

Ralf Boscheck*

The EU's New Competition Policy Standards

In Search of Effects-based, Economically Intuitive or Efficient Rules?

In a 2008 article in the EU's Competition Policy Newsletter, Peter Lowe, Director General of the EU Commission's Directorate Competition, synthesised the experience of his office with regard to the design of competition policy institutions for the 21st century.¹ A year earlier, he had co-authored another article, appearing in the same venue, recapitulating the Commission's lessons learned from the Energy Sector Inquiry and the need for effective unbundling of energy transmission networks.² The reader of both, at first astounded by the apparent gap between policymaking reality and reflections upon it, soon detects a rather pragmatic approach to shaping regulatory agendas. But are there limits to expediency?

Lowe presents an insider's view on the special role of EU competition law enforcement, the modernisation of legal instruments for antitrust, merger and state aid control, and the challenges in changing the DG Competition and its culture. He reports on organisational restructuring to pool resources around sectors and harmful practices, and the introduction of target-oriented processes and performance measurement systems to gauge the productivity, quality and impact of the Directorate's work. The intention is that in the future, Europe's chief competition authority will bring its best available resources to key projects, and will strictly follow an economic and effects-based approach when proofing and presenting cases or promoting legislative proposals. The overall objective of this new and rather "business-like" attitude is to "make markets work better" to the benefit of consumers, firms and social welfare.

In particular, Lowe points to five basic requirements that any modern antitrust authority should meet: (1) policy and enforcement must be based on sound law, economics and market knowledge; (2) enforcement must guarantee coherence and predictability for business; (3) competition policy authorities must be able to concentrate their limited resources on specific priorities; (4) decisions must be taken in a timeframe which is relevant to the problem they are supposed to remedy; (5) enforcement must always go hand in hand with an effective communication of its benefits for consumers and for business.³

But he also qualifies this by stating that real world pressures often disrupt the ideal: the need to formulate predictable *ex ante* rules typically conflicts with the interest in reviewing a case on its merits; improvements in consumer welfare may materialise only late and may not be measurable at all; and regulatory intervention may need to simplify abstract rationalisations to communicate how it adds to the public's benefit. Clearly trade-offs have to be addressed. But one must never ignore that "the long-term legitimacy of any competition enforcement system rests on the economic story which it tells in each case".⁴

Now consider the Directorate's record in the unfolding EU Energy Market Reform.⁵

The Case of EU Energy Market Reforms

After almost 20 years of debate and systematic under-enforcement of two major EU regulatory initiatives, in 2005 the EU Commission opened an inquiry into the functioning of the European gas and electricity markets.⁶ The main finding related to existing, opera-

¹ P. Lowe: The design of competition policy institutions for the 21st century: The experience of the European Commission and DG Competition, Competition Policy Newsletter, No. 3, 2008, pp. 1-11.

² P. Lowe et al.: Effective unbundling of energy transmission networks: Lessons from the Energy Sector Inquiry, Competition Policy Newsletter, No. 1, 2007, pp. 23-34.

³ P. Lowe: The design of competition policy ..., op. cit., pp. 2-3.

⁴ Ibid, p.2.

⁵ The following draws substantially on R. Boscheck: The EU's Third Internal Energy Market Legislative Package: Victory of Politics over Economic Rationality?, forthcoming.

⁶ Energy Sector Inquiry, http://ec.europa.eu/comm/competition/anti-trust/others/sector_inquiries/energy/.

* International Institute for Management Development (IMD), Lausanne, Switzerland.

tional or legal, unbundling regimes that seemed unable to remove incentives and possibilities for integrated energy suppliers to discriminate against third party access and hence negatively affected network investments and thereby the security of supply. As a result, the EU Commission, in 2006, proposed the comprehensive ownership unbundling of all integrated energy companies and a strengthening of regulatory authorities at both national and EU levels. Following a further three years of public consultation and political debates among EU energy ministers, Members of the EU Parliament and the EU Council, the latter finally adopted a proposal that fell significantly short of the Commission's plans. Instead, it offered countries three options to organise their gas and electricity networks: full ownership unbundling (OU), asset ownership with separate transmission subsidiaries operated by an independent systems operator (ISO), or maintained ownership stakes in networks that are managed by an independent transport operator (ITO). As is discussed below, to make these options functionally equivalent in creating so-called "effective unbundling", their respective regulatory requirements differ significantly. The focus here is on the use of economics in presenting the Commission's original case for ownership unbundling.

