

# Gas Market Options WG

Second Report

to

MCE Gas Market Leaders Group

15 May 2006

# Gas Market Options Working Group

- Established December 2005 to further develop Options 2 & 3
- GMOWG initial report to GMLG in Feb'06
- Further work on:
  - ◆ Developing the 2 options
  - ◆ Overseeing a cost/benefit analysis
  - ◆ Establishing a market operator
  - ◆ Governance arrangements
  - ◆ Implementation options/timetable
  - ◆ Liaison with NGERAC

# Cost/Benefit Analysis Objectives

- To assess costs and benefits of:
  - ◆ Bulletin Board
  - ◆ Short Term Trading Market
- “Order of Magnitude” assessment
  - ◆ Quantified to maximum possible extent
  - ◆ Market design to date is conceptual, but adequate to allow cost/benefits to be estimated
- Draft Report prepared by MMA
- To assist GMLG in preparing recommendations on a National Gas Market Development Plan

# Allen Consulting – Option 1

- “Current market with organic development”
- With FRC, “current market” involves
  - ◆ Bilateral contracting; and
  - ◆ Balancing arrangements in each jurisdiction
- Shippers/retailers/end-users balance through:
  - ◆ Victorian gas spot market
  - ◆ “Swing Service” in SA
  - ◆ “OBG” in NSW
- All currently being reviewed, or changes being implemented, to improve efficiency/effectiveness

# Bulletin Board

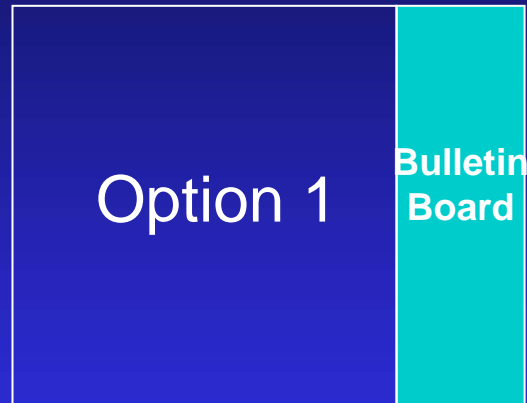
## Option 1 “Organic Development”

- Victorian spot market
- “Swing service” in SA
- “OBG” in NSW
- Bilateral contracts

Current reviews and/or implementation of changes to improve existing arrangements:

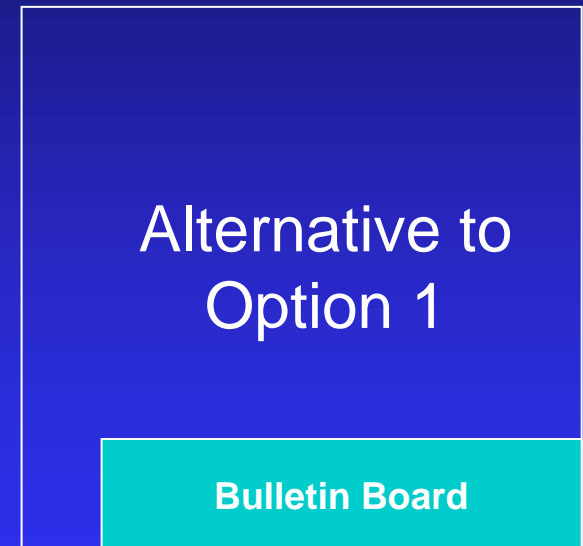
- Gas Market Project (Vic)
  - “Swing service” (SA)
  - OBG (NSW)

## Option 2 “Bulletin Board”



Super-imposes Bulletin Board on current arrangements, which would still require development as per Option 1

## Option 3 “Short-term Trading Market”



Alternative to required development under Option 1, likely to incorporate features of Bulletin Board as per Option 2

# Bulletin Board - Objectives

- To improve transparency and facilitate trade through provision of readily accessible and up to date system and market information
- In particular, provides improved availability of this information to end-users, smaller or potential market entrants, market observers (including Governments)
- Does NOT establish a clearing price, trading mechanism, or otherwise provide increased price transparency

