participant A bid:

Bid ID	Facility	Contract	Receipt Point	Delivery Point	Step 1 Price	Step 1 Quantity	Step 2 Price	Step 2 Quantity
00123	Pipeline X	OTSA001A	XR1	XD1	0.05	5000	0.02	10000
	Pipeline Y	OTSAY01A	YR2	YD2				

Linked bid

- Participant B bid:

Bid ID	Facility	Contract	Receipt Point	Delivery Point	Step 1 Price	Step 1 Quantity	Step 2 Price	Step 2 Quantity
00456	Pipeline X	OTSA001B	XR1	XD1	0.1	20000	[null]	[null]

Auction Processing

Inputs

Auction Solver

Results

Auction bid:
RP1 -> DP2
(Auction Product 1)
Contract/Right

Using the
Zone Register

Pre-Processing

Product Components

| RP 1 | RZ 1 |

| Segment 3 |

| DZ 1 | DP 2 |

Using Auction
Results + Zone
Register

Post-Processing

Auction Product 1
(Price + Volume)
Contract/Right

Auction limits

Provided by
service provider as
per Zone Register

No processing
required

Receipt point

Delivery point

Receipt zone

Pipeline
Segment

Delivery zone

Unused
capacity

CBU

CBU

Results and Reporting

- Participant Auction Results:

Facility	Facility Operator	Participant	Receipt Point	Delivery Point	Quantity	Price	Contract
Pipeline X	X	A	XR1	XD1	10000	0.02	OTSA001A
Pipeline Y	Y	A	YR2	YD2	10000	0.02	OTSAY01A

- Facility Operator Results:

| Facility	Facility Operator	Participant	Receipt Point	Delivery Point	Quantity	Price	Contract
Pipeline X	X	A	XR1	XD1	10000	0.02	OTSA001A
Pipeline X	X	B	XR1	XD1	20000	0.02	OTSA001B

- Public Results:
  - Quantity and price against each auction product component (or against each auction quantity limit)

Upcoming activities

- Preliminary consultation on amendments to STTM / DWGM / BB procedures

- Preliminary Zones consultation
  - Consultation delayed by work on legislative package
  - Expect consultation paper to be released early July.

- Formal Procedures consultation
  - Expect to release formal package in August, for period of 6 weeks.
  - AEMO plans to release further preliminary draft ahead of the formal consultation.