The EU's Case for Ownership Unbundling

Summing up the lessons learned by DG Competition from the Energy Sector Inquiry, Lowe et al. propose ownership unbundling, whose "benefits ... seem to be widely acknowledged"⁷ and whose alleged disadvantages are "somewhat theoretical ... and unlikely to apply in practice."⁸ At a closer look, their argument is hardly convincing.⁹

- First, it is typically assumed that a monopoly network, vertically integrated into supply, will favour and thereby pass on market power to its own supply business at the expense of competition and customers. The ensuing double marginalisation increases prices and the deadweight loss to society. Ownership unbundling is said to remedy this. But does this outcome not depend on the incentives of the upstream monopolist, and the nature of the competitive advantage of its downstream arm? What types of regulatory constraint would make an upstream monopolist want to discriminate against non-integrated customers/resellers? Similarly, is downstream market power based on upstream leverage, some form of entry barrier, or does it simply reflect superior performance? An up-

stream profit maximising integrated monopolist facing fierce competition downstream would not only be entirely indifferent about who resells his service, but would want to be unbundled. This way he could capture all downstream value upstream with lower levels of investment and business exposure. In contrast, an independent upstream supplier facing downstream distribution with market power has an interest in affecting downstream prices and non-price decisions as they affect upstream sales volume. A vast body of literature treats the intricacies of judging the welfare effects of "vertical control". Clearly, the mere focus on ownership is a shortcut to avoid dealing with the complexities of interacting regulatory and commercial regimes and market structures.

- Second, ownership unbundling is seen to focus managerial attention on innovation, maintenance and network expansion. But why would such attention be exclusive to independent parties? A generation surplus or the fear of losing sales on both stages in the case of network failure should drive a vertically integrated operator to maintain and expand network capacity. More importantly, the EU's own data is generally inconsistent with this argument. Data collected for the EU Inquiry on congestion, market openness, efficiency of generation investments and duration of electricity interruptions is entirely unrelated to ownership structure (Table 1). Also, it turns out that, between 1993 and 2006, all cross-border investments in the UK were promoted by vertically integrated operators; similarly, ownership unbundling did not figure in any of the four largest market coupling initiatives in Europe to date.¹⁰
- Third, ownership unbundling is claimed to improve share value and capital allocation. The former would be obvious if there were no synergies and no opportunities for leveraging market power and hence profit potential across. But there is considerable support for economies of scope and synergies available to integrated suppliers that would be lost from unbundling.¹¹ Conversely, the whole purpose of unbundling

¹⁰ With regard to the former these are the Moyle electricity connection between Scotland and Northern Ireland as well as the gas pipelines linking England and Belgium (IUK), England and Holland (BBL), Scotland and Northern Ireland (SNIP) and Scotland and the Republic of Ireland (Irish ICs). With regard to the latter, these are the MIBEL linking Spain and Portugal; All Island Market covering Ireland and Northern Ireland; the Pentilateral Energy Forum (PEF) between France, Germany and the BeNeLux countries; the Nordpool linking Norway, Sweden, Finland and Denmark.

¹¹ Cf. R. J. Michaels: Vertical integration and the restructuring of the US electricity industry, in: Policy Analysis, No. 572, pp. 1-31, 2006; and J. Kwoka, M. Pollitt: Industry restructuring, mergers and efficiency: evidence from electric power, Electricity Policy Research Group Working Papers, No. EPRG 07/08, University of Cambridge, Cambridge 2007.

⁷ Ibid, p. 29.

⁸ Ibid, p. 32.

⁹ For a detailed discussion of the EU's main arguments in support of ownership unbundling see R. Boscheck, op. cit.

