A debate on EU energy policy

In the following pages, European Energy Review presents four views on the EU's energy policy, as laid down in the Third Package. Lars Kjølbye, Head of the Energy Unit in the Competition Directorate of the Commission, and Robin Cohen of Deloitte, argue about the pros and cons of unbundling. Anders Åslund, senior fellow at the Peterson Institute for International Economics, defends the policy of 'reciprocity' towards Gazprom. Reinier Zwitserloot, ceo of oil and gas producer Wintershall, warns that Europe's 'anti-Gazprom' policy endangers security of supply. The articles by Kjølbye and Cohen first appeared in Energy Viewpoints, a publication of the APX Group.

Photo: Mike Grandmaison/Corbis

Robin Cohen

A structural diversion?

The European Commission argues that unbundling will remove incentives for vertically integrated transporters to protect or favour related businesses. However, while a single and effective European electricity market requires enhanced physical integration and the associated investments, regulatory risk is the main impediment. The proposed Agency for the Cooperation of Energy Regulators may prove to be the institution for tackling this problem but as yet no solutions are proposed.

The EU Commission's approach to effective unbundling carries with it numerous risks.

- Ownership unbundling reduces incentives for discrimination, but also risks compromising economies of scale and substituting unclear investment incentives.
- ISOs - the permitted alternative to ownership unbundling - are complex and so may result in worse investment incentives and more regulation than before.
- More regulation is envisaged by the Commission, but, regulatory risk is already the main impediment to investment into electricity networks in the EU.

Some incumbents in response to the Commission's proposals are already preparing to sell their networks, but regulatory risk acts as a deterrent to some buyers and the "Gazprom" clause may further depress the value to be realised from sales.

Ownership unbundling directly removes any potential conflicts of interest which might arise from the same company owning and operating networks on the one hand and having upstream or downstream interests on the other. As a consequence it reduces the need to "police" a company's behaviour through regulatory oversight. However, there is evidence of significant cost savings from vertical integration, which must be weighed against the potential detriments arising from discrimination against independent suppliers.

Furthermore, the practical effect that ownership unbundling will have on investment is unclear. Investment in any sector primarily depends on the likely rate of return to be earned from the asset, albeit that this may include external - or vertically related - benefits. The main risk faced by network assets in Europe - and accordingly the main investment driver - is regulatory and political risk, something regulators rarely admit.

ISOs: new investment incentive problems

As an alternative to ownership unbundling the Commission's proposals provide member states with the option of allowing vertically integrated gas or electricity incumbents to retain ownership of their networks in exchange for handing over their operation to an independent systems operator (ISO). In principle this should remove the opportunity for the owner of the transmission network to discriminate against third party suppliers. It also facilitates the integration of operation of transmission networks in separate regions and under separate ownership.

However, separating network operations from network ownership leads to several potential incentive, regulatory and organisational problems, especially with respect to the interface between the ISO and the network owner. Difficulties arise especially with respect to developing a contractual structure which provides the transmission owner (TO) and the ISO with appropriate incentives to minimise costs and expand the network in an efficient way when there are not such close connections between the two. Instead of reducing the need for regulatory oversight in the sector through the creation of an ISO, regulatory focus will simply shift from policing third party access to scrutinising the interface between the ISO and the transmission owners.

Initial reactions have revealed that both ownership unbundling, as well as a deep ISO model, is unpopular with a number of incumbent vertically integrated companies. Indeed the Commission is arguably already anticipating attempts to water down the unbundling implications of its Directive through forming voluntary regional cooperation agreements by incorporating the proposal for formal EU networks of transmission system operators in electricity and gas in its legislative package.