Market Systems

CTP/DAA Market System Components
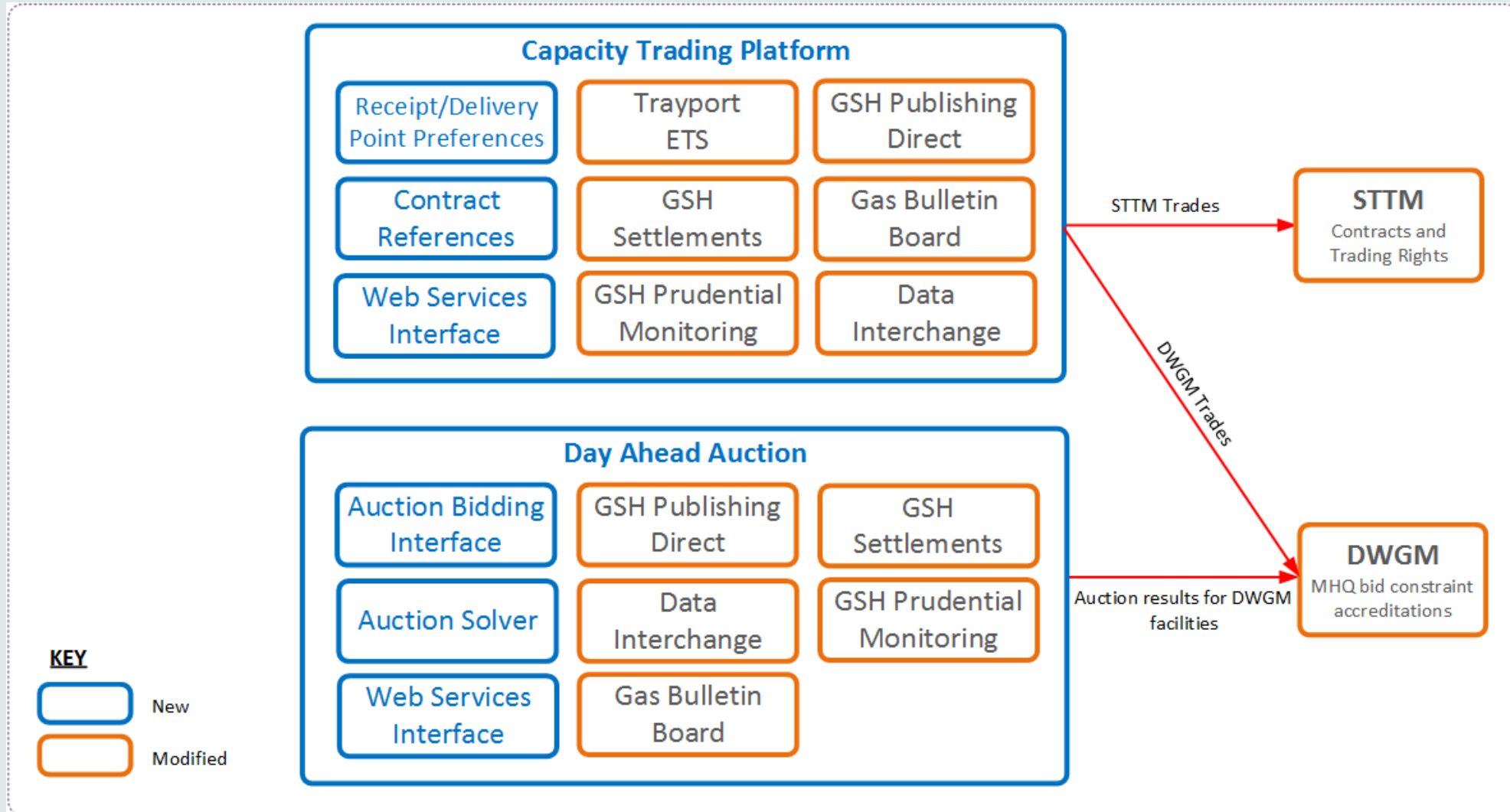
Contract References Web Application (Markets Portal)

- The Contract References web application is a new application that will be available under the *Gas Supply Hub* menu in the Markets Portal.

- Traders will use this application to select a service reference (from pipeline operators), STTM registered facility service (CRN) and DWGM accreditation reference for each capacity product they wish to trade.

- Contract references may be changed at any time prior to the trade being netted.

Trayport Exchange Trading System (ETS)

- The *Trayport ETS* is an existing trading application currently used by traders in the Gas Supply Hub to trade commodity gas.

- A new trading screen for capacity products will be added to this application (similar to the existing commodity trading screen).

- Existing Trayport user accounts will automatically be granted access to trade capacity in the new screen.

- Traders must have selected a valid contract reference in the *Contract References* web portal application prior to submitting an order for a capacity product. All orders on capacity products without a valid contract reference will be automatically rejected.

Receipt/Delivery Point Preferences web application (Markets Portal)

- The *Receipt/Delivery Point Preferences* web application is a new application that will be available under the *Gas Supply Hub* menu in the Markets Portal.

- Traders can use this application to update which Receipt and Delivery Points to use for all trades on a product during a specified timeframe, and allows addition of steps to enable quantities of capacity to be allocated between different Receipt and/or Delivery Points.

- The preferences are applied during the Netting process. This allows traders to change the Receipt and/or Delivery Points for trades already submitted that have not yet been netted, as well as future trades.

Capacity Trade Netting

- Capacity trades will be netted 14 days prior to each gas day. For capacity trades executed less than 14 days prior to the start of the trade date, these will be netted on the day the trade is executed.

- A netted capacity trade report will be sent to facility operators. Facility operators will adjust the contracted capacity on the relevant contracts in their system.

- AEMO will also transfer the netted capacity in the STTM and DWGM systems for relevant products.

STTM & DWGM

STTM

Registered Facility Services (CRN) and trading right capacities will be automatically adjusted to reflect capacity traded in the ETS on relevant products.

DWGM

Accredited maximum hourly (MHQ) bid constraints will be automatically adjusted to reflect capacity traded in the ETS as well as any capacity won at auction, on relevant products.

Auction Bidding Web Application (Markets Portal)

- The *Auction Bidding* interface is a new web application that will be available in the Markets Portal.

