

# Experience with Interconnection Merchant Projects under Regulation (EC) 1228/2003: Prospects for Regulation (EC) 714/2009\*

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## Introduction

Since the start of the liberalisation process, the European Union has tried to create an effective internal market in electricity. The establishment of an effective internal market is regarded as being of particular importance in order to foster social welfare by, for example, realising efficiency gains, competitive prices and higher standards of service. Moreover, it is intended to contribute to security of supply, system integrity and environmental protection within the common market.<sup>1</sup>

In a first effort to create an internal electricity market, the Commission implemented Directive 96/92/EC,<sup>2</sup> which was, in 2003, replaced by Directive 2003/54/EC<sup>3</sup> ('Directive 2003/54'). These Directives laid down a framework of common rules for the creation of an internal electricity market. In particular, these Directives stated that non-discriminatory, transparent and fairly priced network access including cross-border flows of electricity between Member States (so-called 'Third Party Access', 'TPA') was an essential precondition for effective competition.<sup>4</sup> In order to ensure a competitive environment, Regulation (EC) 1228/2003 ('Regulation 1228/2003') was adopted, in which more detailed measures relating to access to the network for cross-border exchanges in electricity were laid down.<sup>5</sup> Regulation 1228/2003 (which was part of the so-called second generation legislation) will be replaced on 3 March 2011 by Regulation (EC) 714/2009 ('Regulation 714/2009')<sup>6</sup> which in turn is part of the third generation legislation (the so-called 'Third Package'),<sup>7</sup> which entered into force on 3 September 2009.

The key principle in the process of liberalisation is the obligation of Member States to open their markets and to ensure TPA on electricity networks. Directive 2003/54, therefore, specifically obliges Member States to ensure non-discriminatory TPA by enforcing fair tariffs and terms and conditions for the transportation of electricity especially *vis-à-vis* the national transmission system operators ('TSOs').<sup>8</sup> It requires harmonised tariff mechanisms, harmonised cross-border transmission principles and common rules for capacity allocation on interconnections between national transmission systems.

In addition, in order to ensure the long-term adequacy of the provision of electricity in Europe, under Directive 2003/54 the TSOs are to a certain extent obliged to invest in new infrastructure. This obligation may also require the construction of linkages between the transmission systems within the different Member States ('interconnectors').<sup>9</sup> In return, compensation for the ensuing costs must be included in the regulated tariffs. Directive 2003/54 expressly states that tariffs must allow for the necessary network investments in order to create a sophisticated, well-connected and well-functioning internal electricity market.<sup>10</sup>

However, in addition to these mandatory investments by TSOs, the European Union also seeks to attract private (or at least voluntary) investment in order to accelerate the establishment of interconnections between the national grids. An essential tool in encouraging private investment in new interconnector capacity is the case-by-case assessment under Article 7 of Regulation 1228/2003. This provision allows for the regulators involved (that is, the two regulators of the areas that are being interconnected and the European Commission) to relax the regulatory requirements set out by Directive 2003/54 and Regulation 1228/2003 (especially with regard to TPA) to a certain degree where it is appropriate in order to encourage investments by third parties which are separate from the existing TSOs at least in terms of their legal form. The procedure ultimately leads to a so-called exemption, which will specify those regulatory provisions which will – exceptionally – not be applicable for a new interconnector for the period of time corresponding to the expected pay-back time of the project. Private investments will thereby be encouraged and, in fact, allowed, which is triggered by the intention to realise a reasonable profit and to compete with the largely unchallenged existing TSOs ('merchant projects'). The aim is to utilise private interests in order to

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1 Directive 96/92/EC of 19 December 1996 concerning common rules for the internal market in electricity, OJ L27 of 30 January 1997, at 20 ('Directive 96/92'), recital 4.

2 Directive 96/92.

3 2003/54/EC of 26 June 2003, OJ L176 of 15 July 2003, at 37 ('Directive 2003/54'; sometimes also referred to as 'the E-Directive').

4 See Directive 2003/54, recitals 5 onward.

5 OJ L176 of 15 July 2003, at 1 ('Regulation 1228/2003').

6 OJ L211 of 14 August 2009, at 15 ('Regulation 714/2009').

7 Besides Regulation 714/2009, the Third Package comprises with respect to the electricity market in particular a replacement for Directive 2003/54, Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, OJ L211 of 14 August 2009, at 55 ('Directive 2009/72').

8 Articles 20 and 23 (2) and (3) Directive 2003/54.

9 See also Article 2 No 13 Directive 2003/54.

10 Article 23(2)(a) Directive 2003/54.

contribute to the overall development of the electricity network.

So far, four merchant projects have been awarded such an exemption under Regulation 1228/2003, namely, interconnectors between Estonia and Finland (Estlink), between England and the Netherlands (BritNed), between Ireland and Wales (East-West Cables), and between Italy and Austria (Arnoldstein – Tarvisio).<sup>11</sup> A fifth project, an interconnector between Norway and Germany (NorGer), is currently pending review of the national exemption decision by the Commission. A closer look reveals that the details of these projects as well as the exemptions granted differ greatly. This article therefore seeks to summarise the experiences gathered with regard to the application of Article 7 of Regulation 1228/2003 so far, and to provide a brief overview of the merchant projects triggered under the current regulatory framework.

### Rationale and legal framework for an exemption under Article 7 Regulation 1228/2003

As cross-border electricity transmission capacity is still a scarce resource, regulation seeks to leverage its efficient usage in two ways: firstly, by enforcing TPA via *ex ante* approval of terms and conditions including tariffs (see Articles 20 and 23(2) and (3) of Directive 2003/54). Secondly, the usage of revenues achieved with the allocation of interconnection capacity is limited to certain purposes, which is enforced by *ex post* regulation of terms and conditions including tariffs (see Article 6(6) of Regulation 1228/2003 and Article 23(4) of Directive 2003/54). Merchant interconnectors may be exempted from both aspects of regulation pursuant to Article 7 of Regulation 1228/2003.