Table 1
Systemic Performance Differences between Ownership Unbundled & Non-ownership Unbundled

	% of hours congested of cross-border links	% Import / (total generation in GW)	Average duration of interruption of electricity in 2004/5: (minutes)
Ownership Unbundled	100%: NL:BE 15%: ES:PR	UK: 2% / (80) DK: 50% / (8)	PR: 149
Non-ownership Unbundled	100%: FR:CH 15%: FR:DE	DE: 16% / (119)	IRE: 157 DE: 19

Source: EU Sector Inquiry 2005/2006.

is to eliminate leverage: if it exists, it is incorporated in market valuations of the integrated firm and lost in case of separation. Finally, the extreme version of the capital allocation argument deems markets always to be superior in spotting profitable cross-subsidisation opportunities to operating managers supervising related stages of production. But then, why do firms survive in markets at all, or, rather, what is “the nature of the firm”?¹²

- Fourth, ownership unbundling is argued to promote horizontal, conglomerate and geographic growth compensating for any potential loss in negotiation strength. But would such diversifications not at least initially increase risk? Lowe et al. respond that “various types of growth by acquisition, or simply an increase of gearing level, should allow the companies to hedge their risks”.¹³ Now, this is frankly worrying.
- Fifth, Lowe et al. claim that one-off transaction expenditures are negligible. Their evidence amounts to a statement that “the one off cost of the British Gas de-merger in 2000 was around 3.2% of the company’s yearly turnover”.¹⁴ However, research on the Dutch case of vertical separation finds that “great uncertainty ... and large information asymmetry” make it “difficult to adequately predict the magnitude of these transaction costs”.¹⁵ Also, ownership unbundling is apt to create a hold-up problem with a forced seller finding it difficult to obtain a fair value for his assets – expropriation concerns are justified.¹⁶

¹² R. H. Coase: The Institutional Structure of Production, Nobel Prize Lecture, *American Economic Review*, Vol. 82, No. 4, 1992, pp. 713-719.

¹³ P. Lowe et al., op. cit., p. 32.

¹⁴ Ibid., p. 32.

¹⁵ M. Muldier, V. Shestalova, G. Zwart: Vertical Separation of the Dutch Energy Distribution Industry: an Economic Assessment of the Political Debate, in: *INTERECONOMICS*, Vol. 42, No. 6, pp. 305-310, here p. 308.

¹⁶ Expropriation concerns, expressed by German utilities throughout the legislative debate, are addressed by Lowe et al. only in terms of the legal feasibility of expropriation under the EU Treaty. See P. Lowe et al., op. cit. p. 33.

- In addition, a critical part of the evaluation, particularly in view of the primary objective of DG Competition’s work, seems to have been completely overlooked by the Commission. Lowe et al. consider ownership unbundling from the point of view of competitors and network operators, but there is no assessment of consumer benefits such as price reductions. This could be because earlier claims, tossed around in the legislative debate, that lower retail margins in the UK, extrapolated to other non-ownership unbundled countries, would result in €5-10 billion consumer savings, were found to be unwarranted. In fact, the underlying Eurostat retail price data included regulated components such as taxes, levies and network charges that are unrelated to competition and efficiencies. A dissection of price components would show a rather different picture. Comparing standard household (3500 kWh) prices in the UK with those in non-ownership unbundled Germany in January 2007, German consumer prices were 48% higher than those in the UK; when accounting for taxes and levies, German consumers paid 5% less than those in the UK.¹⁷

All in all, the case for ownership unbundling presented by Lowe et al. is at least debatable. But this is true for most presentations on this issue. Pollitt reviews intuitions, models and regulatory reform experiences related to ownership unbundling to assess its costs and benefits. He immediately warns that “(t)he coincident timing of several reform steps makes it difficult to find econometric evidence capable of directly testing the effect of ownership unbundling”.¹⁸ The little econometric evidence that exists is usually strangled by the coincidence of multiple reform elements and the difficulty of determining the direction of causality. Pollitt’s survey of case study evidence attempts to structure what in actual fact appear to be highly idiosyncratic and rather path dependent observations. Davies and Waddams Price review the UK ownership unbundling experience. They find that integrated incumbents lose market share much more slowly than others. However, the authors caution that their estimated equations reveal considerable background variations and so should only be seen as “a piece of documentary evidence” suggesting that vertically integrated incumbents “exhibit an advantage in retaining their market share against the inroads of

¹⁷ Source: Eurostat, KEMA; VDEW. To compare only one element, in 2006, at an EU stipulated minimum VAT rate of 15%, the UK applied a 17% general VAT rate but a mere 5% to electricity; Germany applied a 19% VAT rate in general as well as to electricity consumption. Source: Commission Services, July 2008.