- Traders will use this application to submit auction bids.

Auction Solver

- A new Auction solver will run daily to determine the clearing price and quantity of each auction product.

- Inputs include:
  - Auction bids submitted by traders
  - Available auction quantities of each auction product component supplied by facility operators

Settlements

- The existing *Gas Supply Hub Settlements* system will be used for financial settlement of capacity trades and day ahead auction transactions.

- The existing *Settlements Statement* and *Settlements Supporting Data* report will include all relevant details of capacity trades and auction results.

Prudential Monitoring

- The existing *Gas Supply Hub Prudential Monitoring* system will be used to monitor prudential positions in the new capacity trading and day ahead auction markets.

- A single bank guarantee will cover bids/offers in the existing commodity market as well as the new capacity market and day ahead auction.

- All bids and offers on capacity products and auction bids will be subject to the same real time prudential position check as commodity orders at the time of submission.

- The existing *GSH Prudential Dashboard* in the Markets Portal will reflect capacity trade and day ahead auction activity.

GSH Publishing Direct

- *Publishing Direct* is an existing web application available under the *Gas Supply Hub* menu in the Markets Portal.

- All new reports related to capacity trading and day ahead auction activity will be published on the existing *Publishing Direct* web application.

- Existing subscription functionality offered by *Publishing Direct* will also be available for new reports.

Data Interchange

- The *Data Interchange (DI)* is a set of cooperating applications to replicate data between AEMO's Wholesale Market Systems and a participant's RDBMS conforming to the Electricity and/or Gas Data Models. It has two core functions:
  1. AEMO-side reporting applications that generate structured .CSV files into the participant file server.
  2. Participant-side software to replicate data from the participant file server to participants' local DBMS.

- All new reports related to capacity trading and day ahead auction activity will be available to traders via the DI.

Standard DI Implementation
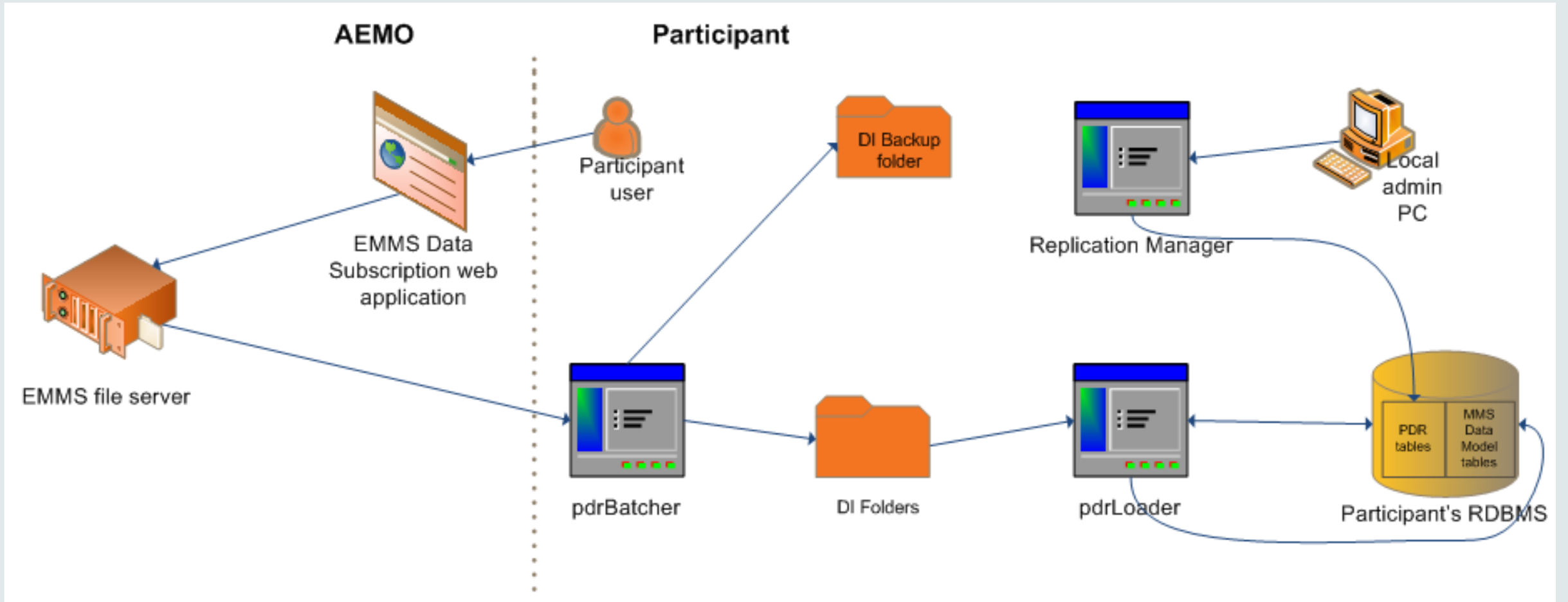
Core DI Components