Both aspects of regulation will be presented in more detail below. Subsequently, this article will present the preconditions for an exemption under Article 7 of Regulation 1228/2003.

#### TPA on interconnectors

TPA is rooted in European competition law and more specifically in the so-called ‘essential facilities doctrine’. Pursuant to this doctrine any company owning a facility which is not replicable by the ordinary process of innovation and investment, and without access to which competition on a market is impossible or seriously impeded (and that is therefore considered to be an ‘essential facility’), has to share it with a rival.<sup>12</sup> A consequence of the doctrine is that:

An undertaking which occupies a dominant position in the provision of an essential facility and itself uses that facility (i.e. a facility or infrastructure, without access to which competitors cannot provide services to their customers), and which refuses other companies access to that facility without objective justification or grants access to competitors only on terms less favourable than those which it gives its own services, infringes article 86 EC ...<sup>13</sup>

In other words, the owner of an essential facility, in this case an interconnector, which uses its power in one market (the electricity transport market) in order to protect or strengthen its position in another related market (the electricity supply market), in particular by refusing to grant access to a competitor, or by only granting access on less favourable terms than those of its own services, and thus imposing a competitive disadvantage on its competitor, abuses his dominant position and may be forced to give access to its facility.

As already mentioned, available capacity is crucial for ensuring effective TPA on interconnectors. It follows that capacity should not be booked for long periods of times and methods for capacity allocation should not be discriminatory. Moreover, asymmetric national regulatory regimes may result in capacity shortages or surplus due to differing electricity prices in neighbouring countries.

The European Union has tried to address these difficulties by providing ‘Guidelines on the management and allocation of available transfer capacity of interconnections between national systems’ in the Annex of Regulation 1228/2003. These Guidelines set standards for congestion management methods, long-term contracts, information exchange mechanisms and capacity auctions, and serve as a guide for Member States and regulatory authorities when adopting TPA-regimes on interconnectors.

However, the requirement to grant TPA is not always reasonable. For example, an operator cannot grant access in case of no capacity. Moreover, if a company is obliged to provide TPA with regard to a new interconnector, it cannot conclude long-term capacity contracts with a sufficient degree of legal certainty, which entails a reasonable risk that the investments may not be earned back or the return on investments will not be reasonable. Obviously, this will negatively affect the climate for investment, the resulting risks might even become prohibitive. Acknowledging these concerns, Article 7 of Regulation 1228/2003 is meant to provide for an exemption from mandatory TPA, where it is appropriate in order to encourage investments.

#### Limitation of use of revenues

According to Article 6(6) of Regulation 1228/2003, revenues achieved with interconnector capacity may only be used for certain purposes. These are

- (a) guaranteeing the actual availability of the allocated capacity,
- (b) network investments maintaining or increasing interconnection capacities, and
- (c) the likely income to be taken into account by the regulatory authorities when approving the methodology for calculating network tariffs, and/or assessing whether tariffs should be modified.

By enforcing this regulation, regulators ensure that revenues from the allocation of interconnector capacity will not influence company profits in order to avoid the company having an incentive to withhold capacity in order to keep prices artificially high. If, for whatever reason, the revenues exceed an amount which may be reasonably used for one of the required purposes, the competent regulator would step in by means of *ex post* regulation in order to compensate for the excess in the aftermath.

11 Exemption decisions are available at: [http://ec.europa.eu/energy/infrastructure/infrastructure/electricity/electricity\\_exemptions\\_en.htm](http://ec.europa.eu/energy/infrastructure/infrastructure/electricity/electricity_exemptions_en.htm).

12 P. Craig and G. de Búrca, *EU law. Text, cases, and materials* (Oxford: Oxford University Press 2003) at 1015.

13 *Sea Containers v Stena Sealink* – interim measures, OJ 1994 L18/8, paragraph 66.

Obviously, the result is a revenue ‘cap’ which prevents an investor from realising unexpected high profits. Even though the ‘allowed’ revenues usually comprise a reasonable return on investment, there is no possibility that the profits are higher than expected (or higher than allowed). This fact might influence the balance of risks and opportunities in a way that could become prohibitive for an investment. Therefore, a new interconnector might also be exempted from the limitation of use of revenues where it is appropriate in order to encourage investment.

### The exemption ex Article 7 Regulation 1228/2003

As mentioned above, Article 7 Regulation 1228/2003 introduces the procedure for a case-by-case assessment by which the regulators involved may exempt the operator of the interconnector from TPA and limitation of use of revenues.

The granting of an exemption is subject to the following conditions (Article 7 (1)(a) to (f) Regulation 1228/2003):

- (a) the investment must enhance competition in electricity supply;
- (b) the level of risk attached to the investment is such that the investment would not take place unless an exemption is granted;
- (c) the interconnector must be owned by a natural or legal person which is separate at least in terms of its legal form from the system operators in whose systems that interconnector will be built;
- (d) charges are levied on users of that interconnector;
- (e) since the partial market opening referred to in Article 19 of Directive 96/92/EC<sup>14</sup>, no part of the capital or operating costs of the interconnector has been recovered from any component of charges made for the use of transmission or distribution systems linked by the interconnector;
- (f) the exemption is not to the detriment of competition or the effective functioning of the internal electricity market, or the efficient functioning of the regulated system to which the interconnector is linked.

The regulatory authorities of the Member States affected by the interconnector are competent to decide on a case-by-case basis on the exemption. The exemption decision shall be notified by the competent national regulatory authorities to the Commission and details regarding the reasoning of the decision as well as all relevant information needed to assess the case shall be included. If the Commission does not agree with the decision of (any of) the national regulatory authorities, it may request to amend or withdraw the exemption decision. Although this request would not be formally binding, so far the national regulators have always complied with the advice of the Commission (even in the gas sector where many more projects have been exempted).<sup>15</sup> Should the regulators not

comply with the Commission’s request, the final exemption decision is subject to the decision of a Committee of Member States (see Articles 7(5) and 13 Regulation 1228/2003). Practically, this kind of dispute resolution would significantly delay the project, if not simply stop it.

