

## APX SYMPOSIUM

### IS OWNERSHIP UNBUNDLING OF TRANSMISSION NETWORKS NECESSARY TO ACHIEVE COMPETITIVE MARKETS?

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#### **Introduction**

Unbundling is at the heart of the current debate on how to achieve integrated and competitive energy markets in the EU. The European Council of 8-9 March 2007 emphasised that there should be effective separation of supply and production activities ensuring equal and open access to transport infrastructures and independence of decisions on investment in infrastructure. The Commission has taken the view that the best option to achieve these objectives is ownership unbundling (OU).<sup>2</sup> Three main models are currently being discussed and compared:

Ownership Unbundling	Independent System Operator	Legal and functional unbundling
<ul style="list-style-type: none"> <li>• Vertically integrated undertakings can no longer hold significant shares in network assets (i.e. network company is controlled by shareholders not active in the generation, production and supply of electricity or gas).</li> <li>• Unified ownership control and management of the network (interface with the customers and assets are in the same hands)</li> </ul>	<ul style="list-style-type: none"> <li>• TSO is split up into two separate functions:               <ul style="list-style-type: none"> <li>○ <u>Transmission Owner (TO)</u> which owns network assets and which can remain part of a vertically integrated undertaking.</li> <li>○ <u>System Operator (SO)</u> which is independent from the vertically integrated undertaking (interfaces with generators, distributors, suppliers, customers, provides customer interface).</li> </ul> </li> <li>• The ISO may operate several systems in a region in which case it is referred to as a <u>Regional System Operator (RSO)</u>.</li> </ul>	<ul style="list-style-type: none"> <li>• TSO is independent in terms of its legal form, organisation and decision making from other activities not relating to transmission.</li> <li>• However, ownership of TSO/DSO assets not separated from vertically integrated undertaking. Parent company takes strategic decisions.</li> </ul>

#### **State of play at Member State level**

The current gas and electricity directives require that Member States must implement at least legal and functional unbundling. However, a number of Member States have already implemented OU. The table below sets out the current situation in the Member States:

	Electricity	Gas
<b>Austria</b>	Legal	Legal
<b>Bulgaria</b>	n.a.	n.a.
<b>Belgium</b>	Legal	Legal
<b>Czech Rep</b>	Ownership*	Legal

<sup>1</sup> All views expressed are personal.

<sup>2</sup> See Commission Communication on prospects for the internal gas and electricity market, COM 2006 841 final.

Cyprus	n.a.	n.a.
Denmark	Ownership*	Ownership*
Estonia	Legal	Legal
Finland	Ownership*	n.a.
France	Legal	Legal
Germany	Legal	Legal
Greece	Legal	n.a.
Hungary	Ownership*	Legal
Ireland	Ownership*	Legal
Italy	Ownership (from 1.7.2007)	Legal
Latvia	Legal	Not implemented
Lithuania	Ownership*	Not implemented
Luxembourg	Legal	Not implemented
Malta	n.a.	n.a.
Netherlands	Ownership	Ownership
Poland	Legal	Legal
Portugal	Ownership	Ownership
Romania	Ownership*	Ownership*
Slovakia	Ownership*	Legal
Slovenia	Ownership	Legal
Spain	Ownership	Ownership
Sweden	Ownership*	Ownership
United Kingdom	Ownership	Ownership
<i>Total</i>	<i>15/27</i>	<i>7/27</i>

\* Indicates that the TSO is a separate company under state control, but where the state also has significant interests in energy supply companies.

### ***The benefits of Ownership Unbundling***

Integrated network operators have an inherent structural incentive to favour the vertically integrated supply business so as to maximise the profits of the overall group. Ownership unbundled network operators on the other hand have no such inherent incentive to discriminate between market participants. OU provides a structural remedy to the conflict of interest created by vertical integration. It thereby ensures that new entrants will have access to the same information as incumbents and obtain equal access to unused transmission capacity. Moreover, following OU investment decisions will not be distorted by supply interests. As the network business is regulated a network operator can only generate more revenues if it expands its network. Incentives (e.g. higher return on investments) can be given for new infrastructure. Experience shows that these are not merely theoretical arguments. The UK and the Netherlands can be mentioned as examples. The UK model has delivered a more than 50% reduction (in real terms) in transmission costs since privatisation due to the internalisation of the system operator/transmission owner interface, innovation, aligned incentives and a reduction of balancing costs. Moreover, investments in networks have increased following OU:

#### *Change of investment levels in the ownership unbundled British Gas Group:<sup>3</sup>*

- *Transco when owned by British Gas Group (upstream integration)<sup>4</sup>.*

<i>3/1997-3/1998</i>	<i>£ 147m</i>
<i>1998-1999</i>	<i>£ 191m</i>
<i>1999-2000</i>	<i>£ 140m</i>
- *Fully unbundled period<sup>5</sup>:*

<i>2000-2001</i>	<i>£ 228m</i>
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<sup>3</sup> DG Competition calculations made on the basis of Transco, Lattice, NGC annual accounts and price review documents from the Competition Commission, Ofgem incentives review document.

<sup>4</sup> Ofgem: Review of Transco's Price Control from 2002. Final Proposals, September 2001, Table 4.8 page 59.

<sup>5</sup> Source: Lattice and National Grid Annual accounts.