- **Data Model** - Establishes the target tables in a participant's DBMS conforming to the market data Model, including database tables, indexes, and constraints.

- **Participant file server** - The publishing point from AEMO systems to participant systems, with each participant allocated an account and access to private and public areas.

- **Participant Data Replication Batcher (pdrBatcher)** – Application responsible for transferring files from AEMO's participant file server to the participant's local Data Interchange folders.

- **Participant Data Replication Loader (pdrLoader)** - Application responsible for loading files from participant's local Data Interchange folders to the participant's DBMS.

DI Documentation

DI documentation and software bundles are available on the AEMO website at the following address: http://www.aemo.com.au/Gas/IT-systems-and-change

Data Interchange

Data interchange (DI) is a set of cooperating applications to replicate data between AEMO's Wholesale Market Systems and a participant's RDBMS conforming to the Electricity and/or Gas Data Models.

Below are all the components necessary for a new installation of Data Interchange, bundled together into compressed files. Each bundle is for a specific RDBMS and the latest release of the Electricity and Gas Data Models.

Data Interchange software

- DIbundle-Oracle11g - Elect v4.27 - Gas v1.4 (59 MB, zip)
- DIbundle-Oracle12c - Elect v4.27 - Gas v1.4 (59 MB, zip)
- DIbundle-SQLServer2012 - Elect v4.27 - Gas v1.4 (55 MB, zip)
- DIbundle-SQLServer2014 - Elect v4.27 - Gas v1.4 (55 MB, zip)

DI Guides

- Subscribing to new Gas Data Model files (190 KB, pdf)
- Guide to setting up a standard Data Interchange environment
- Guide to upgrading a Data Interchange environment (1.8 MB, pdf)
- Concise Guide to Data Interchange
- Guide to Troubleshooting Data Interchange
- EMMS Data Interchange Guide
- MMS Data Subscription Services User Guide