Article 7 Regulation 1228/2003 provides specifically that an interconnector may be exempted by the national regulatory authorities from the provisions of Article 6(6) Regulation 1228/2003 and Articles 20 and 23(2), (3) and (4) Directive 2003/54. It is to be emphasised that the interconnector has to be owned by a natural or legal person which is separate at least in terms of its legal form from the system operator in whose systems that interconnector will be built.<sup>16</sup>

Even though interconnectors may thus be exempted from regulation, pursuant to Article 7(4) of Regulation 1228/2003 such exemption will not necessarily comprise all aspects of regulation equally; that is, the (national) regulator may limit the exemption to certain regulatory provisions as well as to a certain part of the overall capacity. In addition, the exemption may be subject to certain conditions (for instance on the term of the exemption) or the regulator may approve or fix the rules and/or mechanisms on the management and allocation of capacity. Thus, ‘exempted’ does not necessarily mean ‘unregulated’, but rather ‘only regulated to the extent necessary’ in order to encourage (and thereby to avoid deterrence of) the planned infrastructure investment; in other words, there is only ‘case-by-case regulation’ rather than ‘general regulation’.

In May 2009 the Commission published a Working Paper on its assessment of exemption decisions containing a detailed analysis of the reasoning of Article 7 Regulation 1228/2003 and its preconditions as well as the conclusions which may be drawn for the assessment of a given project.<sup>17</sup> The document is meant to help national regulators and potential applicants to assess the preconditions of Article 7 Regulation 1228/2003 in line with the view of the Commission. The Working Paper focuses mainly on the details of the preconditions for an exemption. Although it frequently refers to former decisions in order to explain and illustrate the reasoning of a certain precondition, it does not provide a comprehensive overview of the existing projects. Therefore, with regard to merchant electricity interconnectors, such a comprehensive overview is provided below.

## Existing merchant electricity interconnector projects

### BritNed

BritNed is a joint venture of TenneT (TSO in the Netherlands) and National Grid (TSO in the United

<sup>16</sup> Article 7(1)(c).

<sup>17</sup> Commission staff working document on Article 22 of Directive 2003/55/EC concerning common rules for the internal market in natural gas and Article 7 of Regulation (EC) No 1228/2003 on conditions for access to the network for cross-border exchanges in electricity, 6 May 2009, SEC(2009)642 final (‘the Commission staff working document’). Although there might be differences between the supply of gas and electricity with regard to market structures, regulation measures and the requirements for an exemption correspond. Consequently, the Commission assesses the requirements for an exemption in both sectors together in one paper.

<sup>14</sup> Directive 96/92, see Note 1 above.

<sup>15</sup> Recent Commission decisions requesting amendments to the national decisions comprise, *inter alia*, the Nabucco pipeline from Turkey to Austria via Hungary, Romania and Bulgaria and the OPAL pipeline from northern Germany to the Czech Republic. All exemption decisions of the European Commission with regard to the gas sector are available at [http://ec.europa.eu/energy/infrastructure/infrastructure/gas/gas\\_exemptions\\_en.htm](http://ec.europa.eu/energy/infrastructure/infrastructure/gas/gas_exemptions_en.htm).

Kingdom), which combined to construct and operate the only electricity link between the Dutch and British electricity markets. The two TSOs are setting up a direct current interconnector between Maasvlakte (NL) and the Isle of Grain (UK), which is expected to be operational at the beginning of 2011. The prospective capacity available for trading is said to be 1000 MW, the nominal cable capacity ('peak capacity')<sup>18</sup> is said to be 1320 MW. The investors estimate the project costs at €600 million.<sup>19</sup>

Neither TenneT nor National Grid has an interest in supply activities. Thus, the project costs have to be redeemed by marketing the cable capacity. In order to ensure the best use of the cable, BritNed will apply a blend of implicit and explicit auctions<sup>20</sup> on the basis of capacity contracts of different duration with a maximum duration of one year.<sup>21</sup>

Since this business model does not rely on long-term contracts, BritNed did not apply for an exemption from mandatory TPA. Thus, the capacity will be made available as prescribed by current TPA rules. However, BritNed claimed a risk asymmetry caused by the regulatory requirements for the use of the revenues achieved with the allocation of the capacity: In case of the revenues being less than expected, the investors would have to bear any loss without a mechanism for socialising or compensating them, whereas the regulators could step in by means of *ex post* regulation (see Article 23(4) of Regulation 2003/54), if the project was commercially successful, and cap returns or demand capacity expansions. The revenues achievable for the investors rely largely on price differences between the Dutch and the British electricity markets. Since the prices vary significantly from year to year, revenue forecasts for the project comprise a considerable amount of uncertainty. In their application for an exemption, BritNed argued that these uncertainties, in addition to the fact that high revenues would be capped whereas high losses would not, led to a degree of risk associated with the investment which was commercially prohibitive.<sup>22</sup> BritNed therefore applied for an exemption from Article 6(6) of Regulation 1228/2003 (limitation of revenues achievable) for a period of 25 years in order to be able to amortise its investment.

The Commission deemed the project to be clearly pro-competitive, since, by establishing the first interconnection between the Netherlands and the United Kingdom, it

expands market coupling in the Northwestern European market, contributes to the convergence of marginal electricity prices, leads to less volatile and lower average prices and reduces market concentration.<sup>23</sup> The Commission also generally acknowledged the arguments of BritNed regarding asymmetry of risk. However, the Commission identified some flaws in the argumentation, which ultimately caused it to introduce certain conditions to the exemption.

