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[Title] The Potential for Merchant Interconnectors in the European Electricity System
[Authors] Hamilcar P.A. Knops, Laurens J. de Vries and Rudi A. Hakvoort [contact details below]

The integration of the national European electricity markets into one single European market is hampered by the lack of sufficient transmission capacity ('interconnectors') between the different countries. Therefore, the European Commission is promoting construction of new interconnection capacity.

In principle, construction, maintenance and operation of these interconnectors is a task of the transmission system operators (TSOs), and third party access (tpa) must be guaranteed. However, in particular where lasting price differences exist between markets, market parties might be interested as well to invest in additional interconnection capacity either to capture the congestion rents or for their own use. These 'private' interconnectors are commonly referred to as 'merchant interconnectors'.

At first sight, merchant interconnectors do not seem to fit in the general structure of the European electricity industry, imposed by the EC Directives. The recent EC Regulation 1228/2003 has, however, created the possibility of a special regime for merchant interconnectors provided that they enhance competition in electricity supply.

This paper analyses the current potential for merchant interconnectors in the European electricity system. First, the economics of merchant interconnectors is discussed. The economic profitability has consequences for the (legal) position investors wish to obtain for these interconnectors.

Next, the (special) regime of merchant interconnectors under European law is analysed. The emphasis in this analysis is on the following four issues:

- *How is access to the merchant interconnector organised?*
  Can access to the merchant interconnector be organised in such a way that, on the one hand, it does justice to the principle of third party access, while, on the other hand, it still allows the owner of the merchant interconnector to recoup his investment from congestion rents?
- *What are the 'tariffs' for the use of a merchant interconnector (and how are they established)?*
  What should the 'tariffs' for the use of merchant interconnectors be based upon? Can these 'tariffs' be supervised, and by whom, under what legal framework?
- *Who is technically operating the merchant interconnector and what operational regime should apply?*
  Can the operation of a merchant interconnector be left to the owner, or should an independent operator be designated, or should the TSO be in charge of operating the merchant interconnector?
- *Once a merchant interconnector has been constructed, should other parties (TSO, other merchants) then be allowed to construct additional interconnection capacity in parallel, or should that be precluded?*
  Any additional interconnecting capacity parallel to a merchant interconnector will influence the economic case for the owner of the (first) merchant interconnector to recover, since congestion will be reduced and most likely also his congestion rents.

The paper concludes with a reflection on the issue whether the special legal regime for merchant interconnectors really contributes to the envisaged integration of the European electricity markets and whether competition in transmission investment will create new opportunities for market dominance and, potentially, abuse of such dominant positions.

[Contact details]
Mr. H.P.A. Knops
(address 1)
International Institute of Energy Law, Leiden University
P.O. Box 9520
2300 RA Leiden
The Netherlands
T: ++31-(0)71-5277665
F: ++31-(0)71-5277509
E: h.p.a.knops@law.leidenuniv.nl

Mr. H.P.A. Knops
(address 2)
Mr. L.J. de Vries
Mr. R.A. Hakvoort

Faculty of Technology, Policy and Management, TU Delft
Jaffalaan 5
2628 BX Delft
The Netherlands
T: ++31-(0)15-2783420
F: ++31-(0)15-2783422
E: h.p.a.knops@tbm.tudelft.nl

[Short CV]

Short CV Hamilcar Knops

Hamilcar Knops graduated from Leiden University in the Netherlands in theoretical physics (1998) and law (1999; *cum laude*). In 1998, he studied at Harvard University in Cambridge, Mass.. After his graduation he worked for the law firm Houthoff Buruma in The Hague, the Netherlands. In 2000, he joined the International Institute of Energy Law of Leiden University and the Delft Interfaculty Research Centre on Design and Management of Infrastructures of the Delft University of Technology to carry out a Ph.D.-research on the interaction between the technical and legal aspects of electricity supply.

Short CV Laurens de Vries

Laurens de Vries studied Mechanical Engineering in Delft, specialising in environmental and energy technology. After graduating in 1991, he moved to the USA. In Olympia (Washington State) he studied at The Evergreen State College, where he finished his Master of Environmental Studies Degree in 1996. In his studies there, he focused on environmental economics. In 1997 he left the USA, travelling through Asia for about nine months before returning to the Netherlands. He worked one year at an environmental consulting company before joining Delft University of Technology as a Ph.D. student in September 1999. His research subject is investment in electricity generating capacity, with a focus on the policy options to avoid investment cycles in imperfect markets.

Short CV Rudi Hakvoort

Rudi Hakvoort, received an M.Sc. degree in Applied Physics in 1989 and obtained his Ph.D. degree from Delft University of Technology in 1993. Since then he has been active in academic research at the Delft University of Technology, first in Environmental Management, and since 1995 in the interplay between energy technology and energy policy.