Web Services Interface

A new **web services** interface will be available to traders wishing to automate data submissions and report data retrieval.
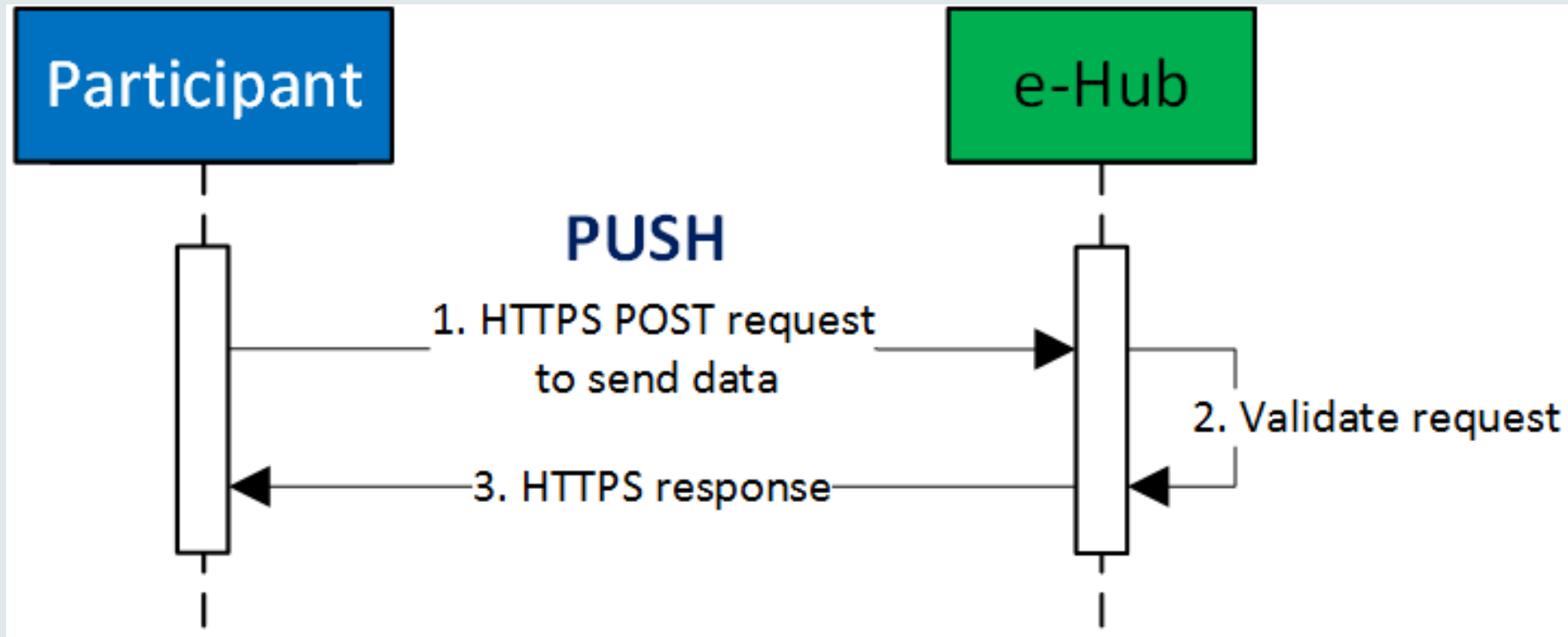
The web services are delivered via the AEMO e-Hub, which consists of:

- An API Web Portal

- An API Gateway

Note: The e-Hub is also used for GBB web services

Web Services Data Submissions Pattern

For data submissions, participants must push the data to the e-Hub using a HTTPS POST request.
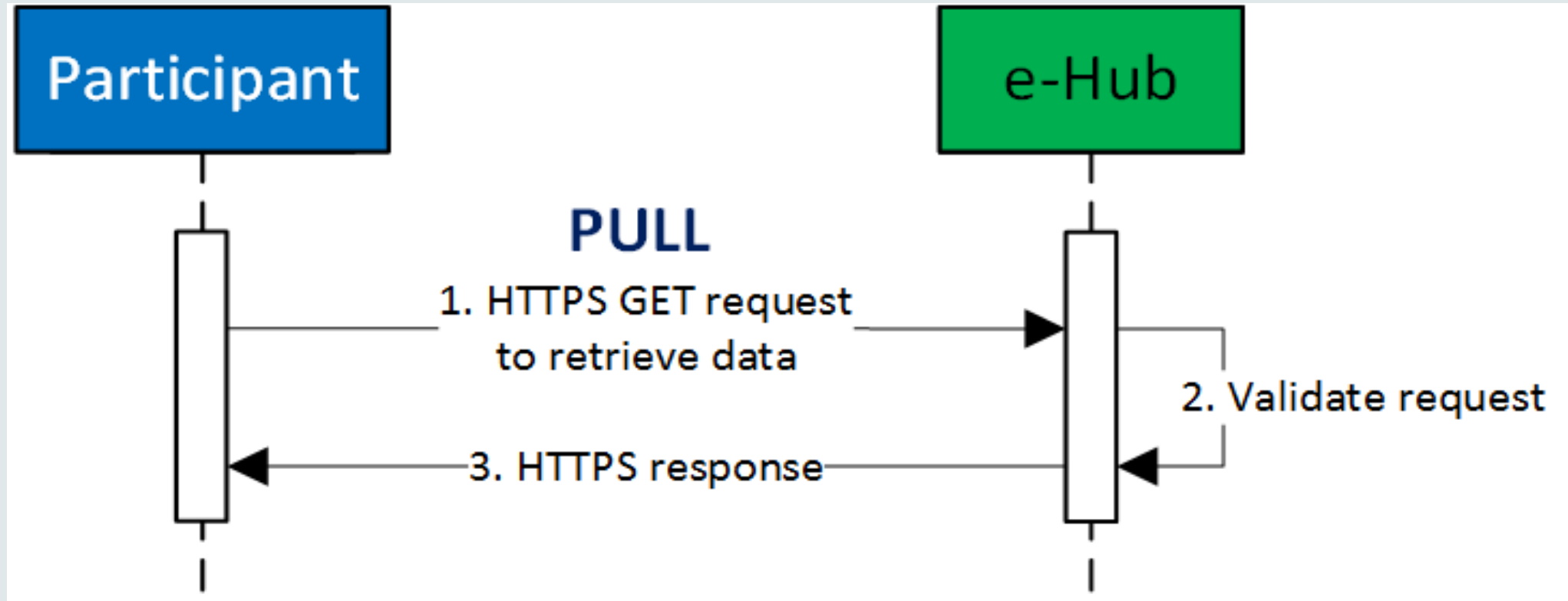
Data Submission Transaction List (for traders)