# Bulletin Board - Overview

- Single Bulletin Board for all interconnected pipelines
- Non-interconnected pipelines preferably in same format, on same site, but separate “pages”
- Mandatory provision of specified physical gas supply/demand information
- Optional facility to post buy/sell offers for gas supply or capacity
- Public access
  - ◆ dependent on final details, could consider pages with restricted access to registered parties only, where confidentiality or security is an issue

# Bulletin Board – Info Requirements

- “Nameplate” ratings of production, storage and pipeline capacities (TJ/day)
  - ◆ reviewed annually
  - ◆ updated in event of material changes, including planned/unplanned outages
- Available firm and non-firm pipeline capacity (per current Access requirements)
- Daily forecasts of aggregate daily demands for major load centres (outlook for next 2-3 days)
- Key contact details for pipeline operators, producers, storage providers, shippers/retailers
  - ◆ Can be achieved by hyper-link to web-sites

# Bulletin Board – who would provide information?

- Producers, storage providers:
  - ◆ Production/storage capacities
  - ◆ Updated annually and upon material change
- Pipeline operators
  - ◆ Transportation capacities
  - ◆ Updated upon material change
- “Users” (retailers, direct end-use customers)
  - ◆ Daily demand forecasts
  - ◆ Aggregated for publication by BB operator

Facilities provided for direct entry, automated for uploading from existing systems, where possible

# Bulletin Board – issues for further consideration

- Legal/governance framework for imposing obligations on parties to provide/update information
- Bulletin Board administrator
  - ◆ independent entity with gas system expertise
  - ◆ costs/funding?
- Interaction with NGERAC
  - ◆ Overlapping objectives, information requirements