Regulation main driver

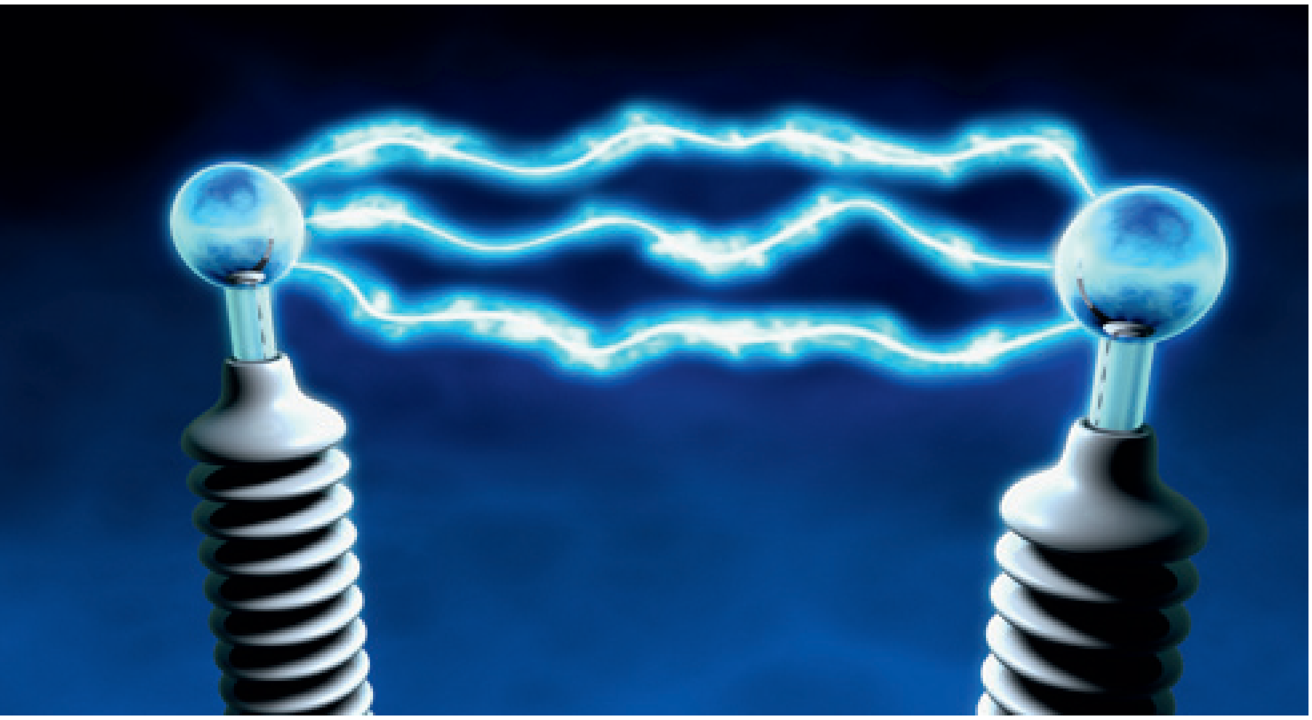
Currently there is a clear regulatory gap in Europe with respect to cross-border network investments. Inconsistent regulatory rules across the EU pertaining to revenue caps, regulated rates of return and investment incentives mean that investors face varying regulatory and commercial risks. The third legislative package proposes the establishment of a new Agency for the Cooperation of Energy Regulators (Acer) which is a first step electricity

towards creating a clear and stable regulatory framework for cross-border investment. However, the powers and remit of Acer are as yet unclear. Most importantly, the degree of independence of Acer from the Commission is itself also unclear but regulatory independence is a key concern for potential investors.

The "Gazprom" clause

Given the uncertainties surrounding future unbundling requirements, a number of the large integrated European utility companies are potentially considering the sale of transmission assets. Infrastructure funds are certainly interested in regulated businesses with relatively stable cash flows. However regulatory risk is not the only factor determining value realisation from network sales.

The draft Directive contains a clause, commonly referred to as the "reciprocity" clause, which may have significant implications for the permitted identity of investors into TSOs.