2001-2002	£ 239m
2002-2003	£ 182m
2003-2004	£ 159m
2004-2005	£ 128m
2005-2006	£ 360m

In *the Netherlands*, the gas transmission system operator has been ownership unbundled since 2005 (Gasunie). The unbundled operator, driven by the optimisation of network activities, has started the Gate LNG terminal in Rotterdam and a gas storage project in the Zuidwendig is underway. Gasunie now has a natural business drive to attract additional gas flows, and to accommodate a broad customer base for gas-related infrastructure services through timely investment. One can observe that the average annual 2001-2004 investments were 63 million Euro whereas the post 2005 average annual investments are estimated at 127 million Euro.<sup>6</sup>

By creating a level playing field and promoting network investment OU facilitates entry into supply markets which is essential if we are to create integrated and competitive markets. Some suggest, however, that OU reduces investment by incumbents in their supply businesses because their cost of capital will increase. Stable regulated returns on the network activity are said to reduce the vertically integrated incumbents' overall cost of capital which in turn facilitates investment in the supply business. The other side of the coin is that the network business will have higher capital costs and thus cross subsidises the vertically integrated supply business to the disadvantage of new entrants. Moreover, experience suggests that such cross-subsidisation is not necessary to ensure adequate investments in supply activities. Where OU has been implemented both the network business and the supply business have gone on to perform well on an independent basis. In fact, OU ensures a better allocation of capital by allowing each activity to attract the investors that look for the particular risk profile in question.

Any loss of economies of scale related to the implementation of OU is also likely to be low. The current requirement of legal and functional should have already brought about any such negative consequences since networks must be managed by a separate legal entity with independent day-to-day management. Concerning more specifically the transaction costs of ownership unbundling, the experience of the UK shows that they are relatively small, even for a move from full vertical integration to ownership unbundling of the transmission network: the one-off cost of the British Gas de-merger in 2000 was around 3.2% of the company's yearly turnover. These one-off costs are likely to be quickly outweighed by the benefits from improving the competitive structure.

Specifically as regards gas, some argue that OU will weaken the bargaining position of EU buyers vis-à-vis external suppliers. However, the added value of the vertically integrated companies is not so much their ownership of the transmission network. It is rather their customer base and their knowledge of how to supply these customers efficiently. The advantage is thus rooted in the retail supply at distribution level. Unbundling the transmission assets will therefore not necessarily weaken the negotiation position of the EU suppliers vis-à-vis the producers. Moreover, from a competition law perspective the focus is on consumer welfare. The key question is therefore whether consumers are likely to benefit from OU and not whether one party to a commercial relationship might lose relative to the other. Generally,

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<sup>6</sup> Clearly the arguments for investments can not easily be disentangled from each other: such as facilitate markets, security of supply, etc. See: <http://www.nvnederlandsegasunie.nl/media/pdfs/Gasunie-jv2005.NL.pdf> and see: [http://www.dte.nl/images/102259%20Informe%20Informele%20zienswijze%20uitbreiding%20H-gas%20transportsysteem\\_tcm7-93518.pdf](http://www.dte.nl/images/102259%20Informe%20Informele%20zienswijze%20uitbreiding%20H-gas%20transportsysteem_tcm7-93518.pdf).

consumers do not benefit from monopoly power at multiple levels of the supply chain (double marginalisation). Recent developments suggest that strong suppliers will in any event find ways to absorb some of the downstream sales of the buyer. It is doubtful that such 'peaceful' accommodation is to the advantage of the consumer. In the Commission's view consumers are better served by competitive markets where operators seek to develop new sources of supply. In this respect it is noteworthy that many LNG projects are being developed by new players.

### ***The ISO option***

Under the ISO model supply companies can retain ownership of network assets which, however, are operated by a separate entity which is independent from the owner. The ISO model is an improvement compared to the status quo as it renders more effective the separation of network and supply activities. However, the separation of ownership and system operation creates complex interfaces that need to be regulated and monitored. In the absence of ownership separation, appropriate national legislation and detailed regulatory rules are needed to ensure that the SO behaves independently. The issue of investment is particularly difficult. Effective separation requires that the SO can take decisions on investments. However, under the ISO model this is not a simple matter given the fact that the assets are owned by the TO, implying that one entity takes investments decisions regarding another entity's assets. Moreover, the SO and the TO necessarily have to exchange market sensitive information. Preventing leakage of information to the supply business is difficult and requires strict arrangements for the management of information to ensure that it is put into the public domain where possible or strictly ring fenced where publication is not possible. Compliance needs to be closely monitored.

### ***The RSO option***

In principle, the RSO model could result in significant improvements as it addresses the need for enhanced cross-border co-operation between network operators. However, such improvements would only arise if the RSO was truly independent from supply entities and had sufficient powers and competence over both national and cross-border issues. An arrangement whereby vertically integrated TSOs would create an RSO to co-ordinate all or part of their network activities would be highly problematic given the risk of collusion. The vertically integrated TSOs could use the RSO to facilitate collusion on downstream markets. However, if an RSO would be created by ownership unbundled TSOs it would address a key concern, namely that fact that national TSOs do not have a sufficiently European outlook in the operation of their businesses.

### ***Conclusion***

Only OU creates an incentive structure that ensures equal and open access to transport infrastructures and independence of decisions on investment in infrastructure. Other options are less effective and require more detailed and burdensome regulation. Since integrated and competitive markets cannot be developed without equal access to adequate network capacity, effective unbundling of transmission networks is a necessary condition for achieving competitive markets. The sooner Europe comes to the conclusion that there is nothing like getting the structure right, the sooner European consumers can start reaping the benefits of liberalisation.