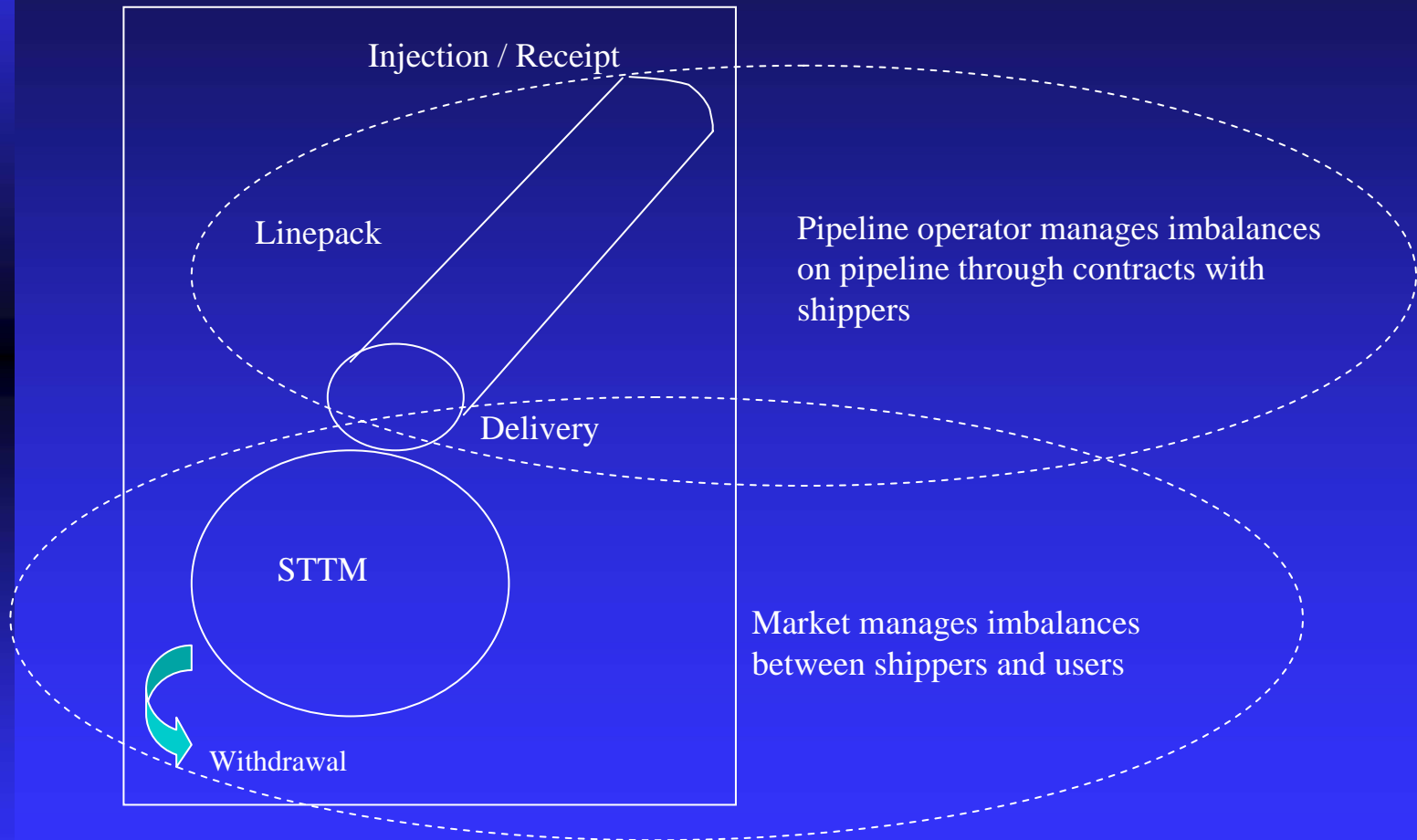
# Short Term Trading Market

# Short Term Trading Market(STTM)

## Design Principles

- Intended to be least cost method of clearing imbalances and valuing gas on a day
- Provides primary mechanism for:
  - ◆ daily trading between participants
  - ◆ demand-side response (eg users, generators)
  - ◆ transparent pricing signals between hubs
- Designed so as not to impact on pipeline or supply contracts
- *Does* involve change to FRC balancing arrangements
- Borrows US and UK concepts and adapts to Australian contract carriage point-to-point system as required

# STTM – Terminology/Concept



# STTM - Overview

- “Users” submit daily usage forecasts/bids
- Shippers submit offers for deliveries at hub
- Offers need to reflect contractual capability to deliver at hub
- Market Operator determines clearing price
- Clearing price applies to deliveries/usage at hub
- Nominations made by shippers to producers/pipeline operators under contracts (no change)
- Physical imbalances on pipelines (injections – deliveries) addressed through contractual arrangements (no change)

# STTM – Impacts on Operations

- Independent Market Operator required to manage systems for:
  - ◆ Receiving daily delivery/withdrawal bids/forecasts
  - ◆ Creating bid stack and setting clearing price
  - ◆ Management of metering data (profiling etc)
  - ◆ Settlements
  - ◆ Information provision
- Does NOT require independent pipeline operator
- Pipeline operations as per contracts
- Pipeline operator will need to advise market operator of delivery allocations

# Compatibility with Victorian Market

- Proposed STTM relies on adequate linepack to manage within-day imbalances
  - ◆ not applicable in Victoria
- Changes currently being implemented to Victorian spot market to address within-day balancing issues on Victorian PTS
- Implementation of revised Victorian market arrangements should proceed as planned
- Proposed daily STTM balancing and pricing signals are consistent with proposed Victorian PTS model
- Interface should not be problematic

# STTM – Implementation Issues

- Would replace existing “swing service” in SA and “OBG” arrangement in NSW
- Detailed design would need to further consider:
  - ◆ Definition of hubs (contractual/physical constraints?)
  - ◆ Market timetable (bids/market clearing/contract nominations etc)
  - ◆ Incentives and shipper risk management
- Governance/legal framework
- Market operator
- Application to non-interconnected, point-to-point pipelines? (eg WA/NT/Queensland)

# Other Issues Considered

- Default Price – ‘Voll’
  - ◆ to apply if STTM fails to clear
- System Security
  - ◆ STTM pricing signals should provide adequate incentives
  - ◆ Jurisdictions may impose additional “fail-safe” measures if it is felt necessary
- Annual Supply/Demand Statement
  - ◆ similar to NEM SOO, or Victorian APR