¹⁸ M. Pollitt: The arguments for and against ownership unbundling of energy transmission networks, in: *Energy Policy*, Vol. 36, No. 2, 2008, pp. 704-713, here p. 705.

entrant firms".¹⁹ Again one needs to explain sustainable downstream market power. Is it based on upstream leverage, some other form of entry impediment, or does it reflect superior performance? Policy implications are clearly different in each case. Mulder et al., reviewing the Dutch debate on ownership unbundling, conclude that "the overall welfare effect is ambiguous and perhaps neutral" but add that ownership unbundling may improve access conditions for increasingly important small-scale, decentralised generation. But then again, is it ownership or the incentives for access provision that one ought to be concerned with?

An Effects-based, Intuitive or Efficient Economic Story?

None of these studies, including Lowe et al. lends robust economic support to the alleged benefits of ownership unbundling; still they maintain an overall positive perspective, or better, intuition. This hunch is neither supported by the best available economic evidence²⁰ nor can any assessment built on it be effects-based. It relies on an "economic story" that is efficient, i.e. helpful in simplifying regulatory relations, harmonising national standards and benchmarking market developments. The focus on ownership and market relations avoids dealing with the complexities of interacting regulatory and commercial governance mechanisms and leads straight to the use of established remedies: competition law and antitrust enforcement. It is not economic evidence but administrative efficiency that makes ownership unbundling attractive. But then how could it be an overall efficient rule for the EU to apply?

For regulatory standards to be efficient they must minimise the sum of two types of interrelated costs: (1) enforcement costs incurred in establishing regulatory contracts, monitoring and enforcing performance including the uncertainty and time involved and its effects on behaviour, and (2) the costs of permitting (prohibiting) efficiency reducing (increasing) arrangements and market conditions. Enforcement costs depend on regulatory processes and incentives pertaining to fact-finding and review, and the required level of data access and means of enforcement. The costs of wrong

¹⁹ S. Davies, C. Waddams Price: Does Ownership Unbundling Matter? Evidence for UK Energy Markets, in: *INTERECONOMICS*, Vol. 42, No. 6, 2007, pp. 297-301, here p. 301.

²⁰ Kwoka presents an even more sobering perspective. His review of the 12 most comprehensive, prominent, and often-cited evaluations of electricity restructuring points to a set of common deficiencies that call into question the conclusions reached by existing studies of restructuring. He concludes "(I)n particular, despite much advocacy, there is no reliable and convincing evidence that consumers are better off as a result of restructuring of the U.S. electric power industry." J. Kwoka: *Restructuring the US Electric Power Sector: A Review of Recent Studies*, Report prepared for the American Public Power Association, 2006.

decisions differ in line with the quality of foregone alternatives and the extent of welfare distortion until removed.

Addressing the latter first, a review of the literature cited above suffices to show that the evidence in support of integrated supply is as patchy as that backing complete ownership unbundling.²¹ Recent analyses, claiming to prove the superiority of legal unbundling over vertical separation, often work with heroic assumptions, such as the ability of legal unbundling "to ensure that the network company, controlling the essential facility, only maximizes its own profit." That is, they assume the presumably fundamental problem away.²² Hence, at this level of abstraction, one has to assume the costs of taking a wrong decision – either way – to be on a par. Contrasting ownership unbundling (OU) with the option of independent systems operator (ISO) and independent transport operator (ITO), is therefore restricted to comparing the regulatory constraints viz. enforcement costs imposed on either one.

The regulation of ownership unbundled undertakings is largely limited to competition and transmission access rules. Ownership and control are separated. If a generator or a supply business were to hold minority positions in transmission facilities, they could not exercise voting rights or any form of board control. Decisions regarding network investments and financing are taken by the unbundled transmission systems operator (TSO). An independent systems operator does not differ from the ownership unbundled model except for the fact that network investments rest entirely with the ISO as TSO; the transmission systems owners nevertheless have to finance, tender, or increase capital for network investments. The agency problem is obvious: how do owners control the cost-effectiveness of ISO decisions? In the case of an independent transport operator, the TSO remains part of the vertically integrated company, but the production and supply subsidiaries cannot hold TSO shares, and vice versa. The Supervisory Board approves annual financial plans and ensures financing, tendering and capital increases. Shared services are allowed only if offered by the TSO to the general public. Common IT systems, shared assess or shared consultancies are prohibited.

To establish the functional equivalency between OU and ISO, regulators must sign off on, and closely monitor, a 10-year investment plan, and subject any

²¹ For a review see M. Pollitt, op. cit.