Firstly, the Commission was critical of the fact that the applicants stressed the possibility of bad years regarding the prospective revenues, but did not take into account the possibility of very good years, which are equally likely and could enable BritNed to amortise the investment very quickly.<sup>24</sup>

Secondly, the Commission was concerned about the effects on competition an exemption could have (see Article 7(1)(f) of Regulation 1228/2003). An exemption is to be granted only if it is not to the detriment of competition. Otherwise customers do not benefit to the extent they possibly could. This could be the case where the project is the first of its kind and, therefore, establishes a monopolistic market position. Under such circumstances an investor might be tempted to design the project in an abusive way in order to maximise his revenues, for example by keeping capacity artificially scarce and revenues high by installing a sub-optimal capacity. Therefore, the regulator has to ensure that the project which is to be exempted is designed in a way that avoids any monopolistic behaviour. Otherwise the negative effects of the exemption might outweigh the positive effects of a new interconnector on the competition in the electricity market.<sup>25</sup>

In the case of BritNed the Commission criticised the installed capacity. The application of BritNed contained, *inter alia*, an analysis carried out by an energy consulting firm which examined the business plan of BritNed on the basis of different cable capacities. This analysis revealed that the average net revenues achievable with the cable would rise up to a capacity of 1320 MW and would fall only at sizes above 1320 MW. However, BritNed decided to install an operating capacity of only 1000 MW. Therefore 'the Commission is not convinced that the proposed size of the interconnection cable is the optimal balance between rewarding to BritNed for undertaking the investment and the benefit for consumers on both sides.'<sup>26</sup>

In consequence, the Commission deemed the 25-year exemption to be in principle justified, but requested the national regulators to amend the exemption decision to include a condition which obliges BritNed to report on the total costs and revenues of the project after ten years. If this report reveals an actual rate of return on the investment of more than one point above the estimated rate of return, BritNed will have to increase transmission capacity or the rate of return will be capped.<sup>27</sup>

18 Exemption decision on the BritNed interconnector by the European Commission, 18 October 2007, CAB D(2007)/1258 ('the BritNed exemption decision'), No 6 of the Annex.

19 See the homepage [www.britned.com](http://www.britned.com).

20 Explicit auction means that transmission capacity is auctioned separately and independently from the market place where electricity is auctioned. This method is a simple means in order to handle the capacity on an interconnector. However, while auctioning the transmission capacity separately there is a lack of information regarding the electricity prices on the connected markets. This could cause an inefficient use of the transmission capacity. Implicit auctions address this problem by including the day-ahead transmission capacity into the auctioning of electricity. Thus, the resulting prices in each market reflect the actual costs of energy and transmission, which ensures that electricity flows from low price markets to high price markets fostering price convergence (details to be found at [www.nordpoolspot.com](http://www.nordpoolspot.com)).

21 See BritNed Application for EU exemption, 12 June 2006 (available at [www.ofgem.gov.uk](http://www.ofgem.gov.uk) ('the BritNed Application')) at 12 onward.

22 BritNed Application, at 5; BritNed exemption decision, No 8 onward of the Annex.

23 BritNed exemption decision, No 11(a) of the Annex.

24 BritNed exemption decision, No 11 (b) of the Annex.

25 Commission staff working document, No 60 onward.

26 BritNed exemption decision, No 11(f) of the Annex.

27 BritNed exemption decision, No 13 of the Annex.

## Estlink

The Estlink cable is a direct current interconnector between Harku in Estonia and Espoo in Finland. It has been fully operational since January 2007 and provides a transmission capacity of 350 MW. The project costs amounted to €110 million. Estlink was constructed and commissioned by Nordic Energy Link, a subsidiary of Eesti Energia AS, the main producer, supplier and distributor of electricity in Estonia.<sup>28</sup> In order to carry out the Estlink project, Eesti Energia AS was joined in an elaborate corporate construction scheme by Latvenergo, the main producer, supplier and distributor of electricity in Latvia, Lietuvos Energija, the TSO in Lithuania, and Finestlink Oy, a subsidiary of Pohjolan Voima and Helsingin Energia, a power producer and supply company and a municipal company for power and heat from Finland.<sup>29</sup>

In contrast to the BritNed project, the merchant investors in the Estlink cable wanted to book all capacity for a certain period of time in order to redeem their investment. Subsequently, depending on certain developments, but no later than 31 December 2013, the Estlink cable will be transferred to the TSOs of Finland, Estonia, Latvia and Lithuania at a predetermined price. Only afterwards will Estlink be publicly accessible.<sup>30</sup> Therefore, for the initial project phase, during which the investors use the capacity on their own, they needed an exemption from TPA pursuant to Article 7(1) of Regulation 1228/2003, which was granted by the Finnish and Estonian regulators. The European Commission decided not to request an amendment or withdrawal of the exemption.

In its decision on the Estlink project, the Commission found that the Estlink cable was clearly pro-competitive, since it opens the Nordic electricity market for cheap electricity from the Baltic States, which currently have substantial overcapacity. In addition, even if the cable is more likely to transport electricity from the Baltic to the Nordic market, the back-flow possibility would already serve as a price signal to the Baltic market.<sup>31</sup> Further, the Commission generally acknowledged that the investors essentially rely on the possibility of selling a considerable amount of their electricity via the Estlink cable and that the risk attached to the investment would be prohibitive unless sufficient transmission capacity was guaranteed to the investors by means of an exemption from TPA.<sup>32</sup>

However, the Commission also considered major concerns regarding the exemption from TPA. Since all capacity towards the Baltic States is reserved for the Baltic investors involved in the project (that is, Eesti Energia AS, Latvenergo, Lietuvos Energija ('the Baltic investors'), the Commission evaluated whether this reservation prevents Finnish suppliers entering the Baltic market via the Estlink

cable. In this context, the Commission also assessed whether there were incentives for the Baltic investors to hoard their capacity in order to keep it scarce to the detriment of the achievable social welfare gains by means of an interconnector.<sup>33</sup>

These concerns were ultimately met by the details of the agreements between the investors and the intended business model. The business rationale for the Estlink project is to exploit the current price differential between the Baltic and the Nordic electricity market. As long as this price difference exists, it is very unlikely that any competitor from Finland will be prevented from selling on the Baltic market. When this price difference disappears, which is expected to happen between 2009 and 2013, the achievable revenues for the Baltic investors will decline significantly and, therefore, the Estlink cable will then be sold to the TSOs and the exemption from TPA will expire.<sup>34</sup>