Van de Graaff generator. Photo: Matthias Kulka/Corbis

This clause provides that transmission systems or transmission system operators shall not be controlled by a person or persons from third countries, unless there is an agreement between the EU and this third country. This "Gazprom" clause introduces potentially increased state intervention by requiring international government-level negotiations. It may also act to deter or bar some investors with a consequent impact on network values.

To sum up, the EU's unbundling proposals are ambitious and controversial. The third legislative package has now passed to the European Parliament and Council (member states) for full legislative scrutiny. This "co-decision" process is open-ended, but usually lasts 2-3 years.

There is significant resistance to the unbundling provisions especially from France and Germany who will argue that ownership unbundling is an unnecessary change that will reduce investment and that the alternative ISO model is overly complicated and bureaucratic. Concerns are also likely to focus on whether the value potentially released from asset sales is less than the value lost from the "benefits" of integration. The European electricity market requires enhanced physical integration and the associated investments. Regulatory risk is the main problem in this context and the Commission's proposals have not articulated a clear way forward on this issue.

However in many ways the Commission has already advanced further with its proposed reforms than some critics might have expected. German and French resistance is nothing new. The Commission is to a significant extent staking its reputation on energy sector reform, not just through the publication of the 3rd legislative package but also in the competition enquiries running parallel. It will not easily give up on the core proposals in the 3rd package, including the unbundling provisions, however protracted and fraught the "co-decision" process preceding the final version of the new Directive will be. ■

Lars Kjølbye

The benefits of unbundling

The European Union has worked intensively to create integrated and competitive gas and electricity markets. This has involved two main rounds of liberalisation aimed at opening up supply market to competition while ensuring that networks are operated in a non-discriminatory and efficient manner. While liberalisation has been partly successful, obstacles persist. In its Energy Sector Inquiry of 10 January 2007 the Commission identified a number of shortcomings. To remedy these, the Commission on 19 September adopted proposals for a third package. This has two parts: (i) measures to ensure effective unbundling of production/supply and network and (ii) measures to enhance the powers and independence of national regulators and enhance cross-border cooperation between regulators and TSOs.

Discriminatory treatment

Unbundling is at the heart of the debate on how to achieve integrated and competitive markets. It is clear from the Sector Inquiry that the current requirement of legal and functional unbundling has not been effective. The Commission found that vertical integration creates substantial problems of discriminatory treatment of competitors and withholding of investments in new capacity except where such capacity is needed by the vertically integrated firm's own supply affiliate. This is a problem at a time when the EU needs large scale investments in networks to ensure security of supply. Thus, the Commission has proposed ownership unbundling of transmission networks as the main and preferred option and the creation of independent system operators (ISO) as an exception that may be offered in member states.

Experience in member states where ownership unbundling has been implemented is positive. Data available suggest that ownership unbundling is positively correlated to investment in networks. Ownership unbundled TSOs for which data is available show a significant and constant increase in investment levels after unbundling. The network investment of the vertically integrated German and French TSOs is lower. Moreover the share of reinvested congestion revenue was about twice as high for ownership unbundled TSOs as for integrated TSOs (33.3% versus 16.8%). Ownership unbundling also avoids actual and perceived discrimination regarding third party access.

Conditions for the ISO model to be effective

The ISO model implies that the TSO is split into two functions: a transmission owner (TO) which owns the assets and can remain part of a vertically integrated company and an ISO which is independent from the company. This model is more complex than ownership unbundling. It is necessary to regulate in detail the interface between TO and ISO and to monitor compliance continuously. The ISO model can achieve effective separation of network and supply provided it is very 'deep' in terms of transferring powers and functions from the TO to the ISO. The ISO must have full independence from the network owner and manage the network in all its aspects. It must be in charge of the day-to-day operation and have the power to decide on investments. If the TO does not wish to finance an investment, the ISO must be able to seek alternative financing. When these conditions are satisfied, the owner cannot influence network decisions and distort competition. If not, a competitive energy market will not be achieved.