# Bulletin Board/STTM Governance

Focuses on establishment of independent entity to implement/administer/operate the Bulletin Board/STTM:

- Functions of Bulletin Board/STTM Operator
- Principles for BB/STTM operator governance
- Existing Models of Australian Energy Market Operators/Administrators
  - ◆ possible variations

# Governance Entity- Options

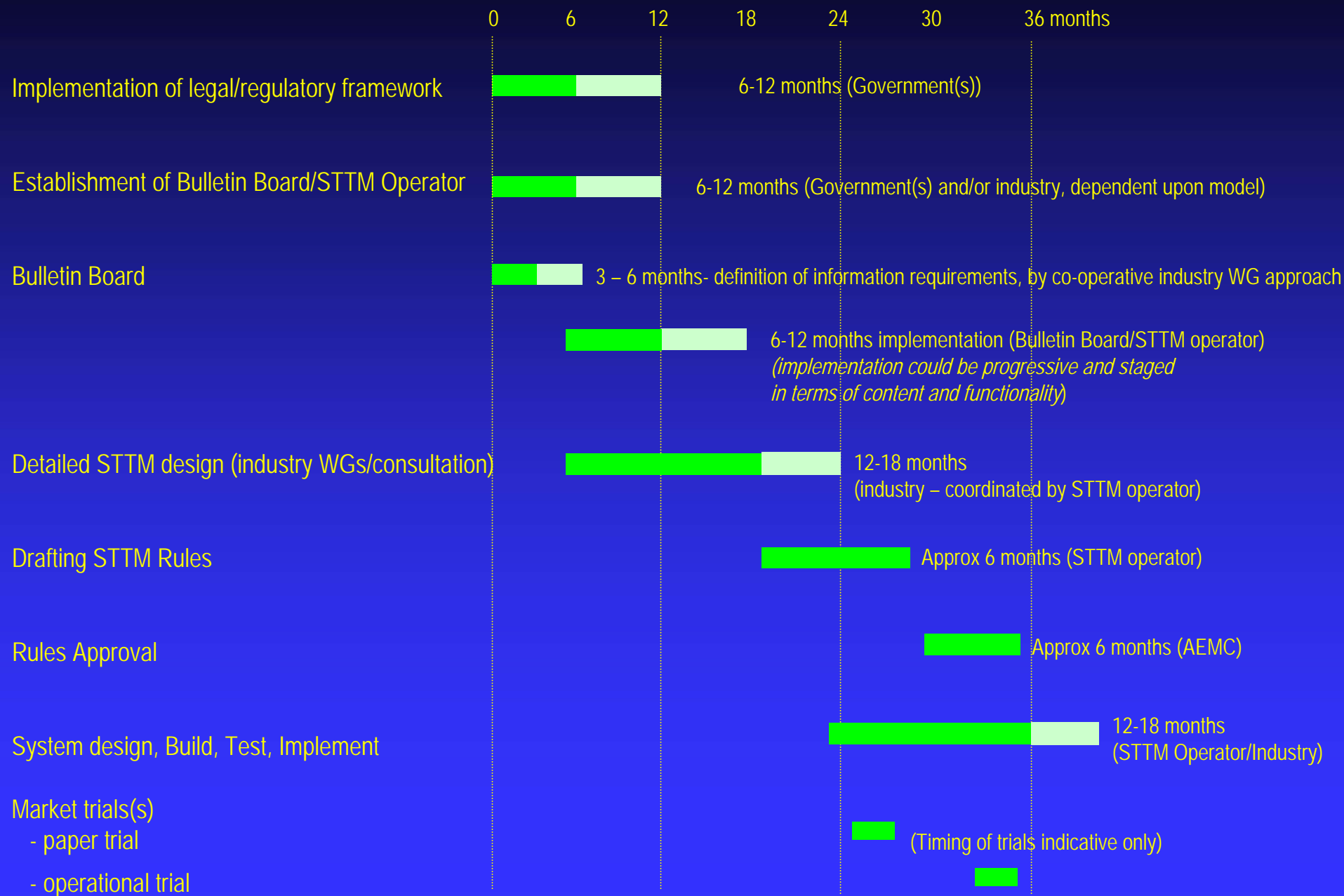
Numerous options/permutations within a range between:

- A statutory body with Board appointed by Ministers/MCE and obligations imposed by statute/legislation.
- A Corporate entity, established and owned by Industry members.

