

# Ownership Unbundling of Electricity Distribution Networks

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Although there are several examples of voluntary ownership separation of distribution networks from generation, transmission and retail, there have only been two countries to have forced this in their markets. New Zealand introduced distribution network ownership unbundling from 1998 and the Netherlands from 2009. In both of these electricity markets the aim was to improve competition, increase quality, and reduce costs by increasing efficiency.

The discussion over the advantages and disadvantages of mandated ownership separation of distribution networks is topical given the changes to the role of distribution networks in the energy transition. In Denmark the government is considering ownership unbundling of DSOs and is currently examining its potential effects on retail competition.

Ownership unbundling of the distribution network is a complicated and challenging process – especially when imposed (i.e. forced) simultaneously on all market players. Three aspects need to be taken into account: (i) the transaction costs of unbundling (e.g. direct or contract renegotiation costs), (ii) the dynamic efficiency effect on costs and quality (e.g. loss of vertical economies versus gain in management focus), and (iii) the effect on the degree of concentration in competitive segments (i.e. the reduction in the number of competitors versus the breaking up of incumbency).

This paper reviews the theoretical arguments and empirical evidence to assess whether distribution network ownership unbundling achieved what proponents argued, and discusses whether alternative policy measures could have achieved similar results at lower costs.

The evidence from the Netherlands and New Zealand shows that it is highly questionable whether forced ownership unbundling of distribution networks is beneficial for quality and/or retail competition, and could even be negative, whereas the associated one-off and structural costs are both significant and certain. The New Zealand experience demonstrates that a structural intervention can result in unintended side-effects –i.e. from one form of integration (distribution and retail) to another form of integration (generation and retail) and could actually reduce competition. The Netherlands on the other hand shows that unilateral structural interventions, without similar measures at a European level, where markets are integrated, leads to an un-level playing field and does not change the status quo in terms of competition and quality. Either way one-off and structural costs are passed on to consumers.

From a policy perspective, we conclude that it is thus advisable to consider other policy measures to improve competition in retail, improve the quality of the network and drive down monopoly network costs. Measures that could be considered are (i) strengthening the regulatory framework and the regulator (e.g. extending the legal remit, increasing the budget), (ii) decreasing or removing barriers to entry for retail activities (e.g. permitting, contracting, financial requirements, arrears procedures, marketing rules, etc.), (iii) further ring-fencing of distribution activities (e.g. separate name and branding from holding company, financial and reporting requirements, independent decision-making and governance, etc.), and (iv) improving transparency for end-users (e.g. price comparison websites, data transparency on quality, competition, and financial metrics). The latter is one of the key focus areas for the European Commission and leading regulators, such as the UK's, Ofgem.

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