REGULATORY OPTIONS FOR TRANSPORTATION REGULATION

The Option	1 State Regulator	2 Entity Regulators	3 State transmission/Entity Regulators
1. Transportation System Operator (TSO) **a.** One TSO **b.** Two Entity TSOs **c.** Multiple TSOs	Simplest and most efficient regulatory structure. Single TSO helps to provide consistent Grid Code and operating rule proposals.	With no State regulator involved requires a mechanism to ensure harmonization of regulatory efforts by 2 Entity Regulators	Most complicated regulatory structure. Production, Distribution and Supply would reflect 2 Entity Regulator scenario
2. Split Transportation and System Operator **a.** One System Operator with: **i.** One Transportation Company **ii.** Two Transportation Companies **iii.** Multiple Transportation Companies **b.** Two Entity System Operators with: **i.** Two Transportation Companies **ii.** Multiple Transportation Companies	State regulator would rely upon the single system operator to develop and propose the Grid Code and operating rules, and to provide for consultation of all stakeholders, including multiple transmission companies in those scenarios Greater State regulator oversight required to ensure coordination of Two Entity System Operators	Same as State, but Entity Regulators must ensure harmonization of final regulatory approvals for Grid Code and operating rules Significant increase in complexity if 2 Entity Regulators must deal with independent inputs from different Entity System Operators and greater risk of inadequate coordination International community may resist requirement to deal with two separate systems within one State	Most complicated regulatory structure. Production, Distribution and Supply would reflect 2 Entity Regulator scenario Gas operators will need to deal with three regulators and two System Operators in a small country

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		With no State regulator involved, requires another effective coordination mechanism to ensure Entity System Operators and Entity Regulators coordinate and cooperate to ensure harmonized rules to avoid market disruption	
3. Combined System Operator with Transportation, Distribution and Storage			
a. One Combined System Operator (CSO) with: **i.** One Transportation Company **ii.** Two Transportation Companies **iii.** Multiple Transportation Companies	Regulator will be able to develop working relationship with one single SO for both electricity and gas, potentially simplifying the regulatory oversight.	Single working relationship with SO	Single working relationship with SO
b. Two Combined System Operators with: **i.** One Transportation Company **ii.** Two Transportation Companies **iii.** Multiple Transportation Companies	Greater State regulator oversight required to ensure coordination of Two Entity Combined System Operators	With no State regulator involved, significant increase in complexity if 2 Entity Regulators must deal with different inputs from 2 Entity System Operators; greater risk of inadequate coordination International community may resist requirement to deal with two separate systems within one small country	Significant complexity for divided jurisdiction between State and Entity Regulators, and two CSOs

ATTACHMENT A: OPTIONS FOR TRANSPORTATION SYSTEM OPERATION AND OWNERSHIP

The Option	Pros/Cons	
1. Transportation System Operator (TSO)		
a. One TSO	Simplest and the model most countries in Europe currently have, with single state-owned gas company; economies of scale.	EU has found anti-competitive conduct and will legislate for more unbundling of transportation. Risk incurrence of additional cost just after formation.
b. Two Entity TSOs	Close to current ownership structure.	All of the above and lack of economies of scale. Possible inconsistent and uncoordinated system investment and operations decisions and practices.
c. Multiple TSOs	Would create market structure and may encourage faster infrastructure development through private sector investment; possible economies of scale through regional ownership and operations.	Increased oversight may be required by Regulator(s) to ensure harmonized operational rule and ensure appropriate third party access
2. Split Transportation and System Operator	Provides independent, non-discriminatory system operation.	Additional Cost
a. One System Operator with:		
i. One Transportation Company	Follows structure of electricity sector; uniform technical standards for operational safety; coordinated dispatch across all borders and internally.	Additional cost.
ii. Two Transportation Companies	Close to current ownership structure for assets. Similar to electricity for	In addition to above, loss of economies of scale; confusion with

The Option	Pros/Cons	
	operation.	multiple regulators; consistent and coordinated system investment difficult unless System Operator required to coordinate and approve.
iii. Multiple Transportation Companies	Would create market structure and may encourage faster infrastructure development through private sector investment; fully coordinated operations may encourage investment.	Same as above, plus lack of strong and consistent regulatory oversight necessary to avoid discrimination because of involvement of multiple regulators.
b. Two Entity System Operators with:		
i. Two Transportation Companies	Close to current ownership and operational structure.	Even more cost because of unbundling requirement; increased complexity resulting in inconsistent and uncoordinated investment; operations and regulation difficult because of lack involvement of multiple regulators and more than one System Operator; and possible decrease of private investment because of increased regulatory risk and confusion in the market.
ii. Multiple Transportation Companies	Multiple transportation companies creates a market structure, which may encourage faster infrastructure development through private sector investment.	Same as above, plus loss of strong and consistent regulatory oversight to avoid discrimination. Increase of number of transportation companies exponentially increases operational and regulatory risk.
3. Combined System Operator with Transportation, Distribution and Storage	Same as above except System Operator has broader functions and authorities. Provides for more efficient operations. For maximum efficiencies of scale and lowering of	Same as Transportation System and System Operator split.

Attachment A
REAP Talking Points - Joint Coordination Body

The Option	Pros/Cons	
	overhead costs, could be combined with current electricity ISO.	
a. One Combined System Operator (CSO) with:		
i. One Transportation Company	Maximum efficiency; encourages investment in gas sector; more consistent and disciplined approach to commercial and safety codes; better ensures system interoperability; ensures consistent standards across all functions; simplifies and unifies codes for review by all regulators; minimizes overhead costs of operation; efficiencies of scale.	Cost and time to split out functions.
ii. Two Transportation Companies	Same as above.	Possible inconsistency and market confusion with involvement of multiple regulators.
iii. Multiple Transportation Companies	Same as above.	Same as above.
b. Two Combined System Operators with:	Same as Two Entity System Operators.	Same as Two Entity System Operators.
i. One Transportation Company		
ii. Two Transportation Companies		
iii. Multiple Transportation Companies		