As regards the possibility of capacity-hoarding, the investors will have to pay a fee for the reserved capacity, regardless of whether or not any of this capacity is used. The Commission identified this to be a significant disincentive for capacity-hoarding. In addition, since the Baltic investors each hold capacity, the losses in terms of more competitive prices and lost customers from selling capacity to any other entrant will be spread among all investors. At the same time, not selling capacity will result in foregone revenues while the risk of being confronted with market entrants, because another investor sells capacity instead, remains merely unchanged.<sup>35</sup>

Consequently, the Commission found neither the prevention of Finnish competitors from entering the Baltic market nor capacity-hoarding by the Baltic investors to be very likely. However, in order to further reduce these risks, the Commission recommended the imposition of transparency rules on the investors of the Estlink cable during the further process, by means of *ex ante* forecasts as well as *ex post* evaluation of the cross-border trade via the Estlink interconnector.<sup>36</sup>

## East-West Cables

In the East-West Cables project, the merchant investor Imera Ltd ('Imera') is an Irish project development company founded to establish electricity interconnection between Ireland and Great Britain. In 2008, Imera applied for an exemption under Article 7 of Regulation 1228/2003 on behalf of its two subsidiaries East West Cable One Ltd and East West Cable Two Ltd, special purpose companies which were set up to develop and construct two direct current interconnection cables between the Republic of Ireland and the United Kingdom. The first cable is to connect Arklow in Ireland and Pentir in Wales, and was

28 See the project's homepage: [www.nordicenergylink.com](http://www.nordicenergylink.com); Exemption decision No E/2005/001, Estlink Project, by the European Commission, 27 April 2005 (the 'Estlink exemption decision'), at 5 onward.

29 According to the agreement, Eesti Energia is the main shareholder with 39.9 per cent of the shares, Latvenergo and Lietuvos Energija have 25 per cent each, and the remaining 10.1 per cent is divided between Pohjolan Voima and Helsingin Energia.

30 Estlink exemption decision, at 2 and 6.

31 Estlink exemption decision, at 2 and 7.

32 Estlink exemption decision, at 7.

33 Since the import of electricity from a region with lower prices sends a price signal to the whole market, a power producer might hesitate to import too much cheap energy into his own market. Otherwise he risks lowering the market prices for his own energy. It is referred to as 'capacity-hoarding' if a power producer holds cable capacity but does not use it in order to keep cheap energy artificially scarce and prices high. That way, the positive effects of an interconnector (increased competition, lower prices), are limited.

34 Estlink exemption decision, at 2.

35 Estlink exemption decision, at 2 onward.

36 Estlink exemption decision, at 3 onward.

planned to be operational in 2010. The second cable, which was meant to be operational in 2011, is to connect Great Island in Ireland and Pembrokeshire in Wales. Each cable will provide for a capacity of 350 MW. Although each cable was formally subject to an individual decision, they actually formed one project in terms of financing and tendering and will therefore be treated as one project in the following ('the EWC Project').<sup>37</sup> In contrast to the investors in the BritNed and Estlink projects, Imera has no ties whatsoever with any existing player in the electricity market.<sup>38</sup>

Imera applied for a full exemption from regulated TPA as well as from the limitation of revenues under Article 6(6) of Regulation 1228/2003 for a period of 25 years for the first cable and 20 years for the second cable.<sup>39</sup> With regard to the limitation of revenues, Imera referred to the same argument that was used in the BritNed application and claimed a risk asymmetry. A regime which could cap revenues in good years while the risk of bad years is fully borne by the investors would allegedly be prohibitive for the project. This argument is also closely related to Imera's application for an exemption from regulated TPA. In order to cover the risks which arise from short-term price fluctuations, the intended business model for the marketing of the cable capacity is mainly based on long-term contracts of at least ten years.<sup>40</sup> Therefore, Imera applied for an exemption from regulated TPA not only in order to implement the intended allocation scheme in the beginning, but also to be protected against possible intervention by the regulator in the context of an *ex post* regulation of the TPA regime in case of the project being more successful than forecast.<sup>41</sup> In order to prevent against foreclosure effects, Imera suggested facilitating a secondary market on which capacities may be auctioned on a short-term basis, as well as a capacity cap for single customers.<sup>42</sup>

The Commission found the EWC Project to be pro-competitive in general. Despite an already existing interconnection between Northern Ireland and Scotland via the Moyle interconnector in Northern Ireland,<sup>43</sup> the Commission stresses in its decision the importance of interconnection capacities especially for the Irish market. Ireland largely relies upon a strengthening of wind energy in order to ensure electricity supply in the future. Due to the intermittent nature of wind generation, interconnection on a broader geographic basis is vital for wind generators in order to compete successfully with conventional energy sources. Wind energy may be exported via the interconnector and, when there is a shortage of wind, conventional energy may be imported. In the small Irish market alone an unforeseen unavailability of wind energy may scarcely be compensated for.<sup>44</sup>

With regard to Imera's allegation that the risks of the project would be prohibitive without an exemption, the Commission in its decision was somewhat sceptical. It found that in principle there was no reason why a well-designed regulatory scheme could not cover the eventualities set forth by Imera to be prohibitive. This finding was supported by the fact that parallel to the merchant project by Imera, the Irish TSO Eirgrid also planned and intended to construct an interconnector between Ireland and the United Kingdom, which will be fully regulated.<sup>45</sup> However, this parallel project also presented the crucial aspect that called for an exemption. The Commission found that the second interconnector added a significant amount of uncertainty to the EWC Project since it was less certain that there is sufficient additional market demand to make both interconnector projects profitable. Thus, the Commission agreed that the significantly higher risk of the EWC Project in the presence of the Eirgrid interconnector justified an exemption, provided that the Eirgrid interconnector proceeded as planned.<sup>46</sup>

Finally, the Commission assessed in detail if an exemption, in line with Article 7(1)(f) of the Regulation 1228/2003, was not to the detriment of competition or the effective functioning of the internal electricity market. Obviously, the marketing of the transmission capacity by means of long-term contracts carries the risk that the infrastructure could be controlled by companies which hold a significant share in the capacity.<sup>47</sup> The Commission generally accepted the measures proposed by Imera in order to avoid any detrimental effects on competition. These measures comprise a capacity cap for dominant undertakings and the facilitation of a secondary market with use-it-or-lose-it schemes.<sup>48</sup> In order to ensure their application, the Commission requested the national regulators to amend their exemption decisions by elevating these measures to formal conditions.<sup>49</sup> Additionally, Imera was to be obliged to implement effective intra-day trading, which is remarkable since the Irish market code then did not allow for intra-day trading. Thus, by imposing the condition on Imera to introduce intra-day trading, the exemption was made subject to a condition the applicant could not fulfil solely on its own account.