Regional cooperation between TSOs

The creation of regional system operators could result in important improvements compared to the current state of network unbundling. The third package contains proposals aimed at enhancing cross-border cooperation between TSOs on important matters such as investment planning. However, such cooperation is not a substitute for effective unbundling. If the TSOs are not properly unbundled, regional cooperation may lead to serious competition concerns. It would not be appropriate for TSOs to coordinate investment plans if they belong to undertakings that are potential competitors on supply markets. It would be immaterial whether the TSOs would commit to certain investment levels or to improving third party access. Our experience shows that even when vertically integrated firms commit to invest, there are a host of ways to delay implementation. A vertically integrated TSO has no incentive to wholeheartedly push a project that benefits competitors.

Ownership unbundled TSOs may have an incentive to merge. That could lead to important synergies. One can also imagine other buyers, such as equity funds. Networks which generate stable and long-term revenues are attractive to certain types of investor. The Commission is aware of very substantial interest. However, for such investments to be really attractive, the investor needs to be confident that there is a strong and predictable regulatory framework in place administered by independent regulators. The third package proposals are of considerable importance in this respect. The Commission is also sending a strong signal to member states in on-going merger cases that it will not tolerate attempts to frustrate mergers compatible with European rules.

The unbundling requirements applies to EU and non-EU companies. As regards the latter it was considered necessary to go a bit further in order to ensure that unbundling requirements cannot be easily circumvented. In this the Commission is not looking for reciprocity but rather assurance that unbundling remains effective. ■

Reinier Zwitserloot

EU encroaches on ownership rights

The Commission's proposals might require producers of natural gas such as Wingas, a joint-venture of German Wintershall and Gazprom, to dispose of their infrastructure assets or to hand over their operation to a third party. The same would apply to non-EU gas producers, such as Gazprom. Reinier Zwitserloot, ceo of Wintershall, warns that these measures would seriously endanger European security of gas supply.

Europe's increasing dependency on gas imports means that major investments in additional infrastructure are required. Such investments can only come from the private sector. Unfortunately, the package put forward by the Commission

Transmission tower. Photo: Steve Prezant/Corbis

represents a considerable encroachment on the ownership rights of private sector companies. As such, it will discourage these companies from investing in EU gas infrastructure. What companies will want to invest if they cannot be certain that their property rights won't be withdrawn or seriously curtailed?

In the case of Wingas, it is important to remember that our networks were built with private sector funding, not taxpayers' money. Wingas did not emerge in a state-protected monopoly but amidst intensive competition. Hence the initial situation in Germany is very different to that of other EU countries insofar as ownership unbundling in these countries mostly affects monopolistic state-owned enterprises. Wingas has invested more than three billion euros building its own gas infrastructure to rival existing systems.

As to the so-called reciprocity clause, this is unfavourable to non-EU companies by requiring an additional separate political agreement before investments are possible. If it is approved it will effectively rule out a special "commitment" to European supply security at the producer level from the outset. Gazprom, as a shareholder of Wingas, has invested more than a billion euros in infrastructure in Germany. A continued commitment to the expansion of the infrastructure in Germany and Europe goes hand in hand with an interest in greater pipeline capacity utilization - with positive effects on European supply security. If Europe wishes to develop a future-oriented partnership with Russia, Gazprom has to be sure that its property ownership rights remain untouched and that further investments in infrastructure are possible.