1. **Auction bids**

2. **Bilateral trades** - trades executed between two parties outside of the GSH trading platform.

Web Services Reports Pattern

Participants must pull the report data from the e-Hub using a HTTPS GET request.

Report Transaction List (for traders)

1. **Auction results** - specifies the price and quantity of the capacity that a trader has won at auction for the following gas day.

2. **Capacity transfer status** – provides the capacity transfer status in service provider and AEMO systems.

Gas Bulletin Board

- Selected Capacity Trading and Day Ahead Auction market reports will be published on the Gas Bulletin Board:
  - Transportation Facility Register
  - Transportation Service Point Register
  - Auction Quantities
  - Auction Product Price and Volume
  - Revised Auction Quantities
  - Secondary Capacity Trades
  - Allocation Agent information

Industry Readiness

Industry Readiness Program

The objectives of the industry readiness program include:

- Support the readiness of industry participants to commence operation of the capacity trading platform and day-ahead auction.

- Support a smooth transition to live operation.

Key components of program:

1. Industry Readiness Reporting and Coordination

2. Training and Market Guides

3. Facility Operator Testing

4. Market Trial

5. Communications

Industry Readiness Program
– Industry Readiness Reporting & Coordination

- Objective of readiness reporting is to identify common or material readiness issues across industry.

- Date of market start is set in legislation.

  - There is no go-live decision for AEMO to make.

  - AEMO may suspend operation of the auction on a facility due to operational reasons.

  - Compliance with obligations from commencement date is expected (and underpinned by civil penalty and conduct provisions), but compliance is ultimately a matter for AER.

- AEMO to prepare a readiness criteria checklist

  - participants can use to measure their own readiness

- AEMO will conduct brief surveys with industry participants

  - Monthly self assessment of progress on systems, process and commercial activities.

- AEMO to publish snapshot of survey results.

Industry Readiness Program – Training & Market Guides

- Objective of training is to aid participant understanding of core design and processes of the new capacity markets.

- It is proposed that training will include core modules for:
  - Legal framework, registration and settlement.
  - Service provider processes and interface.
  - Day-ahead auction – market processes.
  - Capacity trading products – trading and delivery processes.

- Training late November / early December 2018

- Group sessions at AEMO offices where possible.

Facility Operator Testing

- Facility operator testing is a program of connectivity

- The objective of the testing is Enhance facility operator readiness

- Overview:

  - Mid-November to mid-December

  - Most of the testing will be unscripted, 1 week period of AEMO co-ordination.

  - Testing will take place in pre-production environment.

  - Environment will be available over xmas but will not be supported.

Industry Readiness Program – Market Trial

- As real, end-to-end test of market processes and systems

- The purpose of the trial is to provide facility operators, participants and AEMO the opportunity to test their processes and systems in a real operational environment ahead of live operation of the market.

Overview:

- 4 weeks in duration
  - Unscripted testing period – full operational trial
  - Scripted testing period – aims to test unusual scenarios under conditions that are as real as possible.

- AEMO to conduct weekly conferences and track defects and issues

- Cutover approach from market trial to production

Industry Readiness Program – Communications

- Objective is to build awareness and understanding of the Capacity Trading Platform and Day-ahead Auction.

  - Potential traders are aware of the reforms, training & market trial

- Communication methods

  - AEMO website

  - Newsletter

  - AEMO communications email

  - Guide material

- Trading participants to nominate a *Market Readiness Co-ordinator*

  - AEMO to share information about market readiness activities