# Governance Options

Governance Model	Jurisdictional model (s. 5.5.1)	Jurisdictional/ industry model (s. 5.5.2)	Joint Government/ Industry model (s.5.5.4)	Industry Independent model (s. 5.5.5)	Co-regulatory Model (s. 5.5.3)
<b>Board Appointment</b>	Board appointed solely by Minister(s)/MCE	Combination of Board Directors appointed by industry and Government(s)		Board appointed solely by industry Members	
<b>Industry Involvement in Board</b>	No requirement for industry expertise on Board	Statutory requirement for Board to include industry expertise experience and independent members	Board partly comprised of Directors nominated by participating jurisdictions/MCE and partly by Directors nominated and appointed by industry participants	Board entirely appointed by industry participants, but with a requirement for a majority of independent	Board entirely appointed by industry participants
<b>Entity Structure</b>	Could either be a Statutory Authority or Company Limited by Guarantee				
<b>Membership</b>	"Members" would be the jurisdictional Governments	Members would include industry participants and participating jurisdictions/MCE		Members would be industry participants	
<b>Costs and Liability</b>	The entity should be funded on a cost recovery basis and have protections/limitations from liability – these outcomes can be achieved under any model.				
<b>Imposition of Rules &amp; Rule change process</b>	<p>Rules could either be:</p> <ul style="list-style-type: none"> <li>– imposed through legislation/statute; or</li> <li>– form part of an approved scheme to meet specified statutory objectives</li> </ul> <p>In either case, the rule change process is likely to be the same, requiring regulatory approval by AEMC.</p> <p>Where the rules are not imposed by statute and are made/changed by the Board of a company constituted of industry members, ACCC authorization may be required due to potential TPA issues.</p>				
<b>Regulatory Oversight</b>	Regulatory oversight of Bulletin Board/STTM operation and, to the extent considered necessary, costs/fees will be by AEMC and AER under any model.				
<b>Compliance</b>	It should be possible to adopt similar regulatory or self-regulatory approaches to enforcement/compliance issues under any model.				
<b>Dispute Resolution</b>	Efficient and cost effective dispute resolution processes, avoiding unnecessary and costly referral to the courts, could be implemented under any model.				

# Implementation - Timeline



# Summary

## ■ Bulletin Board

- ◆ increased availability and transparency of system and market information
- ◆ does not provide pricing signals
- ◆ voluntary posting of buy/sell offers

## ■ Short term Trading Market

- ◆ Sets daily clearing price
- ◆ Provides short term trading mechanism
- ◆ Design intended to minimise impact on existing upstream contracts/operations
- ◆ Initial application to NSW/SA initially?      Extended to Qld, NT, Tas, WA and ACT if worthwhile
- ◆ More detailed design work required, but adequate for estimates of costs/benefits

# Summary

## ■ Governance

- ◆ Several models currently in operation
- ◆ Major difference in Models is process of Board Appointment and Ownership
- ◆ Legal advice suggests any model can be used to achieve objectives.

# Issues for GMLG decision

- Endorse cost-benefit analysis?
- Support Bulletin Board?
- Support STTM?
  - ◆ endorse concepts as per GMOWG?
  - ◆ further work?
  - ◆ timing/implementation plan?
- Annual Supply/Demand Statement?
  - ◆ Produced by BB/STTM operator?
  - ◆ Interface with NGERAC?
- Bulletin Board/STTM operator?
  - ◆ Functions?
  - ◆ Governance arrangements?
  - ◆ Statutory or Corporate entity?
- Need for wider consultation?
  - ◆ How? When?