The Commission's proposals are a case of the cure being worse than the disease. The existing regulatory framework ensures non-discriminatory access. The main cause of competition deficits is inadequate Europe-wide implementation of the existing regulations as existing EU legislation. Energy security can only be achieved within the framework of good relations based on partnership. Europe needs Russia in the race for future energy resources; Europe and Russia are neighbours; thus, securing the energy supply long-term by direct partnership with Russia is absolutely the right decision to take. Wingas has already secured supply contracts with Gazprom export through to 2036. This is the sort of commitment Gazprom is willing to make. There are hardly any another gas producers willing to do so. ■

The Commission's unbundling proposals could have far-reaching consequences for Wingas. The Gazprom-Basf joint-venture is highly vertically integrated. It is active in gas production in Russia, through joint-venture ZAO Achimgaz; in gas transport - Gazprom has invested more than a billion euros in German gas pipelines through Wingas and Wingas participates in the planned Nord Stream gas pipeline through the Baltic Sea; and in the import and sale of gas in Europe.

Anders Åslund

A necessary deterrent to Gazprom

Former German Chancellor Gerhard Schröder travels around Europe, saying that the continent has no alternative to Russian natural gas. That is true, but not quite the issue. The question is not whether European countries should buy Russian gas but under what conditions. There are concerns about predictability of supply in the short and long term.

Thanks to the sharp dispute in the 1980s between the US and the EU over the construction of gas pipelines from Western

Photo: Manuela Susi

Siberia to Europe, Gazprom felt compelled to be a reliable supplier. Its deliveries to post-Soviet countries, however, have frequently been interrupted because of commercial disputes, and Europe has been hit by Gazprom's sudden sanctions against Ukraine and Belarus.

The long-term specter is that Gazprom neglects investment in development and production, while squeezing out independent producers. It takes over their assets through administrative fiat, or forces them to sell gas to Gazprom at artificially low prices.

In short, Gazprom behaves like a crude profit-maximizing monopolist, who wants to control production and transport. It is expansive and wants to manage gas trade in the whole region.

For a monopolist, it often makes sense to produce less to be able to charge higher prices, which may explain why Gazprom buys non-core assets rather than expand production. Russia's gas production has actually fallen by more than 1% in 2007. Russia's known reserves are immense, but large new supplies from the Shtokman or Yamal fields are not likely to come on line for a decade.

The challenge for the EU is to form a policy on Russian gas. The Union badly needs a common energy policy. In principle, such a policy exists, but it should be implemented and further elaborated.

The foundation of EU energy policy is deregulation of markets and unbundling. If European energy companies are forced to unbundle, neither they nor Gazprom can form distortional monopolies. German energy companies have persistently colluded with Gazprom, intimidating EU energy security.

To impose market conditions within Russia is a greater challenge. Fortunately, Gazprom is the foremost lobbyist for the deregulation of gas prices within Russia, wanting to boost its profits.

An additional market obstacle is the large Russian export tariffs for natural gas. In 2004 Russia committed itself to abolish them in its bilateral protocol with the EU on Russia's accession to the World Trade Organization. The EU can and should insist on their abolition.

A greater concern is access to Russian pipelines. It is unrealistic to expect Russia to ratify the European Energy Charter, which would grant third party access. Independent gas producers in Russia are becoming ever weaker and can do little to break Gazprom's monopoly.

Thus, the EU has to find alternatives. Priority should be to build a Transcaspian gas pipeline to tap Central Asian supplies. This will take time and tenacity, but the Baku-Ceyhan oil pipeline, which was also slow in coming, has proved a success. The EU should welcome the Russian-German Baltic Sea pipeline, because more pipelines breed more efficient markets.

In the shorter term, the EU needs to build up buffer storage for gas. Since this is hardly commercially viable, such investment needs to be public. The EU should also expand the role of LNG (liquefied natural gas) as an alternative to the Russian pipeline gas.

Fundamentally, the EU has a very strong negotiating position. Because of missing infrastructure and excessive transportation costs, Russia cannot possibly sell its natural gas in Western Siberia to Asia, and it has no LNG facilities. Therefore, it has little choice but to sell to Europe, which is a monopolist in relation to Gazprom, while Gazprom is no monopolist in Europe. ■

Basf and Gazprom cooperate in Russia. Photo: Wintershall