### Arnoldstein–Tarvisio

The Arnoldstein–Tarvisio interconnector will connect the grids of APG in Austria and TERNIA in Italy between the converter station in Tarvisio (Italy) and a newly planned converter station in Arnoldstein (Austria).<sup>50</sup> The applicant

37 Also the regulators involved treated the two cables as single project; see Commission Exemption Decision on the East-West Cable Project of 19 December 2008, available at: [http://ec.europa.eu/energy/infrastructure/infrastructure/electricity/electricity\\_exemptions\\_en.htm](http://ec.europa.eu/energy/infrastructure/infrastructure/electricity/electricity_exemptions_en.htm) (the 'East West Cable Exemption Decision'), No 5 of the Annex.

38 See Imera Application for EU Exemption of April 2008 at: <http://www.ofgem.gov.uk> ('Imera Application'), at 5.

39 Imera Application, at 4.

40 East West Cable Exemption Decision, No 21. of the Annex.

41 Imera Application, at 4.

42 Imera Application, at 4.

43 East West Cable Exemption Decision, No 11 of the Annex.

44 East West Cable Exemption Decision, No 09 onward and No 18. of the Annex.

45 East West Cable Exemption Decision, No 22 of the Annex.

46 East West Cable Exemption Decision, No 23 onward of the Annex.

47 East West Cable Exemption Decision, No 38 of the Annex.

48 Use-it-or-lose-it schemes provide for any allocated capacity to be reattributed to the market in case it is not used (see, for example, Article 6(4) of Regulation 1228/2003, Article 16(4) of Regulation 714/2009) in order to avoid strategic hoarding or reservation of capacity.

49 East West Cable Exemption Decision, No 39 onward and 56 of the Annex.

50 Commission Exemption Decision on Eneco Valcanale Srl of 26 October 2010, available in German language at: [http://ec.europa.eu/energy/infrastructure/infrastructure/electricity/electricity\\_exemptions\\_en.htm](http://ec.europa.eu/energy/infrastructure/infrastructure/electricity/electricity_exemptions_en.htm) ('Arnoldstein–Tarvisio Exemption Decision'), No 3.

in this case was Eneco Valcanale Srl with its registered seat in Tarvisio, which is wholly owned by Eneco Strom GmbH, an energy trading company from Austria. Of the shares in Eneco Strom GmbH 96 per cent are held by P.I.N. SA, a 100 per cent subsidiary of Podini Holding SpA, a holding company from Italy which, amongst others, holds shares in electricity supply and generating companies.<sup>51</sup> In comparison to the interconnector projects presented so far, the planned transmission line between Italy and Austria represents a relatively small project with only 12 km cable length, an AC-cable, an envisaged nominal voltage of 132 kV and a maximum capacity of 160 MVA. However, it has some unique aspects which make it interesting from a legal point of view.

The business rationale of the project mainly relies on the price difference between Italy and Austria. Prices in Italy are high, compared to those in neighbouring countries, partly because of a lack of interconnection capacity.<sup>52</sup> Therefore, the capacity of the Arnoldstein–Tarvisio interconnector is intended to be auctioned to electricity suppliers from Austria or Germany which may sell their relatively cheap electricity in Italy.

The Arnoldstein–Tarvisio line is a rather unusual project to apply for an exemption under Article 7(1) of Regulation 1228/2003, since it is based, in contrast to the other projects for which an exemption has been granted so far, on alternating current (AC) technology. According to Article 7(2) of Regulation 1228/2003, an exemption under Article 7(1) of Regulation 1228/2003 may only be granted to AC interconnectors in exceptional cases subject to the additional precondition that the costs and risks of the investment are particularly high when compared with the costs and risks normally incurred when connecting two neighbouring national transmission systems by an AC interconnector. However, Eneco Valcanale Srl has been successful in proving that this additional pre-condition was fulfilled, as well as the usual pre-conditions under Article 7(1) of Regulation 1228/2003.

The Austrian national regulatory authority (Energie-Control Kommission, ‘the E-Control’) has fully granted an exemption in accordance with the application, meaning that in essence the following exemptions were granted:

- an exemption from the limitations in respect of the use of the allocation revenues according to Article 6(6) of Regulation 1228/2003 which should be applicable for 100 per cent of the transmission capacity;
- an exemption from mandatory TPA applicable to 50 per cent of the transmission capacity.