²² See F. Höfler, S. Kranz: *Legal Unbundling can be Golden Mean between Vertical Integration and Separation*, Bonn Econ Discussion Paper 15/2007, Bonn Graduate School of Economics, p. 28.

transaction that could potentially impact compliance to a four month certification process. This is followed by a two to four month review by the Commission, potentially overriding the regulator's assessment. The intrusiveness of these controls, the fundamental agency tension between owner and ISOs, not to mention the demand on resources and time involved caused the German Economic Ministry to strictly reject this option early on. The ITO alternative, however, is likely to be even more demanding.

To ensure effective unbundling in an integrated operation, compliance officers will enforce a compliance programme and non-discriminatory conduct. In addition, management and administrative bodies wishing to change from affiliated businesses to transmission and vice versa will have to go through a three to four year cooling-off period. In practical terms, this not only restricts career opportunities within utilities but also their ability to attract top talents. Furthermore, if a vertically integrated company refuses to invest in network projects considered necessary by national regulatory authorities (NRAs), the regulators can force ITOs to invest, increase capital or impose tendering of the investment to third parties or the acquisition of a third party stake in the ITO. NRAs may impose a fine of up to 10% of the integrated company's total turnover. Obviously, similar to the ISO option, transmission owners will be concerned with how to control ITO performance and how to effectively challenge NRA decisions. The ITO option will be reviewed two years after implementation which may cause a change in the fundamental legislation. As in the case of ISO, the ITO option is only available to undertakings that are vertically integrated when the 3rd legislative package enters into force. The EU maintains that governments cannot prevent vertically integrated undertakings from implementing ownership unbundling if they wish.

Obviously, regarding enforcement costs, ownership unbundling has a clear edge over its alternatives.²³ As long as the likelihood and cost of wrong decisions are deemed to be on a par across alternatives, ownership unbundling is the efficient rule. Again, it is not economic evidence but conceptual simplicity that makes it an attractive option. The regulatory burden imposed on its alternatives may cause integrated operators to consider transmission ownership a liability rather than an asset, contributing to a more general move towards

²³ M. Politt, *op. cit.*, points out that competition law enforcement vis-à-vis unbundled operations may also be cumbersome. But in the case of the ISO and ITO options, the application of competition rules comes on top of rather intrusive regulatory arrangements.

ownership unbundling. The Commission's objective would ultimately be met.

"Speaking very personally, I see only one way forward if we are to restore credibility and faith in the market. Europe has had enough of 'Chinese walls' and quasi-independence. There has to be a structural solution that once and for all separates infrastructure from supply and generation. In other words: ownership unbundling."²⁴

In Sum

As in other areas of competition law,²⁵ the EU's energy market reforms "outsource" the task of regulation to the regulated themselves – in this case, to integrated utilities and their national governments. The economic background analysis provided by DG Competition does not present a robust case in favour of ownership unbundling and falls far short of its own aspiration. Based on a hunch, it is neither supported by best available economic evidence nor can any assessment built on it be effects-based. But it manages to effectively communicate an "economic story" which is as appealing as it is simple. Simplicity drives advocacy and *ex ante* judgement. The new, "business-like" DG Competition delivered a 'product' that 'sells' in political and regulatory markets. But all those, including this author, who intuitively lean towards simple, market-based solutions, must remember that markets are allocation instruments that fail to produce. For production to take place complicated non-market coordination is needed and requires efficient regulation. There is clearly a need to limit expediency and to remember the limits of economics.

"Economics does not lay down a blueprint for antitrust law. Economic theory is inadequate in some areas and in conflict in others. Moreover, the relevant empirical data may be unavailable or unobtainable within the time and resources that can reasonably be devoted to the determination of individual cases. A concern that the law be reasonably administratable, predictable, and consistently enforced may, in many instances, dictate relatively simple rules and presumptions that limit of the scope of case by case economic inquiry."²⁶

²⁴ N. Kroes: A New Energy Policy for a New Era, Conference on European Energy Strategy – the Geopolitical Challenges, Lisbon, 30 October 2006.

²⁵ As for example in the related area of judging vertical restraints, see R. Boscheck: Delegating Regulation – Supply-chain Management, Partnering & Competition Policy Reforms, in R. Boscheck (ed.): Strategies, Markets & Governance, Cambridge 2007, Cambridge University Press, chapter 3.

²⁶ P. Aeeda, D. Turner: Antitrust Law, Boston: Little Brown 1978, Vol. I, pp. 13-14.