The E-Control decreed a maximum period for the exemption of 16 years, which would be reduced in case the investment had amortised earlier. In addition, the exemption was subject, *inter alia*, to the condition that the 50 per cent of the transmission capacity not exempted from mandatory TPA as well as any of the exempted capacity not used by the applicant was auctioned, preferably by the Austrian and/or Italian TSOs.<sup>53</sup>

However, the Commission only agreed in part with the assessment of the E-Control. It acknowledged the perception of the Austrian regulator and the applicant that the costs and risks of the project were particularly high and that, therefore, the precondition pursuant to Article 7(2) of Regulation 1228/2003 for an exceptional exemption of an AC interconnector was met. This assessment was mainly based on the fact that the actual transmission capacity that the Arnoldstein–Tarvisio interconnector will be able to provide depends largely on the infrastructure of the Austrian and Italian grids to which it will be connected. Since these infrastructures are not yet prepared in any way to use the full potential of the planned interconnector, the Commission judged the project to be ‘in advance’ of the overall grid development and therefore to be particularly risky. The poor state of the grids north and south of the Austrian-Italian border also require the converter stations to be more expensive than they would usually be. Thus, risk and costs of the project are particularly high.<sup>54</sup>

The Commission also acknowledged the assessment that the project was clearly pro-competitive, since it opened the Italian market for cheap electricity from neighbouring countries and because of the subordinate market position the applicant currently holds on the Italian wholesale market for electricity trading and the electricity generation market.<sup>55</sup>

However, the Commission did not agree with the decision of the E-Control in respect of the exemption from mandatory TPA. The Commission agreed that costs and risks of the project justified an exemption from the limitation of use of revenues, but it did not acknowledge a reason for an exemption from mandatory TPA. According to the Commission’s assessment, instead of exploiting the price difference between Austria and Italy by transferring cheap electricity on its own account (which would be assured by allocating 50 per cent of the transmission capacity exclusively to the applicant), the applicant might as well exploit the price difference by auctioning the capacity to third parties with the same financial profit. Therefore, there was no actual necessity to exclusively allocate 50 per cent of the capacity to the applicant, especially since such an allocation would withhold these capacities from the market and would constitute a deviation from the common principle of non-discriminatory access to grids.<sup>56</sup>

The Commission therefore requested the E-Control to amend its exemption decision in a way that it does not grant an exemption from mandatory TPA.

## NorGer

Currently there are some interesting efforts to establish stronger links between the Nordic energy market and the continental European market. On 11 September 2008, a first interconnector between the Netherlands and Norway came into operation, known as the NorNed interconnector. It is the world’s longest undersea cable which runs from the Norwegian city of Fedaa to the Dutch city of Eemshaven. The project has been carried out by capacity auctioning and the financial support of the European Union. The developers of NorNed did not apply for an exemption

51 Arnoldstein-Tarvisio Exemption Decision, No 2.

52 Arnoldstein - Tarvisio Exemption Decision, No 12, 48 onward.

53 Arnoldstein-Tarvisio Exemption Decision, No 8.

54 Arnoldstein-Tarvisio Exemption Decision, No 48 onward.

55 Arnoldstein-Tarvisio Exemption Decision, No 67 onward.

56 Arnoldstein-Tarvisio Exemption Decision, No 58 onward.

57 See Note 7 above.

under Article 7 of Regulation 1228/2003 and, therefore, NorNed is obliged to apply the TPA-regime which is implemented in the Dutch and Norwegian energy legislation.

The NorGer interconnector is meant to link the Norwegian and the German electricity grids. It received the national approval from the German national regulatory authority (the Bundesnetzagentur) in late November 2010 and is now likely successfully to clear the remaining regulative hurdles in due course. The interconnector will be based on HVDC technology with a cable capacity of 1,400 MW. According to the current planning, the cable will have a length of approximately 600 km and come ashore close to Wilhelmshaven on the German North Sea coast, where a converter station will be built in Moorriem. In Norway, the cable will come ashore in the Flekkefjord area, from where electricity will be transferred another 70 km to Tonstad in the Sirdal municipality. If the project proceeds as planned, it will be operational between 2015 and 2017. The building costs are estimated to reach approximately €1.4 billion. NorGer is a joint venture between Statnett SF ('Statnett'), the Norwegian national power grid company, Agder Energi AS ('Agder'), one of the largest energy groups in Norway in terms of hydroelectric power production, Lyse Produksjon AS ('Lyse'), Norway's fifth largest hydroelectric power company, and Elektrizitäts-Gesellschaft Laufenburg AG ('EGL'), a European energy trading company from Switzerland. Statnett holds 50 per cent of the shares in NorGer while Agder, Lyse and EGL each hold 16.67 per cent.

The business rationale of the NorGer project mainly depends on the structural differences between the German and the Norwegian electricity markets. While German electricity supply today is primarily based on thermal energy, almost 100 per cent of the Norwegian supply stems from hydroelectric power. Hydroelectric power production may be easily reduced at night when power demand is low. Therefore, there is hardly any difference in daytime and nighttime electricity prices in Norway. German thermal power stations depend on constant production 24 hours a day, which means low electricity prices at night when production exceeds demand and correspondingly higher prices during daytime. NorGer is intended to transport excess electricity from the German thermal power stations and windfarms to Norway at night when prices are low in Germany. In Norway, the electricity may be stored in pump storage hydro power plants. During the day, when electricity demand and price levels in Germany are high, Norwegian electricity produced by the pump storage plants may be sold to the German market to supplement peak consumption.

Thus, NorGer may potentially serve Norwegian as well as German interests. German electricity generation will become more efficient, since the excess production during the night may be sold to Norway. The Norwegian power producers may in return increase earnings by selling electricity to Germany during the day when prices are highest. Also the socio-economic benefits of the NorGer interconnector are potentially high. Not only could it improve security of supply and reduce prices, it could also essentially foster the effective integration of the electricity production from renewable energies in Germany, since it significantly increases the available accumulation capacities.

In its initial decision, which has not yet been approved by the European Commission, the German national

regulatory authority acknowledged the potential benefits of the NorGer interconnector and granted an exemption under Article 7 of Regulation 1228/2003 in respect of the limitation of use of revenues under Article 6(6) of the same Regulation. The exemption is not limited to certain parts of the overall cable capacity; it does not refer to the TPA regime. The exemption will become ineffective if the revenues achieved with the interconnector exceed a certain amount necessary to refund the investment. This is calculated to happen in 2040; however, the exemption will become ineffective not before the year 2030 and no later than 2050.

## Prospects under Regulation 714/2009 and Directive 2009/72

In 2009 the third generation European legislation for the European electricity market (the Third Package) entered into force. As mentioned above,<sup>57</sup> Directive 2009/72/EC and Regulation (EC) 714/2009, which take effect on 3 March 2011, will replace Directive 2003/54 and Regulation 1228/2003. Consequently, from 3 March 2011 any new exemption application will be awarded on the basis of the new legislation.

Most importantly, there will still be the possibility of an exemption under Regulation 714/2009 whose basic principles will remain unchanged in comparison to Regulation 1228/2003. In particular, the material requirements for an exemption in Article 17(1)(a) to (f) of Regulation 714/2009 are almost completely identical to those set out in Article 7(1)(a) to (f) of Regulation 1228/2003, with the few deviations being only cosmetic in nature.

However, the regulatory provisions from which an applicant may be exempted will be expanded. In addition to the *ex ante* and *ex post* regulation regime, from which exemption could be gained under Regulation 1228/2003, the exemption under Regulation 714/2009 may also cover the unbundling requirement of Article 9 of Directive 2009/72 (see Article 17(1) of Regulation 714/2009). This expansion is a reaction to the development of the unbundling requirement which will be stricter under Directive 2009/72 than under Directive 2003/54. Article 10 of Directive 2003/54 only required the TSO, where it was part of a vertically integrated undertaking, to be independent, in terms of its legal form, organisation and decision-making, from other activities not relating to transmission (legal and functional unbundling). However, there was no obligation to separate the ownership of assets of the transmission system from the vertically integrated undertaking. In contrast, Article 9 of Directive 2009/72 requires a full ownership unbundling between generation and supply or production activities and the operation of a transmission system.<sup>58</sup> Consequently, generation and supply companies would not be allowed to engage in interconnector projects insofar as they would gain any (indirect) control or ownership of the transmission facility, if there was no

58 See Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 1228/2003 on conditions for access to the network for cross-border exchanges in electricity, 25 September 2007, Interinstitutional File 2007/0198 (COD) ('Regulation Proposal'), at 4 onward.

59 Regulation 714/2009, recital 23.

possibility of being exempted from this unbundling requirement. Thus, with regard to the great commercial risk connected with the establishment of an interconnector and in order to keep power generation companies as possible investors for merchant projects, an investor may also be exempted from the full unbundling requirement under the new regime.<sup>59</sup>

The major changes under the new regime relate to the formal proceeding for the application and granting of an exemption, since the current proceedings have been identified as being too time-consuming.<sup>60</sup> According to Article 17(4) of Regulation 714/2009, the initial decision of the national regulators concerned with the project will be co-ordinated by the Agency for the Co-operation of Energy Regulators<sup>61</sup> and in the interests of efficiency a time limit of six months has been introduced for the decision of the national regulatory authorities. In addition, Article 17(4) of Regulation 714/2009 provides for a more detailed exemption decision, which has to contain, *inter alia*, a decision on the rules and mechanisms for management and allocation of capacity. With regard to the formal character of the Commission decision in relation to the national regulators, the current factual practice<sup>62</sup> will be mandatory in the future: a request to amend or withdraw an exemption will be formally binding for the national regulatory authorities (Article 17(8) of Regulation 714/2009). Finally, the applicant for an exemption will have to start construction of the planned interconnector within two years of the date of the Commission approval and within five years thereof the interconnector has to be operational. Otherwise the Commission approval will expire (Article 17(8) of Regulation 714/2009).

However, it seems to be not very likely that any of these differences will cause significant changes in the application of the material pre-conditions for an exemption. Therefore, any conclusion that might be drawn from the experience of Article 7 of Regulation 1228/2003 will most likely also be relevant under Regulation 714/2009.

## Conclusion

Experience of the second generation electricity legislation (in particular Regulation 1228/2003) clearly shows that 'merchant' is not merchant. Very different projects have presented themselves so far with no one of them similar to another. The investors cover TSOs as well as producers and specialised undertakings, concentrating solely on the establishment of interconnectors. Their business models vary greatly as well. Whereas BritNed relies on flexible short-term marketing of capacity, EWC in contrast is intended to rely solely on long-term contracts and Estlink is amortising by means of own usage. The technologies applied by these projects comprise long-distance direct current interconnectors as well as a project for a short line applying alternating current technology (Arnoldstein–Tarvisio). However, these completely different projects have

one thing in common: individual commercial interests triggered investments which could help to pursue the collective aim of a European-wide market for electricity. Not only did these projects each find a market environment to attract investors, but also a regulatory regime flexible enough to react to their specific requirements. This is not to say that regulators have proved to be exceedingly lenient. All projects had to pass thorough assessments by two national regulators and the Commission. However, ultimately all projects ended up with a customised exemption, intended to allow the project to proceed and at the same time not losing track of what any exemption is aimed at, namely fostering competition on a common electricity market in order to maximise social welfare. So far, experiences are promising; however, four of the five projects still lack final proof of the capability of the commercial and regulatory environment. Today, only Estlink is actually in operation. It may be hoped, though, that BritNed, EWC, Arnoldstein–Tarvisio, and NorGer will be successful in due course, in order to match expectations of regulators and investors as well as of consumers.

Even if only five merchant projects have been triggered under Regulation 1228/2003 so far, the exemptions granted indicate that there are no excessive regulatory hurdles. The projects analysed in this article demonstrate that it is neither in the interest of the Commission nor of the national regulators to choke off private investment in the infrastructure of the common market. The exemption possibility under Article 7 of Regulation 1228/2003 provides the appropriate means of balancing the interests in each individual case. It is merely a question of applying these provisions to a single case and the relevant commercial reasoning which decides on the successful realisation of projects. Therefore, it may not seem surprising that the future regulation regime (Regulation 714/2009) also includes an exemption possibility, with only minor changes, mainly aimed at reducing procedural hurdles in the interest of prospective applicants. Time will show if hopes are justified that not only the five existing projects will be successfully completed, but also that further projects of their kind will be undertaken in the future.

60 Regulation Proposal, at 15 onward.

61 Which has been established by Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators, OJ L211 of 14 August 2009, at 1.

62 Which represents no actual change compared to the current practice, cf. above note 15.